COVID-19 Weekly Epidemiological Update

Edition 110 published 21 September 2022

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- WHO regional overviews

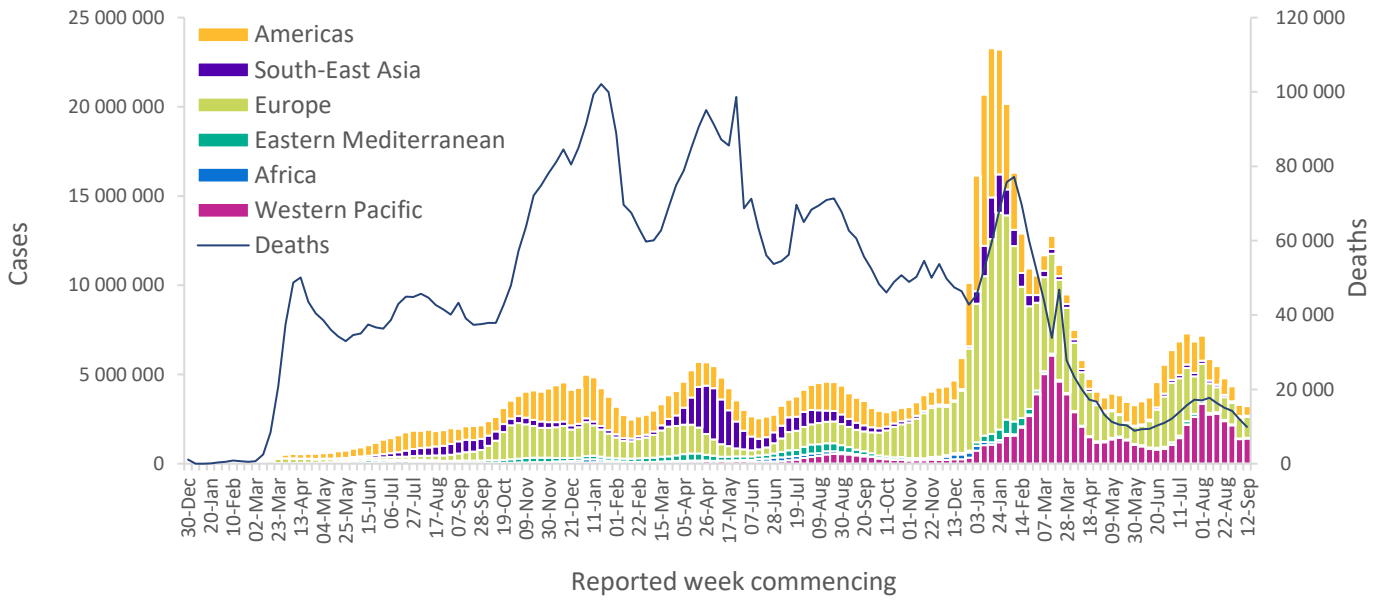
Global overview

Data as of 18 September 2022

Globally, the number of new weekly cases remained stable during the week of 12 to 18 September 2022 as compared to the previous week, with over 3.2 million new cases reported (Figure 1, Table 1). The number of new weekly deaths decreased by 17% as compared to the previous week, with over 9800 fatalities reported. As of 18 September 2022, over 609 million confirmed cases and over 6.5 million deaths have been reported globally.

At the regional level, the number of newly reported weekly cases decreased or remained stable across all six WHO regions: the African Region (-35%), the Eastern Mediterranean Region (-14%), the Region of the Americas (-12%), the South-East Asia Region (-8%), the European Region (-1%) and the Western Pacific Region (+3%). The number of new weekly deaths decreased across all six regions: the Eastern Mediterranean Region (-46%), the African Region (-27%), the Western Pacific Region (-27%), the European Region (-22%), the South-East Asia Region (-6%) and the Region of the Americas (-5%).

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 18 September 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest numbers of new weekly cases were reported from Japan (605 919 new cases; +13%), the United States of America (395 117 new cases; -11%), the Republic of Korea (389 579 new cases; -11%), the Russian Federation (372 485 new cases; +10%) and China (297 693 new cases; 13%). The highest numbers of new weekly deaths were reported from the United States of America (2601 new deaths; +5%), Japan (1162 new deaths; -31%), the Russian Federation (697 new deaths; +9%), Spain (595 new deaths; +83%) and Brazil (487 new deaths; -12%).

Current trends in reported COVID-19 cases and deaths should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected. Additionally, data from previous weeks are continuously updated to retrospectively incorporate changes in reported COVID-19 cases and deaths made by countries.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 18 September 2022**

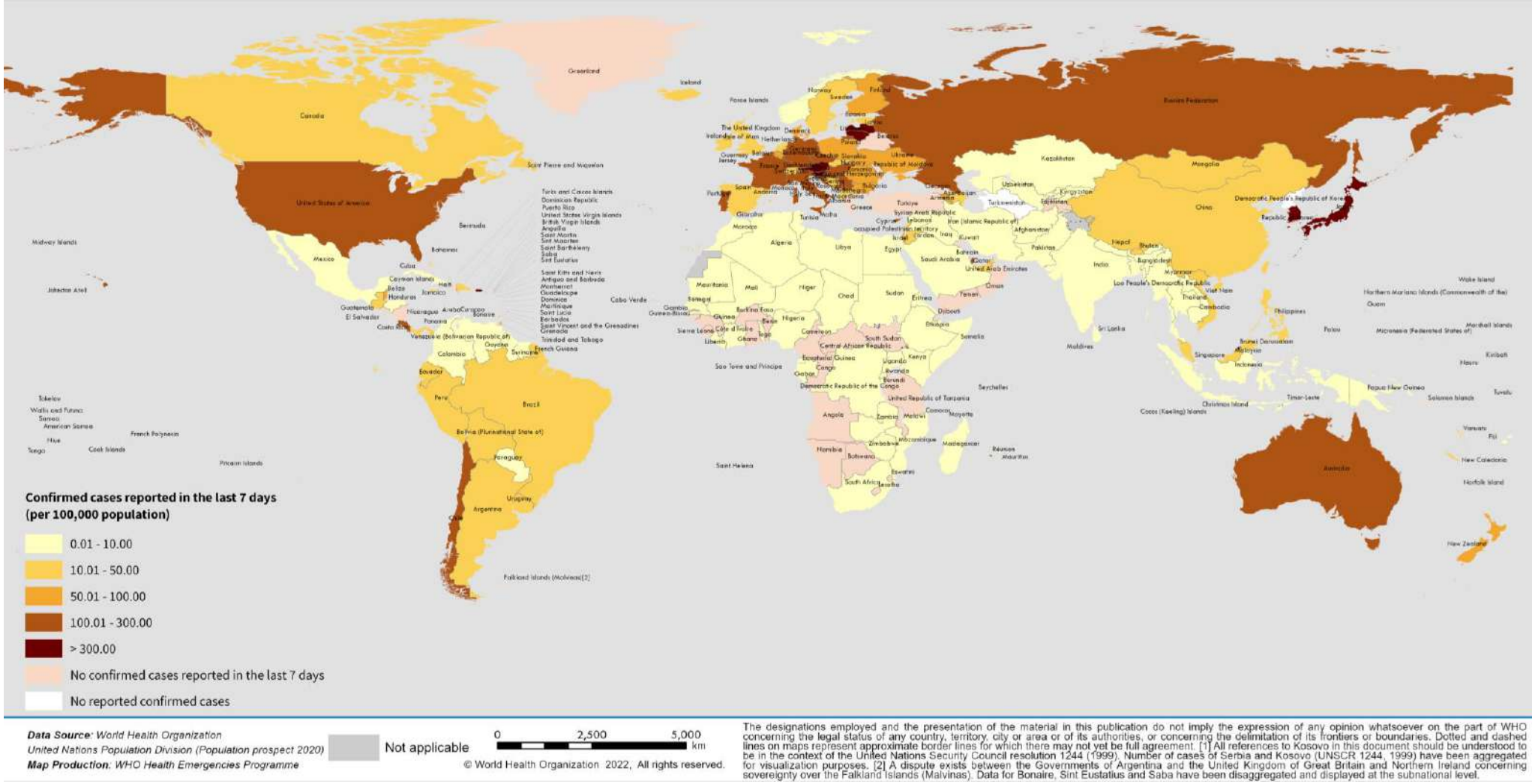
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Western Pacific	1 420 762 (44%)	3%	87 985 821 (14%)	2 415 (24%)	-27%	267 600 (4%)
Europe	1 164 233 (36%)	-1%	251 088 626 (41%)	2 767 (28%)	-22%	2 087 946 (32%)
Americas	552 342 (17%)	-12%	177 464 288 (29%)	4 037 (41%)	-5%	2 830 423 (44%)
South-East Asia	66 777 (2%)	-8%	60 192 703 (10%)	427 (4%)	-6%	796 871 (12%)
Eastern Mediterranean	23 658 (1%)	-14%	23 046 219 (4%)	172 (2%)	-46%	348 149 (5%)
Africa	6 853 (<1%)	-35%	9 317 547 (2%)	44 (<1%)	-27%	174 453 (3%)
Global	**3 234 625 (100%)**	**-2%**	**609 095 968 (100%)**	**9 862 (100%)**	**-17%**	**6 505 455 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior. Data from previous weeks are updated continuously with adjustments received from countries.*
***See Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update
- WHO COVID-19 detailed surveillance data dashboard

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 12 - 18 September 2022*



***Data Source**: World Health Organization*
United Nations Population Division (Population prospect 2020)
***Map Production**: WHO Health Emergencies Programme*

Not applicable

0 2,500 5,000 km

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The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. [1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). Number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes. [2] A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas). Data for Bonaire, Sint Eustatius and Saba have been disaggregated and displayed at the subnational level.

**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 12 - 18 September 2022**

Data Source: *World Health Organization*
United Nations Population Division (Population prospect 2020)
Map Production: *WHO Health Emergencies Programme*

Not applicable

0 2,500 5,000 km

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**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

Geographic spread and prevalence of VOCs

Globally, from 19 August to 19 September 2022, 120 617 SARS-CoV-2 sequences were shared through GISAID. Among these, 119 458 sequences were of the Omicron variant of concern (VOC), accounting for 99.0% of sequences reported globally in the past 30 days. As the number of submitted sequences continues to decline, interpretation of trends should be made with due caution.

The current variant circulation is characterized by Omicron descendent lineages and by a large genetic diversification. More than 230 descendent lineages of Omicron, and more than 30 recombinants have emerged. These variants are being monitored and assessed by WHO based on criteria of genetic constellations of mutations, and/or indications of a rise in prevalence in a geographic location, as well as any evidence of phenotypic changes.[i] All of these lineages have different additional mutations, yet the majority do not warrant concern, either based on current knowledge of relevant genetic sites, or based on very low sequence circulation over several weeks. As of epidemiological week 35 (29 August to 4 September 2022), the pooled descendent lineages of BA.5 (BA.5.X) show the highest relative global prevalence of 76.6%, followed by BA.4.X with 7.5% prevalence. During the same period, BA.3.X, BA.2.X (excluding BA.2.75) and BA.1.X have declined in global prevalence to less than 1%.

Six lineages are currently classified as Omicron subvariants under monitoring. BA.2.75 is being monitored due to nine additional mutations in the spike as compared to its parent lineage BA.2; four of these mutations are within the receptor binding domain (RBD), and at least one of these RBD mutations has been associated with immune escape in previous variants.[1] Global prevalence of BA.2.75 is low (1.26% as of week 35), but has been rising over the last weeks. As of epidemiological week 35, a total of 48 countries have been reporting its detection; the majority of the reported sequences are from India. One of its descendent lineages, BA.2.75.2, has three additional spike mutations.

BA.5.1 + V445* (*indicating pooled amino acid substitutions), BA.5.2 + K444*, BA.5.2.1 + R346*, BA.5.2.1 + K444*, and BE.1.1 (BA.5.3.1.1.1) are emerging subvariants under monitoring, with mutations in RBD positions with predicted phenotypic effects (such as antibody escape, changes to ACE2 binding affinity, etc) and increased spread to new locations.[ii] The prevalence of these Omicron subvariants under monitoring is still low but rising over the last four weeks (see Table 2).

For more information on the assessment of SARS-CoV-2 variants and the WHO classification refer to Annex 2.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- VIEW-hub: repository for the most relevant and recent vaccine data

[i] WHO tracking SARS-CoV-2 Variants

[ii] https://gisaid.org/publish/

Figure 4. Panel A and B: The number and percentage of SARS-CoV-2 sequences, as of 19 September 2022

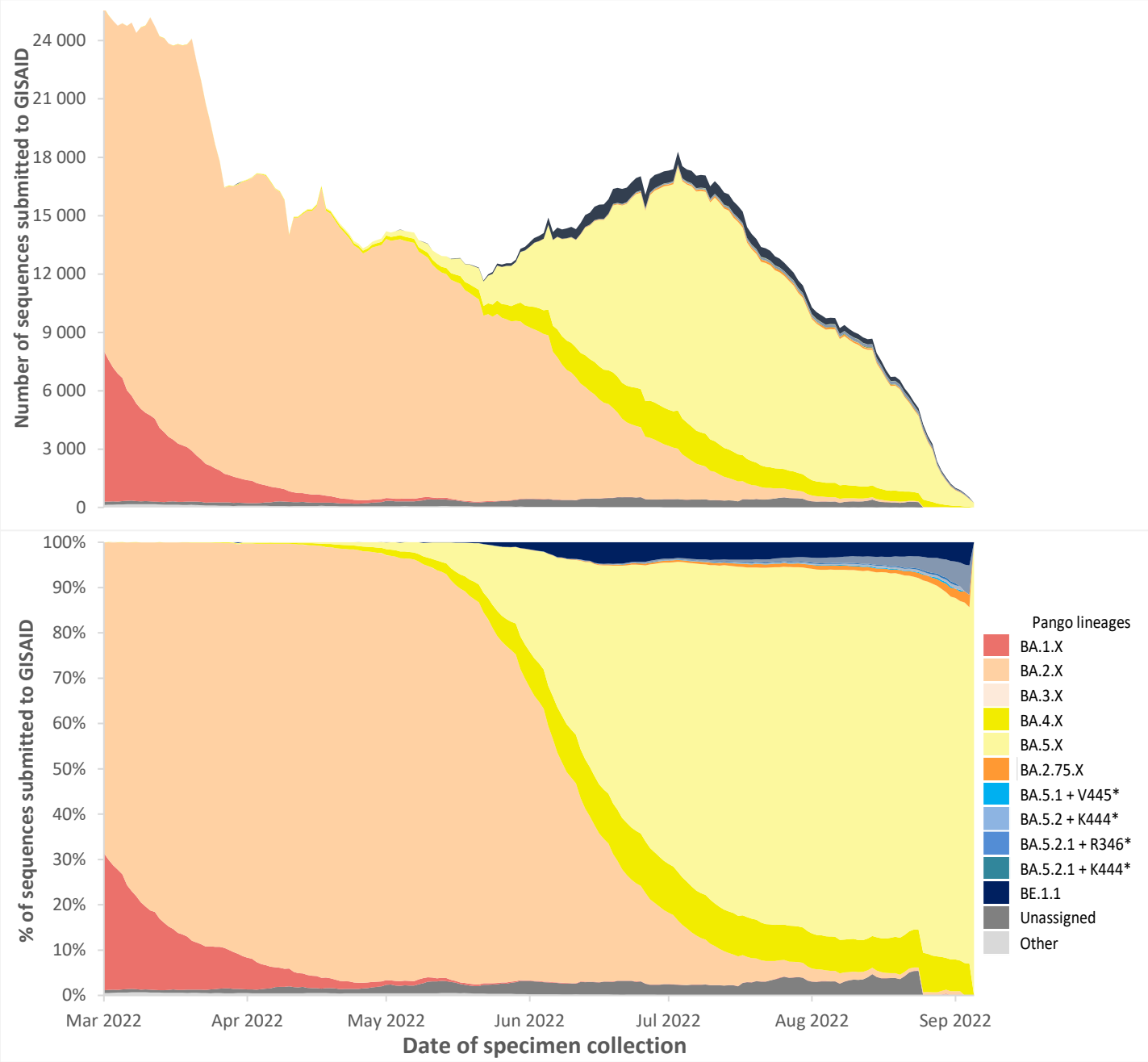


Figure 4 Panel A shows the number, and **Panel B** the percentage, of all circulating variants since March 2022. Omicron sister-lineages and additional Omicron VOC descendent lineages under further monitoring are shown. *BA.1.X, BA.2.X, BA.3.X, BA.4.X* and *BA.5.X* include all BA.1, BA.2, BA.3, BA.4 and BA.5 pooled descendent lineages, except the Omicron subvariants under monitoring shown individually. The *Unassigned* category includes lineages pending for a Pango lineage name, whereas the Other category includes lineages other than those listed in the legend. -Source: SARS-CoV-2 sequence data and metadata from GISAID, as of 19 September 2022.

Table 2. Relative proportions of SARS-CoV-2 sequences over the last four weeks by specimen collection date

			Last 4 weeks by collection date (%) [c]			
Lineage, (n)[a]	**Countries**	**Sequences[b]**	**2022-32[c]**	**2022-33[c]**	**2022-34 [c]**	**2022-35 [c]**
BA.1.X, (58)	183	2 182 417	53 (0.08%)	17 (0.03%)	17 (0.04%)	8 (0.03%)
BA.2.X, (123)	160	1 990 074	1 555 (2.28%)	932 (1.54%)	462 (1.01%)	158 (0.65%)
BA.3.X, (2)	28	764	0	0	0	0
BA.4.X, (13)	116	124 630	5 131 (7.53%)	4 259 (7.03%)	3 726 (8.14%)	1 841 (7.53%)
BA.5.X, (41)	135	774 808	55 207 (80.97%)	49 156 (81.16%)	36 687 (80.18%)	18 719 (76.55%)
BA.2.75.X	48	5 895	622 (0.91%)	518 (0.86%)	397 (0.87%)	308 (1.26%)
BA.5.1 + V445*	36	577	77 (0.11%)	102 (0.17%)	65 (0.14%)	38 (0.16%)
BA.5.2 + K444*	53	1 398	176 (0.26%)	236 (0.39%)	182 (0.4%)	125 (0.51%)
BA.5.2.1 + R346*	56	7 173	851 (1.25%)	952 (1.57%)	1 002 (2.19%)	754 (3.08%)
BA.5.2.1 + K444*	51	1 303	132 (0.19%)	98 (0.16%)	108 (0.24%)	73 (0.3%)
BE.1.1.X (BA.5.3.1.1.1)	78	43 147	2 285 (3.35%)	1 891 (3.12%)	1 464 (3.2%)	789 (3.23%)
Unassigned	204	6 589 983	16 (0.02%)	6 (0.01%)	9 (0.02%)	5 (0.02%)
Other[d]	88	87 945	2 077 (3.05%)	2 399 (3.96%)	1 637 (3.58%)	1 636 (6.69%)

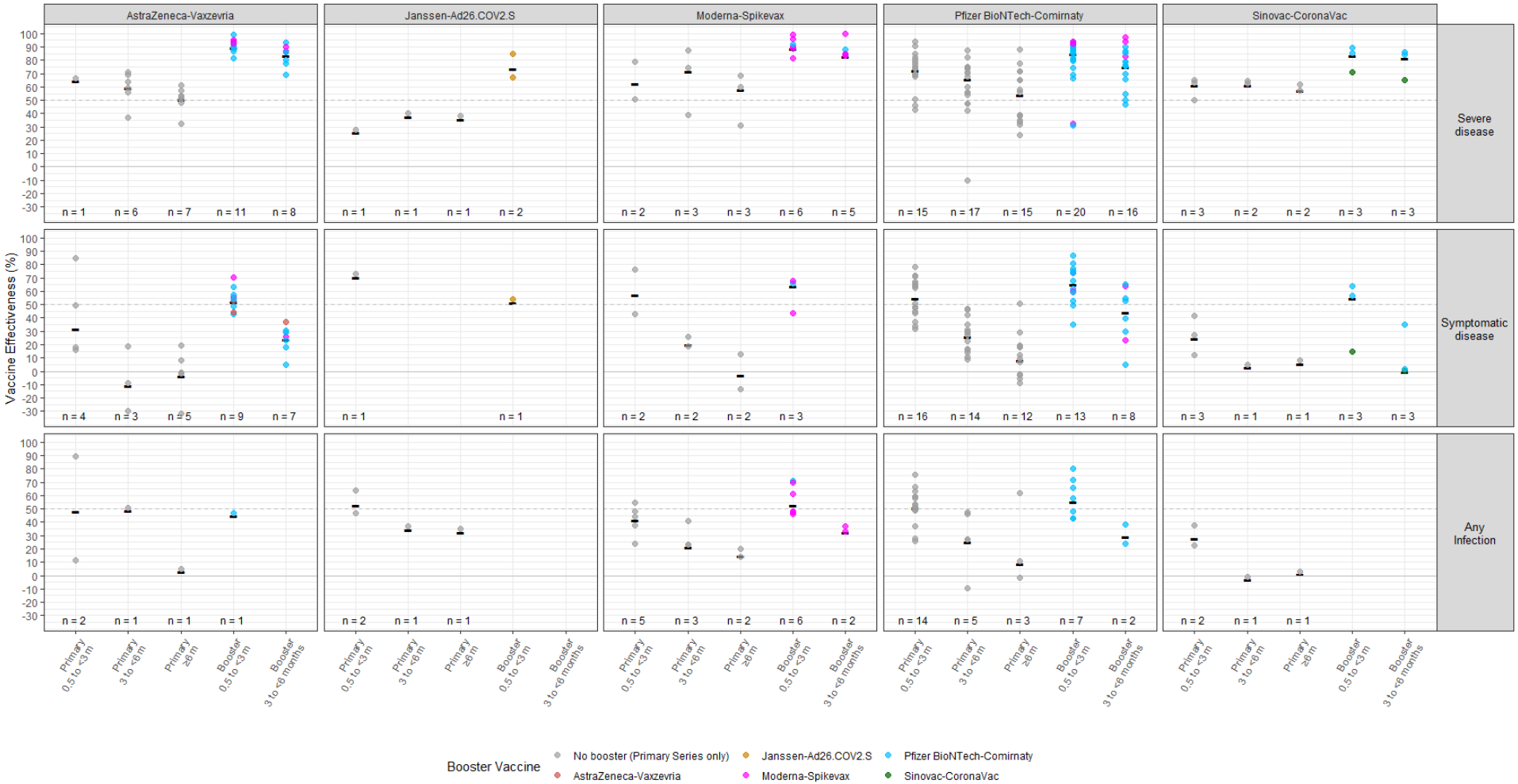
[a] Lineage, *X* means descendent lineages are pooled together, *n* indicates the number of currently designated additional descendent lineages
* Indicating pooled amino acid (AA) substitutions
[b] Data source: sequences and metadata from GISAID, retrieved on 19 September 2022
[c] Number of sequences and relative proportions in %
[d] indicating *Omicron* lineages other than those of BA.X lineages and those of recombinants

Table 3. Summary of phenotypic characteristics of the Omicron VOC[iii]

Public health domain of impact	Omicron (B.1.1.529)		Omicron sub lineages		
	Omicron (B.1.1.529)	**BA.1**	**BA.2**	**BA.4**	**BA.5**
Transmissibility	Growth advantage and increased transmissibility compared to Delta [2]	Lower growth rate compared to BA.2, BA.4 and BA.5[2]	Lower growth rate compared to BA.4 and BA.5 [2]	Lower growth advantage compared to BA.5 [2]	Growth advantage compared to BA.1, BA.2 and BA.4 [2]
Disease severity	Overall evidence suggests lower severity compared to Delta despite contrasting evidence. Earlier studies reported lower severity [3–8]. However, more recent studies report lower[9] or similar severity[10].	There is evidence of higher disease severity compared to BA.4 and BA.5[11]	There is evidence, both in favor of higher severity[11] compared to BA.4 and BA.5 , as well as in support of similar disease severity compared to BA.4 and BA.5[12]	One preliminary study suggests lower severity compared to BA.1 and BA.2 [11]	There is one preliminary study suggesting increased severity compared to BA.1 and BA.2[13], while another study found lower disease severity compared to BA.1 and BA.2[11]. More evidence is needed.
Risk of reinfection	Reduced risk of Omicron reinfection among individuals previously infected with a different SARS-CoV-2 variant compared to naïve individuals[14,15]	Earlier studies reported reduced risk of reinfection with BA.1 after infection with BA.2[14]. However, a recent study reported increased risk of reinfection following prior infection with any Omicron sub-lineage, as compared to non-Omicron VOCs[16].	Reduced risk of reinfection following infection with BA.1 [14] However, a recent study reported increased risk of reinfection following prior infection with any Omicron sub-lineage, as compared to non-Omicron VOCs[16].	Varying evidence regarding risk of reinfection. One study reported protection against infection following previous BA.2 infection[17] while a recent study reported increased risk of reinfection following prior infection with any Omicron sub-lineage, as compared to non-Omicron VOCs[16].	Varying evidence regarding risk of reinfection. One study reported protection against infection following previous BA.2 infection[17] while a recent study reported increased risk of reinfection following prior infection with any Omicron sub-lineage, as compared to non-Omicron VOCs[16].
Impact on antibody responses	Reduction in neutralizing activity reported as compared to other VOCs[18–20]	Lower neutralizing antibody titers compared to the index virus[20]	Lower neutralizing antibody titers compared to the index virus[20]	Lower neutralizing antibody titers compared to BA.1 [21,22]	Lower neutralizing antibody titres compared to BA.1 [21–23]
Impacts on diagnostics	PCR assays that include multiple gene targets maintain their accuracy to detect Omicron[24]; S gene target failure/positivity (SGTF) may be a proxy for screening. Limited to no impact on sensitivity of Ag-RDTs observed[25–28]	S gene target failure	The majority will be S gene target positive	S gene target failure	S gene target failure
Impact on treatments	No difference in the effectiveness of antiviral agents (polymerase and protease inhibitors) against the Omicron variant[29]. Conserved neutralizing activity for three broadly neutralizing monoclonal antibodies (sotrovimab, S2X259 and S2H97) and reduced effectiveness of other monoclonal antibodies[30–32]	Reduced neutralization activity of sotrovimab and casirivimab-imdevimab[33]	Reduced neutralization activity of sotrovimab and casirivimab-imdevimab[33]	Reduced neutralization activity of sotrovimab and casirivimab-imdevimab[33]	Reduced neutralization activity of sotrovimab and casirivimab-imdevimab[33]
Impact on vaccination	Results of vaccine effectiveness (VE) studies should be interpreted with caution because estimates vary with the type of vaccine administered and the number of doses and scheduling (sequential administration of different vaccines). For further information, see the section Interpretation of the results of the VE for the Omicron variant				

[iii] Studies contributing to the table are identified from an ongoing review of both the preprint and published literature on SARS-CoV-2 variants.

Figure 5. Vaccine effectiveness (VE) of primary series and first booster vaccination against the Omicron variant of concern



Dots represent point estimates of VE from each study; dark black horizontal lines represent median VE across all studies in stratum. All data is from a systematic review of COVID-19 VE studies; methods and summary tables of VE studies can be found on view-hub.org. Vertical panels represent VE for full primary series (grey dots) and VE for homologous or heterologous booster vaccination (other colored dots) following completion of primary series vaccination with vaccine of primary series noted in column header. All booster VE estimates are for first booster dose. Severe disease includes hospitalization; symptomatic disease includes disease of any severity level; any infection can include symptomatic and asymptomatic infection. Not shown in plot: VE against severe disease at 0.5-<3 month post primary series of Beijing CNBG-BBIBP-CorV (59%, 95% CI: 4 to 80%) and Gamaleya-Gam-Covid Vac (64%, 95% CI: -45 to 92.2%). Additional details on the methods for inclusion of the estimates in the plots provided in text.

Figure 5 shows the absolute vaccine effectiveness (VE) over time against the Omicron variant, grouped by the primary series vaccine; booster doses may have been a different vaccine (i.e., both homologous and heterologous booster vaccination VEs are shown). Additional information on vaccine performance against VOCs can also be found in Annex 2.

Since the last update on 17 August 2022, six new studies have been added to the figure. Two studies (not yet peer-reviewed) assessed the VE of mRNA vaccines (Pfizer BioNTech-Comirnaty and Moderna-mRNA-1273) against infection or symptomatic disease due to Omicron over time among children in the United Kingdom and Italy respectively.[34,35] A third study assessed VE of two and three doses of Pfizer BioNTech-Comirnaty against hospitalization due to Omicron BA.1/BA.2 and due to Omicron BA.4./BA.5 among adults in South Africa.[36] A fourth study (not yet peer reviewed) assessed VE of three doses Pfizer BioNTech-Comirnaty against hospitalization due to Omicron among adults in the United Kingdom.[37] A fifth study (not yet peer reviewed) evaluated VE of primary series vaccination with Pfizer BioNTech-Comirnaty and Sinovac-CoronaVac against Omicron infection and symptomatic disease among persons five years and older in China (Hong Kong SAR).[38] A sixth study (not peer reviewed) provided new evidence on the VE of two doses of Pfizer BioNTech-Comirnaty and the VE of two doses of Gamaleya-Gam-Covid-Vac against hospitalization with severe acute respiratory infection with Omicron in patients 18 years and older in Paraguay.[39]

Interpretation of the results of absolute VE for the Omicron variant for primary series and first booster dose vaccination

To date, 43 studies from 18 countries (Argentina, Brazil, Canada, Chile, Czech Republic, Denmark, Finland, China (Hong Kong SAR, Norway, Israel, Italy, Paraguay, Qatar, Singapore, South Africa, the United Kingdom, the United States of America, and Zambia) have collectively assessed the protection of seven vaccines against the Omicron variant (16 studies contributed VE estimates of primary series vaccination only to the plot, five contributed estimates of the first booster vaccination only, and 22 contributed to both). Findings from these studies show reduced VE of COVID-19 primary series vaccines against the Omicron variant for all outcomes (*severe disease*, *symptomatic disease*, and *infection*) compared to those that have been observed for the index SARS-CoV-2 strain and the other four VOCs (plots of VE against other VOCs can be found on the VIEW-hub.org Resources Page). Importantly though, VE estimates against the Omicron variant remain higher for *severe disease* than the other outcomes, in the majority of studies. The first booster vaccination substantially improves VE for all outcomes and for all combinations of schedules with estimates available for both primary series and booster vaccination. VE declines more in the first six months after the first booster vaccination for symptomatic disease and infection than it does for severe disease;[40] however, studies that assess VE of booster vaccination beyond six months are not yet available.

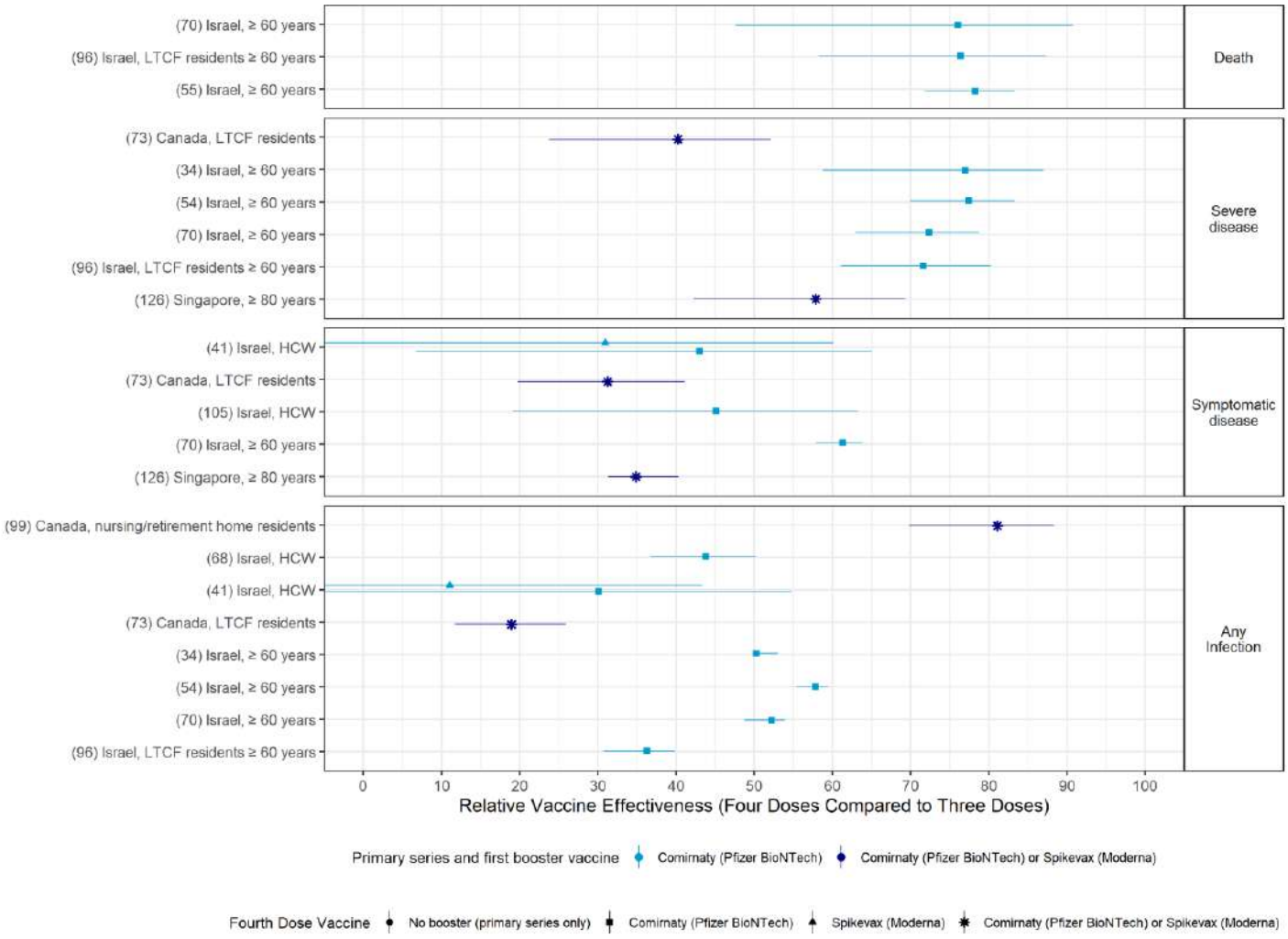
For *severe disease*, VE of the primary series showed little decline over six months. VE was ≥70% during the first three months after primary series vaccination for 11 of 17 (65%) VE estimates for the mRNA vaccines (Moderna-Spikevax and Pfizer BioNTech-Comirnaty). Of the three vector vaccines studies available, all had VE <70%: two reported VE <70% for AstraZeneca-Vaxzevria and Gamaleya-Gam-Covid-Vac, and the other reported VE <50% for Janssen-Ad26.COV2.S. Four estimates were available for inactivated vaccines; none of the three estimates for Sinovac-CoronaVac were ≥ 70% (2 [67%] were ≥ 50%). The single estimates for Beijing CNBG-BBIBP-CorV (Sinopharm) and for Gamaleya-Gam-Covid-Vac was <70% but ≥50% (data not shown in figure). Beyond three months after vaccination with the primary series, VE was ≥70% for 14 of 38 (37%) VE estimates for the mRNA vaccines (25 [66%] had VE ≥50%); one of 13 (8%) AstraZeneca-Vaxzevria VE estimates was ≥70% (10 [77%] were ≥50%); neither of the two estimates for a single dose of the other vector-based vaccine, Janssen-Ad26.COV2.S, was ≥50%; the four VE estimates for Sinovac-CoronaVac were ≥50% but <70%.

The first booster dose vaccination improved VE against *severe disease* in all studies, and VE was ≥70% in 37 (88%) of 42 estimates evaluating VE between 14 days and three months of receipt of a booster dose (39 estimates evaluated an mRNA booster, two evaluated a Janssen-Ad26.COV2.S booster, and one evaluated a Sinovac-CoronaVac booster); one Moderna-Spikevax booster dose had VE <50% (though confidence intervals were very wide), and one Janssen-Ad26.COV2.S booster dose had VE <70%. At three to six months post mRNA booster, VE was ≥70% for 26 of 31 (84%) estimates (the primary series was an mRNA vaccine in 21 of the 29 estimates, AstraZeneca-Vaxzevria in eight and Sinovac-CoronaVac in two). One study found the VE to be <70% but ≥50% following three to six months from the third dose of Sinovac-CoronaVac.

Of note, a study from South Africa provided the first published evidence of vaccine effectiveness against hospitalization with Omicron BA.4/BA.5 sub-lineages.[36] The authors assessed VE Pfizer BioNTech-Comirnaty against hospitalization due to Omicron among adults and found similar magnitude of VE, as well as patterns of decreasing effectiveness over time for Omicron BA.4/BA.5 and Omicron BA.1/BA.2 for both the primary series and first booster dose of Pfizer BioNTech-Comirnaty.

VE against *symptomatic disease* and *infection* within the first three months of primary series vaccination was lower than against severe disease, and VE decreased more rapidly over time. For *symptomatic disease*, only four of 18 (22%) VE estimates for the mRNA vaccines were ≥70% and only 10 (56%) were ≥50%; one (25%) of the four VE estimates for AstraZeneca-Vaxzevria was ≥70% while the remaining three estimates were <50%; the single estimate for Janssen-Ad26.COV2.S was ≥70%, and all three estimates for Sinovac (CoronaVac) were <50%. Beyond three months after vaccination, only one of 40 (3%) VE estimates was ≥50% (30 estimates evaluated mRNA vaccines, eight evaluated AstraZeneca-Vaxzevria, and two evaluated Sinovac-CoronaVac). An mRNA booster vaccination after completion of a primary series of an mRNA vaccine, AstraZeneca-Vaxzevria, or Sinovac-CoronaVac improved VE against *symptomatic disease*: seven of 25 (28%) VE estimates between 14 days and three months post booster were ≥70%, although 20 (80%) were ≥50%; one (50%) of two VE estimates evaluating three doses of AstraZeneca-Vaxzevria was ≥50% but <70%. First booster dose protection declined rapidly over time: only four of 16 (25%) estimates available at three to six months following receipt of an mRNA booster dose had VE ≥50% and none were ≥70%. Neither the single VE estimate for three doses of AstraZeneca-Vaxzevria nor the single estimate for three doses of Sinovac-CoronaVac that were assessed three to six months post booster vaccination was above 50%. VE against *infection* showed a similar pattern of steep waning as that against *symptomatic disease*.

Figure 6. Relative vaccine effectiveness of second booster vaccination against Omicron (relative to first booster vaccination)



Abbreviations: LTCF=long-term care facility; HCW=healthcare workers. Dots represent point estimates of vaccine effectiveness; horizontal lines represent the 95% confidence intervals. Labels along left side of plot indicate reference numbers, country, and study population. Reference numbers identify the study and link to the summary table of VE effectiveness studies on view-hub.org (Table 2 in summary table). Severe disease includes any hospitalization and hospitalization with severe illness; symptomatic disease includes disease of any severity level; any infection can include symptomatic and asymptomatic infection.

Interpretation of the results of absolute VE and relative VE for the Omicron variant for second booster dose vaccination

Two studies have evaluated *absolute VE* of two booster doses (i.e. four total doses) of mRNA vaccines, comparing infection and disease events among persons receiving four doses to an unvaccinated comparison group. One second booster dose study among a high-risk population of long-term care facility residents in Canada reported VE for various combinations of mRNA vaccines of 49-52%, 59-73%, and 83-88% against Omicron infection, symptomatic disease, and hospitalization, respectively, with a maximum potential follow-up time post second booster dose of four months.[41] The second study assessed VE of four doses of any combination of Pfizer BioNTech-Comirnaty and

Moderna-mRNA-1273 in persons 50 years and older in the United States, reporting VE estimates of 66% (95% CI: 60-71%) and 80% (95% CI-71-85%) against emergency department/urgent care visits and hospitalization due to Omicron, respectively, within the first two months of receipt of the second booster dose.[42]

To date, 11 studies (see Figure 6), conducted among long-term care facility residents, older adults, and healthcare workers, have assessed *relative VE* of four doses of mRNA vaccines, by comparing the risk of Omicron infection, disease, and death among persons receiving four doses to persons having received three doses (i.e., first booster) of mRNA vaccines at least three to four months prior. For all outcomes, a fourth dose achieved marginal gains in VE compared to three doses (Figure 6). Relative VE of four doses of mRNA vaccine was higher for severe disease and death than for symptomatic disease and infection.

It is important to note that interpretation of relative VE is not straightforward; it cannot be translated into absolute VE or cases prevented after a second booster dose. Moreover, relative VE cannot be compared across studies due to differences in the absolute VE (which is often not reported) and epidemiological context of the setting of each study. In addition, the follow-up time after the fourth dose in most studies was short (ranging from one to four months) so that waning of the fourth dose is not evaluable. For more information on interpreting relative VE, see the special focus on relative vaccine effectiveness from the June 29th Weekly Epidemiological Update.

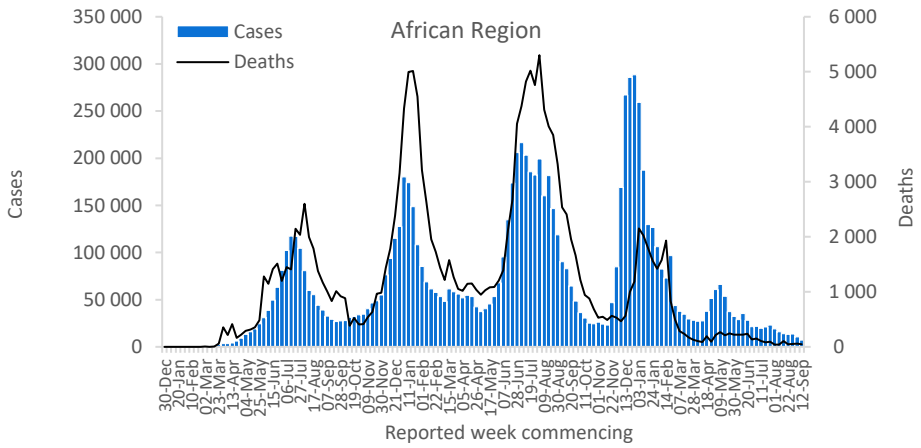
WHO regional overviews:

Epidemiological week 12 - 18 September 2022**

African Region

The African Region reported over 6800 new weekly cases, a 35% decrease as compared to the previous week. Four (8%) countries reported increases in the number of new cases of 20% or greater, with some of the greatest proportional increases seen in the Seychelles (183 vs 94 new cases; +95%), Burundi (358 vs 229 new cases; +56%) and Togo (128 vs 100 new cases; +28%). The highest numbers of new cases were reported from Réunion (2572 new cases; 287.3 new cases per 100 000 population; -45%), South Africa (1603 new cases; 2.7 new cases per 100 000; -11%) and Nigeria (483 new cases; <1 new case per 100 000; -17%).

The number of new weekly deaths in the Region increased by 27% as compared to the previous week, with 44 deaths reported. The highest numbers of new deaths were reported from the Democratic Republic of the Congo (18 new deaths; <1 new death per 100 000 population; similar to the previous week), South Africa (17 new deaths; <1 new death per 100 000; -19%) and Réunion (five new deaths; <1 new death per 100 000; similar to the previous week).

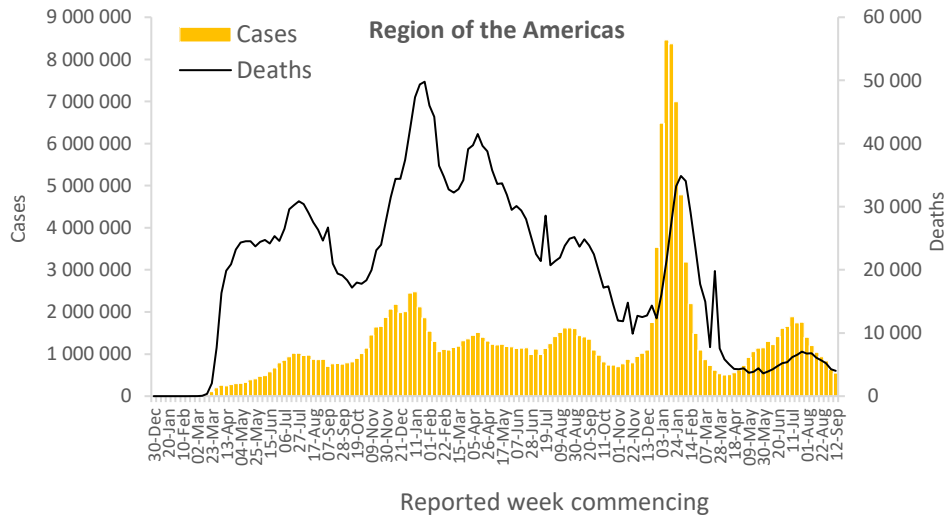


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 552 000 new cases, a 12% decrease as compared to the previous week. Eight of 56 (14%) countries for which data are available reported increases in the number of new cases of 20% or greater, with some of the greatest proportional increases observed in Honduras (825 vs 232 new cases; +256%), Belize (252 vs 102 new cases; +147%) and Ecuador (2012 vs 1417 new cases; +42%). The highest numbers of new cases were reported from the United States of America (395 117 new cases; 119.4 new cases per 100 000; -11%), Brazil (62 346 new cases; 29.3 new cases per 100 000; similar to the previous week) and Chile (23 853 new cases; 124.8 new cases per 100 000; -26%).

The number of new weekly deaths reported in the Region decreased by 5% as compared to the previous week, with over 4000 new deaths reported. The highest numbers of new deaths were reported from the United States of America (2601 new deaths; <1 new death per 100 000; +5%), Brazil (487 new deaths; <1 new death per 100 000; -12%) and Canada (245 new deaths; <1 new death per 100 000; similar to the previous week).

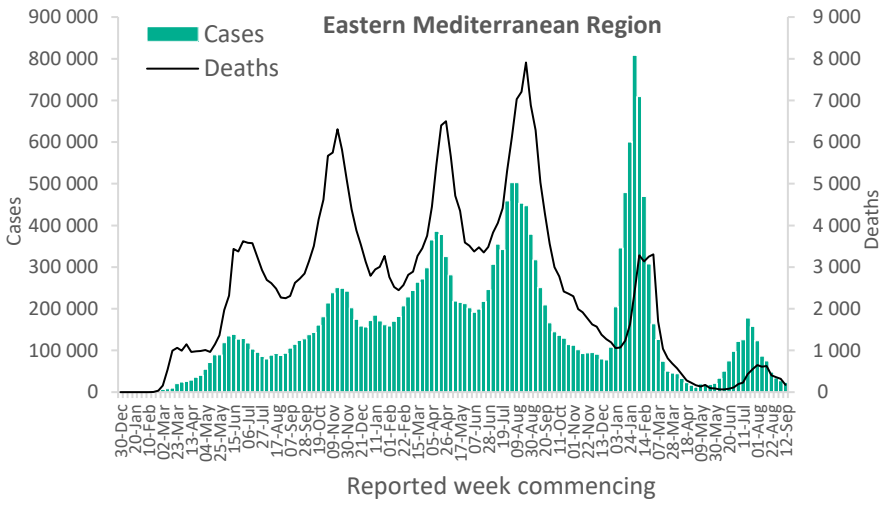


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 23 000 new cases, a 14% decrease as compared to the previous week. Two (9%) countries reported increases in new cases of 20% or greater, with the highest proportional increase observed in Bahrain (2048 vs 1448 new cases; +41%). The highest numbers of new cases were reported from Qatar (5388 new cases; 187.0 new cases per 100 000; +27%), the Islamic Republic of Iran (4105 new cases; 4.9 new cases per 100 000; -47%) and Jordan (3389 new cases; 33.2 new cases per 100 000; similar to the previous week).

The number of new weekly deaths decreased in the Region by 46% as compared to the previous week, with over 100 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (119 new deaths; <1 new death per 100 000; -54%), Saudi Arabia (15 new deaths; <1 new death per 100 000; +15%) and Lebanon (12 new deaths; <1 new death per 100 000; +33%).

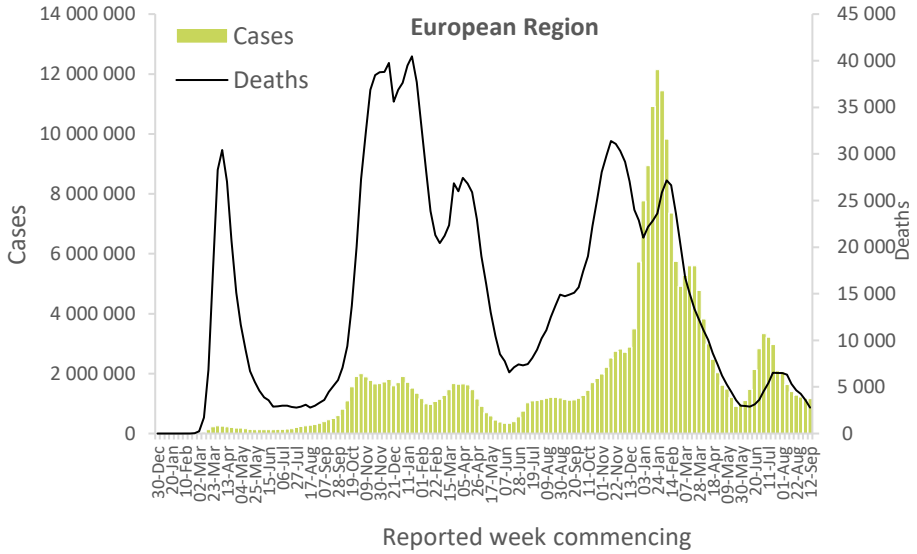


Updates from the Eastern Mediterranean Region

European Region

In the European Region, the number of new weekly cases remained stable this week as compared to the previous week, with over 1.1 million new cases reported. Nine (15%) countries reported increases in new cases of 20% or greater, with the highest proportional increases observed in Monaco (62 vs 33 new cases; +88%) and Lithuania (8809 vs 5754 new cases; +53%). The highest numbers of new cases were reported from the Russian Federation (372 485 new cases; 255.2 new cases per 100 000; +10%), Germany (206 617 new cases; 248.4 new cases per 100 000; similar to the previous week) and France (183 271 new cases; 281.8 new cases per 100 000; +62%).

Over 2700 new weekly deaths were reported in the Region, a 22% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (697 new deaths; <1 new death per 100 000; +9%), Spain (595 new deaths; 1.3 new deaths per 100 000; +83%) and Italy (371 new deaths; <1 new death per 100 000; similar to the previous week).

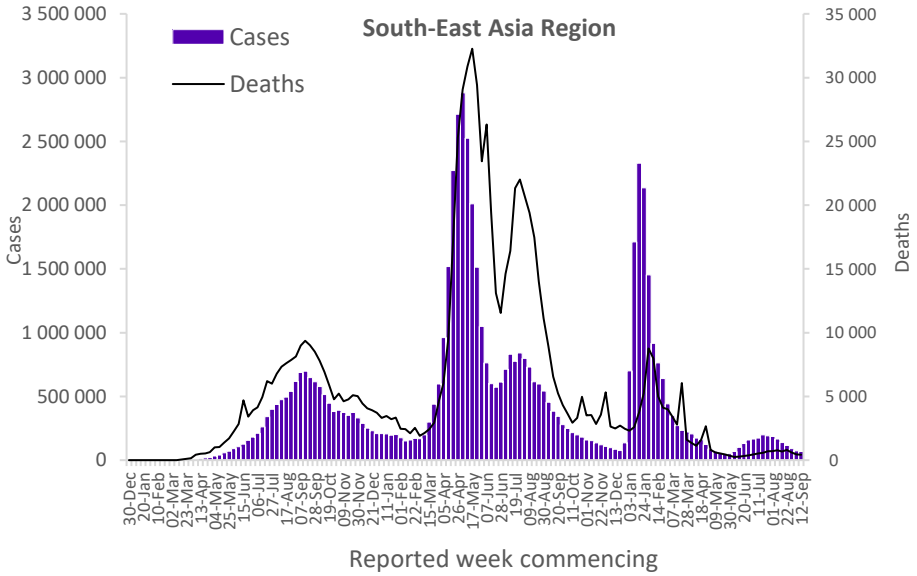


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 66 000 new cases, an 8% decrease as compared to the previous week. Three of the 10 countries (30%) in the Region for which data are available showed an increase in the number of new cases of 20% or greater: Bhutan (311 vs 186 new cases; +67%), Myanmar (2046 vs 1293 new cases; +58%), and Bangladesh (2727 vs 2126; +28%). The highest numbers of new cases were reported from India (38 829 new cases; 2.8 new cases per 100 000; similar to the previous week), Indonesia (16 314 new cases; 6.0 new cases per 100 000; -18%) and Thailand (5841 new cases; 8.4 new cases per 100 000; -35%).

The Region reported over 400 deaths, a 6% decrease as compared to the previous week. The highest numbers of new deaths were reported from India (187 new deaths; <1 new death per 100 000; +18%), Indonesia (122 new deaths; <1 new death per 100 000; similar to the previous week) and Thailand (90 new deaths; <1 new death per 100 000; -35%).

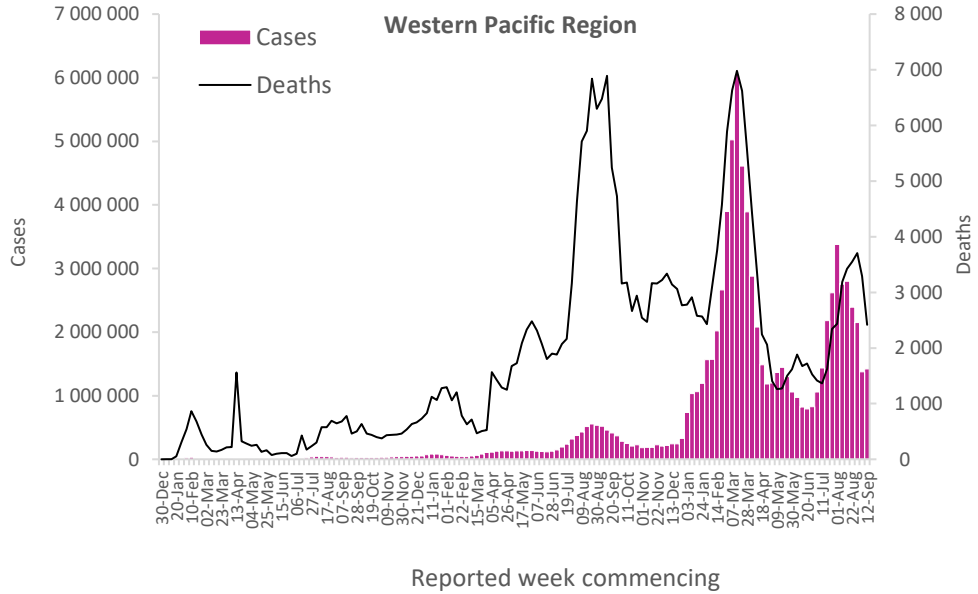


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported a similar case count as the previous week, with over 1.4 million new cases. Four (12%) countries reported increases in new cases of 20% or greater, with the largest proportional increases observed in Marshall Islands (141 vs nine new cases; +1467%), New Caledonia (97 vs 23 new cases; +322%) and Vanuatu (51 vs 36 new cases; +42%). The highest numbers of new cases were reported from Japan (605 919 new cases; 479.1 new cases per 100 000; +13%), the Republic of Korea (389 579 new cases; 759.9 new cases per 100 000; -11%) and China (297 693 new cases; 20.2 new cases per 100 000; +13%).

The Region reported a 27% decrease in new weekly deaths as compared to the previous week, with over 2400 deaths reported. The highest numbers of new deaths were reported from Japan (1162 new deaths; 1 new death per 100 000; -31%), the Republic of Korea (377 new deaths; 1 new death per 100 000; +5%) and China (360 new deaths; <1 new death per 100 000; +20%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.
[2] A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

Updates on the COVID-19 outbreak in the Democratic People's Republic of Korea is not included in this report as the number of laboratory-confirmed COVID-19 cases is not reported.

Annex 2. SARS-CoV-2 variants assessment and classification

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.

Annex 3. Summary of results of neutralization studies assessing primary series and booster vaccine performance against Omicron variant of concern (data updated 19 September 2022)

		Omicron Sub-Lineage					
		BA.1	BA.2	BA.2.12.1	BA.2.75	BA.3	BA.4/BA.5
Primary Series Vaccination							
WHO Emergency Use Listing (EUL) Qualified Vaccines	AstraZeneca-Vaxzevria/SII-Covishield	HNR_{13}	HNR_{2}	HNR_{1}	----	----	HNR_{1}
	Beijing CNBG-BBIBP-CorV	HNR_{9}	HNR_{3}	HNR_{2}	----	HNR_{1}	HNR_{2}
	Bharat-Covaxin	↓↓$_{1}$	----	----	----	----	----
	Cansino-Convidecia	----	----	----	----	----	----
	Janssen-Ad26-COV2.S	HNR_{9}	HNR_{1}	HNR_{1}	----	----	HNR_{1}
	Moderna-Spikevax	↓↓↓$_{11}$	↓↓to↓↓↓$_{2}$	HNR_{1}	----	----	HNR_{1}
	Novavax-Nuvaxovid/SII - Covavax	HNR_{2}	HNR_{1}	HNR_{1}	----	----	HNR_{1}
	Pfizer BioNTech-Comirnaty	HNR_{53}	HNR_{8}	HNR_{1}	HNR_{1}	HNR_{1}	HNR_{3}
	Sinovac-CoronaVac	HNR_{9}	↓↓↓$_{1}$	----	----	----	↓↓↓$_{1}$
Vaccines without WHO EUL	Anhui ZL-Recombinant	----	----	----	----	----	----
	Gamaleya-Sputnik V	HNR_{3}	HNR_{1}	HNR_{1}	----	----	HNR_{1}
	Chumakov-Covi-Vac	HNR_{2}	----	----	----	----	----
First Booster Vaccination (Primary Series Vaccine + Booster Vaccine)							
WHO Emergency Use Listing (EUL) Qualified Booster Vaccines	AstraZeneca-Vaxzevria/SII-Covishield + AstraZeneca-Vaxzevria/SII Covishield	HNR_{2}	HNR_{2}	----	----	↓↓$_{1}$	↓↓↓$_{1}$
	AstraZeneca-Vaxzevria/SII-Covishield + Moderna-Spikevax	↓$_{1}$	----	----	----	----	----
	AstraZeneca-Vaxzevria/SII-Covishield + Pfizer BioNTech-Comirnaty	↓↓to↓↓↓$_{2}$	↓↓$_{1}$	----	----	↓↓$_{1}$	----
	Beijing CNBG-BBIBP-CorV + Beijing CNBG-BBIBP-CorV	↓↓to↓↓↓$_{4}$	HNR_{2}	HNR_{1}	----	↓↓$_{1}$	HNR_{1}
	Janssen-Ad26-COV2.S + Janssen-Ad26-COV2.S	HNR_{2}	----	----	----	----	----
	Janssen-Ad26-COV2.S + Moderna-Spikevax	↓↓↓$_{1}$	----	----	----	----	----
	Janssen-Ad26-COV2.S + Pfizer BioNTech-Comirnaty	↓$_{1}$ to ↓↓↓$_{2}$	----	----	----	----	----
	Moderna-Spikevax + Moderna-Spikevax	↓to↓↓↓$_{9}$	↓↓$_{1}$	↓↓$_{1}$	----	↓↓$_{1}$	↓↓↓$_{2}$
	Moderna-Spikevax + Pfizer BioNTech-Comirnaty	↓↓↓$_{1}$	----	----	----	----	----
	Novavax-Nuvaxovid/SII – Covavax + Novavax-Nuvaxovid/SII - Covavax	↓↓$_{1}$	----	----	----	----	----
	Pfizer BioNTech-Comirnaty + Pfizer BioNTech-Comirnaty	↓to↓↓↓$_{44}$	↓to↓↓↓$_{15}$	↓to↓↓↓$_{3}$	↓↓$_{1}$	↓to↓↓$_{4}$	↓↓to↓↓↓$_{7}$
	Pfizer BioNTech-Comirnaty + Janssen-Ad26-COV2.S	↓$_{2}$	----	----	----	----	----
	Pfizer BioNTech-Comirnaty + Moderna-Spikevax	↓to↓↓$_{2}$	----	----	↓↓↓$_{1}$	----	↓↓↓$_{1}$
	Sinovac-CoronaVac + Cansino-Convidecia	↓↓$_{1}$	----	----	----	----	----
	Sinovac-CoronaVac + Sinovac-CoronaVac	↓↓to↓↓↓$_{7}$	↓↓ to↓↓↓$_{3}$	↓↓$_{1}$	----	↓↓$_{1}$	↓↓ to↓↓↓$_{3}$
	Sinovac-CoronaVac + Pfizer BioNTech-Comirnaty	↓↓$_{2}$	↓↓$_{1}$	----	----	----	----
Booster Vaccines without WHO EUL	Anhui ZL-Recombinant + Anhui ZL-Recombinant	↓to↓↓$_{2}$	↓↓$_{1}$	↓↓$_{1}$	----	↓↓↓$_{1}$	↓↓↓$_{1}$
	Beijing CNBG-BBIBP-CorV + Anhui ZL - Recombinant	↓↓to↓↓↓$_{4}$	HNR_{2}	HNR_{1}	----	↓↓↓$_{1}$	HNR_{1}
	Gamaleya-Sputnik V + Gamaleya Sputnik Light	↓↓$_{1}$	----	----	----	----	----
	Sinovac-CoronaVac + Anhui ZL - Recombinant	↓to↓↓$_{2}$	↓to↓↓$_{2}$	↓to↓↓↓$_{2}$	----	↓to↓↓↓$_{2}$	↓↓$_{1}$
	Sinovac-CoronaVac + Cansino-Ad5-nCoV-IH	↓↓↓$_{1}$	----	----	----	----	----
Second Booster Vaccination (Primary Series + First Booster Vaccine + Second Booster Vaccine)							
WHO Emergency Use Listing (EUL) Qualified Booster Vaccines	Moderna-Spikevax + Moderna-Spikevax + Moderna-Spikevax	↓$_{1}$	----	----	----	----	----
	Moderna-Spikevax + Moderna-Spikevax + Moderna-Spikevax Bivalent Original/Omicron BA.1	↓$_{1}$	----	----	----	----	↓↓$_{1}$
	Pfizer BioNTech-Comirnaty + Pfizer BioNTech-Comirnaty + Pfizer BioNTech-Comirnaty	↓↓↓$_{1}$	----	----	----	----	----
	Pfizer BioNTech-Comirnaty + Pfizer BioNTech-Comirnaty + Moderna-Spikevax	↓↓↓$_{1}$	----	----	----	----	----

Abbreviations: HNR=high non-response. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" indicates <2-fold reduction in neutralization relative to the ancestral strain; "↓" indicates 2 to <5-fold reduction; "↓↓" indicates 5 to <10-fold reduction; "↓↓↓" indicates ≥10-fold reduction. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/sub-lineage was used. HNR indicates a median percent response across all studies of <75%; in these instances, fold-reductions can be biased and, thus. are not presented. The number of studies is shown as subscripts.

Additional notes on Annex Table 3

- Studies contributing to the table are identified from an ongoing review of the preprint and published literature on neutralization of SARS-CoV-2 variants by COVID-19 vaccines.
- The following sets of results are excluded from the table:
    - Samples collected <7 days or ≥6 months after final dose
    - Strain other than ancestral SARS-CoV-1 strain used as the reference
    - Samples collected from immunocompromised persons
    - More than 20% of samples collected from persons previously infected with SARS-CoV-2
- It is important to note that studies vary in population and other methodological considerations which may in part explain some differences when comparing products between different studies. In addition, the reductions summarized in the table do not incorporate uncertainty intervals around the fold reductions which can vary substantially across studies when reported.

Annex 4. Methods for Figure 5

• VE studies included in the plot were identified from an ongoing systematic review of COVID-19 vaccine effectiveness studies. All studies were cohort or test-negative designs conducted when Omicron was the predominant circulating variant. Methods for the systematic review and inclusion/exclusion criteria are available on view-hub.org.

• Only studies providing VE estimates of individual vaccines are included in the plot; studies assessing combined VE of more than one vaccine are excluded except for studies of heterologous primary and booster schedules where all participants included in a VE estimate received the same brands of vaccines in the same order.

• Only studies providing VE estimates for discrete time intervals since vaccination or estimates with limited follow-up time (such that the median time point falls clearly in one of the intervals for the plot) are included. Studies that only provide VE estimates over a cumulative period of time covering more than one-time interval are excluded because they are difficult to interpret due to the marked waning of VE over time with Omicron.

• Only estimates of absolute vaccine effectiveness (i.e., the comparison group is unvaccinated persons) are included in the plot; estimates of relative vaccine effectiveness (e.g., the comparison group is persons having completed the primary series) are excluded as the interpretation of relative vaccine effectiveness is not comparable with absolute vaccine effectiveness.

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COVID-19 Weekly Epidemiological Update

Edition 109 published 14 September 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews

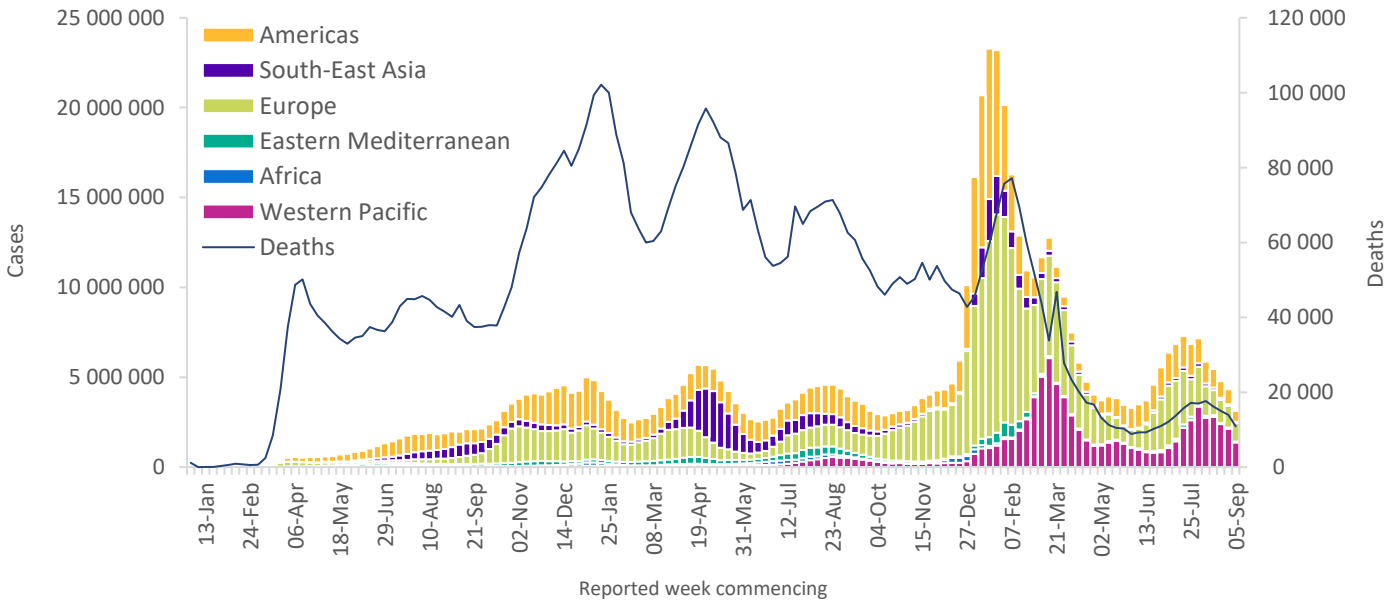
Global overview

Data as of 11 September 2022

Globally, the number of new weekly cases decreased by 28% during the week of 5 to 11 September 2022, as compared to the previous week, with over 3.1 million new cases reported (Figure 1, Table 1). The number of new weekly deaths decreased by 22% as compared to the previous week, with just under 11 000 fatalities reported. As of 11 September 2022, over 605 million confirmed cases and over 6.4 million deaths have been reported globally.

At the regional level, the number of newly reported weekly cases decreased across all six WHO regions: the Western Pacific Region (-36%), the African Region (-33%), the Region of the Americas (-27%), the South-East Asia Region (-20%), the Eastern Mediterranean Region (-19%) and the European Region (-15%). The number of new weekly deaths decreased across five of the six regions: the European Region (-31%), the South-East Asia Region (-25%), the Region of the Americas (-22%), the Western Pacific Region (-11%), the Eastern Mediterranean Region (-10%); while it increased in the African Region (+10%).

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 11 September 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest numbers of new weekly cases were reported from Japan (537 181 new cases; -54%), the Republic of Korea (435 695 new cases; -26%), the United States of America (430 048 new cases; -26%), the Russian Federation (337 187 new cases; +4%) and China (263 288 new cases; +11%). The highest numbers of new weekly deaths were reported from the United States of America (2306 new deaths; -21%), Japan (1681 new deaths; -18%), the Russian Federation (637 new deaths; +1%), Brazil (551 new deaths; -36%) and the Philippines (440 new deaths; +28%).

Current trends in reported COVID-19 cases and deaths should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected. Additionally, data from previous weeks are continuously updated to retrospectively incorporate changes in reported COVID-19 cases and deaths made by countries.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 11 September 2022**

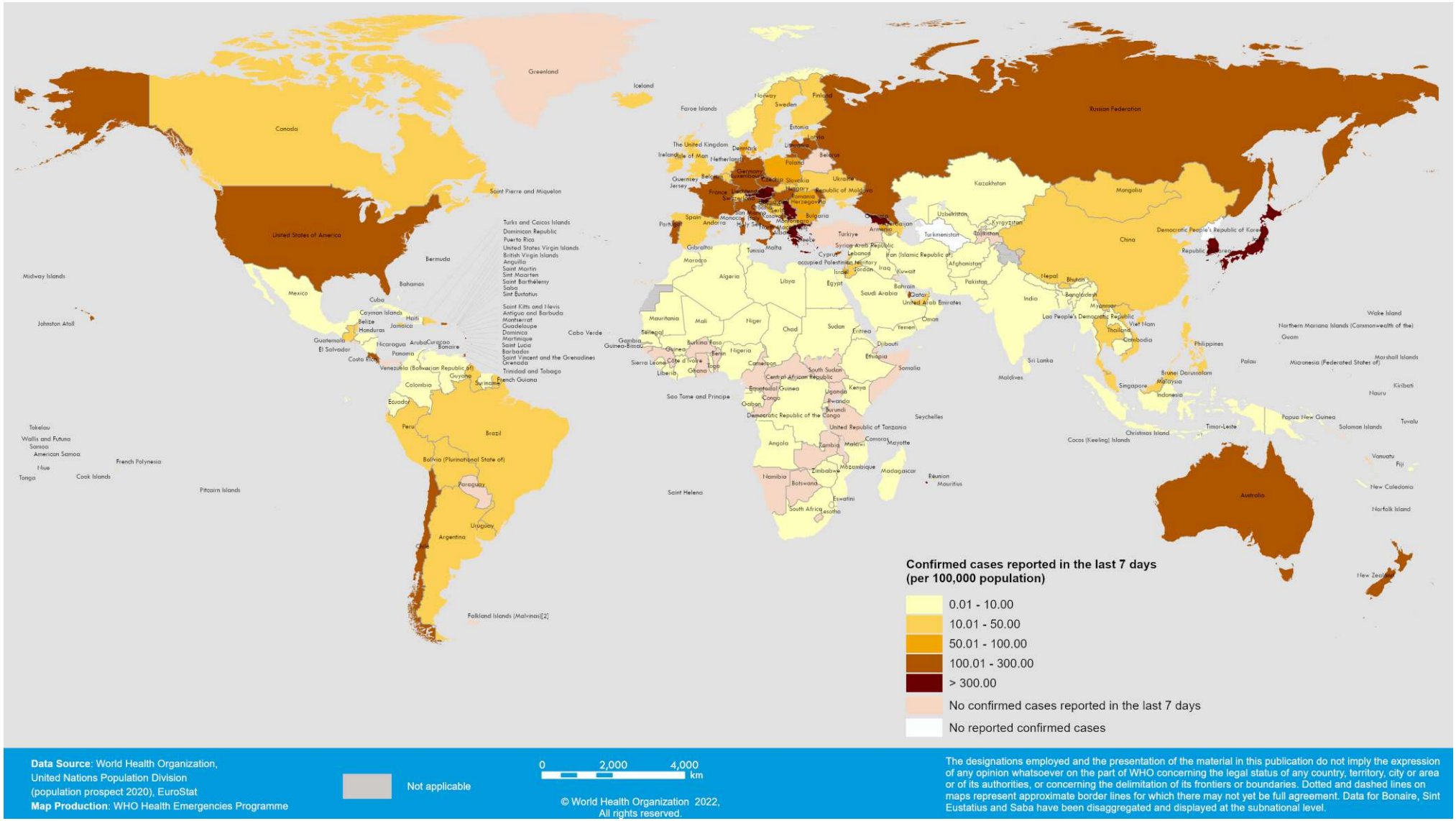
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Western Pacific	1 374 533 (44%)	-36%	86 563 513 (14%)	3 289 (30%)	-11%	265 184 (4%)
Europe	1 037 111 (33%)	-15%	249 801 915 (41%)	2 817 (26%)	-31%	2 083 723 (32%)
Americas	610 303 (19%)	-27%	176 886 543 (29%)	3 998 (37%)	-22%	2 825 662 (44%)
South-East Asia	72 601 (2%)	-20%	60 125 926 (10%)	453 (4%)	-25%	796 444 (12%)
Eastern Mediterranean	27 586 (1%)	-19%	23 022 557 (4%)	321 (3%)	-10%	347 977 (5%)
Africa	8 841 (<1%)	-33%	9 308 479 (2%)	57 (1%)	10%	174 404 (3%)
Global	**3 130 975 (100%)**	**-28%**	**605 709 697 (100%)**	**10 935 (100%)**	**-22%**	**6 493 407 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior. Data from previous weeks are updated continuously with adjustments received from countries.*
***See Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

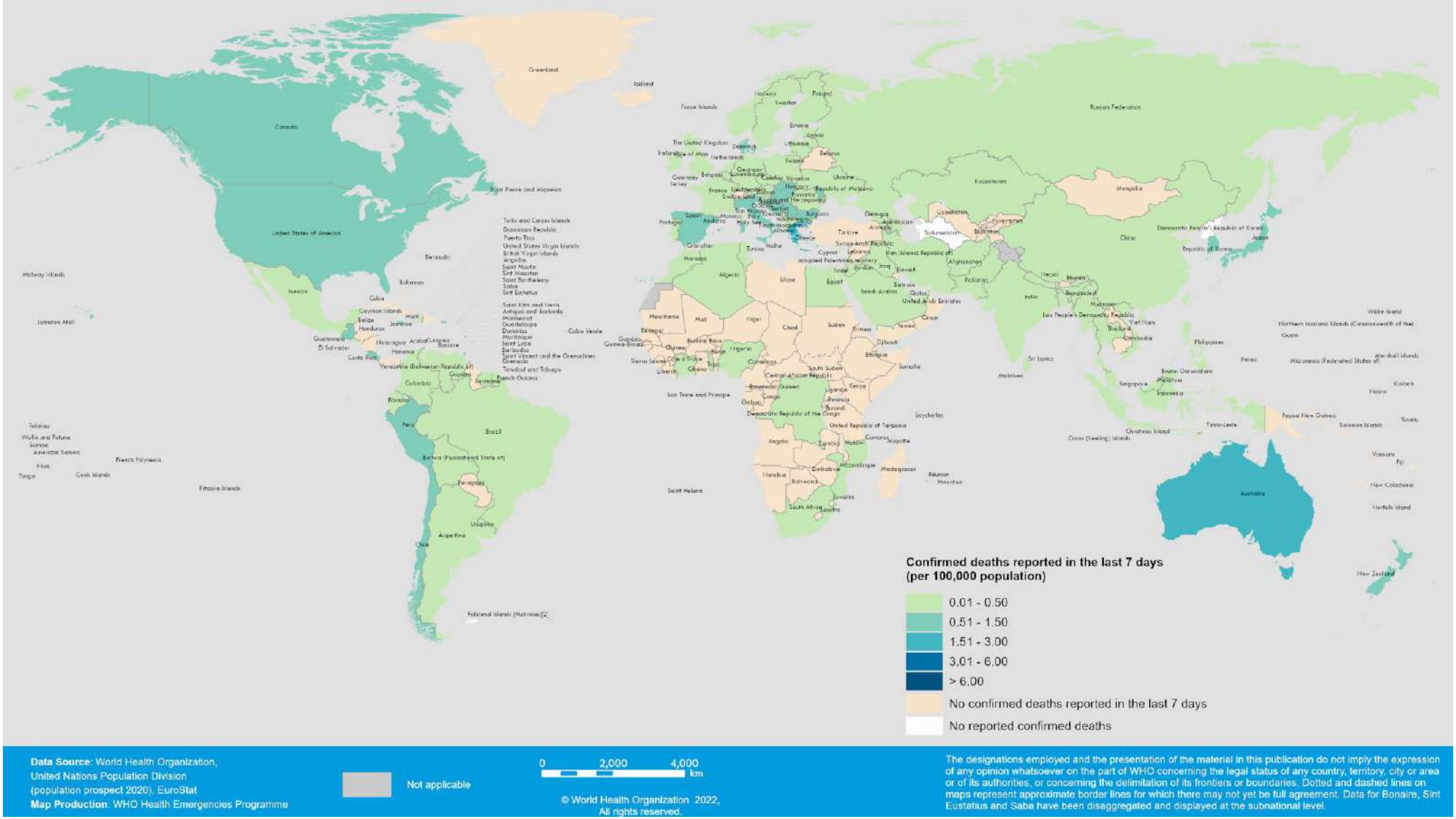
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update
- WHO COVID-19 detailed surveillance data dashboard

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 5 - 11 September 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 5 - 11 September 2022**



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

Geographic spread and prevalence of VOCs

Globally, from 12 August to 12 September 2022, 123 400 SARS-CoV-2 sequences were shared through GISAID. Among these, 122 374 sequences were the Omicron variant of concern (VOC), accounting for 99.2% of sequences reported globally in the past 30 days.

A comparison of sequences submitted to GISAID in epidemiological week 35 (29 August to 4 September 2022) and week 34 (22 to 28 August 2022) shows that BA.5 Omicron descendent lineages continue to be dominant globally, with an increase in weekly prevalence from 82.4% to 90.0%. The prevalence of BA.4 descendent lineages (including BA.4.6) decreased from 8.0% in week 34 to 6.1% in week 35. The prevalence of BA.2 descendent lineages (BA.2.X) increased in week 35 compared to week 34 (2.3% in week 34 and 3.2% in week 35). BA.2.75 is an Omicron descendent lineage under monitoring that continues to show low prevalence globally (1.0% and 2.2% in weeks 34 and 35 respectively).

WHO continues to monitor SARS-CoV-2 variants, including descendent lineages of VOCs, to track changes in prevalence and viral characteristics. The current trends describing the circulation of Omicron descendent lineages should be interpreted with due consideration of the limitations of the COVID-19 surveillance systems. These include differences in sequencing capacity and sampling strategies between countries, changes in sampling strategies over time, reductions in tests conducted and sequences shared by countries around the world and delays in uploading sequence data to GISAID.

For more information on the assessment of SARS-CoV-2 variants and the WHO classification, refer to Annex 2.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- VIEW-hub: repository for the most relevant and recent vaccine data

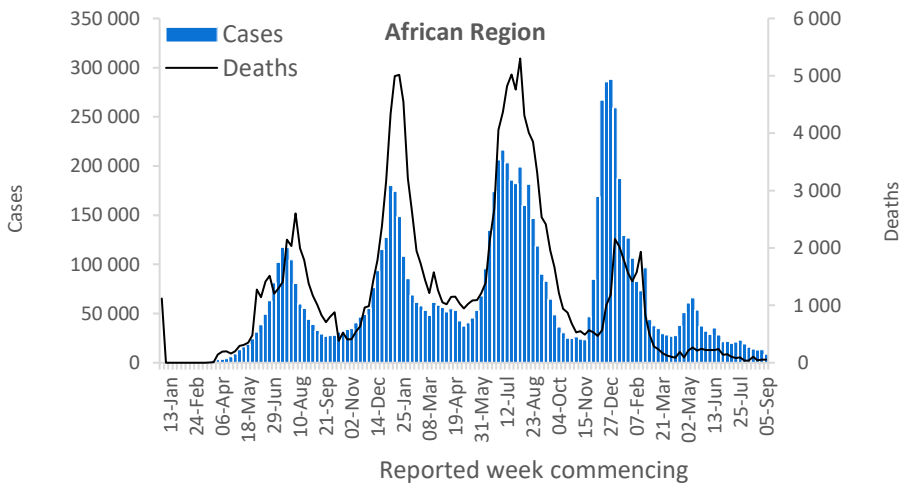
WHO regional overviews:

Epidemiological week 5 - 11 September 2022**

African Region

The African Region reported over 8800 new weekly cases, a 33% decrease as compared to the previous week. Nine (18%) countries reported increases in the number of new cases of 20% or greater, with some of the greatest proportional increases seen in Mali (629 vs 262 new cases; +140%), Liberia (31 vs 15 new cases; +107%) and Zimbabwe (115 vs 56 new cases; +105%). The highest numbers of new cases were reported from Réunion (4661 new cases; 520.6 new cases per 100 000 population; -34%), South Africa (1792 new cases; 3.0 new cases per 100 000; +41%) and Mali (629 new cases; 3.1 new cases per 100 000; +140%).

The number of new weekly deaths in the Region increased by 10% as compared to the previous week, with 57 deaths reported. The highest numbers of new deaths were reported from South Africa (21 new deaths; <1 new death per 100 000 population; -13%), the Democratic Republic of the Congo (17 new deaths; <1 new death per 100 000; +325%) and Nigeria (six new deaths; <1 new death per 100 000; no deaths reported during the previous week).

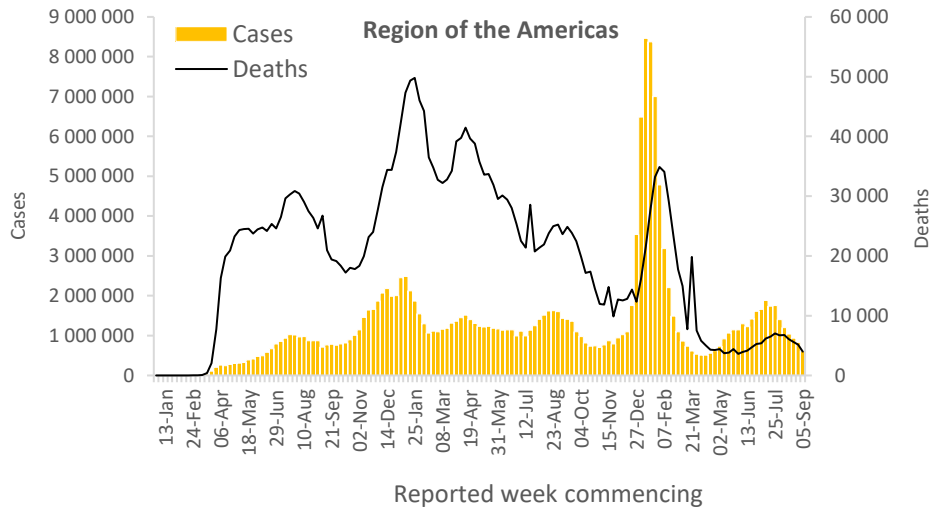


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 610 000 new cases, a 27% decrease as compared to the previous week. Five of 56 (9%) countries for which data are available reported increases in the number of new cases of 20% or greater, with some of the greatest proportional increases observed in Montserrat (86 vs 64 new cases; +34%), Venezuela (Bolivarian Republic of) (890 vs 665 new cases; +34%) and Aruba (122 vs 98 new cases; +24%). The highest numbers of new cases were reported from the United States of America (430 048 new cases; 129.9 new cases per 100 000; -26%), Brazil (60 594 new cases; 28.5 new cases per 100 000; -31%) and Chile (32 268 new cases; 168.8 new cases per 100 000; -19%).

The number of new weekly deaths reported in the Region decreased by 22% as compared to the previous week, with just under 4000 new deaths reported. The highest numbers of new deaths were reported from the United States of America (2306 new deaths; <1 new death per 100 000; -21%), Brazil (551 new deaths; <1 new death per 100 000; -36%) and Peru (255 new deaths; <1 new death per 100 000; +9%).

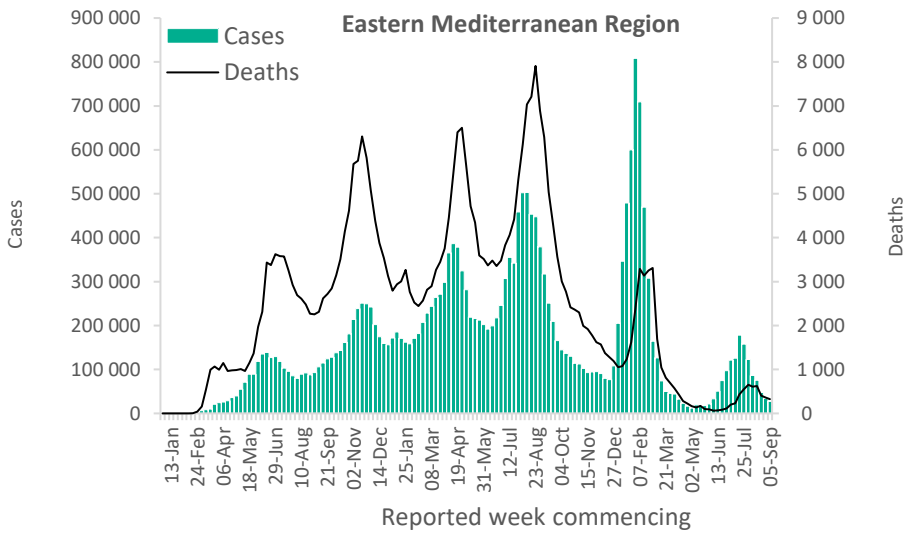


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 27 000 new cases, a 19% decrease as compared to the previous week. Three (14%) countries reported increases in new cases of 20% or greater, with the highest proportional increases observed in Yemen (six vs one new cases; +500%), Sudan (23 vs 14 new cases; +64%) and Tunisia (962 vs 695 new cases; +38%). The highest numbers of new cases were reported from the Islamic Republic of Iran (7800 new cases; 9.3 new cases per 100 000; -31%), Qatar (4247 new cases; 147.4 new cases per 100 000; +8%) and Jordan (3372 new cases; 33.0 new cases per 100 000; -15%).

The number of new weekly deaths decreased in the Region by 10% as compared to the previous week, with over 300 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (260 new deaths; <1 new death per 100 000; -8%), Saudi Arabia (13 new deaths; <1 new death per 100 000; similar to the previous week's figures) and Pakistan (11 new deaths; <1 new death per 100 000; -35%).

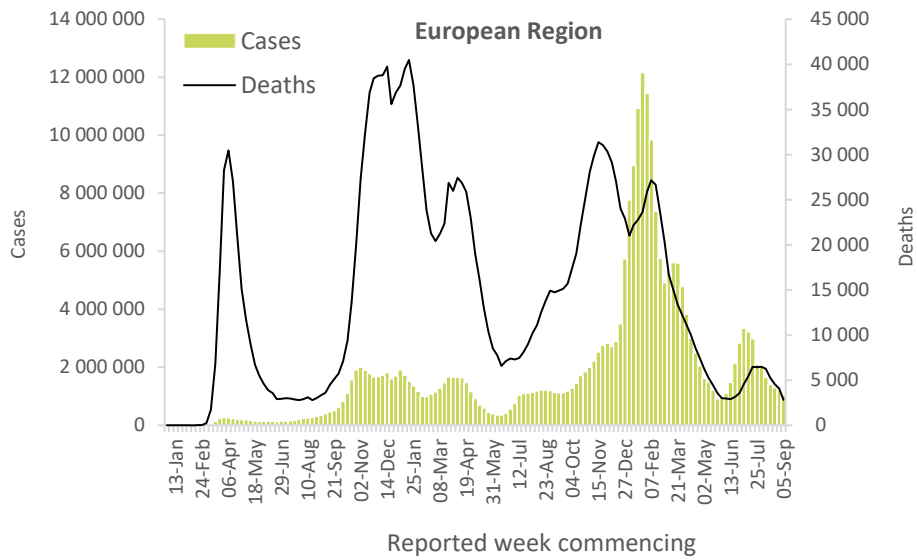


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 1 million new cases, a 15% decrease as compared to the previous week. Four (7%) countries reported increases in new cases of 20% or greater, with the highest proportional increases observed in Ukraine (16 155 vs 11 437 new cases; +41%), Slovenia (11 076 vs 8872 new cases; +25%) and Poland (25 133 vs 20 247 new cases; +24%). The highest numbers of new cases were reported from the Russian Federation (337 187 new cases; 231.1 new cases per 100 000; similar to the previous week's figures), Germany (183 874 new cases; 221.1 new cases per 100 000; -9%) and Italy (110 644 new cases; 185.5 new cases per 100 000; -19%).

Over 2800 new weekly deaths were reported in the Region, a 31% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (637 new deaths; <1 new death per 100 000; similar to the previous week), Italy (373 new deaths; <1 new death per 100 000; -25%) and Spain (326 new deaths; <1 new death per 100 000; -7%).

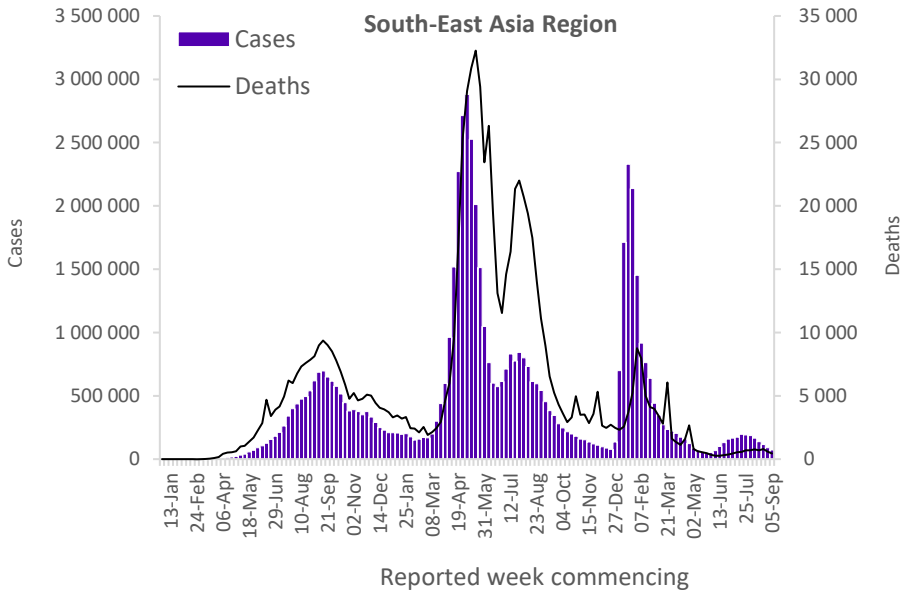


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 72 000 new cases, a 20% decrease as compared to the previous week. Three of the 10 countries (30%) in the Region for which data are available showed an increase in the number of new cases of 20% or greater: Myanmar (1293 vs 597 new cases; +117%), Bangladesh (2126 vs 1444 new cases; +47%) and Timor-Leste (33 vs 25; +32%). The highest numbers of new cases were reported from India (38 824 new cases; 2.8 new cases per 100 000; -20%), Indonesia (19 950 new cases; 7.3 new cases per 100 000; -24%) and Thailand (9004 new cases; 12.9 new cases per 100 000; -26%).

The Region reported over 400 deaths, a 25% decrease as compared to the previous week. The highest numbers of new deaths were reported from India (159 new deaths; <1 new death per 100 000; -33%), Thailand (139 new deaths; <1 new death per 100 000; -22%) and Indonesia (123 new deaths; <1 new death per 100 000; -16%).

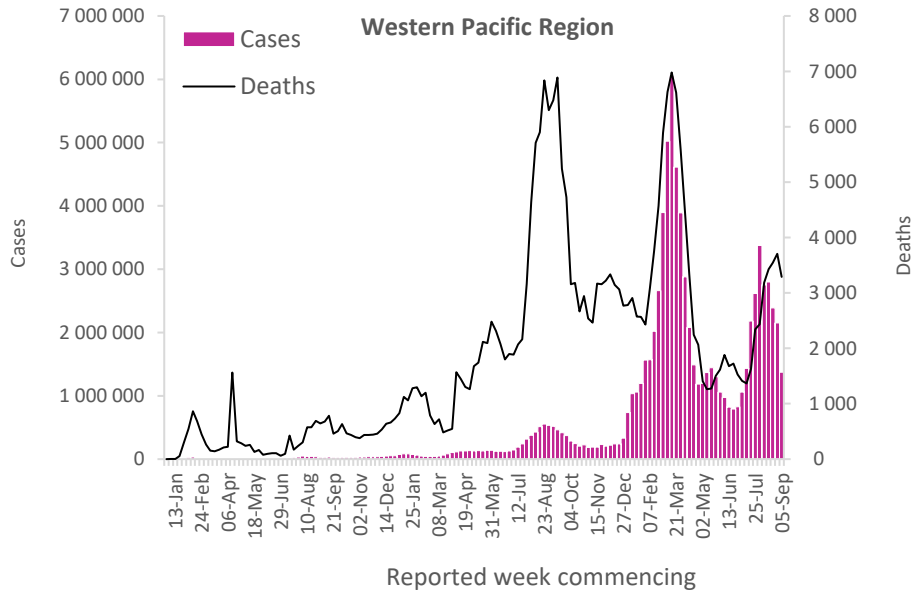


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported just over 1.3 million new cases, a 36% decrease as compared to the previous week. Two (6%) countries reported increases in new cases of 20% or greater, with the largest proportional increases observed in Papua New Guinea (20 vs 15 new cases; +33%) and Viet Nam (20 467 vs 15 906 new cases; +29%). The highest numbers of new cases were reported from Japan (537 181 new cases; 424.7 new cases per 100 000; -54%), the Republic of Korea (435 695 new cases; 849.8 new cases per 100 000; -26%) and China (263 288 new cases; 17.9 new cases per 100 000; +11%).

The Region reported an 11% decrease in new weekly deaths as compared to the previous week, with over 3200 deaths reported. The highest numbers of new deaths were reported from Japan (1681 new deaths; 1.3 new deaths per 100 000; -18%), the Philippines (440 new deaths; <1 new death per 100 000; +28%) and Australia (407 new deaths; 1.6 new deaths per 100 000; +11%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.
[2] A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

Updates on the COVID-19 outbreak in the Democratic People's Republic of Korea is not included in this report as the number of laboratory-confirmed COVID-19 cases is not reported.

Annex 2. SARS-CoV-2 variants assessment and classification

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.

COVID-19 Weekly Epidemiological Update

Edition 108 published 7 September 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews

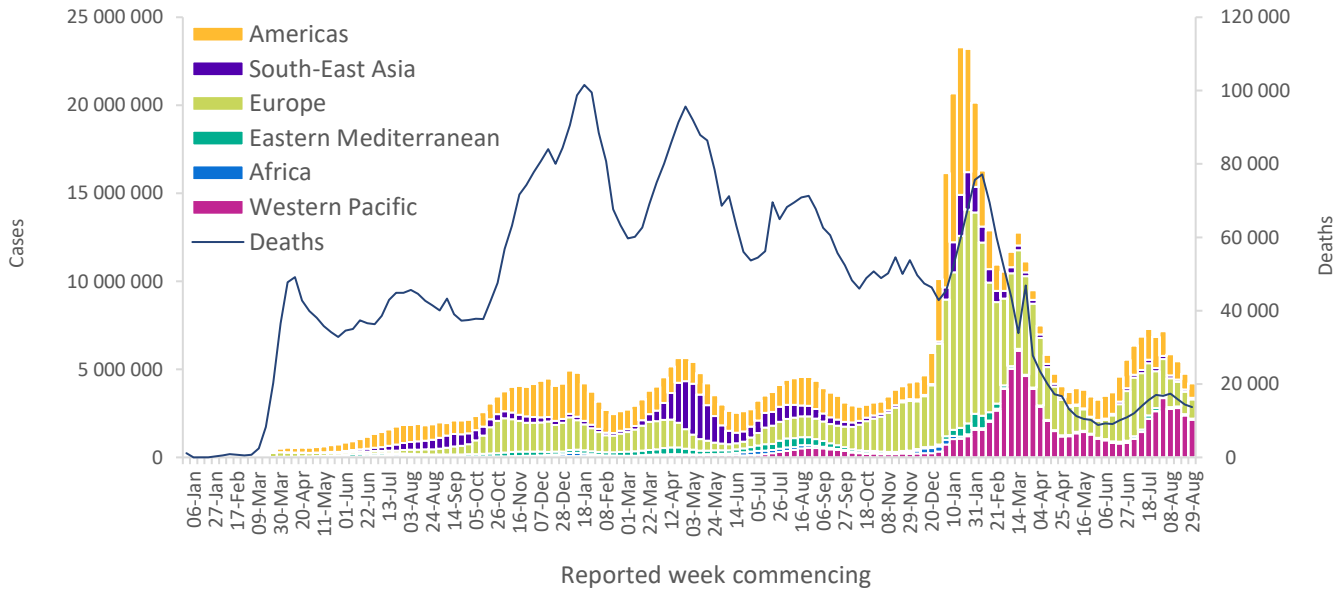
Global overview

Data as of 4 September 2022

Globally, the number of new weekly cases decreased by 12% during the week of 29 August to 4 September 2022, as compared to the previous week, with just under 4.2 million new cases reported (Figure 1, Table 1). The number of new weekly deaths decreased by 5% as compared to the previous week, with over 13 700 reported. Globally, as of 4 September 2022, over 600 million confirmed cases and over 6.4 million deaths have been reported.

At the regional level, the number of newly reported weekly cases decreased across all six regions: the Eastern Mediterranean Region (-29%), the South-East Asia Region (-22%), the European Region (-15%), the African Region (-10%), the Western Pacific Region (-10%) and the Region of the Americas (-9%). The number of new weekly deaths decreased across three of the six regions: the South-East Asia Region (-24%), the European Region (-22%) and the Eastern Mediterranean Region (-12%); while it increased in the African Region (+14%), the Region of the Americas (+6%) and the Western Pacific Region (+5%).

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 4 September 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest numbers of new weekly cases were reported from Japan (1 164 787 new cases; -7%), the United States of America (586 509 new cases; +2%), the Republic of Korea (585 374 new cases; -21%), the Russian Federation (323 500 new cases; +12%) and China (238 044 new cases; +22%). The highest numbers of new weekly deaths were reported from the United States of America (3558 new deaths; +26%), Japan (2059 new deaths; +3%), Brazil (865 new deaths; -17%), the Russian Federation (628 new deaths; +20%) and the Republic of Korea (524 new deaths; similar to the previous week).

Current trends in reported COVID-19 cases and deaths should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected. Additionally, data from countries are continuously updated by WHO to incorporate changes in reported COVID-19 cases and deaths made by countries retrospectively.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 4 September 2022**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Western Pacific	2 149 463 (51%)	-10%	85 188 760 (14%)	3 707 (27%)	5%	261 895 (4%)
Europe	1 092 799 (26%)	-15%	246 634 859 (41%)	3 355 (24%)	-22%	2 061 081 (32%)
Americas	821 450 (20%)	-9%	176 211 601 (29%)	5 645 (41%)	6%	2 820 836 (44%)
South-East Asia	90 523 (2%)	-22%	60 053 325 (10%)	602 (4%)	-24%	795 991 (12%)
Eastern Mediterranean	33 697 (1%)	-29%	22 994 621 (4%)	357 (3%)	-12%	347 656 (5%)
Africa	11 420 (<1%)	-10%	9 297 294 (2%)	50 (<1%)	14%	174 344 (3%)
Global	**4 199 352 (100%)**	**-12%**	**600 381 224 (100%)**	**13 716 (100%)**	**-5%**	**6 461 816 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior. Data from previous weeks are updated continuously with adjustments received from countries.*
***See Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
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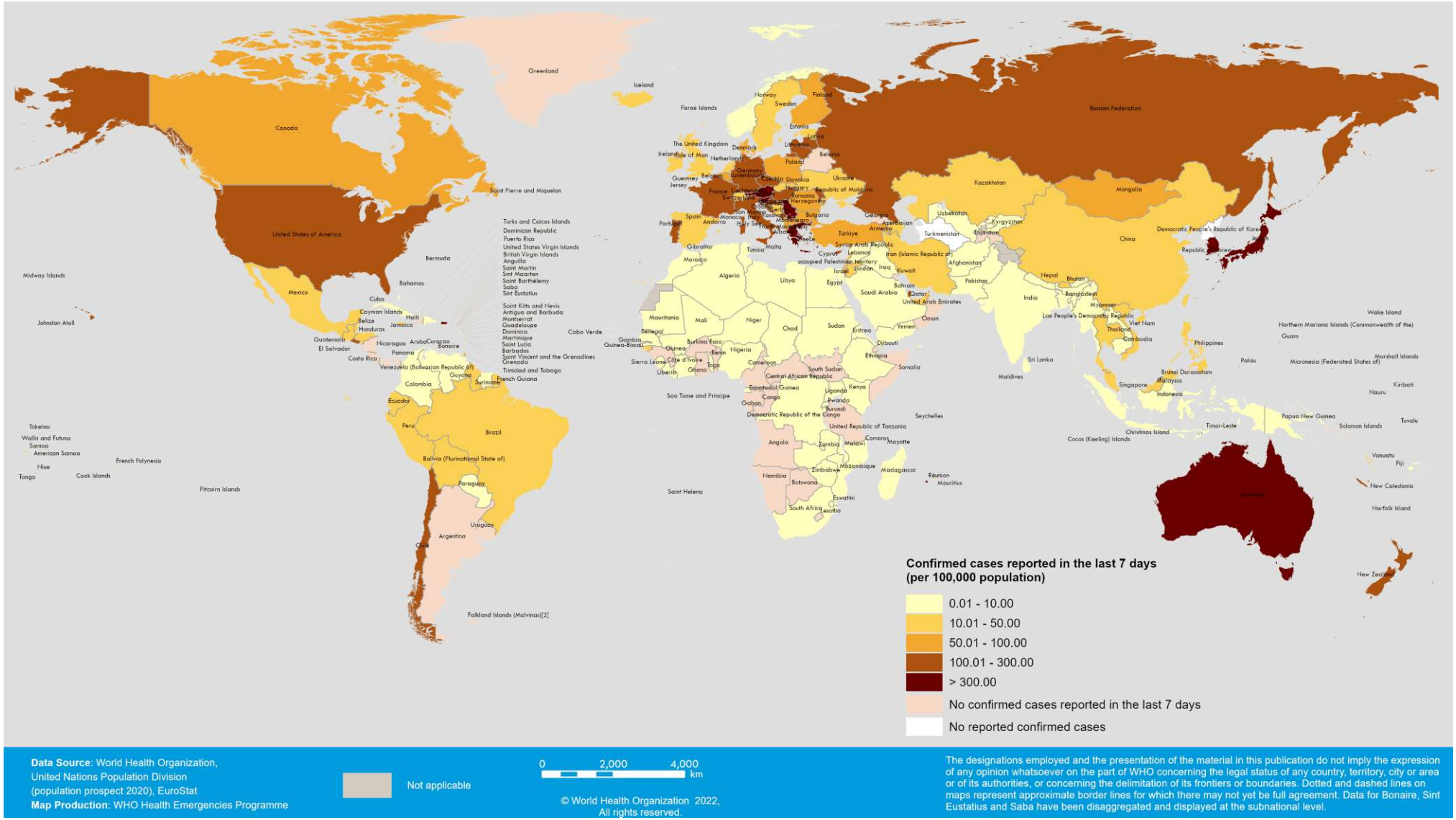
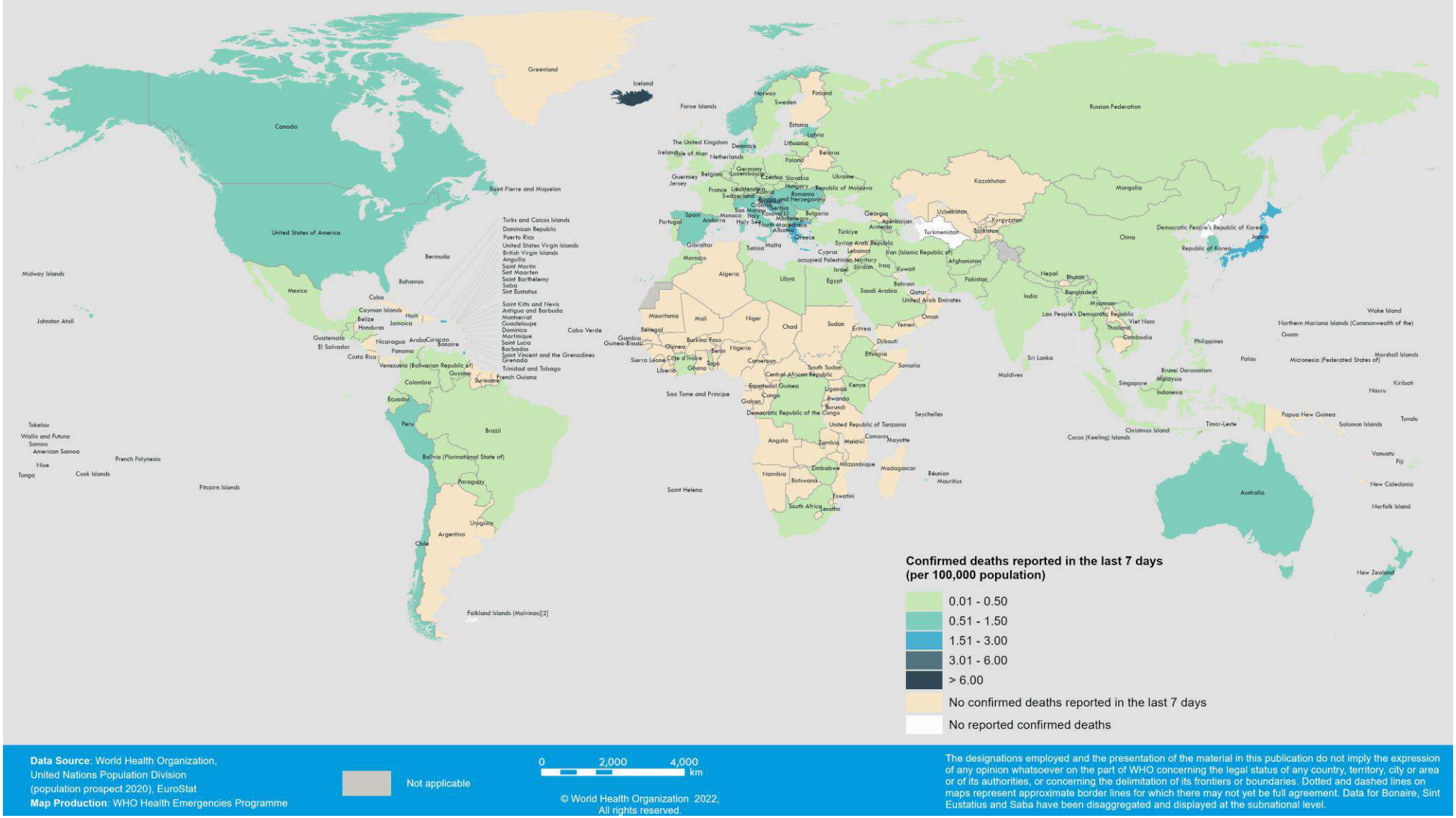
Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 29 August - 4 September 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 29 August - 4 September 2022**



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

Geographic spread and prevalence of VOCs

Globally, from 5 August to 5 September 2022, 118 028 SARS-CoV-2 sequences were shared through GISAID. Among these, 117 317 sequences were the Omicron variant of concern (VOC), accounting for 99.4% of sequences reported globally in the past 30 days.

A comparison of sequences submitted to GISAID in epidemiological week 34 (22 to 28 August 2022) and week 33 (15 to 21 August 2022) shows that BA.5 Omicron descendent lineages continue to be dominant globally, with an increase in weekly prevalence from 84.8% to 86.8%. The prevalence of BA.4 descendent lineages decreased from 6.8% in week 33 to 4.2% in week 34 including BA.4.6 descendent lineage, which decreased from 3.5% to 2% within the same time period. The prevalence of BA.2 descendent lineages (BA.2.X) remained stable in week 34 compared to week 33 (2.6% in week 33 and 2.5% in week 34). BA.2.75, an Omicron descendent lineage under monitoring, still shows a relatively low (0.9% and 1.2% in weeks 33 and 34 respectively) prevalence globally, but a number of countries have observed recent increasing trends.

WHO continues to monitor all lineages, including descendent lineages of VOCs, to track any increase in prevalence and change in viral characteristics. The current trends describing the circulation of Omicron descendent lineages should be interpreted with due consideration of the limitations of the SARS-CoV-2 surveillance systems. These include differences in sequencing capacity and sampling strategies between countries, changes in sampling strategies, reductions in tests conducted and sequences shared by countries around the world and delays in uploading sequence data to GISAID.

For more information on the assessment of SARS-CoV-2 variants and the WHO classification refer to Annex 2.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data

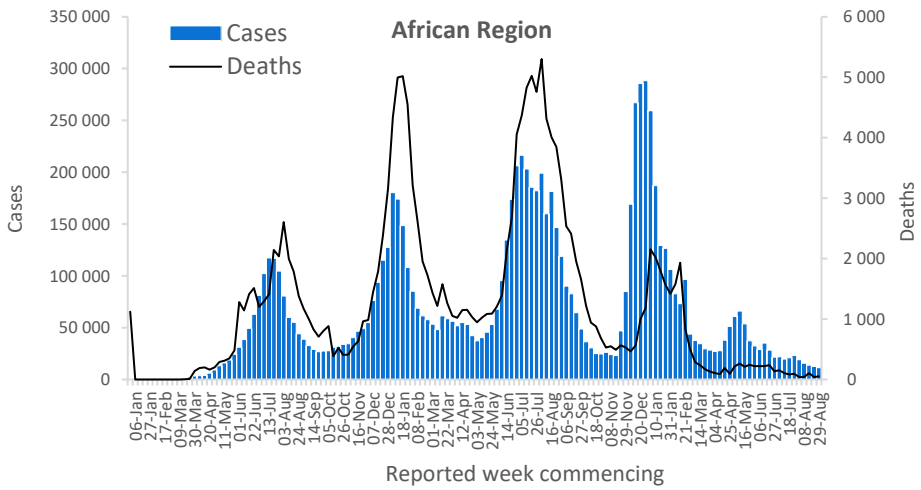
WHO regional overviews:

Epidemiological week 29 August - 4 September 2022**

African Region

The African Region reported over 11 000 new weekly cases, a 10% decrease compared to the previous week. Eight (16%) countries reported increases in the number of new cases of 20% or greater, with some of the greatest proportional increases seen in Mali (262 vs 55 new cases; +376%), Chad (47 vs 33 new cases; +42%) and Côte d'Ivoire (202 vs 166 new cases; +22%). The highest numbers of new cases were reported from Réunion (7014 new cases; 783.4 new cases per 100 000 population; +23%), South Africa (1275 new cases; 2.1 new cases per 100 000; -14%) and Nigeria (460 new cases; <1 new case per 100 000; -7%).

The number of new weekly deaths in the Region increased by 14% as compared to the previous week, with 50 deaths reported. The highest numbers of new deaths were reported from South Africa (24 new deaths; <1 new death per 100 000 population; +33%), Réunion (13 new deaths; 1.5 new deaths per 100 000; +117%), and the Democratic Republic of the Congo (four new deaths; <1 new death per 100 000; -20%).

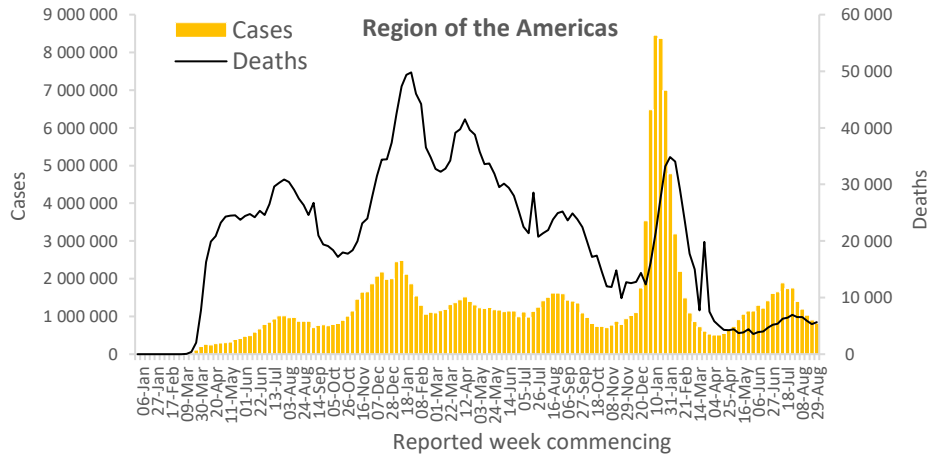


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 821 000 new cases, a 9% decrease as compared to the previous week. Four of 56 (7%) countries for which data are available reported increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Sint Eustatius (15 vs eight new cases; +88%), United States Virgin Islands (264 vs 181 new cases; +46%) and Mexico (22 111 vs 17 325 new cases; +28%). The highest numbers of new cases were reported from the United States of America (586 509 new cases; 177.2 new cases per 100 000; +2%), Brazil (87 236 new cases; 41.0 new cases per 100 000; -17%) and Chile (40 080 new cases; 209.7 new cases per 100 000; -27%).

The number of new weekly deaths reported in the Region increased by 6% as compared to the previous week, with over 5600 deaths reported. The highest numbers of new deaths were reported from the United States of America (3558 new deaths; 1.1 new deaths per 100 000; +26%), Brazil (865 new deaths; <1 new death per 100 000; -17%) and Canada (288 new deaths; <1 new death per 100 000; -1%).

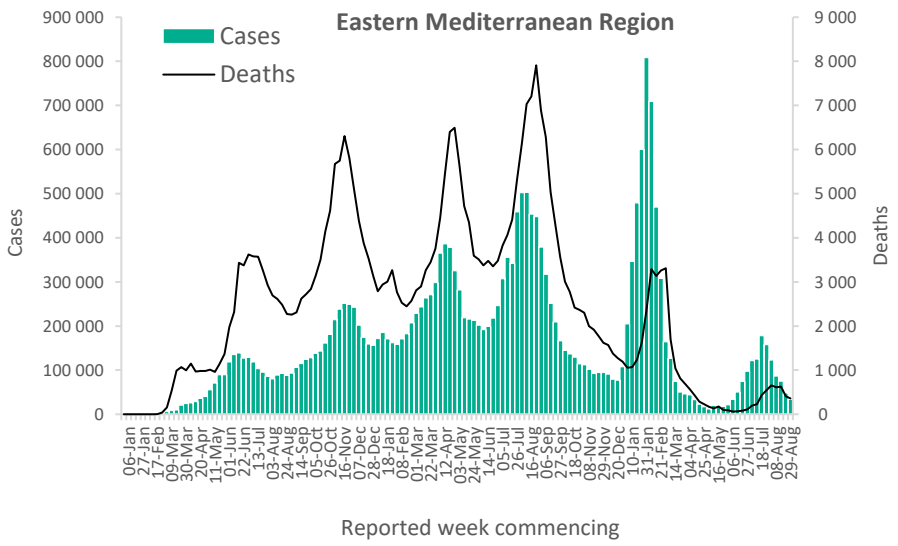


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 33 000 new cases, a 29% decrease as compared to the previous week. No countries in the Region reported an increase in the number of new cases of 20% or greater compared to the previous week. The highest numbers of new cases were reported from the Islamic Republic of Iran (11 351 new cases; 13.5 new cases per 100 000; -27%), Jordan (3946 new cases; 38.7 new cases per 100 000; -18%) and Qatar (3944 new cases; 136.9 new cases per 100 000; +2%).

The number of new weekly deaths decreased in the Region by 12% as compared to the previous week, with over 350 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (282 new deaths; <1 new death per 100 000; +1%), Lebanon (17 new deaths; <1 new death per 100 000; -15%), and Pakistan (17 new deaths; <1 new death per 100 000; -19%).

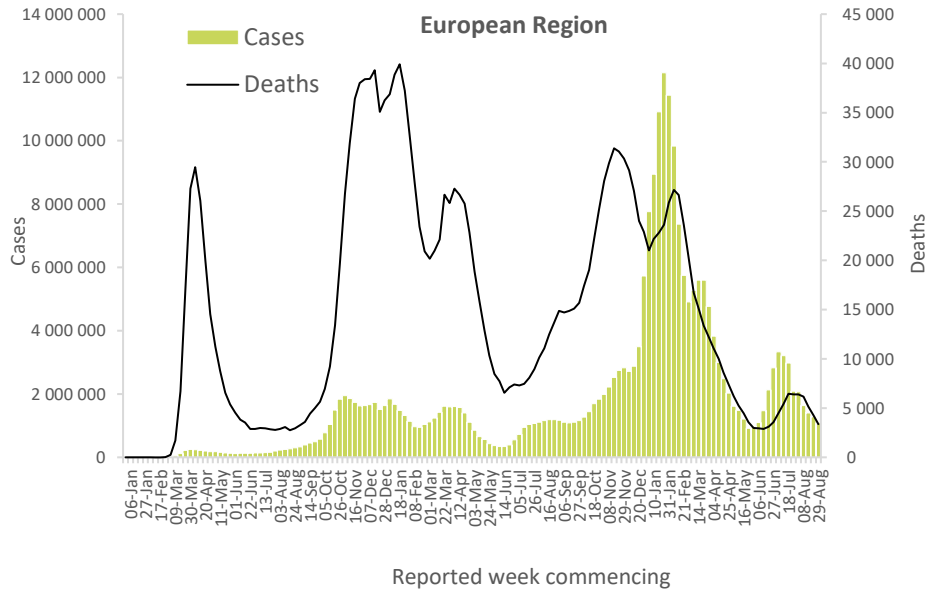


Updates from the Eastern Mediterranean Region

European Region

The European Region reported just under 1.1 million new cases, a 15% decrease as compared to the previous week. Two (3%) countries reported increases in new cases of 20% or greater, with the highest proportional increases observed in Gibraltar (20 vs 15 new cases; +33%) and Ukraine (11 437 vs 9113 new cases; +26%). The highest numbers of new cases were reported from the Russian Federation (323 500 new cases; 221.7 new cases per 100 000; +12%), Germany (183 715 new cases; 220.9 new cases per 100 000; -19%) and Italy (136 211 new cases; 228.4 new cases per 100 000; -14%).

Over 3300 new weekly deaths were reported in the Region, a 22% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (628 new deaths; <1 new death per 100 000; +20%), Italy (496 new deaths; <1 new death per 100 000; -23%) and Spain (350 new deaths; <1 new death per 100 000; +7%).

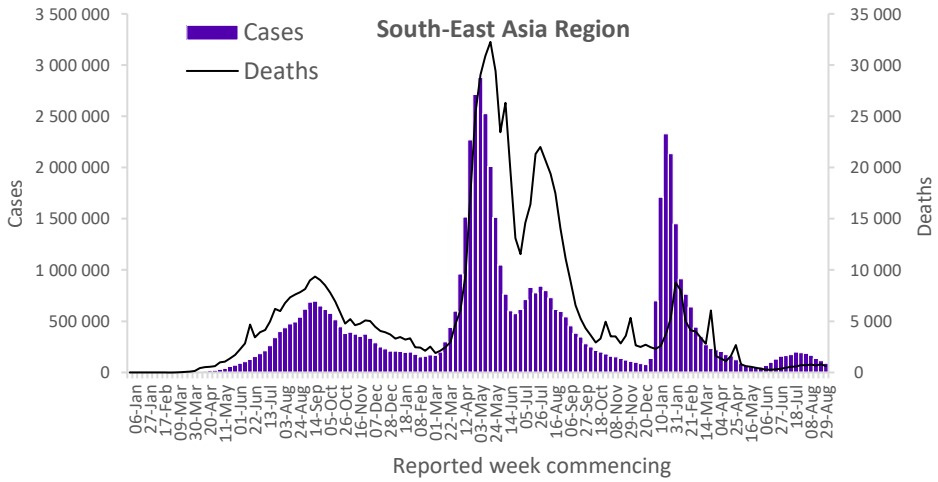


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 90 000 new cases, a 22% decrease as compared to the previous week. One of the 10 countries (10%) in the Region for which data are available showed an increase in the number of new cases of 20% or greater: Myanmar (597 vs 308 new cases; +94%). The highest numbers of new cases were reported from India (48 403 new cases; 3.5 new cases per 100 000; -30%), Indonesia (26 238 new cases; 9.6 new cases per 100 000; -15%) and Thailand (12 130 new cases; 17.4 new cases per 100 000; -1%).

The Region reported just over 600 deaths, a 24% decrease compared to the previous week. The highest numbers of new deaths were reported from India (237 new deaths; <1 new death per 100 000; -44%), Thailand (178 new deaths; <1 new death per 100 000; -9%) and Indonesia (147 new deaths; <1 new death per 100 000; +20%).

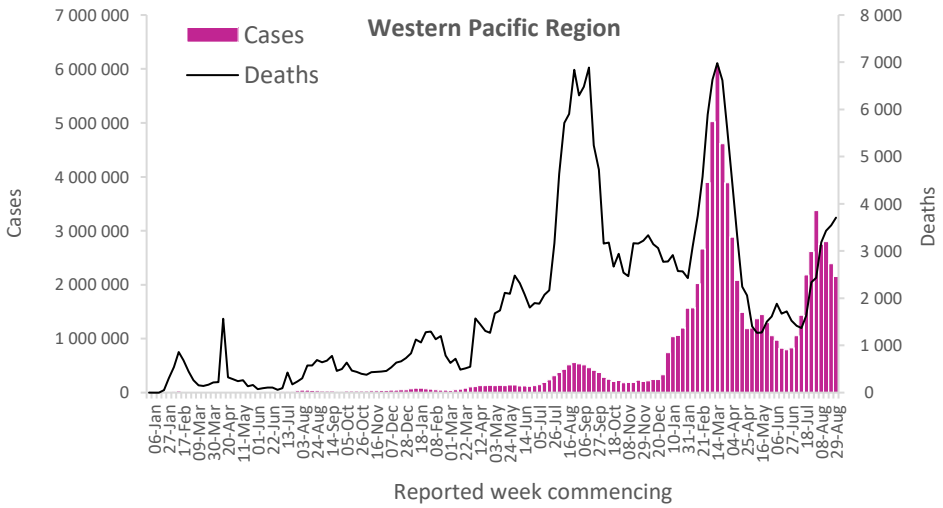


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported just over 2.1 million new cases, a 10% decrease compared to the previous week. However, three (9%) countries reported increases in new cases of 20% or greater, with some of the largest proportional increases observed in Vanuatu (83 vs 10 new cases; +730%) and Micronesia (Federated States of) (1486 vs 182 new cases; +716%). The highest numbers of new cases were reported from Japan (1 164 787 new cases; 921.0 new cases per 100 000; -7%), the Republic of Korea (585 374 new cases; 1141.8 new cases per 100 000; -21%) and China (238 044 new cases; 16.2 new cases per 100 000; +22%).

The Region reported a 5% increase in new weekly deaths compared to the previous week, with over 3700 deaths reported. The highest numbers of new deaths were reported from Japan (2059 new deaths; 1.6 new deaths per 100 000; +3%), the Republic of Korea (524 new deaths; 1.0 new deaths per 100 000; similar to the previous week) and Australia (366 new deaths; 1.4 new deaths per 100 000; -13%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.
[2] A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

Updates on the COVID-19 outbreak in the Democratic People's Republic of Korea is not included in this report as the number of laboratory-confirmed COVID-19 cases is not reported.

Annex 2. SARS-CoV-2 variants assessment and classification

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.

COVID-19 Weekly Epidemiological Update

Edition 107 published 31 August 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews
- Summary of Monthly Operational Update

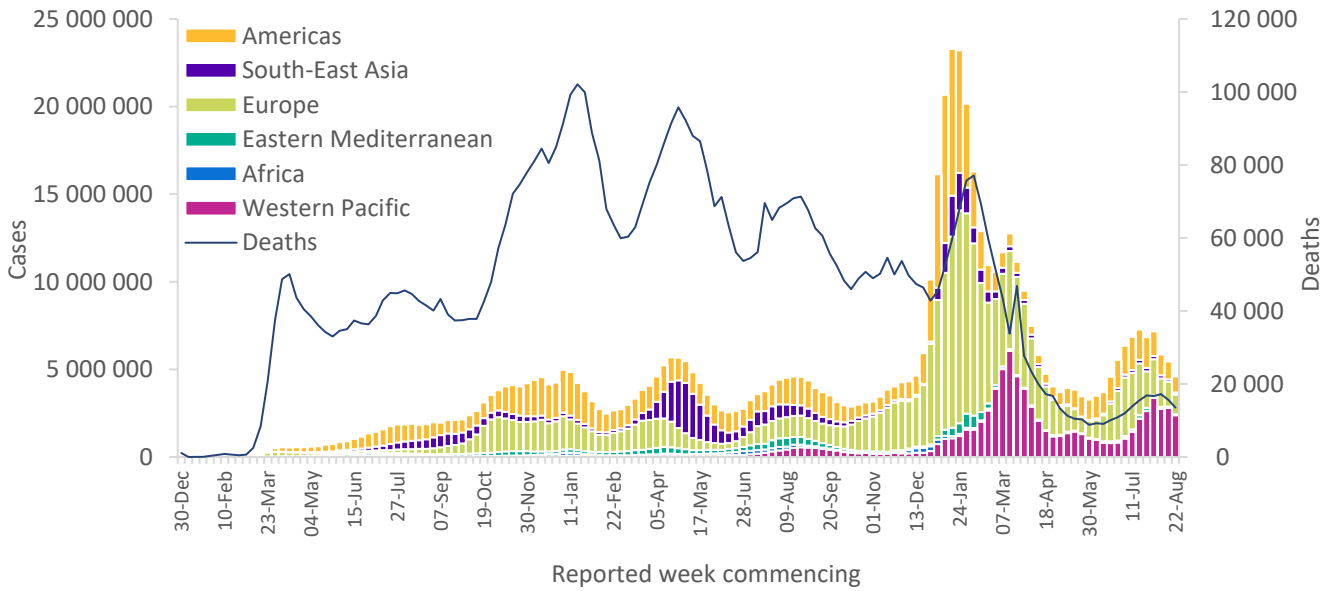
Global overview

Data as of 28 August 2022

Globally, the number of new weekly cases decreased by 16% during the week of 22 to 28 August 2022, as compared to the previous week, with over 4.5 million new cases reported (Figure 1, Table 1). The number of new weekly deaths decreased by 13%, as compared to the previous week, with over 13 500 fatalities reported. As of 28 August 2022, over 598 million confirmed cases and over 6.4 million deaths have been reported globally.

At the regional level, the number of newly reported weekly cases decreased across all six regions: the Eastern Mediterranean Region (-37%), the European Region (-20%), the South-East Asia Region (-16%), the Western Pacific Region (-15%), the African Region (-13%) and the Region of the Americas (-13%). The number of new weekly deaths decreased across four of the six regions: the African Region (-64%), the Eastern Mediterranean Region (-35%), the European Region (-30%), and the Region of the Americas (-9%); while it increased in the South-East Asian Region (+15%) and remained stable in the Western Pacific Region (+3%).

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 28 August 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest numbers of new weekly cases were reported from Japan (1 258 772 new cases; -15%), the Republic of Korea (743 487 new cases; -16%), the United States of America (576 437 new cases; -10%), the Russian Federation (288 580 new cases; +23%) and Germany (206 860 new cases; -22%). The highest numbers of new weekly deaths were reported from the United States of America (2818 new deaths; -6%), Japan (1990 new deaths; +23%), Brazil (1039 new deaths; -6%), Italy (647 new deaths; -4%) and the Republic of Korea (525 new deaths; +25%).

Current trends in reported COVID-19 cases and deaths should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected. Additionally, data from countries are continuously updated by WHO to incorporate changes in reported COVID-19 cases and deaths made by countries retrospectively.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 28 August 2022**

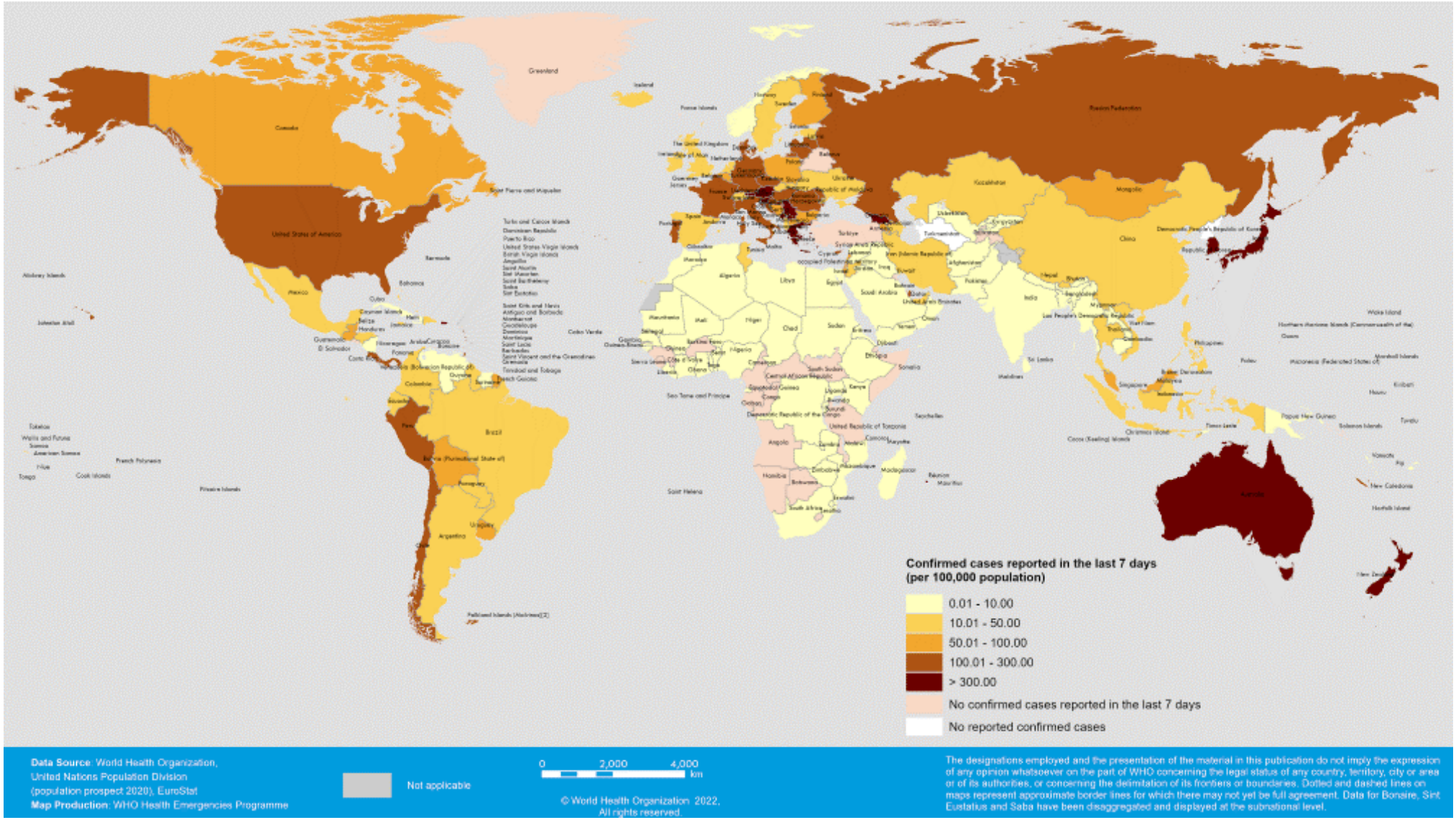
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Western Pacific	2 390 216 (52%)	-15%	83 039 297 (14%)	3 547 (26%)	3%	258 188 (4%)
Europe	1 117 601 (24%)	-20%	247 381 780 (41%)	3 425 (25%)	-30%	2 074 258 (32%)
Americas	907 084 (20%)	-13%	175 391 153 (29%)	5 336 (39%)	-9%	2 815 191 (44%)
South-East Asia	115 936 (3%)	-16%	59 962 802 (10%)	792 (6%)	15%	795 389 (12%)
Eastern Mediterranean	47 375 (1%)	-37%	22 960 506 (4%)	405 (3%)	-35%	347 299 (5%)
Africa	10 320 (<1%)	-13%	9 281 437 (2%)	36 (<1%)	-64%	174 281 (3%)
Global	**4 588 532 (100%)**	**-16%**	**598 017 739 (100%)**	**13 541 (100%)**	**-13%**	**6 464 619 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior. Data from previous weeks are updated continuously with adjustments received from countries.*
***See Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

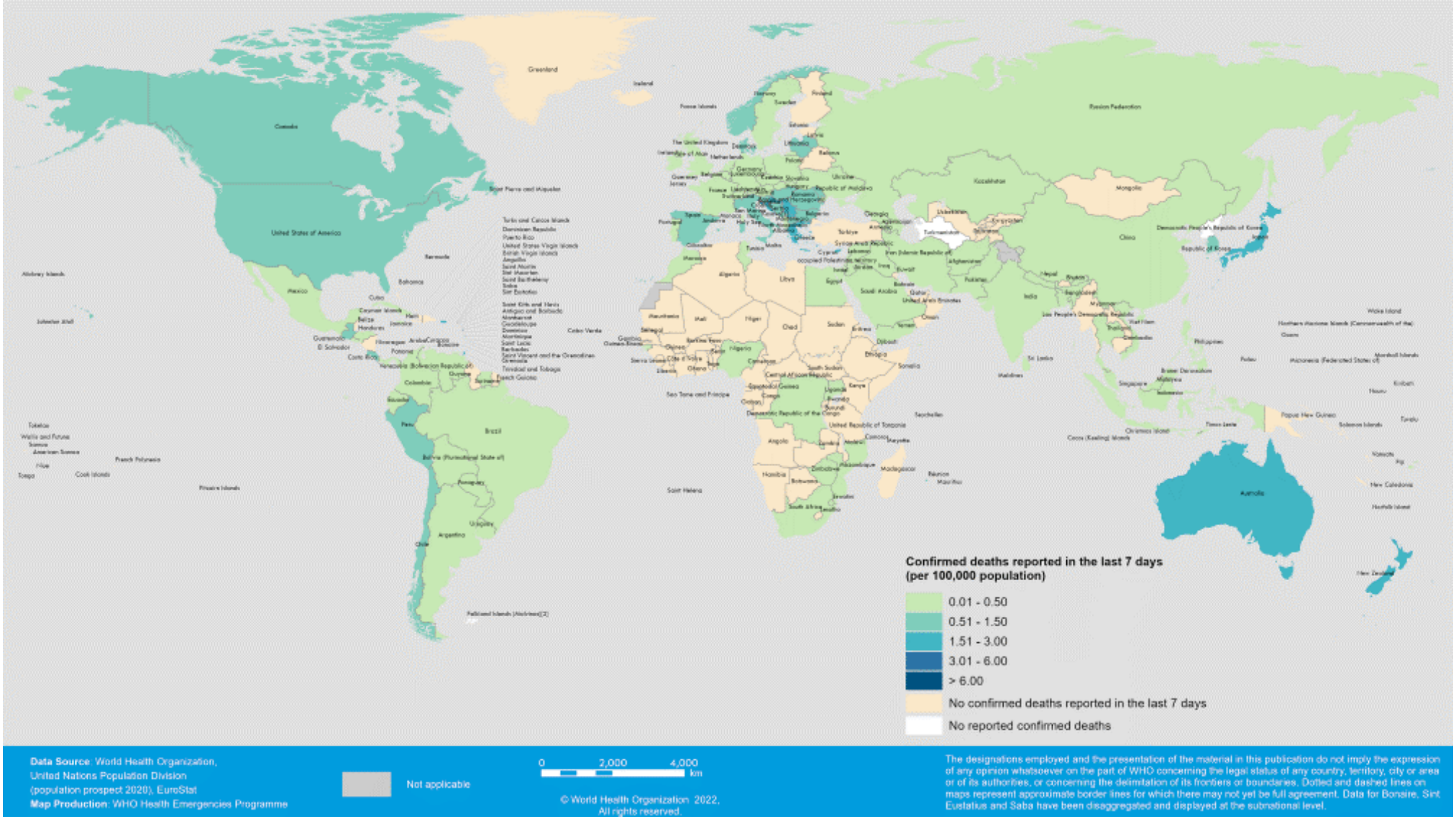
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update
- WHO COVID-19 detailed surveillance data dashboard

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 22 - 28 August 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 22 - 28 August 2022**



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

Geographic spread and prevalence of VOCs

Globally, from 29 July to 29 August 2022, 138 779 SARS-CoV-2 sequences were shared through GISAID. Among these, 138 236 sequences were the Omicron variant of concern (VOC), accounting for 99.6% of sequences reported globally in the past 30 days.

A comparison of sequences submitted to GISAID in epidemiological week 33 (14 to 20 August 2022) and week 32 (7 to 13 August 2022) shows that BA.5 Omicron descendent lineages continue to be dominant globally, with an increase in weekly prevalence from 72.4% to 78.2%. The prevalence of BA.2 descendent lineages (BA.2.X) remained stable in week 33 compared to week 32 (2.7% in both weeks). BA.2.75, an Omicron descendent lineage under monitoring, still shows a relatively low prevalence globally, but a number of countries have observed recent increasing trends.

WHO continues to monitor all lineages, including descendent lineages of VOCs, to track any increase in prevalence and change in viral characteristics. The current trends describing the circulation of Omicron descendent lineages should be interpreted with due consideration of the limitations of the SARS-CoV-2 surveillance systems. These include differences in sequencing capacity and sampling strategies between countries, changes in sampling strategies, reductions in tests conducted and sequences shared by countries around the world and delays in uploading sequence data to GISAID.

For more information on the assessment of SARS-CoV-2 variants and the WHO classification refer to Annex 2.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data

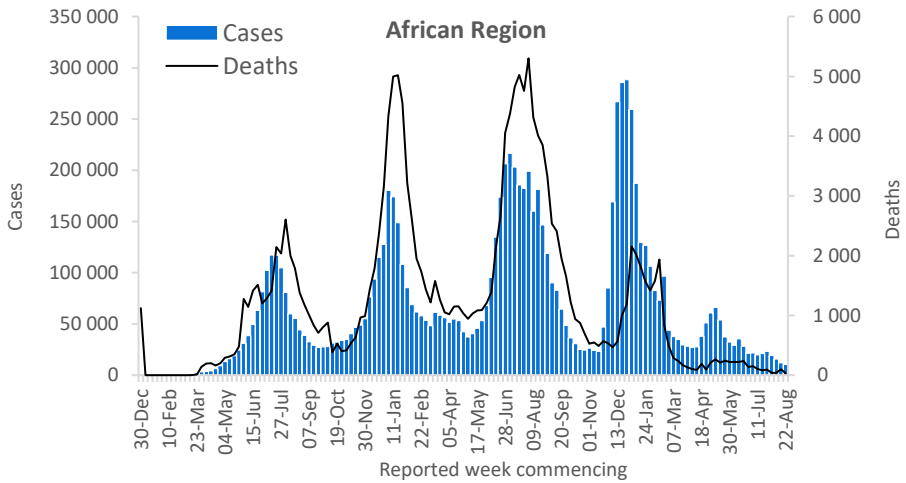
WHO regional overviews:

Epidemiological week 22 - 28 August 2022**

African Region

The African Region reported over 10 000 new weekly cases, a 13% decrease compared to the previous week. Six (12%) countries reported increases in the number of new cases of 20% or greater, with some of the greatest proportional increases seen in Mali (55 vs 15 new cases; +267%), Chad (33 vs 14 new cases; +136%) and Niger (127 vs 55 new cases; +131%). The highest numbers of new cases were reported from Réunion (5711 new cases; 637.9 new cases per 100 000 population; +12%), South Africa (1480 new cases; 2.5 new cases per 100 000; -5%) and Nigeria (495 new cases; <1 new case per 100 000; +26%).

The number of new weekly deaths in the Region decreased by 64% as compared to the previous week, with 36 deaths reported. The highest numbers of new deaths were reported from South Africa (18 new deaths; <1 new death per 100 000 population; -79%), Réunion (six new deaths; <1 new death per 100 000; +200%) and the Democratic Republic of the Congo (four new deaths; <1 new death per 100 000; +33%).

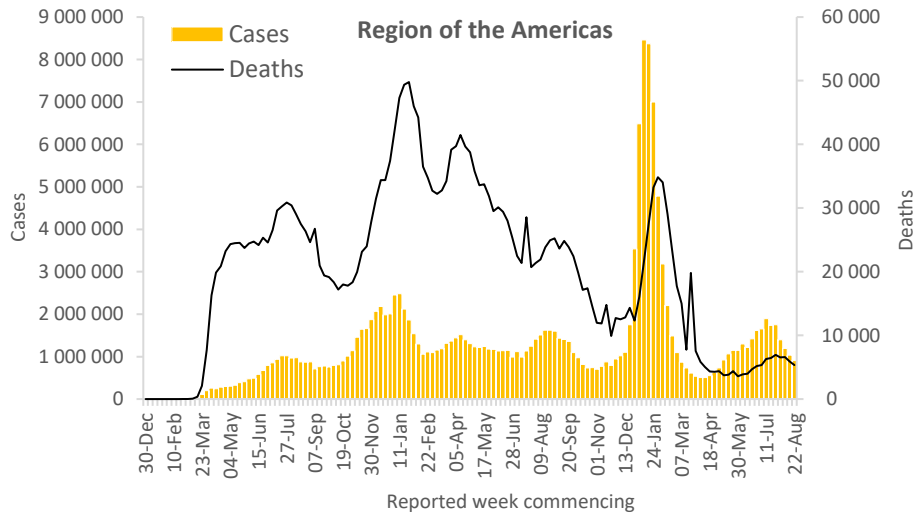


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 907 000 new cases, a 13% decrease as compared to the previous week. Five of 56 (9%) countries for which data are available reported increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Honduras (3948 vs 2130 new cases; +85%), Saint Barthélemy (32 vs 23 new cases; +39%) and Ecuador (6288 vs 4644 new cases; +35%). The highest numbers of new cases were reported from the United States of America (576 437 new cases; 174.1 new cases per 100 000; -10%), Brazil (104 672 new cases; 49.2 new cases per 100 000; -10%) and Chile (54 867 new cases; 287.0 new cases per 100 000; -13%).

The number of new weekly deaths reported in the Region decreased by 9% as compared to the previous week, with over 5300 deaths reported. The highest numbers of new deaths were reported from the United States of America (2818 new deaths; <1 new death per 100 000; -6%), Brazil (1039 new deaths; <1 new death per 100 000; -6%) and Canada (292 new deaths; <1 new death per 100 000; similar to the previous week).

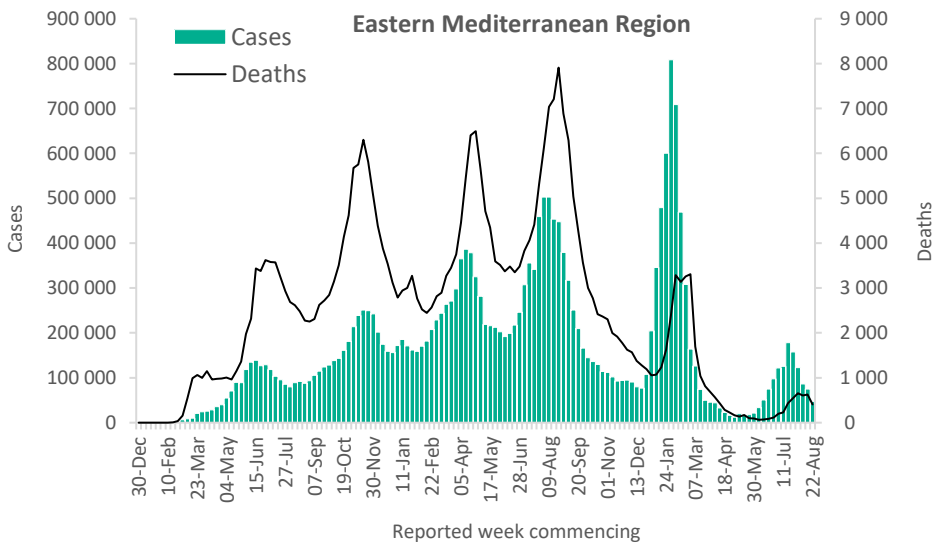


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 47 000 new cases, a 37% decrease as compared to the previous week. One (5%) country reported an increase in the number of new cases of 20% or greater: the occupied Palestinian territory (3355 vs 937 new cases; +258%). The highest numbers of new cases were reported from the Islamic Republic of Iran (15 605 new cases; 18.6 new cases per 100 000; -55%), Jordan (4832 new cases; 47.4 new cases per 100 000; -19%) and Lebanon (4469 new cases; 65.5 new cases per 100 000; -41%).

The number of new weekly deaths decreased in the Region by 35% compared to the previous week, with over 400 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (280 new deaths; <1 new death per 100 000; -41%), Tunisia (24 new deaths; <1 new death per 100 000; -57%) and Pakistan (21 new deaths; <1 new death per 100 000; -22%).

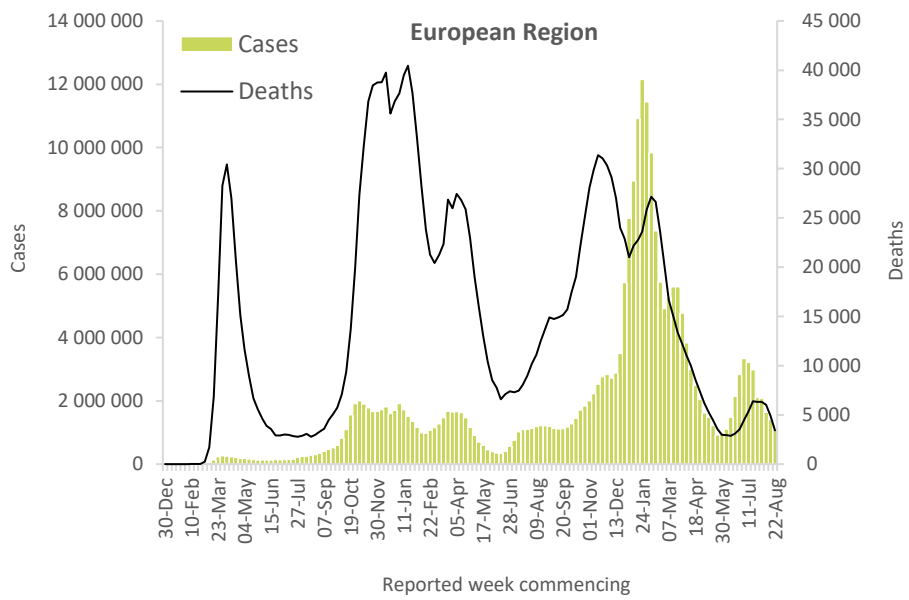


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 1.1 million new cases, a 20% decrease as compared to the previous week. Two (3%) countries in the Region reported increases in new cases of 20% or greater, with the highest proportional increases observed in Ukraine (9113 vs 5439 new cases; +68%) and the Russian Federation (288 580 vs 235 385 new cases; +23%). The highest numbers of new cases were reported from the Russian Federation (288 580 new cases; 197.7 new cases per 100 000; +23%), Germany (206 860 new cases; 248.7 new cases per 100 000; -22%) and Italy (157 864 new cases; 264.7 new cases per 100 000; +5%).

Over 3400 new weekly deaths were reported in the Region, a 30% decrease as compared to the previous week. The highest numbers of new deaths were reported from Italy (647 new deaths; 1.1 new deaths per 100 000; -4%), the Russian Federation (523 new deaths; <1 new death per 100 000; +20%) and Spain (326 new deaths; <1 new death per 100 000; -29%).

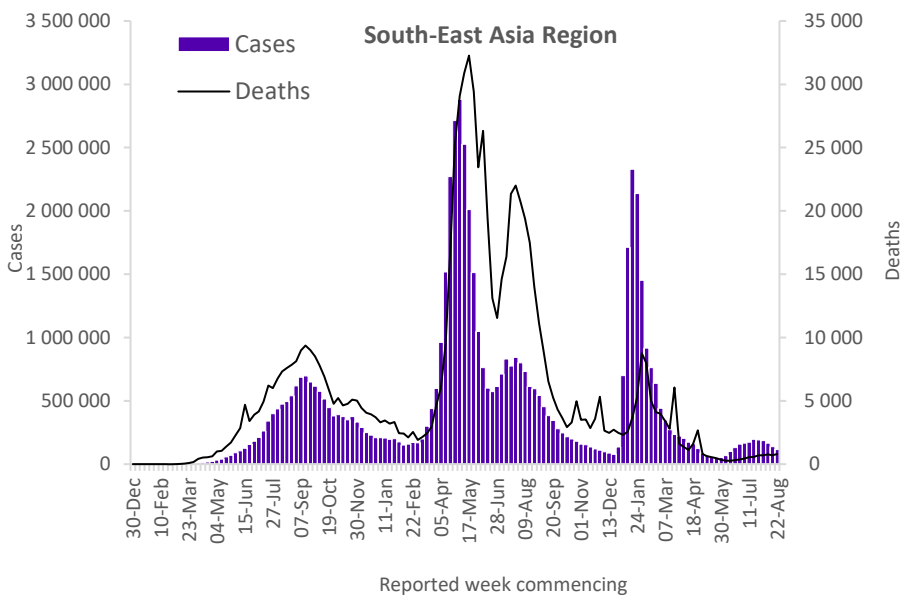


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported under 116 000 new cases, a 16% decrease as compared to the previous week. Three of the 10 countries (30%) for which data are available showed an increase in the number of new cases of 20% or greater: Bhutan (178 vs 119 new cases; +50%), Timor-Leste (44 vs 33 new cases; +33%) and Bangladesh (1347 vs 1100 new cases; +22%). The highest numbers of new cases were reported from India (68 703 new cases; 5.0 new cases per 100 000; -20%), Indonesia (30 747 new cases; 11.2 new cases per 100 000; -6%) and Thailand (12 232 new cases; 17.5 new cases per 100 000; -11%).

The Region reported just under 800 deaths, a 15% increase compared to the previous week. The highest numbers of new deaths were reported from India (422 new deaths; <1 new death per 100 000; +43%), Thailand (195 new deaths; <1 new death per 100 000; -2%) and Indonesia (123 new deaths; <1 new deaths per 100 000; -19%).

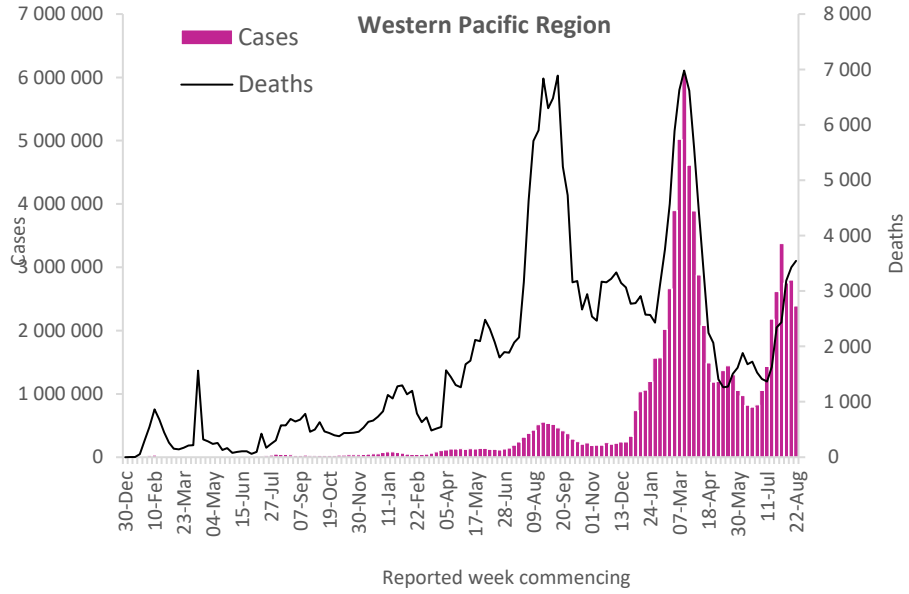


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported just under 2.4 million new cases, a 15% decrease compared to the previous week. Two (6%) countries reported increases in new cases of 20% or greater, with the largest proportional increases observed in Palau (69 vs 33 new cases; +109%) and Tonga (1100 vs 730 new cases, +51%). The highest numbers of new cases were reported from Japan (1 258 772 new cases; 995.3 new cases per 100 000; -15%), the Republic of Korea (743 487 new cases; 1450.2 new cases per 100 000; -16%) and China (194 464 new cases; 13.2 new cases per 100 000; +13%).

The Region reported a similar number of deaths as the previous week, with over 3500 new weekly deaths reported. The highest numbers of new deaths were reported from Japan (1990 new deaths; 1.6 new deaths per 100 000; +23%), the Republic of Korea (525 new deaths; 1.0 new death per 100 000; +25%) and Australia (419 new deaths; 1.6 new deaths per 100 000; -14%).



Updates from the Western Pacific Region

Summary of Monthly Operational Update

The Monthly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) monitoring and evaluation team which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework. In this edition, highlights of country-level actions and WHO support to countries include:

- WHO/Europe supports Kazakhstan's national laboratory working group to develop national laboratory policy and strategic plans to address COVID-19 lessons learned
- Liberia's Grand Bassa county hits 71% COVID-19 vaccination coverage against its total population
- Nepal launches the COVID-19 vaccination campaign for children
- Social listening leads to more impactful communication and a stronger COVID-19 response in Fiji
- Building emergency care capacities through training: scaling up Afghanistan's delivery of essential health services and health system resilience during the pandemic and beyond
- The Bahamas receives the first pediatric COVID-19 vaccines through the COVAX Facility
- Palau establishes its national emergency medical team
- Increasing COVID-19 vaccination coverage in Togo in 2021 through community dialogue and traditional leaders
- Téchne's International Multidisciplinary Summer School on "Systemic Design for Health": responding to needs identified during the COVID-19 pandemic and beyond
- Building a community of learning for women leaders in health emergencies among WHO staff and Member States
- Leveraging lessons learned and systems from previous epidemics, Uganda builds up its response capacities to scale up COVID-19 testing and surveillance while maintaining essential health services
- WHO develops a method to deliver actionable infodemic insights and recommendations as part of the COVID-19 pandemic response
- Leaving no one behind: How OpenWHO.org ensures equity in health information delivery for people living with disabilities
- WHO's COVID-19 Response Funding in 2022: Delivering science, solutions and solidarity to end the acute phase of the pandemic
- Updated WHO guidance and publications

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

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[2] A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

Updates on the COVID-19 outbreak in the Democratic People's Republic of Korea is not included in this report as the number of laboratory-confirmed COVID-19 cases is not reported.

Annex 2. SARS-CoV-2 variants assessment and classification

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.

COVID-19 Weekly Epidemiological Update

Edition 106 published 24 August 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews

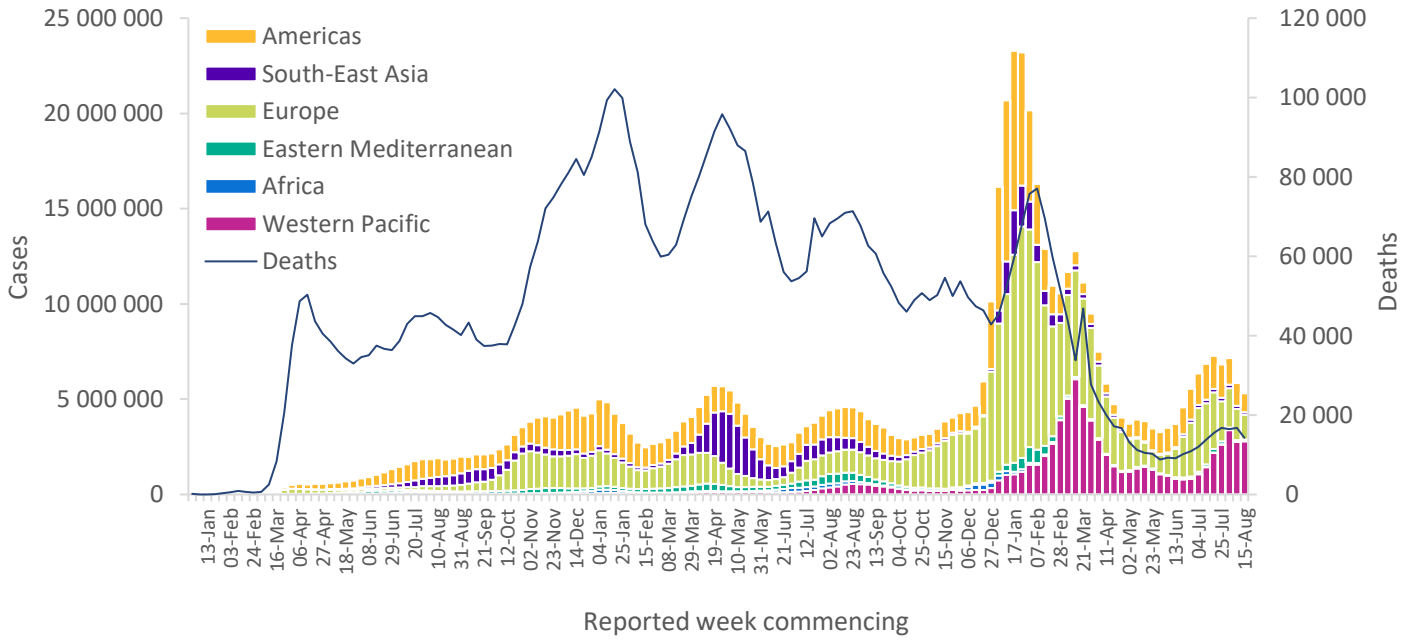
Global overview

Data as of 21 August 2022

Globally, the number of new weekly cases decreased by 9% during the week of 15 to 21 August 2022, as compared to the previous week, with over 5.3 million new cases reported (Figure 1, Table 1). The number of new weekly deaths decreased by 15%, as compared to the previous week, with over 14 000 fatalities reported. As of 21 August 2022, 593 million confirmed cases and 6.4 million deaths have been reported globally.

At the regional level, the number of reported new weekly cases decreased or remained stable across all six regions: the African Region (-25%), the European Region (-20%), the Region of the Americas (-18%), the South-East Asia Region (-17%), the Eastern Mediterranean Region (-13%), and the Western Pacific Region (+2%). The number of new weekly deaths increased in the African Region (+183%) and the Western Pacific Region (+8%), while it decreased or remained stable in the European Region (-30%), the Region of the Americas (-15%), the South-East Asia Region (-11%), and the Eastern Mediterranean Region (+3%).

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 21 August 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest numbers of new weekly cases were reported from Japan (1 476 374 new cases; +6%), the Republic of Korea (884 373 new cases; +2%), the United States of America (612 378 new cases; -13%), Germany (240 998 new cases; -19%), and the Russian Federation (235 385 new cases; +39%). The highest number of new weekly deaths were reported from the United States of America (2714 new deaths; -13%), Japan (1624 new deaths; -1%), Brazil (1105 new deaths; -26%), Italy (677 new deaths; -26%), and Australia (490 new deaths; -9%).

Current trends in reported COVID-19 cases and deaths should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected. Additionally, data from countries are continuously updated by WHO to incorporate changes in reported COVID-19 cases and deaths made by countries retrospectively.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 21 August 2022**

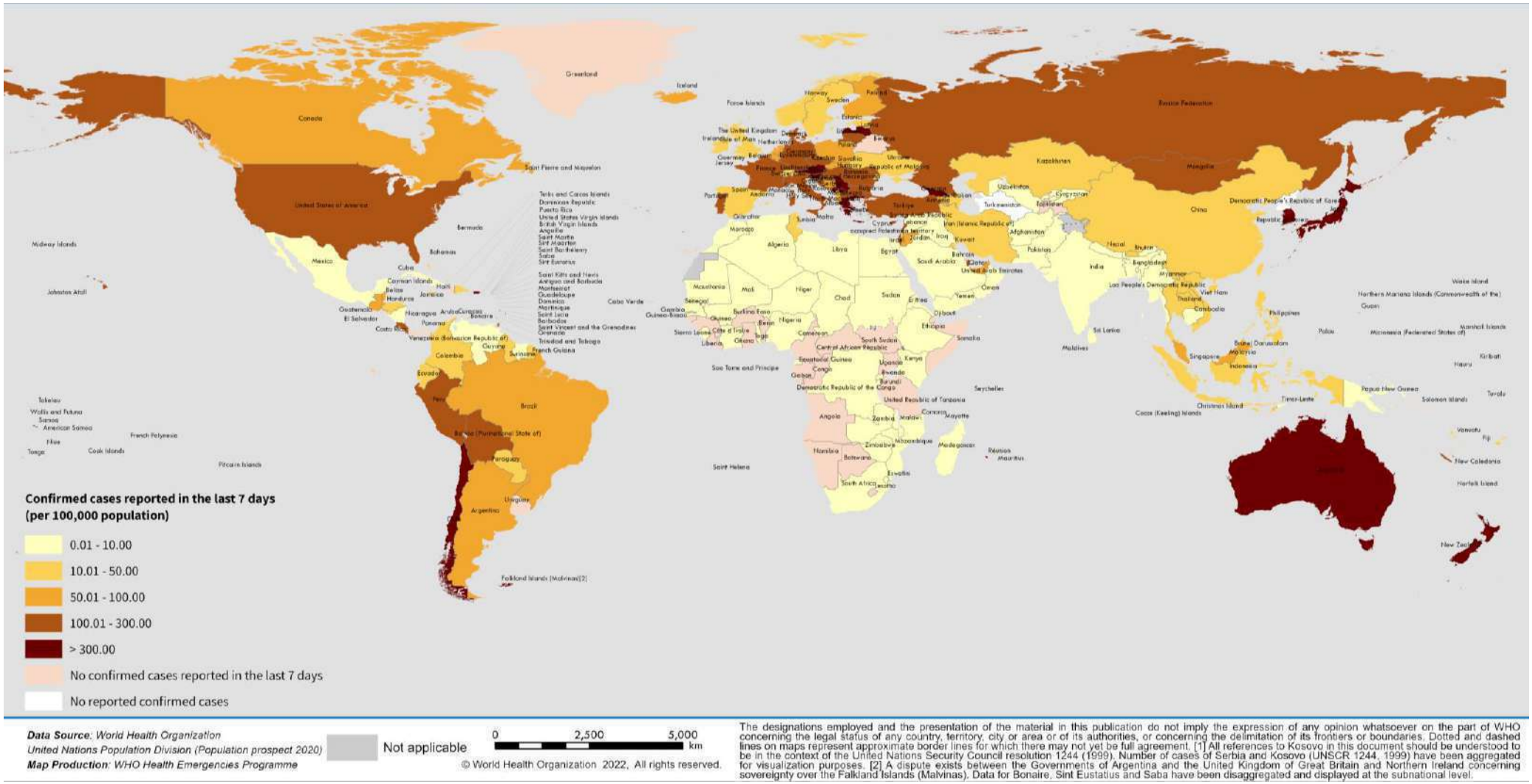
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Western Pacific	2 796 888 (53%)	2%	80 644 476 (14%)	3 424 (24%)	8%	254 637 (4%)
Europe	1 305 837 (25%)	-20%	246 166 703 (41%)	4 055 (28%)	-30%	2 069 166 (32%)
Americas	979 882 (18%)	-18%	174 395 054 (29%)	5 421 (38%)	-15%	2 808 962 (44%)
South-East Asia	137 350 (3%)	-17%	59 846 866 (10%)	686 (5%)	-11%	794 597 (12%)
Eastern Mediterranean	75 095 (1%)	-13%	22 913 131 (4%)	625 (4%)	3%	346 894 (5%)
Africa	11 192 (<1%)	-25%	9 269 272 (2%)	99 (1%)	183%	174 235 (3%)
Global	**5 306 244 (100%)**	**-9%**	**593 236 266 (100%)**	**14 310 (100%)**	**-15%**	**6 448 504 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior. Data from previous weeks are updated continuously with adjustments received from countries.*
***See Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

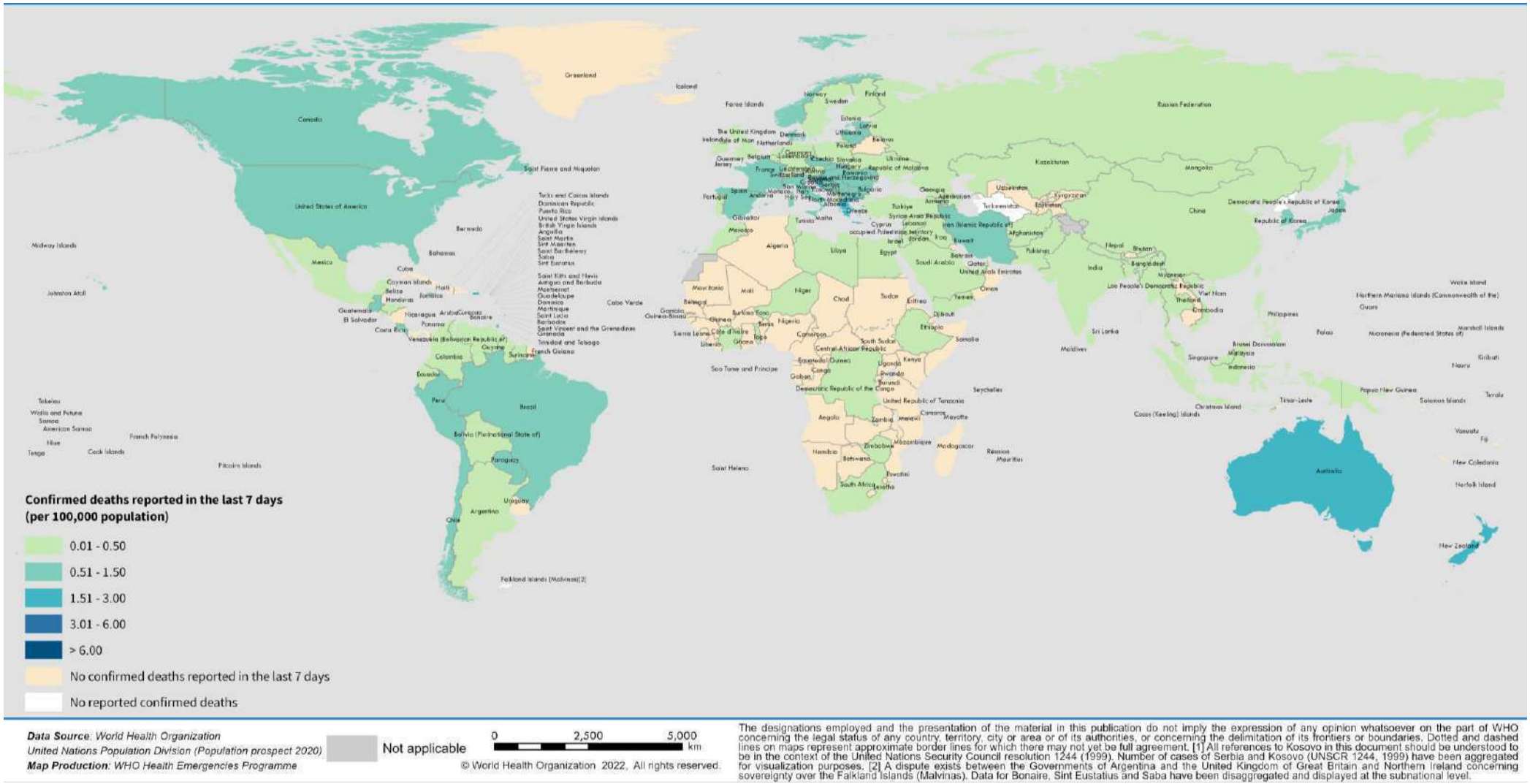
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update
- WHO COVID-19 detailed surveillance data dashboard

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 15 - 21 August 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 15 - 21 August 2022**



***Data Source**: World Health Organization*
United Nations Population Division (Population prospect 2020)
***Map Production**: WHO Health Emergencies Programme*

Not applicable

0 2,500 5,000 km

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**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

Geographic spread and prevalence of VOCs

Globally, from 22 July to 22 August 2022, 162 215 SARS-CoV-2 sequences were shared through GISAID. Among these, 160 716 sequences were the Omicron Variant of Concern (VOC), accounting for 99% of sequences reported globally in the past 30 days.

A comparison of sequences submitted to GISAID in epidemiological week 32 (7 to 13 August 2022) and week 31 (31 July to 6 August 2022) shows that BA.5 Omicron descendent lineages continue to be dominant globally, with an increase in weekly prevalence from 71% to 74%. There is increasing diversity within BA.5 descendent lineages, with additional mutations in the spike and non-spike regions and a rise in prevalence among some lineages. Notably, BA.5.1 (22.3% in week 32 as compared to 18.6% in week 31), BA.5.2 (20.3% in week 32 as compared to 16.8% in week 31) are rising in prevalence, while BA.5.2.1 remained stable (21% in weeks 32 and 31).

The prevalence of BA.2 descendent lineages (BA.2.X) and BA.4 descendent lineages (BA.4.X) has been on a continuous decline for several weeks. As of week 32, the prevalence of BA.2.X and BA.4.X is 5.6% and 6.1%, respectively.

Additional Omicron descendent lineages (e.g., BF.7 alias for BA.5.2.1.7) account for 14% of prevalence as of week 32, a rise from 11% of prevalence as of week 31. These lineages have been assigned Pango lineage names BC, BD, BF and BG.

WHO continues to monitor all lineages, including descendent lineages of VOCs, to track any increase in prevalence and change in viral characteristics. The current trends describing the circulation of Omicron descendent lineages should be interpreted with due consideration of the limitations of the SARS-CoV-2 surveillance systems. These include differences in sequencing capacity and sampling strategies between countries, changes in sampling strategies, and reductions in tests conducted and sequences shared by countries around the world.

For more information on the assessment of SARS-CoV-2 variants and the WHO classification refer to Annex 2.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data

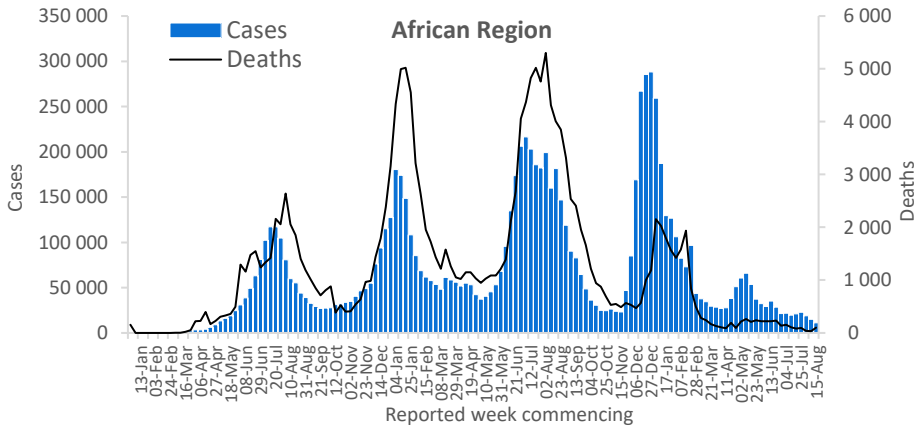
WHO regional overviews:

Epidemiological week 15 - 21 August 2022**

African Region

The African Region reported just over 11 000 new cases, a 25% decrease as compared to the previous week. Seven (14%) countries reported increases in the number of new cases of 20% or greater, with the greatest proportional increases seen in Niger (55 vs 18 new cases; +206%), Chad (14 vs five new cases; +180%), and Mali (15 vs eight new cases; +88%). The highest numbers of new cases were reported from Réunion (5093 new cases; 568.9 new cases per 100 000 population; +11%), South Africa (1566 new cases; 2.6 new cases per 100 000; +21%), and Burundi (973 new cases; 8.2 new cases per 100 000; +29%).

The number of new weekly deaths in the Region increased by 183% (predominantly due to batch reporting from South Africa) as compared to the previous week, with 99 deaths reported. The highest numbers of new deaths were reported from South Africa# (84 new deaths; <1 new death per 100 000 population), Zimbabwe (four new deaths; <1 new death per 100 000; same figure at the previous week), and the Democratic Republic of the Congo# (three new deaths; <1 new death per 100 000 population).

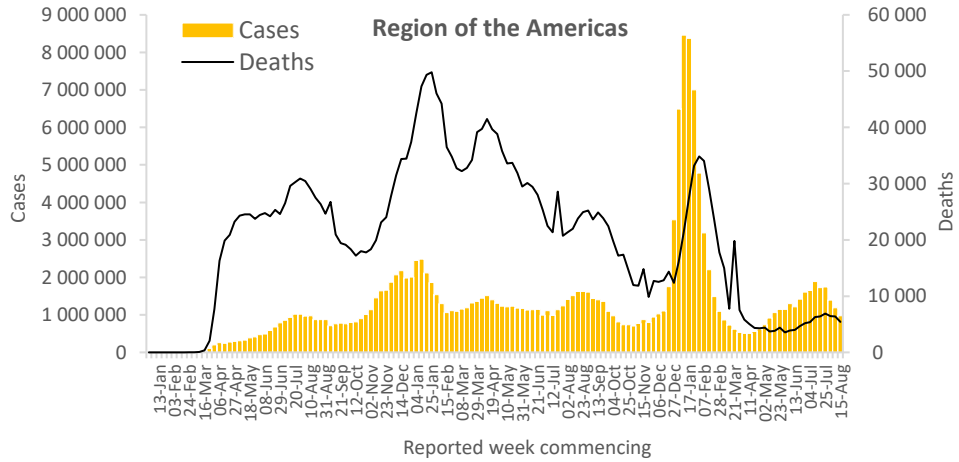


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 979 000 new cases, an 18% decrease as compared to the previous week. Eight of 56 (14%) countries for which data are available reported increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Grenada (266 vs 73 new cases; +264%), Suriname (19 vs six new cases; +217%), and Antigua and Barbuda (75 vs 33 new cases; +127%). The highest numbers of new cases were reported from the United States of America (612 378 new cases; 185.0 new cases per 100 000; -13%), Brazil (116 106 new cases; 54.6 new cases per 100 000; a -24%), and Chile (62 880 new cases; 328.9 new cases per 100 000; -13%).

The number of new weekly deaths reported in the Region decreased by 15% as compared to the previous week, with over 5400 deaths reported. The highest numbers of new deaths were reported from the United States of America (2714 new deaths; <1 new death per 100 000; -13%), Brazil (1105 new deaths; <1 new death per 100 000; -26%), and Peru (378 new deaths; 1.1 new deaths per 100 000; +10%).

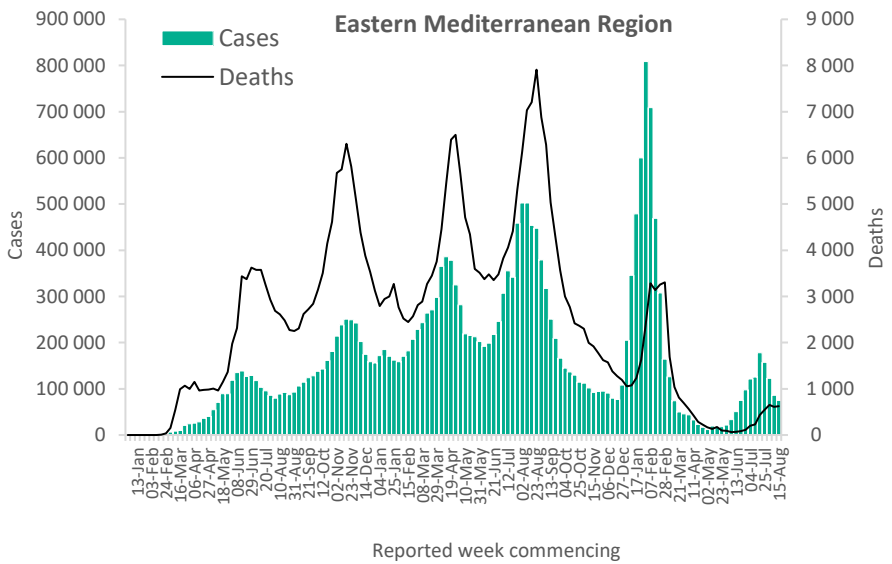


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported a decrease in cases for the fourth consecutive week, with over 75 000 new cases reported, a 13% decrease as compared to the previous week. Two (9%) countries reported increases in the number of new cases of 20% or greater: Iraq (3035 vs 541 new cases; +461%) and Yemen (12 vs eight new cases; +50%). The highest numbers of new cases were reported from the Islamic Republic of Iran (34 475 new cases; 41.0 new cases per 100 000; +2%), Lebanon (7620 new cases; 111.6 new cases per 100 000; -27%), and Jordan (5939 new cases; 58.2 new cases per 100 000; +8%).

The number of new weekly deaths remained similar to the previous week, with over 600 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (471 new deaths; <1 new death per 100 000; +2%), Tunisia (56 new deaths; <1 new death per 100 000; +17%), Lebanon (27 new deaths; <1 new death per 100 000; +4%), and Pakistan (27 new deaths; <1 new death per 100 000; +50%).

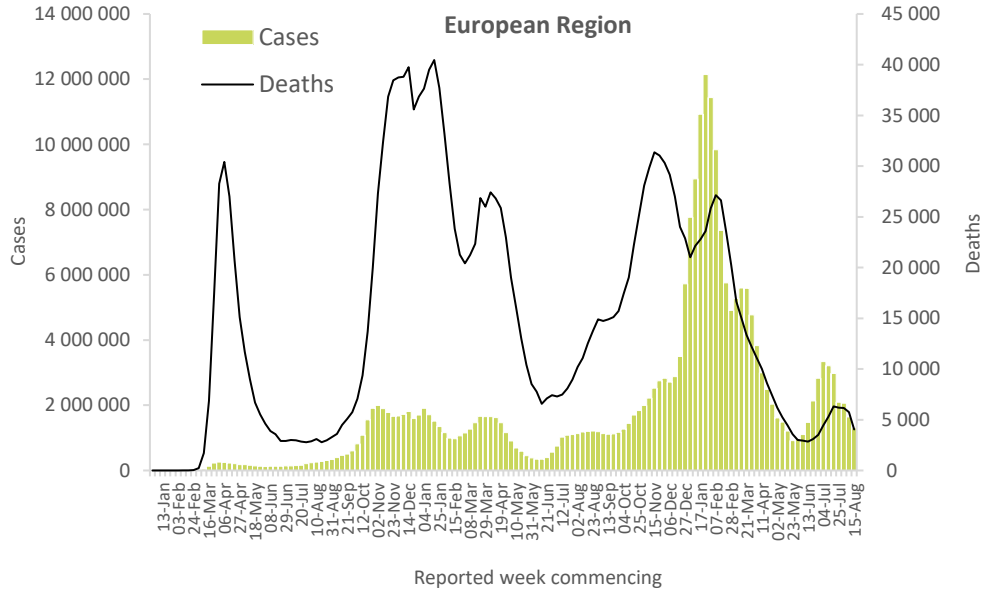


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 1.3 million new cases, a 20% decrease as compared to the previous week. Three (5%) countries in the Region reported increases in new cases of 20% or greater, with some of the highest proportional increases observed in Ukraine (5439 vs 3893 new cases; +40%), and Jersey (197 vs 143 new cases; +38%). The highest numbers of new cases were reported from Germany (240 998 new cases; 289.8 new cases per 100 000; -19%), the Russian Federation (235 385 new cases; 161.3 new cases per 100 000; +39%), and Italy (150 922 new cases; 253.0 new cases per 100 000; -22%).

Over 4000 new weekly deaths were reported in the Region, a 30% decrease as compared to the previous week. The highest numbers of new deaths were reported from Italy (677 new deaths; 1.1 new deaths per 100 000; -26%), Spain (461 new deaths; 1 new death per 100 000; -20%), and the Russian Federation (435 new deaths; <1 new death per 100 000; +13%).

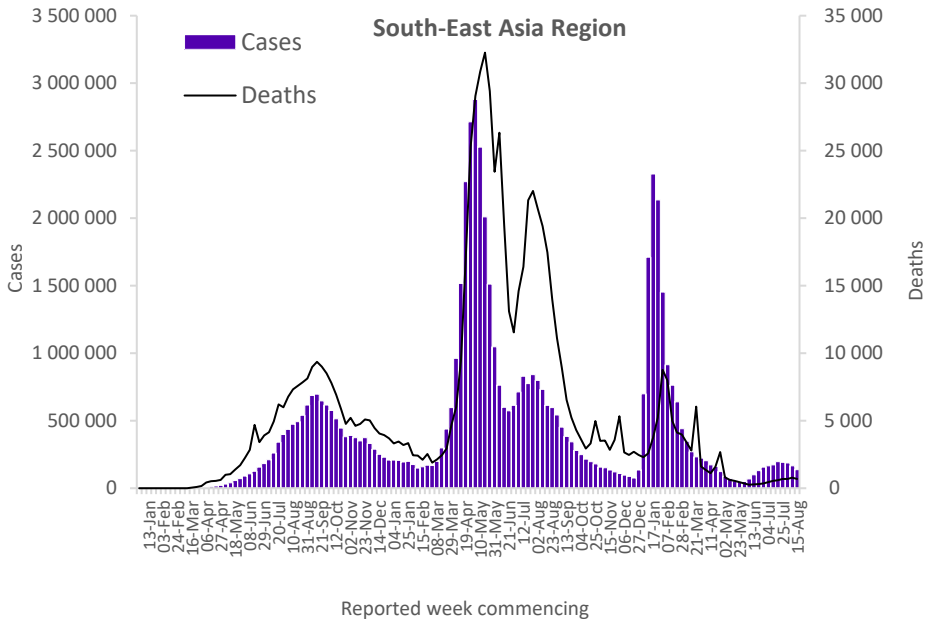


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 137 000 new cases, a 17% decrease as compared to the previous week. One of the 10 countries (10%) for which data are available showed an increase in the number of new cases of 20% or greater: Myanmar (265 vs 191 new cases; +39%). The highest numbers of new cases were reported from India (85 965 new cases; 6.2 new cases per 100 000; -20%), Indonesia (32 783 new cases; 12.0 new cases per 100 000; -13%), and Thailand (13 755 new cases; 19.7 new cases per 100 000; -7%).

The Region reported just under 700 deaths, an 11% decrease as compared to the previous week. The highest numbers of new deaths were reported from India (295 new deaths; <1 new death per 100 000; -15%), Thailand (199 new deaths; <1 new death per 100 000; -14%), and Indonesia (151 new deaths; <1 new death per 100 000; +15%).

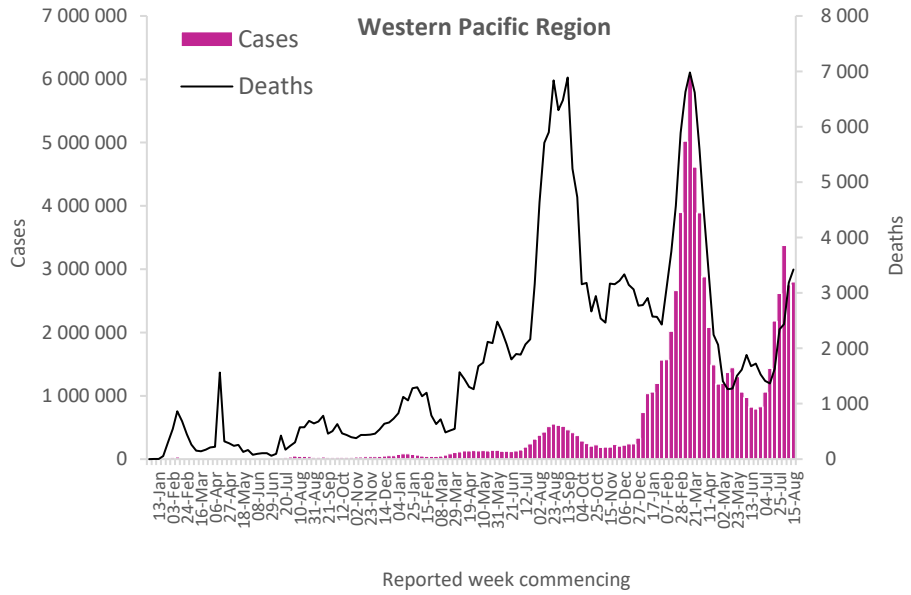


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported a similar case count as the previous week, with over 2.7 million new cases reported. Six (18%) countries reported increases in new cases of 20% or greater, with the largest proportional increases observed in Vanuatu (36 vs three new case; +1100%), Marshall Islands (9086 vs 758 new cases; +1099%), and Palau (33 vs seven new cases, +371%). The highest numbers of new cases were reported from Japan (1 476 374 new cases; 1167.3 new cases per 100 000; +6%), the Republic of Korea (884 373 new cases; 1725.0 new cases per 100 000; +2%), and China (172 424 new cases; 11.7 new cases per 100 000; +3%).

The Region reported over 3400 new weekly deaths, an 8% increase as compared to the previous week. The highest numbers of new deaths were reported from Japan (1624 new deaths; 1.3 new deaths per 100 000; -1%), Australia (490 new deaths; 1.9 new deaths per 100 000; -9%), and the Philippines (441 new deaths; <1 new death per 100 000; +305%).



Updates from the Western Pacific Region

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[2] A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

Updates of an outbreak of COVID-19 reported in the Democratic People's Republic of Korea continue through official media since 12 May 2022; however, at present, no confirmed cases or deaths have been reported to WHO.

For some countries, it was not possible to calculate the weekly percentage change in the number of cases and / or deaths due to either batch reporting or no reporting during the last week.

Annex 2. SARS-CoV-2 variants assessment and classification

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.

COVID-19 Weekly Epidemiological Update

Edition 105 published 17 August 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews

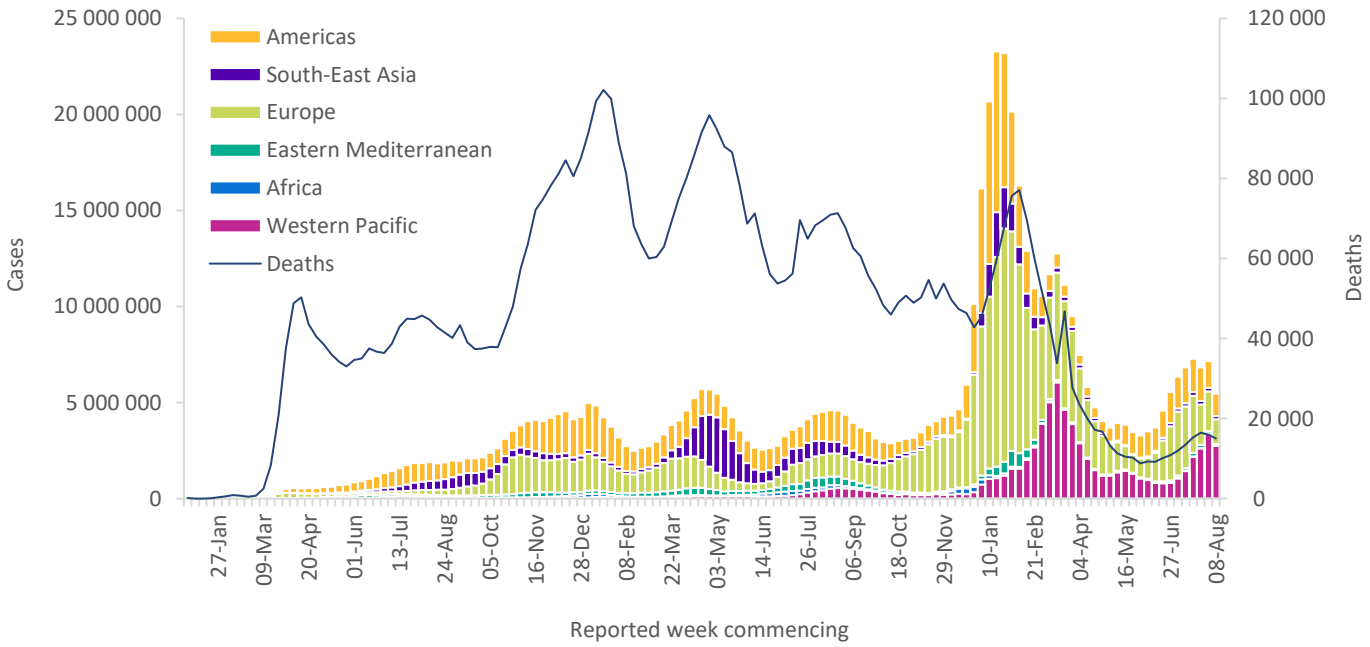
Global overview

Data as of 14 August 2022

Globally, the number of new weekly cases decreased by 24% during the week of 8 to 14 August 2022, as compared to the previous week, with over 5.4 million new cases reported (Figure 1, Table 1). The number of new weekly deaths decreased by 6%, as compared to the previous week, with over 15 000 fatalities reported. As of 14 August 2022, 587 million confirmed cases and 6.4 million deaths have been reported globally.

At the regional level, the number of reported new weekly cases decreased across all six regions: the African Region (-38%), the European Region (-38%), the Eastern Mediterranean Region (-30%), the Western Pacific Region (-18%), the Region of the Americas (-17%), and the South-East Asia Region (-11%). The number of new weekly deaths increased in the Western Pacific (+31%) and the South-East Asia Region (+12%), while it decreased or remained stable in the African Region (-33%), the European Region (-25%), the Eastern Mediterranean Region (-7%), and the Region of the Americas (-4%).

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 14 August 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest numbers of new weekly cases were reported from Japan (1 395 301 new cases; -7%), the Republic of Korea (866 830 new cases; +22%), the United States of America (679 653 new cases; -14%), Germany (271 277 new cases; -25%), and Italy (193 305 new cases; -32%). The highest numbers of new weekly deaths were reported from the United States of America (2 907 new deaths; -4%), Japan (1 647 new deaths; 64%), Brazil (1 495 new deaths; +3%), Italy (920 new deaths; -13%), and Spain (573 new deaths; -12%).

Current trends in reported COVID-19 cases and deaths should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected. Additionally, data from countries are continuously updated by WHO to incorporate changes in reported COVID-19 cases and deaths made by countries retrospectively.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 14 August 2022**

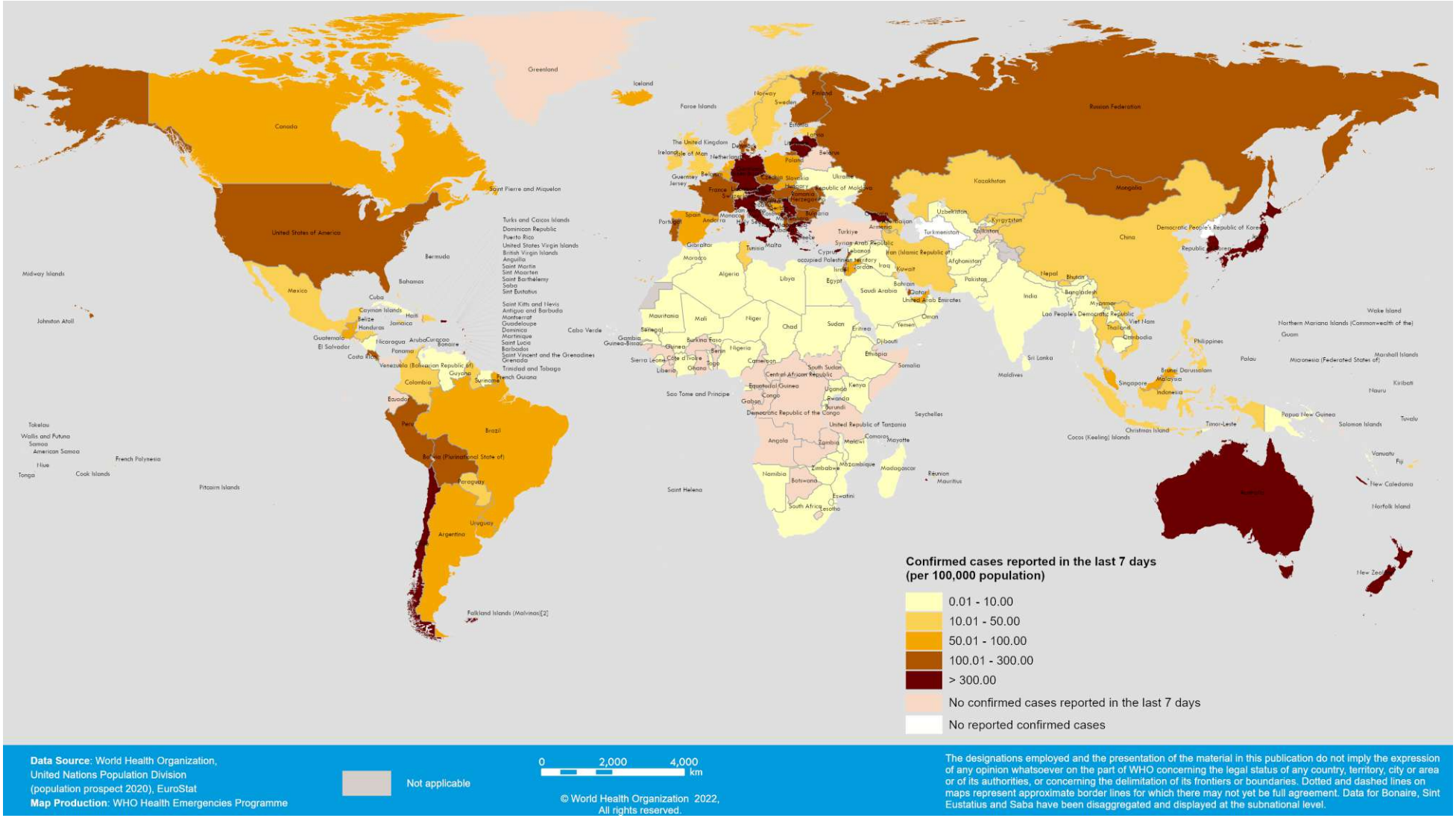
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Western Pacific	2 751 736 (50%)	-18%	77 847 591 (13%)	3 184 (21%)	31%	251 213 (4%)
Europe	1 288 470 (24%)	-38%	244 507 196 (42%)	4 333 (29%)	-25%	2 062 695 (32%)
Americas	1 156 829 (21%)	-17%	173 361 614 (30%)	6 150 (41%)	-4%	2 803 004 (44%)
South-East Asia	166 382 (3%)	-11%	59 709 418 (10%)	774 (5%)	12%	793 911 (12%)
Eastern Mediterranean	86 220 (2%)	-30%	22 837 954 (4%)	607 (4%)	-7%	346 268 (5%)
Africa	11 004 (<1%)	-38%	9 252 860 (2%)	24 (<1%)	-33%	174 123 (3%)
Global	**5 460 641 (100%)**	**-24%**	**587 517 397 (100%)**	**15 072 (100%)**	**-6%**	**6 431 227 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior. Data from previous weeks are updated continuously with adjustments received from countries.*
***See Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

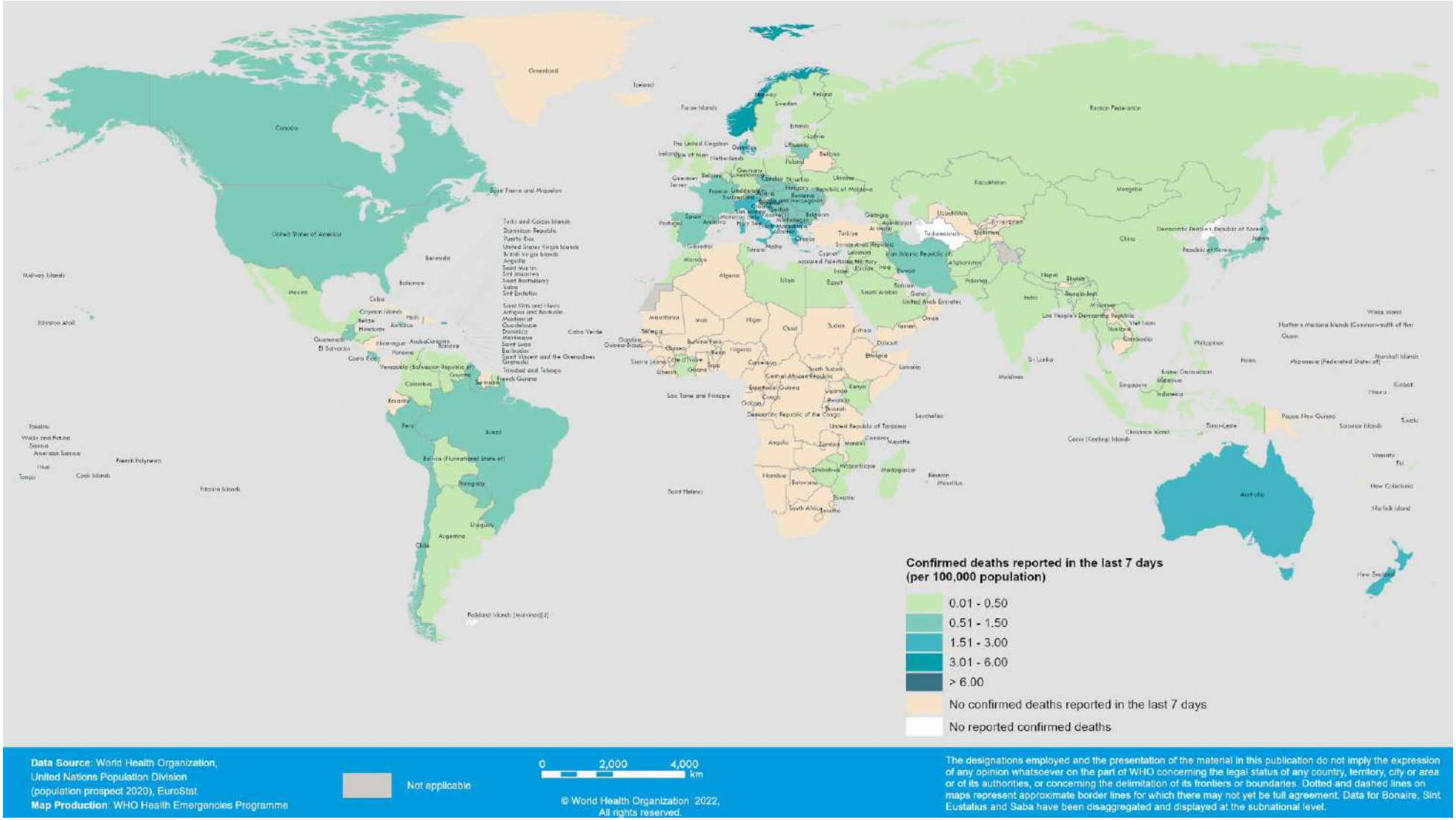
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update
- WHO COVID-19 detailed surveillance data dashboard

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 8 - 14 August 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 8 - 14 August 2022**



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

Geographic spread and prevalence of VOCs

Globally, from 15 July to 15 August 2022, 172 042 SARS-CoV-2 sequences were submitted to GISAID. Among these sequences, the Omicron variant of concern (VOC) remains the dominant variant circulating globally, accounting for 99.3% (170 905) of sequences.

As the number of submitted sequences continues to decline, interpretation of trends should be made with due consideration of the limitations of surveillance systems, including differences in sequencing capacity and sampling strategies between countries, as well as changes in sampling and sequencing strategies in multiple countries.

There is now a large diversity within the Omicron VOC, an expected phenomenon that is the result of the accumulation of mutations as part of the virus replication process and/or immune pressure from the host. More than 200 descendent lineages of Omicron have emerged; these variants are being monitored by WHO, depending on the specific genetic constellations of mutations, indications of a rise in prevalence in a specific location or geographic spread, as well as any evidence of phenotypic changes[i].

The current SARS-CoV-2 variant landscape is characterized by the emergence of an Omicron descendent lineage, the increase in the prevalence followed by the spread to many countries globally and replacement of the former dominant descendent lineage(s). The surge of cases linked to a specific descendent lineage is either due to its higher intrinsic transmissibility or higher immune evasion characteristics. The extent to which the emergence of a variant causes a rise in the number of cases, hospitalizations, and deaths in a country depends on a number of factors, including the levels of population immunity following either SARS-CoV-2 infection, vaccination, or a combination of the two, and the stringency of public health and social measures in place.

Figure 4, Table 2 and Annex 5 indicate the proportion of Omicron descendent variants. Notably, BA.1.X, BA.2.X (incl. BA.2.12.1 and BA.2.75) and BA.3.X have a prevalence of <1%, 3% and <1%, respectively, during week 30 (from 24 to 30 July 2022). The prevalence of BA.4.X is 8%, representing a declining trend as compared to previous weeks. BA.5 and its descendent lineages continue to rise in relative prevalence as compared to other descendent lineages and account for 74% of submitted sequences in week 31 (from 31 July to 6 August 2022).

Genetic diversification of BA.5 has also resulted in multiple descendent lineages, with additional mutations in both the spike and non-spike regions. These are indicated in Table 2 and Annex 5. Thirty-five BA.5 descendent lineages have been assigned a Pango lineage. Among all BA.5 descendent lineages, the relative proportions of BA.5.1, BA.5.2 and BA.5.2.1 are rising, accounting for 29%, 22% and 30% of submitted sequences, respectively during week 31 (from July 31 to 6 August 2022). BA.5.2.1 is the most prevalent variant in all six WHO regions since the week of 7 to 13 August 2022.

Among the Omicron descendent lineages that continue to emerge is BA.2.75, with the earliest sequences reported in May 2022. This variant, currently an Omicron subvariant under monitoring, has nine additional mutations in the spike as compared to its parent lineage BA.2; four of these mutations are within the receptor binding domain (RBD), and at least one of these RBD mutations has been associated with immune escape in previous variants.[2] As compared to 18 July when only 250 sequences from 15 countries were submitted to GISAID, more than 2700 sequences from 16 countries have been reported as of 15 August 2022. The majority of the reported sequences are from India. The

[i] WHO tracking SARS-CoV-2 Variants

global prevalence of this variant was highest in week 27 (from 3 to 9 July 2022) and has declined in recent weeks, but it is not known if this is a true decline in prevalence or the result of a delay in sequence submissions.

Preliminary laboratory-based studies indicate a relative growth advantage of BA.2.75 as compared to BA.2 and BA.5.[2] Further, there is an indication of higher fusogenicity[ii], more efficient replication in lung cells and more pathogenicity in a hamster model as compared to BA.2. More studies are required to confirm these preliminary findings.

Figure 4. Panel A and B: The number and percentage of SARS-CoV-2 sequences, as of 15 August 2022

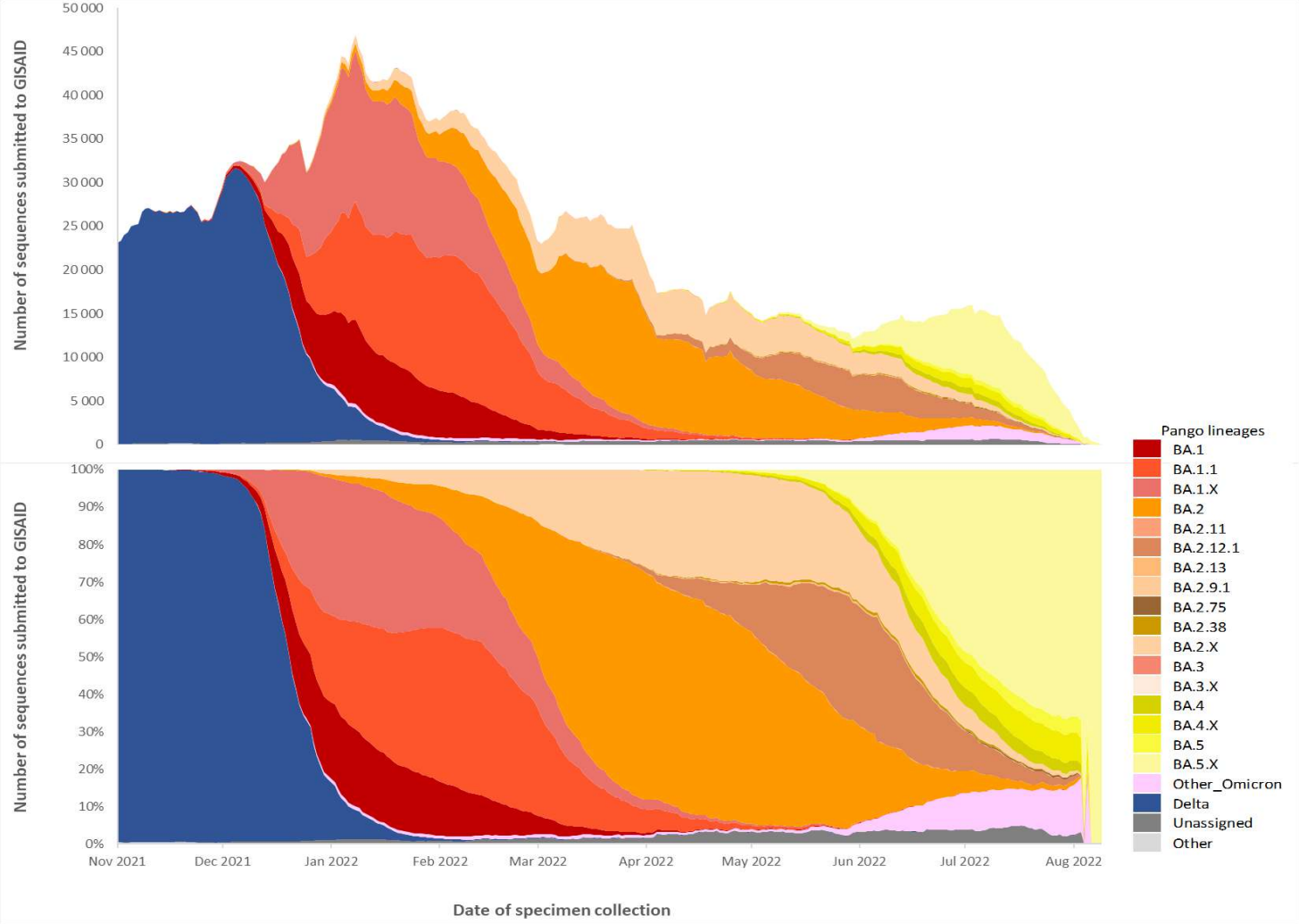


Figure 4 Panel A shows the number and **Panel B** the percentage of all circulating variants since 1 November 2022. Omicron sister-lineages and additional Omicron VOC descendent lineages under further monitoring (VOC-VUM) are shown. *BA.1.X, BA.2.X, BA.3.X, BA.4.X* and *BA.5.X* include all BA.1, BA.2, BA.3, BA.4 and BA.5 pooled descendent lineages, except those already shown in the figure above. The category *Other_Omicron* indicates sequences not part of the above-mentioned Omicron descendent lineages. The *Unassigned* category includes lineages pending for a Pango lineage name whereas the *Other* category includes lineages other than those listed in the legend. Source: SARS-CoV-2 sequence data and metadata from GISAID, as of 15 August 2022.

[ii] Fusogenicity: a measure of the binding between a pathogen's membrane/receptor to a host membrane/receptor.

Table 2. Relative proportions of SARS-CoV-2 sequences over the last four weeks by specimen collection date

			Last 4 weeks by collection date (%) [c]			
Lineage (n)[a]	**Countries**	**Sequences[b]**	**2022-28**	**2022-29**	**2022-30**	**2022-31**
BA.1.X, (n=54)	195	2 372 883	26 (<1%)	22 (<1%)	18 (<1%)	0 (0%)
BA.2.X, (n=117)	165	2 039 486	7465 (9%)	3589 (6%)	1082 (4%)	89 (3%)
BA.3.X, (n=1)	44	1334	37 (<1%)	24 (<1%)	5 (<1%)	0 (0%)
BA.4.X, (n=11)	103	91 020	9358 (12%)	6101 (11%)	2760 (10%)	235 (8%)
BA.5.X, (n=35)	121	364 487	52 633 (65%)	39 442 (69%)	18 806 (70%)	2067 (74%)
Other_Omicron[d]	176	145 604	8050 (10%)	6443 (11%)	3474 (13%)	371 (13%)
Recombinants[e], (n=27)	-	Pooled 6517	4 (<1%)	4 (<1%)	2 (<1%)	0 (0%)
Delta[f]	205	4 369 710	5 (<1%)	4 (<1%)	0 (0%)	1 (<1%)
Other	209	2 702 359	3942 (5%)	1899 (3%)	642 (2%)	31 (1%)

[a] Lineage, *X* means descendent lineages are pooled, *n* indicates the number of currently designated additional descendent lineages
[b] Data source: sequences and metadata from GISAID, retrieved on 12 August 2022
[c] Number of sequences and relative proportions in %
[d] indicating *Omicron* lineages other than those of BA.X lineages and those of recombinants
[e] indicating the sum of recombinant lineages
[f] Previously circulating VOC

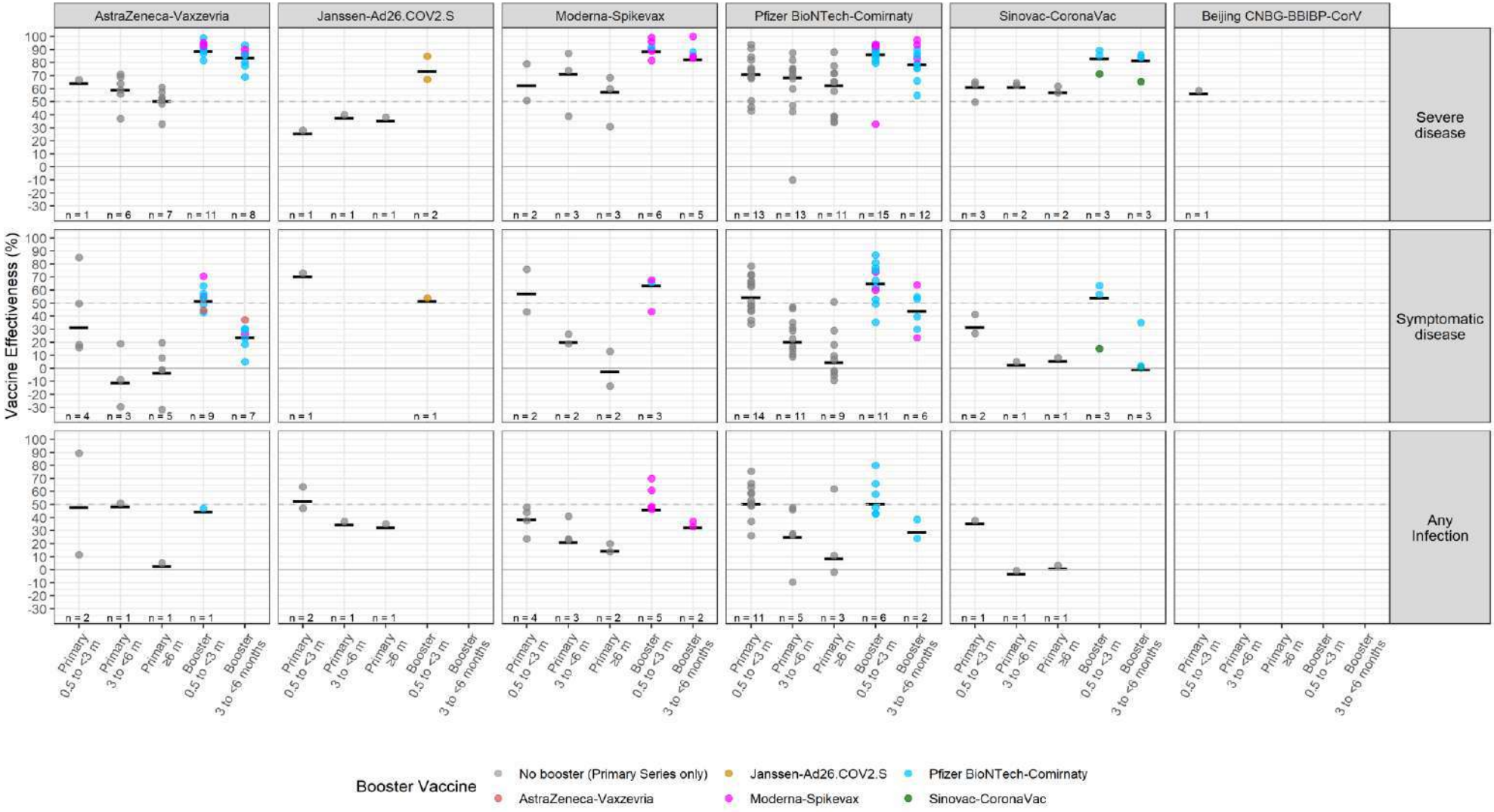
Table 3. Summary of phenotypic characteristics of the Omicron VOC[3]

Public health domain of impact	Omicron (B.1.1.529)		Omicron sublineages		
	Omicron (B.1.1.529)	**BA.1**	**BA.2**	**BA.4**	**BA.5**
Transmissibility	Growth advantage and increased transmissibility compared to Delta [4]	Lower growth rate compared to BA.2[1], BA.4 and BA.5 [3]	Lower growth rate compared to BA.4 and BA.5 [1,2]	Growth advantage compared to BA.2 [2]	Growth advantage compared to BA.4 [2]
Disease severity	Overall evidence suggests lower severity compared to Delta despite contrasting evidence. Earlier studies reported lower severity.[4–10] However, more recent studies report lower [11]or similar severity.[12,13]	No difference in disease severity compared to BA.2, BA.4 and BA.5[12]	There is evidence, both in favor of lower severity[14] compared to BA.5 and in support of similar disease severity compared to BA.4 and BA.5[12]	Currently available evidence does not suggest a difference in disease severity compared to BA.2 and BA.5 [12]	There is one preliminary study suggesting increased severity[14] compared to BA.2 while other studies suggests similar disease severity compared to BA.2 and BA.4[12]. More evidence is needed to understand the disease severity
Risk of reinfection	Reduced risk of Omicron reinfection among individuals previously infected with a different SARS-CoV-2 variant compared to naïve individuals[15,16]	Reduced risk of reinfection with BA.1 after infection with BA.2[16]	Reduced risk of reinfection following infection with BA.1 [16]	Varying evidence regarding risk of reinfection. One study reported protection against infection following previous BA.2 infection [17] while another reported reduced protection from reinfection.[12]	Varying evidence regarding risk of reinfection. One study reported protection against infection following previous BA.2 infection [17] while another reported reduced protection from reinfection.
Impact on antibody responses	Reduction in neutralizing activity reported as compared to other VOCs[18–20]	Lower neutralizing antibody titers compared to the index virus[20]	Lower neutralizing antibody titers compared to the index virus[20]	Lower neutralizing antibody titers compared to BA.1 [21,22]	Lower neutralizing antibody titres compared to BA.1 [21–23]
Impacts on diagnostics	PCR assays that include multiple gene targets maintain their accuracy to detect Omicron[24]; S gene target failure/positivity (SGTF) may be a proxy for screening. Limited to no impact on sensitivity of Ag-RDTs observed[25–28]	S gene target failure	The majority will be S gene target positive	S gene target failure.	S gene target failure.
Impact on treatments	No difference in the effectiveness of antiviral agents (polymerase and protease inhibitors) against the Omicron variant[29]. Conserved neutralizing activity for three broadly neutralizing monoclonal antibodies (sotrovimab, S2X259 and S2H97) and a reduced effectiveness of other monoclonal antibodies[30–33]	Reduced efficacy of cilgavimab[34] and casirivimab-imdevimab[35]	Reduced neutralizing activity of sotrovimab, bamlanivimab, casirivimab, etesevimab, imdevimab and tixagevimab [36]	Reduced neutralizing activity of sotrovimab, bamlanivimab, casirivimab, etesevimab, imdevimab and tixagevimab. Increased resistance to cilgavimab compared to BA.2[36]	Reduced neutralizing activity of sotrovimab, bamlanivimab, casirivimab, etesevimab, imdevimab and tixagevimab. Increased resistance to cilgavimab compared to BA.2[36]
Impact on vaccination	Results of vaccine effectiveness (VE) studies should be interpreted with caution because estimates vary with the type of vaccine administered and the number of doses and scheduling (sequential administration of different vaccines). For further information, see the section Interpretation of the results of the VE for the Omicron variant				

[3] Studies contributing to the table are identified from an ongoing review of both the preprint and published literature on SARS-CoV-2 variants.

[4] Similar methodology used as Reference [1]

Figure 5. Vaccine effectiveness (VE) of primary series and first booster vaccination against the Omicron variant of concern



Dots represent point estimates of VE from each study; dark black horizontal lines represent median VE across all studies in stratum. All data is from a systematic review of COVID-19 VE studies; methods and summary tables of VE studies can be found on view-hub.org. Vertical panels represent VE for full primary series (grey dots) and VE for homologous or heterologous booster vaccination (other colored dots) following completion of primary series vaccination with vaccine of primary series noted in panel header. All booster VE estimates are for first booster dose. Severe disease includes hospitalization, and pneumonia; symptomatic disease includes disease of any severity level; any infection can include symptomatic and asymptomatic infection. Additional details on the methods for inclusion of the estimates in the plots provided in text.

Figure 5 summarizes the impact of the Omicron variant on absolute vaccine effectiveness (VE) over time, grouped by the primary series vaccine; booster doses may have been a different vaccine (i.e., both homologous and heterologous booster vaccination VEs are shown). Additional information on vaccine performance against VOCs can also be found in Annex 4.

Since the last update on 20 July 2022, five new studies have been added to the figure. Four studies (two not yet peer-reviewed) assessed the VE of two doses of Pfizer BioNTech-Comirnaty against infection, symptomatic disease, emergency department/urgent care encounters, or hospitalization due to Omicron over time among children in Canada, Qatar, Singapore, and the United States of America.[36–39] Another study evaluated VE of primary series vaccination with Sinovac-CoronaVac, as well as VE of two doses of Sinovac-CoronaVac followed by a booster dose of Pfizer BioNTech-Comirnaty against Omicron symptomatic disease, hospitalization, and death among adults 18 years and older in Brazil.[40]

Interpretation of the results of absolute VE for the Omicron variant

To date, 37 studies from 15 countries (Argentina, Brazil, Canada, Chile, Czech Republic, Denmark, Finland, Norway, Israel, Qatar, Singapore, South Africa, the United Kingdom, the United States of America, and Zambia) have collectively assessed the protection of six vaccines against the Omicron variant. Thirteen studies contributed VE estimates of primary series vaccination only to the plot, four contributed to estimates of the first booster vaccination only, and 20 contributed estimates to both. Findings from these studies show reduced VE of COVID-19 primary series vaccines against the Omicron variant for all outcomes (*severe disease*, *symptomatic disease*, and *infection*) compared to those that have been observed for the original SARS-CoV-2 strain and the four previously circulating VOCs. However, importantly, VE estimates against the Omicron variant remain higher for *severe disease* than the other outcomes, in the majority of studies. The first booster vaccination substantially improves VE for all outcomes and for all combinations of schedules with estimates available for both primary series and booster vaccination. VE declines more with time after the first booster vaccination for symptomatic disease and infection than it does for severe disease[41]; however, studies that assess VE of booster vaccination beyond six months to evaluate longer duration of protection are not yet available.

For *severe disease*, VE estimates of the primary series showed little decline over six months. VE estimates were ≥70% during the first three months after primary series vaccination for nine of 15 (60%) VE estimates for the mRNA vaccines (Moderna-Spikevax and Pfizer BioNTech-Comirnaty). Of the two vector vaccines for which data were available, both had VE <70%: one reported VE <70% for AstraZeneca-Vaxzevria and the other reported VE <50% for Janssen-Ad26.COV2.S. Four estimates were available for inactivated vaccines: none of the three estimates for Sinovac-CoronaVac were ≥ 70% (two [67%] VE estimates were ≥ 50%); the single estimate for Beijing CNBG-BBIBP-CorV (Sinopharm) was ≥50% but <70%. Beyond three months after vaccination, VE estimates were ≥70% for 14 of 34 (41%) VE estimates for the mRNA vaccines (24 [71%] estimates had VE ≥50%); one of 13 (8%) VE estimates for

AstraZeneca-Vaxzevria was ≥70% (10 [77%] estimates were ≥50%). The two estimates for the vector-based Janssen-Ad26.COV2.S vaccine were <50%; the four VE estimates for Sinovac-CoronaVac were ≥50% but <70%.

The first booster dose vaccination improved VE estimates against *severe disease* in all studies, and VE was ≥70% in 37 of 39 (95%) estimates evaluating VE between 14 days and three months of receipt of a booster dose. Thirty-six estimates evaluated an mRNA booster, two evaluated a Janssen-Ad26.COV2.S booster, and one evaluated a Sinovac-CoronaVac booster. One Moderna-Spikevax booster dose had VE estimate of <50% (though confidence intervals were very wide), and one Janssen-Ad26.COV2.S booster dose had VE <70%. At three to six months post mRNA booster, VE was ≥70% for 26 of 29 (90%) estimates (the primary series was an mRNA vaccine in 19 of the 29 estimates, AstraZeneca-Vaxzevria in eight and Sinovac-CoronaVac in two). One study found the VE to be ≥50% but <70% following three to six months from the third dose of Sinovac-CoronaVac.

VE against *symptomatic disease* and *infection* within the first three months of primary series vaccination was lower than against severe disease, and VE decreased more substantially over time. For *symptomatic disease*, only four of 16 (25%) VE estimates for the mRNA vaccines were ≥70% and only nine (56%) were ≥50%; one (25%) of the four VE estimates for AstraZeneca-Vaxzevria was ≥70% while the remaining three estimates were <50%; the single estimate for Janssen-Ad26.COV2.S was ≥70%, and both estimates for Sinovac (CoronaVac) were <50%. Beyond three months after vaccination, only one of 38 (3%) VE estimates was ≥50% (28 estimates evaluated mRNA vaccines, eight evaluated AstraZeneca-Vaxzevria, and two evaluated Sinovac-CoronaVac). A booster vaccination with an mRNA vaccine after completion of a primary series of AstraZeneca-Vaxzevria, an mRNA vaccine, or Sinovac-CoronaVac improved VE against *symptomatic disease*: seven of 25 (28%) VE estimates between 14 days and three months post booster were ≥70%, although 20 (80%) estimates were ≥50%; one (50%) of two VE estimates evaluating three doses of AstraZeneca-Vaxzevria was ≥50% but <70%. First booster dose protection declined rapidly over time: only four of 16 (25%) estimates available at three to six months following receipt of an mRNA booster dose had VE ≥50% and none were ≥70%. Both the single estimate for three doses of AstraZeneca-Vaxzevria and the single estimate for three doses of Sinovac-CoronaVac assessed at three to six months post booster vaccination were <50%. VE estimates against *infection* showed similar patterns of lower protection and steep waning as those against *symptomatic disease.*

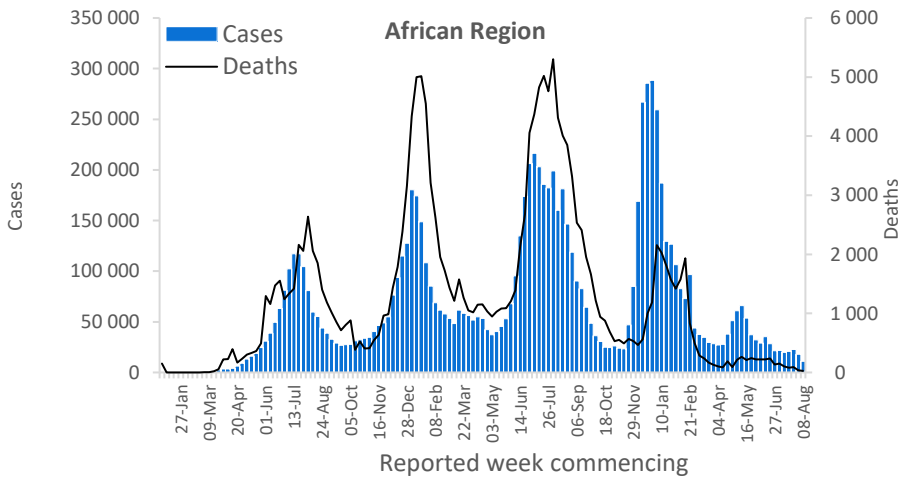
WHO regional overviews:

Epidemiological week 8 - 14 August 2022**

African Region

The African Region reported just over 11 000 new cases, a 38% decrease as compared to the previous week. Five (10%) countries reported an increase in the number of new cases of 20% or greater, with the greatest proportional increases seen in Niger (18 vs six new cases; +200%), Mayotte (642 vs 385 new cases; +67%), and Mozambique (182 vs 132 new cases; +38%). The highest numbers of new cases were reported from Réunion (4590 new cases; 512.7 new cases per 100 000 population; -21%), South Africa (1293 new cases; 2.2 new cases per 100 000; -26%), and Algeria (867 new cases; 2.0 new cases per 100 000; +13%).

The number of new weekly deaths in the Region decreased by 33% as compared to the previous week, with 24 deaths reported. The highest numbers of new deaths were reported from Réunion (eight new deaths; <1 new death per 100 000 population; +14%), Zimbabwe (four new deaths; <1 new death per 100 000; -43%), and Côte d'Ivoire# (four new deaths; <1 new death per 100 000 population).

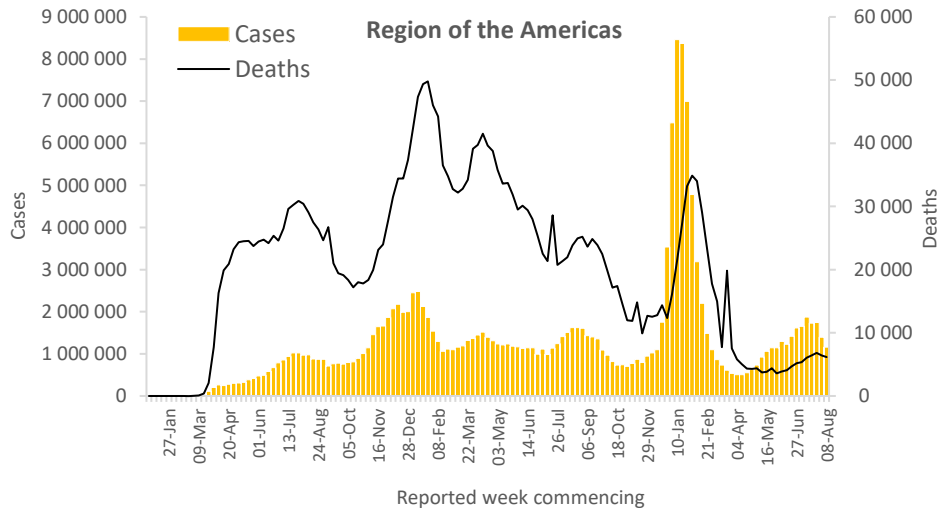


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 1.1 million new cases, a 17% decrease as compared to the previous week. Six of 56 (11%) countries for which data are available reported increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in the Falkland Islands (Malvinas) (20 vs eight new cases; +150%), Antigua and Barbuda (33 vs 14 new cases; +136%), and Grenada (73 vs 36 new cases; +103%). The highest numbers of new cases were reported from the United States of America (679 653 new cases; 205.3 new cases per 100 000; -14%), Brazil (153 661 new cases; 72.3 new cases per 100 000; -25%), and Chile (72 562 new cases; 379.6 new cases per 100 000; +14%).

The number of new weekly deaths reported in the Region remained stable as compared to the previous week, with over 6100 deaths reported. The highest numbers of new deaths were reported from the United States of America (2907 new deaths; <1 new death per 100 000; -4%), Brazil (1495 new deaths; <1 new death per 100 000; +3%), and Peru (344 new deaths; 1 new death per 100 000; -2%).

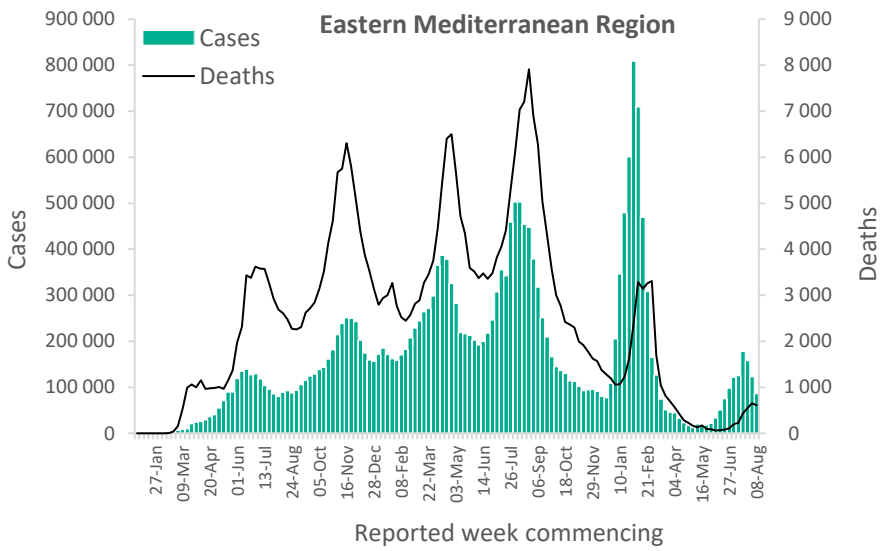


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported a decrease in cases for the third consecutive week, with over 86 000 new cases reported, a 30% decrease as compared to the previous week. Two (9%) countries reported increases in the number of new cases of 20% or greater: Bahrain (3967 vs 3182 new cases; +25%) and Afghanistan (1785 vs 1466 new cases; +22%). The highest numbers of new cases were reported from the Islamic Republic of Iran (33 949 new cases; 40.4 new cases per 100 000; -37%), Lebanon (10 379 new cases; 152.1 new cases per 100 000; -21%), and the occupied Palestinian territory (6382 new cases; 125.1 new cases per 100 000; -29%).

The number of new weekly deaths in the Region decreased by 7% as compared to the previous week, with over 600 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (463 new deaths; <1 new death per 100 000; similar to the previous week), Tunisia (48 new deaths; <1 new death per 100 000; -25%), and Lebanon (26 new deaths; <1 new death per 100 000; +53%).

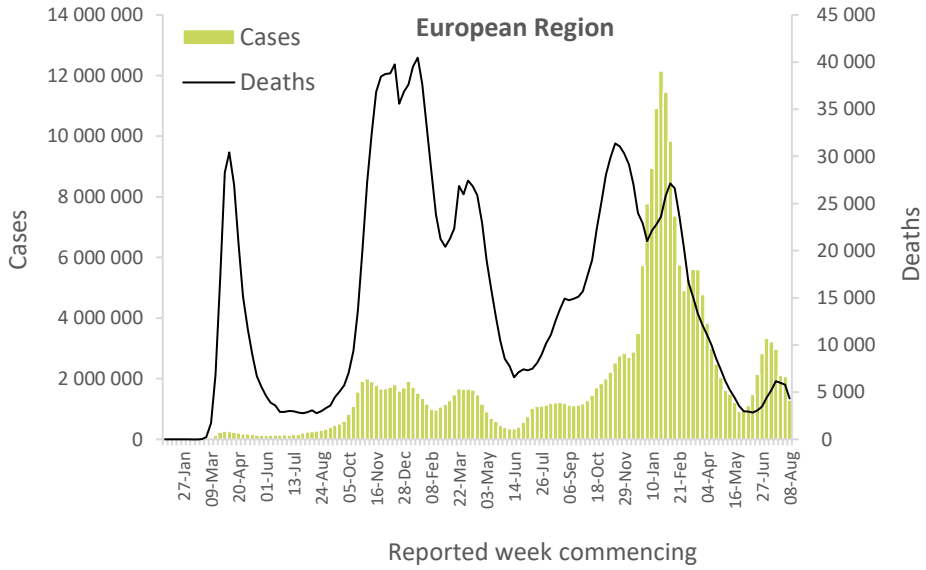


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 1.2 million new cases, a 38% decrease as compared to the previous week. Four (7%) countries in the Region reported increases in new cases of 20% or greater, with some of the highest proportional increases observed in Gibraltar (96 vs 36 new cases; +167%), and Ukraine (3893 vs 556 new cases; +40%). The highest numbers of new cases were reported from Germany (271 277 new cases; 326.2 new cases per 100 000; -25%), Italy (193 305 new cases; 324.1 new cases per 100 000; -32%), and the Russian Federation (169 259 new cases; 116.0 new cases per 100 000; +53%).

Over 4300 new weekly deaths were reported in the Region, a 25% decrease as compared to the previous week. The highest numbers of new deaths were reported from Italy (920 new deaths; 1.5 new deaths per 100 000; -13% decrease), Spain (573 new deaths; 1.2 new deaths per 100 000; -12%), and France (466 new deaths; <1 new death per 100 000; -11%).

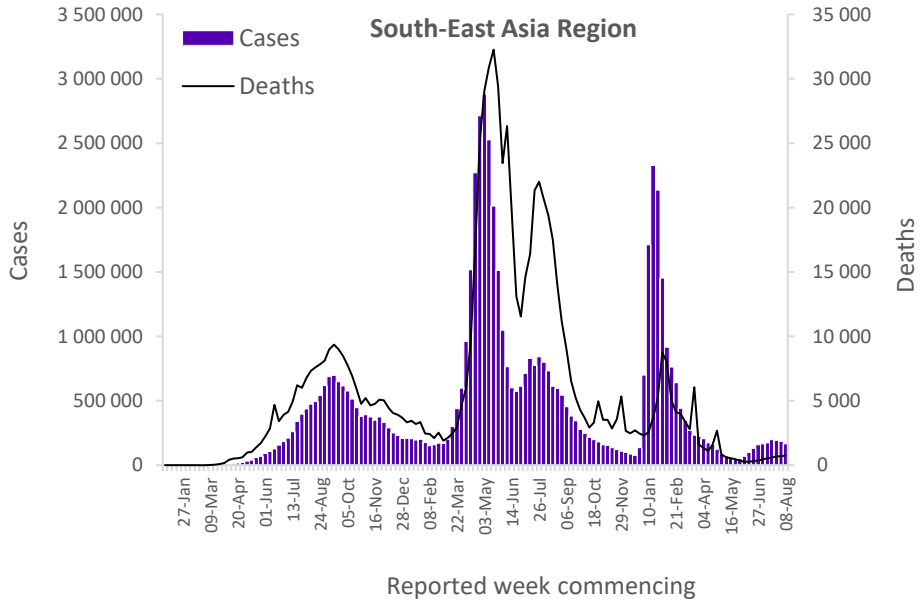


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 166 000 new cases, an 11% decrease as compared to the previous week. Three of the 10 countries (30%) for which data are available showed increases in the number of new cases of 20% or greater: Myanmar (191 vs 106 new cases; +80%), Timor Leste (43 vs 35 new cases; +23%) and Sri Lanka (1248 vs 1025 new cases, 22%). The highest numbers of new cases were reported from India (107 732 new cases; 7.8 new cases per 100 000; -14%), Indonesia (37 796 new cases; 13.8 new cases per 100 000; similar to the previous week), and Thailand (14 816 new cases; 21.2 new cases per 100 000; -4%).

The Region reported under 800 deaths, a 12% increase as compared to the previous week. The highest numbers of new deaths were reported from India (348 new deaths; <1 new death per 100 000; +5%), Thailand (232 new deaths; <1 new death per 100 000; +10%), and Indonesia (131 new deaths; <1 new death per 100 000; +28%).

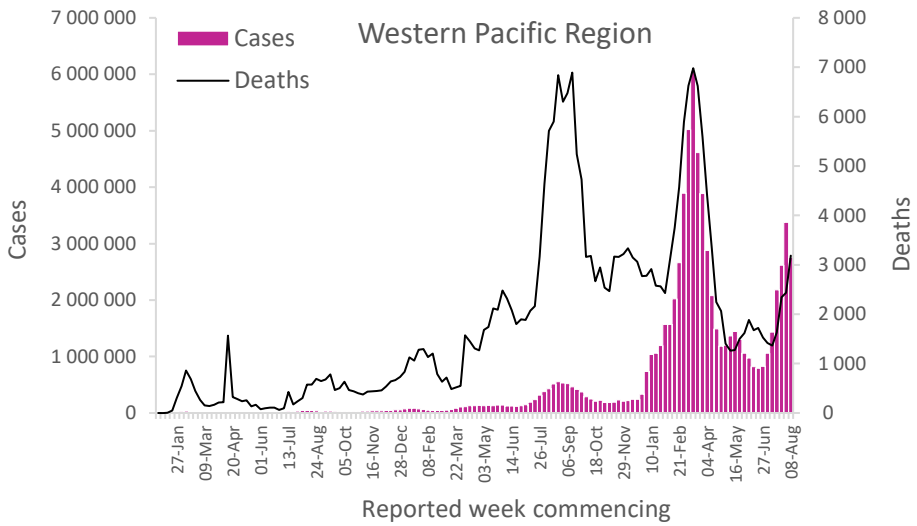


Updates from the South-East Asia Region

Western Pacific Region

After an increasing trend in cases since the end of July 2022, the Western Pacific Region reported an 18% decrease in new cases as compared to previous week, with over 2.7 million new cases reported. Five (15%) countries reported increases in new cases of 20% or greater, with some of the largest proportional increases observed in Commonwealth of the Northern Mariana Islands (215 vs one new case; +21 400%) and Marshall Islands (758 vs four new cases; +18 850% and Nauru (196 vs two new cases, +9700%). The highest numbers of new cases were reported from Japan (1 395 301 new cases; 1103.2 new cases per 100 000; -7%), the Republic of Korea (866 830 new cases; 1690.7 new cases per 100 000; +22%), and Australia (171 173 new cases; 671.3 new cases per 100 000; -35%).

The Region reported over 3100 new weekly deaths, a 31% increase as compared to the previous week. The highest numbers of new deaths were reported from Japan (1647 new deaths; 1.3 new deaths per 100 000; + 64%), Australia (539 new deaths; 2.1 new deaths per 100 000; +2%), and the Republic of Korea (360 new deaths; <1 new death per 100 000; +67%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.
[2] A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas)."

Updates of an outbreak of COVID-19 reported in the Democratic People's Republic of Korea continue through official media since 12 May 2022; however, at present, no confirmed cases or deaths have been reported to WHO.

For some countries, it was not possible to calculate the weekly percentage change in the number of cases and / or deaths due to either batch reporting or no reporting during the last week.

Annex 2. SARS-CoV-2 variants assessment and classification

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.[1]

Annex 3. Summary of Primary Series and First Booster Vaccine Performance against Omicron Variant of Concern (data as of 25 July 2022)

		Omicron Sub-Lineage				
		BA.1	**BA.2**	**BA.2.12.1**	**BA.3**	**BA.4/BA.5**
Primary Series Vaccination						
WHO Emergency Use Listing (EUL) Qualified Vaccines	AstraZeneca-Vaxzevria/SII-Covishield	HNR_{12}	HNR_{2}	HNR_{1}	----	HNR_{1}
	Beijing CNBG-BBIBP-CorV	HNR_{8}	HNR_{3}	HNR_{2}	HNR_{1}	HNR_{2}
	Bharat-Covaxin	$\downarrow\downarrow_{1}$	----	----	----	----
	Cansino-Convidecia	----	----	----	----	----
	Janssen-Ad26-COV2.S	HNR_{9}	HNR_{1}	HNR_{1}	----	HNR_{1}
	Moderna-Spikevax	$\downarrow\downarrow\downarrow_{11}$	$\downarrow\downarrow$to$\downarrow\downarrow\downarrow_{2}$	HNR_{1}	----	HNR_{1}
	Novavax-Nuvaxovid/SII - Covavax	HNR_{2}	HNR_{1}	HNR_{1}	----	HNR_{1}
	Pfizer BioNTech-Comirnaty	HNR_{49}	HNR_{7}	HNR_{1}	HNR_{1}	HNR_{2}
	Sinovac-CoronaVac	HNR_{8}	$\downarrow\downarrow\downarrow_{1}$	----	----	$\downarrow\downarrow\downarrow_{1}$
Vaccines without WHO EUL	Anhui ZL-Recombinant	----	----	----	----	----
	Gamaleya-Sputnik V	HNR_{3}	HNR_{1}	HNR_{1}	----	HNR_{1}
	Chumakov-Covi-Vac	HNR_{2}	----	----	----	----
Booster Vaccination (Primary Series Vaccine + Booster Vaccine)						
WHO Emergency Use Listing (EUL) Qualified Booster Vaccines	AstraZeneca-Vaxzevria/SII-Covishield + AstraZeneca-Vaxzevria/SII Covishield	HNR_{2}	HNR_{2}	----	$\downarrow\downarrow_{1}$	$\downarrow\downarrow\downarrow_{1}$
	AstraZeneca-Vaxzevria/SII-Covishield + Moderna-Spikevax	$\downarrow_{1}$	----	----	----	----
	AstraZeneca-Vaxzevria/SII-Covishield + Pfizer BioNTech-Comirnaty	$\downarrow\downarrow_{1}$	$\downarrow\downarrow_{1}$	----	$\downarrow\downarrow_{1}$	----
	Beijing CNBG-BBIBP-CorV + Beijing CNBG-BBIBP-CorV	$\downarrow\downarrow$to$\downarrow\downarrow\downarrow_{4}$	HNR_{2}	HNR_{1}	$\downarrow\downarrow_{1}$	HNR_{1}
	Janssen-Ad26-COV2.S + Janssen-Ad26-COV2.S	HNR_{2}	----	----	----	----
	Janssen-Ad26-COV2.S + Pfizer BioNTech-Comirnaty	$\downarrow_{1}$ to $\downarrow\downarrow\downarrow_{2}$	----	----	----	----
	Moderna-Spikevax + Moderna-Spikevax	$\downarrow$to$\downarrow\downarrow\downarrow_{8}$	$\downarrow\downarrow_{1}$	$\downarrow\downarrow_{1}$	$\downarrow\downarrow_{1}$	$\downarrow\downarrow\downarrow_{1}$
	Moderna-Spikevax + Pfizer BioNTech-Comirnaty	$\downarrow\downarrow\downarrow_{1}$	----	----	----	----
	Novavax-Nuvaxovid/SII – Covavax + Novavax-Nuvaxovid/SII - Covavax	$\downarrow\downarrow_{1}$				
	Pfizer BioNTech-Comirnaty + Pfizer BioNTech-Comirnaty	$\downarrow$to$\downarrow\downarrow\downarrow_{42}$	$\downarrow$to$\downarrow\downarrow\downarrow_{14}$	$\downarrow$to$\downarrow\downarrow\downarrow_{3}$	$\downarrow$to$\downarrow\downarrow_{4}$	$\downarrow\downarrow$to$\downarrow\downarrow\downarrow_{6}$
	Pfizer BioNTech-Comirnaty + Janssen-Ad26-COV2.S	$\downarrow_{2}$	----	----	----	----
	Pfizer BioNTech-Comirnaty + Moderna-Spikevax	$\downarrow$to$\downarrow\downarrow_{2}$	----	----	----	----
	Sinovac-CoronaVac + Sinovac-CoronaVac	$\downarrow$to$\downarrow\downarrow\downarrow_{7}$	$\downarrow\downarrow$ to$\downarrow\downarrow\downarrow_{3}$	$\downarrow\downarrow_{1}$	$\downarrow\downarrow_{1}$	$\downarrow\downarrow$ to$\downarrow\downarrow\downarrow_{2}$
	Sinovac-CoronaVac + Pfizer BioNTech-Comirnaty	$\downarrow\downarrow_{2}$	$\downarrow\downarrow_{1}$	----	----	----
Booster Vaccines without WHO EUL	Anhui ZL-Recombinant + Anhui ZL-Recombinant	$\downarrow$to$\downarrow\downarrow_{2}$	$\downarrow\downarrow_{1}$	$\downarrow\downarrow_{1}$	$\downarrow\downarrow\downarrow_{1}$	$\downarrow\downarrow\downarrow_{1}$
	Beijing CNBG-BBIBP-CorV + Anhui ZL - Recombinant	$\downarrow\downarrow$to$\downarrow\downarrow\downarrow_{4}$	HNR_{2}	HNR_{1}	$\downarrow\downarrow\downarrow_{1}$	HNR_{1}
	Gamaleya-Sputnik V + Gamaleya Sputnik Light	$\downarrow\downarrow_{1}$	----	----	----	----
	Sinovac-CoronaVac + Anhui ZL - Recombinant	$\downarrow$to$\downarrow\downarrow_{2}$	$\downarrow$to$\downarrow\downarrow_{2}$	$\downarrow$to$\downarrow\downarrow\downarrow_{2}$	$\downarrow$to$\downarrow\downarrow\downarrow_{2}$	$\downarrow\downarrow_{1}$

Abbreviations: HNR=high non-response. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" indicates <2-fold reduction in neutralization; "↓" indicates 2 to <5-fold reduction; "↓↓" indicates 5 to <10-fold reduction; "↓↓↓" indicates ≥10-fold reduction. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/sub-lineage was used. HNR indicates a median percent response across all studies of <75%; in these instances, fold-reductions can be biased and, thus. are not presented. The number of studies is shown as subscripts.

Additional notes on Annex Table 3

- Studies contributing to the table are identified from an ongoing review of the preprint and published literature on neutralization of SARS-CoV-2 variants by COVID-19 vaccines.
- Studies that use samples collected >7 days and < 6 months after complete vaccination and that use an ancestral strain as the reference are included in the table.
- Studies of immunocompromised persons are excluded.
- It is important to note that studies vary in population and other methodological considerations which may in part explain some differences when comparing products between different studies. In addition, the reductions summarized in the table do not incorporate uncertainty intervals around the fold reductions which can vary substantially across studies when reported.

Annex 4. Methods for Figure 5

- VE studies included in the plot were identified from an ongoing systematic review of COVID-19 vaccine effectiveness studies. All studies were cohort or test-negative designs conducted when Omicron was the predominant circulating variant. Methods for the systematic review and inclusion/exclusion criteria are available on view-hub.org.
- Only studies providing VE estimates of individual vaccines are included in the plot; studies assessing combined VE of more than one vaccine are excluded except for studies of heterologous primary and booster schedules where all participants included in a VE estimate received the same brands of vaccines in the same order.
- Only studies providing VE estimates for discrete time intervals since vaccination or estimates with limited follow-up time (such that the median time point falls clearly in one of the intervals for the plot) are included. Studies that only provide VE estimates over a cumulative period of time covering more than one-time interval are excluded because they are difficult to interpret due to the marked waning of VE over time with Omicron.
- Only estimates of absolute vaccine effectiveness (i.e., the comparison group is unvaccinated persons) are included in the plot; estimates of relative vaccine effectiveness (e.g., the comparison group is persons having completed the primary series) are excluded as the interpretation of relative vaccine effectiveness is not comparable with absolute vaccine effectiveness.

Annex 5. Relative proportions of selected BA.5 descendent lineages in the last four weeks by specimen collection date

			Last 4 weeks by collection date			
Lineage	**Countries**	**Sequences**	**2022-28**	**2022-29**	**2022-30**	**2022-31**
BA.5	83	21849	3 147 (5.98%)	2 256 (5.72%)	1 134 (6.03%)	139 (6.72%)
BA.5.1	99	120192	14 967 (28.44%)	11 364 (28.81%)	5 488 (29.18%)	591 (28.59%)
BA.5.1.1	51	5608	897 (1.70%)	630 (1.60%)	262 (1.39%)	27 (1.31%)
BA.5.1.2	45	2204	337 (0.64%)	274 (0.69%)	160 (0.85%)	13 (0.63%)
BA.5.1.3	52	4025	409 (0.78%)	271 (0.69%)	177 (0.94%)	10 (0.48%)
BA.5.1.4	34	794	82 (0.16%)	68 (0.17%)	15 (0.08%)	3 (0.15%)
BA.5.2	105	57755	9 454 (17.96%)	7 861 (19.93%)	4 069 (21.64%)	459 (22.21%)
BA.5.2.1	104	92110	15 240 (28.96%)	11 396 (28.89%)	5 340 (28.40%)	628 (30.38%)
BA.5.2.2	44	2166	257 (0.49%)	205 (0.52%)	84 (0.45%)	8 (0.39%)
BA.5.2.3	47	2768	486 (0.92%)	345 (0.87%)	166 (0.88%)	29 (1.40%)
BA.5.2.4	20	294	41 (0.08%)	38 (0.10%)	17 (0.09%)	2 (0.10%)
BA.5.3	49	2795	124 (0.24%)	75 (0.19%)	38 (0.20%)	3 (0.15%)
BA.5.3.1	68	4344	429 (0.82%)	346 (0.88%)	218 (1.16%)	17 (0.82%)
BA.5.3.2	31	1765	57 (0.11%)	28 (0.07%)	9 (0.05%)	1 (0.05%)
BA.5.3.3	35	1479	161 (0.31%)	138 (0.35%)	68 (0.36%)	10 (0.48%)
BA.5.3.4	22	618	20 (0.04%)	5 (0.01%)	5 (0.03%)	1 (0.05%)
BA.5.5	69	29355	3 996 (7.59%)	2 456 (6.23%)	902 (4.8%)	65 (3.14%)
BA.5.6	70	14366	2 529 (4.80%)	1 686 (4.27%)	654 (3.48%)	61 (2.95%)
BA.5.X (total)	121	364487	52 633 (100%)	39 442 (100%)	18 806 (100%)	2 067 (100%)

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COVID-19 Weekly Epidemiological Update

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In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews

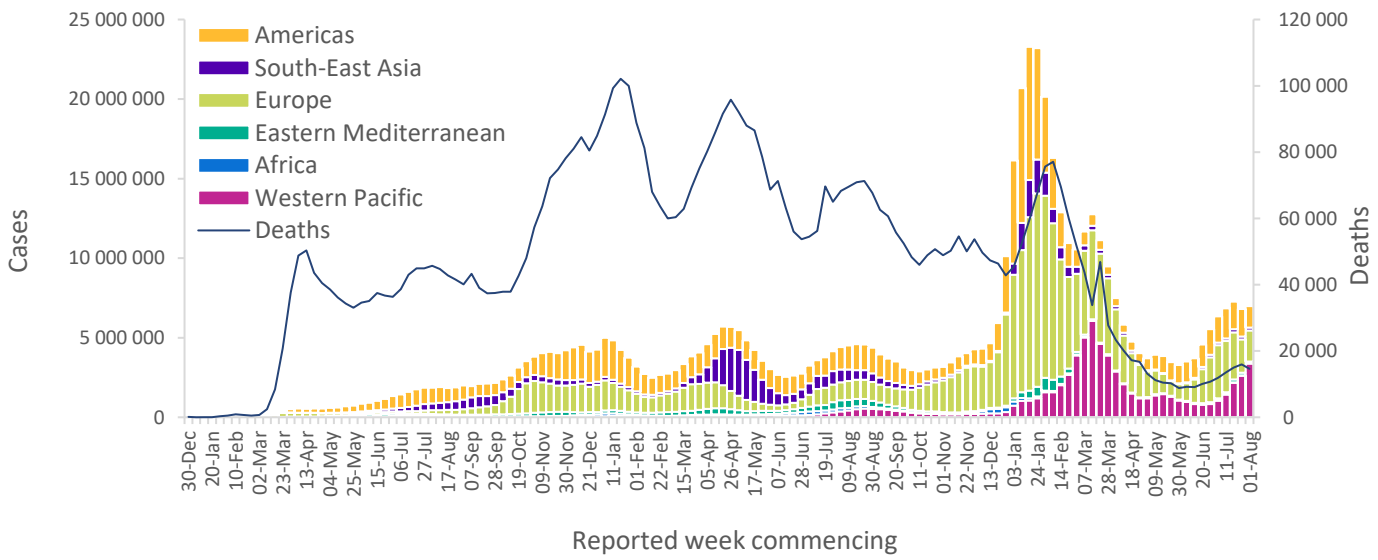
Global overview

Data as of 7 August 2022

Globally, the number of new weekly cases remained stable during the week of 1 to 7 August 2022, as compared to the previous week, with over 6.9 million new cases reported (Figure 1, Table 1). The number of new weekly deaths decreased by 9%, with over 14 000 fatalities reported, as compared to the previous week. As of 7 August 2022, 581.8 million confirmed cases and 6.4 million deaths have been reported globally.

At the regional level, the number of reported new weekly cases increased in the Western Pacific Region (+29%); while the numbers of new cases decreased or remained stable in the African Region (-46%), the Region of the Americas (-22%), the Eastern Mediterranean Region (-22%), the European Region (-7%), and the South-East Asia Region (-3%). The number of new weekly deaths increased in the Eastern Mediterranean Region (+19%), while the numbers decreased or remained stable in the African Region (-73%), the European Region (-15%), the Region of the Americas (-10%), the South-East Asia Region (-1%), and the Western Pacific Region (+4%).

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 7 August 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest numbers of new weekly cases were reported from Japan (1 496 968 new cases; +9%), the United States of America (759 806 new cases; -19%), the Republic of Korea (713 078 new cases; +26%), Viet Nam (571 458 new cases), and Türkiye[#] (406 322 new cases). The highest numbers of new weekly deaths were reported from the United States of America (2764 new deaths; -2%), Brazil (1445 new deaths; -21%), Italy (1059 new deaths; -12%), Japan (1002 new deaths; +53%), and Spain (654 new deaths; +23%).

Current trends in reported COVID-19 cases and deaths should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected. Additionally, data from countries are continuously updated by WHO to incorporate changes in reported COVID-19 cases and deaths made by countries retrospectively.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 7 August 2022**

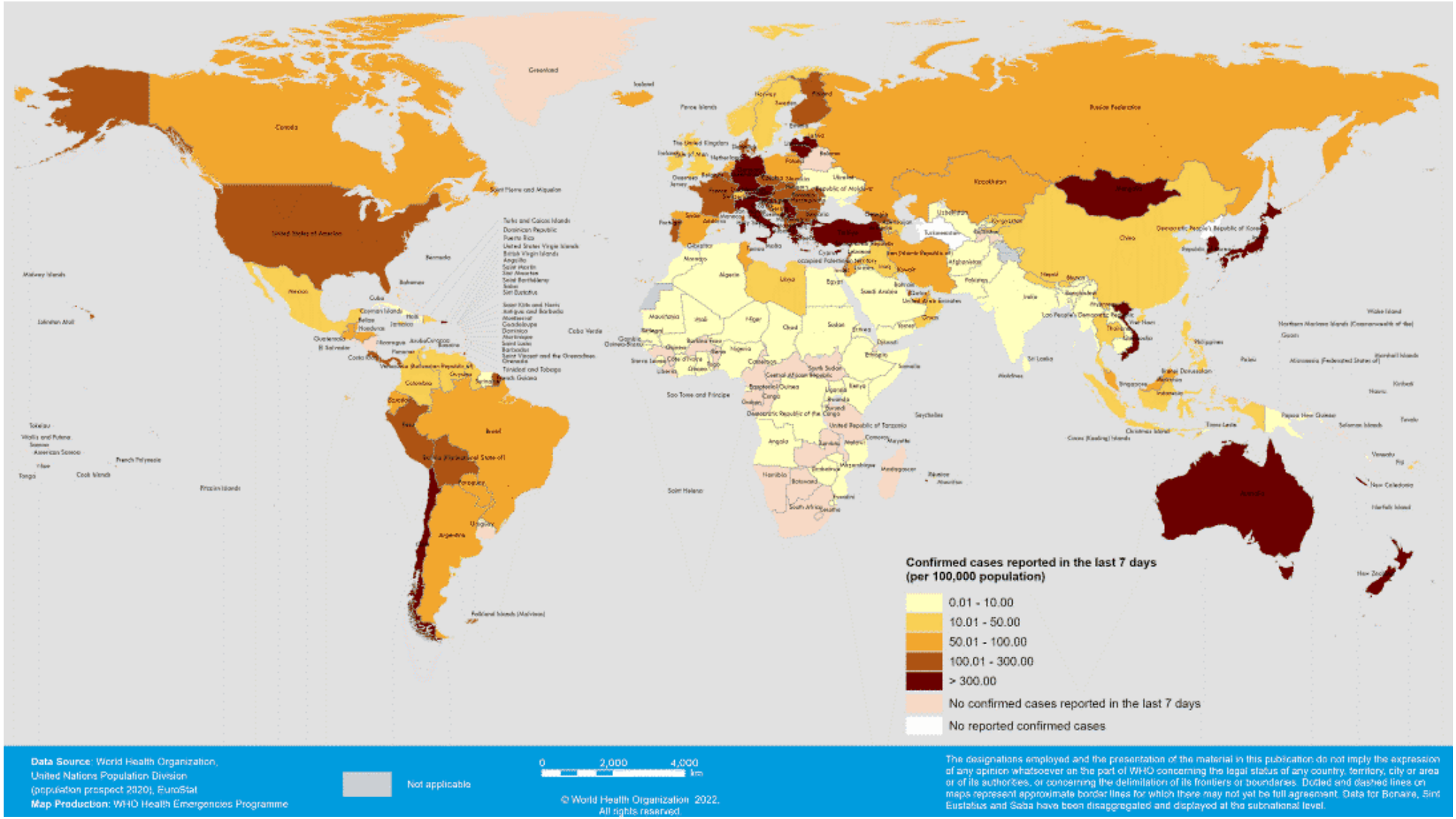
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days*	Cumulative deaths (%)
Western Pacific	3 375 480 (48%)	29%	75 095 910 (13%)	2436 (17%)	4%	248 029 (4%)
Europe	1 938 695 (28%)	-7%	243 079 753 (42%)	4717 (32%)	-15%	2 056 264 (32%)
Americas	1 345 194 (19%)	-22%	172 129 558 (30%)	6040 (41%)	-10%	2 796 241 (44%)
South-East Asia	186 248 (3%)	-3%	59 543 036 (10%)	693 (5%)	-1%	793 137 (12%)
Eastern Mediterranean	122 934 (2%)	-22%	22 751 726 (4%)	652 (4%)	19%	345 660 (5%)
Africa[^]	11 965 (<1%)	-46%	9 230 865 (2%)	25 (<1%)	-73%	174 079 (3%)
Global	**6 980 516 (100%)**	**3%**	**581 831 612 (100%)**	**14 563 (100%)**	**-9%**	**6 413 423 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior. Data from previous weeks are updated continuously with adjustments received from countries.*
***See Annex 1: Data, table, and figure notes*
[^]Weekly data from the African Region does not include data from South Africa as the country is in the process of moving from daily to weekly reporting.

For the latest data and other updates on COVID-19, please see:

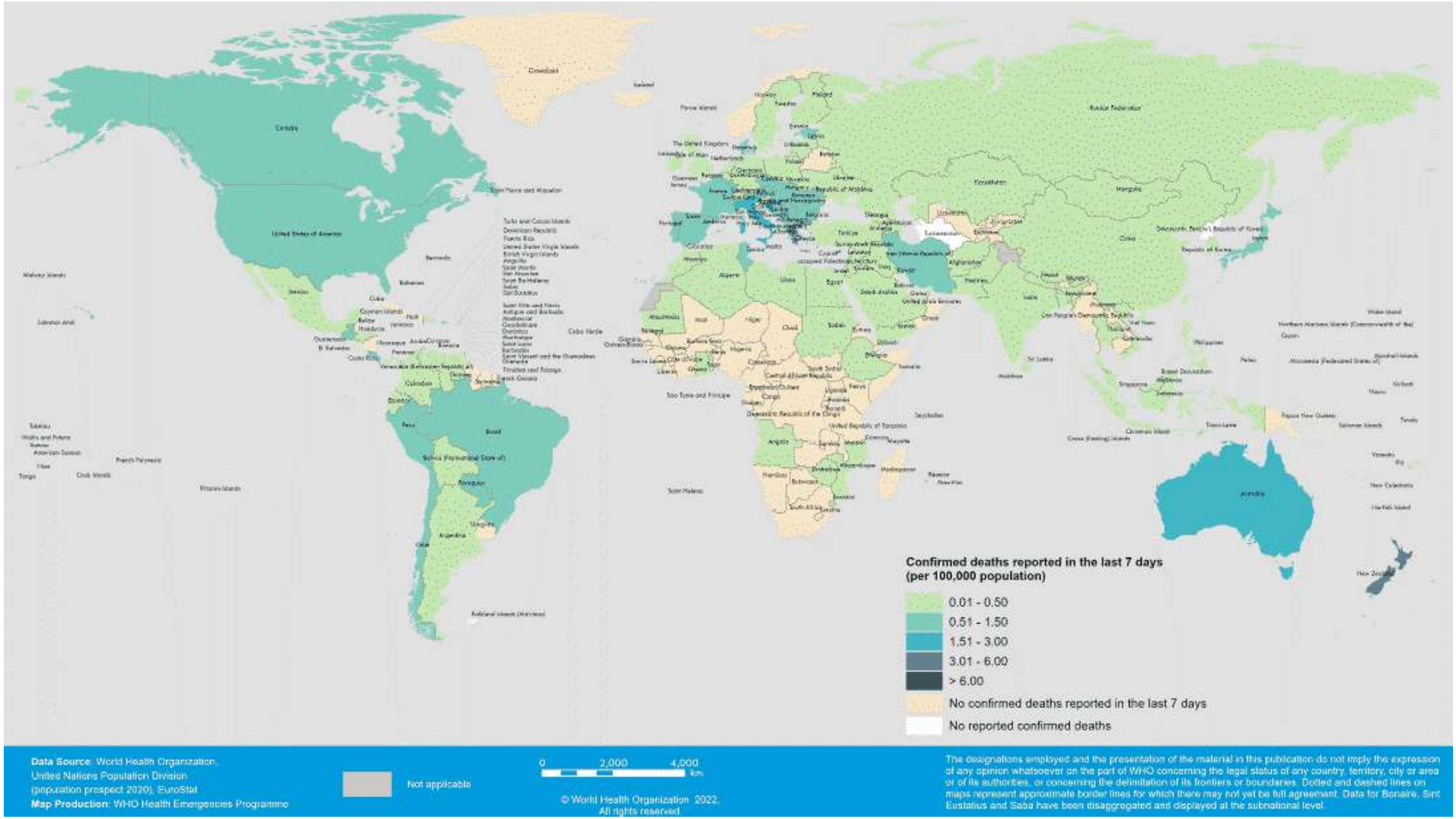
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update
- WHO COVID-19 detailed surveillance data dashboard

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 1 - 7 August 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 1 - 7 August 2022**



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

Geographic spread and prevalence of VOCs

Globally, from 8 July to 8 August 2022, 175 384 sequences were collected and uploaded to GISAID. Among these, 174 089 sequences were Omicron variant of concern (VOC), accounting for 99% of sequences reported globally in the past 30 days.

A comparison of sequences submitted to GISAID in epidemiological week 30 (24 to 30 July 2022) and week 29 (17 to 23 July 2022) shows that BA.5 Omicron descendent lineages continue to be dominant globally, with an increase in weekly prevalence from 68.9% to 69.7%. Within the same time period, the weekly prevalence of Omicron descendent lineages BA.4, BA.2.12.1 and BA.2 decreased globally: BA.4 decreased from 10.8% to 9.1%, BA.2.12.1 decreased from 2.4% to 1.3% and BA.2 decreased from 1.4% to 1.0%.

BA.5 descendent lineages (BA.5.X) are increasing in diversity, with additional mutations in spike and non-spike regions. WHO continues to monitor all lineages, including descendent lineages of VOCs, to track an increase in prevalence and change in viral characteristics.

Current trends describing the circulation of Omicron descendent lineages should be interpreted with due consideration of the limitations of SARS-CoV-2 surveillance systems, including differences in sequencing capacity and sampling strategies between countries, as well as changes in sampling strategies and reductions in testing and sequences being conducted and shared from countries around the world.

For more information on the assessment of SARS-CoV-2 variants and the WHO classification refer to Annex 2.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

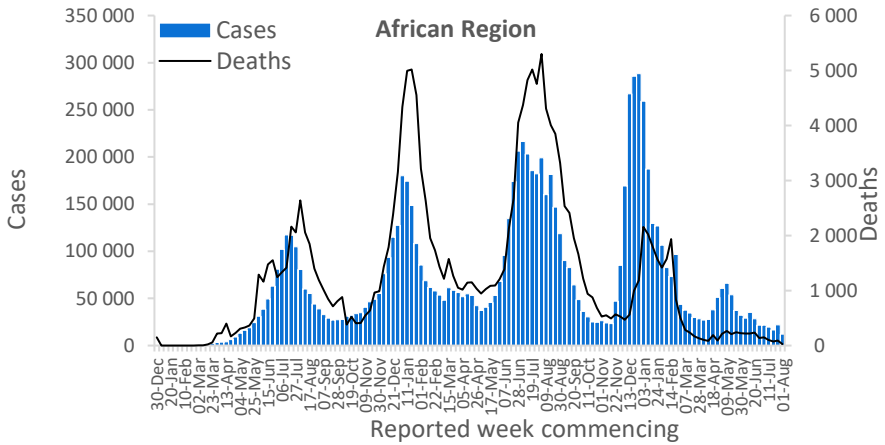
WHO regional overviews:

Epidemiological week 1 - 7 August 2022**

African Region

The African Region reported just under 12 000 new cases, a 46% decrease as compared to the previous week. Five (10%) countries reported an increase in the number of new cases of 20% or greater, with some of the greatest proportional increases seen in Ghana (179 vs 120 new case; +49%), Algeria (767 vs 602 new cases; +27%), and Mayotte (385 vs 313 new cases; +23%). The highest numbers of new cases were reported from Réunion (5823 new cases; 650.4 new cases per 100 000 population; +2%), Burundi (1096 new cases; 9.2 new cases per 100 000; -36%), and Nigeria (908 new cases; <1 new case per 100 000; -39%).

The number of new weekly deaths in the Region decreased by 73% as compared to the previous week, with 25 deaths reported. The highest numbers of new deaths were reported from Réunion (seven new deaths; <1 new death per 100 000 population; similar to the previous week) and Zimbabwe (seven new deaths; <1 new death per 100 000; +40%). The decline in the number of cases and deaths reported in the Region should be interpreted with caution following the changes of reporting from daily to weekly or batch reporting by several countries, including South Africa.

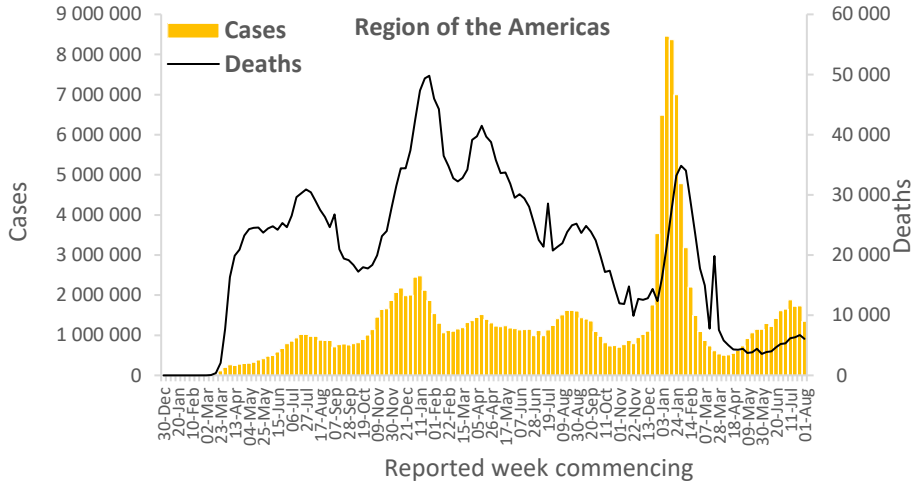


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 1.3 million new cases, a 22% decrease as compared to the previous week. Four of 56 (7%) countries for which data are available reported increases in the number of new cases of 20% or greater, with some of the greatest proportional increases observed in Haiti (168 vs 33 new cases; +409%), Saba (22 vs seven new cases; +214%), and the Dominican Republic (3930 vs 2695 new cases; +46%). The highest numbers of new cases were reported from the United States of America (759 806 new cases; 229.5 new cases per 100 000; -19%), Brazil (203 772 new cases; 95.9 new cases per 100 000; -28%), and Chile (63 595 new cases; 332.7 new cases per 100 000; +13%).

The number of new weekly deaths reported in the Region decreased by 10% as compared to the previous week, with over 6000 deaths reported. The highest numbers of new weekly deaths were reported from the United States of America (2764 new deaths; <1 new death per 100 000; -2%), Brazil (1445 new deaths; <1 new death per 100 000; -21%), and Mexico (374 new deaths; <1 new death per 100 000; -27%).

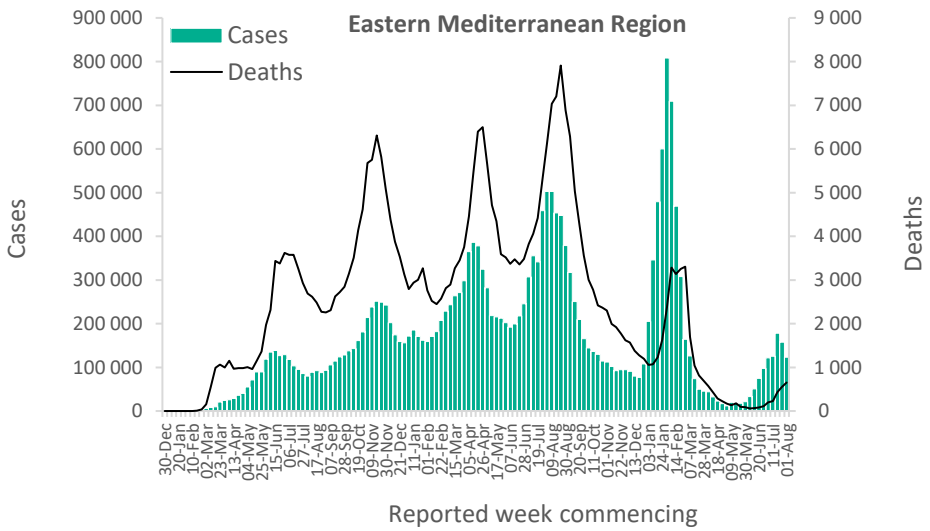


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported a decrease in cases for the second consecutive week, with just under 123 000 new cases reported, a 22% decrease as compared to the previous week. Two (9%) countries reported increases in the number of new cases of 20% or greater: Somalia (63 vs 45 new cases; +40%) and Afghanistan (1466 vs 1106 new cases; +33%). The highest numbers of new cases were reported from the Islamic Republic of Iran (53 646 new cases; 63.9 new cases per 100 000; -13%), Lebanon (13 136 new cases; 192.5 new cases per 100 000; -21%), and the occupied Palestinian territory (8969 new cases; 175.8 new cases per 100 000; -11%).

The number of new weekly deaths in the Region increased by 19% as compared to the previous week, with 652 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (461 new deaths; <1 new death per 100 000; +61%), Tunisia (64 new deaths; <1 new death per 100 000; -35%), and Morocco (22 new deaths; <1 new death per 100 000; -4%).

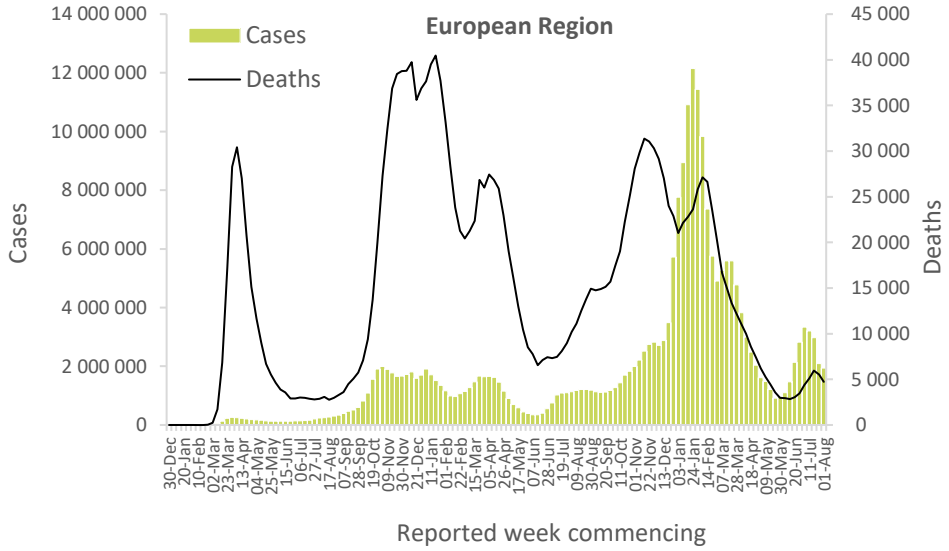


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 1.9 million new cases, a 7% decrease as compared to the previous week. Seven (11%) countries in the Region reported increases in new cases of 20% or greater, with the highest proportional increases observed in the Republic of Moldova (9528 vs 5793 new cases; +64%), the Russian Federation (110 980 vs 69 464 new cases; +60%), and Andorra (285 vs 182 new cases; +57%). The highest numbers of new cases were reported from Türkiye# (406 322 new cases; 481.8 new cases per 100 000), Germany (331 512 new cases; 398.6 new cases per 100 000; -33%), and Italy (283 998 new cases; 476.2 new cases per 100 000; -28%).

Over 4700 new weekly deaths were reported in the Region, a 15% decrease as compared to the previous week. The highest numbers of new deaths were reported from Italy (1059 new deaths; 1.8 new deaths per 100 000; -12%), Spain (654 new deaths; 1.4 new deaths per 100 000; +23%), and France (492 new deaths; <1 new death per 100 000; -19%).

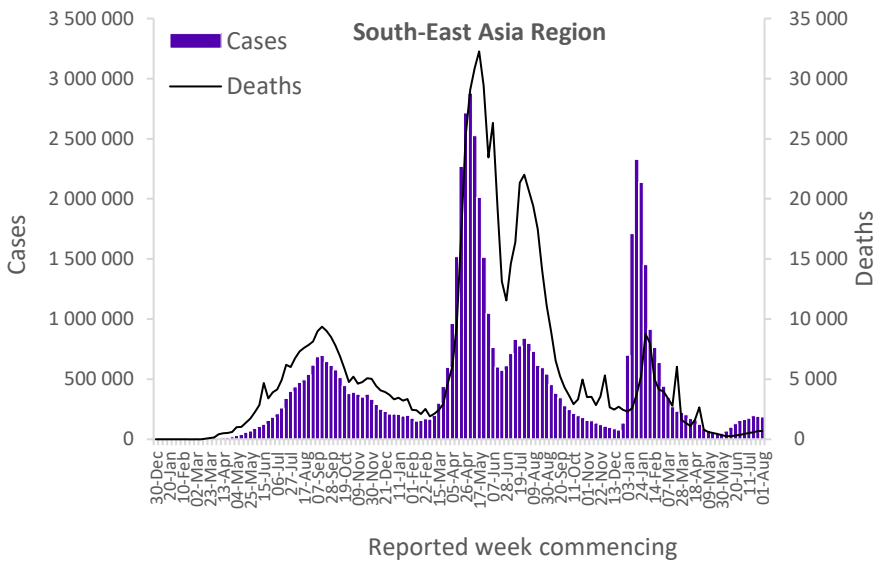


Updates from the European Region

South-East Asia Region

In the South-East Asia Region, the number of new cases remained stable for the second consecutive week, with over 186 000 new cases reported. Two of the 10 countries (20%) for which data are available showed increases in the number of new cases of 20% or greater: Timor-Leste (35 vs 18 new cases; +94%) and Sri Lanka (1025 vs 839 new cases; +22%). The highest numbers of new cases were reported from India (125 921 new cases; 9.1 new cases per 100 000; -4%), Indonesia (37 880 new cases; 13.8 new cases per 100 000; -2%), and Thailand (15 433 new cases; 22.1 new cases per 100 000; +8%).

The number of new weekly deaths remained stable this week in the Region as compared to the previous week, with nearly 700 new deaths reported. The highest numbers of new deaths were reported from India (332 new deaths; <1 new death per 100 000; +2%), Thailand (211 new deaths; <1 new death per 100 000; -7%), and Indonesia (102 new deaths; <1 new death per 100 000; +12%).

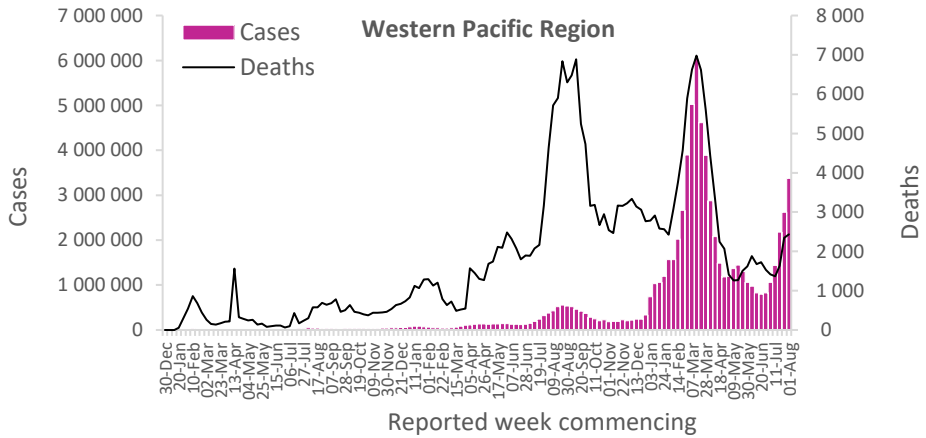


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region continues to report an increasing trend in cases since the end of June 2022, with over 3.3 million new cases reported, a 29% increase as compared to the previous week. Five (15%) countries reported increases in new cases of 20% or greater, with some of the largest proportional increases observed in Mongolia (13 970 vs 9279 new cases; +51%) and Lao People's Democratic Republic (579 vs 426 new cases; +36%). The highest numbers of new cases were reported from Japan (1 496 968 new cases; 1183.6 new cases per 100 000; +9%), the Republic of Korea (713 078 new cases; 1390.9 new cases per 100 000; +26%), and Viet Nam (571 458 new cases; 587.1 new cases per 100 000; +7541%). The increase reported in Viet Nam is partly due to batch reporting of cases at the provincial level following a review of the data from February 2022.

The Region reported over 2400 new weekly deaths, a figure similar to that of the previous week. The highest numbers of new deaths were reported from Japan (1002 new deaths; <1 new death per 100 000; +53%), Australia (531 new deaths; 2.1 new deaths per 100 000; -17%), and China (272 new deaths; <1 new death per 100 000; -33%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Updates of an outbreak of COVID-19 reported in the Democratic People's Republic of Korea continue through official media since 12 May 2022; however, at present, no confirmed cases or deaths have been reported to WHO.

For some countries, it was not possible to calculate the weekly percentage change in the number of cases and / or deaths due to either batch reporting or no reporting during the last week.

Annex 2. SARS-CoV-2 variants assessment and classification

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.

COVID-19 Weekly Epidemiological Update

Edition 103 published 3 August 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews
- Summary of the Monthly Operational Update

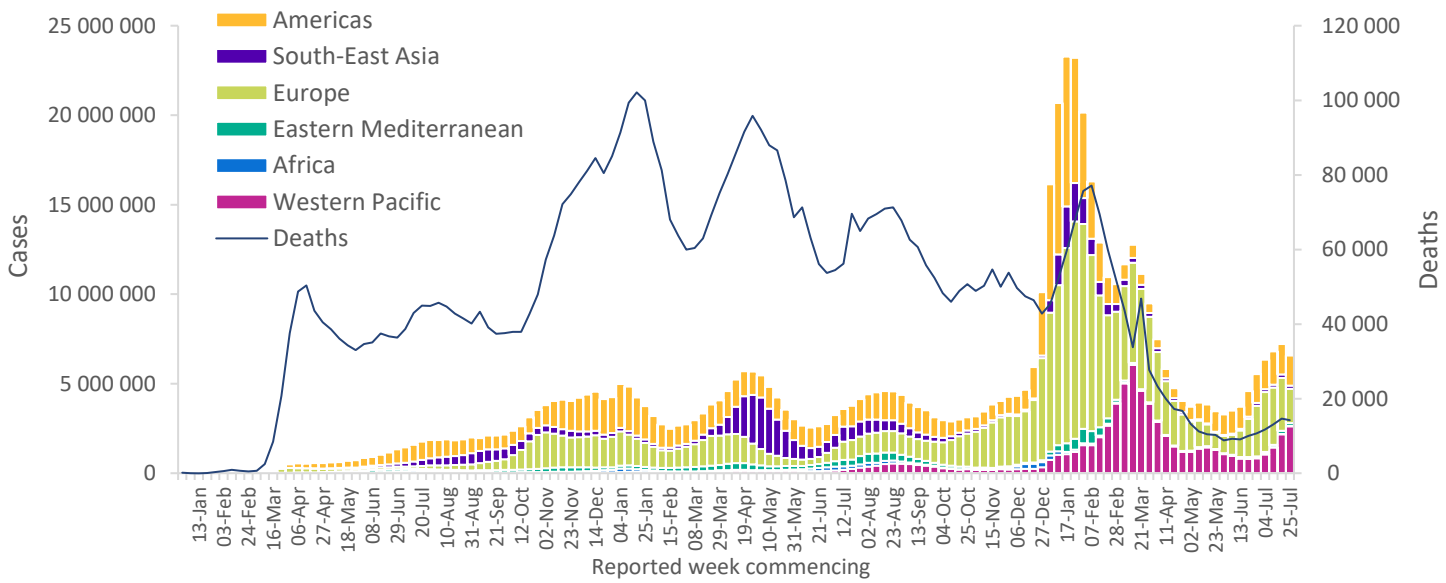
Global overview

Data as of 31 July 2022

Globally, the number of weekly cases decreased by 9% during the week of 25 to 31 July 2022 as compared to the previous week, with over 6.5 million new cases reported (Figure 1, Table-1). The number of new weekly deaths remained stable this week as compared to the previous week, with over 14 000 fatalities reported. As of 31 July 2022, over 574 million confirmed cases and over 6.3 million deaths have been reported globally.

At the regional level, the number of reported new weekly cases increased in the Western Pacific Region (+20%) and the African Region (+5%); at the same time, it decreased or remained stable in the European Region (-35%), the Eastern Mediterranean Region (-12%), the South-East Asia Region (-2%) and the Region of the Americas (-2%). The number of new weekly deaths increased in the Western Pacific Region (+44%), the Eastern Mediterranean Region (+26%), the South-East Asia Region (+20%), and the African Region (+12%), while it decreased in the European Region (-26%). The number of new weekly deaths in the Region of the Americas was similar to the figure reported during the previous week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 31 July 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest numbers of new weekly cases were reported from Japan (1 379 099 new cases; 42%), the United States of America (923 366 new cases; +2%), the Republic of Korea (564 437 new cases; +25%), Germany (459 724 new cases; -26%), and Italy (394 583 new cases; -26%). The highest numbers of new weekly deaths were reported from the United States of America (2 626 new deaths; -10%), Brazil (1 827 new deaths; +31%), Italy (1 205 new deaths; +27%), Japan (655 new deaths; +141%), and Australia (637 new deaths; +24%).

Current trends in reported COVID-19 cases and deaths should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected. Additionally, data from countries are continuously updated by WHO to incorporate changes in reported COVID-19 cases and deaths made by countries retrospectively.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 31 July 2022**

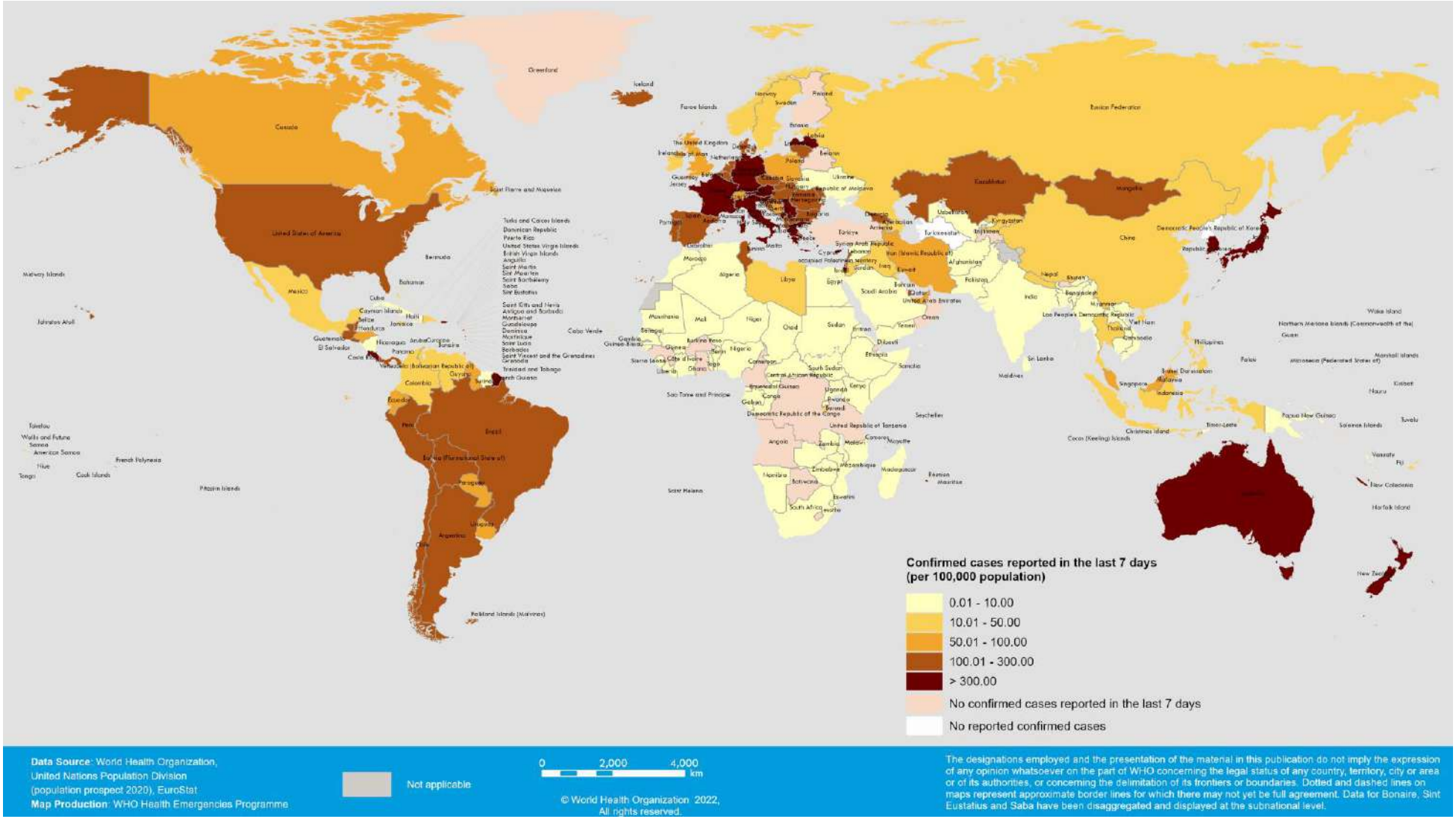
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Western Pacific	2 618 349 (40%)	20%	71 722 656 (12%)	2 342 (17%)	44%	245 657 (4%)
Europe	1 914 599 (29%)	-35%	240 928 373 (42%)	4 315 (30%)	-26%	2 049 551 (32%)
Americas	1 666 963 (25%)	-2%	170 676 377 (30%)	6 196 (44%)	1%	2 789 118 (44%)
South-East Asia	191 983 (3%)	-2%	59 356 443 (10%)	698 (5%)	20%	792 444 (12%)
Eastern Mediterranean	156 532 (2%)	-12%	22 627 851 (4%)	545 (4%)	26%	345 005 (5%)
Africa	17 253 (<1%)	5%	9 213 803 (2%)	83 (1%)	12%	174 044 (3%)
Global	**6 565 679 (100%)**	**-9%**	**574 526 267 (100%)**	**14 179 (100%)**	**-3%**	**6 395 832 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

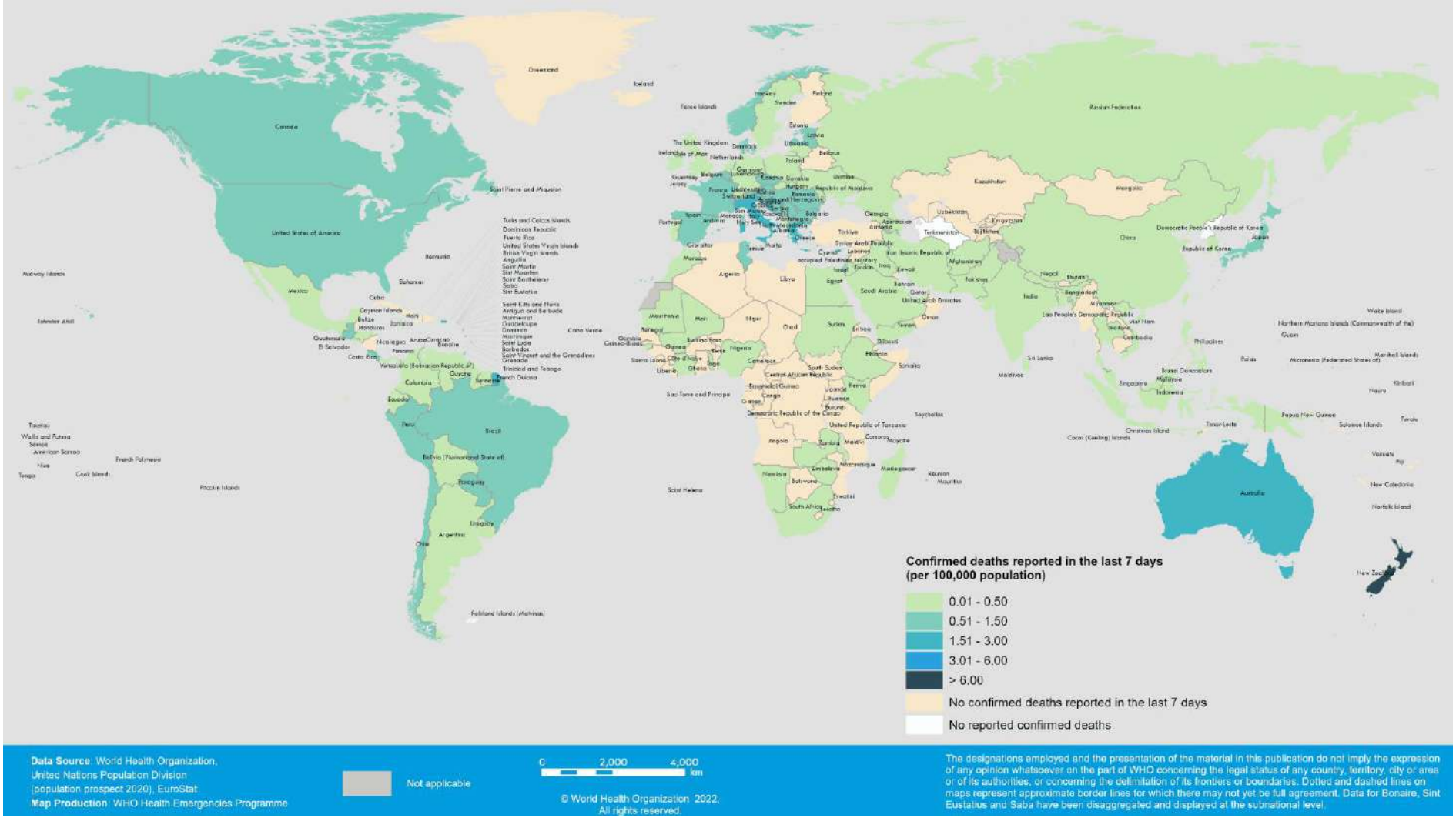
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update
- WHO COVID-19 detailed surveillance data dashboard

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 25 - 31 July 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 25 - 31 July 2022**



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

Geographic spread and prevalence of VOCs

Globally, from 1 July to 1 August 2022, 204 668 sequences were collected and uploaded to GISAID. Among these, 203 440 sequences were Omicron variant of concern (VOC) and its descendent lineages, accounting for 99% of sequences reported globally in the past 30 days.

A comparison of sequences submitted to GISAID in epidemiological week 29 (17 to 23 July 2022) and week 28 (10 to 16 July 2022) shows that BA.5 and BA.4 Omicron descendent lineages continued to be dominant globally, with a weekly prevalence that increased from 63.8% to 69.6%, and from 10.9% to 11.8%, respectively. Conversely, within the same time period, BA.2.12.1 and BA.2 sequences showed a decline from 4.4% to 1.9% and from 2% to 1.5%, respectively.

Current trends describing the circulation of Omicron descendent lineages should be interpreted with due consideration of the limitations of SARS-CoV-2 surveillance systems, including differences in sequencing capacity and sampling strategies between countries, as well as changes in sampling strategies and reductions in testing and sequences being conducted and shared from countries around the world.

For more information on the assessment of SARS-CoV-2 variants and the WHO classification refer to Annex 2.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

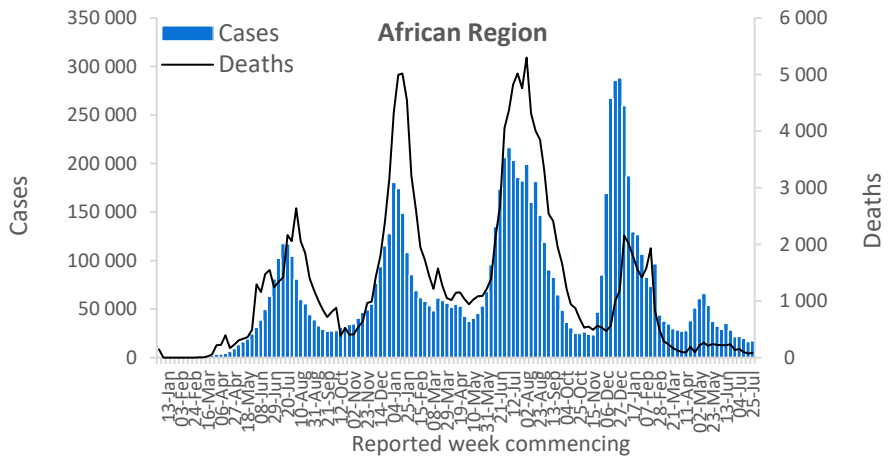
WHO regional overviews:

Epidemiological week 25 - 31 July 2022**

African Region

The Africa Region reported over 17 000 new cases, a 5% increase as compared to the previous week. However, 14 (31%) countries reported an increase in the number of new cases of 20% or greater, with some of the greatest proportional increases seen in Liberia (30 vs one new case; +2900%), Seychelles (160 vs seven new cases; +2186%), and Rwanda (323 vs 49 new cases; +559%). The highest numbers of new cases were reported from Réunion* (5687 new cases; 635 new cases per 100 000 population), South Africa (2422 new cases; 4.1 new cases per 100 000; +2%), and Burundi (1714 new cases; 14.4 new cases per 100 000; +68%).

The number of new weekly deaths in the Region increased by 12% as compared to the previous week, with 83 new deaths reported. The highest numbers of new deaths were reported from South Africa (39 new deaths; <1 new death per 100 000 population; +56%), Réunion* (seven new deaths; <1 new death per 100 000), and Malawi (seven new deaths; <1 new death per 100 000; +17%).

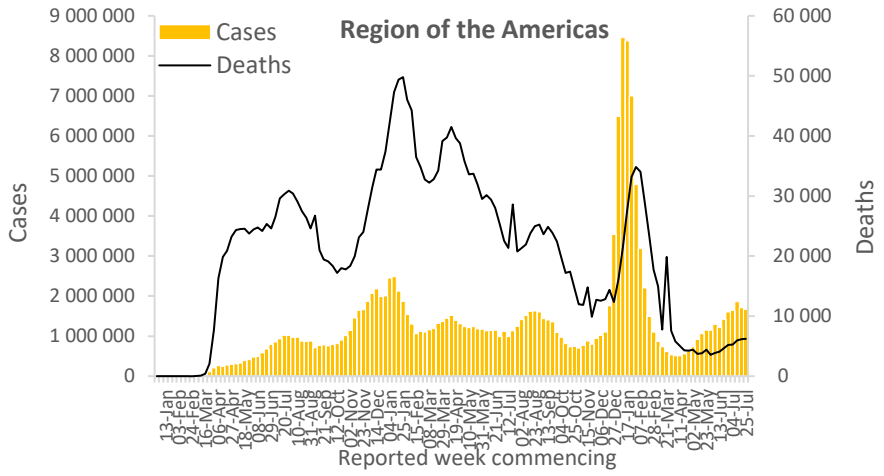


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 1.6 million new cases, a similar number as compared to the previous week. Eight of 56 (14%) countries for which data are available reported increases in the number of new cases of 20% or greater, with some of the greatest proportional increases observed in Montserrat (22 vs seven new cases; +214%), Honduras (5105 vs 2657 new cases; +92%), and Saint Lucia (312 vs 190 new cases; +64%). The highest numbers of new cases were reported from the United States of America (923 366 new cases; 279 new cases per 100 000; +2%), Brazil (284 971 new cases; 134.1 new cases per 100 000; +11%), and Peru (78 692 new cases; 238.7 new cases per 100 000; -9%).

The number of new weekly deaths reported in the Region remained similar to the number reported in the previous week, with just under 6200 new deaths reported. The highest numbers of new deaths were reported from the United States of America (2626 new deaths; <1 new death per 100 000; -10%), Brazil (1827 new deaths; <1 new death per 100 000; +31%), and Canada (253 new deaths; <1 new death per 100 000; +22%).

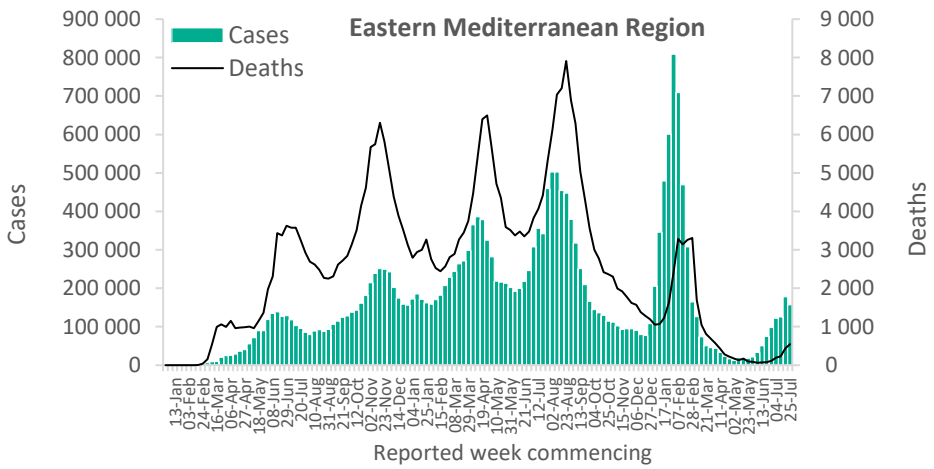


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported a 12% decrease in cases this week following an increasing trend observed since late May 2022, with over 156 500 new weekly cases. Five (23%) countries reported increases in the number of new cases of 20% or greater, with the highest proportional increases observed in Yemen (28 vs one new case; +2700%), Somalia (45 vs 12 new cases; +275%), and Jordan (4763 vs 2455 new cases; +94%). The highest numbers of new cases were reported from the Islamic Republic of Iran (61 977 new cases; 73.8 new cases per 100 000; +33%), Lebanon (16 609 new cases; 243.3 new cases per 100 000; -19%), and Iraq (15 888 new cases; 39.5 new cases per 100 000; -38%).

The number of new weekly deaths in the Region increased by 26% as compared to the previous week, with over 545 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (287 new deaths; <1 new death per 100 000; +75%), Tunisia (99 new deaths; <1 new death per 100 000; -17%), and Iraq (27 new deaths; <1 new death per 100 000; +42%).

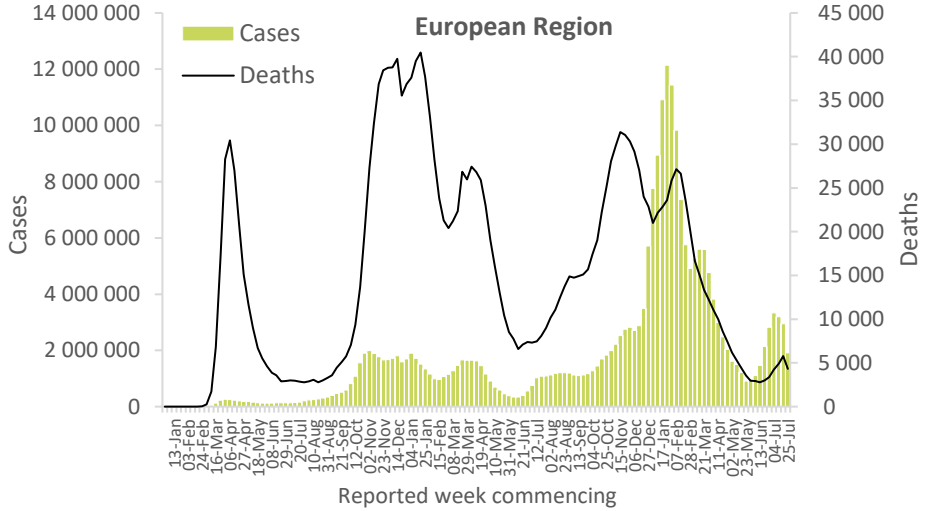


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 1.9 million new weekly cases, a 35% decrease as compared to the previous week. Fourteen (23%) countries in the Region reported increases in new cases of 20% or greater, with some of the highest proportional increases observed in Kyrgyzstan (981 vs 88 new cases; +1015%), the Republic of Moldova (5793 vs 3360 new cases; +72%), and the Russian Federation (69 464 vs 41 959 new cases; +66%). The highest numbers of new cases were reported from Germany (459 724 new cases; 552.8 new cases per 100 000; -26%), Italy (394 583 new cases; 661.6 new cases per 100 000; -26%), and France (290 392 new cases; 446.5 new cases per 100 000; -46%).

Over 4300 new weekly deaths were reported in the Region, a 26% decrease as compared to the previous week. The highest numbers of new deaths were reported from Italy (1205 new deaths; two new deaths per 100 000; +27%), France (552 new deaths; <1 new death per 100 000; -27%), and Spain (532 new deaths; 1.1 new death per 100 000; -34%).

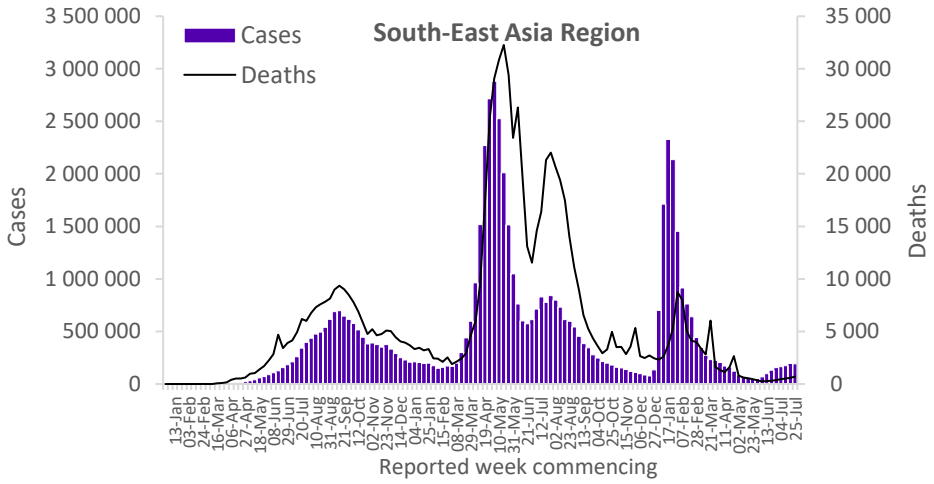


Updates from the European Region

South-East Asia Region

In the South-East Asia Region, the number of new cases plateaued this week following an increasing trend in cases since early June 2022, with over 191 000 new cases reported. Three of the 10 countries (30%) for which data are available showed increases in the number of new cases of 20% or greater, with the largest proportional increases observed in Timor-Leste (18 vs eight new cases; +125%), Sri Lanka (839 vs 452 new cases; +86%) and Nepal (2974 vs 2214; +34%). The highest numbers of new cases were reported from India (131 056 new cases; 9.5 new cases per 100 000; -5%), Indonesia (38 756 new cases; 14.2 new cases per 100 000; +16%), and Thailand (14 323 new cases; 20.5 new cases per 100 000; -15%).

The number of new weekly deaths in the Region increased by 20% as compared to the previous week, with nearly 700 new deaths reported. The highest numbers of new deaths were reported from India (324 new deaths; <1 new death per 100 000; similar to the previous week's figures), Thailand (228 new deaths; <1 new death per 100 000; +42%), and Indonesia (91 new deaths; <1 new death per 100 000; +72%).

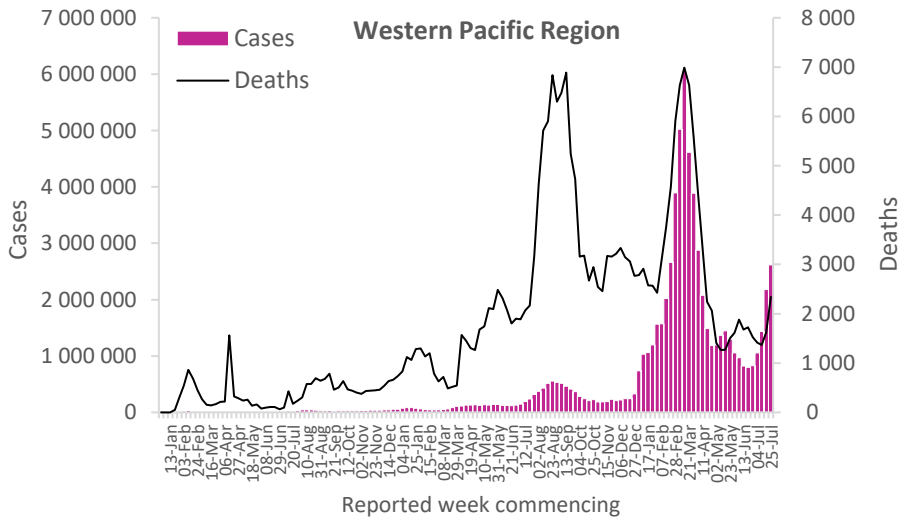


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region continues to report an increasing trend in cases for the sixth consecutive week, with over 2.6 million new cases reported, a 20% increase as compared to the previous week. Twelve (35%) countries reported increases in new cases of 20% or greater, with some of the largest proportional increases observed in the Federated States of Micronesia (5109 vs 111 new cases; +4503%), Cook Islands (195 vs 33 new cases; +491%), and Guam (819 vs 448 new cases; +83%). The highest numbers of new cases were reported from Japan (1 379 099 new cases; 1090.4 new cases per 100 000; +42%), the Republic of Korea (564 437 new cases; 1100.9 new cases per 100 000; +25%), and Australia (306 679 new cases; 1202.7 new cases per 100 000; -18%).

The Region reported over 2300 new weekly deaths, a 44% increase as compared to the previous week. The highest numbers of new deaths were reported from Japan (655 new deaths; <1 new death per 100 000; +141%), Australia (637 new deaths; 2.5 new deaths per 100 000; +24%), and China (403 new deaths; <1 new death per 100 000; -12%).



Updates from the Western Pacific Region

Summary of the COVID-19 Monthly Operational Update

The Monthly operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) monitoring and evaluation team which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework.

In this edition, highlights of country-level actions and WHO support to countries include:

- The Eastern Mediterranean Region reflects on genomic sequencing and its future within integrated surveillance of respiratory viruses
- Global Outbreak Alert and Response Network (GOARN) field epidemiologists support the COVID-19 response in Papua New Guinea
- WHO/Europe leads regional dialogue on the importance of strong infection prevention and control programmes for COVID-19, monkeypox and beyond
- An ancient tradition to the rescue: Mayan midwives or "comadronas" dispels COVID-19 vaccination fears
- Reviewing the COVID-19 response in Sudan amidst other national emergencies
- Emergency Medical Teams (EMTs) provide support to Eswatini during the COVID-19 pandemic
- Malaysia trials digital community to protect mental health during COVID-19
- Looking back at WHO's rapid and coordinated response to COVID-19 in Bhutan (2020-21)
- WHO Public Health Laboratories knowledge sharing platform: Enhancing laboratory readiness
- The Access to COVID-19 Tools Accelerator (ACT-A) Health Systems and Response Connector: enhancing the equitable access and implementation of COVID-19 tools
- GOARN Steering Committee selects new leadership and agrees on its upcoming four-year strategy
- "Dear Pandemic": a communication platform empowering woman to navigate the flood of information on COVID-19, presented as part of WHO's Science Translation initiative
- OpenWHO online course spurs learners to improve infection prevention and control practices
- WHO's COVID-19 Response Funding in 2022: Delivering science, solutions and solidarity to end the acute phase of the pandemic
- Updated WHO guidance and publications

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

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[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Updates of an outbreak of COVID-19 reported in the Democratic People's Republic of Korea continue through official media since 12 May 2022; however, at present, no confirmed cases or deaths have been reported to WHO.

* For some countries, it was not possible to calculate the weekly percentage change in the number of cases and / or deaths due to batch reporting during the last week.

Annex 2. SARS-CoV-2 variants assessment and classification

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.

COVID-19 Weekly Epidemiological Update

Edition 102 published 27 July 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews

Global overview

Data as of 24 July 2022

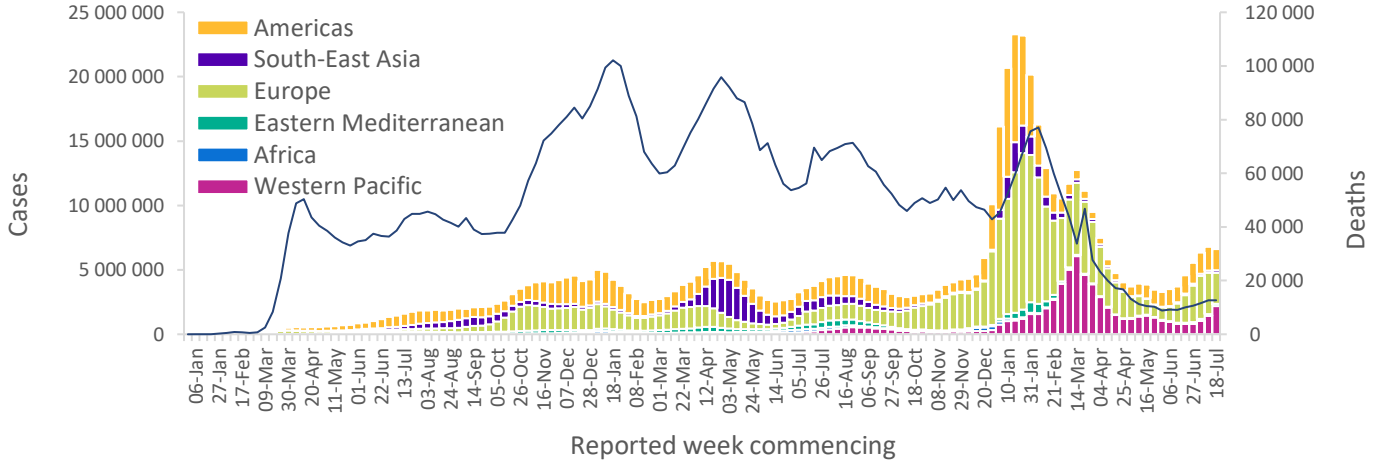
Globally, the number of weekly cases reported during the week of 18 to 24 July 2022 was similar to the number reported last week, with over 6.6 million new cases (Figure 1). Likewise, the number of new weekly deaths was similar to the number reported during the previous week, with over 12 600 fatalities.

At the regional level, the number of new weekly cases increased in the Western Pacific Region (+52%), the Eastern Mediterranean Region (+45%) and the South-East Asia Region (+13%), while it decreased in the African Region (-44%), the European Region (-24%) and the Region of the Americas (-12%). The number of new weekly deaths increased in the Eastern Mediterranean Region (+88%), the Western Pacific Region (+19%) and the South-East Asia Region (+8%), while it decreased in the African Region (-47%) and the European Region (-6%). The number of new weekly deaths in the Region of the Americas was similar to the figure reported during the previous week.

As of 24 July 2022, over 567 million confirmed cases and over 6.3 million deaths have been reported globally.

Current trends in reported COVID-19 cases and deaths should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected. Additionally, data are continuously updated to incorporate regular changes made by countries retrospectively.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 24 July 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest numbers of new weekly cases were reported from Japan (969 068 new cases; +73%), the United States of America (860 097 new cases; -3%), Germany (565 518 new cases; -16%), Italy (531 327 new cases; -26%), and France (508 620 new cases; -27%). The highest numbers of new weekly deaths were reported from the United States of America (2 637 new deaths; +3%), Brazil (1 396 new deaths; -20%), Italy (952 new deaths; +21%), Spain (810 new deaths; +33%), and France (737 new deaths; +34%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 24 July 2022**

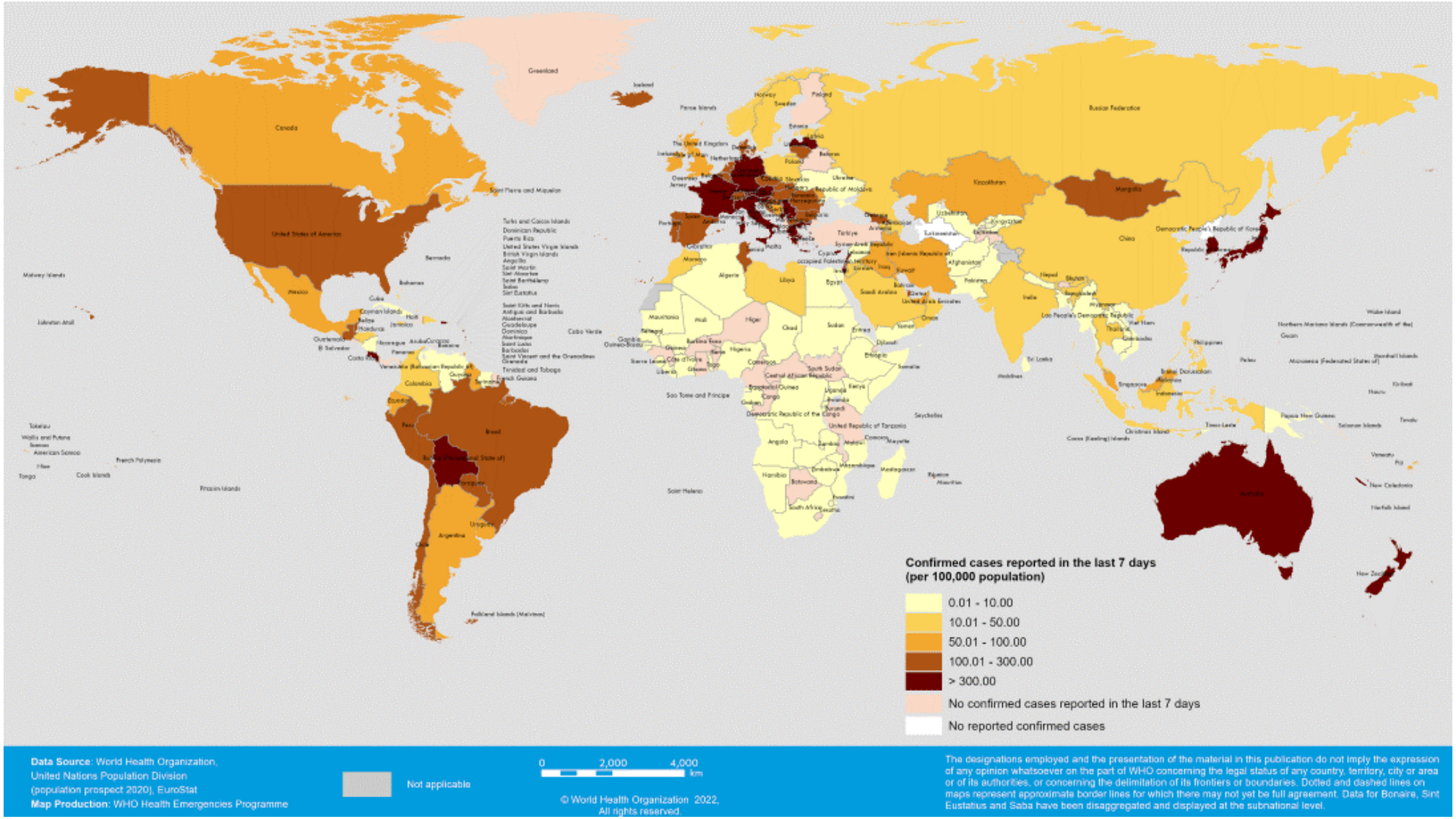
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	2 418 103 (37%)	-24%	238 475 439 (42%)	4 235 (33%)	-6%	2 042 968 (32%)
Western Pacific	2 180 412 (33%)	52%	69 104 310 (12%)	1 628 (13%)	19%	243 313 (4%)
Americas	1 623 921 (25%)	-12%	168 908 707 (30%)	5 757 (45%)	-2%	2 782 308 (44%)
South-East Asia	196 613 (3%)	13%	59 164 201 (10%)	582 (5%)	8%	791 746 (12%)
Eastern Mediterranean	177 722 (3%)	45%	22 468 513 (4%)	432 (3%)	88%	344 458 (5%)
Africa	10 882 (<1%)	-44%	9 190 691 (2%)	55 (<1%)	-47%	173 942 (3%)
Global	**6 607 653 (100%)**	**-3%**	**567 312 625 (100%)**	**12 689 (100%)**	**0%**	**6 378 748 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

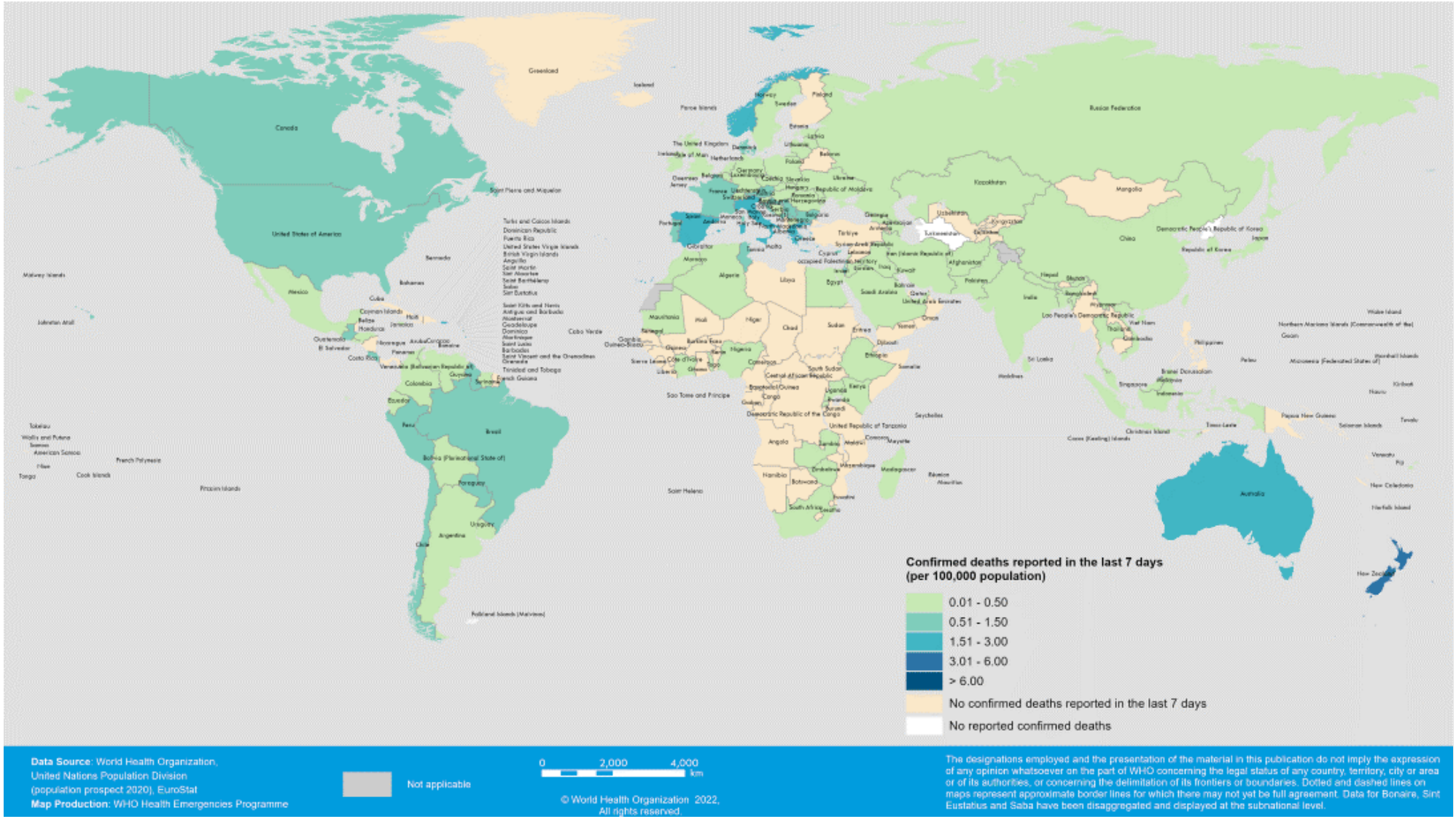
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update
- WHO COVID-19 detailed surveillance data dashboard

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 18 - 24 July 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 18 - 24 July 2022**



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

Geographic spread and prevalence of VOCs

Globally, from 21 June to 21 July 2022, 193 561 sequences were collected and uploaded to GISAID. Among these, 175 679 sequences were the Omicron variant of concern (VOC), accounting for 90.1% of sequences reported globally in the past 30 days. During the same period, Delta VOC and recombinants were observed in 49 (<0.1%) sequences. The remaining 18 223 (9.9%) sequences are waiting to be assigned and presumed to be Omicron.

A comparison of sequences submitted to GISAID in epidemiological week 28 (10 to 16 July 2022) and week 27 (3 to 9 July 2022) shows that BA.4 and BA.5 Omicron subvariants continued to be dominant globally with a weekly prevalence that remained stable, with BA.4 accounting for 11.1% in week 27 and 11.2% in week 28, and BA.5 accounting for 52.4% and 52%, respectively. Conversely, during the same period, BA.2 and BA.2.12.1 sequences showed a decline from 3.6% to 2.2% and from 6.4% to 2.7%, respectively.

Current trends describing the circulation of Omicron sublineages should be interpreted with due consideration of the limitations of SARS-CoV-2 surveillance systems, including differences in sequencing capacity and sampling strategies between countries, as well as changes in sampling strategies and reductions in testing and sequences being conducted and shared from countries around the world.

For more information on the assessment of SARS-CoV-2 variants and the WHO classification refer to Annex 2.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

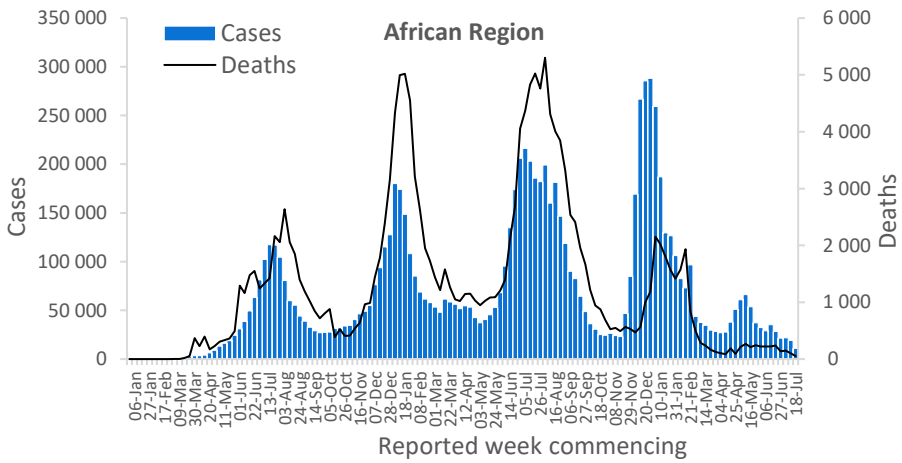
WHO regional overviews:

Epidemiological week 18 - 24 July 2022**

African Region

The Africa Region reported over 10 000 new cases, a 44% decrease as compared to the previous week. However, seven (14%) countries reported an increase in the number of new cases of 20% or greater, with some of the greatest proportional increases seen in the Democratic Republic of the Congo (245 vs 80 new cases; +206%), Burundi (1023 vs 451 new cases; +127%), and Algeria (348 vs 178 new cases; +96%). The highest numbers of new cases were reported from South Africa (2382 new cases; 4.0 new cases per 100 000 population; -4%), Mauritius (1321 new cases; 103.9 new cases per 100 000; -69%), and Burundi (1023 new cases; 8.6 new cases per 100 000; +127%).

The number of new weekly deaths in the Region decreased by 47% as compared to the previous week, with 55 new deaths reported. The highest numbers of new deaths were reported from South Africa (25 new deaths; <1 new death per 100 000 population; -40%), Zimbabwe (six new deaths; <1 new death per 100 000; +200%), and Ethiopia (five new deaths; <1 new death per 100 000; -50%).

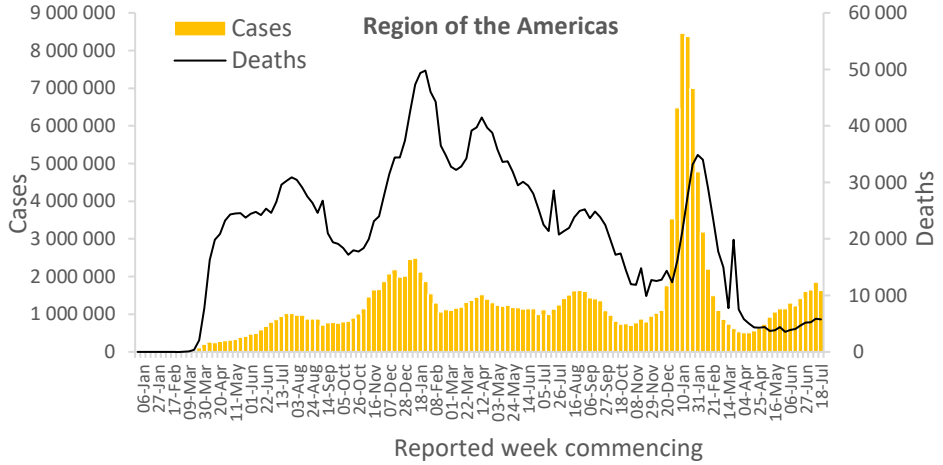


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 1.6 million new cases, a 12% decrease as compared to the previous week. Twelve of 56 (21%) countries for which data are available reported increases in the number of new cases of 20% or greater, with some of the greatest proportional increases observed in Bolivia (Plurinational State of) (40 986 vs 14 322 new cases; +186%), Venezuela (Bolivarian Republic of) (2579 vs 1595 new cases; +62%), and Cuba (581 vs 365 new cases; +59%). The highest numbers of new cases were reported from the United States of America (860 097 new cases; 259.8 new cases per 100 000; -3%), Brazil (255 610 new cases; 120.3 new cases per 100 000; -39%), and Mexico (119 613 new cases; 92.8 new cases per 100 000; -34%).

The number of new weekly deaths reported in the Region remained similar to the number reported in the previous week, with over 5700 new deaths reported. The highest numbers of new deaths were reported from the United States of America (2637 new deaths; <1 new death per 100 000; +3%), Brazil (1396 new deaths; <1 new death per 100 000; -20%), and Mexico (376 new deaths; <1 new death per 100 000; -13%).

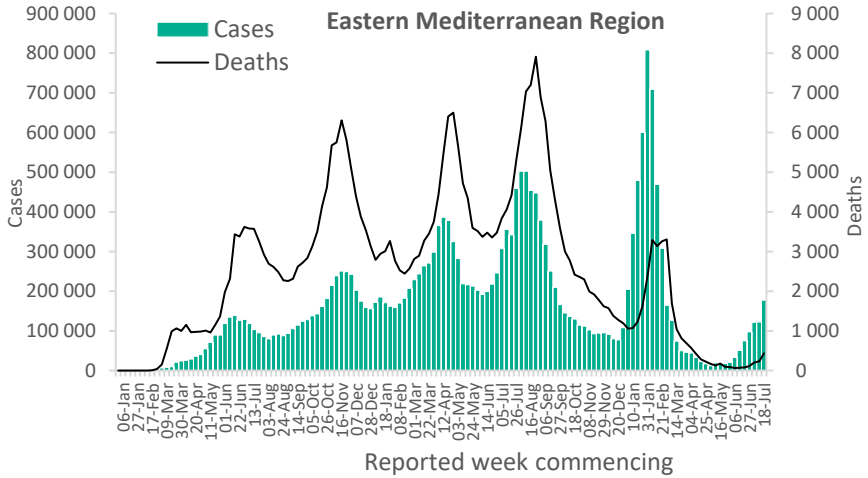


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region has been reporting an increasing trend in cases since late May 2022, with over 120 000 new weekly cases, a 45% increase as compared to the previous week. Twelve of 18 (55%) countries reported increases in the number of new cases of 20% or greater, with the highest proportional increases observed in Egypt (231 vs 49 new cases; +371%), Afghanistan (1024 vs 231 new cases; +343%), and the Syrian Arab Republic (106 vs 27 new cases; +293%). The highest numbers of new cases were reported from the Islamic Republic of Iran (46 595 new cases; 55.5 new cases per 100 000; +85%), Tunisia (27 340 new cases; 231.3 new cases per 100 000; +31%), and Iraq (25 573 new cases; 63.6 new cases per 100 000; +33%).

The number of new weekly deaths in the Region increased by 88% as compared to the previous week, with over 200 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (164 new deaths; <1 new death per 100 000; +188%), Tunisia (119 new deaths; 1.0 new death per 100 000; +59%), and Morocco (33 new deaths; <1 new death per 100 000; +22%).

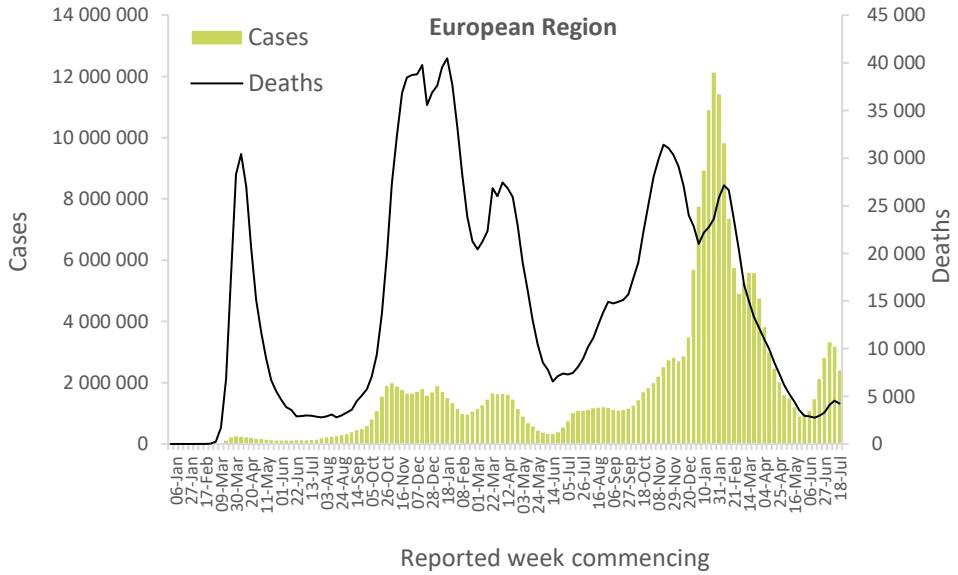


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 2.4 million new weekly cases, a 24% decrease as compared to the previous week. Twenty (33%) countries in the Region reported increases in new cases of 20% or greater, with some of the highest proportional increases observed in Azerbaijan (1743 vs 703 new cases; +148%), Kazakhstan (15 001 vs 7190 new cases; +109%), and Kosovo[1] (8333 vs 4507; +85%). The highest numbers of new cases were reported from Germany (565 518 new cases; 680.0 new cases per 100 000; -16%), Italy (531 327 new cases; 890.9 new cases per 100 000; -26%), and France (508 620 new cases; 782.0 new cases per 100 000; -27%).

Over 4200 new weekly deaths were reported in the Region, a 6% decrease as compared to the previous week. The highest numbers of new deaths were reported from Italy (952 new deaths; 1.6 new deaths per 100 000; +21%), Spain (810 new deaths; 1.7 new deaths per 100 000; +33%), and France (737 new deaths; 1.1 new deaths per 100 000; +34%).

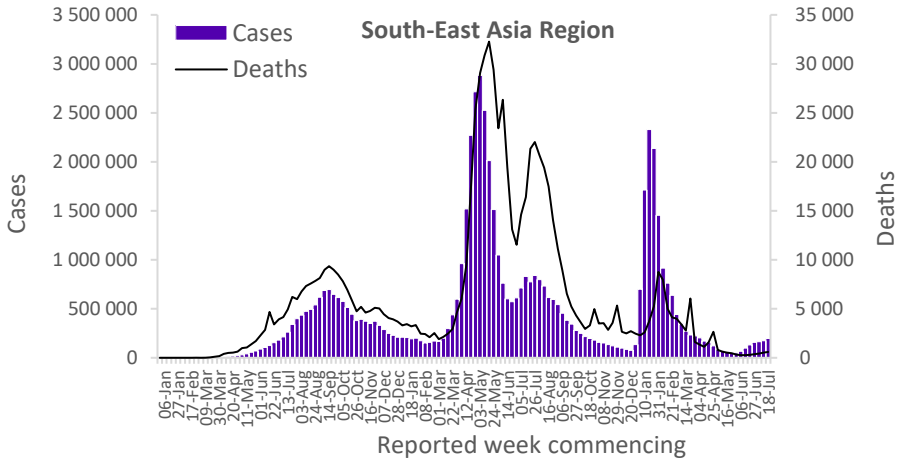


Updates from the European Region

South-East Asia Region

The South-East Asia Region has been reporting an increasing trend in cases since early June, with over 196 000 new cases reported, a 13% increase as compared to the previous week. Five of 10 countries (50%) for which data are available showed increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Sri Lanka (452 vs 175 new cases; +158%), Nepal (2214 vs 1091 new cases; 103%) and Myanmar (135 vs 80; +69%). The highest numbers of new cases were reported from India (138 156 new cases; 10.0 new cases per 100 000; +8%), Indonesia (33 389 new cases; 12.2 new cases per 100 000; +41%), and Thailand (16 824 new cases; 24.1 new cases per 100 000; +20%).

The number of new weekly deaths in the Region increased by 8% as compared to the previous week, with over 500 new deaths reported. The highest numbers of new deaths were reported from India (324 new deaths; <1 new death per 100 000; +15%), Thailand (161 new deaths; <1 new death per 100 000; similar to the previous week's figures), and Indonesia (53 new deaths; <1 new death per 100 000; -9%).

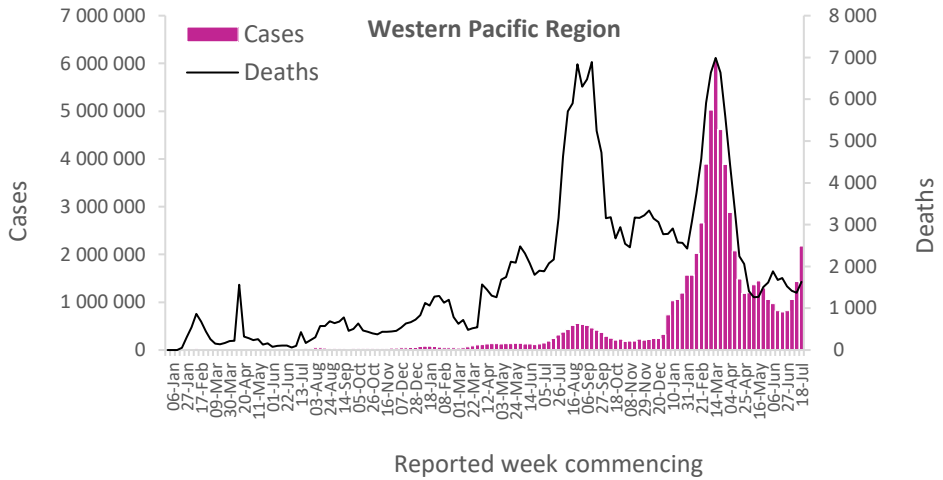


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region has been reporting an increasing trend in cases for the fifth consecutive week, with over 2.1 million new cases reported, a 52% increase as compared to the previous week. Twelve (35%) countries reported increases in new cases of 20% or greater, with some of the largest proportional increases observed in Mongolia (7066 vs 1024 new cases; +590%), Lao People's Democratic Republic (256 vs 149 new cases; +72%), and French Polynesia (696 vs 425 new cases; +64%). The highest numbers of new cases were reported from Japan (969 068 new cases; 766.2 new cases per 100 000; +73%), the Republic of Korea (449 856 new cases; 877.4 new cases per 100 000; +80%), and Australia (376 260 new cases; 1475.5 new cases per 100 000; +64%).

The Region reported over 1600 new weekly deaths, a 19% increase as compared to the previous week. The highest numbers of new deaths were reported from Australia (514 new deaths; 2.0 new deaths per 100 000; +75%), China (457 new deaths; <1 new death per 100 000; -21%), and Japan (272 new deaths; <1 new death per 100 000; +66%).



Updates from the Western Pacific Region

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[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.
[2] Since 21 May 2022, data for COVID-19 cases and deaths in Northern Ireland are no longer included in the United Kingdom updates.
[3] Updates of an outbreak of COVID-19 reported in the Democratic People's Republic of Korea continue through official media since 12 May 2022; however, at present, no confirmed cases or deaths have been reported to WHO.

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COVID-19 Weekly Epidemiological Update

Edition 101 published 20 July 2022

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- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews

Global overview

Data as of 17 July 2022

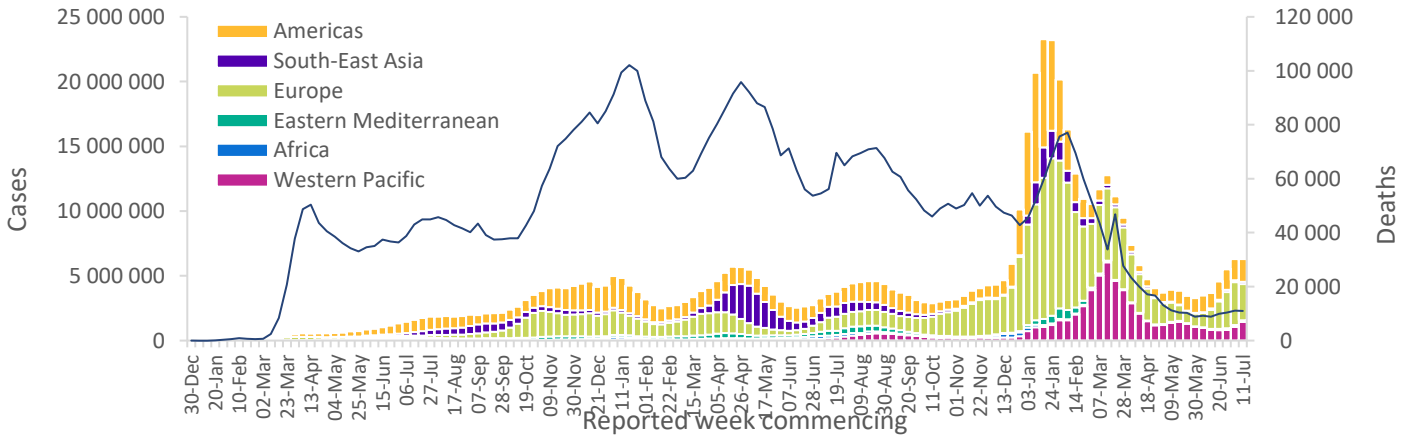
Globally, during the week of 11 to 17 July 2022, the number of weekly cases plateaued, with just under 6.3 million new cases after an increasing trend for the past five weeks (Figure 1). The reported number of new weekly deaths is increasing with 11 000 fatalities reported.

At the regional level, the number of new weekly cases increased in the Western Pacific Region (+37%), the Region of the Americas (+9%) and the South-East Asia Region (+5%), while it decreased in the African Region (-27%) and the European Region (-16%). The number of new weekly cases in the Eastern Mediterranean Region was similar to the figure reported during the previous week. The number of new weekly deaths increased in the South-East Asia Region (+20%), the Eastern Mediterranean Region (+15%) and the Region of the Americas (+7%), while it decreased in the African Region (-39%) and the European Region (-14%). The number of new weekly deaths in the Western Pacific Region was similar to the figure reported during the previous week.

As of 17 July 2022, over 559 million confirmed cases and over 6.3 million deaths have been reported globally.

Current trends in reported COVID-19 cases and deaths should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected. Additionally, data is continuously updated to incorporate regular changes made by countries retrospectively.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 17 July 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest numbers of new weekly cases were reported from the United States of America (866 479 new cases; +18%), France (757 830 new cases; -15%), Italy (718 925 new cases; +9%), Germany (602 930 new cases; -3%), and Japan (559 111 new cases; +107%). The highest numbers of new weekly deaths were reported from the United States of America (2345 new deaths; +5%), Brazil (1 751 new deaths; +7%), Italy (784 new deaths; +37%), Spain (610 new deaths; -1%), and China (576 new deaths; -17%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 17 July 2022**

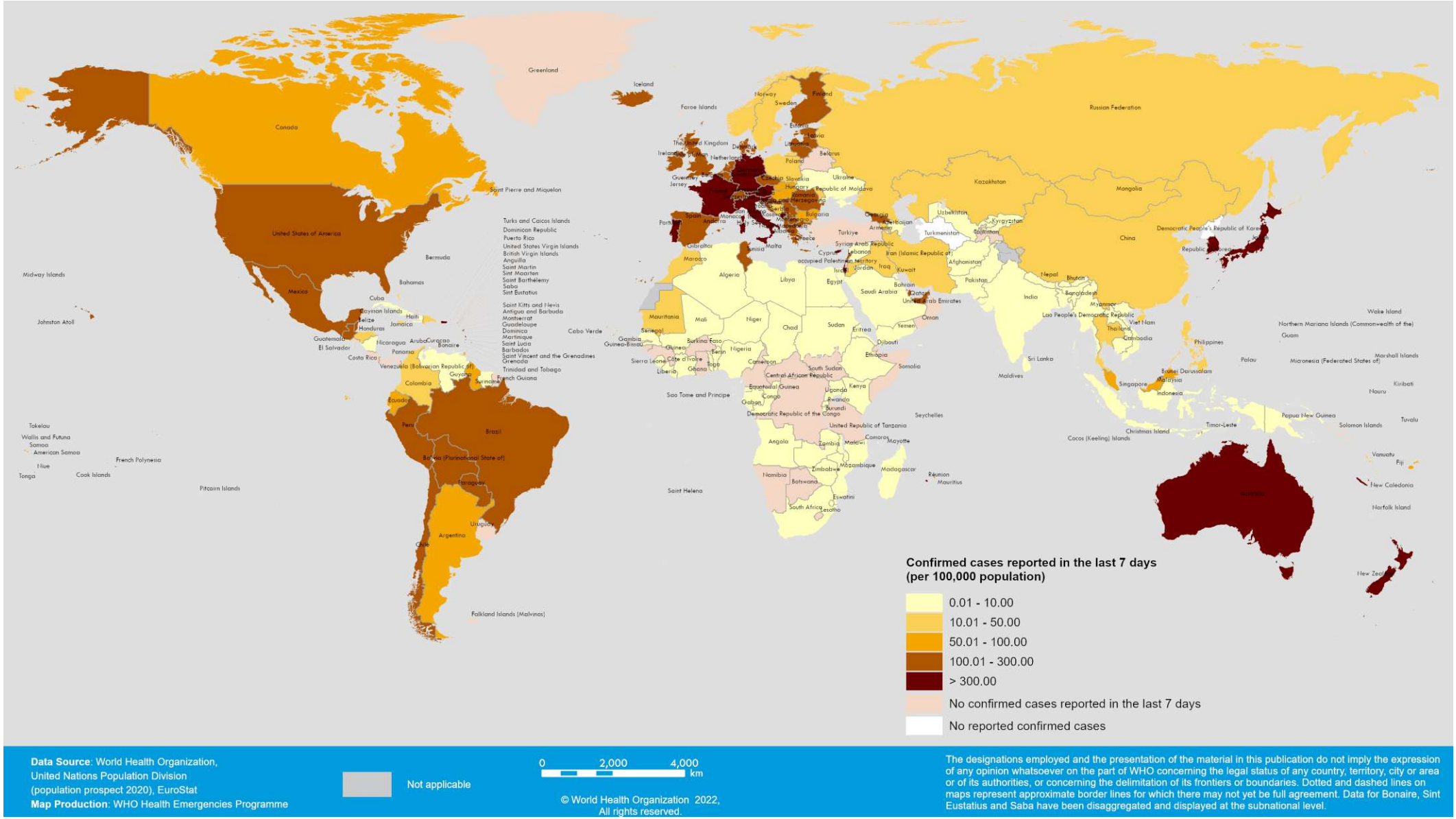
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	2 785 259 (44%)	-16%	235 432 245 (42%)	3 311 (30%)	-14%	2 036 904 (32%)
Americas	1 756 694 (28%)	9%	167 081 979 (30%)	5 470 (50%)	7%	2 775 646 (44%)
Western Pacific	1 444 382 (23%)	37%	66 933 896 (12%)	1 366 (12%)	-3%	241 684 (4%)
South-East Asia	173 854 (3%)	5%	58 967 419 (11%)	538 (5%)	20%	791 164 (12%)
Eastern Mediterranean	120 859 (2%)	-1%	22 288 922 (4%)	228 (2%)	15%	344 024 (5%)
Africa	15 409 (<1%)	-27%	9 175 098 (2%)	87 (1%)	-39%	173 861 (3%)
Global	**6 296 457 (100%)**	**0%**	**559 880 323 (100%)**	**11 000 (100%)**	**-1%**	**6 363 296 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

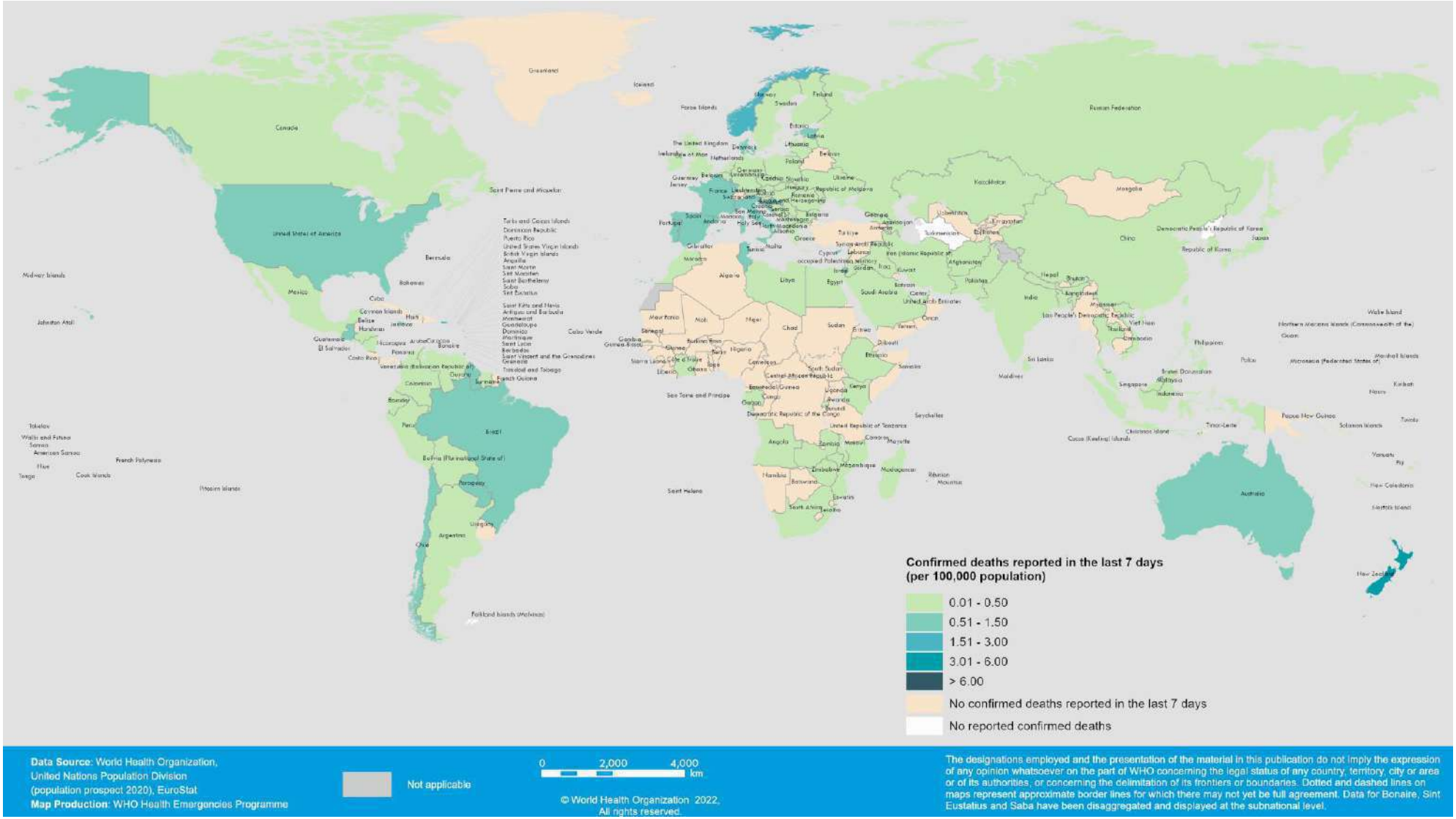
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update
- WHO COVID-19 detailed surveillance data dashboard

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 11 - 17 July 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 11 - 17 July 2022**



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

Geographic spread and prevalence of VOCs

Globally, from 13 June to 13 July 2022, 200 845 SARS-CoV-2 sequences were collected and submitted to GISAID. Among these sequences, the Omicron VOC remains the dominant variant circulating globally, accounting for 95.4% (191 648) of sequences. The remaining 4.4% (8876) sequences are awaiting PANGO lineage designations and 0.2% (321) are Delta and several recombinants.

Among Omicron sequences, as of epidemiological week 27 (4 to 10 July 2022), BA.2 represents 2.61%, while BA.2.12.1 represents 4.51%, BA.4 represents 10.57%, and BA.5 represents 53.59%. Comparing to the proportion of Omicron sequences collected during epidemiological weeks 26 (27 June to 3 July), BA.2 declined from 3.84% to 2.61%, BA.2.12.1 declined from 10.59% to 4.51%, BA.4 declined from 13.21% to 10.57% while BA.5 increased from 51.84% to 53.59%. Based on the data downloaded from GISAID on 18 July 2022, BA.5 has been reported in 100 countries and continues to drive an increase in cases, hospitalisations and ICU admissions.

Several subvariants of Omicron have emerged and some of these are being monitored by WHO[i]. BA.2.75 is an Omicron subvariant under monitoring, with earliest sequences reported from May 2022. BA.2.75 has nine additional mutations in the spike compared to BA.2. There is no evidence yet of the extent to which these mutations impact on transmissibility and disease severity compared to other circulating lineages. As of 18 July, 250 sequences of BA.2.75 from 15 countries have been reported on GISAID.

Current trends describing the circulation of Omicron subvariants should be interpreted with due consideration of the limitations of SARS-CoV-2 surveillance systems, including differences in sequencing capacity and sampling strategies between countries, as well as changes in sampling strategies and reductions in testing and sequences being conducted and shared from countries around the world.

For more information on the assessment of SARS-CoV-2 variants and the WHO classification refer to Annex 2.

[i] WHO tracking SARS-CoV-2 Variants

Figure 4. Panel A and B: The number and percentage of SARS-CoV-2 sequences, as of 18 July 2022

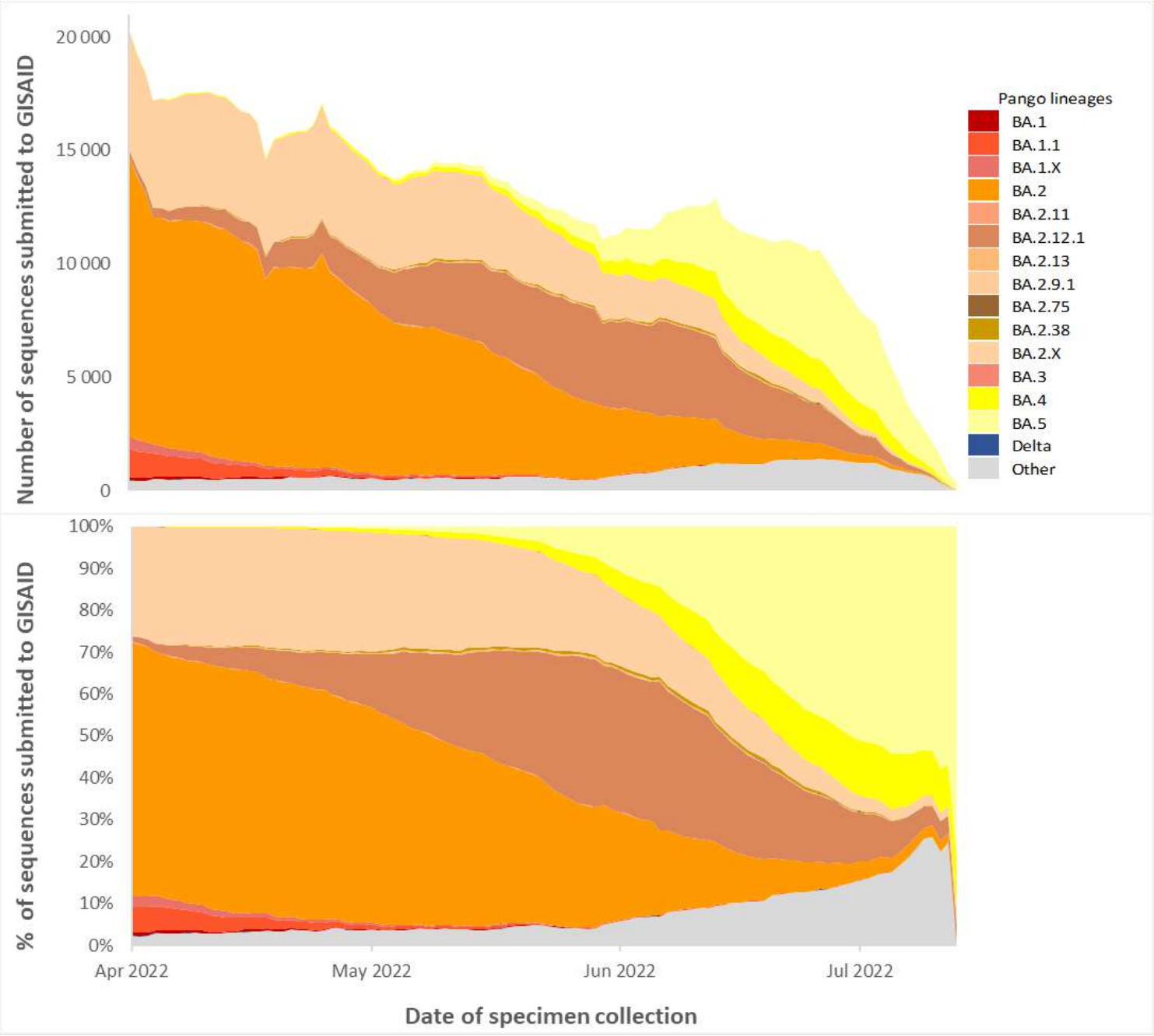


Figure 4 Panel A shows the number and **Panel B** the percentage of all circulating variants since 1 April 2022. Omicron sister-lineages and additional Omicron VOC descendent lineages under further monitoring (VOC-VUM) are shown. BA.1.X and BA.2.X include all BA.1 and BA.2 pooled descendent lineages, except those already shown in the figure above. Source: SARS-CoV-2 sequence data and metadata from GISAID, as of 18 July 202

Table 2. Relative proportions of SARS-CoV-2 sequences over the last four weeks by specimen collection date

A.						
						Last 4 weeks by collection date (%) [b]
Lineage	**Countries**	**Sequences[a]**	**2022-24**	**2022-25**	**2022-26**	**2022-27**
BA.1	177	482 065	0.01	0.01	0.01	0.00
BA.1.1	183	997 165	0.05	0.02	0.02	0.02
BA.1.X*	179	899 907	0.04	0.03	0.02	0.01
BA.2	153	1 141 038	9.83	6.61	3.84	2.61
BA.2.11	23	815	0.02	0.02	0.00	0.01
BA.2.12.1	95	225 356	22.86	15.83	10.59	4.51
BA.2.13	48	3 737	0.32	0.21	0.14	0.12
BA.2.38	56	6 533	0.89	0.51	0.22	0.16
BA.2.75	15	250	0.09	0.14	0.08	0.05
BA.2.9.1	16	767	0.01	0.00	0.01	0.00
BA.2.X*	147	547 294	9.14	6.05	3.19	2.39
BA.3	42	1 146	0.05	0.02	0.01	0.01
BA.4	88	49 813	11.47	12.15	13.21	10.57
BA.5	100	139 680	34.67	45.07	51.84	53.59
Delta[#]	203	4 362 456	0.01	0.04	0.01	0.00
Other[C]	210	2 776 891	10.54	13.30	16.82	25.95

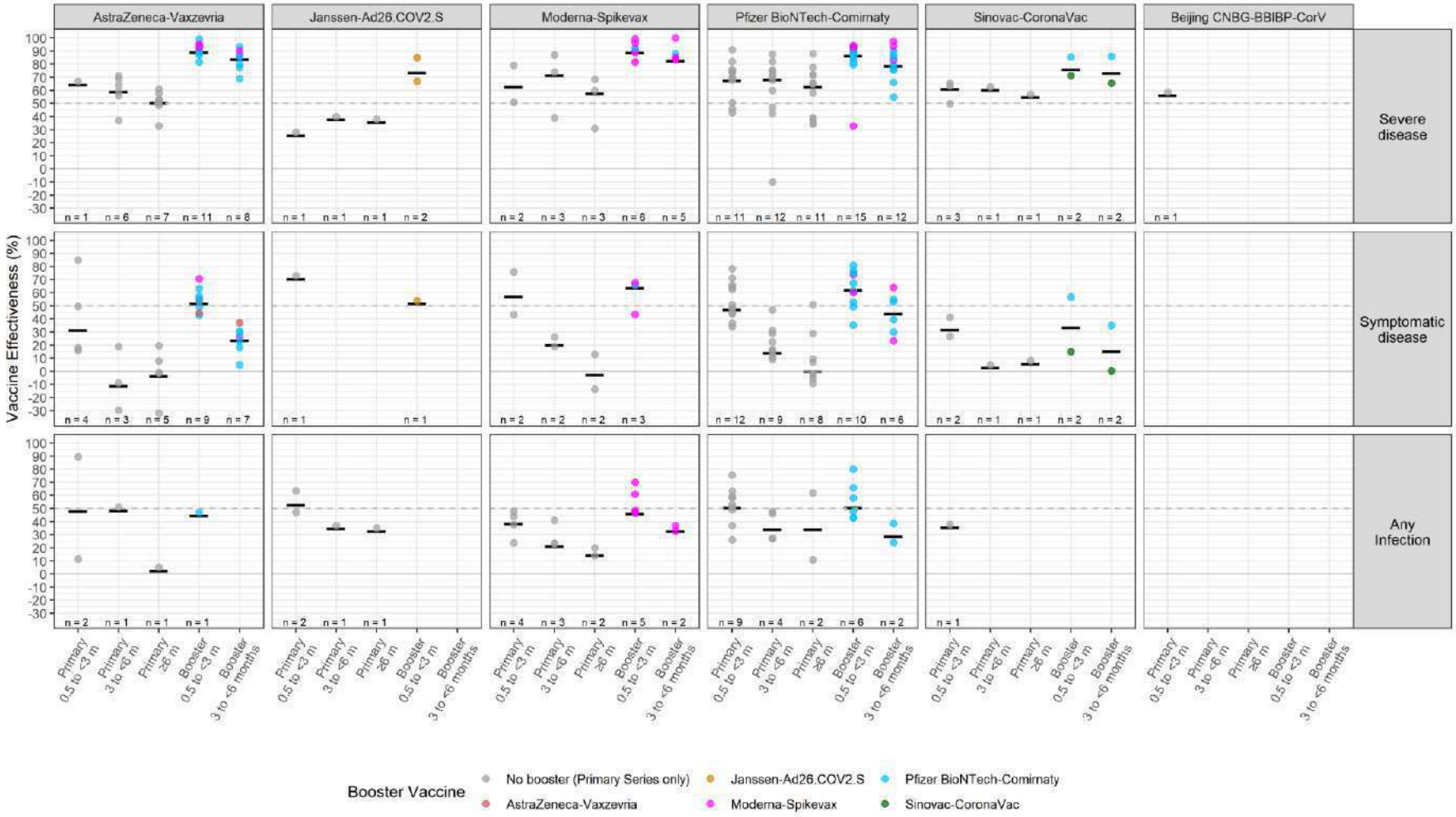
[a] Data source: sequences and metadata from GISAID, data published on 18 July 2022.
[b] Relative proportions in %.
* BA.1.X and BA.2.X include all BA.1 and BA.2 pooled descendent lineages, except those already shown in the table above.
[#] Previously circulating VOC.
[c] Other includes all omicron lineages which are not listed in the table above as well as sequences which are awaiting PANGO lineage designations (presumed Omicron).

Table 3. Summary of phenotypic characteristics* of the Omicron VOC

Public health domain of impact	Omicron (B.1.1.529)	Omicron sublineages			
		BA.1	BA.2	BA.4	BA.5
Transmissibility	Growth advantage and increased transmissibility compared to Delta [ii]	Lower growth advantage compared to BA.2[1], BA.4 and BA.5 [2]	Lower growth advantage compared to BA.4 and BA.5 [1,2]	Growth advantage compared to BA.2 [2]	Growth advantage compared to BA.4 [2]
Disease severity	Overall evidence suggests lower severity despite contrasting evidence. Earlier studies reported lower severity compared to Delta. [3–7] However, more recent studies in different settings reported similar [8,9] or increased severity[10] compared to Delta.[3–7,11 12]	No difference in disease severity compared to BA.2, BA.4 and BA.5 [13]	No difference in disease severity compared to BA.4 and BA.5[13]	Currently available evidence does not suggest a difference in disease severity compared to BA.2 and BA.5 [13]	Currently available evidence does not suggest a difference in disease severity compared to BA.2 and BA.4[13]
Risk of reinfection	Reduced risk of Omicron reinfection among individuals previously infected with a different SARS-CoV-2 variant compared to naïve individuals[14,15]	Reduced risk of reinfection with BA.1 after infection with BA.2[15]	Reduced risk of reinfection following infection with BA.1 [15]	Protection against infection following previous BA.2 infection [16]	Protection against infection following previous BA.2 infection [16]
Impact on antibody responses	Reduction in neutralizing activity reported as compared to other VOCs[17–19]	Lower neutralising antibody titers compared to the index virus[19]	Lower neutralising antibody titers compared to the index virus[19]	Lower neutralizing antibody titres (7.6-fold) compared to BA.1 [20,21]	Lower neutralising antibody titres (7.5-fold) compared to BA.1 [20,21]
Impacts on diagnostics	PCR assays that include multiple gene targets maintain their accuracy to detect Omicron[22]; S gene target failure/positivity (SGTF) may be a proxy for screening. Limited to no impact on sensitivity of Ag-RDTs observed[23–26]	S gene target failure	The majority will be S gene target positive	S gene target failure.	S gene target failure.
Impact on treatment	No difference in the effectiveness of antiviral agents (polymerase and protease inhibitors) against the Omicron variant[27]. Conserved neutralizing activity for three broadly neutralizing monoclonal antibodies (sotrovimab, S2X259 and S2H97) and a reduced effectiveness of other monoclonal antibodies[28–31]	Reduced efficacy of cilgavimab[32] and casirivimab-imdevimab[33]	Reduced neutralising activity of sotrovimab, bamlanivimab, casirivimab, etesevimab, imdevimab and tixagevimab [34]	Reduced neutralising activity of sotrovimab, bamlanivimab, casirivimab, etesevimab, imdevimab and tixagevimab. Increased resistance to cilgavimab compared to BA.2[34]	Reduced neutralising activity of sotrovimab, bamlanivimab, casirivimab, etesevimab, imdevimab and tixagevimab. Increased resistance to cilgavimab compared to BA.2[34]
Impact on vaccination	Results of vaccine effectiveness (VE) studies should be interpreted with caution because estimates vary with the type of vaccine administered and the number of doses and scheduling (sequential administration of different vaccines). For further information, see the section Interpretation of the results of the VE for the Omicron variant				

[ii] Similar methodology used as Reference [1]

Figure 5. Vaccine effectiveness (VE) of primary series and first booster vaccination against the Omicron variant of concern



Dots represent point estimates of VE from each study; dark black horizontal lines represent median VE across all studies in stratum. All data is from a systematic review of COVID-19 VE studies; methods and summary tables of VE studies can be found on view-hub.org. Vertical panels represent VE for full primary series (grey dots) and VE for homologous or heterologous booster vaccination (other colored dots) following completion of primary series vaccination with vaccine of primary series noted in panel header. All booster VE estimates are for first booster dose. Severe disease includes hospitalization, and pneumonia; symptomatic disease includes disease of any severity level; any infection can include symptomatic and asymptomatic infection. Additional details on the methods for inclusion of the estimates in the plots are provided in text.

Figure 5 summarises the impact of the Omicron variant on absolute vaccine effectiveness (VE) over time, grouped by the primary series vaccine; booster doses may have been a different vaccine (i.e., both homologous and heterologous booster vaccination VEs are shown). Additional information on vaccine performance against VOCs can also be found in Annex 3.

Since the last update, one new study (not yet peer reviewed) has been added to the figure. The study assessed the VE of two and three doses of Pfizer BioNTech-Comirnaty against emergency department admissions and hospitalization due to Omicron BA.1 and BA.2 sub-lineages over time among adults 18 years and older in the United States of America.[35]

For more information on the methods for Figure 5 refer to Annex 4.

Interpretation of the results of absolute VE for the Omicron variant

To date, 34 studies from 14 countries (Argentina, Brazil, Canada, Chile, Czech Republic, Denmark, Finland, Norway, Israel, Qatar, South Africa, the United Kingdom, the United States of America, and Zambia) have collectively assessed the protection of six vaccines against the Omicron variant (12 studies contributed VE estimates of primary series vaccination, four contributed to estimates of first booster vaccination only, and 18 contributed to both). Findings from these studies show reduced VE of COVID-19 primary series vaccines against the Omicron variant for all outcomes (*severe disease*, *symptomatic disease*, and *infection*) than has been observed for the other four VOCs. Importantly though, VE estimates against the Omicron variant remain higher for *severe disease* than the other outcomes, in the majority of studies. The first booster vaccination substantially improves VE for all outcomes and for all combinations of schedules with estimates available for both primary series and booster vaccination. VE declines more with time after the first booster vaccination for symptomatic disease and infection than it does for severe disease[36]; however, studies that assess VE of booster vaccination beyond six months to evaluate longer duration of protection are not yet available.

For *severe disease*, VE of the primary series showed little decline over six months. VE was ≥70% during the first three months after primary series vaccination for seven of 13 (54%) VE estimates for the mRNA vaccines (Moderna-Spikevax and Pfizer BioNTech-Comirnaty). Of the two vector vaccines studies available, both had VE <70%: one reported VE <70% for AstraZeneca-Vaxzevria and the other reported VE <50% for Janssen-Ad26.COV2.S. Four estimates were available for inactivated vaccines: none of the three estimates for Sinovac-CoronaVac were ≥ 70% (two [67%] were ≥ 50%); the single estimate for Beijing CNBG-BBIBP-CorV (Sinopharm) was <70% but ≥50%. Beyond three months after vaccination VE was ≥70% for 13 of 33 (39%) VE estimates for the mRNA vaccines (23 [70%] had VE ≥50%); one of 13 (8%) AstraZeneca-Vaxzevria VE estimates was ≥70% (9 [69%] were ≥50%); neither of the two estimates for the other vector-based vaccine, Janssen-Ad26.COV2.S, was ≥50%; the two VE estimates for Sinovac-CoronaVac were ≥50% but <70%.

The first booster dose vaccination improved VE against *severe disease* in all studies, and VE was ≥70% in 36 (95%) of 38 estimates evaluating VE between 14 days and three months of receipt of a booster dose (35 estimates evaluated an mRNA booster, two evaluated a Janssen-Ad26.COV2.S booster, and one evaluated a Sinovac-CoronaVac booster); one Moderna-Spikevax booster dose had VE <50%, and one Janssen-Ad26.COV2.S booster dose had VE <70%. At three to six months post mRNA booster, VE was ≥70% for 25 of 28 (89%) estimates (the primary series was an mRNA vaccine in 19 of the 28 estimates, AstraZeneca-Vaxzevria in eight and Sinovac-CoronaVac in one). One study found the VE to be <70% but ≥50% following three to six months from the third dose of Sinovac-CoronaVac.

VE against *symptomatic disease* and *infection* within the first three months of primary series vaccination was lower than against severe disease, and VE decreased more substantially over time. For *symptomatic disease*, only three of 14 (21%) VE estimates for the mRNA vaccines were ≥70% and only seven (50%) were ≥50%; one (25%) of the four VE estimates for AstraZeneca-Vaxzevria was ≥70% while the remaining three estimates were <50%; the single estimate for Janssen-Ad26.COV2.S was ≥70%, and both estimates for Sinovac (CoronaVac) were <50%. Beyond three months after vaccination, only one of 35 (3%) VE estimates was ≥50% (25 estimates evaluated mRNA vaccines, eight evaluated AstraZeneca-Vaxzevria, and two evaluated Sinovac-CoronaVac). mRNA booster vaccination after completion of a primary series of an mRNA vaccine, AstraZeneca-Vaxzevria, or Sinovac-CoronaVac improved VE against *symptomatic disease*: six of 23 (26%) VE estimates between 14 days and three months post booster were ≥70% (18 [78%] were ≥50%); one (50%) of two VE estimates evaluating three doses of AstraZeneca-Vaxzevria was ≥50% but <70%, as was the single estimate for three doses of Janssen-Ad26.COV2.S, and the single estimate for three doses of Sinovac-CoronaVac was <50%. However, first booster dose protection declined rapidly over time: only four of 15 (27%) estimates available at three to six months following receipt of an mRNA booster dose had VE ≥50% and none were ≥70%. Neither the single estimate for three doses of AstraZeneca-Vaxzevria nor the single estimate for three doses of Sinovac-CoronaVac assessed three to six months post booster vaccination was above 50%. VE against *infection* showed a similar pattern of waning as that against *symptomatic disease.*

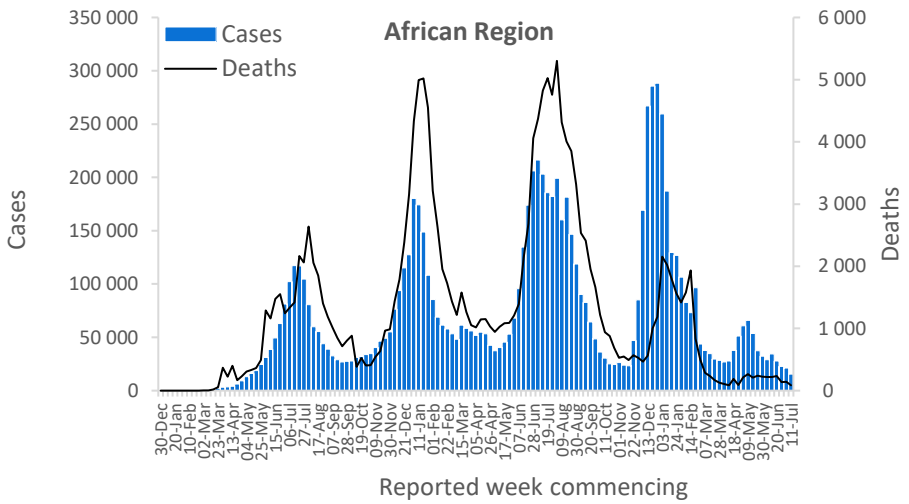
WHO regional overviews:

Epidemiological week 11 - 17 July 2022**

African Region

The African Region reported a decline in the number of new weekly cases, with over 15 000 new cases reported, a 27% decrease as compared to the previous week. Seven (14%) countries reported an increase in the number of new cases of 20% or greater, with the greatest proportional increases seen in Burundi (451 vs 169 new cases; +167%), Senegal (263 vs 133 new cases; +98%), and Eritrea (40 vs 23 new cases; +74%). The highest numbers of new cases were reported from Réunion (3599 new cases; 402 new cases per 100 000 population; +25%), South Africa (2482 new cases; 4.2 new cases per 100 000; +25%), and Zambia (1200 new cases; 6.5 new cases per 100 000; -17%).

The number of new weekly deaths in the Region decreased by 39% as compared to the previous week, with just under 90 new deaths reported. The highest numbers of new deaths were reported from South Africa (42 new deaths; <1 new death per 100 000 population; -34%), Ethiopia (10 new deaths; <1 new death per 100 000; -23%), and Réunion (six new deaths; <1 new death per 100 000; -14%).

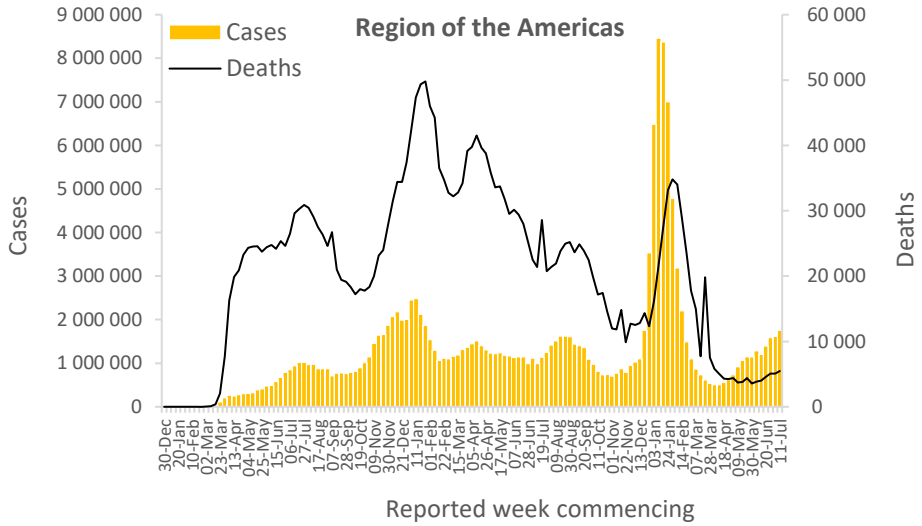


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 1.7 million new cases, a 9% increase as compared to the previous week. Eighteen of 56 (32%) countries for which data are available reported increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Sint Eustatius (69 vs 18 new cases; +283%), Peru (67194 vs 32889 new cases; +104%), and Saint Vincent and the Grenadines (114 vs 56 new cases; +104%). The highest numbers of new cases were reported from the United States of America (866 479 new cases; 261.8 new cases per 100 000; +18%), Brazil (419 273 new cases; 197.2 new cases per 100 000; +6%), and Mexico (141 241 new cases; 109.5 new cases per 100 000; -20%).

The number of new weekly deaths reported in the Region increased by 7% as compared to the previous week, with over 5000 new deaths reported. The highest numbers of new deaths were reported from the United States of America (2345 new deaths; <1 new death per 100 000; +5%), Brazil (1751 new deaths; <1 new death per 100 000; +7%), and Mexico (315 new deaths; <1 new death per 100 000; +32%).

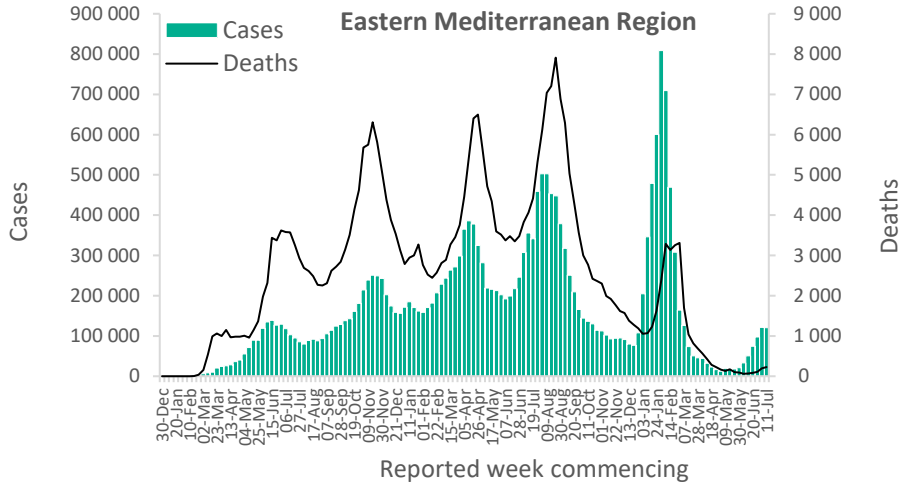


Updates from the Region of the Americas

Eastern Mediterranean Region

After an increasing trend over the past two months, the Eastern Mediterranean Region reported over 120 000 new weekly cases, a figure similar to last week's figure. Six (27%) countries reported increases in the number of new cases of 20% or greater, with some of the highest proportional increases observed in Libya (453 vs 51 new cases; +788%, partly due to batch reporting), the Islamic Republic of Iran (25 126 vs 8761 new cases; +187%), and Jordan (2135 vs 1329 new cases; +61%). The highest numbers of new cases were reported from the Islamic Republic of Iran (25 126 new cases; 29.9 new cases per 100 000; +187%), Tunisia (20 903 new cases; 176.9 new cases per 100 000; +50%), and Iraq (19 217 new cases; 47.8 new cases per 100 000; -34%).

The number of new weekly deaths in the Region increased by 15% as compared to the previous week, with over 200 new deaths reported. The highest numbers of new deaths were reported from Tunisia (75 new deaths; <1 new death per 100 000; +32%), the Islamic Republic of Iran (57 new deaths; <1 new death per 100 000; +46%), and Morocco (27 new deaths; <1 new death per 100 000; -23%).

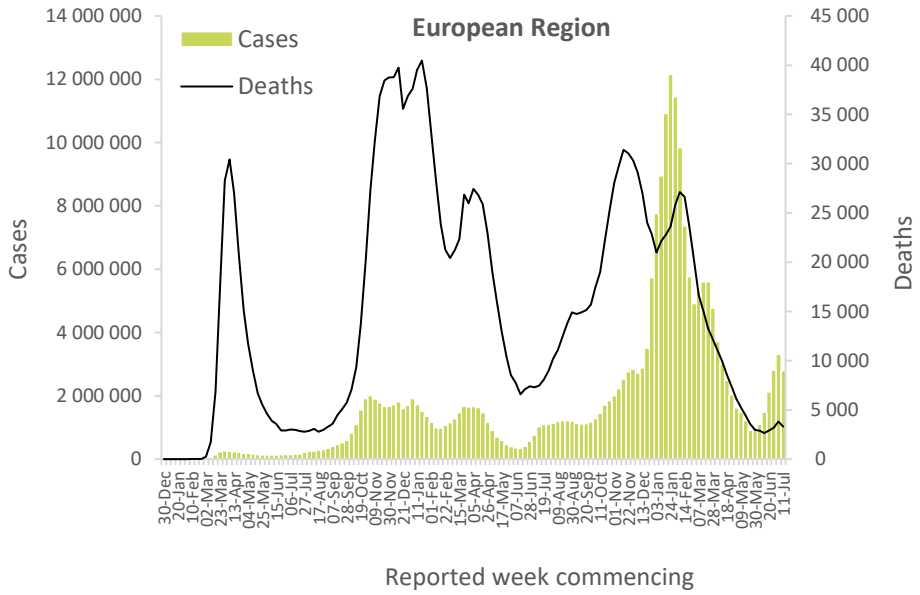


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 2.7 million new weekly cases, a 16% decrease from the previous week. Twenty (33%) countries in the Region reported increases in new cases of 20% or greater, with the highest proportional increases observed in Kyrgyzstan (485 vs 78 new cases; +522%), Romania (34 582 vs 7726 new cases; +348%), and Kazakhstan (7190 vs 2293 new cases; +214%). The highest numbers of new cases were reported from France (757 830 new cases; 1165.2 new cases per 100 000; -15%), Italy (718 925 new cases; 1205.4 new cases per 100 000; +9%), and Germany (602 930 new cases; 725.0 new cases per 100 000; -3%).

Over 3000 new weekly deaths were reported in the Region, a 14% decrease as compared to the previous week. The highest numbers of new deaths were reported from Italy (784 new deaths; 1.3 new deaths per 100 000; +37%), Spain (610 new deaths; 1.3 new deaths per 100 000; -1%), and France (530 new deaths; <1 new death per 100 000; +30%).

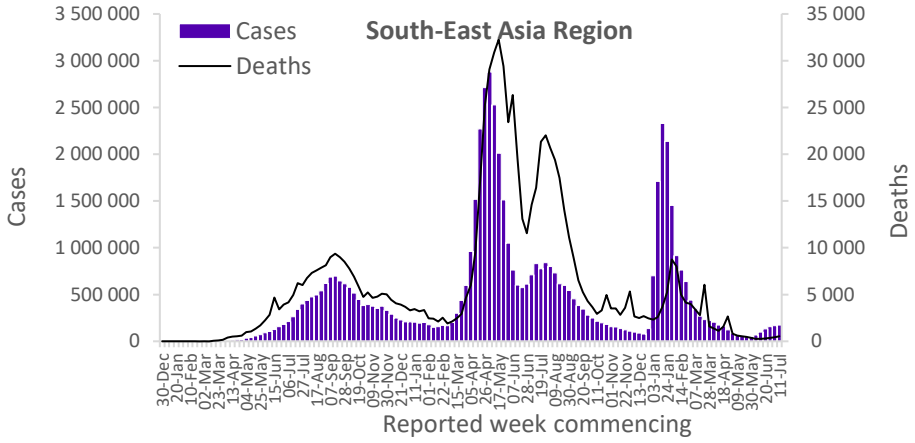


Updates from the European Region

South-East Asia Region

The South-East Asia Region has been reporting an increasing trend in cases since early June, with over 173 000 new cases reported, a 5% increase as compared to the previous week. Three of 10 countries (30%) for which data were available showed increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Nepal (1091 vs 516 new cases; +111%), Sri Lanka (175 vs 106 new cases; +65%) and Indonesia (23 648 vs 17 388; +36%). The highest numbers of new cases were reported from India (127 948 new cases; 9.3 new cases per 100 000; +6%), Indonesia (23 648 new cases; 8.6 new cases per 100 000; +36%), and Thailand (13 986 new cases; 20 new cases per 100 000; -6%).

The number of new weekly deaths in the Region increased by 20% as compared to the previous week, with over 500 new deaths reported. The highest numbers of new deaths were reported from India (281 new deaths; <1 new death per 100 000; +23%), Thailand (161 new deaths; <1 new death per 100 000; +19%), and Indonesia (58 new deaths; <1 new death per 100 000; +38%).

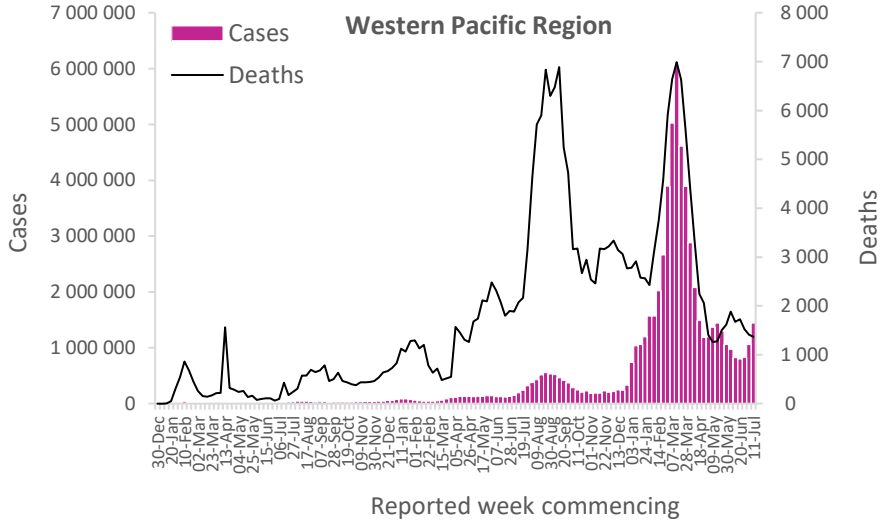


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported over 1.4 million new cases, a 37% increase as compared to the previous week. Fourteen (42%) countries reported increases in new cases of 20% or greater, with some of the largest proportional increases observed in the Lao People's Democratic Republic (149 vs 55 new cases; +171%), Japan (559 111 vs 269 760 new cases; +107%), and the Republic of Korea (249 912 vs 122 234 new cases; +104%). The highest numbers of new cases were reported from Japan (559 111 new cases; 442.1 new cases per 100 000; +107%), the Republic of Korea (249 912 new cases; 487.5 new cases per 100 000; +104%), and Australia (229 874 new cases; 901.5 new cases per 100 000; -11%).

The Region reported over 1300 new weekly deaths, similar to the figure reported during the previous week. The highest numbers of new deaths were reported from China (576 new deaths; <1 new death per 100 000; -17%), Australia (293 new deaths; 1.1 new deaths per 100 000; -1%), and Japan (164 new deaths; <1 new death per 100 000; +52%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.
[2] Since 21 May 2022, data for COVID-19 cases and deaths in Northern Ireland was no longer included in the United Kingdom updates.
[3] Updates of an outbreak of COVID-19 reported in the Democratic People's Republic of Korea continue through official media since 12 May 2022; however, at present, no confirmed cases or deaths have been reported to WHO.

Annex 2. SARS-CoV-2 variants assessment and classification

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.[1]

Annex 3. Summary of Primary Series and First Booster Vaccine Performance against Omicron Variant of Concern (data as of 11 July 2022)

		Omicron Sub-Lineage				
		BA.1	**BA.2**	**BA.2.12.1**	**BA.3**	**BA.4/BA.5**
Primary Series Vaccination						
WHO Emergency Use Listing (EUL) Qualified Vaccines	AstraZeneca-Vaxzevria/SII-Covishield	HNR_{10}	HNR_{1}	----	----	----
	Beijing CNBG-BBIBP-CorV	HNR_{7}	HNR_{2}	HNR_{1}	HNR_{1}	HNR_{1}
	Bharat-Covaxin	$\downarrow\downarrow_{1}$	----	----	----	----
	Cansino-Convidecia	----	----	----	----	----
	Janssen-Ad26-COV2.S	HNR_{6}	----	----	----	----
	Moderna-Spikevax	$\downarrow\downarrow\downarrow_{10}$	HNR_{2}	----	----	----
	Novavax-Nuvaxovid/SII - Covavax	----	----	----	----	----
	Pfizer BioNTech-Comirnaty	HNR_{47}	$\downarrow\downarrow\downarrow_{2}$	----	HNR_{1}	HNR_{1}
	Sinovac-CoronaVac	$\downarrow\downarrow\downarrow_{1}$	----	----	----	----
Vaccines without WHO EUL	Anhui ZL-Recombinant	----	----	----	----	----
	Gamaleya-Sputnik V	HNR_{2}	----	----	----	----
Booster Vaccination (Primary Series Vaccine + Booster Vaccine)						
WHO Emergency Use Listing (EUL) Qualified Booster Vaccines	AstraZeneca-Vaxzevria/SII-Covishield + AstraZeneca-Vaxzevria/SII Covishield	HNR_{2}	HNR_{2}	----	$\downarrow\downarrow_{1}$	$\downarrow\downarrow\downarrow_{1}$
	AstraZeneca-Vaxzevria/SII-Covishield + Moderna-Spikevax	$\downarrow_{1}$	----	----	----	----
	AstraZeneca-Vaxzevria/SII-Covishield + Pfizer BioNTech-Comirnaty	$\downarrow\downarrow_{1}$	$\downarrow\downarrow_{1}$	----	$\downarrow\downarrow_{1}$	----
	Beijing CNBG-BBIBP-CorV + Beijing CNBG-BBIBP-CorV	$\downarrow\downarrow$to$\downarrow\downarrow\downarrow_{4}$	HNR_{2}	HNR_{1}	$\downarrow\downarrow_{1}$	HNR_{1}
	Janssen-Ad26-COV2.S + Janssen-Ad26-COV2.S	HNR_{1}	----	----	----	----
	Janssen-Ad26-COV2.S + Pfizer BioNTech-Comirnaty	$\downarrow_{1}$	----	----	----	----
	Moderna-Spikevax + Moderna-Spikevax	$\downarrow$to$\downarrow\downarrow\downarrow_{9}$	$\downarrow\downarrow_{1}$	$\downarrow\downarrow_{1}$	$\downarrow\downarrow_{1}$	$\downarrow\downarrow\downarrow_{1}$
	Moderna-Spikevax + Pfizer BioNTech-Comirnaty	$\downarrow\downarrow\downarrow_{1}$	----	----	----	----
	Pfizer BioNTech-Comirnaty + Pfizer BioNTech-Comirnaty	$\downarrow$to$\downarrow\downarrow\downarrow_{40}$	$\downarrow$to$\downarrow\downarrow_{13}$	$\downarrow$to$\downarrow\downarrow\downarrow_{3}$	$\downarrow$to$\downarrow\downarrow_{4}$	$\downarrow\downarrow$to$\downarrow\downarrow\downarrow_{5}$
	Pfizer BioNTech-Comirnaty + Janssen-Ad26-COV2.S	$\downarrow_{2}$	----	----	----	----
	Pfizer BioNTech-Comirnaty + Moderna-Spikevax	$\downarrow$to$\downarrow\downarrow_{2}$	----	----	----	----
	Sinovac-CoronaVac + Sinovac-CoronaVac	HNR_{6}	$\downarrow\downarrow_{2}$	$\downarrow\downarrow_{1}$	$\downarrow\downarrow_{1}$	$\downarrow\downarrow_{1}$
	Sinovac-CoronaVac + Pfizer BioNTech-Comirnaty	$\downarrow\downarrow_{2}$	$\downarrow\downarrow_{1}$	----	----	----
Booster Vaccines without WHO EUL	Anhui ZL-Recombinant + Anhui ZL-Recombinant	$\downarrow$to$\downarrow\downarrow_{2}$	$\downarrow\downarrow_{1}$	$\downarrow\downarrow_{1}$	$\downarrow\downarrow\downarrow_{1}$	$\downarrow\downarrow\downarrow_{1}$
	Beijing CNBG-BBIBP-CorV + Anhui ZL - Recombinant	$\downarrow\downarrow$to$\downarrow\downarrow\downarrow_{4}$	HNR_{2}	HNR_{1}	$\downarrow\downarrow\downarrow_{1}$	HNR_{1}
	Gamaleya-Sputnik V + Gamaleya Sputnik Light	$\downarrow\downarrow_{1}$	----	----	----	----
	Sinovac-CoronaVac + Anhui ZL - Recombinant	$\downarrow$to$\downarrow\downarrow_{2}$	$\downarrow$to$\downarrow\downarrow_{2}$	$\downarrow$to$\downarrow\downarrow\downarrow_{2}$	$\downarrow$to$\downarrow\downarrow\downarrow_{2}$	$\downarrow\downarrow_{1}$

Abbreviations: HNR=high non-response. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" indicates <2-fold reduction in neutralization; "↓" indicates 2 to <5-fold reduction; "↓↓" indicates 5 to <10-fold reduction; "↓↓↓" indicates ≥10-fold reduction. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/sub-lineage was used. HNR indicates a median percent response across all studies of <75%; in these instances, fold-reductions can be biased and, thus. are not presented. The number of studies is shown as subscripts.

Additional notes on Annex Table 3

- Studies contributing to the table are identified from an ongoing review of the preprint and published literature on neutralization of SARS-CoV-2 variants by COVID-19 vaccines.
- Studies that use samples collected >7 days and < 6 months after complete vaccination and that use an ancestral strain as the reference are included in the table.
- Studies of immunocompromised persons are excluded.
- It is important to note that studies vary in population and other methodological considerations which may in part explain some differences when comparing products between different studies. In addition, the reductions summarised in the table do not incorporate uncertainty intervals around the fold reductions which can vary substantially across studies when reported.

Annex 4. Methods for Figure 5

- VE studies included in the plot were identified from an ongoing systematic review of COVID-19 vaccine effectiveness studies. All studies were cohort or test-negative designs conducted when Omicron was the predominant circulating variant. Methods for the systematic review and inclusion/exclusion criteria are available on view-hub.org.
- Only studies providing VE estimates of individual vaccines are included in the plot; studies assessing combined VE of more than one vaccine are excluded except for studies of heterologous primary and booster schedules where all participants included in a VE estimate received the same brands of vaccines in the same order.
- Only studies providing VE estimates for discrete time intervals since vaccination or estimates with limited follow-up time (such that the median time point falls clearly in one of the intervals for the plot) are included. Studies that only provide VE estimates over a cumulative period of time covering more than one time interval are excluded because they are difficult to interpret due to the marked waning of VE over time with Omicron.
- Only estimates of absolute vaccine effectiveness (i.e., the comparison group is unvaccinated persons) are included in the plot; estimates of relative vaccine effectiveness (e.g., the comparison group is persons having completed the primary series) are excluded as the interpretation of relative vaccine effectiveness is not comparable with absolute vaccine effectiveness.

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COVID-19 Weekly Epidemiological Update

Edition 100 published 13 July 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- Special Focus: WHO global situational alert system
- WHO regional overviews

Global overview

Data as of 10 July 2022

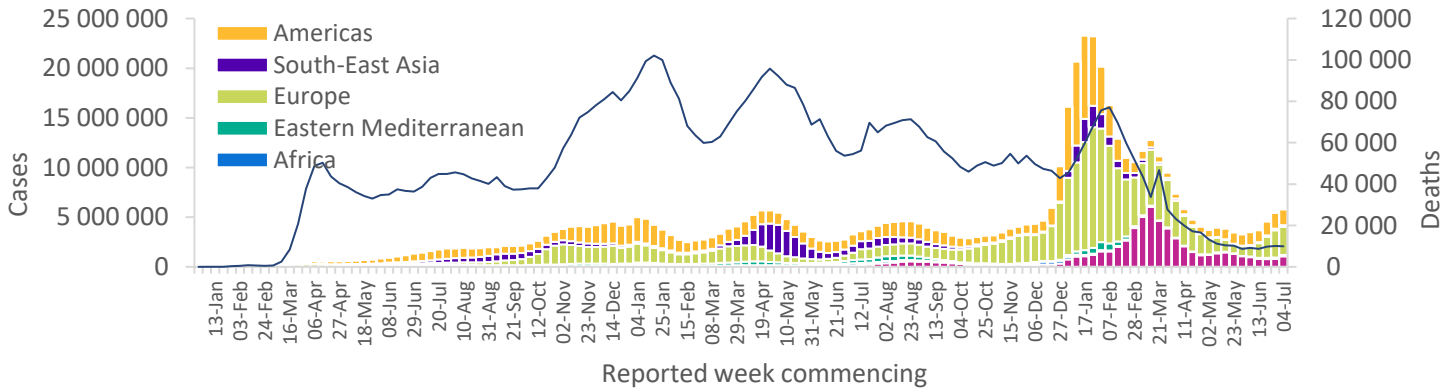
Globally, the number of weekly cases has increased for the fifth consecutive week, after a declining trend since the last peak in March 2022. During the week of 4 to 10 July 2022, over 5.7 million new cases were reported, a 6% increase as compared to the previous week (Figure 1). The number of new weekly deaths was similar to the figure reported during the previous week, with over 9800 fatalities reported to WHO.

At the regional level, the number of new weekly cases increased in the Western Pacific Region (+28%), the Eastern Mediterranean Region (+25%), the South-East Asia Region (+5%), while it decreased in the African Region (-33%) and remained similar to last week's numbers in the European Region (+4%) and the Region of the Americas (-1%). The number of weekly deaths increased in the Eastern Mediterranean Region (+78%) and the South-East Asia Region (+23%), while it decreased in the African Region (-17%) and the Western Pacific Region (-10%). The Region of the Americas and the European Region both reported similar figures as compared to the previous week.

As of 10 July 2022, just under 553 million confirmed cases and over 6.3 million deaths have been reported globally.

These trends should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 10 July 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest number of new weekly cases were reported from France (771 260 new cases; 6%), the United States of America (722 924 new cases; -6%), Italy (661 984 new cases; 30%), Germany (561 136 new cases; -9%), and Brazil (396 781 new cases; -3%). The highest number of new weekly deaths were reported from the United States of America (1987 new deaths; -19%), Brazil (1639 new deaths; 11%), China (692 new deaths; -8%), Spain (619 new deaths; 98%), and Italy (574 new deaths; 33%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 10 July 2022**

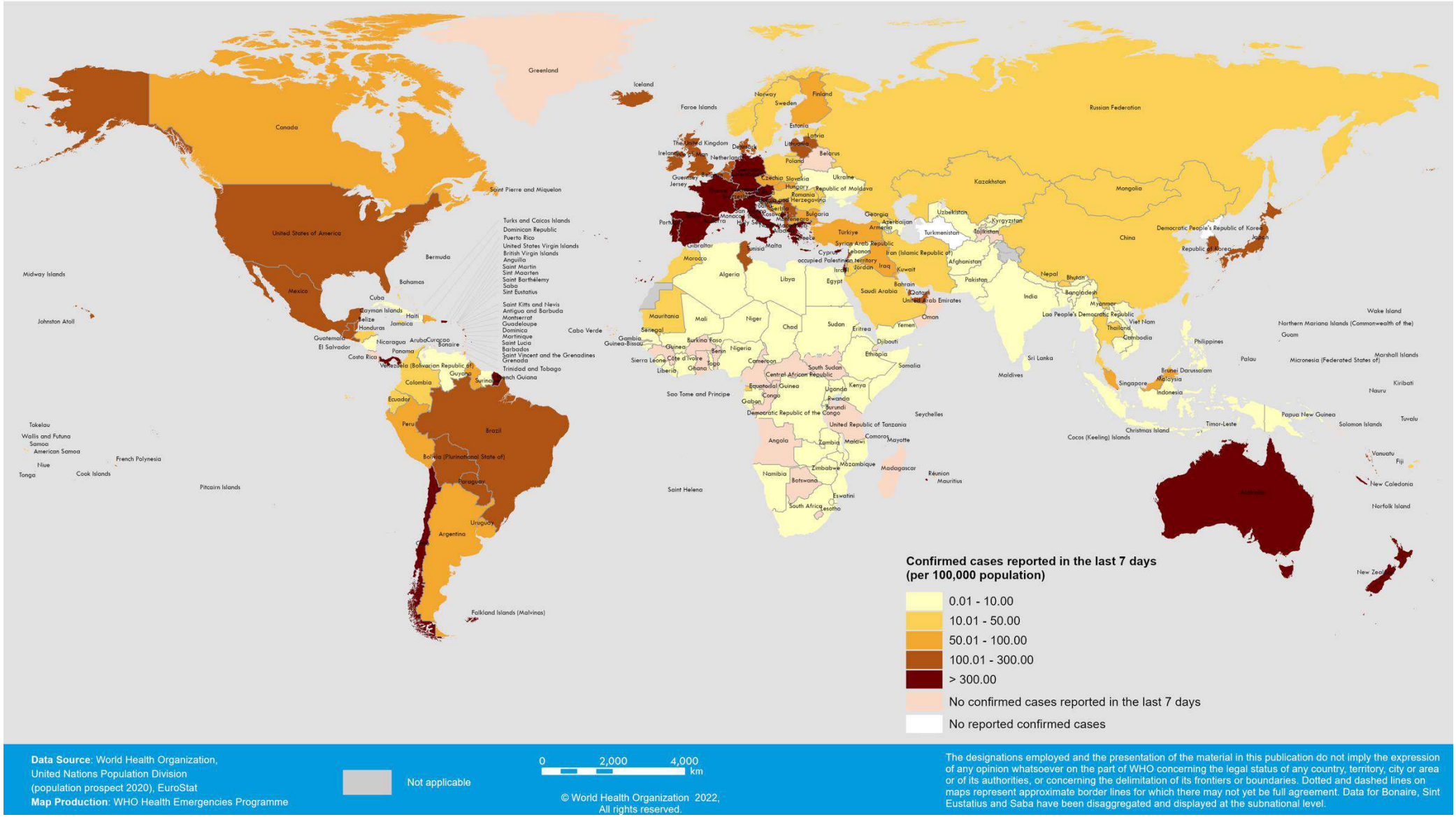
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	2 854 636 (49%)	4%	232 128 863 (42%)	2 946 (30%)	0%	2 031 961 (32%)
Americas	1 562 967 (27%)	-1%	165 258 879 (30%)	4 789 (49%)	-4%	2 769 531 (44%)
Western Pacific	1 057 634 (18%)	28%	65 491 304 (12%)	1 377 (14%)	-10%	240 280 (4%)
South-East Asia	164 547 (3%)	5%	58 792 794 (11%)	447 (5%)	23%	790 625 (12%)
Eastern Mediterranean	121 627 (2%)	25%	22 168 063 (4%)	199 (2%)	78%	343 796 (5%)
Africa	14 831 (<1%)	-33%	9 152 899 (2%)	114 (1%)	-17%	173 746 (3%)
Global	**5 776 242 (100%)**	**6%**	**552 993 566 (100%)**	**9 872 (100%)**	**-2%**	**6 349 952 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

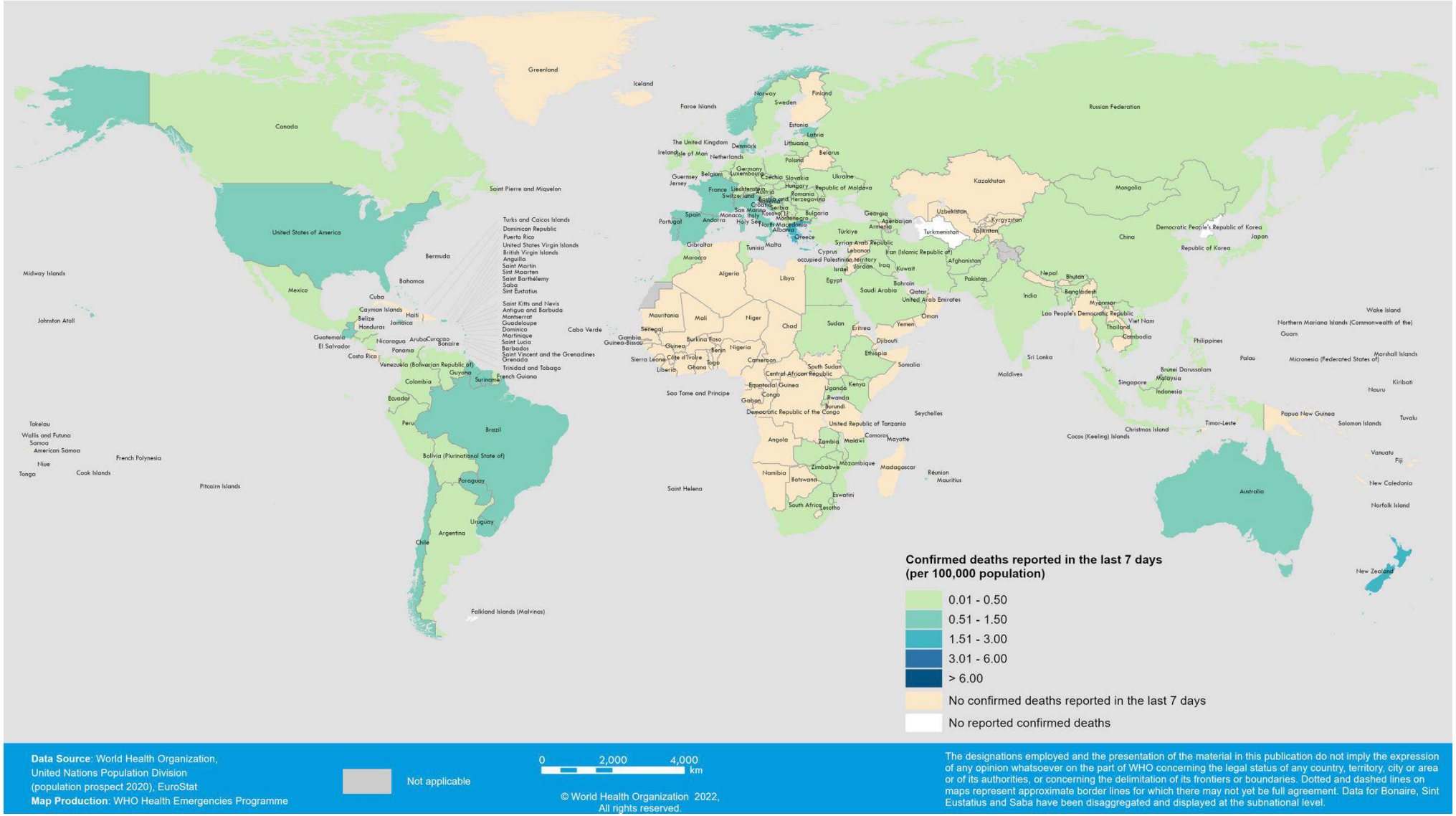
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update
- WHO COVID-19 detailed surveillance data dashboard

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 4 - 10 July 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 4 - 10 July 2022**



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

Geographic spread and prevalence of VOCs

Within the last 30 days (10 June to 10 July 2022), 159 848 sequences were submitted to GISAID. The Omicron VOC remains the dominant variant circulating globally, accounting for 84% of sequences reported in the past 30 days. Approximately 15% of sequences reported to GISAID in the last 30 days have not yet been assigned a PANGO lineage but majority are presumed to be Omicron.

Globally, the Omicron lineages BA.2 and BA.2.12.1 show declining trends, while BA.4 and BA.5 show increasing trends. A comparison of sequences submitted to GISAID in epidemiological week 25 (19 to 25 June 2022) and week 26 (26 June to 7 July) shows a decline in BA.2 sequences from 7% to 4% and a decline in BA.2.12.1 sequences from 13% to 7%. Within the same period, the proportion of reported sequences of BA.4 has risen from 11% to 14% and BA.5 from 42% to 50%. BA.5 sequences have been reported from 89 countries.

These trends should be interpreted with due consideration of the limitations of surveillance systems, including differences in sequencing capacity and sampling strategies between countries, as well as changes in sampling and sequencing strategies in multiple countries.

For more information on the assessment of SARS-CoV-2 variants and the WHO classification refer to Annex 2.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

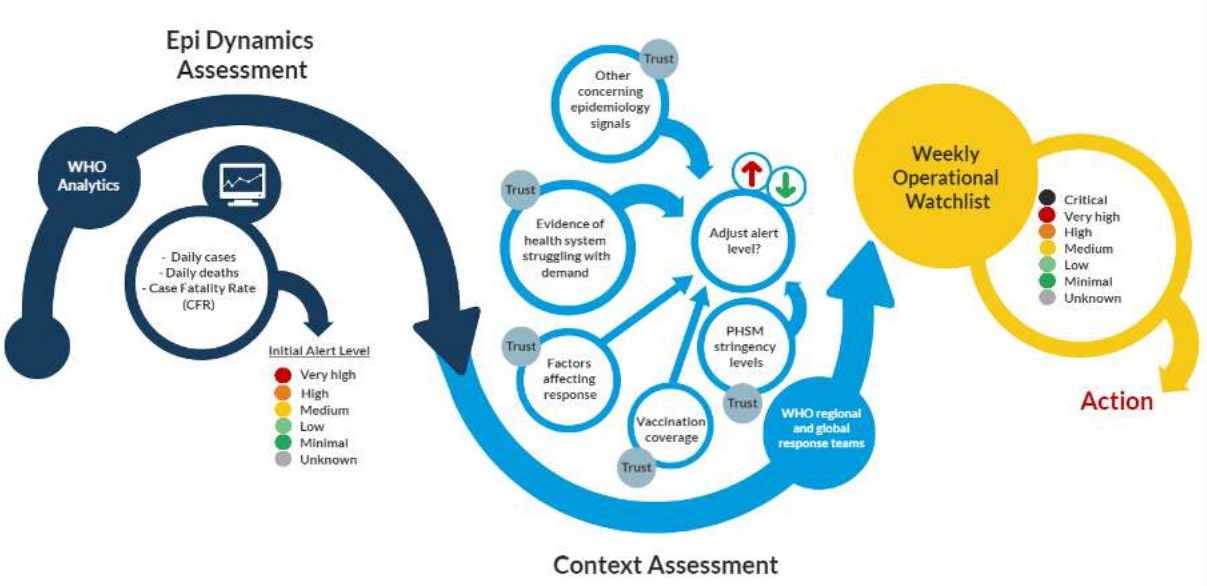
Special Focus: WHO global situational alert system: a mixed methods multi-stage framework to identify country-level COVID-19 alerts

Background

The COVID-19 pandemic has been marked by periods of increased transmission, at different times, across the globe. In an effort to better identify and respond to surges, WHO developed a global situational alert system, using a mixed methods framework, to support the identification of countries where immediate actions may help mitigate the impact of a surge in COVID-19 morbidity and mortality. The alert system was developed in early May 2021, following the rapid increase in hospitalizations and deaths in India and Nepal, during which time governments and national and international response organizations faced significant challenges and constraints with regard to mobilizing resources, global supplies and workforce to respond to the situation.

Integrated Analytics

Figure 4. Weekly assessment process stages



A global weekly assessment methodology was developed, comprising three main stages (Figure 4).

Stage one: Epidemiological dynamics assessment

An automated statistical risk assessment algorithm based on the daily incidence of cases and deaths reported over the previous week was used to predict the number of COVID-19 associated deaths (a proxy for disease severity) within the next five weeks per one million population. This stage produced an initial alert level.

Stage two: Context assessment

Additional contextual factors were manually assessed using 'signals' for each country based on three indicators: (i) health system pressures; (ii) other concerning epidemiological signals (e.g., concurrent outbreaks, concerns related to testing, changes in circulating variants of concern, etc.); and (iii) factors affecting the response – such as mass gatherings, population movement or instability related to acute events resulting in logistical challenges. 'Signals' were obtained from event-based surveillance from various sources, including Epidemic Intelligence from Open Sources (EIOS), internet search engines, WHO Regional Office situation reports, Ministry of Health websites and the internal WHO variant tracking database. This was combined with information on vaccination coverage and on the implementation of public health and social measures. An assessment of the trust in available data was attributed for each indicator, ranging from high (reliable data from a trusted source) to unknown (no information consistently output from a country, with limited or no media access). All indicators, and associated trust levels, were combined to produce a recommendation on whether a country should be maintained at the initial alert level, or whether this alert level should be adjusted upwards or downwards by one level based on identified aggravating or mitigating factors, respectively. Based on this, teams at WHO global and regional levels jointly agreed on a final classification for each country.

Stage three: Response

Based on the final classifications, a weekly operational watchlist of countries considered at moderate to critical alert level was produced and shared between WHO Headquarters and Regional Offices to inform and prompt response actions. The global situation alert system has facilitated the release of more than USD 27 million of internal emergency funding to help expedite response activities in at-risk contexts and has enabled the rapid release of operational and technical assistance, including over 450 000 antigen rapid diagnostic tests; over 6000 oxygen concentrators; support to deploy and establish COVID-19 treatment centers; and the deployment of rapid response teams. One of the inherent challenges in the methodology was the relatively short lead-time of the alerts, which limited the ability to influence operational decisions that require considerable advance planning, such as vaccine distribution. As countries became better prepared for future surges in cases and supply chain constraints eased in 2021, the weekly operational watchlist was increasingly used by response teams to facilitate high-level advocacy and guide the work of technical and operational teams.

Next steps

A retrospective qualitative and quantitative review of the process was undertaken between April and June 2022, to inform the use of this system for COVID-19 and of similar systems for future epidemics. Preliminary results suggest that the mixed methods approach, incorporating multiple data sources and allowing for differences in data quality, may have improved the capacity to rapidly identify deteriorating contexts, particularly when there were gaps or delays in official reporting of cases and deaths. This therefore helped to improve the situational assessments in a timely manner. However, developing a standardised global system remained challenging as data availability varied by country over the course of the pandemic. Moreover, despite the benefits of the qualitative assessment, this added a degree of subjectivity based on differing perceptions of risk.

Based on the decreased level of global operational support required for country responses to COVID-19 (due to preparedness and lessons learned over the past two years), a decision was made to pause the WHO global situational alert system for COVID-19 in May 2022. However, some WHO Regional Offices continue to use the system for their respective regions. Triggers which may prompt the reimplementation of the global system for COVID-19 are currently being drafted. Lessons learned are being documented, and the statistical risk assessment algorithm continues to be active, for potential adaptation to future epidemics or pandemics.

Conclusion

The WHO global situational alert system served as a global framework which enabled identification of countries at risk for surges in COVID-19 morbidity and mortality; and in some cases facilitated timely, evidence-based operational decision-making to mitigate these surges. The multi-stage nature of this alert system proved beneficial during the COVID-19 pandemic and the use of this system to inform evidence-based operational action should be explored for other outbreaks and health emergencies. The use of the WHO situational alert system for a different health emergency would nonetheless require adjustment of the parameters and indicators.

Acknowledgement: WHO acknowledges the work of teams at global, regional and country level which have contributed to this project, as well as UNICEF colleagues embedded in the global response.

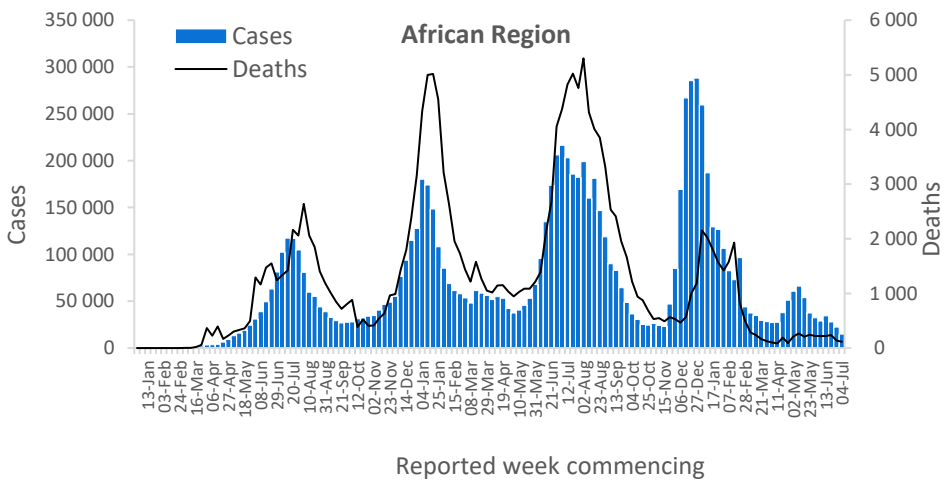
WHO regional overviews:

Epidemiological week 4 - 10 July 2022**

African Region

The African Region reported a decline in the number of new weekly cases, with over 14 000 new cases reported, a 33% decrease as compared to the previous week. Fifteen (31%) countries reported an increase in the number of new cases of 20% or greater, with some of the greatest proportional increases seen in Equatorial Guinea (269 vs 119 new cases; +126%), Mayotte (181 vs 81 new cases; +123%), and Gabon (218 vs 115 new cases; +90%). The countries that reported the highest numbers of new cases were Réunion (2869 new cases; 320.4 new cases per 100 000 population; +91%), South Africa (1978 new cases; 3.3 new cases per 100 000; -30%), and Kenya (1524 new cases; 2.8 new cases per 100 000; -33%).

The number of new weekly deaths in the Region decreased by 17% as compared to the previous week, with over 100 new deaths reported. The highest numbers of new deaths were reported from South Africa (64 new deaths; <1 new death per 100 000 population; -21%), Ethiopia (13 new deaths; <1 new death per 100 000; +63%), and Kenya (eight new deaths; <1 new death per 100 000; +100%).

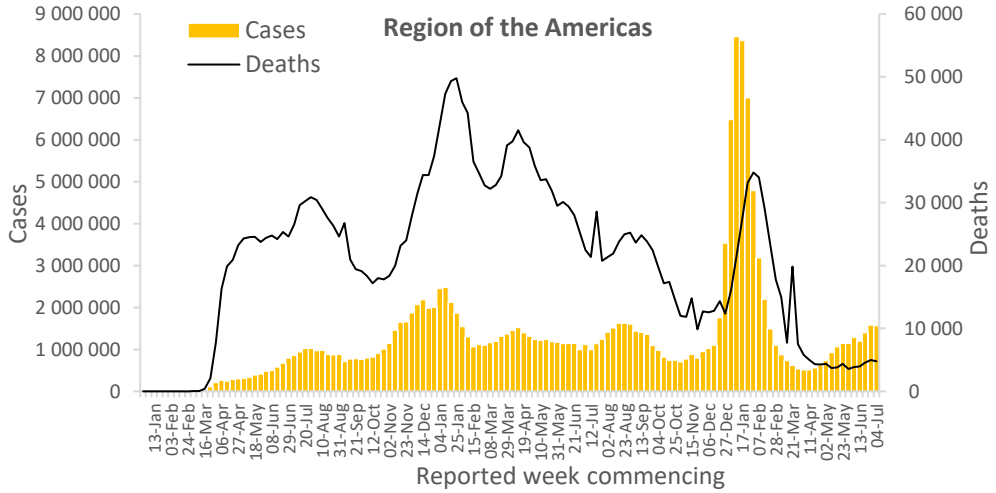


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 1.5 million new cases, a figure similar to that of the previous week. Eighteen of 56 (32%) countries for which data are available reported increases in the number of new cases of 20% or greater, with some of the greatest proportional increases observed in Saint Pierre and Miquelon (78 vs 12 new cases; +550%), Honduras (2130 vs 839 new cases; +154%), and Paraguay (12 988 vs 5309 new cases; +145%). The highest numbers of new cases were reported from the United States of America (722 924 new cases; 218.4 new cases per 100 000; -6%), Brazil (396 781 new cases; 186.7 new cases per 100 000; similar to the previous week's figures), and Mexico (137 426 new cases; 106.6 new cases per 100 000; similar to the previous week's figures).

The number of new weekly deaths reported in the Region was similar to that of the previous week, with over 4700 new deaths reported. The highest numbers of new deaths were reported from the United States of America (1987 new deaths; <1 new death per 100 000; -19%), Brazil (1639 new deaths; <1 new death per 100 000; +11%), and Chile (224 new deaths; 1.2 new deaths per 100 000; +26%).

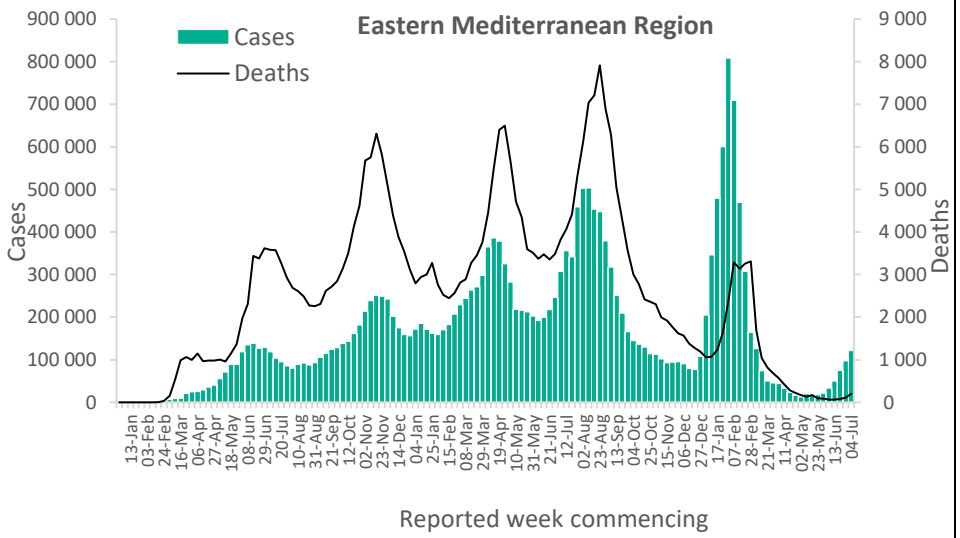


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 121 000 new weekly cases, representing a 25% increase as compared to the previous week. Ten (45%) countries reported increases in the number of new cases of 20% or greater, with some of the greatest proportional increases observed in Iran (Islamic Republic of) (8761 vs 2776 new cases; +216%), Tunisia (13 947 vs 5477 new cases; +155%), and the occupied Palestinian territory (2735 vs 1350 new cases; +103%). The highest numbers of new cases were reported from Iraq (29 194 new cases; 72.6 new cases per 100 000; +85%), Morocco (17 262 new cases; 46.8 new cases per 100 000; -18%), and Tunisia (13 947 new cases; 118.0 new cases per 100 000; +155%).

The number of new weekly deaths in the Region increased by 78% as compared to the previous week, with over 200 new deaths reported. The highest numbers of new deaths were reported from Tunisia (57 new deaths; <1 new death per 100 000; +171%), the Islamic Republic of Iran (39 new deaths; <1 new death per 100 000; +457% increase), and Morocco (35 new deaths; < new death per 100 000; +94%).

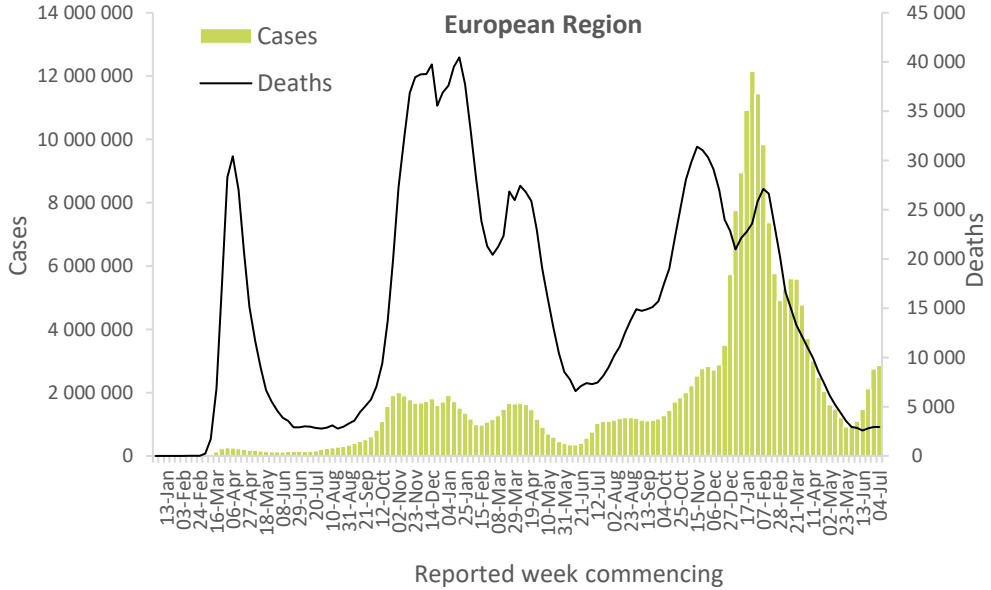


Updates from the Eastern Mediterranean Region

European Region

The number of new weekly cases reported in the European Region was similar to that of the previous week, with over 2.8 million new cases reported. Twenty-one (34%) countries in the Region reported increases in new cases of 20% or greater, with some of the greatest proportional increases observed in Kazakhstan (2293 vs 959 new cases; +139%), Kosovo[1] (1886 vs 849 new cases; +122%), and the Republic of Moldova (1014 vs 465 new cases; +118%). The highest numbers of new cases were reported from France (771 260 new cases; 1185.8 new cases per 100 000; +6%), Italy (661 984 new cases; 1109.9 new cases per 100 000; +30%), and Germany (561 136 new cases; 674.7 new cases per 100 000; -9%).

Over 2900 new weekly deaths were reported in the Region, similar to the previous week's figure. The highest numbers of new deaths were reported from Spain (619 new deaths; 1.3 new deaths per 100 000; +98%), Italy (574 new deaths; 1.0 new deaths per 100 000; +33%), and France (382 new deaths; <1 new death per 100 000; +52%).

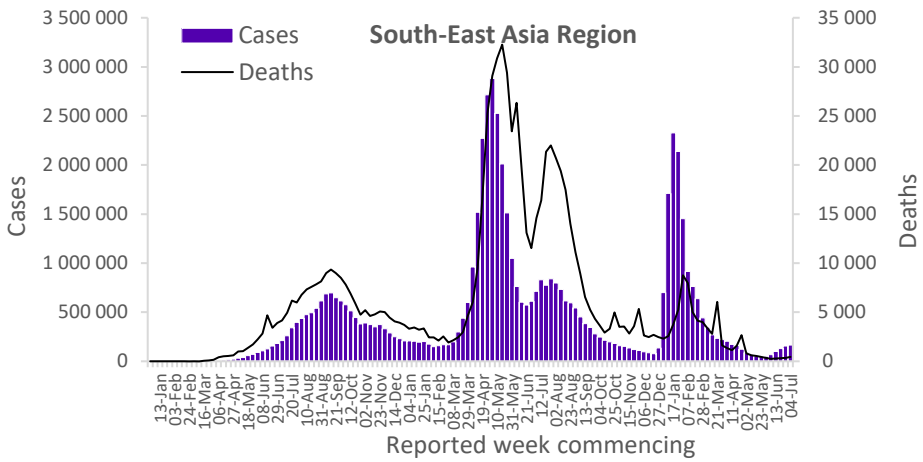


Updates from the European Region

South-East Asia Region

The South-East Asia Region has been reporting an increasing trend in cases since early June, with over 164 000 new cases reported, a 5% increase as compared to the previous week. Four of 10 countries (40%) for which data were available showed increases in the number of new cases of 20% or greater, with some of the greatest proportional increases observed in Nepal (516 vs 268 new cases; +93%) and Sri Lanka (106 vs 87 new cases; +22%). The highest numbers of new cases were reported from India (120 222 new cases; 8.7 new cases per 100 000; +7%), Indonesia (17 388 new cases; 6.4 new cases per 100 000; +29%), and Thailand (14 938 new cases; 21.4 new cases per 100 000; -6%).

The number of new weekly deaths in the Region increased by 23% as compared to the previous week, with over 400 new deaths reported. The highest numbers of new deaths were reported from India (229 new deaths; <1 new death per 100 000; +15%), Thailand (135 new deaths; <1 new death per 100 000; +25%), and Indonesia (42 new deaths; <1 new death per 100 000; +31%).

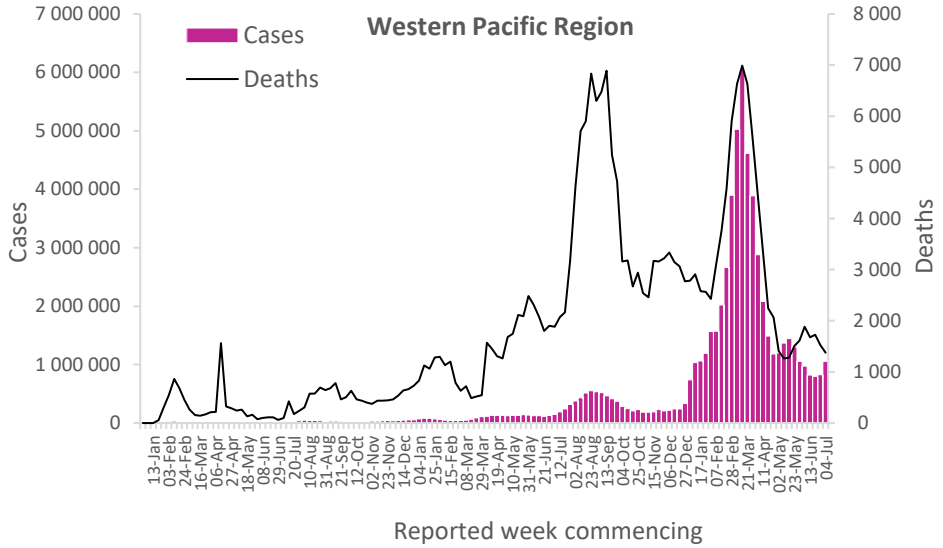


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported over 1 million new cases, a 28% increase as compared to the previous week. Fifteen (45%) countries reported increases in new cases of 20% or greater, with some of the largest proportional increases observed in Vanuatu (315 vs 100 new cases; +215%), French Polynesia (302 vs 118 new cases; +156%), and the Republic of Korea (122 234 vs 63 592 new cases; +92%). The highest numbers of new cases were reported from Japan (269 760 new cases; 213.3 new cases per 100 000; +98%), Australia (257 002 new cases; 1007.9 new cases per 100 000; +22%), and China (223 915 new cases; 15.2 new cases per 100 000; +17%).

The Region reported over 1300 new weekly deaths, representing a 10% decrease as compared to the previous week. The highest numbers of new deaths were reported from China (692 new deaths; <1 new death per 100 000; -8%), Australia (295 new deaths; 1.2 new deaths per 100 000; -11%), and Japan (108 new deaths; < 1 new death per 100 000; -44%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.
[2] Since 21 May 2022, data for COVID-19 cases and deaths in Northern Ireland was no longer included in the United Kingdom updates.
[3] Updates of an outbreak of COVID-19 reported in the Democratic People's Republic of Korea continue through official media since 12 May 2022; however, at present, no confirmed cases or deaths have been reported to WHO.

Annex 2. SARS-CoV-2 variants assessment and classification

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.

COVID-19 Weekly Epidemiological Update

Edition 99 published 6 July 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews

Global overview

Data as of 3 July 2022

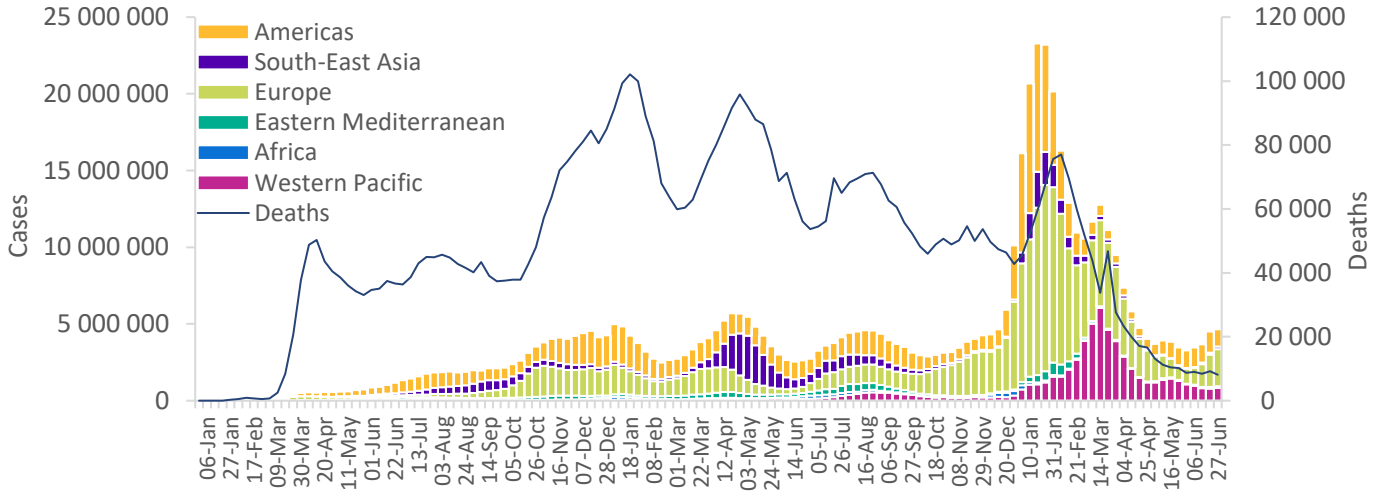
Globally, the number of weekly cases has increased for the fourth consecutive week, after a declining trend since the last peak in March 2022. During the week of 27 June to 3 July 2022, over 4.6 million new cases were reported, a figure similar to that of the previous week (Figure 1). The number of new weekly deaths decreased by 12%, with over 8100 fatalities reported.

At the regional level, the number of new weekly cases increased in the Eastern Mediterranean Region (+29%), the South-East Asia Region (+20%), the European Region (+15%), and the Western Pacific Region (+4%), while it decreased in the African Region (-33%) and the Region of the Americas (-18%). The number of new weekly deaths increased in the Eastern Mediterranean Region (+34%) and the South-East Asia Region (+16%), while decreases were observed in the African Region (-50%), the Region of the Americas (-13%), the European Region (-12%) and the Western Pacific Region (-12%).

As of 3 July 2022, over 546 million confirmed cases and over 6.3 million deaths have been reported globally.

These trends should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 3 July 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest numbers of new weekly cases were reported from France (603 074 new cases; +33%), Germany (555 331 new cases; -2%), Italy (511 037 new cases; +50%), the United States of America (496 049 new cases; -29%), and Brazil (334 852 new cases; -4%).

The highest numbers of new weekly deaths were reported from the United States of America (1 622 new deaths; -19%), Brazil (1 187 new deaths; -10%), China (755 new deaths; -30%), Italy (430 new deaths; +21%), and the Russian Federation (371 new deaths; -14%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 3 July 2022**

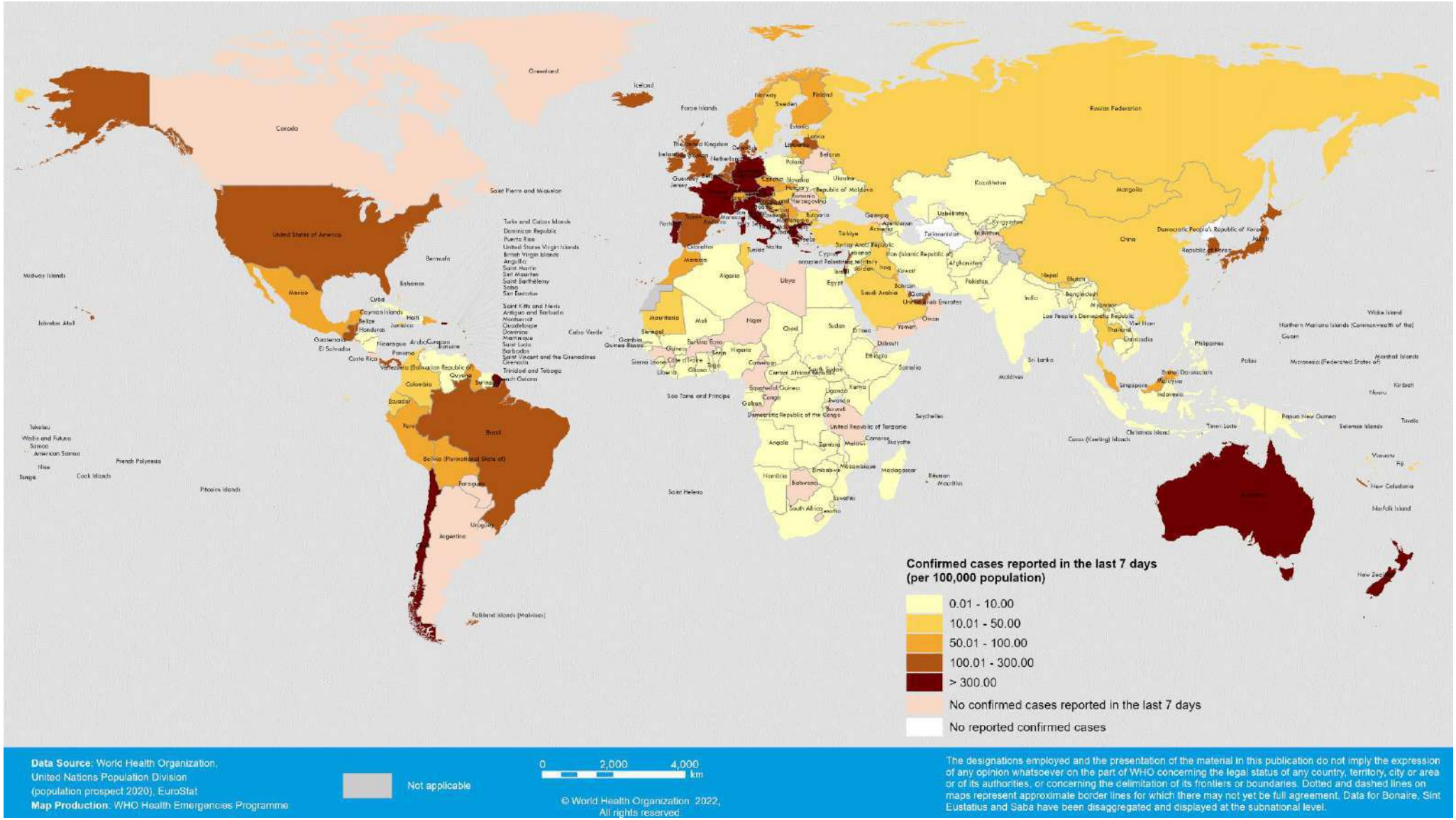
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	2 421 772 (52%)	15%	228 917 538 (42%)	2 347 (29%)	-12%	2 027 968 (32%)
Americas	1 128 639 (24%)	-18%	163 205 242 (30%)	3 632 (45%)	-13%	2 762 527 (44%)
Western Pacific	827 117 (18%)	4%	64 433 670 (12%)	1 526 (19%)	-12%	238 904 (4%)
South-East Asia	157 080 (3%)	20%	58 628 247 (11%)	364 (4%)	16%	790 178 (12%)
Eastern Mediterranean	95 912 (2%)	29%	22 044 303 (4%)	111 (1%)	34%	343 596 (5%)
Africa	18 483 (0%)	-33%	9 134 221 (2%)	122 (2%)	-50%	173 616 (3%)
Global	**4 649 003 (100%)**	**3%**	**546 363 985 (100%)**	**8 102 (100%)**	**-12%**	**6 336 802 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

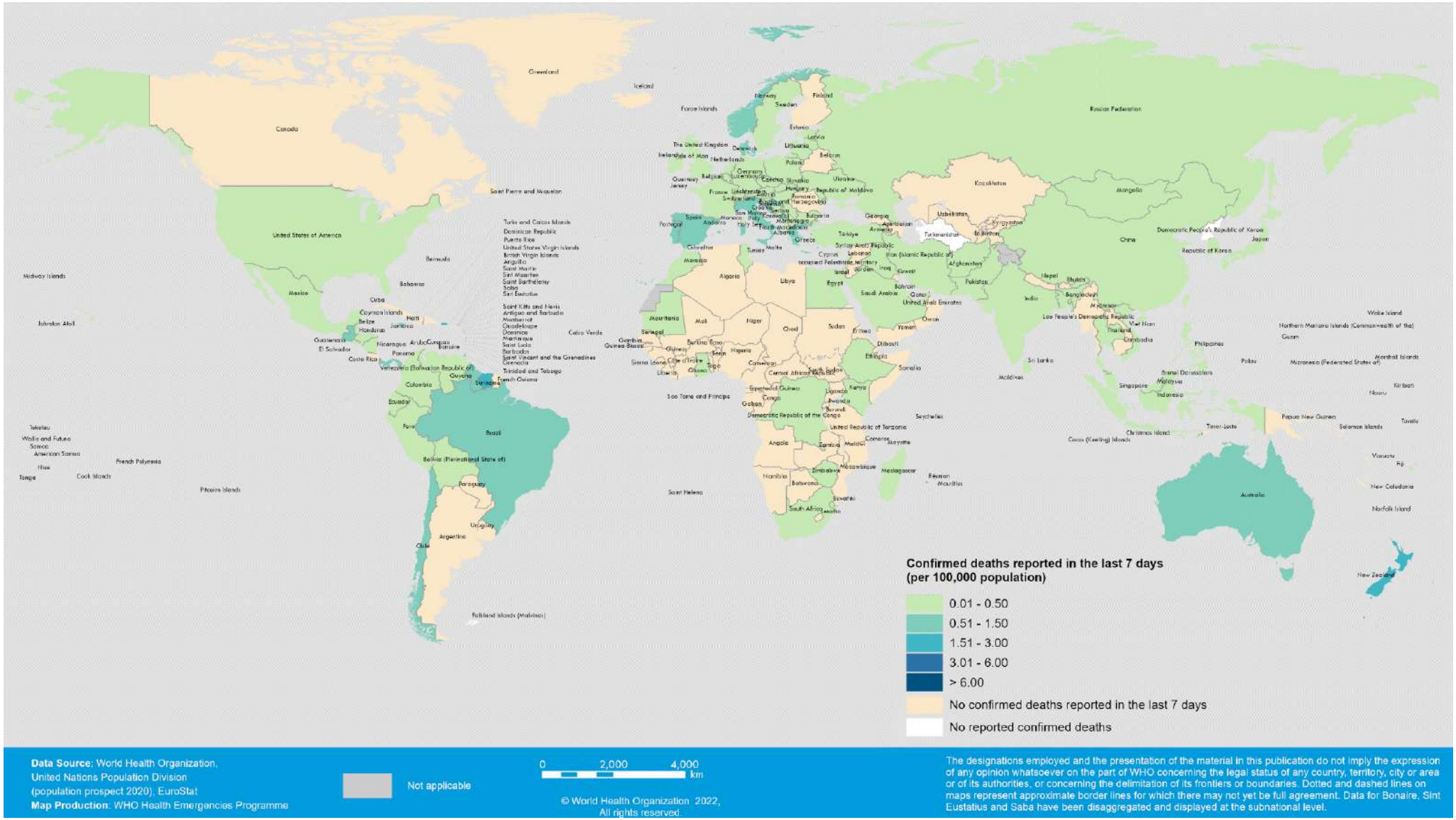
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update
  WHO COVID-19 detailed surveillance data dashboard

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 27 June - 3 July 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 27 June - 3 July 2022**



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.[1]

Geographic spread and prevalence of VOCs

The Omicron VOC continues to be the dominant variant circulating globally, accounting for 92% of sequences reported to GISAID between 1 and 30 June 2022. The remaining 8% waiting to be assigned are (presumed Omicron), Delta VOC and recombinants. Among Omicron lineages, the proportions of BA.5 and BA.4 continue to increase. BA.5 has been detected in 83 countries, and during epidemiological week 25 (19 to 25 June), the proportion of BA.5 among all sequences submitted weekly to GISAID increased from 37% to 52% (Table 2). Although BA.4 is also rising globally, the rate of increase is not as high as that of BA.5. BA.4 has been detected in 73 countries, and now accounts for 12% of all sequences submitted during week 25 (up from 11% in the previous week). BA.4 and BA.5 share similar mutations in SARS-CoV-2 spike but have different mutations in non-spike regions.

Globally, the proportions of Omicron lineages BA.2 and BA.2.12.1 have decreased as compared to week 23 (5 to 11 June). During week 25, the prevalence of BA.2 among all sequences submitted to GISAID was 9% (a decrease from 16% in the previous week) and the prevalence of BA.2.12.1 was 11% (a decrease from 19% in the previous week). BA.2 and BA.2.12.1 have been reported in 150 and 84 countries, respectively. There is no evidence yet regarding any change in severity with BA.4, BA.5 or BA.2.12.1 as compared to BA.2. However, the rise in prevalence of BA.2.12.1, BA.4 and BA.5 has coincided with an increase in cases in several WHO regions. In some countries, the rise in cases also resulted in a surge in hospitalizations, ICU admissions and deaths. In countries where the incidence of BA.4, BA.5 or BA.2.12.1 cases is now declining, the rise in cases, hospitalizations, ICU admissions and deaths have been lower as compared to the previous BA.1 and/or BA.2 waves. The differences observed in epidemiological situations is likely influenced by a number of factors, including surveillance, vaccination coverage and the implementation of PHSM.

Figure 4. Panel A and B: The number and percentage of SARS-CoV-2 sequences, as of 3 July 2022

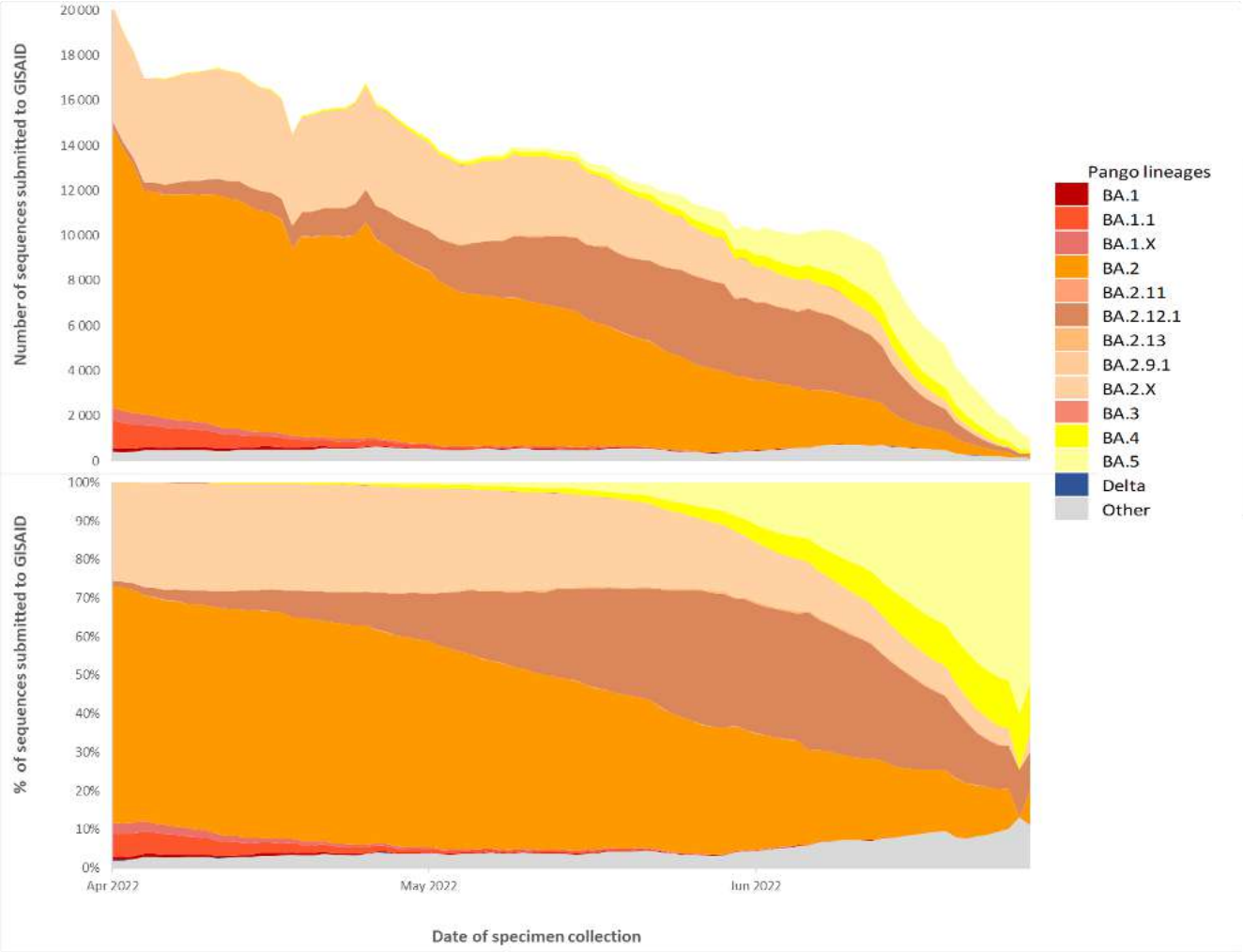


Figure 4 Panel A shows the number and **Panel B** the percentage of all circulating variants since 1 April 2022. Omicron sister-lineages and additional Omicron VOC descendent lineages under further monitoring (VOC-VUM) are shown. BA.1.X and BA.2.X include all BA.1 and BA.2 pooled descendent lineages, except those already shown in the figure above. Source: SARS-CoV-2 sequence data and metadata from GISAID, as of 3 July 2022.

Table 2. Relative proportions of SARS-CoV-2 sequences over the last four weeks by specimen collection date

			Last 4 weeks by collection date (%) [b]			
Lineage	**Countries**	**Sequences[a]**	**2022-22**	**2022-23**	**2022-24**	**2022-25**
BA.1	177	494 370	0.04	0.03	0.01	0.00
BA.1.1	177	973 139	0.12	0.06	0.03	0.03
BA.1.X*	176	907 266	0.08	0.03	0.04	0.02
BA.2	150	1 140 152	27.17	21.06	15.89	9.00
BA.2.11	20	697	0.03	0.02	0.01	0.06
BA.2.12.1	84	180 177	32.93	29.76	19.03	10.57
BA.2.13	44	3 366	0.52	0.47	0.38	0.41
BA.2.9.1	14	722	0.02	0.02	0.01	0.00
BA.2.X*	137	508 704	13.51	10.00	7.47	4.41
BA.3	41	1 060	0.01	0.02	0.03	0.00
BA.4	73	23 625	5.68	8.35	10.69	12.48
BA.5	83	56 476	14.22	23.11	36.92	51.68
Delta[#]	202	4 348 347	0.02	0.00	0.01	0.01
Other[^]	210	2 706 558	5.65	7.08	9.48	11.34

[a] Data source: cumulative sequences and metadata from GISAID.
[b] Relative proportions in %.
*BA.1.X and BA.2.X include all BA.1 and BA.2 pooled descendent lineages, except those already shown in the table.
[#] Previously circulating VOC.
[^]Other include sequences waiting to be assigned, Delta VOC and recombinants.

Characteristics of Omicron

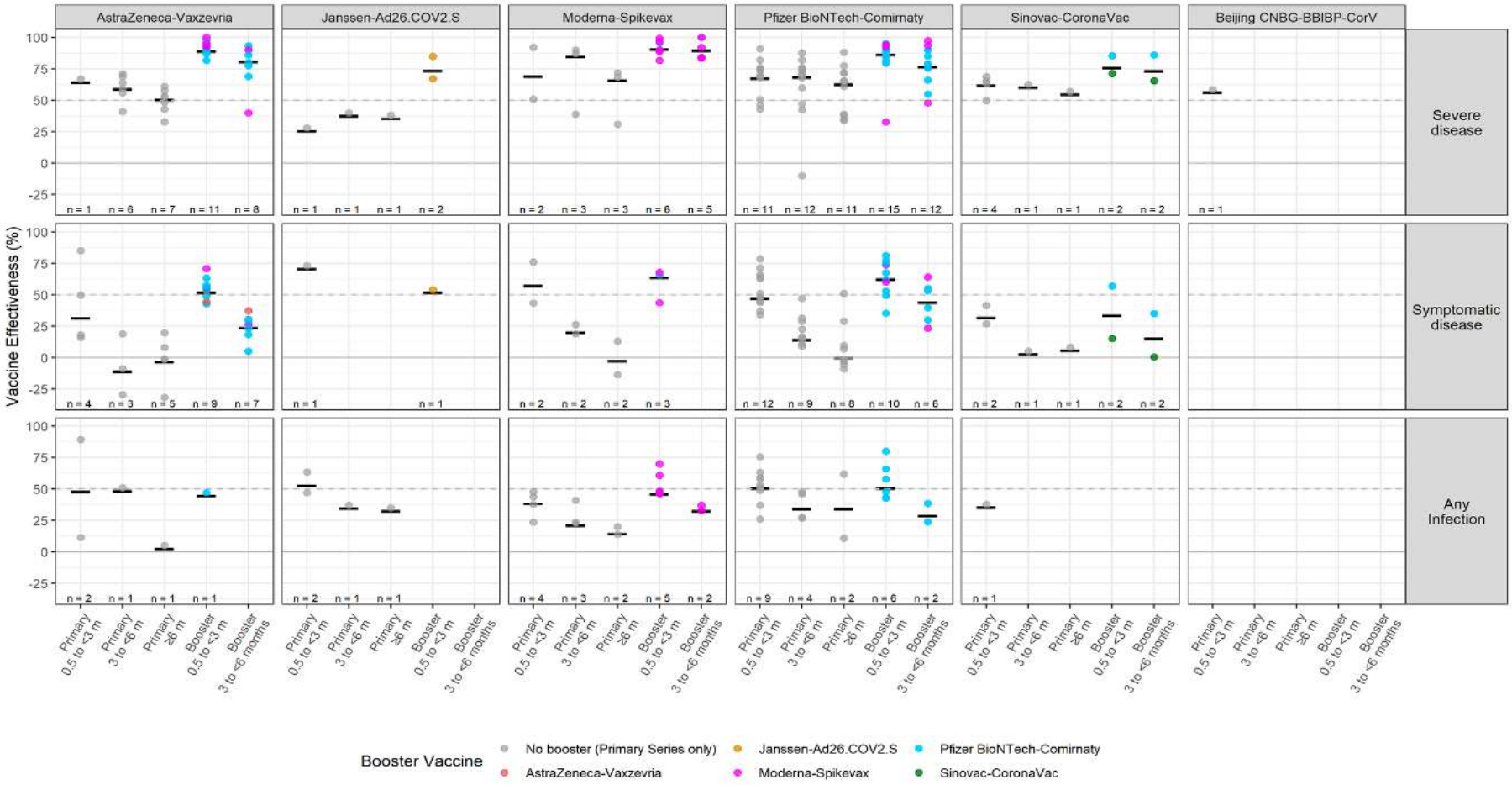
Available evidence on the phenotypic impacts of VOCs is reported in previous editions of the COVID-19 Weekly Epidemiological Update. Table 2 summarizes the phenotypic characteristics of the Omicron VOC and its sub-lineages for which evidence is available since the last update on 22 June 2022. Some of these studies have not been peer-reviewed and the findings must, therefore, be interpreted with due consideration of this limitation.

Table 3. Summary of phenotypic characteristics* of the Omicron VOC

Public health domain of impact	Omicron (B.1.1.529)	Omicron sublineages			
		BA.1	BA.2	BA.4	BA.5
Transmissibility	Growth advantage and increased transmissibility compared to Delta [1]	Lower transmissibility compared to BA.2[2]	Increased transmissibility compared to BA.1 [2]	Growth advantage compared to BA.2 [2]	Growth advantage over BA.2[2]
Disease severity	Overall evidence suggests lower severity despite some conflicting results. Earlier studies reported lower severity compared to Delta.[3–7] However, more recent studies in different settings reported similar [8,9] or increased severity[10] compared to Delta.[3–7,11] [12]	No difference in disease severity compared to BA.2[13]	No difference in disease severity compared to BA.1[13]	Currently available evidence does not suggest a difference in disease severity compared to BA.1 [14]	Currently available evidence does not suggest a difference in disease severity compared to BA.1 [15,16]
Risk of reinfection	Reduced risk of Omicron reinfection among individuals previously infected with a different SARS-CoV-2 variant compared to naïve individuals[17,18]	Reduced risk of reinfection with BA.1 following infection with BA.2[19]	Reduced risk of reinfection with BA.2 following infection with BA.1 [19]	No specific data available	No specific data available
Impact on antibody responses	Reduction in neutralizing activity as compared to other VOCs[20–22]	Lower neutralising antibody titers compared to the index virus [21]	Lower neutralising antibody titers compared to the index virus[21]	Lower neutralising antibody titres (7.6-fold) compared to BA.1 [23–25]	Lower neutralising antibody titres (7.5-fold) compared to BA.1 [23,25]
Impacts on diagnostics	PCR assays that include multiple gene targets maintain their accuracy to detect Omicron[26]; S gene target failure/positivity (SGTF) may be a proxy for screening. Limited to no impact on sensitivity of Ag-RDTs observed[27–30]	S gene target failure.	The majority will be S gene target positive (SGTP).	S gene target failure.	S gene target failure.
Impact on treatment	No difference in the effectiveness of antiviral agents (polymerase and protease inhibitors) against the Omicron variant[31]. Conserved neutralizing activity for three broadly neutralizing monoclonal antibodies (sotrovimab, S2X259 and S2H97) and a reduced effectiveness of other monoclonal antibodies[32–35]	Reduced efficacy of cilgavimab[36] and casirivimab-imdevimab [37]	Reduced neutralising activity of sotrovimab[36, 37], casirivimab and imdevimab [38]	Reduced neutralising activity of cilgavimab[38], casirivimab and imdevimab[38]	Reduced neutralising activity of cilgavimab[38], casirivimab and imdevimab[38]
Impact on vaccination	Results of vaccine effectiveness (VE) studies should be interpreted with caution because estimates vary with the type of vaccine administered and the number of doses and scheduling (sequential administration of different vaccines). For further information, see the section Interpretation of the results of the VE for the Omicron variant.				

[1] Similar methodology used as Reference [1]

Figure 5. Vaccine effectiveness (VE) of primary series and first booster vaccination against the Omicron variant of concern



Dots represent point estimates of VE from each study; dark black horizontal lines represent median VE across all studies in stratum. All data is from a systematic review of COVID-19 VE studies; methods and summary tables of VE studies can be found on view-hub.org. Vertical panels represent VE for full primary series (grey dots) and VE for homologous or heterologous booster vaccination (other colored dots) following completion of primary series vaccination with vaccine of primary series noted in panel header. All booster VE estimates are for the first booster dose. Severe disease includes hospitalization and pneumonia; symptomatic disease includes disease of any severity level; any infection can include symptomatic and asymptomatic infection. Additional details on the methods for inclusion of the estimates in the plots provided in text.

Figure 5 summarizes the impact of the Omicron variant on vaccine effectiveness (VE) over time, grouped by the primary series vaccine; booster doses may have been a different vaccine (i.e., both homologous and heterologous booster vaccination VEs are shown). Additional information on vaccine performance against VOCs can also be found in Annex 2.

Methods for Figure 5

- VE studies included in the plot were identified from an ongoing systematic review of COVID-19 vaccine effectiveness studies. All studies were cohort or test-negative designs conducted when Omicron was the predominant circulating variant. Methods for the systematic review and inclusion/exclusion criteria are available on view-hub.org.
- Only studies providing VE estimates of individual vaccines are included in the plot; studies assessing combined VE of more than one vaccine are excluded except for studies of heterologous primary and booster schedules where all participants included in a VE estimate received the same brands of vaccines in the same order.
- Only studies providing VE estimates for discrete time intervals since vaccination or estimates with limited follow-up time (such that the median time point falls clearly in one of the intervals for the plot) are included. Studies that only provide VE estimates over a cumulative period of time covering more than one time interval are excluded because they are difficult to interpret due to the marked waning of VE over time with Omicron.
- Only estimates of absolute vaccine effectiveness (i.e., the comparison group is unvaccinated persons) are included in the plot; estimates of relative vaccine effectiveness (e.g., the comparison group is persons having completed the primary series) are excluded as the interpretation of relative vaccine effectiveness is not comparable with absolute vaccine effectiveness.

Interpretation of the results of absolute VE for the Omicron variant

To date, 33 studies from 14 countries (Argentina, Brazil, Canada, Chile, Czech Republic, Denmark, Finland, Norway, Israel, Qatar, South Africa, the United Kingdom, the United States of America, and Zambia) have collectively assessed the protection of six vaccines against the Omicron variant (12 studies contributed VE estimates of primary series vaccination only, four contributed to estimates of first booster vaccination only, and 17 contributed to both). Findings from these studies show reduced VE of COVID-19 primary series vaccines against the Omicron variant for all outcomes (*severe disease*, *symptomatic disease*, and *infection*) than has been observed for the other four VOCs. Importantly though, VE estimates against the Omicron variant remain higher for *severe disease* than the other outcomes, in the majority of studies. The first booster vaccination substantially improves VE for all outcomes and for all combinations of schedules with estimates available for both primary series and booster vaccination. VE declines more over time after the first booster vaccination for symptomatic disease and infection than it does for severe disease[39]; however, studies that assess VE of booster vaccination beyond six months to evaluate longer duration of protection are not yet available.

For *severe disease*, VE of the primary series showed little decline over six months. VE was ≥70% during the first three months after primary series vaccination for seven of 13 (54%) VE estimates for the mRNA vaccines (Moderna-Spikevax and Pfizer BioNTech-Comirnaty). Of the two vector vaccines studies available, both had VE <70%: one reported VE <70% for AstraZeneca-Vaxzevria and the other reported VE <50% for Janssen-Ad26.COV2.S. Four estimates were available for inactivated vaccines: none of the three estimates for Sinovac-CoronaVac were ≥ 70% (2 [67%] were ≥ 50%); the single estimate for Beijing CNBG-BBIBP-CorV was <70% but ≥50%. Beyond three months after

vaccination, VE was ≥70% for 14 of 29 (48%) VE estimates for the mRNA vaccines (20 [69%] had VE ≥50%); one of 13 (8%) AstraZeneca-Vaxzevria VE estimates was ≥70% (9 [69%] were ≥50%); neither of the two estimates for the other vector-based vaccine, Janssen-Ad26.COV2.S, was ≥50%; the two VE estimates for Sinovac-CoronaVac were ≥50% but <70%.

The first booster dose vaccination improved VE against *severe disease* in all studies, and VE was ≥70% in 34 (94%) of 36 estimates evaluating VE between 14 days and three months of receipt of a booster dose (33 estimates evaluated an mRNA booster, two evaluated a Janssen-Ad26.COV2.S booster, and one evaluated a Sinovac-CoronaVac booster); one Moderna-Spikevax booster dose had VE <50%, and one Janssen-Ad26.COV2.S booster dose had VE <70%. At three to six months post mRNA booster, VE was ≥70% for 21 of 26 (81%) estimates (the primary series was an mRNA vaccine in 17 of the 26 estimates, AstraZeneca-Vaxzevria in eight and Sinovac-CoronaVac in one). One study found the VE to be <70% but ≥50% following three to six months from the third dose of Sinovac-CoronaVac.

VE against *symptomatic disease* and *infection* within the first three months of primary series vaccination was lower than against severe disease, and VE decreased more substantially over time. For *symptomatic disease*, only three of 14 (21%) VE estimates for the mRNA vaccines were ≥70% and only seven (50%) were ≥50%; one (25%) of the four VE estimates for AstraZeneca-Vaxzevria was ≥70% while the remaining three estimates were <50%; the single estimate for Janssen-Ad26.COV2.S was ≥70%, and both estimates for Sinovac (CoronaVac) were <50%. Beyond three months after vaccination, there were 31 VE estimates (21 estimates evaluated mRNA vaccines, eight evaluated AstraZeneca-Vaxzevria, and two evaluated Sinovac-CoronaVac), of which only one was ≥50% . mRNA booster vaccination after completion of a primary series of an mRNA vaccine, AstraZeneca-Vaxzevria, or Sinovac-CoronaVac improved VE against *symptomatic disease*: five of 21 (24%) VE estimates between 14 days and three months post booster were ≥70% (16 [76%] were ≥50%); one (50%) of two VE estimates evaluating three doses of AstraZeneca-Vaxzevria was ≥50% but <70% as was the single estimate for three doses of Janssen-Ad26.COV2.S, and the single estimate for three doses of Sinovac-CoronaVac was <50%. However, first booster dose protection declined rapidly over time: only three of 13 (23%) estimates available at three to six months following receipt of an mRNA booster dose had VE ≥50% and none were ≥70%. Neither the single estimate for three doses of AstraZeneca-Vaxzevria nor the single estimate for three doses of Sinovac-CoronaVac assessed three to six months post booster vaccination was above 50%. VE against *infection* showed a similar pattern of waning as that against *symptomatic disease*.

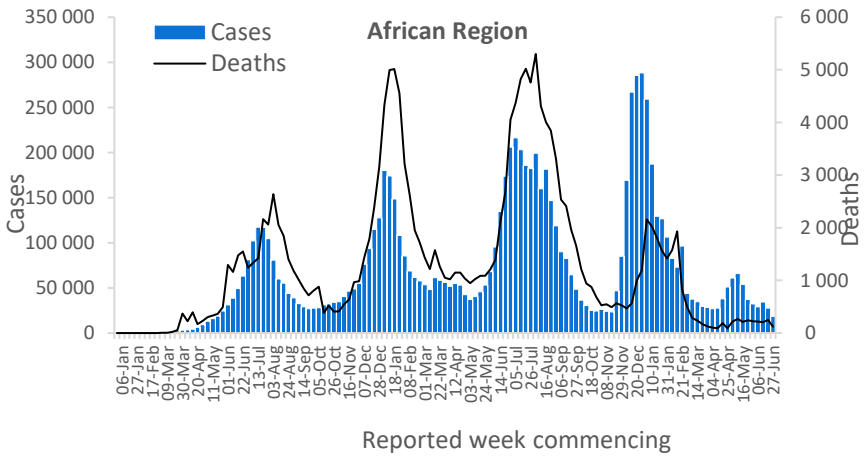
WHO regional overviews:

Epidemiological week 27 June - 3 July 2022**

African Region

The African Region reported a decline in the number of new weekly cases, with over 18 000 new cases reported, a 33% decrease as compared to the previous week. Thirteen (25%) countries reported an increase in the number of new cases of 20% or greater, with some of the greatest proportional increases seen in Mauritania (699 vs 135 new cases; +418%), Equatorial Guinea (92 vs 44 new cases; +109%) and Côte d'Ivoire (638 vs 340 new cases; +88%). The countries that reported the highest numbers of new cases were South Africa (2842 new cases; 4.8 new cases per 100 000 population; -58%), Kenya (2283 new cases; 4.2 new cases per 100 000; -20%), and Ethiopia (2038 new cases; 1.8 new cases per 100 000; -41%).

The number of new weekly deaths in the Region decreased by 50% as compared to the previous week, with over 100 new deaths reported. The highest numbers of new deaths were reported from South Africa (81 new deaths; <1 new death per 100 000 population; -39%), Zimbabwe (nine new deaths; <1 new death per 100 000; -40%), and Ethiopia (eight new deaths; <1 new death per 100 000; similar to the previous week's figures).

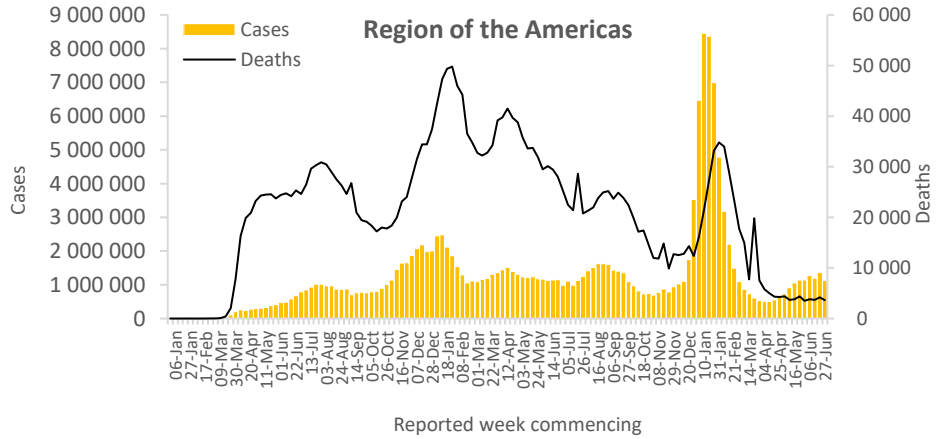


Updates from the African Region

Region of the Americas

The Region of the Americas reported a decrease in the number of new weekly cases, with over 1.1 million new cases reported, an 18% decrease as compared to the previous week. Fourteen of 46 (30%) countries for which data are available reported increases in the number of new cases of 20% or greater, with some of the greatest proportional increases observed in Saint Kitts and Nevis (155 vs 37 new cases; +319%), Haiti (302 vs 75 new cases; +303%), and Saint Barthélemy (43 vs 26 new cases; +65%). The highest numbers of new cases were reported from the United States of America (496 049 new cases; 149.9 new cases per 100 000; -29%), Brazil (334 852 new cases; 157.5 new cases per 100 000; -4%), and Mexico (97 374 new cases; 75.5 new cases per 100 000; +27%).

The number of new weekly deaths in the Region decreased by 13% as compared to the previous week, with over 3600 new deaths reported. The highest numbers of new deaths were reported from the United States of America (1622 new deaths; <1 new death per 100 000; -19%), Brazil (1187 new deaths; <1 new deaths per 100 000; -10%), and Chile (178 new deaths; <1 new death per 100 000; +12%).

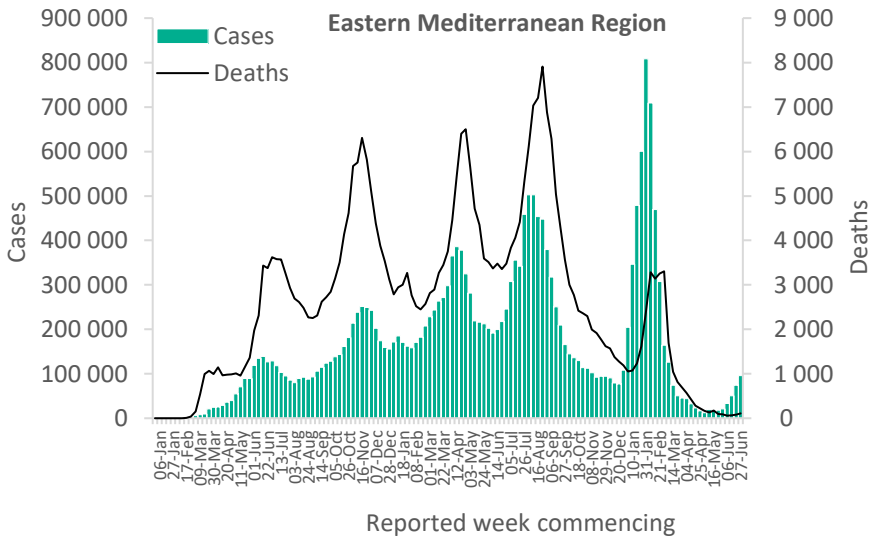


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported just under 96 000 new weekly cases, representing a 29% increase as compared to the previous week. Eight (36%) countries reported increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in the occupied Palestinian territory (1350 vs 403 new cases; +235%), Iraq (15 791 vs 6237 new cases; +153%), and Tunisia (5477 vs 2277 new cases; +141%). The highest numbers of new cases were reported from Morocco (21 124 new cases; 57.2 new cases per 100 000; +19%), Iraq (15 791 new cases; 39.3 new cases per 100 000; +153%), and the United Arab Emirates (12 347 new cases; 124.8 new cases per 100 000; +11%).

The number of new weekly deaths in the Region increased by 34% as compared to the previous week, with over 100 new deaths reported. Some of the highest numbers of new deaths were reported from Tunisia (21 new deaths; <1 new death per 100 000; +40%), Morocco (18 new deaths; <1 new death per 100 000; +50%), and Saudi Arabia (13 new deaths; <1 new death per 100 000; similar to the previous week's figures).

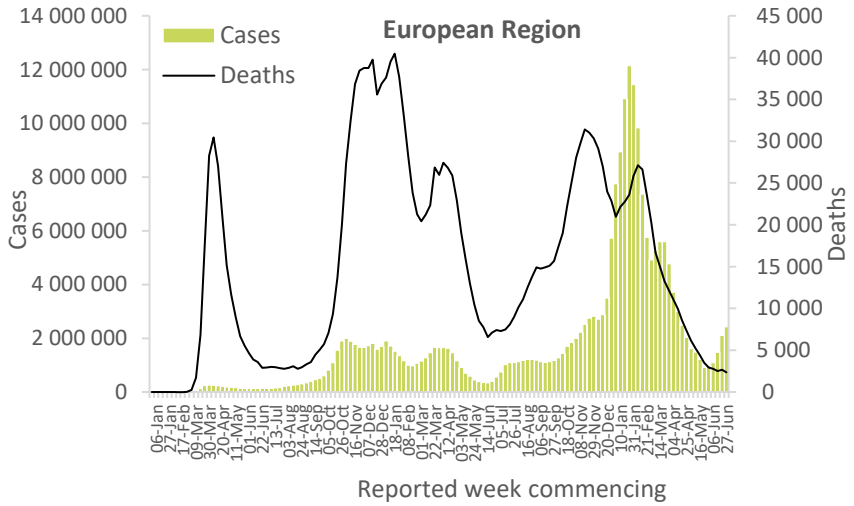


Updates from the Eastern Mediterranean Region

European Region

New weekly cases have continued to increase for over a month in the European Region, with over 2.4 million new cases reported, a 15% increase compared to the previous week. Thirty-one (51%) countries in the Region reported increases in new cases of 20% or greater, with the greatest proportional increases observed in Kosovo[1] (849 vs 199 new cases; +327%), Kyrgyzstan (29 vs 7 new cases; +314%) and Kazakhstan (959 vs 299 new cases; +221%). The highest numbers of new cases were reported from France (603 074 new cases; 927.2 new cases per 100 000; +33%), Germany (555 331 new cases; 667.7 new cases per 100 000; -2%), and Italy (511 037 new cases; 856.8 new cases per 100 000; +50%).

Over 2300 new weekly deaths were reported in the Region, a 12% decrease as compared to the previous week. The highest numbers of new deaths were reported from Italy (430 new deaths; <1 new death per 100 000; +21%), the Russian Federation (371 new deaths; <1 new death per 100 000; -14%), and Spain (312 new deaths; <1 new death per 100 000; -2%).

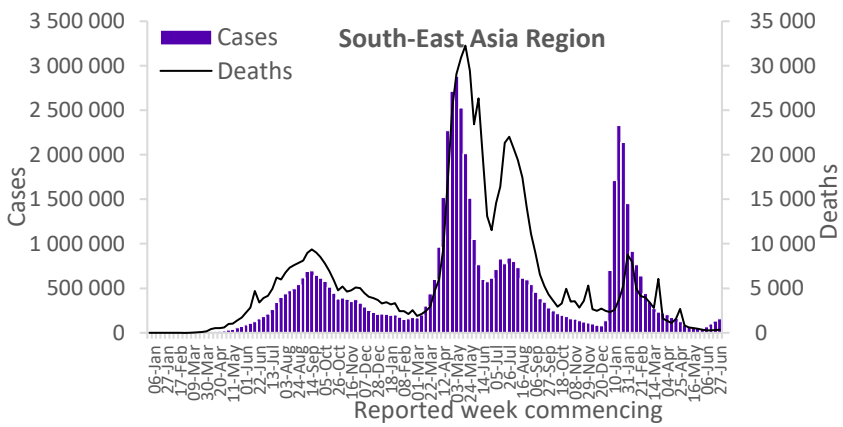


Updates from the European Region

South-East Asia Region

The South-East Asia Region has been reporting an increasing trend in cases since early June, with over 157 000 new cases reported, a 20% increase as compared to the previous week. Five of 10 countries (50%) for which data are available showed increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Bhutan (103 vs 48 new cases; +115%), Nepal (268 vs 171 new cases; +57%) and Bangladesh (13516 vs 8846 new cases; +53%). The highest numbers of new cases were reported from India (112 456 new cases; 8.1 new cases per 100 000; +21%), Thailand (15 950 new cases; 22.9 new cases per 100 000; +6%), and Bangladesh (13 516 new cases; 8.2 new cases per 100 000; +53%).

The number of new weekly deaths in the Region increased by 16% as compared to the previous week, with over 350 new deaths reported. The highest numbers of new deaths were reported from India (200 new deaths; <1 new death per 100 000; +39%), Thailand (108 new deaths; <1 new death per 100 000; -14%), and Indonesia (32 new deaths; <1 new death per 100 000; +7%).

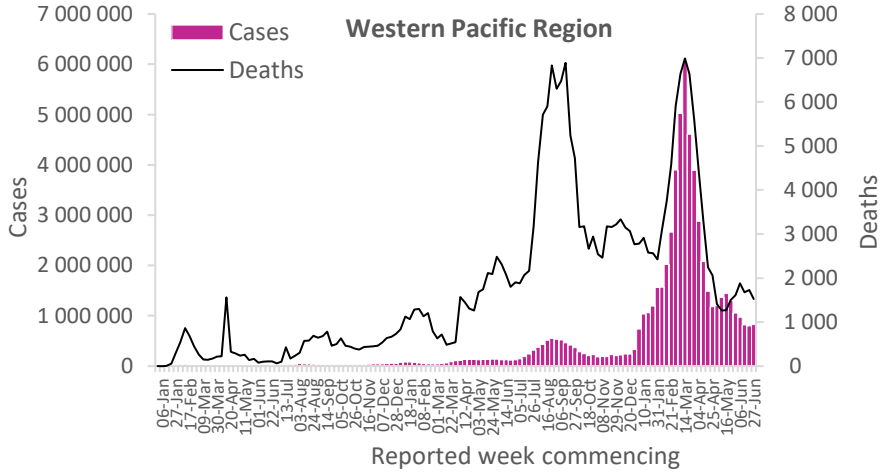


Updates from the South-East Asia Region

Western Pacific Region

After a decreasing trend in cases since mid-May, the Western Pacific Region reported a slight increase in new weekly cases, with over 827 000 new cases, a 4% increase as compared to the previous week. Thirteen (39%) countries reported increases in new cases of 20% or greater, with some of the largest proportional increases observed in the Commonwealth of the Northern Mariana Islands (190 vs 87 new cases; +118%), Palau (36 vs 20 new cases; +80%) and New Caledonia (822 vs 513 new cases; +60%). The highest numbers of new cases were reported from China (270 446 new cases; 18.4 new cases per 100 000; -19%), Australia (210 389 new cases; 825.1 new cases per 100 000; +7%), and Japan (136 357 new cases; 107.8 new cases per 100 000; +25%).

The Region reported over 1500 new weekly deaths, representing a 12% decrease as compared to the previous week. The highest numbers of new deaths were reported from China (755 new deaths; <1 new death per 100 000; -30%), Australia (331 new deaths; 1.3 new death per 100 000; similar to the previous week's figures), and Japan (192 new deaths; <1 new death per 100 000; +106%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.
[2] Since 21 May 2022, data for COVID-19 cases and deaths in Northern Ireland was no longer included in the United Kingdom updates.
[3] Updates of an outbreak of COVID-19 reported in the Democratic People's Republic of Korea continue through official media since 12 May 2022; however, at present, no confirmed cases or deaths have been reported to WHO.

Annex 2. Neutralization Studies of Primary Series and First Booster Vaccine Performance against Omicron Variant of Concern (data as of 27 June 2022)

		Omicron Sub-Lineage				
		BA.1	**BA.2**	**BA.2.12.1**	**BA.3**	**BA.4/BA.5**
Primary Series Vaccination						
WHO Emergency Use Listing (EUL) Qualified Vaccines	AstraZeneca-Vaxzevria/SII-Covishield	HNR_{9}	HNR_{1}	----	----	----
	Beijing CNBG-BBIBP-CorV	HNR_{7}	HNR_{2}	----	HNR_{1}	HNR_{1}
	Bharat-Covaxin	$\downarrow\downarrow_{1}$	----	----	----	----
	Cansino-Covidecia	----	----	----	----	----
	Janssen-Ad26-COV2.S	HNR_{6}	----	----	----	----
	Moderna-Spikevax	$\downarrow\downarrow\downarrow_{10}$	HNR_{2}	$\downarrow\downarrow\downarrow_{1}$	----	----
	Novavax-Nuvaxovid/SII - Covavax	----	----	----	----	----
	Pfizer BioNTech-Comirnaty	HNR_{47}	$\downarrow\downarrow\downarrow_{2}$	$\downarrow\downarrow\downarrow_{2}$	HNR_{1}	HNR_{1}
	Sinovac-CoronaVac	$\downarrow\downarrow\downarrow_{1}$	----	----	----	----
Vaccines without WHO EUL	Anhui ZL-Recombinant	----	----	----	----	----
	Gamaleya-Sputnik V	HNR_{2}	----	----	----	----
Booster Vaccination (Primary Series Vaccine + Booster Vaccine)						
WHO Emergency Use Listing (EUL) Qualified Booster Vaccines	AstraZeneca-Vaxzevria/SII-Covishield + AstraZeneca-Vaxzevria/SII Covishield	HNR_{2}	HNR_{2}	----	----	----
	AstraZeneca-Vaxzevria/SII-Covishield + Moderna-Spikevax	$\downarrow_{1}$	----	----	----	----
	AstraZeneca-Vaxzevria/SII-Covishield + Pfizer BioNTech-Comirnaty	$\downarrow\downarrow_{1}$	$\downarrow\downarrow_{1}$	----	$\downarrow\downarrow_{1}$	----
	Beijing CNBG-BBIBP-CorV + Beijing CNBG-BBIBP-CorV	$\downarrow\downarrow$to$\downarrow\downarrow\downarrow_{6}$	HNR_{2}	HNR_{1}	$\downarrow\downarrow_{1}$	HNR_{1}
	Janssen-Ad26-COV2.S + Janssen-Ad26-COV2.S	HNR_{1}	----	----	$\downarrow\downarrow_{1}$	----
	Moderna-Spikevax + Moderna-Spikevax	$\downarrow$to$\downarrow\downarrow\downarrow_{9}$	$\downarrow\downarrow_{1}$	$\downarrow\downarrow_{1}$	----	$\downarrow\downarrow\downarrow_{1}$
	Moderna-Spikevax + Pfizer BioNTech-Comirnaty	$\downarrow\downarrow\downarrow_{1}$			----	----
	Pfizer BioNTech-Comirnaty + Pfizer BioNTech-Comirnaty	$\downarrow$to$\downarrow\downarrow\downarrow_{38}$	$\downarrow$to$\downarrow\downarrow\downarrow_{11}$	$\downarrow\downarrow\downarrow_{1}$	$\downarrow$to$\downarrow\downarrow\downarrow_{3}$	$\downarrow\downarrow$to$\downarrow\downarrow\downarrow_{3}$
	Pfizer BioNTech-Comirnaty + Janssen-Ad26-COV2.S	$\downarrow_{2}$	----	----	----	----
	Pfizer BioNTech-Comirnaty + Moderna-Spikevax	$\downarrow$to$\downarrow\downarrow_{2}$	----	----	----	----
	Sinovac-CoronaVac + Sinovac-CoronaVac	HNR_{6}	$\downarrow\downarrow_{2}$	$\downarrow\downarrow_{1}$	$\downarrow\downarrow_{1}$	$\downarrow\downarrow_{1}$
	Sinovac-CoronaVac + Pfizer BioNTech-Comirnaty	$\downarrow\downarrow_{2}$	$\downarrow\downarrow_{1}$	----	----	----
Booster Vaccines without WHO EUL	Anhui ZL-Recombinant + Anhui ZL-Recombinant	HNR_{3}	----	----	----	----
	Beijing CNBG-BBIBP-CorV + Anhui ZL - Recombinant	$\downarrow\downarrow$to$\downarrow\downarrow\downarrow_{5}$	HNR_{2}	HNR_{1}	$\downarrow\downarrow\downarrow_{1}$	HNR_{1}
	Gamaleya-Sputnik V + Gamaleya Sputnik Light	$\downarrow\downarrow_{1}$	----	----	----	----
	Sinovac-CoronaVac + Anhui ZL - Recombinant	$\downarrow_{1}$	$\downarrow_{1}$	$\downarrow_{1}$	$\downarrow_{1}$	$\downarrow\downarrow_{1}$

Abbreviations: HNR=high non-response. Arrows generalize the magnitude of reduction in neutralization against the Omicron sub-lineage relative to the ancestral strain: "↔" indicates <2-fold reduction in neutralization; "↓" indicates 2 to <5-fold reduction; "↓↓" indicates 5 to <10-fold reduction; "↓↓↓" indicates ≥10-fold reduction. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies was used, restricting to studies reporting ≥75% of persons/sera with detectable neutralization titers. HNR indicates a median percent of persons/sera with detectable neutralization titers across all studies of <75%; in these instances, fold-reductions can be biased and, thus are not presented. The number of studies is shown as subscripts. For booster vaccination, only schedules with available results are shown.

Additional notes on Annex 2 table

- Studies contributing to the table are identified from an ongoing review of the preprint and published literature on neutralization of SARS-CoV-2 variants by COVID-19 vaccines.
- Studies that use samples collected more than seven days and less than six months after complete vaccination and that use an ancestral strain as the reference are included in the table.
- Studies of immunocompromised persons are excluded.
- It is important to note that studies vary in population and other methodological considerations, which may in part explain some differences when comparing products between different studies. In addition, the reductions summarized in the table do not incorporate uncertainty intervals around the degree of reductions, which can vary substantially across studies when reported.

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COVID-19 Weekly Epidemiological Update

Edition 98, published 29 June 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- Special Focus: Relative vaccine effectiveness
- WHO regional overviews

Global overview

Data as of 26 June 2022

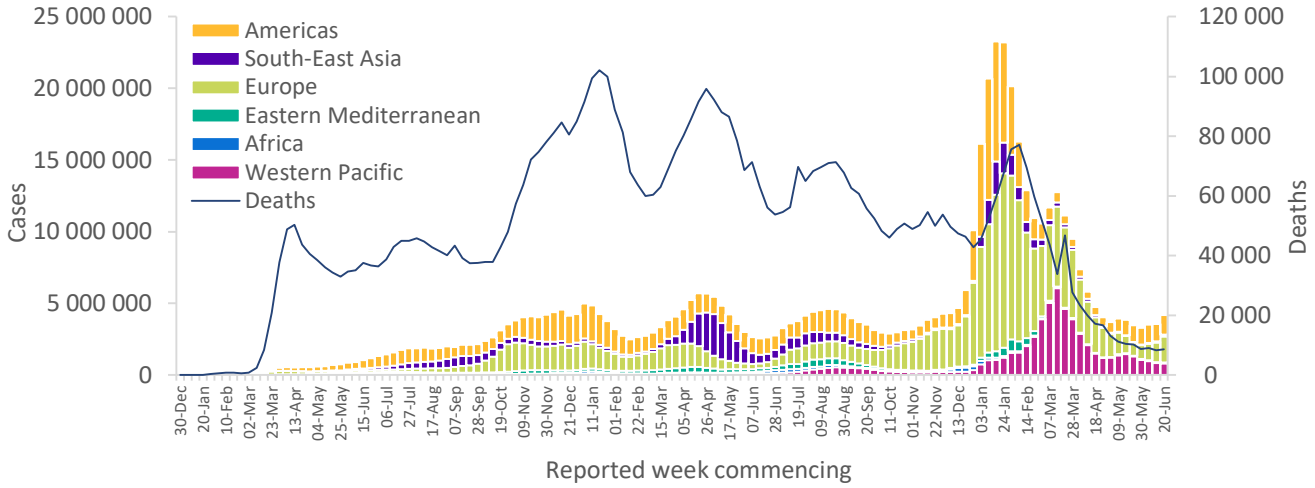
Globally, the number of weekly cases has increased for the third consecutive week, after a declining trend since the last peak in March 2022. During the week of 20 to 26 June 2022, over 4.1 million new cases were reported, an 18% increase as compared to the previous week (Figure 1). The number of new weekly deaths remained similar to that of the previous week, with over 8500 fatalities reported.

At the regional level, the number of new weekly cases increased in the Eastern Mediterranean Region (+47%), the European Region (+33%), the South-East Asia Region (+32%), and the Region of the Americas (+14%), while it decreased in the African Region (-39%) and the Western Pacific Region (-3%). The number of new weekly deaths increased in the Eastern Mediterranean Region (+22%), the South-East Asia Region (+15%), and the Region of the Americas (+11%), while decreases were observed in the Western Pacific Region (-6%), the European Region (-5%) and the African Region (-1%).

As of 26 June 2022, over 541 million confirmed cases and over 6.3 million deaths have been reported globally.

These trends should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 26 June 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest numbers of new weekly cases were reported from the United States of America (701 855 new cases; +5%), Germany (504 655 new cases; +23%), Brazil (349 791 new cases; +37%), Italy (340 012 new cases; +61%), and China (333 926 new cases; -18%).

The highest numbers of new weekly deaths were reported from the United States of America (1997 new deaths; -2%), Brazil (1313 new deaths; +37%), China (925 new deaths; -11%), the Russian Federation (429 new deaths; -3%), and Italy (355 new deaths; +5%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 26 June 2022**

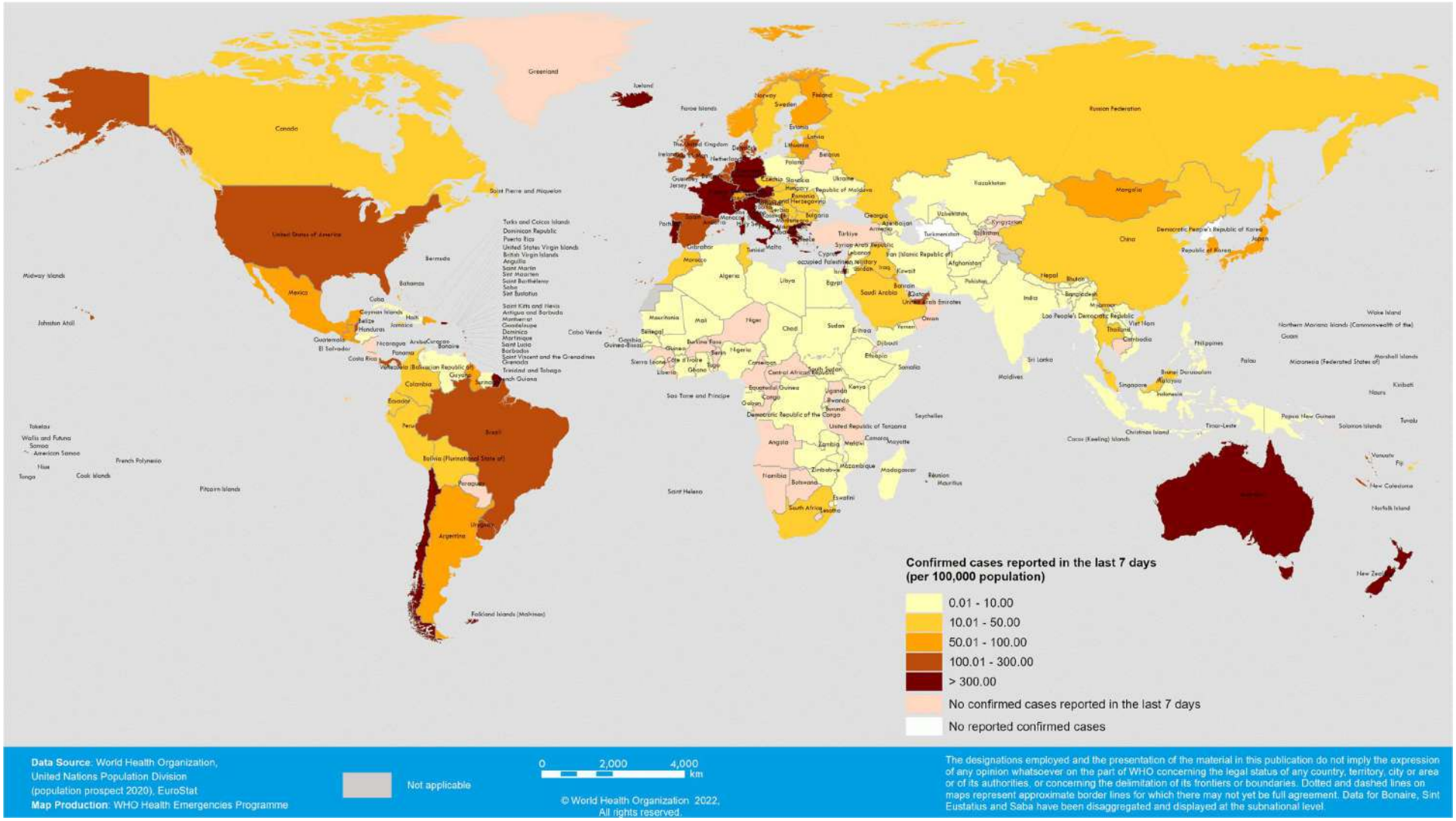
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	1 796 850 (43%)	33%	226 115 754 (42%)	2 259 (26%)	-5%	2 024 722 (32%)
Americas	1 360 367 (33%)	14%	162 064 197 (30%)	4 127 (48%)	11%	2 758 857 (44%)
Western Pacific	799 391 (19%)	-3%	63 605 980 (12%)	1 566 (18%)	-6%	237 209 (4%)
South-East Asia	131 014 (3%)	32%	58 471 132 (11%)	314 (4%)	15%	789 814 (12%)
Eastern Mediterranean	74 016 (2%)	47%	21 948 319 (4%)	83 (1%)	22%	343 485 (5%)
Africa	20 579 (<1%)	-39%	9 107 669 (2%)	203 (2%)	-1%	173 447 (3%)
Global	**4 182 217 (100%)**	**18%**	**541 313 815 (100%)**	**8 552 (100%)**	**3%**	**6 327 547 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

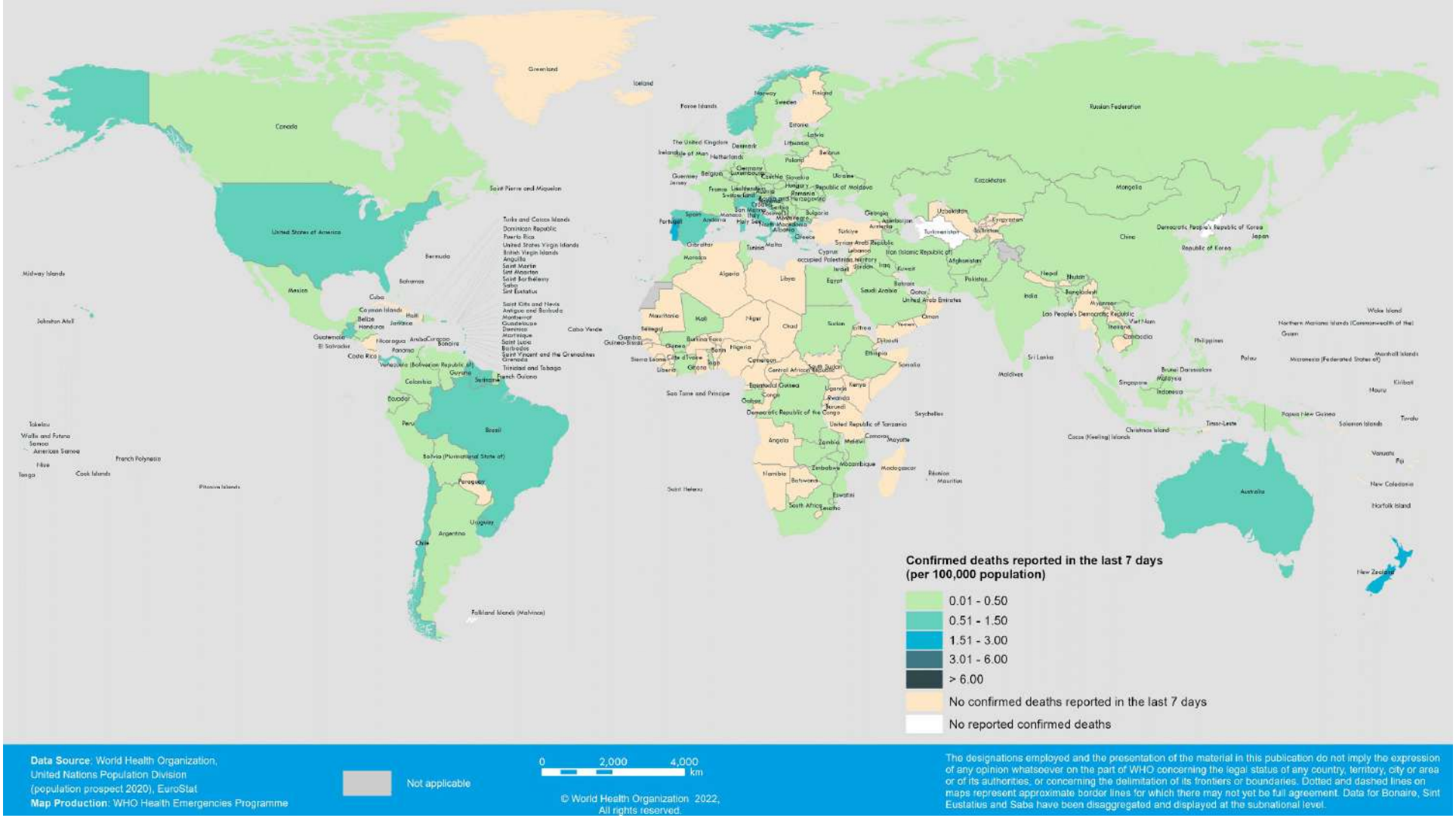
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update
- WHO COVID-19 detailed surveillance data dashboard

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 20 – 26 June 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 20-26 June 2022*



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.

Geographic spread and prevalence of VOCs

There continues to be a decline in the number of SARS-CoV-2 sequences submitted to GISAID, as compared to January 2022 when 1 248 906 sequences were submitted. From 27 May to 27 June 2022, 146 183 SARS-CoV-2 sequences were submitted to GISAID. Among these sequences, the Omicron VOC remains the dominant variant circulating globally, accounting for 94% of sequences reported in the past 30 days. Among Omicron sequences, as of epidemiological week 24 (13 to 19 June 2022) BA.2 represents 25%, while BA.2.12.1 represents 11%, BA.4 represents 12%, and BA.5 represents 43%. Comparing the proportion of Omicron sequences submitted during epidemiological weeks 23 (6 to 12 June) and 24, BA.2 declined from 30% to 25%, BA.2.12.1 declined from 18% to 11%, while BA.4 increased from 9% to 12% and BA.5 increased from 28% to 43%.

These trends should be interpreted with due consideration of the limitations of surveillance systems, including differences in sequencing capacity and sampling strategies between countries, as well as changes in sampling and sequencing strategies in multiple countries.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

Special Focus: Relative vaccine effectiveness

Vaccine effectiveness (VE) is a measure of how well vaccines work in the real world. Most VE studies compare the risk of a clinical outcome among vaccinated persons to the risk among unvaccinated persons, referred to as absolute VE (aVE).

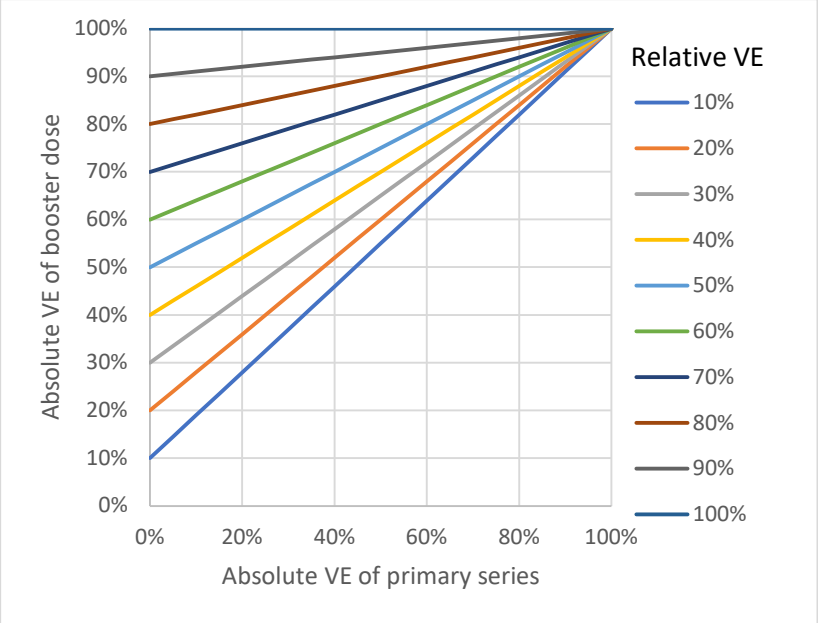
$$aVE = 1 - \frac{risk\ among\ vaccinated}{risk\ among\ unvaccinated}\ x\ 100\%$$

However, as vaccine coverage reaches a high rate (e.g., >90%), the unvaccinated population can become quite different from the vaccinated population in terms of SARS-CoV-2 exposure and/or disease risk, leading to a bias in the aVE results. To help mitigate this bias and compare more similar risk groups, one can compare vaccine effectiveness within the group of vaccinated individuals alone, specifically comparing by the number of doses received. For example, one can compare recipients of one booster dose to recipients of only the primary series, or compare recipients of two booster doses to recipients of one booster dose or the primary series, and so on. This type of comparison is called a relative VE (rVE) and has been done for several vaccines, such as those for influenza.[1] For COVID-19 vaccines, rVE has been reported in studies from multiple countries including Israel, Brazil and Canada.[2-4]

The relationship between absolute and relative VE can be expressed in the following mathematical terms (using boosted versus primary series as an example), which is demonstrated in Figure 4.

$$rVE = \frac{aVE_{boosted} - aVE_{primary\ series}}{1 - aVE_{primary\ series}}\ x\ 100\%$$

Figure 4. Relationship between absolute vaccine effectiveness to relative vaccine effectiveness[a]

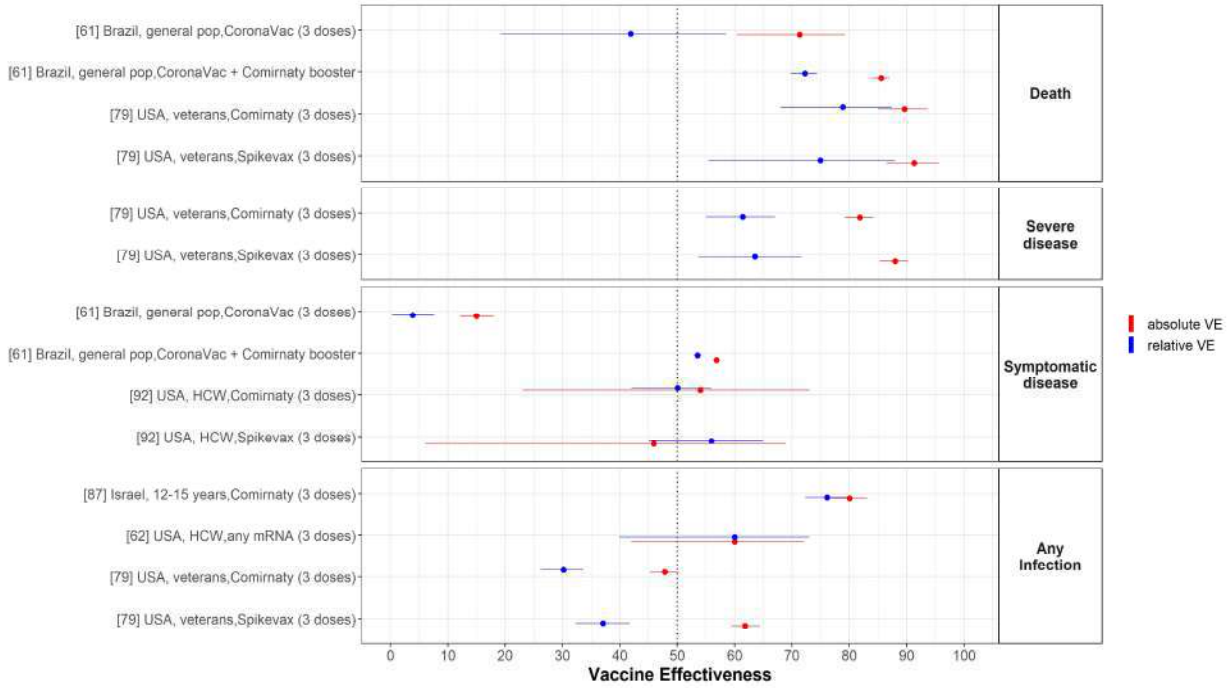


[a]The figure can be applied to any relative VE comparison (i.e., three doses versus two doses; four versus two doses etc.). In this figure, booster dose versus primary series have been used as an example.

At low aVE of the primary series (whereby primary series recipients are compared to unvaccinated persons), the rVE of the booster dose (whereby booster dose recipients are compared to primary series recipients) approximates the aVE of the booster dose (whereby booster dose recipients are compared to unvaccinated persons). However, at high aVE of the primary series, the rVE of the booster dose can vary quite dramatically while the incremental gain in aVE of the booster dose is small.

For example, if the aVE of the primary series is 90%, and the rVE of the booster dose is 50%, then the aVE of the booster dose is 95%. This rVE of 50% makes it appear like a significant increase in protection, but the gain in absolute VE is only 5%. Meanwhile, if the aVE of the primary series is 0%, and rVE of the booster dose is 50%, then the aVE of the booster dose is 50%. The true aVE of the booster dose should always be higher than the rVE, but by how much will depend on the true aVE of the primary series, which is determined by a variety of factors. However, in real-world VE studies, this is not always the case due to issues such as confounding bias (e.g. due to behavioral differences, history of a prior SARS-CoV-2 infection) and uncertainty of the estimates.

Figure 5. Absolute and relative vaccine effectiveness of the first booster dose against Omicron VOC[a]



[a] Labels on y-axis indicate: [reference number], country, population, vaccine. Reference numbers refer to study numbers in Table 2 of the *COVID-19 Vaccine Effectiveness Results Summary Table* found at https://view-hub.org/resources.

A few studies have evaluated both the aVE and the rVE of the booster dose. The results of these evaluations are summarized in Figure 5. Because persons in the comparison group potentially have some vaccine-induced immunity, the rVE is lower or equal to the aVE of the booster dose. If investigators do not provide the aVE of the booster dose, then one cannot calculate it from the rVE alone. One would need both the rVE and the aVE of the primary series at the same time in the same population to calculate the aVE of the booster dose.

The rVE provides a way to quantify the additional preventive benefit of a booster dose versus a primary series. The rVE must be interpreted with the understanding that the comparison group has potentially some residual protection

from the vaccine. Interpreting the rVE requires knowing the population and vaccine being evaluated, the timing of the last dose, the clinical outcome, and the epidemiologic situation, including the circulating SARS-CoV-2 variants. Because these are context and time-specific, one cannot use an aVE of the primary series from one study to calculate the aVE of a booster dose in another study. Furthermore, the rVE of a given vaccine cannot be compared across studies as rVE is dependent on aVE, signifying that averted events can vary widely from study to study.[5]

Second booster dose VE

To date, nine studies have assessed the rVE against the Omicron VOC over time of a second booster vaccine dose relative to either the first booster dose or the primary series. In five studies evaluating the protection of mRNA boosters against COVID-19 *severe disease* (hospitalization, ICU admission, and/or death), the rVE of a second mRNA booster dose compared to the first booster dose ranged from 40% to 86.5% (Table 2). The follow-up time was limited in all studies. Only one study was able to calculate the absolute and relative VE of a second booster dose against severe disease, finding an aVE of the second booster dose of 86%, an aVE of the first booster dose of 77%, and an rVE of 40%.[2] Also presented is the absolute risk reduction to show the impact of the addition of a second booster dose.

Table 2. Studies evaluating the relative vaccine effectiveness (VE) against SARS-CoV-2-specific outcomes of the second booster dose (data as of 27 June 2022)

				Infection with SARS-CoV2	Severe Disease/Mortality with COVID-19			
Study	**Country**	**Population studied**	**Vaccine Evaluated**	**Relative VE against Infection (95% CI)**	**Relative VE against Severe disease (95% CI)**	**Rate among comparator group**	**Rate among 2nd booster dose recipients**	**Rate difference**
Cohen et al [6]	Israel	HCWs	Pfizer-BioNTech-Comirnaty	44% (37-50%) ≥7 days after second booster dose versus ≥4 months after first[t] booster dose				
Regev-Yochay et al[7]	Israel	HCWs	Pfizer-BioNTech-Comirnaty	30% (-9 to55%) ≥7 days after second booster dose versus ≥4 months after first booster dose				
			Moderna-Spikevax	11% (-43 to 44%) ≥7 days after second booster dose versus ≥4 months after first booster dose				
Amir et al[4]	Israel	≥60 years	Pfizer-BioNTech-Comirnaty		89% (87-91%) 0-2 months after second booster dose versus ≥4 months after primary series.	11.6 (10.6-12.9) / 100 000 person days at risk	1.3 (1.1-1.4) / 100 000 person days at risk	10.3 cases / 100 000 person days at risk
Arbel et al[8]	Israel	≥60 years	Pfizer-BioNTech-Comirnaty		78% (72-83%) ≥7 days after second booster dose versus ≥4 months after first booster dose (mortality)	99.2 / 100 000 persons at risk	28 / 100 000 persons at risk	71.2 / 100 000 persons at risk*

Bar-On et al[9]	Israel	≥60 years	Pfizer-BioNTech-Comirnaty	52% (50-52%) 15-21 days after second booster dose versus ≥4 months after first booster dose	66% (57-72%) 15-21 days after second booster dose versus ≥4 months after first booster dose	5.5 (5.2-5.9) / 100 000 person days at risk	2.3 (1.9-2.8) / 100 000 person days at risk	3.2 (2.7-3.7) / 100 000 person days at risk
				9% (0-17%) 50-56 days after second booster dose versus ≥4 months after first booster dose	77% (62-86%) 36-42 days after second booster dose versus ≥4 months after first booster dose	5.5 (5.2-5.9) / 100 000 person days at risk	1.3 (0.8- 2.2) / 100 000 person days at risk	4.2 (3.4–4.9) / 100 000 person-days at risk
Magen et al [10]	Israel	≥60 years	Pfizer-BioNTech-Comirnaty	52% (49-54%) 14-30 days after second booster dose versus ≥4 months after first booster dose	64% (48-77%) 14-30 days after second booster dose versus ≥4 months after first booster dose	85.2 / 100 000 persons	30.4 / 100 000 persons	54.8 (34.7–75.9) / 100 000 persons
Gazit et al [11]	Israel	≥60 years	Pfizer-BioNTech-Comirnaty	65.1% (63-67.1% 14-20 days after second booster dose versus ≥4 months after first booster dose	77.5% (69.7-83.2%) 7-27 days after second booster dose versus ≥4 months after first booster dose			
				22% (4.9-36.1%) 63-69 days after second booster dose versus ≥4 months after first booster dose	86.5% (63.4-95%) 49-69 days after second booster dose versus ≥4 months after first booster dose			
Muhsen et al[12]	Israel	Residents of LTCFs	Pfizer-BioNTech-Comirnaty	34% (30%-37%) ≥7 days after second booster dose versus ≥4 months after first booster dose	67% (57%-75%) against severe hospitalization and 72% (54%-83%) against death ≥7 days after second booster			

					dose versus ≥4 months after first booster dose			
Grewal et al[2]	Canada	≥60 years living in LTCFs	Pfizer-BioNTech-Comirnaty Moderna-Spikevax	19% (12-26%) ≥7 days after second booster dose versus ≥84 days after first booster dose	40% (24-52%) ≥7 days after second booster dose versus ≥84 days after first booster dose			

HCW = healthcare workers
LTCF = long-term care facilities
*Unadjusted rates

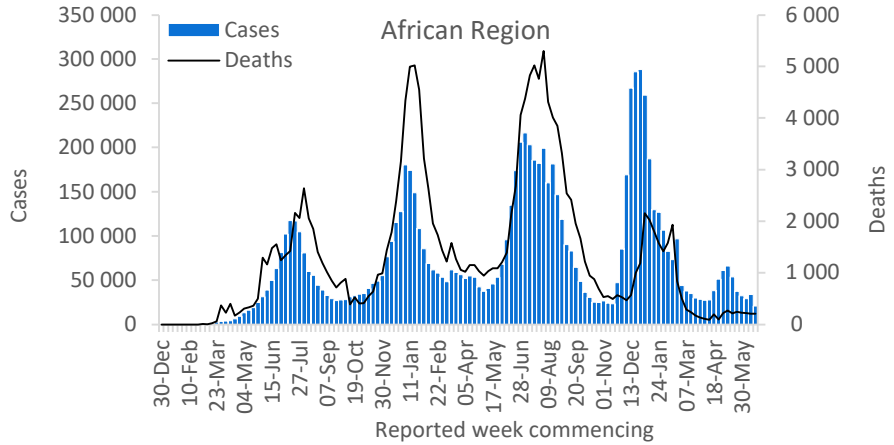
WHO regional overviews:

Epidemiological week 20-26 June 2022**

African Region

The African Region reported a decline in the number of new weekly cases, with over 20 000 new cases reported, a 39% decrease as compared to the previous week. Fourteen (29%) countries reported an increase in the number of new cases of 20% or greater, with some of the greatest proportional increases seen in Equatorial Guinea (44 vs six new cases; +633%), Gabon (82 vs 31 new cases; +165%) and the Seychelles (184 vs 88 new cases; +109%). The countries that reported the highest numbers of new cases were South Africa (6843 new cases; 11.5 new cases per 100 000 population; -14%), Ethiopia (3092 new cases; 2.7 new cases per 100 000; -40%), and Kenya (2859 new cases; 5.3 new cases per 100 000; +21%).

The number of new weekly deaths in the Region was similar as compared to the previous week, with over 200 new deaths reported. The highest numbers of new deaths were reported from South Africa (133 new deaths; <1 new death per 100 000 population; +10%), Democratic Republic of the Congo (17 new deaths; <1 new death per 100 000; +325%), and Zimbabwe (15 new deaths; <1 new death per 100 000; +15%).

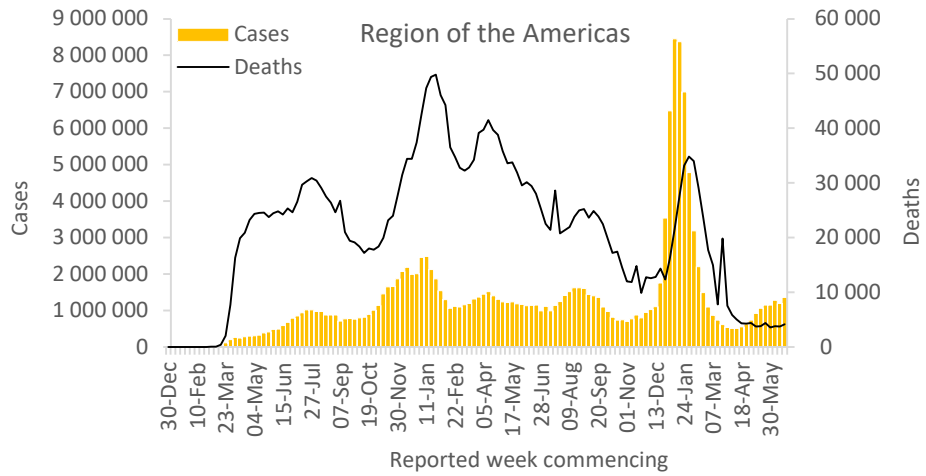


Updates from the African Region

Region of the Americas

The Region of the Americas reported an increase in the number of new weekly cases, with over 1.3 million new weekly cases, a 14% increase as compared to the previous week. Sixteen (29%) countries reported increases in the number of new cases of 20% or greater, with some of the greatest proportional increases observed in Canada (15 051 vs 6515 new cases; +131%), the Falkland Islands (Malvinas) (51 vs 23 new cases; +122%) and Bolivia (Plurinational State of) (5485 vs 2617 new cases; +110%). The highest numbers of new cases were reported from the United States of America (701 855 new cases; 212.0 new cases per 100 000; +5%), Brazil (349 791 new cases; 164.6 new cases per 100 000; +37%), and Mexico (76 407 new cases; 59.3 new cases per 100 000; +47%).

The number of new weekly deaths in the Region increased by 11% as compared to the previous week, with over 4100 new deaths reported. The highest numbers of new deaths were reported from the United States of America (1997 new deaths; <1 new death per 100 000; -2%), Brazil (1313 new deaths; <1 new death per 100 000; +37%), and Chile (159 new deaths; <1 new death per 100 000; +6%).

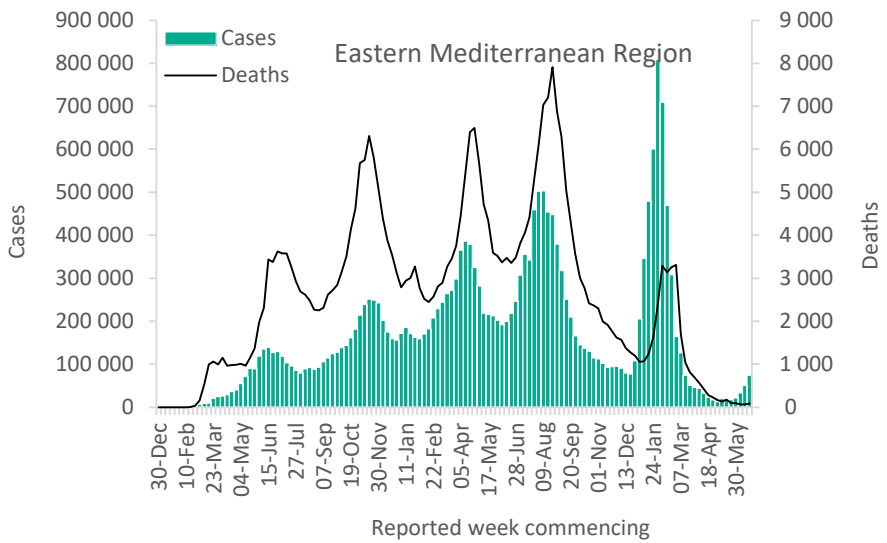


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 74 000 new weekly cases, representing a 47% increase as compared to the previous week. Ten (45%) countries reported increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Iraq (6237 vs 2210 new cases; +182), Tunisia (2277 vs 886 new cases; +157%), and Pakistan (1652 vs 718 new cases; +130%). The highest numbers of new cases were reported from Morocco (17 729 new cases; 48.0 new cases per 100 000; +84%), Bahrain (12 740 new cases; 748.7 new cases per 100 000; +38%), and the United Arab Emirates (11 139 new cases; 112.6 new cases per 100 000; +15%).

The number of new weekly deaths in the Region increased by 22% as compared to the previous week, with 83 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (20 new deaths; <1 new death per 100 000; +43%), Tunisia (15 new deaths; <1 new death per 100 000; +114%), and Saudi Arabia (13 new deaths; <1 new death per 100 000; -13%).

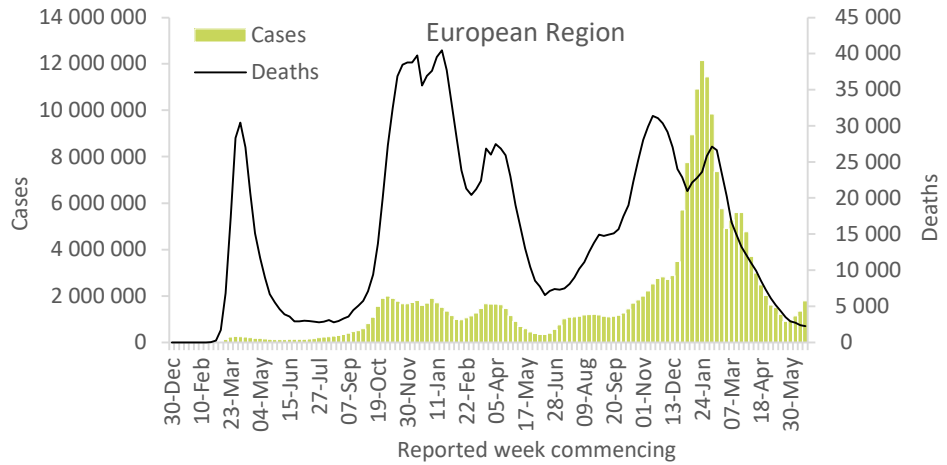


Updates from the Eastern Mediterranean Region

European Region

After reporting decreases in the number of new weekly cases since mid-March 2022, an increase has been reported for the third consecutive week in the European Region, with over 1.8 million new cases reported, a 33% increase compared to the previous week. Thirty-three (54%) countries in the Region reported increases in new cases of 20% or greater, with the greatest proportional increases observed in Romania (2609 vs 341 new cases; +665%), Spain (118 421 vs 18 757 new cases; +531%) and Kazakhstan (299 vs 112 new cases; +167%). The highest numbers of new cases were reported from Germany (504 655 new cases; 606.8 new cases per 100 000; +23%), Italy (340 012 new cases; 570.1 new cases per 100 000; +61%), and France (331 843 new cases; 510.2 new cases per 100 000; +37%).

Over 2200 new weekly deaths were reported in the Region, a 5% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (429 new deaths; <1 new death per 100 000; -3%), Italy (355 new deaths; <1 new death per 100 000; a +5%), and Spain (317 new deaths; <1 new death per 100 000; +45%).

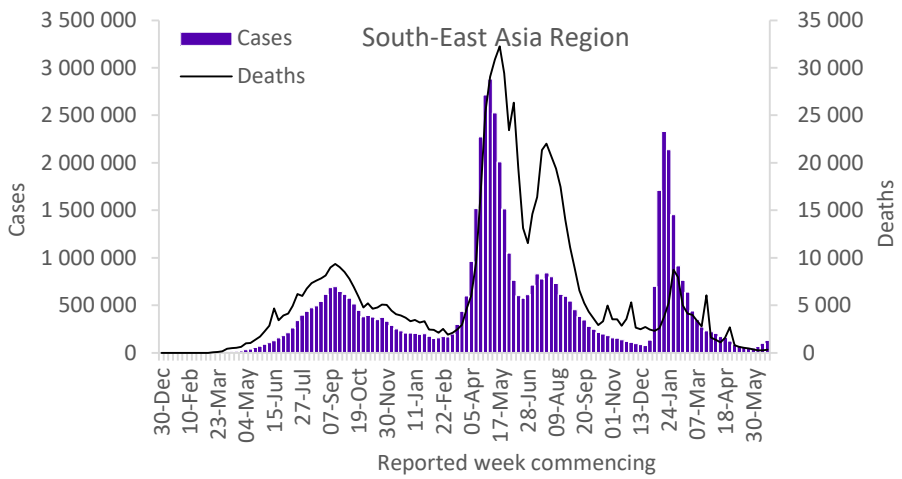


Updates from the European Region

South-East Asia Region

After the declining trend in new cases observed since mid-January 2022, the South-East Asia Region has reported increases over the last four weeks, with over 131 000 new cases reported, a 32% increase as compared to the previous week. Eight of ten countries (80%) for which data are available showed increases in the number of new cases of 20% or greater, with some of the greatest proportional increases observed in Bangladesh (8846 vs 2212 new cases; +300%), the Maldives (1043 vs 528 new cases; +98%) and Sri Lanka (83 vs 47 new cases; +77%). The highest numbers of new cases were reported from India (93 281 new cases; 6.8 new cases per 100 000; +25%), Thailand (15 111 new cases; 21.6 new cases per 100 000; +7%), and Indonesia (12 376 new cases; 4.5 new cases per 100 000; +63%).

The number of new weekly deaths in the Region increased by 15% as compared to the previous week, with over 300 new deaths reported. The highest numbers of new deaths were reported from India (144 new deaths; <1 new death per 100 000; +53%), Thailand (125 new deaths; <1 new death per 100 000; -6%), and Indonesia (30 new deaths; <1 new death per 100 000; -32%).

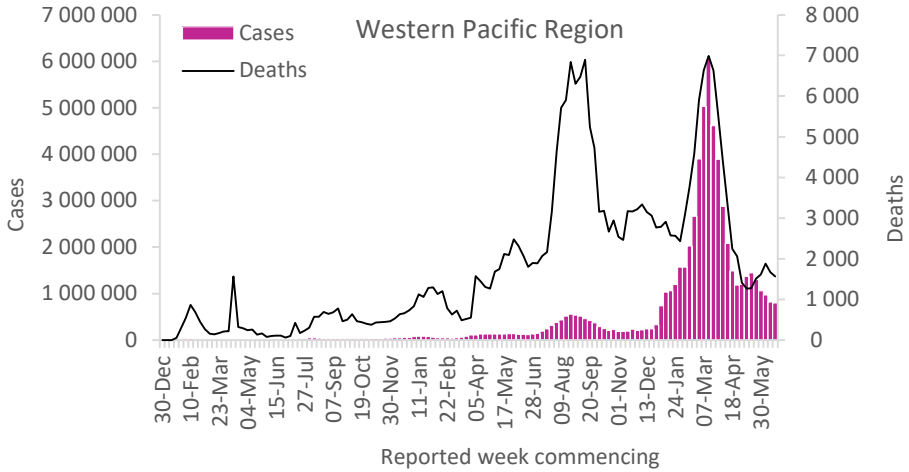


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region continues the decreasing trend observed since mid-May 2022, with over 799 000 new cases reported last week, which is similar to the number of new cases reported during the previous week. Twelve (36%) countries reported increases in new cases of 20% or greater, with some of the largest proportional increases observed in Samoa (346 vs 75 new cases; +361%), French Polynesia (102 vs 60 new cases; +70%) and the Philippines (4376 vs 2738 new cases; +60%). The highest numbers of new cases were reported from China (333 926 new cases; 22.7 new cases per 100 000; -18%), Australia (196 360 new cases; 770.0 new cases per 100 000; +8%), and Japan (109 520 new cases; 86.6 new cases per 100 000; +20%).

The Region reported over 1500 new weekly deaths, representing a 6% decrease as compared to the previous week. The highest numbers of new deaths were reported from China (925 new deaths; <1 new death per 100 000; -11%), Australia (331 new deaths; 1.3 new deaths per 100 000; +6%), and the Republic of Korea (87 new deaths; <1 new death per 100 000; +43%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.
[2] Since 21 May 2022, data for COVID-19 cases and deaths in Northern Ireland was no longer included in the United Kingdom updates.
[3] Updates of an outbreak of COVID-19 reported in the Democratic People's Republic of Korea continue through official media since 12 May 2022; however, at present, no confirmed cases or deaths have been reported to WHO.

References for Special Focus on relative vaccine effectiveness

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Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public: Protect yourself; Questions and answers; Travel advice

COVID-19 Weekly Epidemiological Update

Edition 97, published 22 June 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews
- Summary of the Monthly Operational Update

Global overview

Data as of 19 June 2022

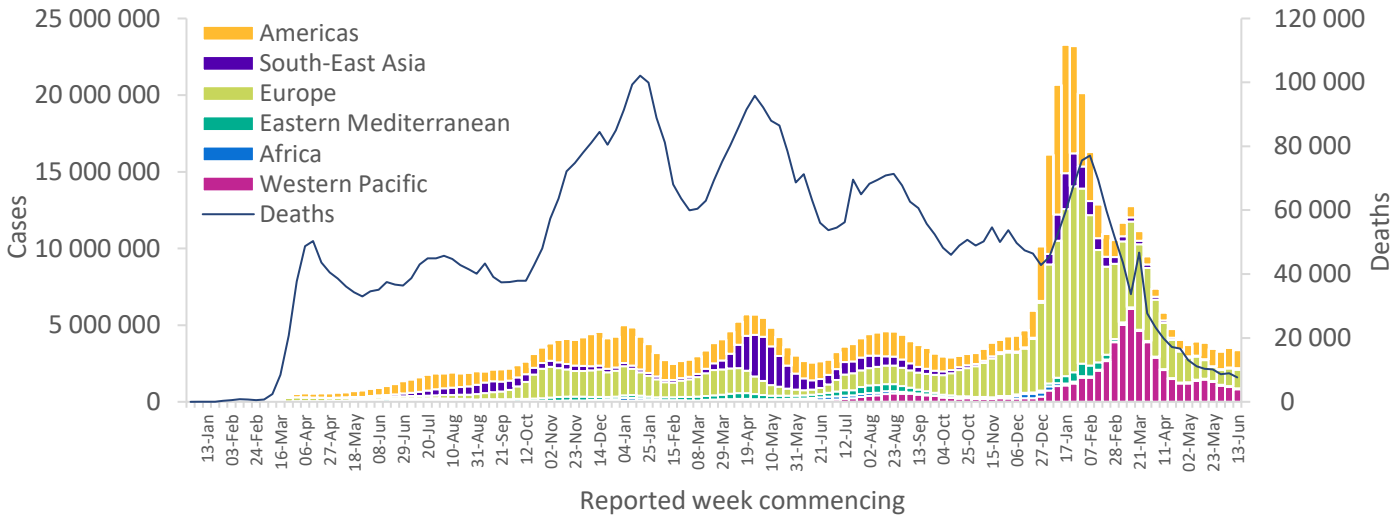
Globally, the number of new weekly cases has continued to decline since the peak in January 2022. During the week of 13 until 19 June 2022, over 3.3 million cases were reported, a 4% decrease as compared to the previous week (figure 1). The number of new weekly deaths declined by 16% as compared to the previous week, with over 7500 fatalities reported.

At the regional level, the number of new weekly cases increased in the South-East Asia Region (+46%), the Eastern Mediterranean Region (+45%), and the European Region (+6%), while it decreased in the other three WHO regions. The number of new weekly deaths increased in the South-East Asia Region (+4%), while decreasing trends were observed in the other five regions.

As of 19 June 2022, over 536 million confirmed cases and over 6.3 million deaths have been reported globally.

These trends should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 19 June 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest number of new weekly cases were reported from the United States of America (652 217 new cases; -12%), China (406 401 new cases; -19%), Germany (356 414 new cases; +10%), Brazil (256 034 new cases; -9%), and France (253 322 new cases; +33%). The highest number of new weekly deaths were reported from the United States of America (1 858 new deaths; -13%), China (1 044 new deaths; -13%), Brazil (956 new deaths; -3%), the Russian Federation (443 new deaths; -11%), and Italy (338 new deaths; -24%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 19 June 2022**

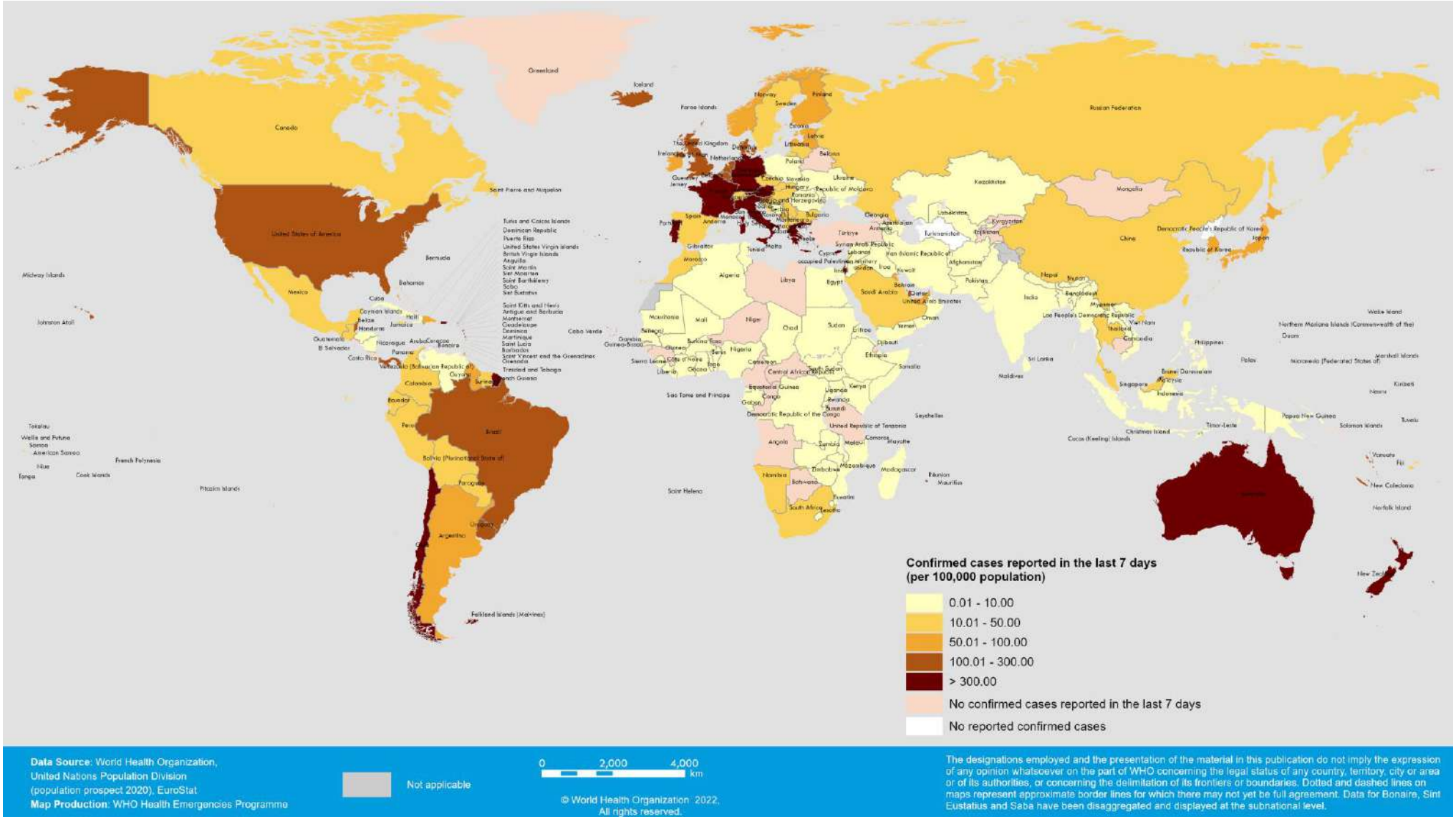
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	1 201 047 (36%)	6%	224 069 651 (42%)	1 985 (26%)	-26%	2 021 567 (32%)
Americas	1 169 388 (35%)	-9%	160 675 014 (30%)	3 437 (45%)	-11%	2 754 328 (44%)
Western Pacific	820 228 (24%)	-16%	62 806 589 (12%)	1 667 (22%)	-11%	235 643 (4%)
South-East Asia	99 237 (3%)	46%	58 339 959 (11%)	273 (4%)	4%	789 500 (12%)
Eastern Mediterranean	48 257 (1%)	45%	21 872 148 (4%)	61 (1%)	-2%	343 395 (5%)
Africa	22 296 (1%)	-21%	9 074 845 (2%)	169 (2%)	-24%	173 207 (3%)
Global	**3 360 453 (100%)**	**-4%**	**536 838 970 (100%)**	**7 592 (100%)**	**-16%**	**6 317 653 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

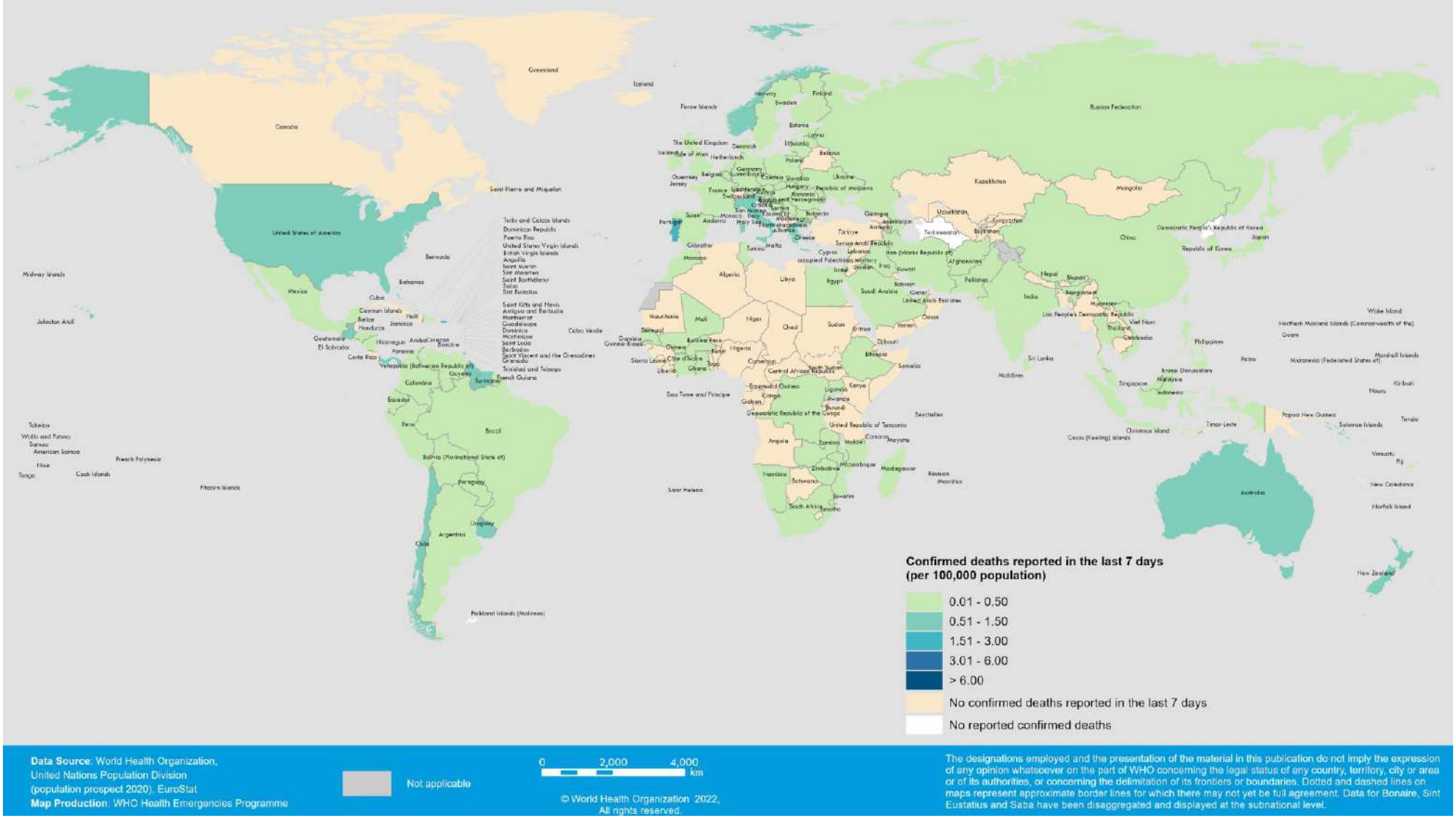
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update
- WHO COVID-19 detailed surveillance data dashboard

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 13 – 19 June 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 13-19 June 2022*



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.[1]

Geographic spread and prevalence of VOCs

The Omicron VOC continues to be the dominant variant circulating globally, accounting for nearly all sequences reported to GISAID between 17 May and 17 June 2022. Among Omicron lineages, as of epidemiological week 23 (6 to 12 June 2022), the proportions of BA.2 and its descendent lineages (pooled lineages named BA.2.X) are declining but nonetheless remain dominant, accounting for 36% and 12% respectively (Table 2).

Globally, BA.5 and BA.4 lineages continue to rise in prevalence and have been detected in 62 and 58 countries respectively. BA.2.12.1, which has now been detected in 69 countries, has decreased in prevalence since the previous week. As of week 23, the prevalence of BA.5 is 25% (from previous week 16%), BA.4 is 9% (from previous week 16%) and BA.2.12.1 is 17% (from previous week 31%). BA.4 and BA.5 have a constellation of genetic mutations that differ from BA.2, including a shared mutation at S:L452 which has been associated with higher transmissibility. The rise in prevalence of BA.4 and BA.5 has coincided with a rise in cases in several WHO regions. In some countries, the rise in cases has also led to a surge in hospitalizations and ICU admissions; however, the current evidence available does not indicate a change in severity associated with any of the three Omicron descendent lineages BA.2.12.1, BA.4 and BA.5.

Based on sequence data submitted to GISAID, variant circulation and dynamics differ by country. Multiple countries report co-circulation of BA.2.12.1, BA.4 and BA.5. The prevalence of VOC-LUMs BA.2.9.1, BA.2.11 and BA.2.13 (all carrying the S:L452 mutation) is <1%. .

Figure 5 Panel A and B: The number and percentage of SARS-CoV-2 sequences, as of 20 June 2022

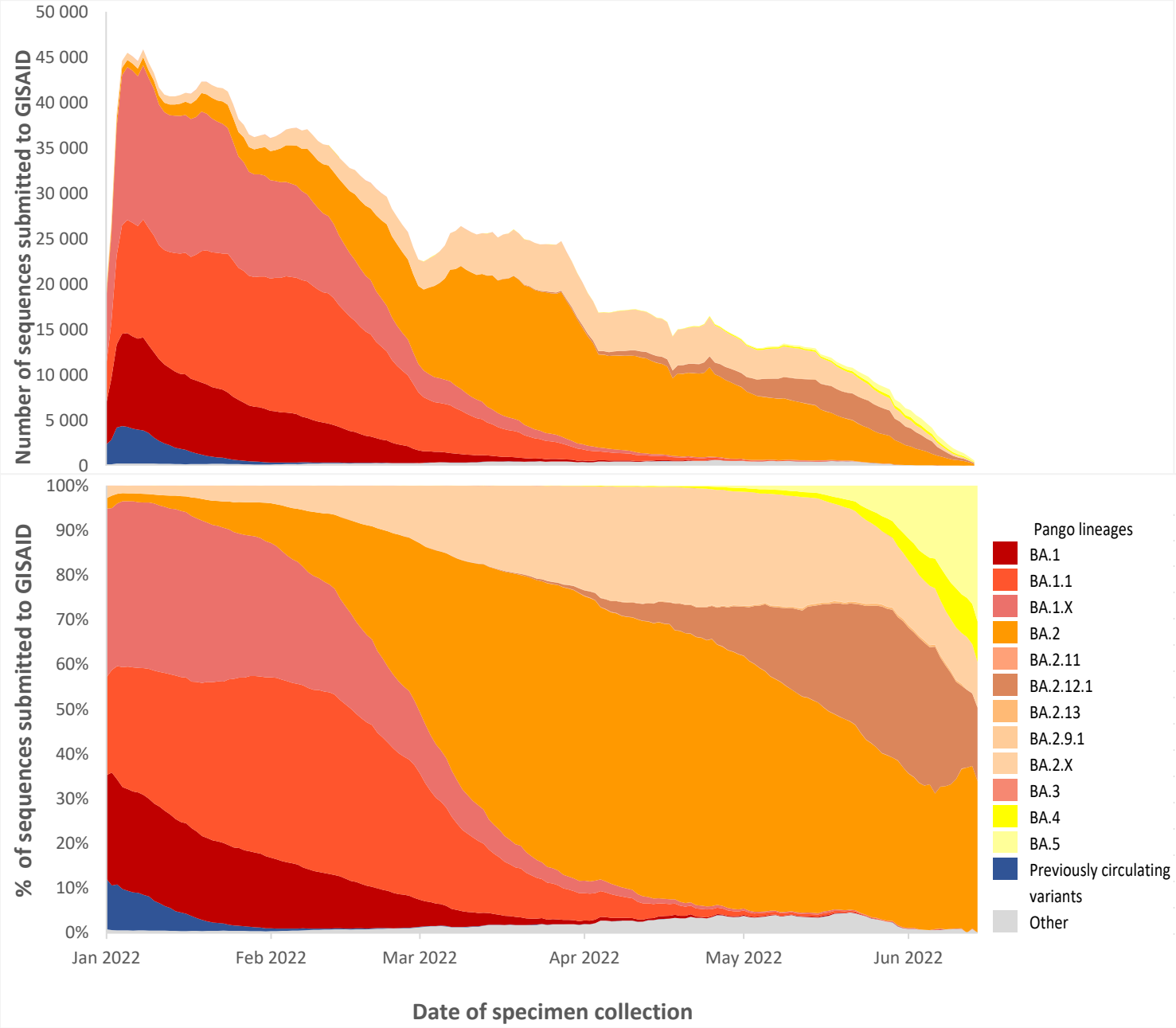


Figure 4 Panel A shows the number and **Panel B** the percentage of all circulating variants since 1 January 2022. Omicron sister-lineages and additional Omicron VOC descendent lineages under further monitoring (VOC-VUM) are shown. BA.1.X and BA.2.X include all BA.1 and BA.2 pooled descendent lineages, except those already shown in the figure above. Source: SARS-CoV-2 sequence data and metadata from GISAID, as of 20 June 2022.

Table 2: Relative proportions of SARS CoV-2 variants over the last four weeks by specimen collection date

			Last 4 weeks by collection date (%)			
Lineage	**Countries**	**Sequences[a]**	**2022-20**	**2022-21**	**2022-22**	**2022-23**
BA.1	178	494 314	0.13	0.04	0.04	0.05
BA.1.1	177	968 541	0.30	0.16	0.07	0.05
BA.1.X*	175	895 060	0.23	0.06	0.06	0.04
BA.2	146	1 137 826	41.42	36.51	32.53	36.40
BA.2.11	15	627	0.06	0.04	0.03	0.03
BA.2.12.1	69	118 126	27.02	33.04	30.57	17.20
BA.2.13	36	2 305	0.42	0.50	0.48	0.35
BA.2.9.1	13	699	0.07	0.05	0.03	0.08
BA.2.X*	133	452 477	20.26	15.59	13.16	11.60
BA.3	33	830	0.00	0.01	0.00	
BA.4	58	10 778	2.11	3.73	6.27	8.62
BA.5	62	18 556	3.57	7.91	16.11	24.78
Delta[#]	202	4 344 425	0.01	0.01	0.01	
Other	210	2 687 902	4.39	2.35	0.64	0.80

[a] Data source: sequences and metadata from GISAID.
[b] Relative proportions in %.
* BA.1.X and BA.2.X include all BA.1 and BA.2 pooled descendent lineages, except those already shown in the table above.
[#]Previously circulating VOC
The blue rows indicate the dominant lineages. The darker grey rows indicate the lineages that are increasing in prevalence, light grey indicate the lineage with decreasing prevalence since last week.

Characteristics of Omicron

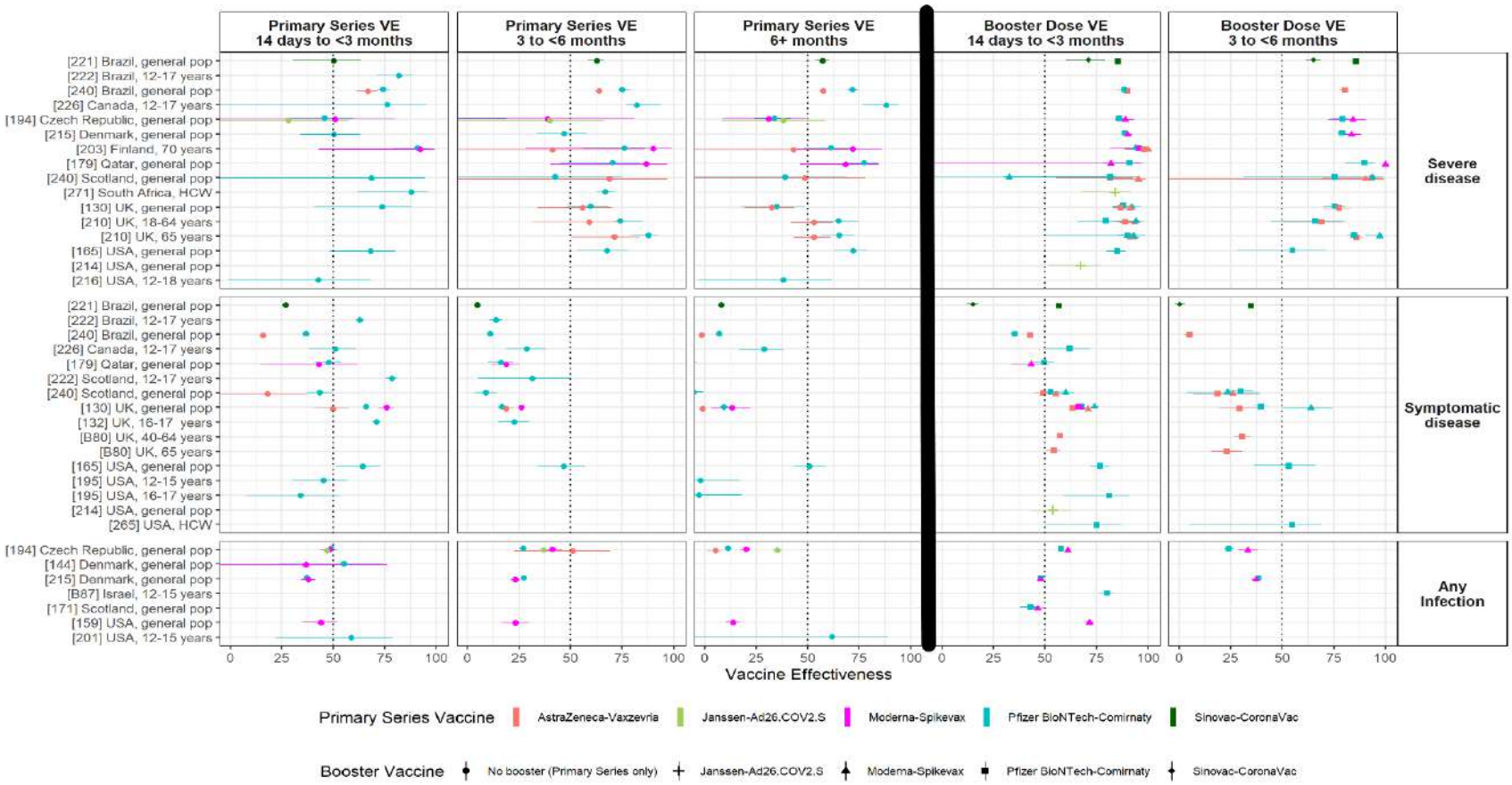
Available evidence on the phenotypic impacts of VOCs is reported in previous editions of the COVID-19 Weekly Epidemiological Update. Table 2 summarizes the phenotypic characteristics of the Omicron VOC and its sublineages for which evidence is available since the last update on 8 June 2022. Some of these studies have not been peer-reviewed and the findings must, therefore, be interpreted with due consideration of this limitation.

Table 2: Summary of phenotypic characteristics* of the Omicron VOC

Public health domain of impact	Omicron (B.1.1.529)	Omicron sublineages			
		BA.1	BA.2	BA.4	BA.5
Transmissibility	Growth advantage and increased transmissibility compared to Delta [i]	Lower transmissibility compared to BA.2 [2]	Increased transmissibility compared to BA.1[2]	Growth advantage compared to BA.2 [3]	Growth advantage over BA.2 [3]
Disease severity	Overall evidence suggests lower severity despite contrasting evidence. Earlier studies reported lower severity compared to Delta. [4–8] However, more recent studies in different settings reported similar [9,10] or increased severity[11] compared to Delta.[4–8,12] [13]	No difference in disease severity compared to BA.2[14]	No difference in disease severity compared to BA.1[14]	Currently available evidence does not suggest a difference in disease severity compared to BA.1 [15]	Currently available evidence does not suggest a difference in disease severity compared to BA.1 [16,17]
Risk of reinfection	Reduced risk of Omicron reinfection among individuals previously infected with a different SARS-CoV-2 variant compared to naïve individuals[18,19]	Reduced risk of reinfection with BA.1 following infection with BA.2[20]	Reduced risk of reinfection with BA.2 following infection with BA.1 [20]	No specific data available	No specific data available
Impact on antibody responses	Reduction in neutralizing activity reported as compared to other VOCs[21–23]	Lower neutralising antibody titers compared to the index virus [22]	Lower neutralising antibody titers compared to the index virus[22]	Lower neutralising antibody titres (7.6-fold) compared to BA.1 [24–26]	Lower neutralising antibody titres (7.5-fold) compared to BA.1 [24,26]
Impacts on diagnostics	PCR assays that include multiple gene targets maintain their accuracy to detect Omicron[27]; S gene target failure/positivity (SGTF) may be a proxy for screening. Limited to no impact on sensitivity of Ag-RDTs observed[28–31]	S gene target failure.	The majority will be S gene target positive (SGTP).	S gene target failure.	S gene target failure.
Impact on treatment	No difference in the effectiveness of antiviral agents (polymerase and protease inhibitors) against the Omicron variant[32]. Conserved neutralizing activity for three broadly neutralizing monoclonal antibodies (sotrovimab, S2X259 and S2H97) and a reduced effectiveness of other monoclonal antibodies[33–36]	Reduced efficacy of casirivimab-imdevimab against BA.1[37]	Reduced neutralising activity of sotrovimab [37], casirivimab and imdevimab against BA.2[38]	Reduced neutralising activity of casirivimab and imdevimab[38]	Reduced neutralising activity of casirivimab and imdevimab[38]
Impact on vaccination	Results of vaccine effectiveness (VE) studies should be interpreted with caution because estimates vary with the type of vaccine administered and the number of doses and scheduling (sequential administration of different vaccines). For further information, **see the section Interpretation of the results of the VE for the Omicron variant**				

[i] Similar methodology used as Reference [1]

Figure 6. Vaccine effectiveness (VE) of primary series and booster vaccination against the Omicron variant of concern



Abbreviations: pop=population; HCW=healthcare workers. Dots represent point estimates of vaccine effectiveness; horizontal lines represent the 95% confidence intervals. Labels along left side of plot indicate reference numbers , country, and study population. Reference numbers identify the study and link to the summary table of VE effectiveness studies on view-hub.org (Table 1 in summary table); references starting with a 'B' are studies found in the booster VE table only (Table 2 in summary table). Primary series refers to the completion of two doses of vaccines for AstraZeneca-Vaxzevria; Moderna-Spikevax, Pfizer BioNTech-Comirnaty and Sinovac-CoronaVac and one dose of Janssen-Ad26.COV2.S. Severe disease includes severe disease, hospitalization, and pneumonia; symptomatic disease includes disease of any severity level; any infection can include symptomatic and asymptomatic infection. Additional details on the methods for inclusion of the estimates in the plots provided in Annex 3. Note, nine point estimates for the primary series with confidence intervals below 0 are not shown in the Omicron plot: two estimates from reference #144 against infection at 3 to <6 months (Pfizer BioNTech-Comrinaty and Moderna-Spikevax), two estimates from reference #179 against symptomatic disease at 6+ months (Pfizer BioNTech-Comrinaty and Moderna-Spikevax), and five estimates from reference #240 (one AstraZeneca-Vaxzevria estimate at 3 to <6 months; three AstraZeneca-Vaxzevria estimates and one Pfizer BioNTech estimate at 6+ months).

Figure 6 summarizes the impact of the Omicron variant on product-specific vaccine effectiveness (VE) over time for both primary series vaccines and booster vaccines. Additional information on vaccine performance against VOCs can also be found in Annex 4. Since the last update, one new study assessing absolute vaccine effectiveness of three doses of Pfizer BioNTech-Comirnaty among healthcare workers in the United States of America has been added to the figure.[39] In addition, a study evaluating VE of two doses of Janssen-Ad26.COV2.S against hospitalization among healthcare workers in South Africa that had been previously included in the figure has now been published. The study has provided additional VE estimates for two doses of Pfizer-BioNTech-Comirnaty, which have been added to the figure.[40]

Interpretation of the results of absolute VE for the Omicron variant

To date, 23 studies from ten countries (Brazil, Canada, Czech Republic, Denmark, Finland, Israel, Qatar, South Africa, the United Kingdom and the United States of America) have assessed the duration of protection of five vaccines against the Omicron variant (six studies assessed VE of primary series vaccination only, three assessed VE of booster vaccination only, and 14 assessed both). Findings from these studies show reduced VE of COVID-19 primary series vaccines against the Omicron variant for all outcomes (*severe disease*, *symptomatic disease*, and *infection*) than has been observed for the other four VOCs. Importantly though, VE estimates against the Omicron variant remain higher for *severe disease* than the other outcomes, in the majority of studies. Booster vaccination substantially improves VE for all outcomes and for all combinations of schedules with estimates available for both primary series and booster vaccination. VE declines more with time after booster vaccination for symptomatic disease and infection than it does for severe disease; however, studies that assess VE of booster vaccination beyond six months are needed to evaluate longer duration of protection.

For *severe disease*, within the first three months of primary series vaccination, seven of 13 (54%) VE estimates for the mRNA vaccines (Moderna-Spikevax and Pfizer BioNTech-Comirnaty) were ≥70%. Of the two studies available for vector vaccines, one reported a VE of <70% for AstraZeneca-Vaxzevria, and the other reported a VE of <50% for Janssen-Ad26.COV2.S. One study was available for inactivated vaccines (Sinovac-CoronaVac), reporting a VE of 50%. Beyond three months after vaccination, thirteen of 29 (45%) VE estimates for the mRNA vaccines were ≥70% while 20 (69%) were ≥50%; one of the 12 (8%) VE estimates for AstraZeneca-Vaxzevria was ≥70% while eight (67%) were ≥50%; neither of the two estimates for the other vector-based vaccine, Janssen-Ad26.COV2.S, were ≥50%. The two available VE estimates beyond three months of vaccination for Sinovac-CoronaVac were ≥50%.

Booster vaccination improved VE against *severe disease* in all studies in which it was assessed. There were 33 estimates evaluated an mRNA booster, two estimates for a booster dose of Janssen-Ad26.COV2.S, and one estimate for a booster dose of Sinovac-CoronaVac. Across the datasets, only one estimate for a booster dose of Pfizer BioNTech-Comirnaty and one estimate for a booster dose of Janssen-Ad26.COV2.S were below 70% between 14 days and three months of receipt of a booster dose. At three to six months post mRNA booster, 17 of 20 (85%) estimates showed VE ≥70% (an mRNA vaccine was given as the primary series in 13 of the 20 estimates while AstraZeneca-Vaxzevria and Sinovac-CoronaVac were given as the primary series for six and one of the twenty estimates, respectively).

VE estimates against *symptomatic disease* and *infection* within the first three months of primary series vaccination were lower than against severe disease, and VE decreased more substantially over time. For *symptomatic disease* within the first three months of primary series vaccination, three of 13 (23%) VE estimates for the mRNA vaccines were ≥70% and seven (54%) were ≥50%; none of the three VE estimates for AstraZeneca-Vaxzevria nor the single estimate for Sinovac (CoronaVac) were above 50%. Beyond three months after vaccination, one of the 29 (3%) VE

estimates were ≥50% (21 estimates evaluated mRNA vaccines, six evaluated AstraZeneca-Vaxzevria, and two evaluated Sinovac-CoronaVac). mRNA booster vaccination after completion of a primary series of an mRNA vaccine, AstraZeneca-Vaxzevria, or Sinovac-CoronaVac, improved VE against *symptomatic disease,* with five of 21 (24%) VE estimates ≥70% and 16 (76%) estimates ≥50% between 14 days and three months post booster. However, booster dose protection declined with time since vaccination with only two of 13 (15%) available estimates indicating a VE of ≥50% at three to six months following receipt of an mRNA booster dose. Neither the single estimate for a booster dose of AstraZeneca-Vaxzevria nor the single estimate for a booster dose of Sinovac-CoronaVac three to six months post vaccination was above 50%. VE against *infection* showed a similar pattern as that against *symptomatic disease*.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

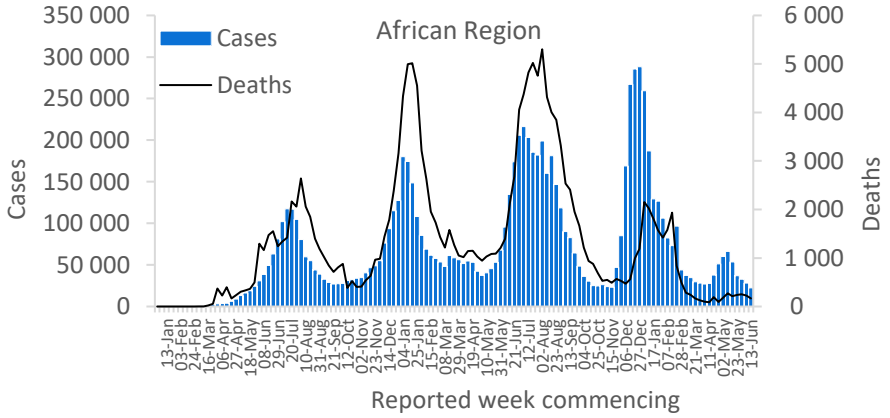
WHO regional overviews:

Epidemiological week 13-19 June 2022**

African Region

The African Region reported 22 000 new cases, a 21% decrease as compared to the previous week. Eleven (22%) countries reported an increase in the number of new cases of 20% or greater, with some of the greatest proportional increases seen in Senegal (51 vs 17 new cases; +200%), South Sudan (36 vs 18 new cases; +100%) and Mozambique (758 vs 392 new cases; +93%). The countries that reported the highest numbers of new cases were South Africa (7978 new cases; 13.5 new cases per 100 000 population; -24%), Ethiopia (3488 new cases; 3.0 new cases per 100 000; -9%), and Kenya (2370 new cases; 4.4 new cases per 100 000; +83%).

The number of new weekly deaths in the Region decreased by 24% as compared to the previous week, with over 150 new deaths reported. The highest numbers of new deaths were reported from South Africa (121 new deaths; <1 new death per 100 000 population; -26%), Uganda (eight new deaths; <1 new death per 100 000; +167%), and Zimbabwe (eight new deaths; <1 new deaths per 100 000; -27%).

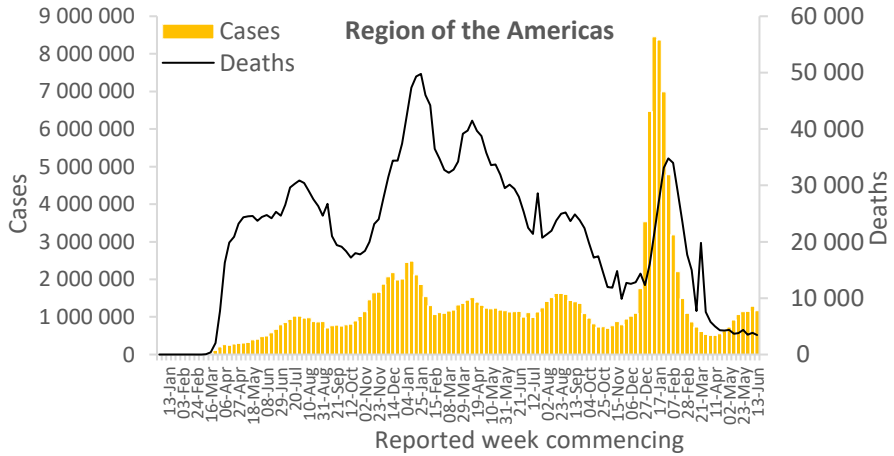


Updates from the African Region

Region of the Americas

After reporting increases in the number of new weekly cases observed since mid-April 2022, the Region of the Americas reported over 1.1 million new cases, a 9% decrease as compared to the previous week. However, fourteen (25%) countries reported increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Turks and Caicos Islands (29 vs 12 new cases; +142%), Saint Kitts and Nevis (73 vs 39 new cases; +87%) and Paraguay (1384 vs 776 new cases; +78%). The highest numbers of new cases were reported from the United States of America (652 217 new cases; 197.0 new cases per 100 000; -12%), Brazil (256 034 new cases; 120.5 new cases per 100 000; -9%), and Chile (73 455 new cases; 384.3 new cases per 100 000; +6%).

The number of new weekly deaths in the Region decreased by 11% as compared to the previous week, with over 3400 new deaths reported. The highest numbers of new deaths were reported from the United States of America (1858 new deaths; <1 new death per 100 000; -13%), Brazil (956 new deaths; <1 new death per 100 000; -3%), and Chile (150 new deaths; <1 new death per 100 000; +24%).

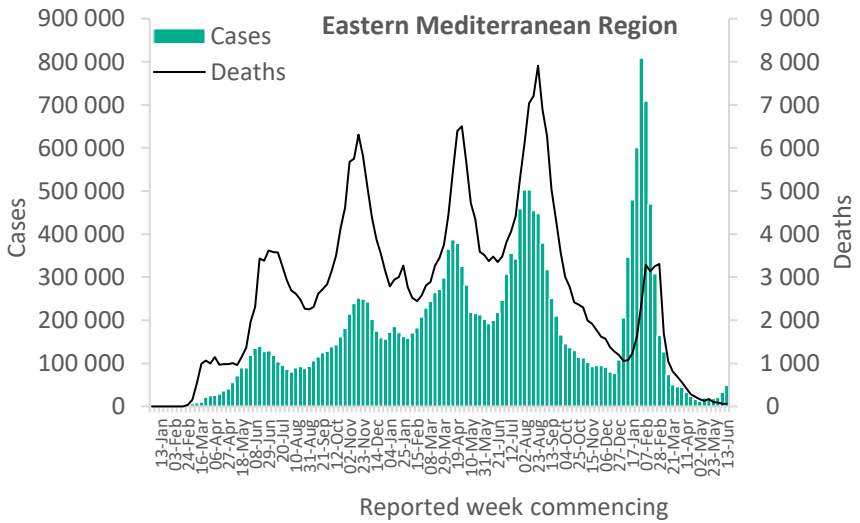


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 48 000 new weekly cases, representing a 45% increase as compared to the previous week. Fourteen (63%) countries reported increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Iraq (2210 vs 1080 new cases; +105), Morocco (9628 vs 5184 new cases; +86%) and Oman (327 vs 194 new cases; +69%). The highest numbers of new cases were reported from the United Arab Emirates (9651 new cases; 97.6 new cases per 100 000; +63%), Morocco (9628 new cases; 26.1 new cases per 100 000; +86%), and Bahrain (9227 new cases; 542.3 new cases per 100 000; +41%).

The number of new weekly deaths in the Region decreased by 2% as compared to the previous week, with 61 new deaths reported. The highest numbers of new deaths were reported from Saudi Arabia (15 new deaths; <1 new death per 100 000; similar to the previous week's figures), the Islamic Republic of Iran (14 new deaths; <1 new death per 100 000; -33%), and Tunisia (seven new deaths; <1 new death per 100 000; similar to the previous week's figure).

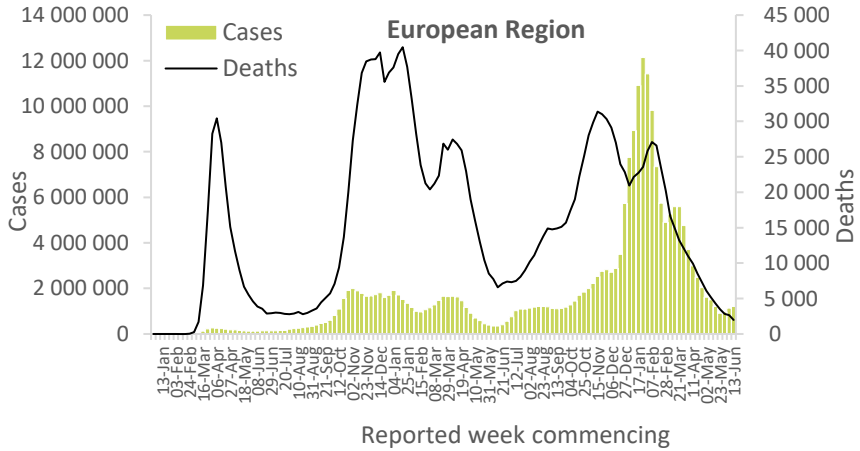


Updates from the Eastern Mediterranean Region

European Region

After reporting decreases in the number of new weekly cases since mid-March 2022, a slight increase has been reported in the last two weeks in the European Region, with over 1.2 million new cases reported this week, a 6% increase compared to the previous week. Twenty-one (34%) countries in the Region reported increases in new cases of 20% or greater, with the greatest proportional increases observed in the Isle of Man (570 vs 153 new cases; +272%), Uzbekistan (370 vs 140 new cases; +164%) and Kosovo[1] (93 vs 37 new cases; +151%). The highest numbers of new cases were reported from Germany (356 414 new cases; 428.6 new cases per 100 000; +10%), France (253 322 new cases; 389.5 new cases per 100 000; +33%), and Italy (210 840 new cases; 353.5 new cases per 100 000; +47%).

With just under 2000 new weekly deaths, a 26% decrease as compared to the previous week, the Region reports a decreasing trend since early February 2022. The highest numbers of new deaths were reported from the Russian Federation (443 new deaths; <1 new death per 100 000; -11%), Italy (338 new deaths; <1 new death per 100 000; -24%), and France (272 new deaths; <1 new death per 100 000; +6%).

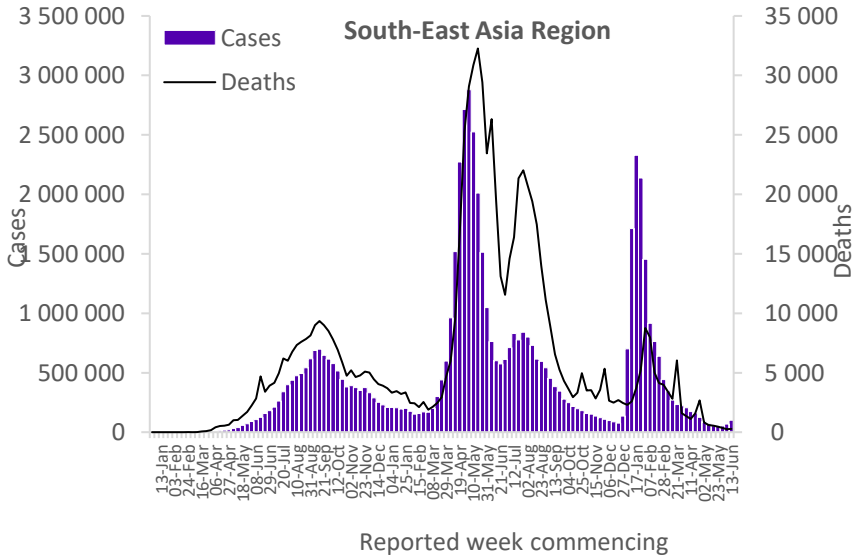


Updates from the European Region

South-East Asia Region

After the declining trend in new cases observed since mid-January 2022, the Region has reported an increase in the last three weeks, with over 99 000 new cases reported this week, a 46% increase as compared to the previous week. Six (60%) countries showed increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Bangladesh (2212 vs 492 new cases; +350%), Maldives (369 vs 160 new cases; +131%) and Indonesia (7587 vs 3688 new cases; +106%). The highest numbers of new cases were reported from India (74 675 new cases; 5.4 new cases per 100 000; +65%), Thailand (14 181 new cases; 20.3 new cases per 100 000; -22%), and Indonesia (2.8 new cases per 100 000).

The number of new weekly deaths increased by 4% as compared to the previous week, with over 273 new deaths reported. The highest numbers of new deaths were reported from Thailand (133 new deaths; <1 new death per 100 000; -18%), India (94 new deaths; <1 new death per 100 000; +36%), and Indonesia (44 new deaths; <1 new death per 100 000; +57%).

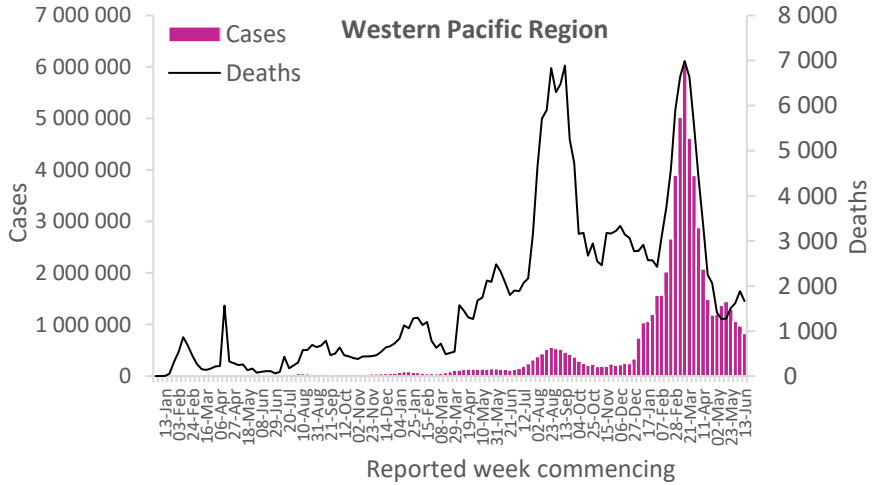


Updates from the South-East Asia Region[3]

Western Pacific Region

With over 820 000 new cases reported last week, the Western Pacific Region continues the decreasing trend that has been observed for the past month . This represents a 16% decline in new cases as compared to the previous week. Seven (21%) countries reported increases in new cases of 20% or greater, with the largest proportional increases observed in Fiji (163 vs 41 new cases; +298%), Northern Mariana Islands (Commonwealth of the) (79 vs 37 new cases; +114%) and the Philippines (2738 vs 1587 new cases; +73%). The highest numbers of new cases were reported from China (406 401 new cases; 27.6 new cases per 100 000; -19%), Australia (181 980 new cases; 713.7 new cases per 100 000; -6%), and Japan (91 491 new cases; 72.3 new cases per 100 000; -27%).

The Region reported over 1600 new weekly deaths, representing a 11% decrease as compared to the previous week. The highest numbers of new deaths were reported from China (1044 new deaths; <1 new death per 100 000; -13%), Australia (311 new deaths; 1.2 new deaths per 100 000; +5%), and Japan (144 new deaths; <1 new death per 100 000; similar to the previous week's figures).



Updates from the Western Pacific Region

Summary of the COVID-19 Monthly Operational Update

The Monthly operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) monitoring and evaluation team which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework.

In this edition of the COVID-19 Monthly Operational Update, highlights of country-level actions and WHO support to countries include:

- WHO Country Office and Ministry of Health Türkiye lead the development of a national genomic surveillance strategy: 24–26 June 2022 in Izmir, Türkiye
- The United Republic of Tanzania hosts the first simulation exercise in East Africa since the onset of the COVID-19 pandemic, to improve readiness to health emergencies at points of entry
- Empowering indigenous women as 'agents of change': WHO supports Ecuador to engage community stakeholders as part of its COVID-19 response strategy
- 15 tonnes of lifesaving COVID-19 supplies arrive in Samoa
- The Syrian Arab Republic's coastal areas takes COVID-19 vaccination campaign to a new level
- Myanmar: learning from COVID-19 to prepare for influenza
- WHO/Europe carried out an Intra-Action Review in Azerbaijan, identifying challenges and best practices from the response to COVID-19
- PAHO/WHO supports the Plurinational State of Bolivia to introduce and expand oxygen therapy for COVID-19 patients
- Strengthening Yemen's response to COVID-19 and the delivery of essential health services
- Preparing for future outbreaks with free online courses on 28 diseases through OpenWHO
- "The Story of Coronavirus": an animated video to understand COVID-19 transmission
- WHO Scientific Advisory Group for the Origins of Novel Pathogens (SAGO) released its first preliminary report
- WHO holds a global consultation entitled "Crafting the Mosaic": Resilient surveillance systems for respiratory viruses of pandemic potential
- Global Lead Coordinator for COVID-19 Vaccine Delivery Partnership visits Malawi
- Updated WHO guidance and publications

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.
[2] Since 21 May, data for COVID-19 cases and deaths in Northern Ireland was no longer included in the United Kingdom updates (see here for the official announcement).
[3] Updates of an outbreak of COVID-19 reported in the Democratic People's Republic of Korea continue through official media since 12 May 2022; however, at present, no confirmed cases or deaths have been reported to WHO.

Annex 2. Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. Likewise, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection.
- Table 3 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than 4 months post final dose.
- Studies reporting VOC-specific VE estimates for full vaccination (≥7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca-Vaxzevria for infection (when a phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Neutralization studies that use samples collected >7 days and < 6 months after complete vaccination and that use an ancestral strain as the reference are included in the Table 3.

Annex 3. Methods for Figure 6

• VE studies included in the plot were identified from an ongoing systematic review of COVID-19 vaccine effectiveness studies. All studies were cohort or test-negative studies. Methods for the systematic review and inclusion/exclusion criteria are available on view-hub.org. The studies were conducted during a period when Omicron was the predominant circulating variant. Only studies providing VE estimates of individual vaccines are included in the plot (studies assessing combined VE of more than one vaccine are excluded). In addition, for the primary series VE, only studies providing VE estimates for discrete time intervals since vaccination, which evaluate changes in VE over time, are included.

• For the primary series VE, estimates are only included in the plot for studies that report absolute VE for more than one time period for an individual vaccine. Thirteen studies of VE against Omicron provided only a single cumulative VE estimate for an individual vaccine, which due to varying lengths of time since vaccination are difficult to interpret due to the marked waning of VE over time with omicron.

Annex 4. Summary of Primary Series Vaccine Performance against Variants of Concern

(VE data as of 16 June 2022; Neutralization data as of 15 June 2022)

	WHO Emergency Use Listing (EUL) Qualified Vaccines[+]									Vaccines without WHO EUL[+]	
	AstraZeneca-Vaxzevria/ SII - Covishield	Beijing CNBG-BBIBP-CorV	Bharat-Covaxin	Cansino - Convidecia	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Novavax-Nuvaxovid/ SII - Covavax	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Gamaleya-Sputnik V
Alpha, Beta, Gamma											
Summary of VE*	*see update from 11 January 2022 for details of vaccine performance against Alpha, Beta, and Gamma variants of concern*										
Delta											
Summary of VE*	*see update from 27 April 2022 for details of vaccine performance against Delta variant of concern*										
Omicron											
Summary of VE*	Reduced protection against infection and symptomatic disease; possible reduced protection against for severe disease but limited evidence										
- Severe disease	-	-	-	-	-	↓to↓↓/↓↓↓ [2]	-	↓↓ to ↓↓↓ [5]	-	-	-
- Symptomatic disease	↓↓↓ [1]	-	-	-	-	↓↓/↓↓↓ [2]	-	↓↓↓ [3]	-	-	-
- Infection	↓↓↓ [1]	-	-	-	-	↓↓↓ [3]	-	↓↓↓ [3]	-	-	-
Neutralization	↓↓↓ [7]	↓to↓↓ [4]	↓↓ [1]	-	↓to ↓↓↓ [4]	↓↓↓ [18]	-	↓↓↓ [47]	↓↓to↓↓↓ [5]	-	↓↓ [1]

VE refers to vaccine effectiveness and vaccine efficacy. *Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10 percentage point (pp) reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20 pp reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30 pp reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30 pp reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study. The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources Library . References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public: Protect yourself; Questions and answers; Travel advice

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COVID-19 Weekly Epidemiological Update

Edition 96, published 15 June 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- Special Focus: WHO Mass Gatherings Global Event Database Analysis
- WHO regional overviews

Global overview

Data as of 12 June 2022

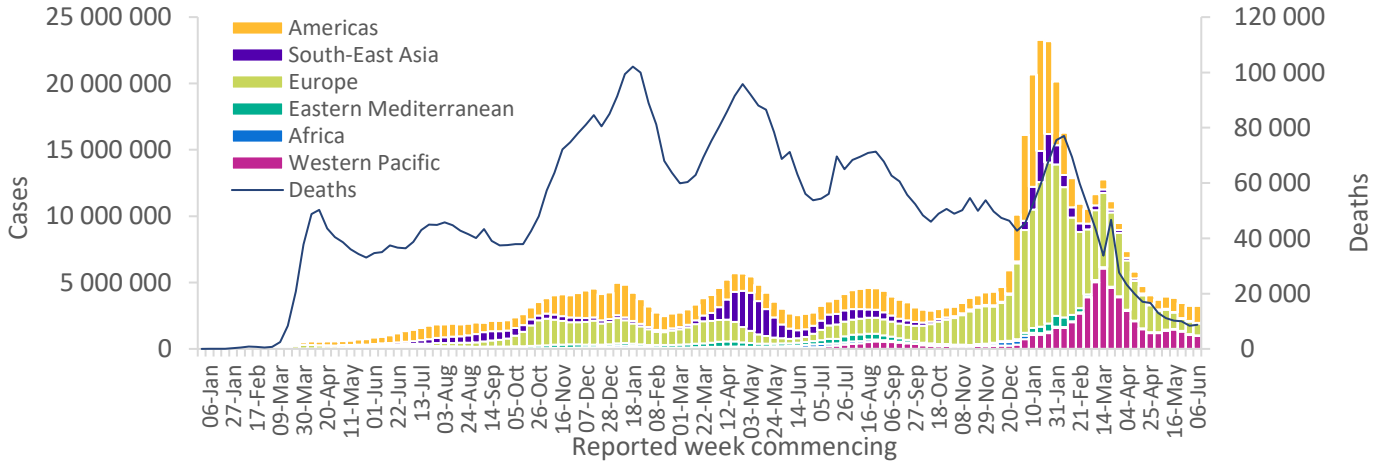
Globally, the number of new weekly cases has continued to decline since a peak in January 2022. During the week of 6 until 12 June 2022, over 3.2 million cases were reported, similar to the number reported during the previous week (figure 1).
After five weeks of decline, the number of new weekly deaths has risen again, with over 8700 fatalities reported, a 4% increase as compared to the previous week.

At the regional level, the number of new weekly cases increased in the Eastern Mediterranean Region (+58%), in the South-East Asia Region (+33%) and in the Region of the Americas (+13%), while it decreased in the other three WHO regions.
The number of new weekly deaths increased in the Region of the Americas (+21%) and Western Pacific Region (+17%), while decreasing trends were observed in the other four regions.

As of 12 June 2022, over 533 million confirmed cases and over 6.3 million deaths have been reported globally.

These trends should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 12 June 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest number of new weekly cases were reported from the United States of America (743 723 new cases; +13%), China (501 146 new cases; -5%), Germany (281 706 new cases; +16%), Brazil (279 862 new cases; +29%), and Australia (194 158 new cases; -13%).

The highest number of new weekly deaths were reported from the United States of America (2367 new deaths; +32%), China (1201 new deaths; +32%), Brazil (989 new deaths; +52%), the Russian Federation (500 new deaths; -12%), and Italy (443 new deaths; +17%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 12 June 2022**

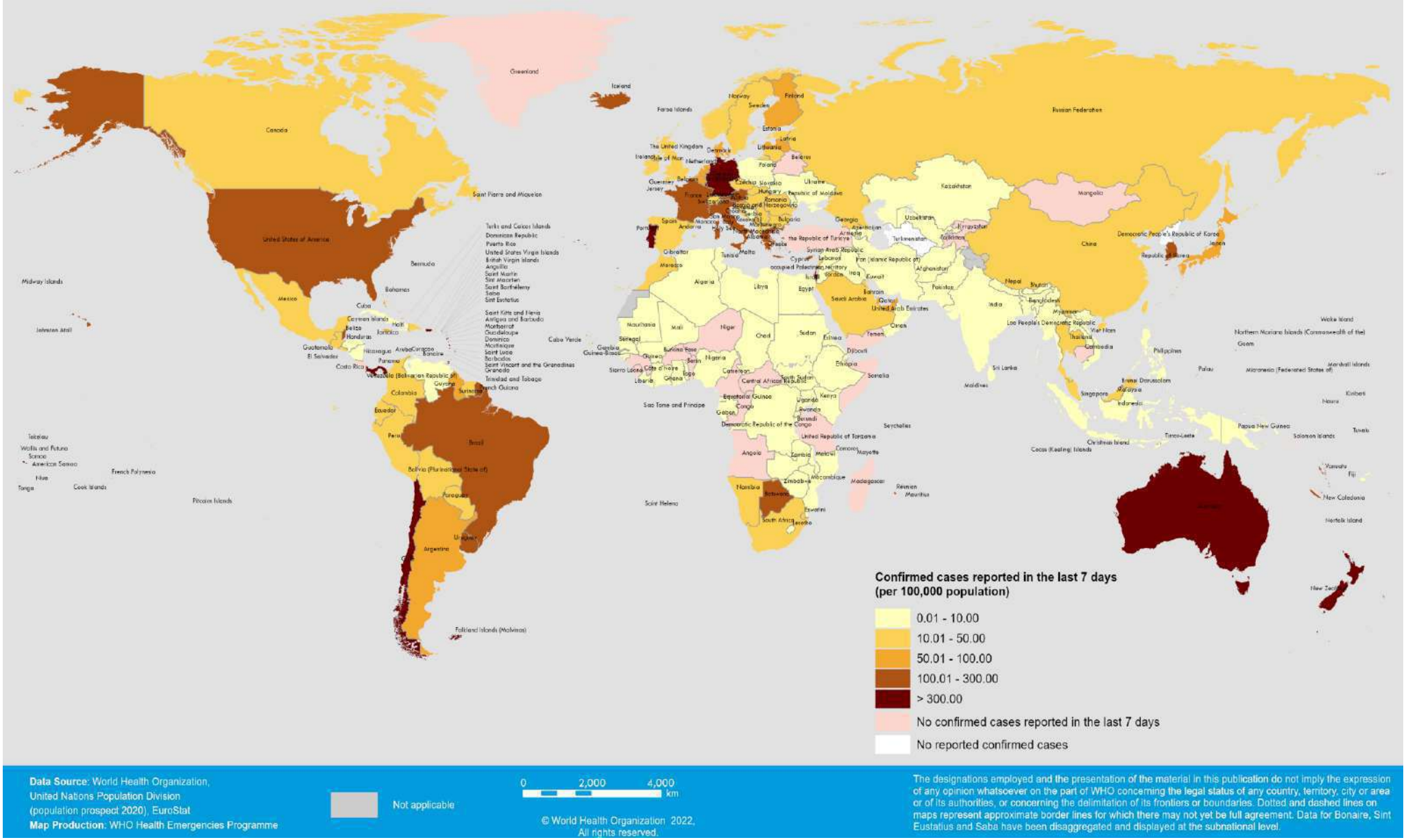
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 278 169 (39%)	13%	159 473 940 (30%)	4 105 (47%)	21%	2 750 430 (44%)
Western Pacific	970 940 (30%)	-8%	61 985 866 (12%)	1 882 (22%)	17%	233 976 (4%)
Europe	873 103 (27%)	-8%	222 587 925 (42%)	2 208 (25%)	-18%	2 018 528 (32%)
South-East Asia	67 795 (2%)	33%	58 240 686 (11%)	261 (3%)	-25%	789 225 (13%)
Eastern Mediterranean	33 329 (1%)	58%	21 823 732 (4%)	62 (1%)	-32%	342 966 (5%)
Africa	27 097 (1%)	-7%	9 047 715 (2%)	219 (3%)	-11%	173 028 (3%)
Global	**3 250 433 (100%)**	**<1%**	**533 160 628 (100%)**	**8 737 (100%)**	**4%**	**6 308 166 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

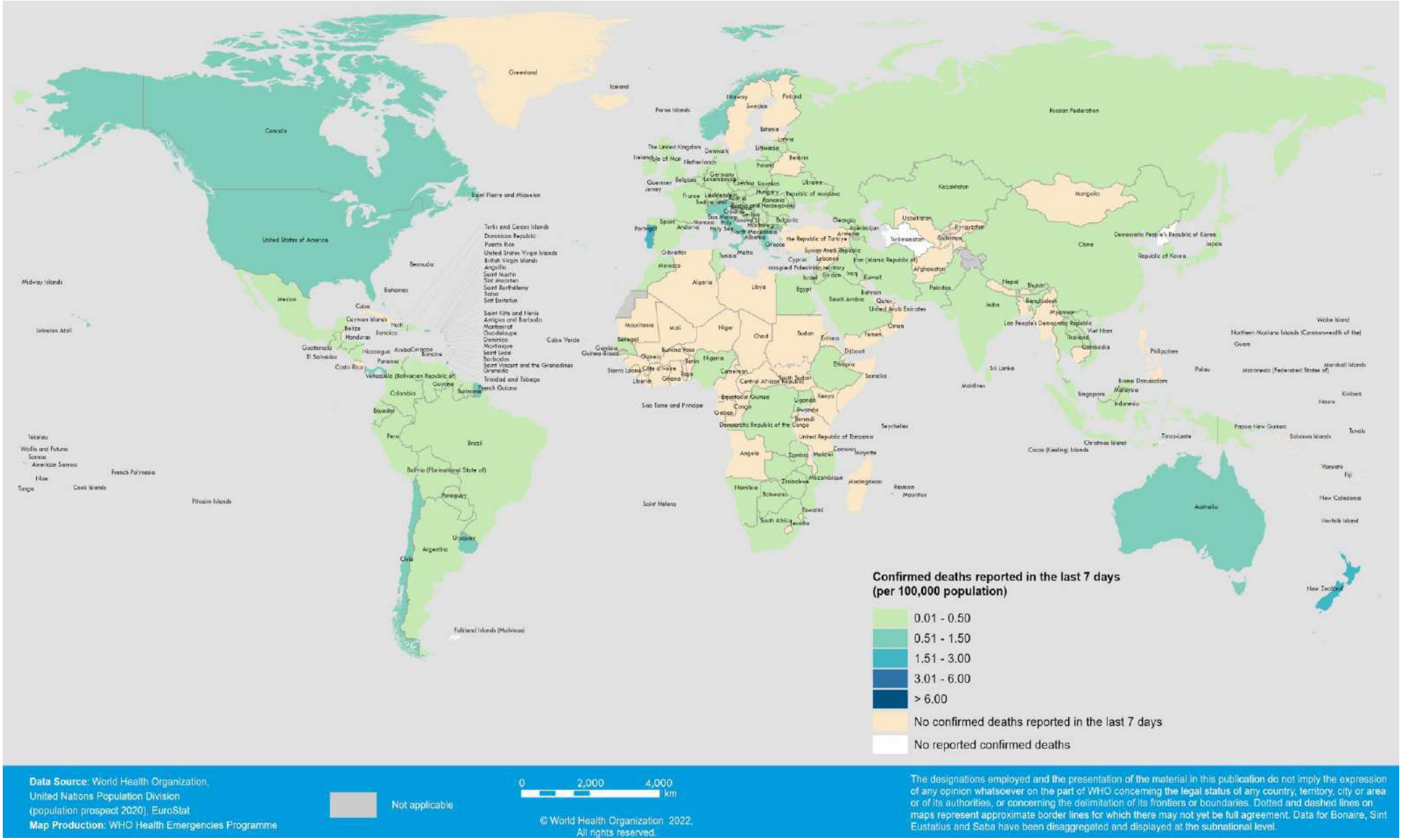
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update
- WHO COVID-19 detailed surveillance data dashboard

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 6 – 12 June 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 6-12 June 2022*



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.

Geographic spread and prevalence of VOCs

Within the last 30 days (13 May to 12 June 2022), 169 940 SARS-CoV-2 sequences were submitted to GISAID. There continues to be a substantial decline in the number of SARS-CoV-2 submissions to GISAID, as compared to the number of sequences submitted during the month of January 2022, when 1 248 906 sequences were submitted to GISAID. The Omicron VOC remains the dominant variant circulating globally, accounting for 97% of sequences reported. Among Omicron lineages submitted to GISAID, BA.2 represents 39%, while BA.2.12.1 represents 28%, BA.5 represents 6%, and BA.4 represents 3%. For epidemiological week 20 (15 to 21 May 2022) and week 21 (22 to 28 May 2022), there was a 4% decline in the number of BA.2 sequences, while there were increases of 4%, 3%, and 2% in BA.5, BA.2.12.1, and BA.4 sequences respectively.

These trends should be interpreted with due consideration of the limitations of surveillance systems, including differences in sequencing capacity and sampling strategies between countries, as well as changes in sampling and sequencing strategies in multiple countries.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

Special Focus: WHO Mass Gatherings Global Event Database Analysis

Mass Gatherings (MGs) are events characterized by the concentration of people at a specific location for a specific purpose over a set period of time (WHO, 2015). As such, if inadequately planned and/or managed, mass gatherings have the potential to strain the response resources of the host country or community, also working as amplifiers of disease outbreaks. During the COVID-19 pandemic, the threshold for identifying such events as mass gatherings lowered significantly, as even smaller events and gatherings posed a risk to increased spread of the virus.

Since the beginning of the pandemic, WHO continues to recommend that the decision-making process related to holding, modifying, postponing or cancelling gatherings of any size in the context of the COVID-19 pandemic should rely on a risk-based approach. Such risk assessment exercises should be tailored to the characteristics of the event under consideration and be repeated at regular intervals, throughout the planning period as well as during the gathering, stopping only after the event has ended when local systems have returned to normal. Following such an approach enables a factual and dynamic appraisal of the overall risk associated with the event and its implications, and a timely adaptation of the response[i].

Recognized as a best practice for mass gatherings, public health authorities and event organizers are invited to apply WHO's recommended risk-based approach to decision-making for mass gatherings, tailoring it to the event under consideration.

WHO Mass Gatherings Global Event Database

In January 2020, WHO and its Collaborating Centre for Global Health Security – the Johns Hopkins Bloomberg School of Public Health (JHU) – developed a WHO Mass Gatherings Global Event Database to monitor the impact of the COVID-19 pandemic on mass gathering planning.
Hosts of mass gatherings, as well as all partners involved, are encouraged to enter information on events into an online form (example data shown) that feeds into the global database and is regularly reviewed and updated by JHU. Between January 2020 and 7 June 2022, the database featured over 5000 mass gatherings, of which 58% have applied WHO's risk-based approach in their decision-making process.

Mass Gatherings Indicators of risk-based approach implementation:

The database has been used to inform WHO's COVID-19 Strategic Preparedness and Response Plan (SPRP) and its associated mass gatherings country-based and event-based indicator(s) on a weekly and monthly basis, as described below (see Table 2).
Since the beginning of the COVID-19 pandemic, the use of risk-based approaches to mass gatherings has increased substantially. As of 7 June 2022, 174 out of 196 (88.7%) countries worldwide, including 90.2% (165/183) of Member States and 75% (9/13) of non-Member States, reported having a mass gathering event being affected by COVID-19 (cancelled, postponed, suspended, otherwise modified or re-opened in post-crisis scenario, i.e. their regular format) as a result of using a risk-based approach to decide if or how a mass gathering should be held.

[i] https://apps.who.int/iris/handle/10665/332235

The mass gatherings event-level SPRP indicator has remained relatively stable for the last six months at 68%-70% and as of 7 June 2022, 68.5% of events reported having been affected by COVID-19 (Table 2).

Table 2. Mass Gatherings country and event-level SPRP monitoring indicators

Indicator	*Description*	*Percentage*	*Number*
Country-level SPRP indicator	*Percentage of countries that reported having at least one mass gathering event affected by COVID-19 (cancelled, postponed, suspended, otherwise modified or re-opened in post crisis scenario) as a result of a risk assessment exercise/risk-based approach.*	***88.7%***	*174 out of 196 countries*
Event-level SPRP indicator	*Percentage of events that were affected by COVID-19 (cancelled, postponed, suspended, otherwise modified or re-opened in post crisis scenario) as a result of a risk assessment exercise/risk-based approach.*	***68.5 %***	*2967 out of 4329 events*

The breakdown of the mass gatherings country-level SPRP indicator on the use of a risk assessment/risk-based approach for those affected by COVID-19 mass gathering events (88.7% in total) by WHO region and Member States status is described below (see Table 3).

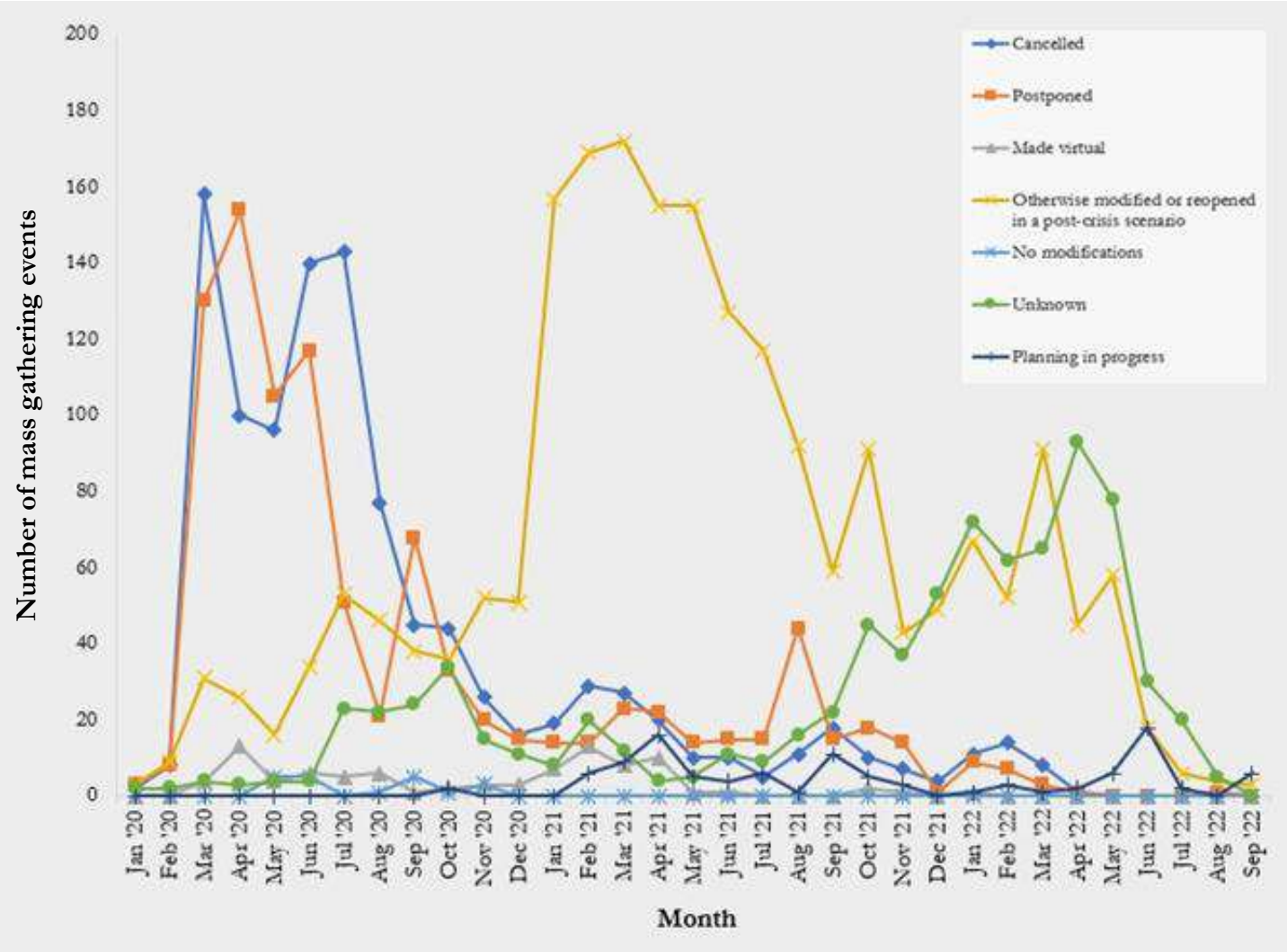
Table 3. Breakdown of the mass gatherings country-level SPRP indicator by WHO Region

WHO Region	Member-States percentage (N)	Non-Member States percentage (N)	WHO Region percentage (N)
Africa	86.7% (39)	100% (1)	87.0% (40)
Americas	87.1% (27)	100% (1)	77.8% (28)
Eastern Mediterranean	81.8% (18)	-	81.8% (18)
Europe	98.1% (53)	100% (2)	98.2% (55)
South-East Asia	81.8% (9)	-	81.8% (9)
Western Pacific	95.0% (19)	100% (5)	96% (24)
Total	90.2% (165 out of 183)	75.0% (9 out of 13)	88.7% (174 out of 196)

Monitoring of mass gathering events status

Monitored modifications to mass gatherings include cancellation, postponement, made virtual, otherwise modified or reopened in post-crisis scenario, held with no modifications, with unknown status, and planning in progress. Data collection for each calendar year includes all events that are happening through the end of December of the current year in order to forecast potential situations of concern. Events that have not yet occurred are recorded as “Planning in progress.” Events for which no data could be found on the event status are recorded as “Unknown”. Figure 4 (below) provides a temporal analysis of decisions made to mass gatherings by host authorities throughout the COVID-19 pandemic.

Figure 4. Monitoring of the mass gathering events status using the WHO Mass Gatherings Global Event Database, 2020- 2022



The majority of mass gatherings were postponed or cancelled in early to mid-2020, most likely as a default measure, but the majority of mass gatherings in late 2020 to 2021 were held in a modified format (i.e. online or hybrid format) as organizers began to embrace the risk-based approach process. The trend also generally follows the decline in mass gatherings coinciding with peaks in incidence of Delta and Omicron VOCs, respectively. The drop in recorded mass gatherings in the database during the latter half of 2022 is likely more attributable to ongoing data collection efforts rather than a true representation of the number of events being held during that time period. However, the proportional rise in events not reporting their status, as compared to reporting modifications or postponements, is being observed. More work is needed to convey the continued risks of SARS-CoV-2 transmission to mass gathering event organizers to encourage the ongoing use and reporting of a risk assessment/risk-based approach (RA/RBA).

Mass gatherings that indicated using a RA/RBA were most often reported to be otherwise modified rather than cancelled or postponed (see Table 4). Fifty-two percent of events (1581 out of 3045) that indicated the use of RA/RBA reported a modification to the event. However, there are still gaps in the data where it could not be determined

whether event organizers used a RA/RBA to make decisions about their events. Over 40% (2134 out of 5244) of all recorded events have not reported whether a RA/RBA was used.

The continuous process of cataloguing and analyzing global mass gatherings demonstrates its value and practicality for the WHO SPRP during the COVID-19 pandemic. Knowing where and when mass gatherings will occur can inform resource mobilization efforts and public health operational response during COVID-19 and other outbreaks.

Additionally, the decision to modify, postpone, or cancel a mass gathering often depends on financial and other considerations alongside health and safety concerns. Applying the risk assessment/risk-based approach can facilitate the delivery of a safe and successful event that, in turn, may yield important psychosocial benefits for participants and spectators and generate revenues for host countries and organizers. However, it is also clear that applying a set of precautionary measures also requires significant levels of human and financial resources. Event organizers, therefore, must account for these factors when planning gatherings of all sizes.

Table 4. Breakdown of usage of a risk assessment for recorded mass gathering events globally (n=5244) as of 7 June 2022

Use of risk assessment	Status of mass gatherings							
	Cancelled	Postponed	Made virtual	Otherwise modified	No modifications	Unknown	Planning in progress	Total
Yes	801 (15.27%)	523 (9.97%)	89 (1.70%)	1581 (30.15%)	4 (0.08%)	16 (0.31%)	31 (0.59%)	3045 (58.07%)
No	34 (0.65%)	7 (0.13%)	0 (0.00%)	19 (0.36%)	3 (0.06%)	2 (0.04%)	0 (0.00%)	65 (1.24%)
Not reported	249 (4.75%)	440 (8.39%)	2 (0.04%)	553 (10.55%)	13 (0.25%)	800 (15.26%)	77 (1.47%)	2134 (40.69%)
Total	1084 (20.67%)	970 (18.50%)	91 (1.74%)	2153 (41.06%)	20 (0.38%)	818 (15.60%)	108 (2.06%)	5244 (100.00%)

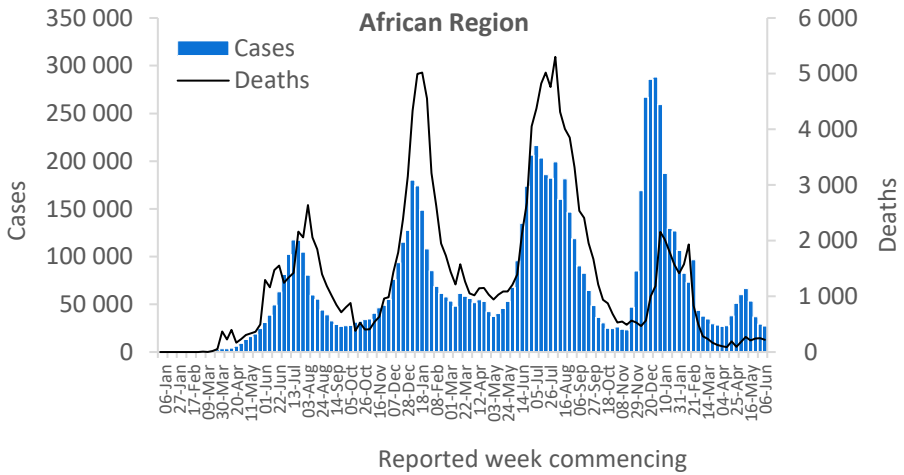
WHO regional overviews:

Epidemiological week 6-12 June 2022**

African Region

The African Region reported a decline in the number of new weekly cases for the third consecutive week, with over 27 000 new cases, a 7% decrease as compared to the previous week. However, 13 (27%) countries reported an increase in the number of new cases of 20% or greater, with some of the greatest proportional increases seen in Malawi (89 vs 37 new cases; +141%), Uganda (572 vs 267 new cases; +114%) and Cabo Verde (540 vs 266 new cases; +103%). The countries that reported the highest numbers of new cases were South Africa (10 550 new cases; 17.8 new cases per 100 000 population; -29%), Ethiopia (3829 new cases; 3.3 new cases per 100 000; +54%), and Réunion (1924 new cases; 214.9 new cases per 100 000; -6%)

The number of new weekly deaths in the Region decreased by 11% as compared to the previous week, with over 200 new deaths reported. The highest numbers of new deaths were reported from South Africa (164 new deaths; <1 new death per 100 000 population; -4%), Réunion (12 new deaths; 1.3 new deaths per 100 000; +71%), and Zimbabwe (11 new deaths; <1 new deaths per 100 000; +10%).

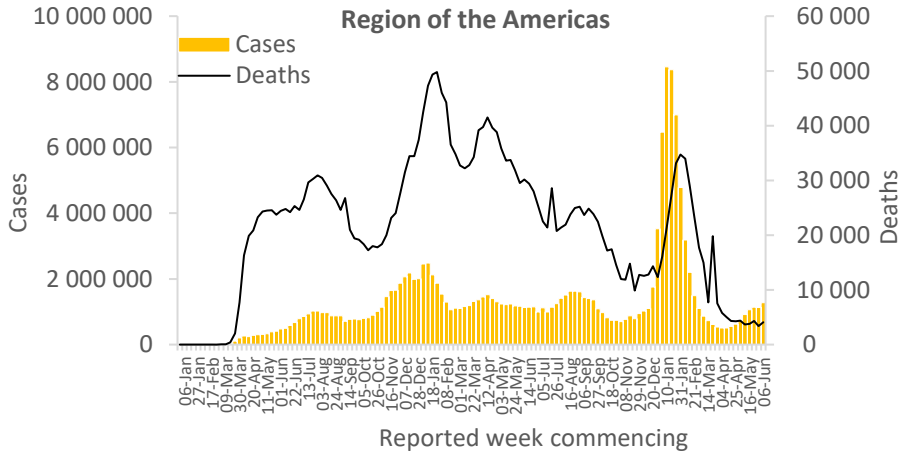


Updates from the African Region

Region of the Americas

The Region of the Americas has continued to report increases in case incidence since mid-April 2022, with over 1.2 million new weekly cases, a 13% increase as compared to the previous week. Seventeen (30%) countries reported increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Saint Martin (74 vs 38 new cases; +95%), the British Virgin Islands (137 vs 75 new cases; +83%) and Bolivia (Plurinational State of) (2002 vs 1250 new cases; +60%). The highest number of new cases were reported from the United States of America (743 723 new cases; 224.7 new cases per 100 000; +13%), Brazil (279 862 new cases; 131.7 new cases per 100 000; +29%), and Chile (69 174 new cases; 361.9 new cases per 100 000; +25%).

The number of new weekly deaths in the Region increased by 21% as compared to the previous week, with over 4100 new deaths reported. The highest numbers of new deaths were reported from the United States of America (2367 new deaths; <1 new death per 100 000; +32%), Brazil (989 new deaths; <1 new death per 100 000; +52%), and Canada (199 new deaths; <1 new death per 100 000; -35%).

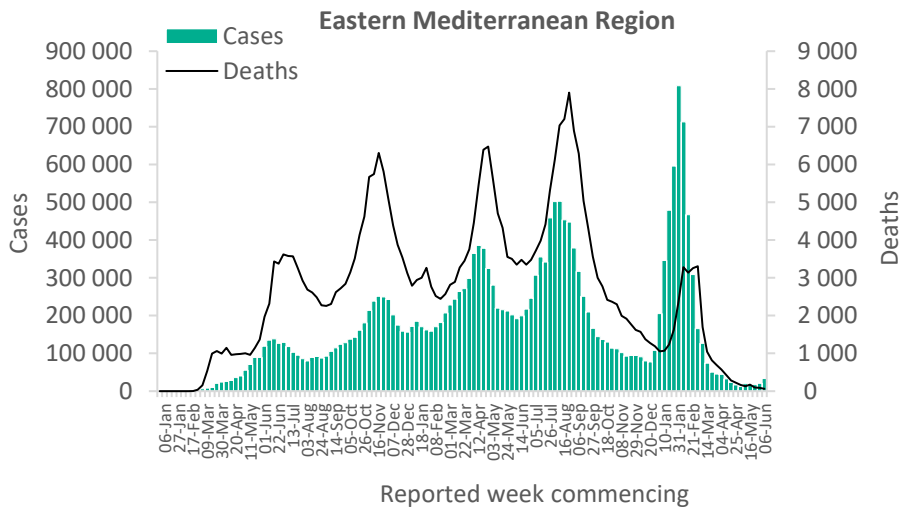


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 33 000 new weekly cases, representing a 58% increase as compared to the previous week. Twelve (55%) countries reported increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Morocco (5184 vs 2188 new cases; +137), Kuwait (1701 vs 851 new cases; +100%) and the United Arab Emirates (5909 vs 3269 new cases; +81%). The highest numbers of new cases were reported from Bahrain (6551 new cases; 385.0 new cases per 100 000; +60%), Saudi Arabia (6149 new cases; 17.7 new cases per 100 000; +35%), and the United Arab Emirates (5909 new cases; 59.7 new cases per 100 000; +81%).

The number of new weekly deaths in the Region decreased by 32% as compared to the previous week, with 62 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (21 new deaths; <1 new death per 100 000; -5%), Saudi Arabia (15 new deaths; <1 new death per 100 000; +25%), and Lebanon (eight new deaths; <1 new death per 100 000; -11%).

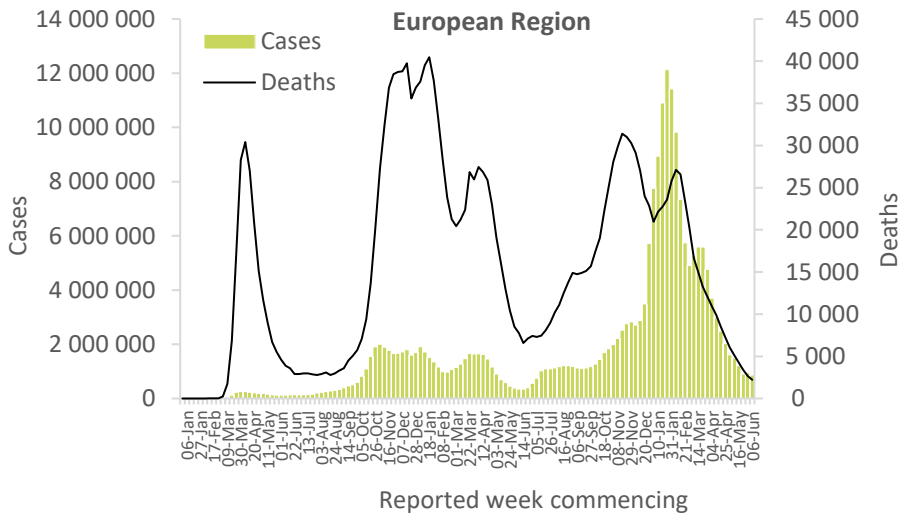


Updates from the Eastern Mediterranean Region

European Region

After decreases in the number of new weekly cases observed since mid-March 2022, the European Region reported over 873 000 new cases this week, an 8% increase compared to the previous week. Twenty-one (34%) countries in the Region reported increases in new cases of 20% or greater, with some of the greatest proportional increases observed in the Republic of Moldova (227 vs 34 new cases; +568%), Jersey (308 vs 167 new cases; +84%) and Israel (29 248 vs 16 476 new cases; +78%). The highest numbers of new cases were reported from Germany (281 706 new cases; 338.7 new cases per 100 000; +16%), Italy (143 614 new cases; 240.8 new cases per 100 000; +23%), and France (136 360 new cases; 209.7 new cases per 100 000; -2%).

Over 2200 new weekly deaths were reported, an 18% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (500 new deaths; <1 new death per 100 000; -12%), Italy (443 new deaths; <1 new death per 100 000; +17%), and France (240 new deaths; <1 new death per 100 000; -26%).



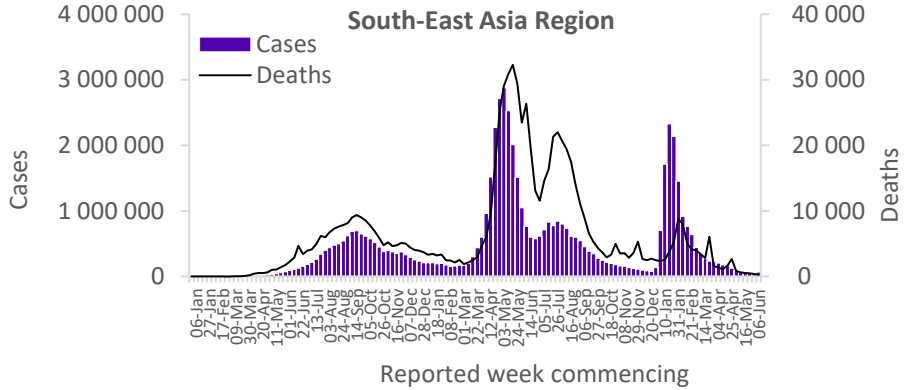
Updates from the European Region

South-East Asia Region

After the declining trend in new cases observed since mid-January 2022, the South-East Asia Region reported over 67 000 new cases, a 33% increase compared to the previous week. Five (50%) countries showed increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Bangladesh (492 vs 216 new cases; +128%), India (45 200 vs 23 774 new cases; +90%) and Indonesia (3688 vs 2385 new cases; +55%). The highest numbers of new cases were reported from India (45 200 new cases; 3.3 new cases per 100 000; +90%), Thailand (18 070 new cases; 25.9 new cases per 100 000; -25%), and Indonesia (3688 new cases; 1.3 new cases per 100 000; +55%).

The number of new weekly deaths in the Region decreased by 25% as compared to the previous week, with over 200 new deaths reported. The highest numbers of new deaths were reported from Thailand (163 new deaths; <1 new death per 100 000; -18%), India (69 new deaths; <1 new death per 100 000; -35%), and Indonesia (28 new deaths; <1 new death per 100 000; -32%).

Reports of an outbreak of COVID-19 reported in the Democratic People's Republic of Korea continue through official media on 12 May 2022; however, at present, no confirmed cases or deaths have been reported to WHO.

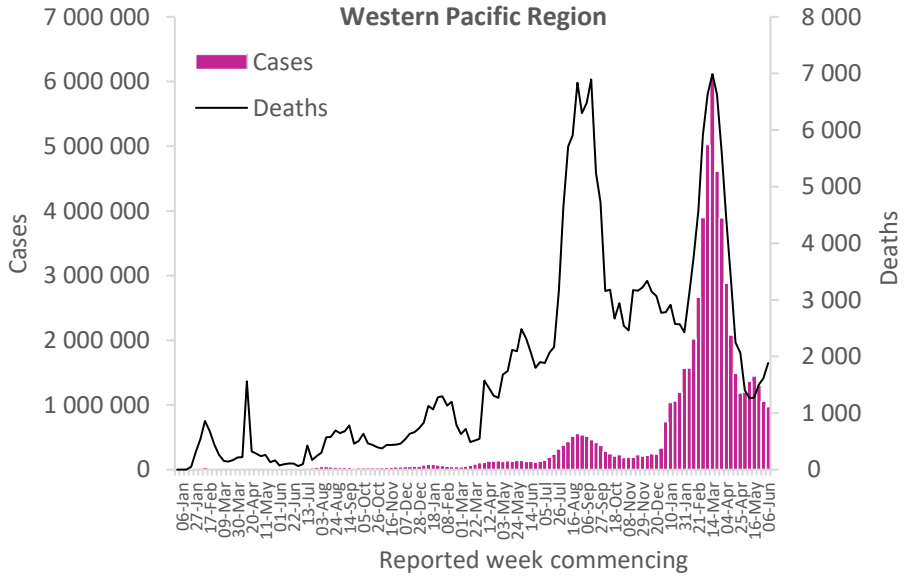


Updates from the South-East Asia Region

Western Pacific Region

With just under 971 000 new cases reported last week, the Western Pacific Region continues the decreasing trend observed for the third consecutive week. This represents an 8% decline in new cases as compared to the previous week. Six (18%) countries reported increases in new cases of 20% or greater, with the largest proportional increases observed in Guam (688 vs 126 new cases; +446%), French Polynesia (160 vs 35 new cases; +357%) and Palau (80 vs 45 new cases; +78%). The highest numbers of new cases were reported from China (501 146 new cases; 34.1 new cases per 100 000; -5%), Australia (194 158 new cases; 761.4 new cases per 100 000; -13%), and Japan (125 577 new cases; 99.3 new cases per 100 000; +3%).

The Region reported over 1800 new weekly deaths, representing a 17% increase as compared to the previous week. The highest numbers of new deaths were reported from China (1201 new deaths; <1 new death per 100 000; +32%), Australia (295 new deaths; 1.2 new deaths per 100 000; +2%), and Japan (144 new deaths; <1 new death per 100 000; -28%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.
[2] Since 21 May, data for COVID-19 cases and deaths in Northern Ireland was no longer included in the United Kingdom updates (see here for the official announcement).

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public: Protect yourself; Questions and answers; Travel advice

COVID-19 Weekly Epidemiological Update

Edition 95, published 8 June 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews
- Summary of the Monthly operational update on COVID-19 - May 2022

Global overview

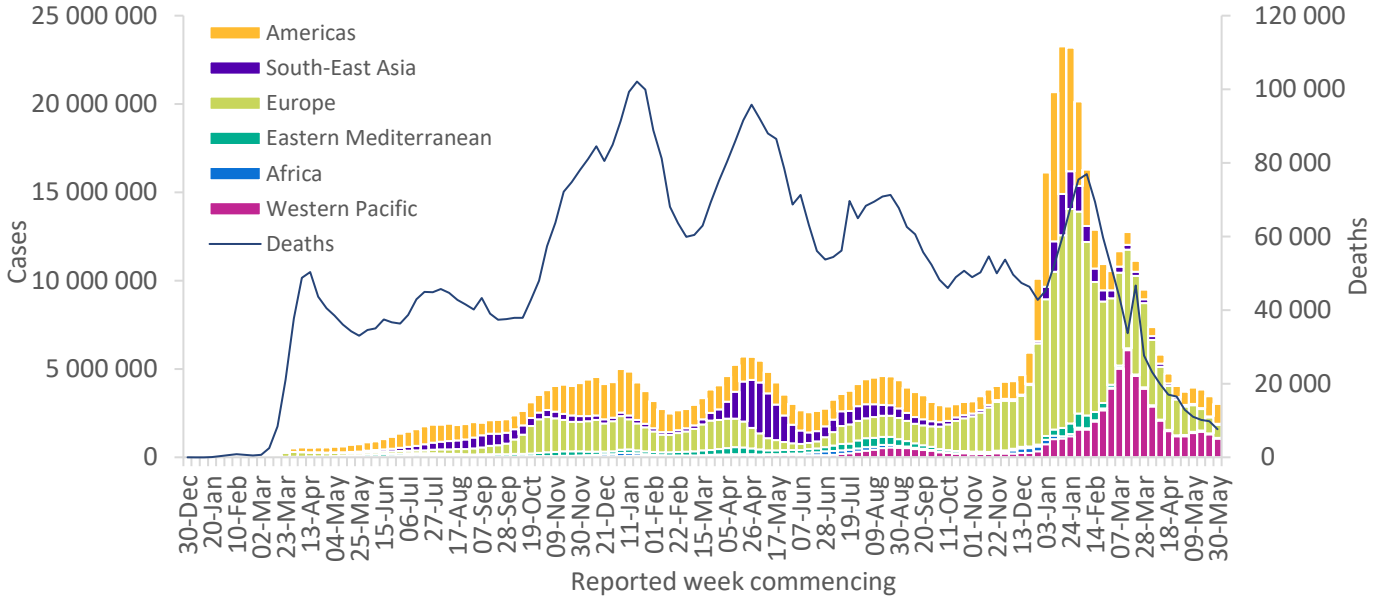
Data as of 5 June 2022

Globally, the number of new weekly cases has continued to decline since the peak in January 2022. During the week of 30 May to 5 June 2022, over three million cases were reported, a 12% decrease as compared to the previous week (figure 1). The number of new weekly deaths also continues to decline, with over 7 600 fatalities reported, representing a 22% decrease as compared to the previous week.

At the regional level, the numbers of new weekly cases increased in the Eastern Mediterranean Region (+19%) and South-East Asia Region (+1%), while they decreased in the other four WHO regions. The number of new weekly deaths increased in the Western Pacific Region (+7%), while decreasing trends were observed in the other five regions.

As of 5 June 2022, over 529 million confirmed cases and over six million deaths have been reported globally. These trends should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 5 June 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest number of new weekly cases were reported from the United States of America (657 268 new cases; -11%), China (528 432 new cases; -8%), Australia (221 935 new cases; -25%), Brazil (216 334 new cases; +36%), and Germany (215 955 new cases; +16%).

The highest number of new weekly deaths were reported from the United States of America (1 703 new deaths; -33%), China (910 new deaths; +57%), Brazil (652 new deaths; -21%), the Russian Federation (565 new deaths; -7%), and Italy (380 new deaths; -39%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 5 June 2022**

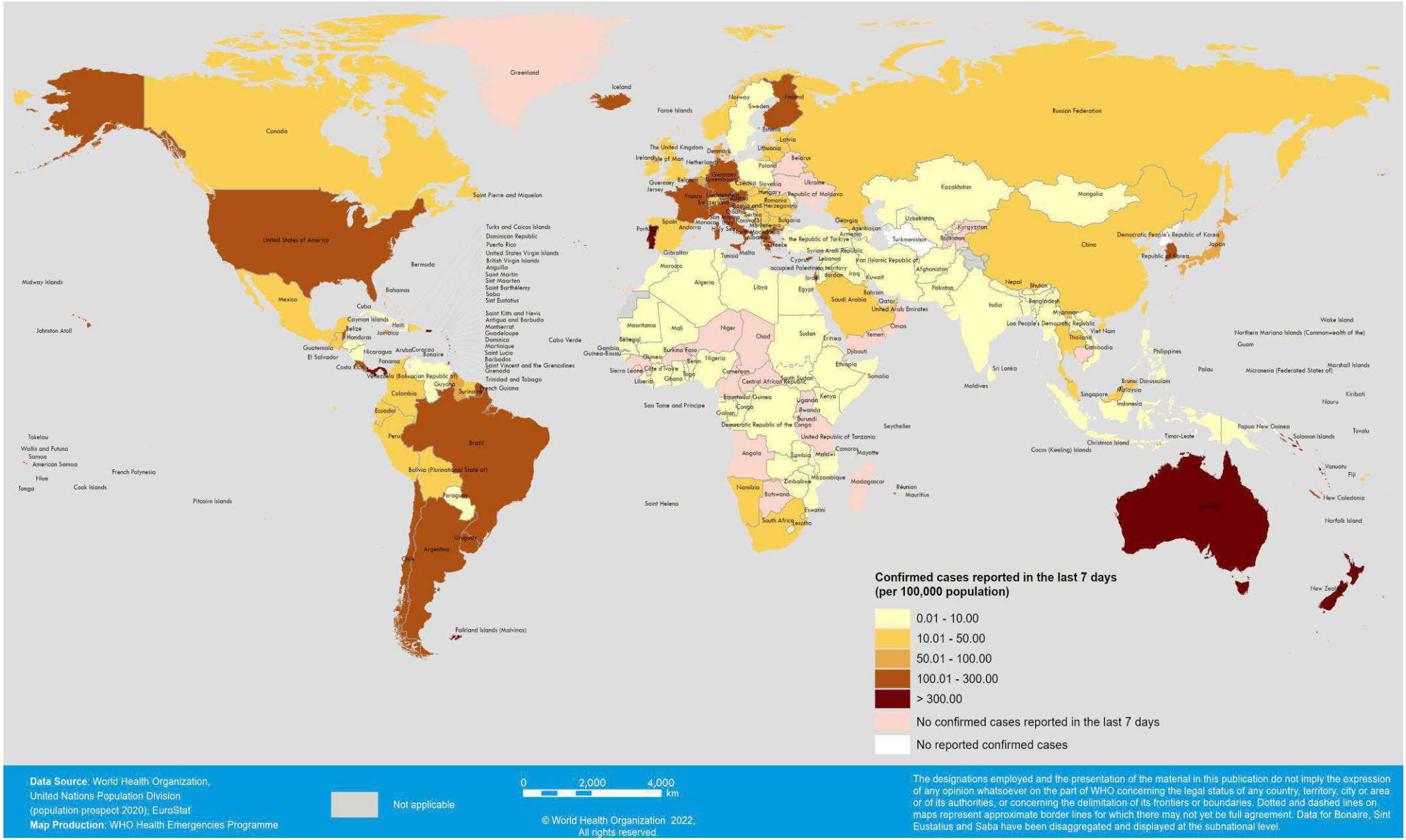
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 124 932 (37%)	-1%	158 183 579 (30%)	3 303 (43%)	-23%	2 745 921 (44%)
Western Pacific	1 055 718 (35%)	-19%	61 013 872 (12%)	1 615 (21%)	7%	232 094 (4%)
Europe	744 792 (25%)	-18%	221 509 299 (42%)	2 082 (27%)	-35%	2 015 211 (32%)
South-East Asia	50 811 (2%)	1%	58 172 873 (11%)	350 (5%)	-23%	788 964 (13%)
Africa	26 160 (1%)	-29%	9 017 523 (2%)	211 (3%)	-13%	172 773 (3%)
Eastern Mediterranean	20 965 (1%)	19%	21 790 247 (4%)	83 (1%)	-14%	342 896 (5%)
Global	**3 023 378 (100%)**	**-12%**	**529 688 157 (100%)**	**7 644 (100%)**	**-22%**	**6 297 872 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

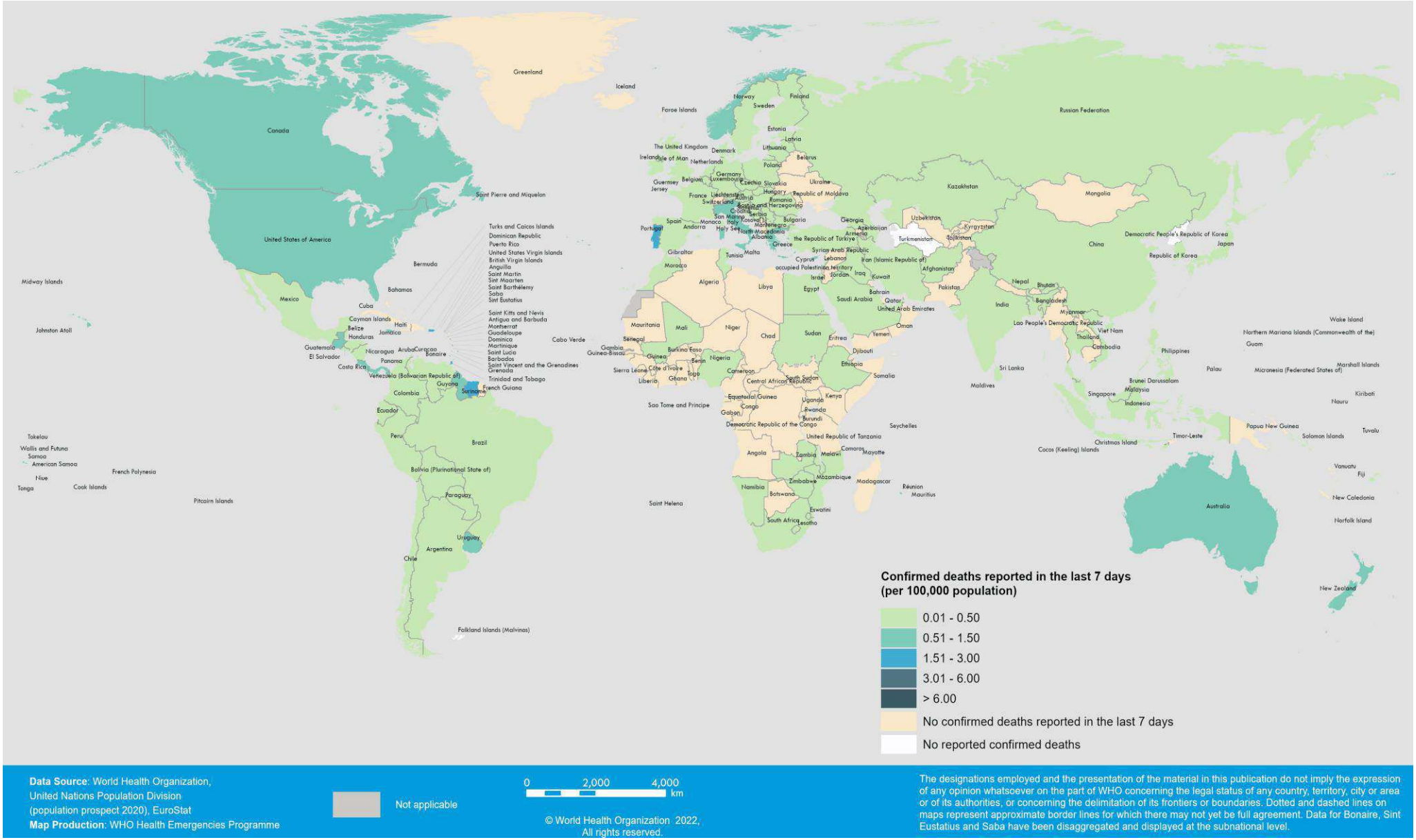
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly/Monthly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 30 May – 5 June 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 30 May – 5 June 2022*



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.

Geographic spread and prevalence of VOCs

The Omicron VOC continues to be the dominant variant circulating globally, accounting for nearly all sequences reported to GISAID in the last 30 days. Due to very low circulation among sequences submitted to GISAID in the last three months, Delta is now categorized by WHO as a 'previously circulating VOC,' in the same way that Alpha, Beta and Gamma are categorized. Importantly however, this does not imply that previously circulating VOCs cannot resurge in the future and WHO will continue to monitor using available data.

Among Omicron lineages, as of epidemiological week 20 (15 to 21 May 2022), BA.2 and its descendent lineages (pooled lineages named BA.2.X) are declining but remain dominant, accounting for 44% and 19% respectively (figure 4, Table 2). Several variants with preliminary evidence of a growth advantage over other Omicron lineages show a global prevalence of <1% and are no longer rising, namely BA.2.11, BA.2.13, and BA.2.9.1. These lineages have in common the acquisition of a mutation at the locus S:L452X. Former dominant Omicron lineages BA.1, BA.1.1. BA.1.X and BA.3 sublineages have declined to <1%.

Globally, BA.2.12.1, BA.5, and BA.4 variants are rising in prevalence. As of week 20, BA.2.12.1 (detected in 53 countries) has reached a prevalence of 28%, a prevalence that may be largely attributed to an initial rapid increase in the Region of the Americas. BA.5 (detected in 47 countries) and BA.4 (detected in 42 countries) account for 4% and 2% of circulating variants, respectively. All three variants carry the signature mutation at locus S:L452 that is thought to confer greater transmissibility through higher cell fusogenicity and immune escape characteristics. Accumulating evidence from several countries indicates that there has been no observed increase in severity associated with BA.5 and BA.4.[1] No evidence is available at the current time on disease severity associated with BA.2.12.1.

As for the recombinant variants of SARS-CoV-2 detected in early 2022, including recombinants of known VOCs, a few had characteristics indicative of potential for increased transmissibility; however, this did not translate into a wide spread. The number of SARS-CoV-2 recombinant sequences submitted to GISAID which were being monitored by WHO or which showed an initial rise in the number of sequences reported (XE, XD and XF) continues to decline weekly, now representing <0.1% of sequences submitted during week 20.

Figure 4 Panel A and B: The number and percentage of SARS-CoV-2 sequences, as of 4 June 2022

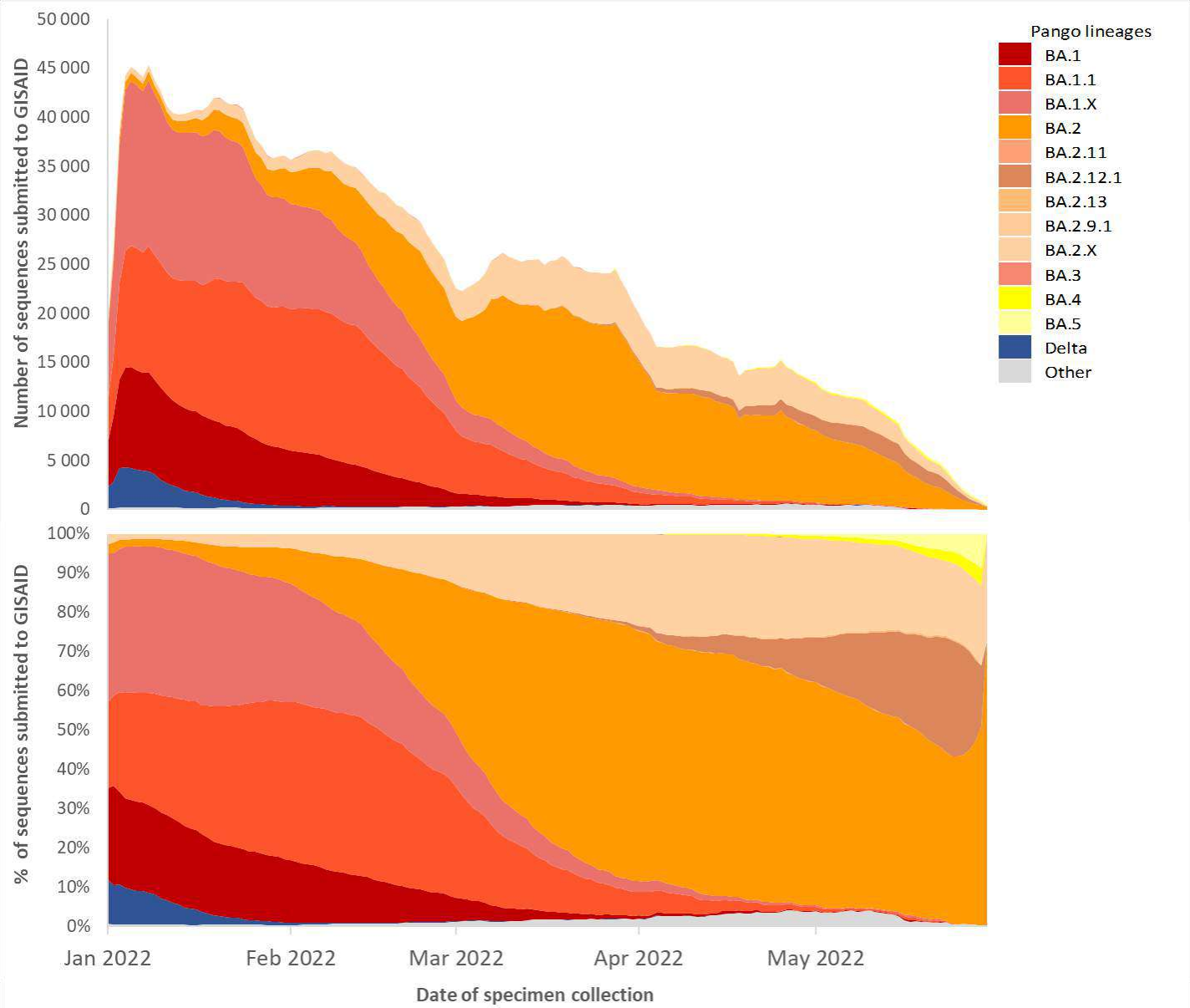


Figure 4 Panel A shows the number and **Panel B** the percentage of all circulating variants since 1 January 2022. Omicron sister-lineages and additional Omicron VOC descendent lineages under further monitoring (VOC-VUM) are shown. BA.1.X and BA.2.X include all BA.1 and BA.2 pooled descendent lineages, except those already shown in the figure above. Source: SARS-CoV-2 sequence data and metadata from GISAID, as of 4 June 2022.

Table 2: Relative proportions of Omicron lineages over the last four weeks by specimen collection date

Lineage	Countries	Sequences[a]	2022-18[b]	2022-19[b]	2022-20[b]	2022-21[b]
BA.1	175	491 224	0.11	0.21	0.20	0.02
BA.1.1	174	959 680	0.53	0.52	0.39	0.13
BA.1.X*	174	889 390	0.17	0.32	0.31	0.02
BA.2	138	1 054 358	53.15	49.60	43.98	49.88
BA.2.11	12	547	0.04	0.05	0.05	0.03
BA.2.12.1	53	68 256	16.78	21.85	27.83	15.62
BA.2.13	34	1 529	0.34	0.44	0.47	0.45
BA.2.9.1	13	649	0.08	0.08	0.14	0.21
BA.2.X*	122	404 797	22.89	21.24	19.25	20.05
BA.3	31	817	0.01	0.01	0.00	0.00
BA.4	42	4 692	1.12	1.25	2.38	4.14
BA.5	47	4 905	1.01	1.87	4.00	8.75
Delta	202	4 338 590	0.01	0.01	0.00	0.02
Other	209	2 675 752	3.75	2.55	0.98	0.70

[a]Data source: sequences and metadata from GISAID
[b]Relative proportions in %
*BA.1.X and BA.2.X include all BA.1 and BA.2 pooled descendent lineages, except those already shown in the table above.
The blue rows indicate the dominant lineages. The grey rows indicate the lineages that are increasing in prevalence.

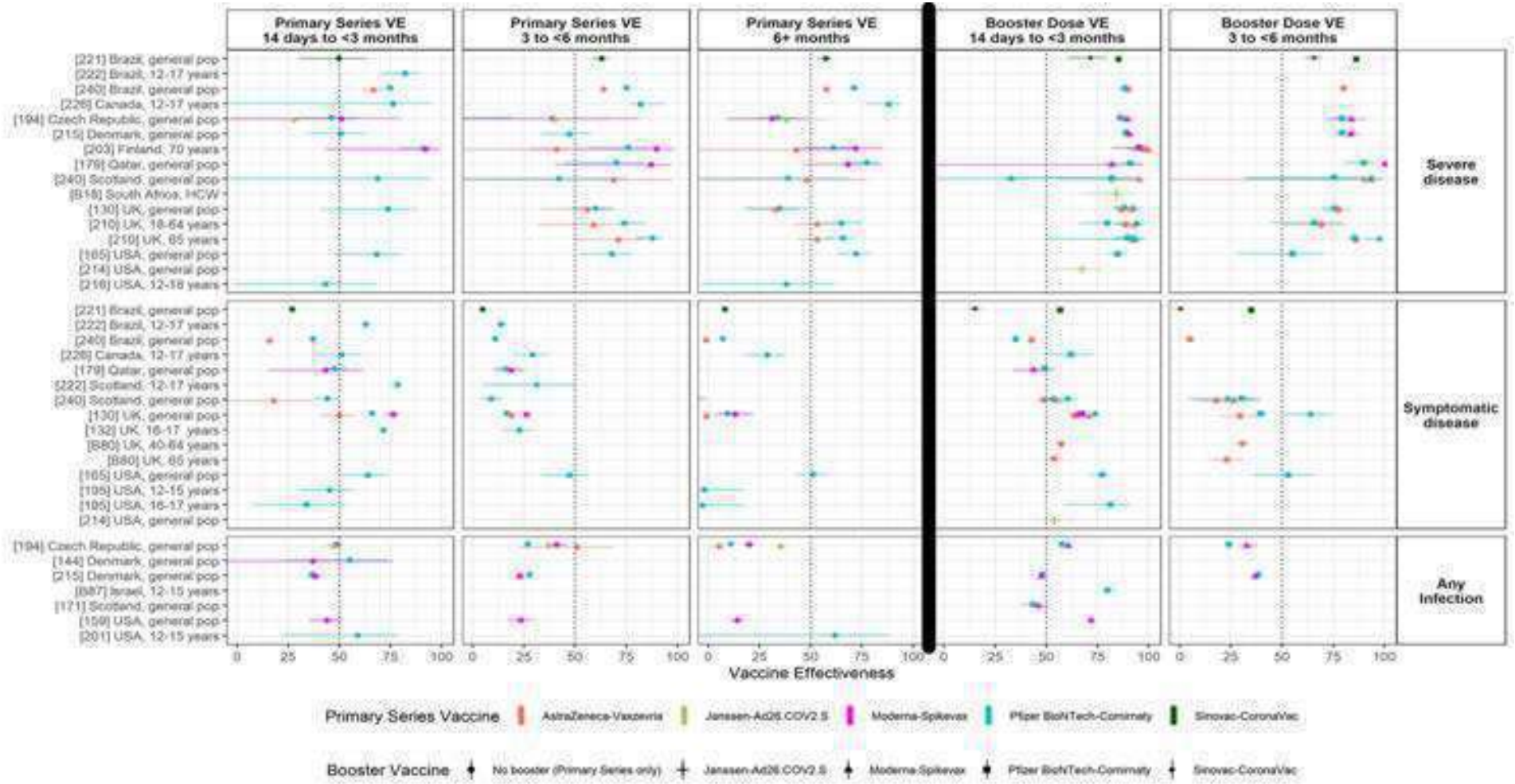
Characteristics of Omicron

Available evidence on the phenotypic impacts of VOCs is reported in previous editions of the COVID-19 Weekly Epidemiological Update. Table 3 summarize the phenotypic characteristics of the Omicron VOC and its sublineages for which evidence is available since the last update on 25 May 2022. Some of these studies have not been peer-reviewed and the findings must, therefore, be interpreted with due consideration of this limitation.

Table 3: Summary of phenotypic characteristics* of the Omicron VOC

Public health domain of impact	Omicron (B.1.1.529)	Omicron sublineages			
		BA.1	BA.2	BA.4	BA.5
Transmissibility	Growth advantage and increased transmissibility compared to Delta (Campbell 2021)[2]	Lower transmissibility compared to BA.2 (Atkulwar 2022)[3]	Increased transmissibility compared to BA.1[3]	No studies on relative transmissibility compared to BA.1 and BA.2	No studies on relative transmissibility compared to BA.1 and BA.2
Disease severity	Overall evidence suggests lower severity despite contrasting evidence. Earlier studies reported lower severity compared to Delta. [1,4–7] However, more recent studies reported similar [8,9] or increased severity[10] compared to Delta.[1,4–7,11 12]	No difference in disease severity compared to BA.2[13]	No difference in disease severity compared to BA.1[13]	Currently available evidence does not suggest a difference in disease severity compared to BA.1 [14]	Currently available evidence does not suggest a difference in disease severity compared to BA.1 [14,15]
Risk of reinfection	Reduced risk of Omicron reinfection if previously infected with a different SARS-CoV-2 variant[16,17]	Reduced risk of reinfection with BA.1 following infection with BA.2[18]	Reduced risk of reinfection with BA.2 following infection with BA.1 [18]	No specific data available	No specific data available
Impact on antibody responses	Reduction in neutralizing activity reported as compared to other VOCs[19–21]	Lower neutralising antibody titers compared to the index virus [20]	Lower neutralising antibody titers compared to the index virus[20]	Lower neutralising antibody titres (7.6-fold) compared to BA.1 [22–24]	Lower neutralising antibody titres (7.5-fold) compared to BA.1 [22,24]
Impacts on diagnostics	PCR assays that include multiple gene targets maintain their accuracy to detect Omicron[25]; S gene target failure/positivity (SGTF) may be a proxy for screening. Limited to no impact on sensitivity of Ag-RDTs observed[26–29]	S gene target failure.	The majority will be S gene target positive (SGTP).	S gene target failure.	S gene target failure.
Impact on treatment	No difference in the effectiveness of antiviral agents (polymerase and protease inhibitors) against the Omicron variant[30]. Conserved neutralizing activity for three broadly neutralizing monoclonal antibodies (sotrovimab, S2X259 and S2H97) and a reduced effectiveness of other monoclonal antibodies[31–34]	Reduced efficacy of casirivimab-imdevimab against BA.1[35]	Reduced neutralising activity of sotrovimab [35], casirivimab and imdevimab against BA.2[36]	Reduced neutralising activity of casirivimab and imdevimab[36]	Reduced neutralising activity of casirivimab and imdevimab[36]
Impact on vaccination	Results of vaccine effectiveness (VE) studies should be interpreted with caution because estimates vary with the type of vaccine administered and the number of doses and scheduling (sequential administration of different vaccines). For further information, **see the section Interpretation of the results of the VE for the Omicron variant**				

Figure 5. Vaccine effectiveness (VE) of primary series and booster vaccination against the Omicron variant of concern



Abbreviations: pop=population; HCW=healthcare workers. Dots represent point estimates of vaccine effectiveness; horizontal lines represent the 95% confidence intervals. Labels along left side of plot indicate reference numbers [], country, and study population. Reference numbers identify the study and link to the summary table of VE effectiveness studies on view-hub.org (Table 1 in summary table); references starting with a 'B' are studies found in the booster VE table only (Table 2 in summary table). Primary series refers to the completion of two doses of vaccines for AstraZeneca-Vaxzevria; Moderna-Spikevax, Pfizer BioNTech-Comirnaty and Sinovac-CoronaVac and one dose of Janssen-Ad26.COV2.S. Severe disease includes severe disease, hospitalization, and pneumonia; symptomatic disease includes disease of any severity level; any infection can include symptomatic and asymptomatic infection. Additional details on the methods for inclusion of the estimates in the plots provided in Annex 3. Note, nine point estimates for the primary series with confidence intervals below 0 are not shown in the Omicron plot: two estimates from reference #144 against infection at 3 to <6 months (Pfizer BioNTech-Comrinaty and Moderna-Spikevax), two estimates from reference #179 against symptomatic disease at 6+ months (Pfizer BioNTech-Comrinaty and Moderna-Spikevax), and five estimates from reference #240 (one AstraZeneca-Vaxzevria estimate at 3 to <6 months; three AstraZeneca-Vaxzevria estimates and one Pfizer BioNTech estimate at 6+ months).

Figure 5 summarizes the impact of Omicron variant on product-specific vaccine effectiveness (VE) over time for both primary series vaccines and booster vaccines. Additional information on vaccine performance against VOCs can also be found in Annex 4. Since the last update, one new study (not yet peer-reviewed) assessing absolute vaccine effectiveness of three doses of Pfizer BioNTech-Comirnaty among children in Israel has been added to the figure.[35] The study found three doses of the vaccine to be 80% effective (95% CI: 76.7-83.1) at preventing Omicron infection among children 12-15 years of age within approximately two months of vaccination with the third dose.

Interpretation of the results of absolute VE for the Omicron variant

To date, 22 studies from 10 countries (Brazil, Canada, Czech Republic, Denmark, Finland, Israel, Qatar, South Africa, the United Kingdom and the United States of America) have assessed the duration of protection of five vaccines against the Omicron variant (six studies assessed VE of primary series vaccination only, four assessed VE of booster vaccination only, and 12 assessed both). Findings from these studies show reduced VE of COVID-19 primary series vaccines against the Omicron variant for all outcomes (*severe disease*, *symptomatic disease*, and *infection*) than has been observed for the other VOCs. Importantly though, VE estimates against the Omicron variant remain higher for *severe disease*, in the majority of studies. Booster vaccination substantially improves VE for all outcomes and for all combinations of schedules with estimates available for both primary series and booster vaccination. VE declines more with time after booster vaccination for symptomatic disease and infection than it does for severe disease; however, studies that assess VE of booster vaccination beyond six months are needed to evaluate the longer duration of protection.

For *severe disease*, within the first three months of primary series vaccination, six of 12 (50%) VE estimates for the mRNA vaccines (Moderna-Spikevax and Pfizer BioNTech-Comirnaty) were ≥70%. Of the two studies available for vector vaccines, one reported a VE of <70% for AstraZeneca-Vaxzevria, and the other reported a VE of <50% for Janssen-Ad26.COV2.S. One study available for inactivated vaccines (Sinovac-CoronaVac) reported a VE equal to 50%. Beyond three months after vaccination, 13 of 28 (46%) VE estimates for the mRNA vaccines were ≥70% while 19 (68%) were ≥50%; one of the 12 (8%) VE estimates for AstraZeneca-Vaxzevria was ≥70% while eight (67%) were ≥50%, but neither of the two estimates for Janssen-Ad26.COV2.S were ≥50%. The two available VE estimates beyond three months of vaccination for Sinovac-CoronaVac were ≥50%.

Booster vaccination improved VE against severe disease in all studies in which it was assessed. There were 33 estimates of an mRNA booster, two estimates a booster dose of Janssen-Ad26.COV2.S, and one estimates a booster dose of Sinovac-CoronaVac. Across the datasets, only one estimate for Pfizer BioNTech-Comrinaty as a booster dose and one for Janssen-Ad26.COV2.S as a booster dose below 70% between 14 days and three months of receipt of a booster dose. At three to six months post mRNA booster, 17 of 20 (85%) estimates showed VE ≥70% (an mRNA vaccine was given as the primary series in 13 of the 20 estimates while AstraZeneca-Vaxzevria and Sinovac-CoronaVac were given as the primary series for six and one of the 20 estimates, respectively).

VE estimates against *symptomatic disease* and *infection* within the first three months of primary series vaccination tended to be lower than against severe disease, and VE decreased more substantially over time. For *symptomatic disease* within the first three months of primary series vaccination, three of 13 (23%) VE estimates for the mRNA vaccines were ≥70% and seven (54%) were ≥50%; none of the three available VE estimates for AstraZeneca-Vaxzevria nor the single estimate for Sinovac-CoronaVac) were above 50%. Beyond three months after vaccination, one of the 29 (3%) VE estimates were ≥50% (21 estimates evaluated mRNA vaccines, six evaluated AstraZeneca-Vaxzevria, and two evaluated Sinovac-CoronaVac). Booster with an mRNA vaccination after completion of a primary series of an

mRNA vaccine, AstraZeneca-Vaxzevria, or Sinovac-CoronaVac, improved VE against *symptomatic disease* with four of 20 (20%) VE estimates ≥70% and 15 (75%) estimates ≥50% between 14 days and three months post booster. However, booster dose protection declined with time since vaccination with only two of twelve (17%) available estimates indicating a VE of ≥50% at three to six months following receipt of an mRNA booster dose. Neither the single estimate for a booster dose of AstraZeneca-Vaxzevria nor the single estimate for a booster dose of Sinovac-CoronaVac three to six months post vaccination was above 50%. VE against *infection* showed a similar pattern as that against *symptomatic disease*.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

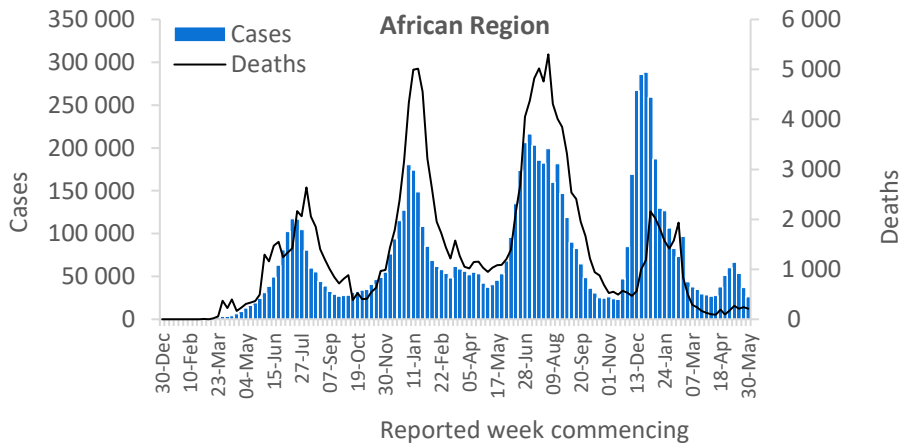
WHO regional overviews:

Epidemiological week 30 May – 5 June 2022**

African Region

After reporting increasing trends for a month, the African Region has reported a decline in the number of new weekly cases for the third consecutive week, with over 26 000 new cases, a 29% decrease as compared to the previous week. However, eleven (22%) countries reported an increase in the number of new cases of over 20%, with the greatest proportional increases observed in Ghana (352 vs 73 new cases; +382%), Eritrea (10 vs three new cases; +233%) and Ethiopia (2483 vs 889 new cases; +179%). The highest numbers of new cases were reported from South Africa (14 885 new cases; 25.1 new cases per 100 000; -42%), Ethiopia (2483 new cases; 2.2 new cases per 100 000; +179%), and Réunion (2046 new cases; 228.5 new cases per 100 000; -37%).

The number of new weekly deaths in the Region decreased by 13% as compared to the previous week, with over 200 new deaths reported. The highest numbers of new deaths were reported from South Africa (171 new deaths; <1 new death per 100 000 population; -19%), Zimbabwe (10 new deaths; <1 new death per 100 000; +67%), and Réunion (seven new deaths; <1 new death per 100 000; similar to the previous week's figures).

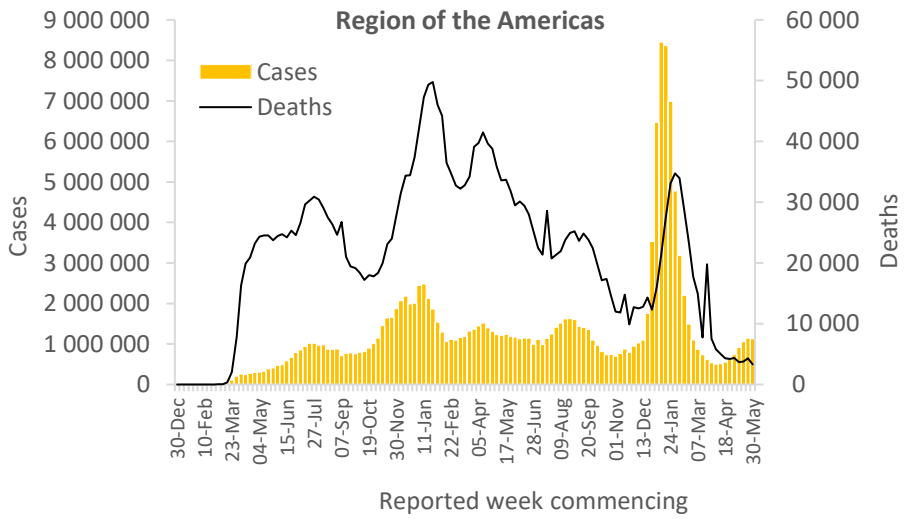


Updates from the African Region

Region of the Americas

Following an increasing trend since mid-April 2022, the Region of the Americas has reported a decrease in case incidence. Over 1.1 million new weekly cases were reported, a 1% decrease as compared to the previous week. However, sixteen (29%) countries reported increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Ecuador (7215 vs 2400 new cases; +201%), Haiti (74 vs 29 new cases; +155%) and Guyana (627 vs 347 new cases; +81%). The highest numbers of new cases were reported from the United States of America (657 268 new cases; 198.6 new cases per 100 000; -11%), Brazil (216 334 new cases; 101.8 new cases per 100 000; +36%), and Chile (55 211 new cases; 288.8 new cases per 100 000; +16%).

The number of new weekly deaths in the Region increased by 23% as compared to the previous week, with over 3300 new deaths reported. The highest numbers of new deaths were reported from the United States of America (1703 new deaths; <1 new death per 100 000; -33%), Brazil (652 new deaths; <1 new death per 100 000; -21%), and Canada (304 new deaths; <1 new death per 100 000; similar to the previous week's figures).

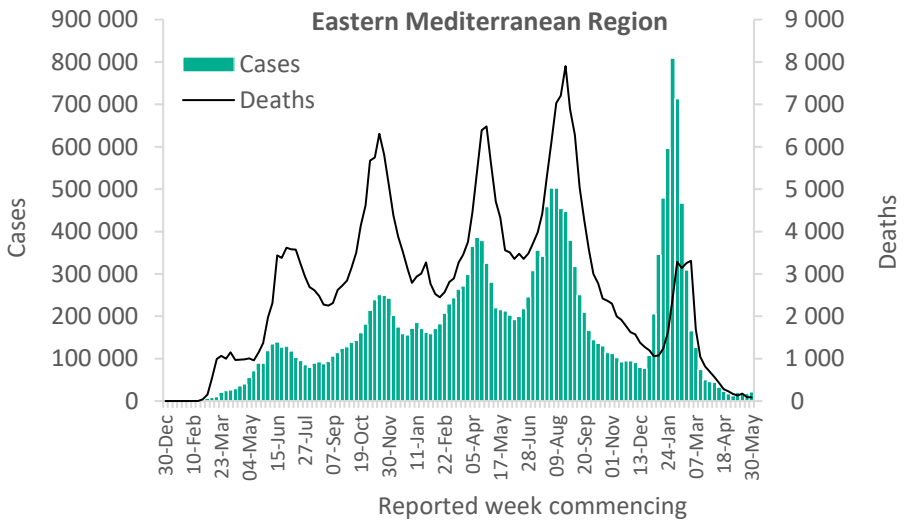


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported just under 21 000 new weekly cases, representing a 19% increase as compared to the previous week. Six (27%) countries reported increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Somalia (30 vs 14 new cases; +114%), Morocco (2188 vs 1202 new cases; +82%) and Bahrain (4806 vs 3187 new cases; +28%). The highest numbers of new cases were reported from Saudi Arabia (4545 new cases; 13.1 new cases per 100 000; +26%), Bahrain (4086 new cases; 240.1 new cases per 100 000; +28%), and the United Arab Emirates (3269 new cases; 33.1 new cases per 100 000; +26%).

The number of new weekly deaths in the Region decreased by 14% as compared to the previous week, with over 80 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (22 new deaths; <1 new death per 100 000; -37%), Egypt (14 new deaths; <1 new death per 100 000; similar to the previous week's figures), and Saudi Arabia (12 new deaths; <1 new death per 100 000; -20%).

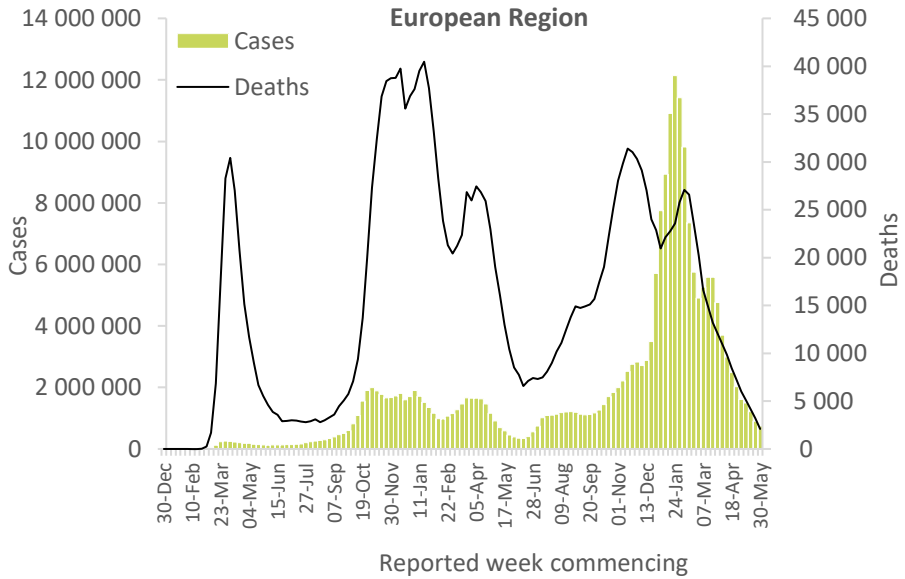


Updates from the Eastern Mediterranean Region

European Region

In the European Region, the number of new cases has continued to decline since mid-March 2022, with over 744 000 new weekly cases, an 18% decrease as compared to the previous week. Six (10%) countries in the Region reported increases in new cases of 20% or greater: Monaco (132 vs 59 new cases; +124%), Uzbekistan (113 vs 81 new cases; +40%) and Luxembourg (1559 vs 1181 new cases; +32%). The highest numbers of new cases were reported from Germany (215 955 new cases; 259.7 new cases per 100 000; +16%), France (128 198 new cases; 197.1 new cases per 100 000; +13%), and Portugal (120 711 new cases; 1172.4 new cases per 100 000; -31%).

Over 2000 new weekly deaths were reported, a 35% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (565 new deaths; <1 new death per 100 000; -7%), Italy (380 new deaths; <1 new death per 100 000; -39%), and France (272 new deaths; <1 new death per 100 000; -7%).



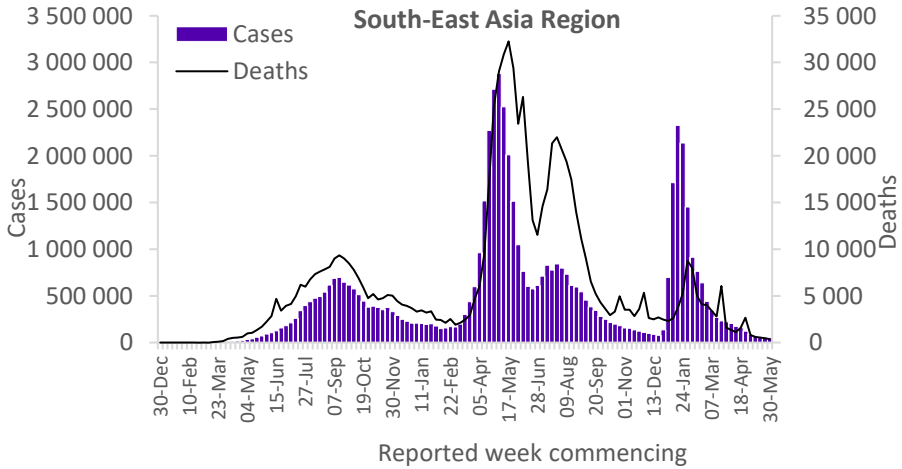
Updates from the European Region

South-East Asia Region

After a decreasing trend in the number of new weekly cases observed since mid-January 2022, the South-East Asia Region reported over 50 000 new cases this week, representing a 1% increase as compared to the previous week. Three (30%) countries showed increases in the number of new cases of 20% or greater: India (23 774 vs 16 672 new cases; +43%), Indonesia (2385 vs 1825 new cases; +31%), and Nepal (72 vs 59 new cases; +22%). The highest numbers of new cases were reported from Thailand (24 145 new cases; 34.6 new cases per 100 000; -23%), India (23 774 new cases; 1.7 new cases per 100 000; +42), and Indonesia (2385 new cases; <1 new case per 100 000; +31%).

The Region reported 350 deaths, a decrease of 23% as compared to the previous week. The highest numbers of new deaths were reported from Thailand (199 new deaths; <1 new death per 100 000; -12%), India (106 new deaths; <1 new death per 100 000; -39%), and Indonesia (41 new deaths; <1 new death per 100 000; -21%).

Reports of an outbreak of COVID-19 reported in the Democratic People's Republic of Korea continue through official media on 12 May 2022; however, at present, no confirmed cases or deaths have been reported to WHO.

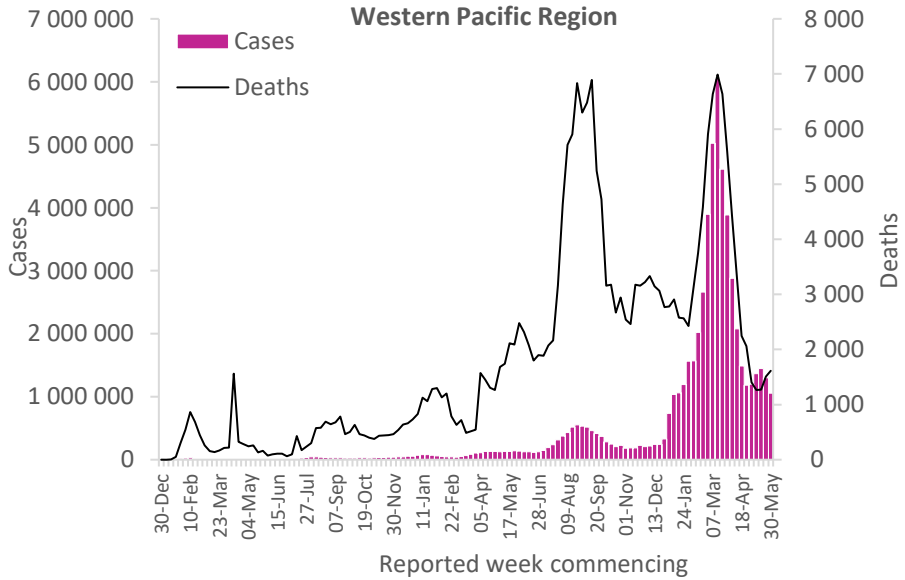


Updates from the South-East Asia Region

Western Pacific Region

With over one million new weekly cases reported, the Western Pacific Region shows a decreasing trend for the second consecutive week (-19% as compared to the previous week). Six (18%) countries reported increases in new cases of 20% or greater, with the largest proportional increases observed in Papua New Guinea (205 vs 31 new cases; +561%), Vanuatu (1174 vs 205 new cases; +473%) and Tonga (254 vs 94 new cases; +170%). The highest numbers of new cases were reported from China (528 432 new cases; 35.9 new cases per 100 000; -8%), Australia (221 935 new cases; 870.3 new cases per 100 000; -25%), and Japan (122 241 new cases; 96.7 new cases per 100 000; -40%).

The Region reported over 1600 new weekly deaths, representing a 7% increase as compared to the previous week. The highest numbers of new deaths were reported from China (910 new deaths; <1 new death per 100 000; +57%), Australia (288 new deaths; <1 new death per 100 000; -17%), and Japan (199 new deaths; <1 new death per 100 000; -18%).



Updates from the Western Pacific Region

Summary of the COVID-19 Monthly Operational Update

The Monthly operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) monitoring and evaluation team which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework.

In this edition, highlights of country-level actions and WHO support to countries include:

- WHO, Government of Japan, and Governments of the Marshall Islands, Federated States of Micronesia and Palau partner to enhance COVID-19 preparedness and response
- WHO/Europe mission to Tajikistan to support the Ministry of Health and Social Protection of the Population of the Republic of Tajikistan with clinical management of COVID-19
- Expansion of South Sudan's COVID-19 vaccination to remote regions
- Eastern Mediterranean Region publishes its COVID-19 Strategic Preparedness and Response Plan for 2022
- Region of the Americas establishes a high-level commission on mental health and COVID-19
- Integrating SARS-CoV-2 into influenza sentinel surveillance- field experience in Togo
- Engaging with Parliamentarians in Nepal to strengthen Risk Communications and Community Engagement (RCCE)
- Technical and targeted multi-sectoral support to manage COVID-19 waste in the African Region
- Shipment of rapid antigen tests to Iraq
- Nigeria holds first national Training of Trainers (ToT) workshop on infodemic management
- COVID-19 Vaccine Delivery Partnership supports countries to scale-up vaccination strategies
- WHO plays advisory role to International Olympic Committee for Beijing 2022 Winter Olympic and Paralympic Games
- Act-A Health Systems Response Connector (HSRC) supports Member States to translate COVID-19 tools into national interventions
- Progress update on the utilization of OpenWHO training platform

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[2] Since 21 May, data for COVID-19 cases and deaths in Northern Ireland was no longer included in the United Kingdom updates (see here for the official announcement).

Annex 2. Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. Likewise, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection.
- Table 3 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than four months post final dose.
- Studies reporting VOC-specific VE estimates for full vaccination (≥7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase three RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase three RCT estimates, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca-Vaxzevria for infection (when a phase three estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Neutralization studies that use samples collected >seven days and <six months after complete vaccination and that use an ancestral strain as the reference are included in Table 3.

Annex 3. Methods for Figure 5

- VE studies included in the plot were identified from an ongoing systematic review of COVID-19 vaccine effectiveness studies. All studies were cohort or test-negative studies. Methods for the systematic review and inclusion/exclusion criteria are available on view-hub.org. The studies were conducted during a period when Omicron was the predominant circulating variant. Only studies providing VE estimates of individual vaccines are included in the plot (studies assessing combined VE of more than one vaccine are excluded). In addition, for the primary series VE, only studies providing VE estimates for discrete time intervals since vaccination, which evaluate changes in VE over time, are included.

- For the primary series VE, estimates are only included in the plot for studies that report absolute VE for more than one time period for an individual vaccine. Thirteen studies of VE against Omicron provided only a single cumulative VE estimate for an individual vaccine, which due to varying lengths of time since vaccination are difficult to interpret due to the marked waning of VE over time with Omicron.

Annex 4. Summary of Primary Series Vaccine Performance against Variants of Concern ***(VE data as of 28 May 2022; Neutralization data as of 2 June 2022)***

	WHO Emergency Use Listing (EUL) Qualified Vaccines[+]									Vaccines without WHO EUL[+]	
	AstraZeneca-Vaxzevria/ SII - Covishield	Beijing CNBG-BBIBP-CorV	Bharat-Covaxin	Cansino - Convidecia	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Novavax-Nuvaxovid/ SII - Covavax	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Gamaleya-Sputnik V
Alpha, Beta, Gamma											
Summary of VE*	*see update from 11 January 2022 for details of vaccine performance against Alpha, Beta, and Gamma variants of concern*										
Delta											
Summary of VE*	*see update from 27 April 2022 for details of vaccine performance against Delta variant of concern*										
Omicron[38]											
Summary of VE*	Reduced protection against infection and symptomatic disease; possible reduced protection against for severe disease but limited evidence										
- Severe disease	-	-	-	-	-	↓to↓↓/↓↓↓$_{2}$	-	↓↓ to ↓↓↓$_{5}$	-	-	-
- Symptomatic disease	↓↓↓$_{1}$	-	-	-	-	↓↓/↓↓↓$_{2}$	-	↓↓↓$_{3}$	-	-	-
- Infection	↓↓↓$_{1}$	-	-	-	-	↓↓↓$_{3}$	-	↓↓↓$_{3}$	-	-	-
Neutralization	↓↓↓$_{7}$	↓to↓↓$_{4}$	↓↓$_{1}$	-	↓to↓↓↓$_{4}$	↓↓↓$_{18}$	-	↓↓↓$_{46}$	↓↓to↓↓↓$_{5}$	-	↓↓$_{1}$

VE refers to vaccine effectiveness and vaccine efficacy. *Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10 percentage point (pp) reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20 pp reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30 pp reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30 pp reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study. The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources Library. References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public: Protect yourself; Questions and answers; Travel advice

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COVID-19 Weekly Epidemiological Update

Edition 94, published 1 June 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews

Global overview

Data as of 29 May 2022

Globally, the number of new weekly cases has continued to decline since a peak in January 2022. During the week of 23 until 29 May 2022, over 3.3 million cases were reported, an 11% decrease as compared to the previous week (figure 1). The number of new weekly deaths also continues to decline, with over 9 600 fatalities reported, representing a 3% decrease as compared to the previous week.

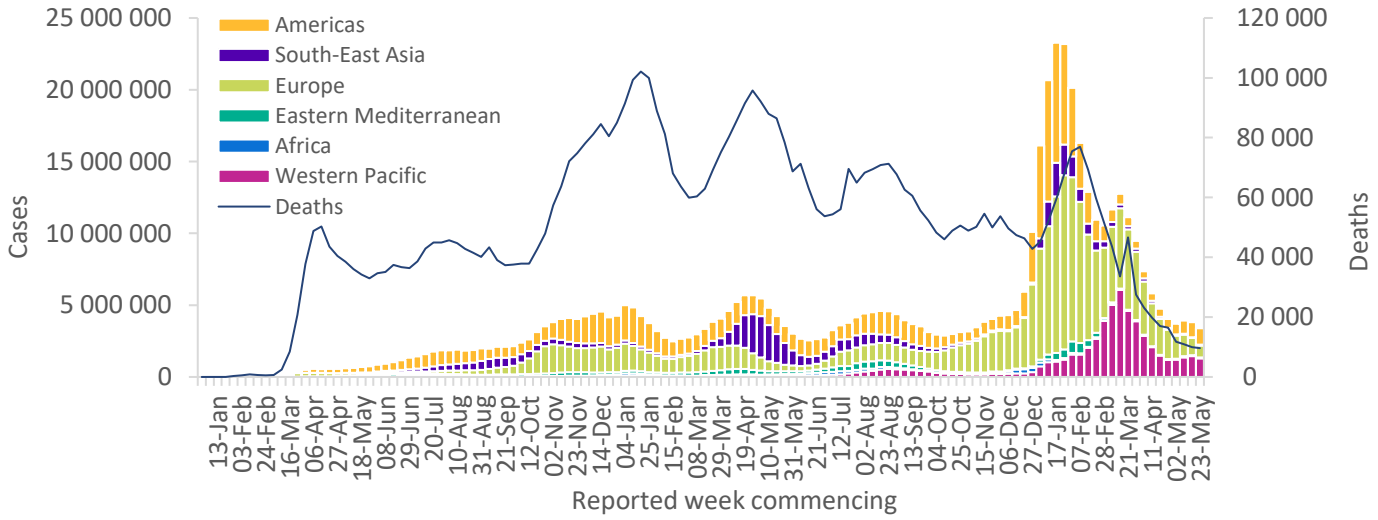
At the regional level, the number of new weekly cases increased in the American Region (+9%) and in the Eastern Mediterranean Region (+1%), while it decreased in the remaining four WHO regions.

The number of new weekly deaths increased in the Western Pacific Region (+18%), in the African Region (+15%), and in the Region of the Americas (+13%), while decreasing trends were observed in the remaining three regions.

As of 29 May 2022, over 526 million confirmed cases and over six million deaths have been reported globally.

These trends should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 29 May 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest number of new weekly cases were reported from the United States of America (736 298 new cases; +3%), China (576 367 new cases; +6%), Australia (294 128 new cases; -18%), Japan (203 365 new cases; -18%), and Germany (183 844 new cases; -38%).

The highest number of new weekly deaths were reported from the United States of America (2 461 new deaths; +25%), Brazil (826 new deaths; +16%), Italy (624 new deaths; -15%), the Russian Federation (605 new deaths; -11%), and China (578 new deaths; +82%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 29 May 2022**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Western Pacific	1 299 894 (38%)	-10%	59 958 154 (11%)	1 506 (16%)	18%	230 479 (4%)
Americas	1 139 104 (34%)	9%	157 027 750 (30%)	4 229 (44%)	13%	2 742 377 (44%)
Europe	842 866 (25%)	-30%	220 678 128 (42%)	3 117 (32%)	-22%	2 012 067 (32%)
South-East Asia	50 204 (1%)	-8%	58 122 050 (11%)	457 (5%)	-15%	788 614 (13%)
Africa	34 126 (1%)	-36%	8 988 466 (2%)	242 (3%)	15%	171 434 (3%)
Eastern Mediterranean	17 580 (1%)	1%	21 769 191 (4%)	96 (1%)	-45%	342 813 (5%)
Global	**3 383 774 (100%)**	**-11%**	**526 544 503 (100%)**	**9 647 (100%)**	**-3%**	**6 287 797 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
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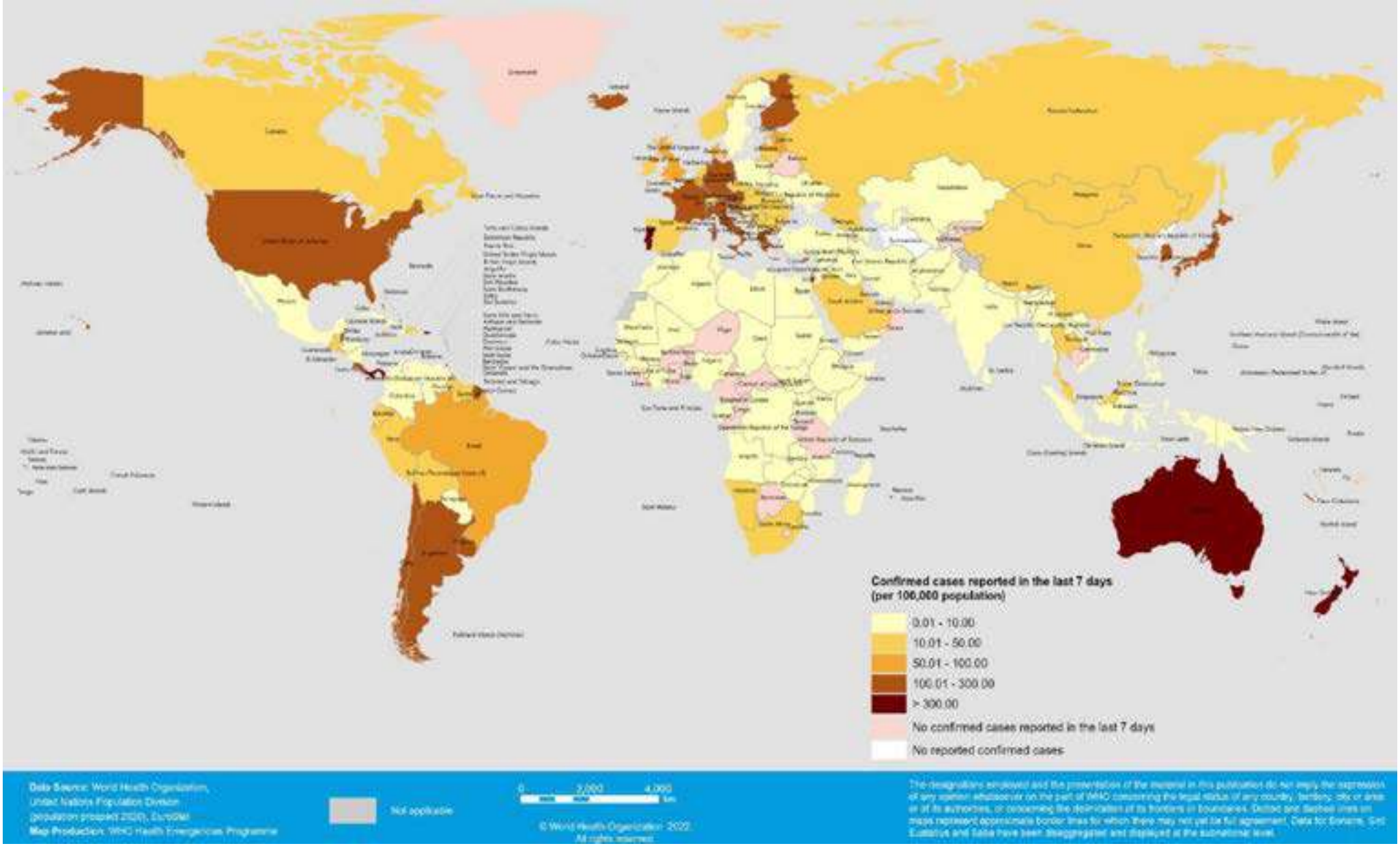
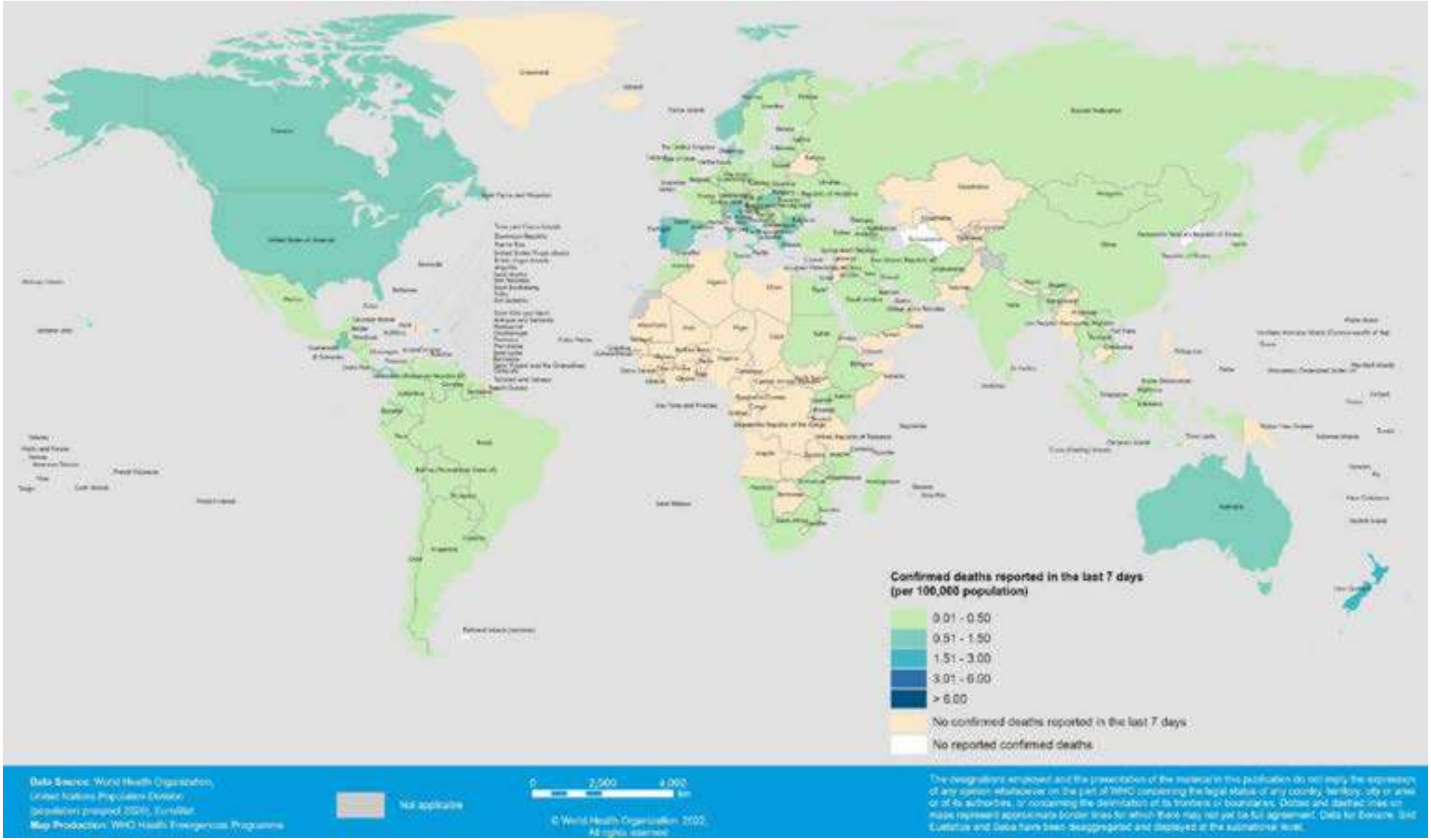
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 23 – 29 May 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 23-29 May 2022*



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.
The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.

Geographic spread and prevalence of VOCs

There continues to be a decline in the number of SARS-CoV-2 sequences submitted to GISAID, with 152 476 submitted within the last 30 days. The Omicron VOC remains the dominant variant circulating globally, accounting for nearly all sequences reported. Among the Omicron sublineages, BA.2 is the dominant sublineage, despite declining from 78% to 75% of Omicron sequences submitted in the last 30 days. The BA.1 sublineage has also declined in prevalence from 7% to 4%. Three Omicron sublineages have shown an increasing trend among Omicron sequences submitted in the last 30 days: BA.2.12.1 has risen from 11% to 16%; BA.4 has risen from 2% to 3%; and BA.5 has risen from 1% to 2%. During the same period, the prevalence of BA.3 has declined to <1%.

These trends should be interpreted with due consideration of the limitations of surveillance systems, including differences in sequencing capacity and sampling strategies between countries, as well as changes in sampling and sequencing strategies in multiple countries.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

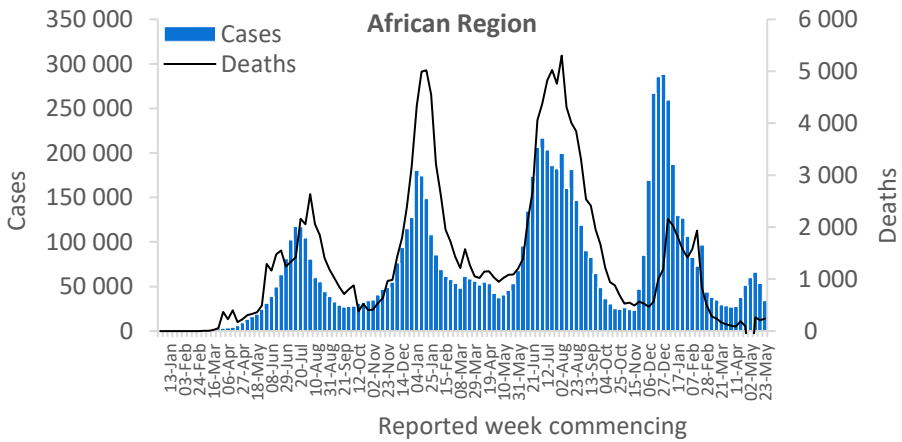
WHO regional overviews:

Epidemiological week 23-29 May 2022**

African Region

After reporting increasing trends for a month, the African Region reported a decline in the number of new weekly cases for the second consecutive week, with over 34 000 new cases, a 36% decrease as compared to the previous week. However, eleven (22%) countries reported an increase in the number of new cases of over 20%, with the greatest proportional increases observed in Angola (234 vs 46 new cases; +409% and included batch reporting), Kenya (464 vs 211 new cases; +120%) and Ethiopia (889 vs 406 new cases; +119%). The highest numbers of new cases were reported from South Africa (25 541 new cases; 43.1 new cases per 100 000 population; -35%), Réunion (3252 new cases; 363.2 new cases per 100 000; -40%), and Ethiopia (889 new cases; <1 new case per 100 000; a +119%).

The number of new weekly deaths increased by 15% as compared to the previous week, with over 200 new deaths reported. The highest numbers of new deaths were reported from South Africa (211 new deaths; <1 new death per 100 000 population; +19%), Réunion (seven new deaths; <1 new death per 100 000; -13%), and Zimbabwe (six new deaths; <1 new deaths per 100 000; -50%).

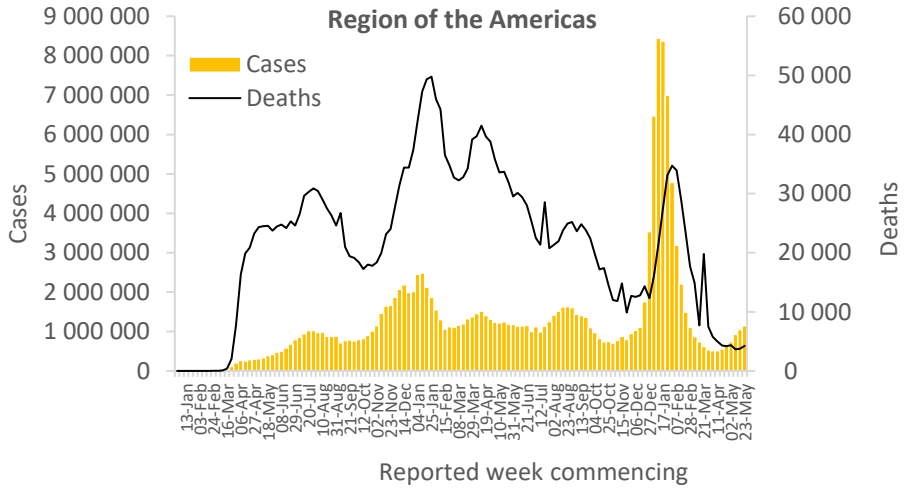


Updates from the African Region

Region of the Americas

The Region of the Americas has continued to report an increasing trend in case incidence since mid-April 2022, with over 1.1 million new weekly cases, a 9% increase as compared to the previous week. Ten (18%) countries reported increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Saba (18 vs 4 new cases; +350%), Dominican Republic (1909 vs 838 new cases; +128%) and Brazil (158 732 vs 97 674 new cases; +63%). The highest number of new cases were reported from the United States of America (736 298 new cases; 222.4 new cases per 100 000; +3%), Brazil (158 732 new cases; 74.7 new cases per 100 000; +63%), and Argentina (51 778 new cases; 114.6 new cases per 100 000; +19%).

The number of new weekly deaths in the Region increased by 13% as compared to the previous week, with over 4200 new deaths reported. The highest numbers of new deaths were reported from the United States of America (2461 new deaths; <1 new death per 100 000; +25%), Brazil (826 new deaths; <1 new death per 100 000; +16%), and Canada (303 new deaths; <1 new death per 100 000; -32%).

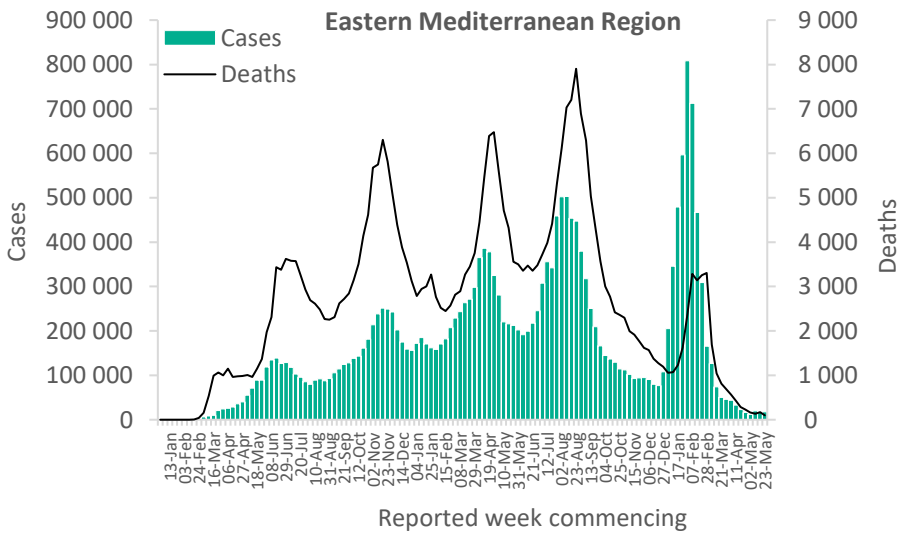


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 17 000 new weekly cases, representing a 1% increase as compared to the previous week. Seven (32%) countries reported increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Kuwait (751 vs 105 new cases; +615% and included batch reporting), Sudan (92 vs 34 new cases; +171%) and Morocco (1202 vs 824 new cases; +46%). The highest numbers of new cases were reported from Saudi Arabia (3621 new cases; 10.4 new cases per 100 000; -4%), Bahrain (3187 new cases; 187.3 new cases per 100 000; -16%), and the United Arab Emirates (2603 new cases; 26.3 new cases per 100 000; +13%).

The number of new weekly deaths in the Region decreased by 45% as compared to the previous week, with 96 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (35 new deaths; <1 new death per 100 000; -36%), Saudi Arabia (15 new deaths; <1 new death per 100 000; +7%), and Egypt (14 new deaths; <1 new death per 100 000; -33%).

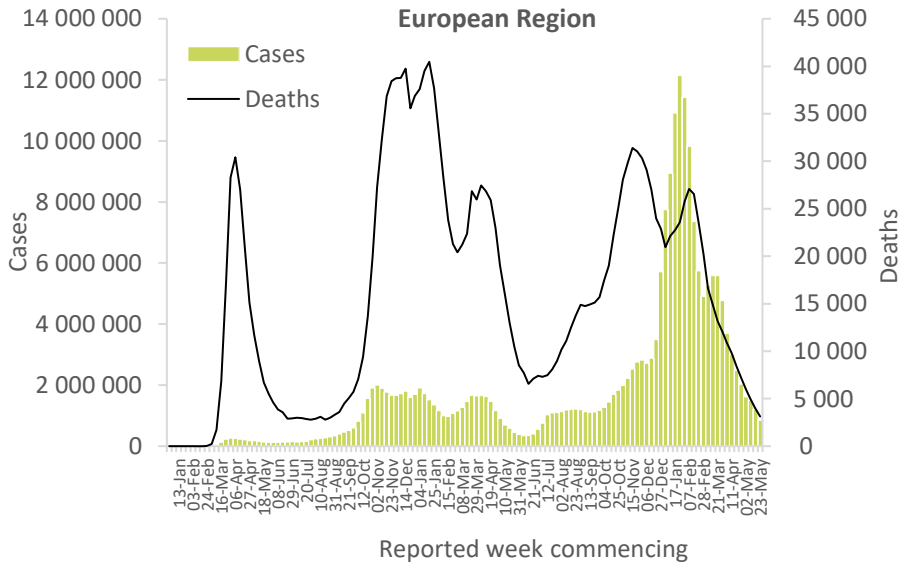


Updates from the Eastern Mediterranean Region

European Region

In the European Region, the number of new cases has continued to decline since mid-March 2022, with over 842 000 new weekly cases, a 30% decrease as compared to the previous week. Three (5%) countries in the Region reported increases in new cases of 20% or greater: Armenia (25 vs 18 new cases; +39%), Denmark (4426 vs 3269 new cases; +35%) and Azerbaijan (49 vs 40 new cases; +23%). The highest numbers of new cases were reported from Germany (183 844 new cases; 221.1 new cases per 100 000; -38%), Portugal (176 910 new cases; 1718.3 new cases per 100 000; -8%), and Italy (144 478 new cases; 242.2 new cases per 100 000; -27%).

Over 3100 new weekly deaths were reported, a 22% decrease as compared to the previous week. The highest numbers of new deaths were reported from Italy (624 new deaths; 1.0 new death per 100 000; -15%), the Russian Federation (605 new deaths; <1 new death per 100 000; -11%), and the United Kingdom (314 new deaths; <1 new death per 100 000; -43%).

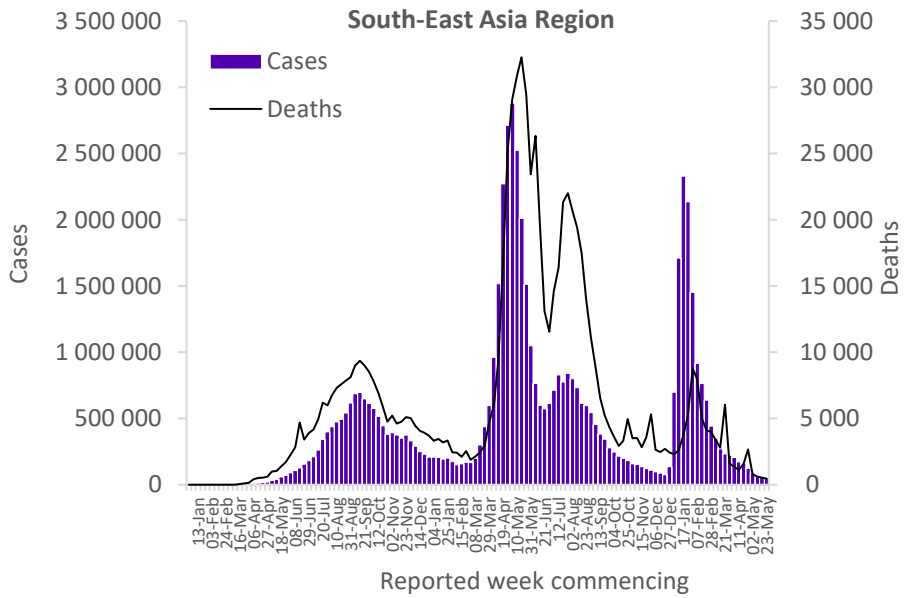


Updates from the European Region

South-East Asia Region

The South-East Asia Region has continued to report decreasing trends in the incidence of weekly cases and deaths since mid-January 2022, with over 50 000 new cases and over 400 new deaths reported this week, decreases of 8% and 15% respectively as compared to the previous week. Two countries showed increases in the number of new cases of 20% or greater: Bhutan (40 vs 4 new cases; +900% but due to batch reporting) and Timor-Leste (17 vs 6 new cases; +183%). The highest numbers of new cases were reported from Thailand (31 154 new cases; 44.6 new cases per 100 000; -17%), India (16 672 new cases; 1.2 new cases per 100 000; +13%), and Indonesia (1825 new cases; <1 new case per 100 000; similar to the previous week's figures).

The highest numbers of new deaths in the Region were reported from Thailand (226 new deaths; <1 new death per 100 000; -18%), India (173 new deaths; <1 new death per 100 000; -13%), and Indonesia (52 new deaths; <1 new death per 100 000; -19%).

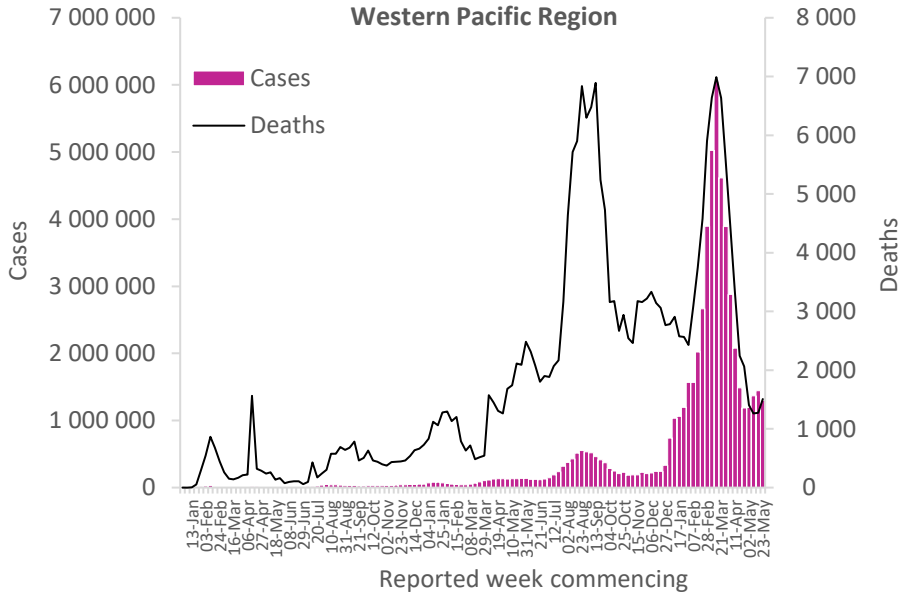


Updates from the South-East Asia Region

Western Pacific Region

After an increasing trend in the number of new weekly cases observed during the last three weeks, the Western Pacific Region reported just under 1.3 million new cases this week, a 10% decrease as compared to the previous week. Two countries reported increases in new cases of 20% or greater: Northern Mariana Islands (Commonwealth of the) (18 vs 10 new cases; +80%) and French Polynesia (53 vs 37 new cases; +43%). The highest numbers of new cases were reported from China (576 367 new cases; 39.2 new cases per 100 000; +6%), Australia (294 128 new cases; 1153.4 new cases per 100 000; -18%), and Japan (203 365 new cases; 160.8 new cases per 100 000; -18%).

The Region reported over 1500 new weekly deaths, representing an 18% increase as compared to the previous week. The highest numbers of new deaths were reported from China (578 new deaths; <1 new death per 100 000; +82%), Australia (347 new deaths; 1.4 new deaths per 100 000; +13%), and Japan (244 new deaths; <1 new death per 100 000; -4%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public: Protect yourself; Questions and answers; Travel advice

COVID-19 Weekly Epidemiological Update

Edition 93, published 25 May 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews

Global overview

Data as of 22 May 2022

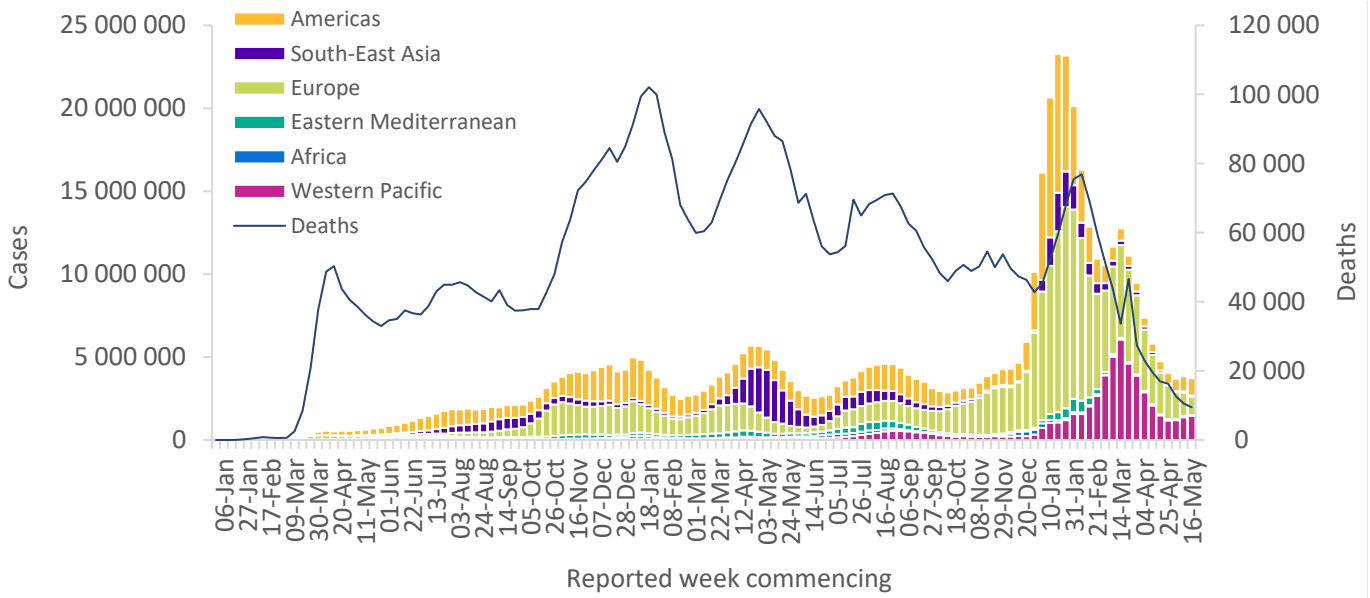
Globally, the number of new weekly cases has continued the declining trend observed since a peak in January 2022. During the week of 16 through 22 May 2022, over 3.7 million cases were reported, a 3% decrease as compared to the previous week (figure 1). The number of new weekly deaths also continues to decline, with over 9000 fatalities reported, representing an 11% decrease as compared to the previous week.

At the regional level, the number of new weekly cases increased in the Region of the Americas (+13%) and in the Western Pacific Region (+6%), while decreasing trends were observed in the remaining four regions.
The number of new weekly deaths increased in the Eastern Mediterranean Region (+30%), remained stable in the Western Pacific and the Region of the Americas (both <1%), and decreased in the other three regions.

As of 22 May 2022, over 522 million confirmed cases and over six million deaths have been reported globally.

These trends should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 22 May 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest number of new weekly cases were reported from the United States of America (713 882 new cases; +18%), China (543 290 new cases; +39%), Australia (360 323 new cases; +8%), Germany (268 396 new cases; -35%), and Japan (249 210 new cases; -11%).

The highest number of new weekly deaths were reported from the United States of America (1 957 new deaths; +2%), Italy (736 new deaths; -4%), Brazil (713 new deaths; +3%), the Russian Federation (680 new deaths; -6%), and Spain (564 new deaths; +118%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 22 May 2022**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Western Pacific	1 443 519 (39%)	6%	58 656 813 (11%)	1 271 (13%)	<1%	228 974 (4%)
Europe	1 119 084 (30%)	-20%	219 662 866 (42%)	3 574 (38%)	-23%	2 007 375 (32%)
Americas	1 036 740 (28%)	13%	155 877 294 (30%)	3 675 (39%)	<1%	2 737 863 (44%)
South-East Asia	54 768 (1%)	-23%	58 071 838 (11%)	539 (6%)	-12%	788 157 (13%)
Africa	49 633 (1%)	-24%	8 949 290 (2%)	208 (2%)	-22%	172 308 (3%)
Eastern Mediterranean	17 335 (<1%)	-12%	21 751 611 (4%)	173 (2%)	30%	342 717 (5%)
Global	**3 721 079 (100%)**	**-3%**	**522 970 476 (100%)**	**9 440 (100%)**	**-11%**	**6 277 407 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
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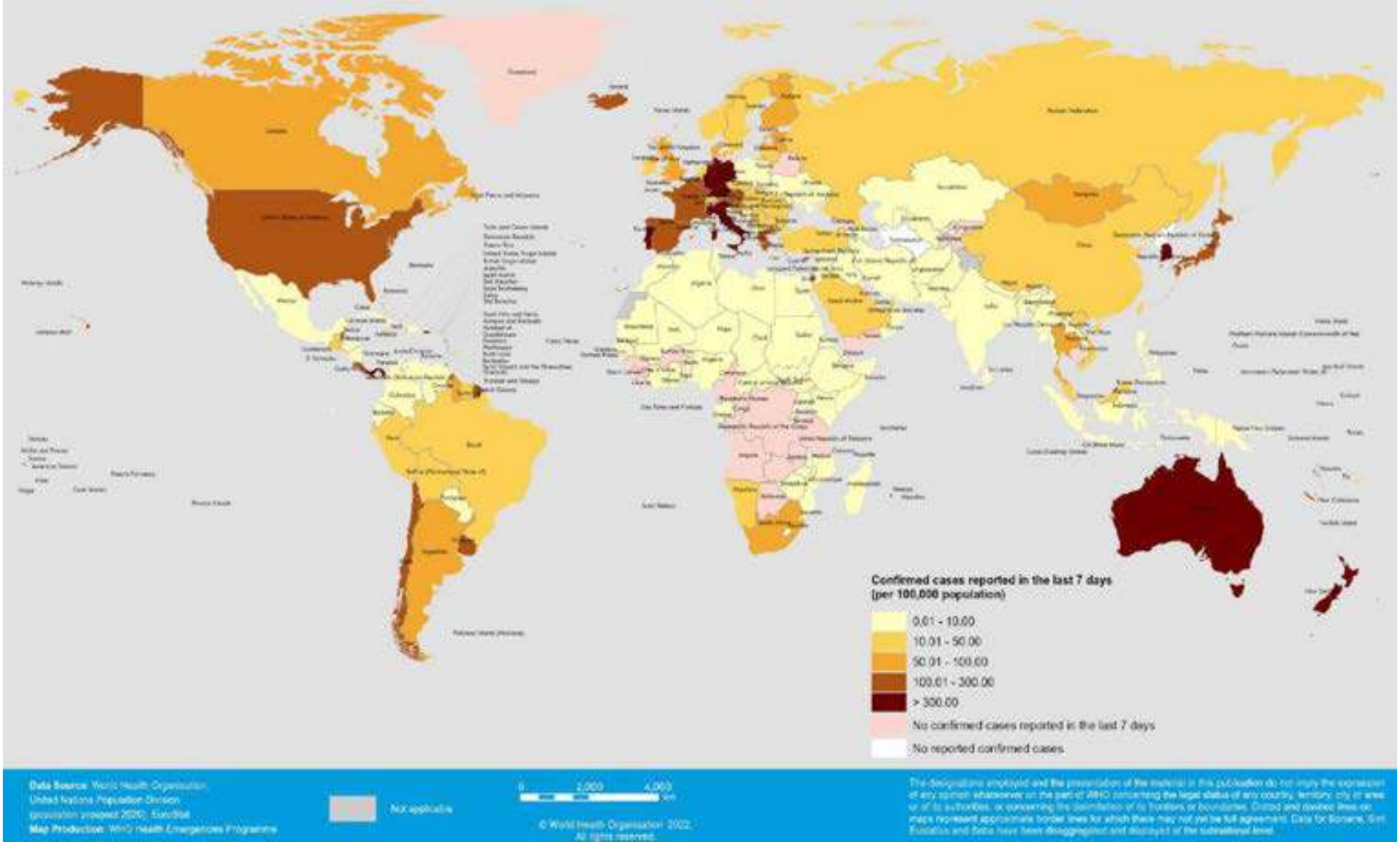
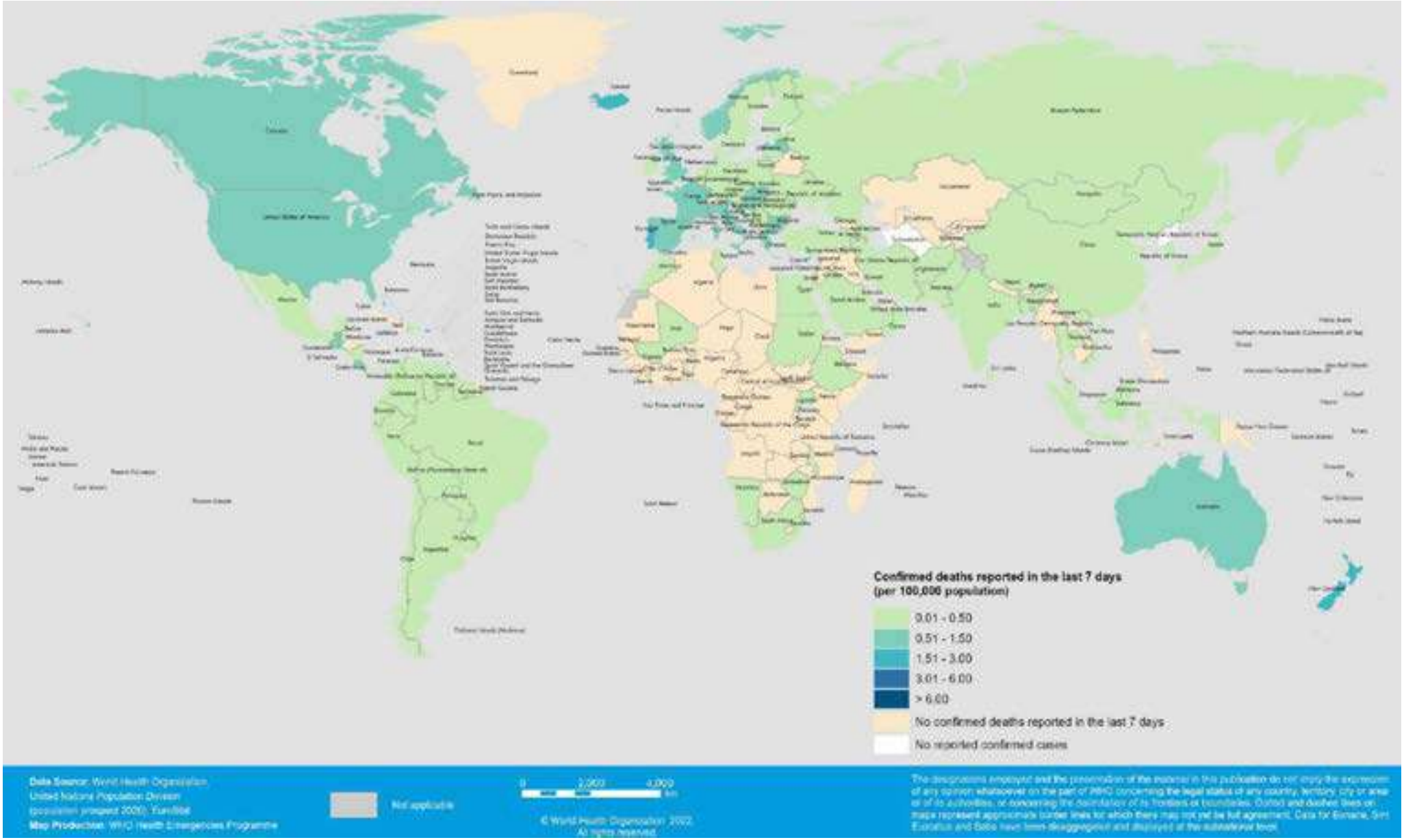
Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 16 – 22 May 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 16-22 May 2022*



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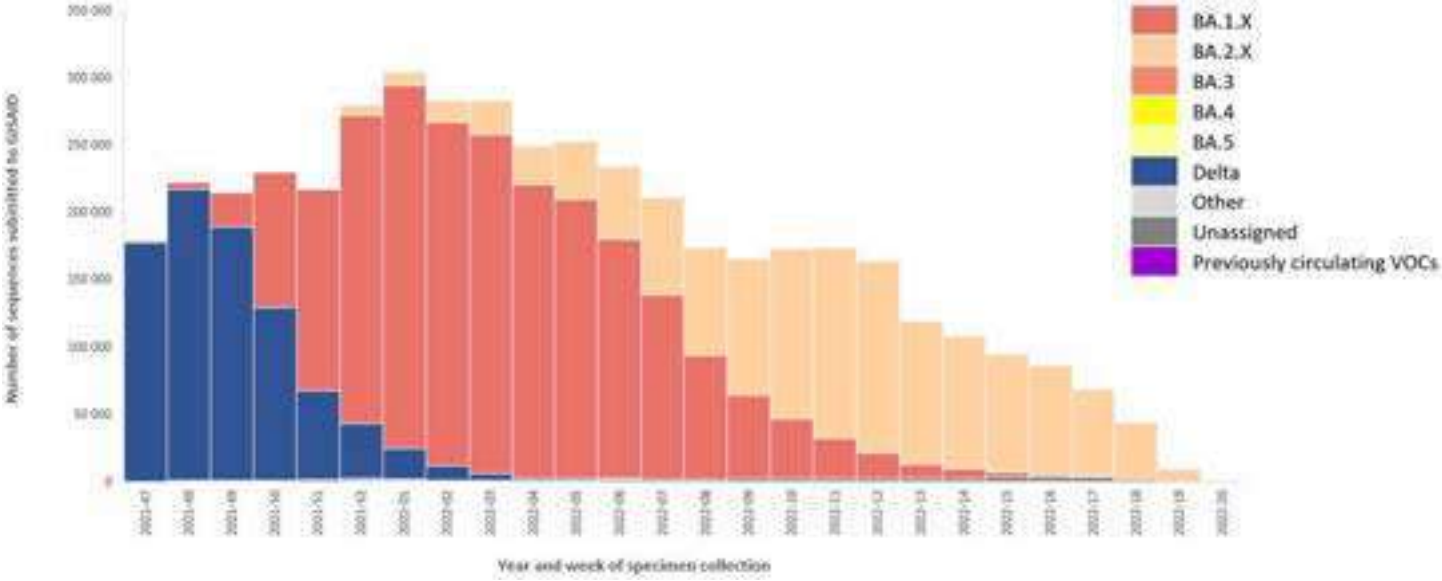
Geographic spread and prevalence of VOCs

The total number of SARS-CoV-2 sequences submitted to GISAID continues to show a declining trend (Figure 4). The Omicron VOC is the dominant variant circulating globally, accounting for nearly all sequences reported to GISAID within the last 30 days. Among Omicron lineages, BA.2 and its descendent lineages (pooled lineages named BA.2.X) are the dominant variants. As of the epidemiological week 18 in 2022 (1-7 May), the relative proportions of BA.2.X, BA.4, and BA.5 were 94%, 0.8%, and 1%, respectively. Among BA.2 descendent lineages, BA.2.12.1 accounted for 17% (Figure 5). Delta and other VOCs (Alpha, Beta and Gamma) have declined significantly over time but may still be circulating below detection levels.

Studies are ongoing to further elucidate the characteristics of Omicron lineages that appear to show a growth advantage as compared to BA.1 and BA.2. Further, additional evidence is anticipated regarding the severity or clinical manifestations for Omicron lineages which have a mutation at the spike locus S:L452. With currently available data, BA.4, BA.5 and BA.2.12.1 appear to be spreading faster in countries with substantial prior waves of cases due to BA.1; while countries that experienced more substantial BA.2 waves appear to have fewer cases due to BA.4, BA.5 and BA.2.12.1 at this stage. The extent of vaccination in each country, also likely influences the impact of these emerging Omicron descendent lineages.

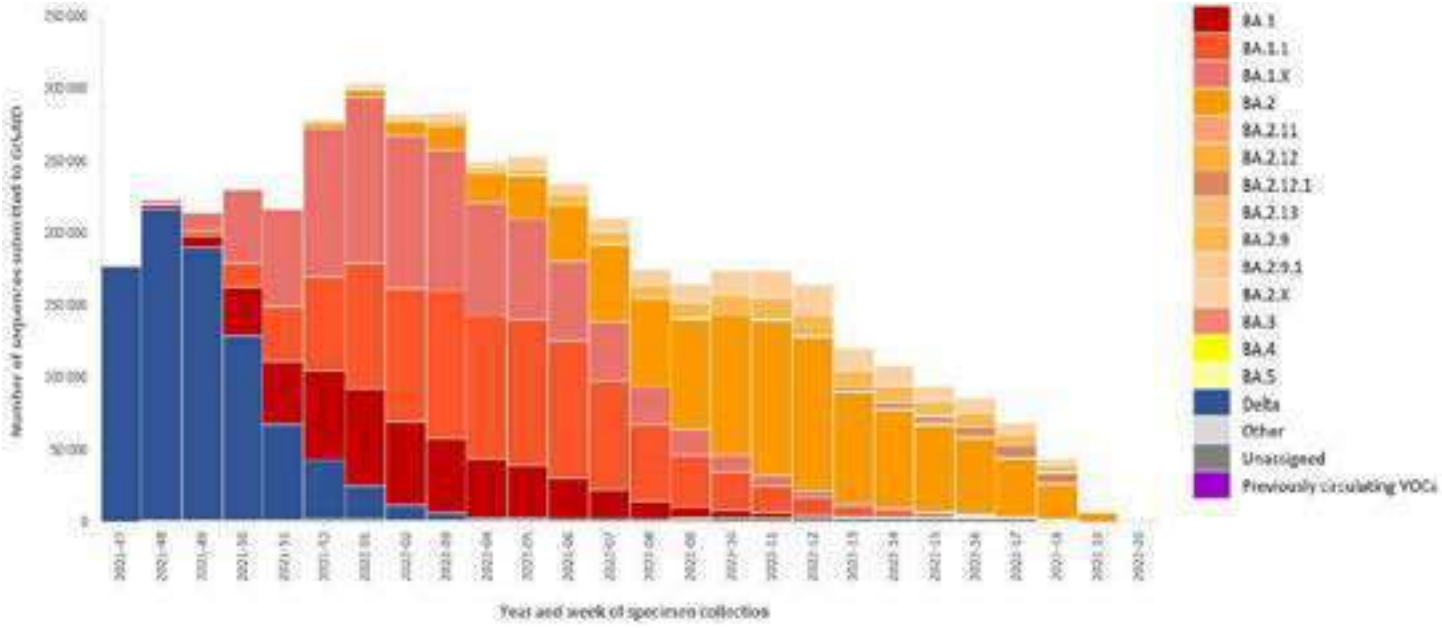
All Omicron descendant lineages continue to be tracked under the umbrella of Omicron VOC, given the lack of evidence on changes that would indicate difference in phenotype, such as associated severity.

Figure 4. The number of Omicron sequences by sister-lineage*, as of 23 May 2022



*Omicron sister-lineages include Omicron lineages BA.1 and pooled descendent lineages named BA.1.**X**, BA.2 and all pooled descendent lineages named BA.2.**X**, BA.3, BA.4 and BA.5. Source: SARS-CoV-2 sequence data and metadata from GISAID, extracted from GISAID on 23 May 2022 at 10 CET.

Figure 5. The number of Omicron sequences by Omicron sister-lineages* and BA.2 descendent lineages, as of 23 May 2022



*Omicron descendent lineages with past and present signs of growth advantage are shown in this figure. BA.1.X and BA.2.X show pooled descendent lineages of BA.1 and BA.2 excluding those that have been reported here. Source: SARS-CoV-2 sequence data and metadata from GISAID, extracted from GISAID on 23 May 2022 at 10 CET.

Characteristics of Omicron

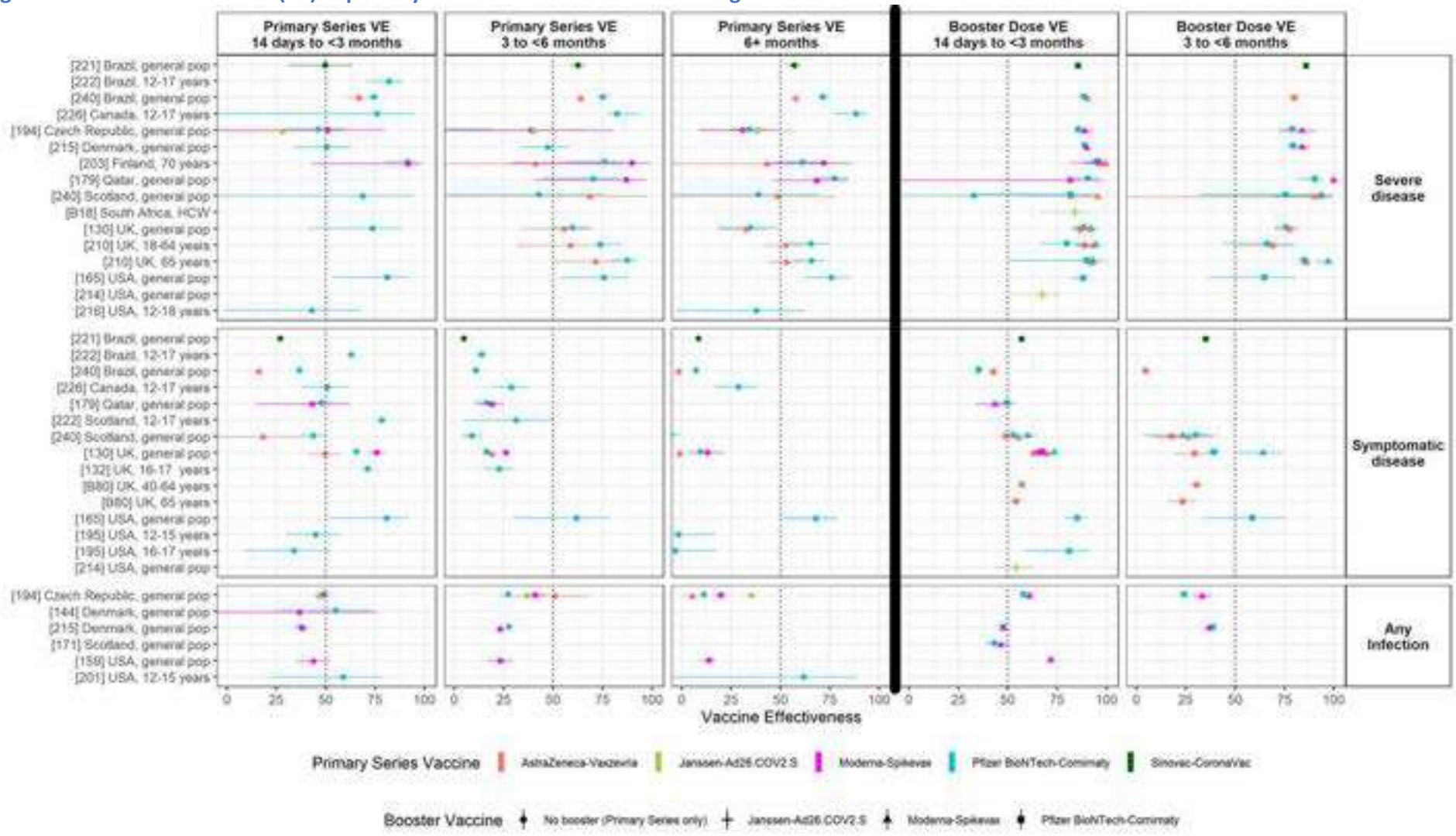
Available evidence on the phenotypic impacts of VOCs is reported in previous editions of the COVID-19 Weekly Epidemiological Update. Table 2 summarizes the phenotypic characteristics of the Omicron VOC and its sublineages for which evidence is available since the last update on 11 May 2022. Some of these studies have not been peer-reviewed and the findings must, therefore, be interpreted with due consideration of this limitation.

Table 2: Summary of phenotypic characteristics* of the Omicron VOC

Public health domain of impact	Omicron (BA.1.1.529)	Omicron sublineages	
		BA.1	BA.2
Transmissibility	• Growth advantage and increased transmissibility compared to Delta (Campbell 2021)[1]	Lower transmissibility compared to BA.2[2]	Increased transmissibility compared to BA.1[2]
Disease severity	• Overall evidence suggests lower severity despite contrasting evidence. • Earlier studies reported lower severity compared to Delta[3–7]. However, more recent studies reported similar [8,9] or increased severity compared to Delta.[3–5,7,10,11]	No difference in disease severity compared to BA.2[7]	No difference in disease severity compared to BA.1[7]
Risk of reinfection	• Reduced risk of Omicron reinfection if previously infected with a different SARS-CoV-2 variant[12,13]	Reduced risk of reinfection with BA.1 following infection with BA.2[14]	Reduced risk of reinfection with BA.2 following infection with BA.1 [14]
Impact on antibody responses	Reduction in neutralizing activity reported as compared to other VOCs [15–17]	• Lower neutralising antibody titers compared to the Index virus[16,17] • Possible reduced vaccine-induced and infection-induced neutralisation and non-neutralisation activity compared to BA.2 [15,17,18]	• Lower neutralising antibody titers compared to the Index virus [16,17] • Possible increased vaccine-induced and infection-induced neutralization and non-neutralisation activity compared to BA.1 (Yu 2022, Bartsch 2022) [15,17,18]
Impacts on diagnostics	PCR assays that include multiple gene targets maintain their accuracy to detect Omicron; S gene target failure/positivity (SGTF) may be a proxy for screening. Limited to no impact on sensitivity of Ag-RDTs observed [17–21]	No specific data available. No S gene target failure. [19–22]	No specific data available. The majority will be S gene target positive (SGTF). [19–22]
Impact on treatment	• No difference in the effectiveness of antiviral agents (polymerase and protease inhibitors) against the Omicron variant[24] • Conserved neutralizing activity for three broadly neutralizing monoclonal antibodies (sotrovimab, S2X259 and S2H97) and a reduced effectiveness of other monoclonal antibodies[25–28]	Reduced efficacy of casirivimab-imdevimab against BA.1[29]	Reduced neutralizing activity of sotrovimab against BA.2[29]
Impact on vaccination	Results of vaccine effectiveness (VE) studies should be interpreted with caution because estimates vary with the type of vaccine administered and the number of doses and scheduling (sequential administration of different vaccines). For further information, **see the section Interpretation of the results of the VE for the Omicron variant**		

**Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision*

Figure 6. Vaccine effectiveness (VE) of primary series and booster vaccination against the Omicron variant of concern



* Abbreviations: pop=population; HCW=healthcare workers. Dots represent point estimates of vaccine effectiveness; horizontal lines represent the 95% confidence intervals. Labels along left side of plot indicate reference numbers [], country, and study population. Reference numbers identify the study and link to the summary table of VE effectiveness studies on view-hub.org (Table 1 in summary table); references starting with a 'B' are studies found in the booster VE table only (Table 2 in summary table). Primary series refers to the completion of two doses of vaccines for AstraZeneca-Vaxzevria; Moderna-Spikevax, Pfizer BioNTech-Comirnaty and Sinovac-CoronaVac and one dose of Janssen-Ad26.COV2.S. Severe disease includes severe disease, hospitalization, and pneumonia; symptomatic disease includes disease of any severity level; any infection can include symptomatic and asymptomatic infection. Additional details on the methods for inclusion of the estimates in the plots provided in Annex 3. Note, nine point estimates for the primary series with confidence intervals below 0 are not shown in the Omicron plot: two estimates from reference #144 against infection at 3 to <6 months (Pfizer BioNTech-Comrinaty and Moderna-Spikevax), two estimates from reference #179 against symptomatic disease at 6+ months (Pfizer BioNTech-Comrinaty and Moderna-Spikevax), and five estimates from reference #240 (one AstraZeneca-Vaxzevria estimate at 3 to <6 months; three AstraZeneca-Vaxzevria estimates and one Pfizer BioNTech estimate at 6+ months).

Figure 6 summarizes the impact of Omicron variant on product-specific vaccine effectiveness (VE) over time for both primary series vaccines and booster vaccines. Additional information on vaccine performance against VOCs can also be found in Annex 4. Since the last update, no new studies assessing absolute vaccine effectiveness have been added to the figures. Two studies that assessed relative vaccine effectiveness of a booster dose only (comparing persons receiving three doses to persons receiving two doses) were removed from the figure. As the interpretation of relative vaccine effectiveness is not comparable to absolute vaccine effectiveness (using unvaccinated persons as the comparison group), only estimates of absolute vaccine effectiveness are included in the figure.

Interpretation of the results of the VE for the Omicron variant

To date, 21 studies from nine countries (Brazil, Canada, Czech Republic, Denmark, Finland, Qatar, South Africa, the United Kingdom and the United States of America) have assessed the duration of protection of five vaccines against the Omicron variant (six studies assessed VE of primary series vaccination only, four assessed VE of booster vaccination only, and 11 assessed both). Findings from these studies show reduced VE of COVID-19 primary series vaccines against the Omicron variant for all outcomes (*severe disease*, *symptomatic disease*, and *infection*) than has been observed for other four VOCs. Importantly though, VE estimates against the Omicron variant remain higher for *severe disease* in the majority of studies. Booster vaccination substantially improves VE for all outcomes and for all combinations of schedules with estimates available for both primary series and booster vaccination. VE declines more with time after booster vaccination for symptomatic disease and infection than it does for severe disease; however, studies that assess VE of booster vaccination beyond six months are needed to evaluate the longer duration of protection.

For *severe disease*, within the first three months of primary series vaccination, seven of 12 (58%) VE estimates for the mRNA vaccines (Moderna-Spikevax and Pfizer BioNTech-Comirnaty) were ≥70%. Of the two studies available for vectored vaccines, one reported a VE of <70% for AstraZeneca-Vaxzevria, and the other reported a VE of <50% for Janssen-Ad26.COV2.S. One study available for inactivated vaccines (Sinovac-CoronaVac) reported a VE of 50%. Beyond three months after vaccination, 12 of 27 (44%) VE estimates for the mRNA vaccines were ≥70%, while 18 (77%) were ≥50%, one of the 12 (8%) VE estimates for AstraZeneca-Vaxzevria was ≥70% while eight (67%) were ≥50%, and the two (100%) available VE estimates for Sinovac-CoronaVac were ≥50%; both estimates for Janssen-Ad26.COV2.S beyond three months of vaccination were <50%.

Booster vaccination improved VE against *severe disease* in all studies in which it was assessed. There were 33 estimates of an mRNA booster, two estimates a booster dose of Janssen-Ad26.COV2.S, and one estimates a booster dose of Sinovac-CoronaVac. Across the datasets, only one estimate for Pfizer BioNTech-Comrinaty as a booster dose and one for Janssen-Ad26.COV2.S as a booster dose below 70% between 14 days and three months of receipt of a booster dose. At three to six months post mRNA booster, 18 of 20 (90%) estimates showed VE ≥70% (an mRNA vaccine was given as the primary series in 13 of the 20 estimates, while AstraZeneca-Vaxzevria and Sinovac-CoronaVac were given as the primary series for six and one of the twenty estimates, respectively).

VE estimates against *symptomatic disease* and *infection* within the first three months of primary series vaccination tended to be lower than against severe disease, and VE decreased more substantially over time. For *symptomatic disease* within the first three months of primary series vaccination, only three of 13 (23%) VE estimates for the mRNA vaccines were ≥70% and seven (54%) were ≥50%; all three (100%) VE estimates for AstraZeneca-Vaxzevria and the

single estimate for Sinovac (CoronaVac) were below 50%. Beyond three months after vaccination, none of the 28 VE estimates were ≥50% (20 estimates evaluated mRNA vaccines, six evaluated AstraZeneca-Vaxzevria, and two evaluated Sinovac-CoronaVac). A booster with mRNA vaccine after completion of a primary series of an mRNA vaccine, AstraZeneca-Vaxzevria, or Sinovac-CoronaVac, improved VE against *symptomatic disease* with four of 19 (21%) VE estimates ≥70% and 14 (74%) estimates ≥50% between 14 days and three months post booster. However, booster dose protection declined with time since vaccination, with only two of twelve (17%) available estimates indicating a VE of ≥50% at three to six months following receipt of an mRNA booster dose. Estimates for a booster dose of AstraZeneca-Vaxzevria (one estimate) and Sinovac-CoronaVac (one estimate) three to six months post vaccination indicated VE of <50%. VE against *infection* showed a similar pattern as that against *symptomatic disease*.

Additional resources for VOCs

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

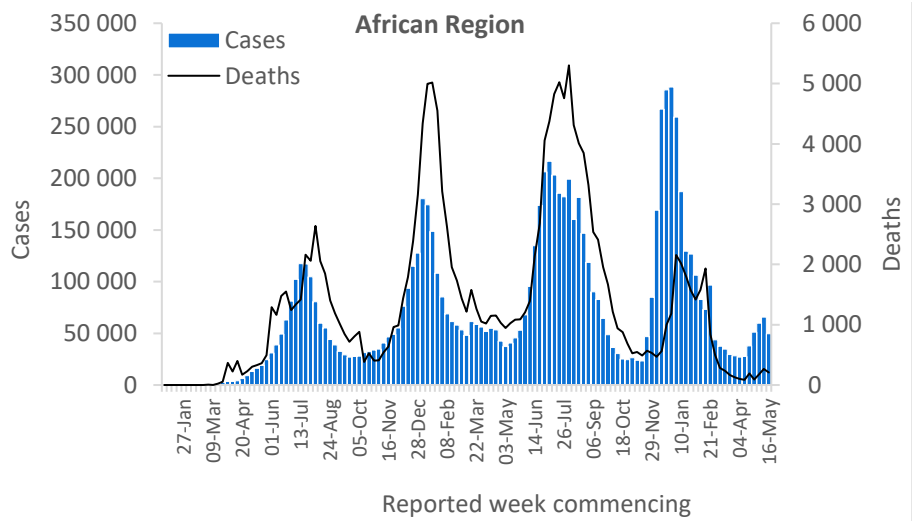
WHO regional overviews:

Epidemiological week 16-22 May 2022**

African Region

After a month of increasing trends, the African Region reported a decline both in the number of new weekly cases (over 49 000; -24%) and new weekly deaths (n=208; -22%) as compared to the previous week. However, 13 (27%) countries in the Region reported an increase in cases of over 20%, with some of the greatest proportional increases observed in Côte d'Ivoire (65 vs 22 new cases; +195%), Ethiopia (406 vs 207 new cases; +96%) and Burundi (509 vs 268 new cases; +90%). The highest numbers of new cases were reported from South Africa (39 203 new cases; 66.1 new cases per 100 000 population; -24%), Réunion (5383 new cases; 601.2 new cases per 100 000; -32%), and Zimbabwe (1436 new cases; 9.7 new cases per 100 000; +53%).

The highest numbers of new deaths in the Region were reported from South Africa (178 new deaths; <1 new death per 100 000 population; -25%), Zimbabwe (12 new deaths; <1 new death per 100 000; +33%), and Réunion (eight new deaths; <1 new deaths per 100 000; +33%).

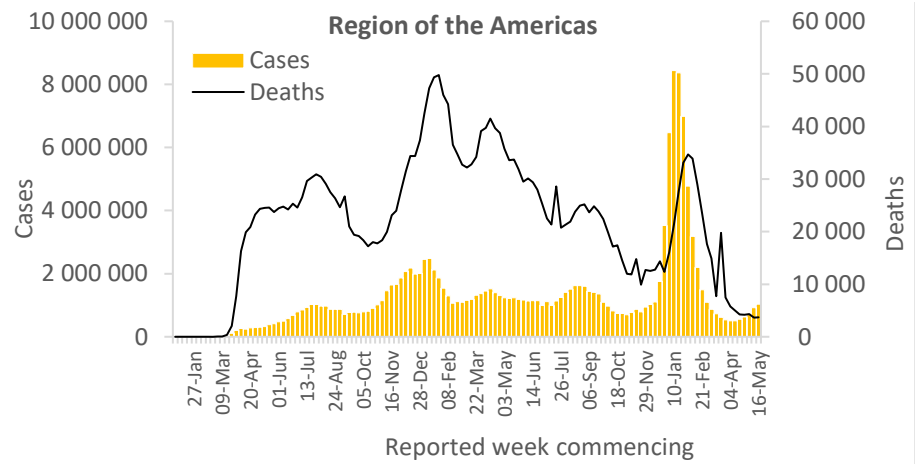


Updates from the African Region

Region of the Americas

The Region of the Americas has continued to report an increasing trend since mid-April 2022, with over one million new weekly cases reported, a 13% increase as compared to the previous week. Twenty-four (43%) countries in the Region reported increases in new cases of 20% or greater, with the greatest proportional increases observed in Antigua and Barbuda (221 vs 58 new cases; +281%), Bolivia (Plurinational State of) (1193 vs 465 new cases; +157%) and Colombia (3795 vs 1671 new cases; +127%). The highest numbers of new cases were reported from the United States of America (713 882 new cases; 215.7 new cases per 100 000; +18%), Brazil (97 674 new cases; 46.0 new cases per 100 000; -19%), and Argentina (43 487 new cases; 96.2 new cases per 100 000; +28%).

The number of new weekly deaths in the Region remained stable as compared to the previous week (<1% increase), with over 3600 new deaths reported. The highest numbers of new deaths were reported from the United States of America (1957 new deaths; <1 new death per 100 000; +2%), Brazil (713 new deaths; <1 new death per 100 000; +3%), and Canada (411 new deaths; 1.1 new deaths per 100 000; -18%).

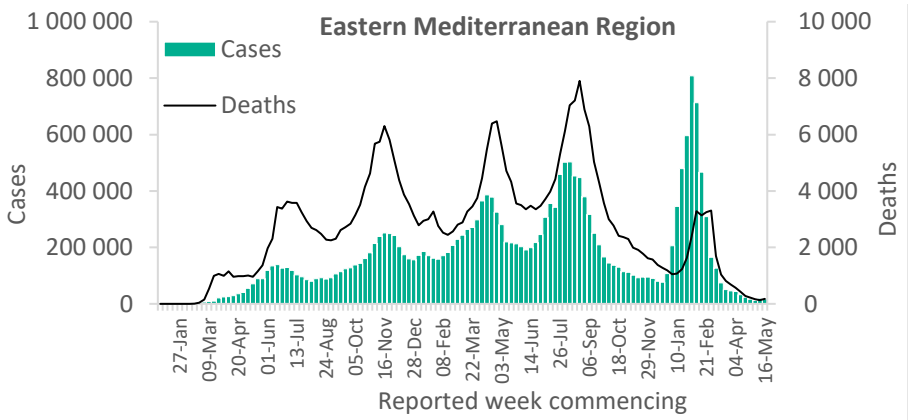


Updates from the Region of the Americas

Eastern Mediterranean Region

After the increasing trend observed during the past week (following a declining trend observed since mid-February 2022), the Eastern Mediterranean Region reported over 17 000 new weekly cases, representing a 12% decrease as compared to the previous week. Four (19%) countries in the Region reported increases in new cases of 20% or greater, with the greatest proportional increases observed in Jordan (305 vs 84 new cases; +263%), Morocco (824 vs 500 new cases; +65%) and Afghanistan (431 vs 320 new cases; +35%). The highest numbers of new cases were reported from Bahrain (3800 new cases; 223.3 new cases per 100 000; -23%), Saudi Arabia (3780 new cases; 10.9 new cases per 100 000; +2%), and the United Arab Emirates (2305 new cases; 23.3 new cases per 100 000; +8%).

The number of new weekly deaths in the Region increased by 30% when compared to the previous week, with over 150 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (55 new deaths; <1 new death per 100 000; +8%), Tunisia (53 new deaths; <1 new deaths per 100 000; +489%), and Egypt (21 new deaths; <1 new death per 100 000; -25%). All 53 deaths reported from Tunisia last week were batch reported on 18 May 2022.

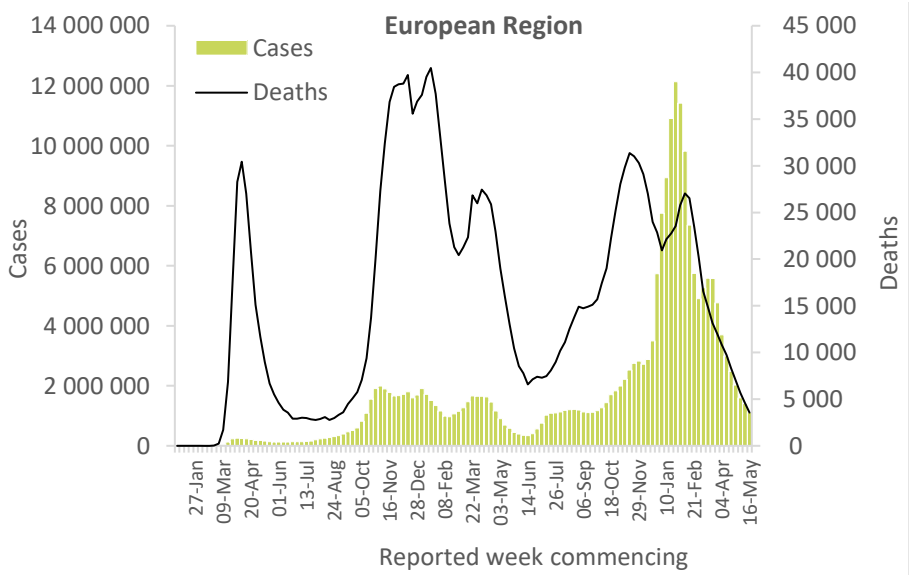


Updates from the Eastern Mediterranean Region

European Region

In the European region, cases have continued to decline since mid--March 2022, with over 1.1 million new weekly cases, a 20% decrease as compared to the previous week. Three (5%) countries in the Region reported increases in new cases of 20% or greater: Spain (110 951 vs 51 716 new cases; +115%), Uzbekistan (127 vs 87 new cases; +46%) and Monaco (105 vs 15 new cases; +33%). The highest numbers of new cases were reported from Germany (268 396 new cases; 322.7 new cases per 100 000; -35%), Italy (199 116 new cases; 333.9 new cases per 100 000; -24%), and Portugal (164 225 new cases; 1595.1 new cases per 100 000; +7%).

The Region reported over 3500 new deaths, a 23% decrease as compared to the previous week. The highest numbers of new deaths were reported from Italy (736 new deaths; 1.2 new deaths per 100 000; -4%), the Russian Federation (680 new deaths; <1 new death per 100 000; -6%), and Spain (564 new deaths; 1.2 new deaths per 100 000; +118%).



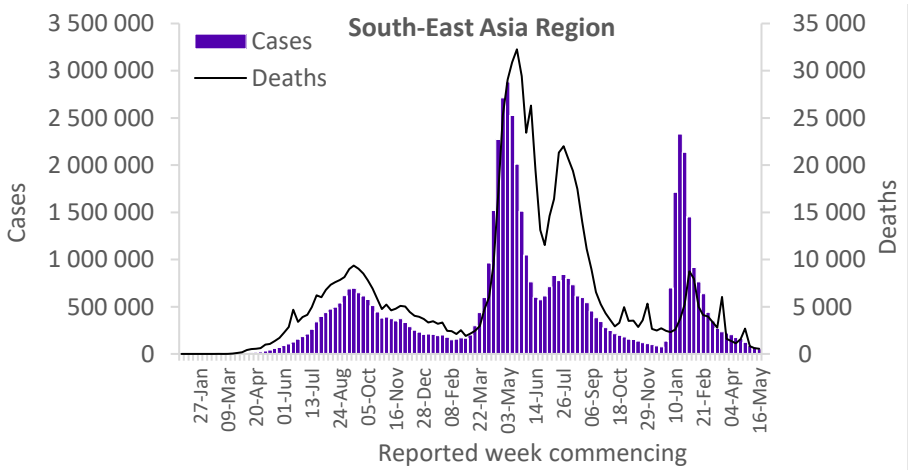
Updates from the European Region

South-East Asia Region

The South-East Asia Region has continued the decreasing trends observed since mid-January 2022, with over 54 000 new cases and over 500 new deaths reported, decreases of 23% and 12% respectively as compared to the previous week. Three (30%) countries in the Region showed increases in new cases of 20% or greater, with the largest proportional increases observed in the Maldives (93 vs 67 new cases; +39%) and Nepal (70 vs 56 new cases; +25%). The highest numbers of new cases were reported from Thailand (37 648 new cases; 53.9 new cases per 100 000; -23%), India (14 772 new cases; 1.1 new cases per 100 000; -24%), and Indonesia (1814 new cases; <1 new case per 100 000; -23%).

The highest numbers of new deaths in the Region were reported from Thailand (274 new deaths; <1 new death per 100 000; -29%), India (199 new deaths; <1 new deaths per 100 000; +33%), and Indonesia (64 new deaths; <1 new deaths per 100 000; -17%).

Reports of an outbreak of COVID-19 first reported in the Democratic People's Republic of Korea continue through official media on 12 May 2022; however, at present, no confirmed cases or deaths have been reported to WHO.

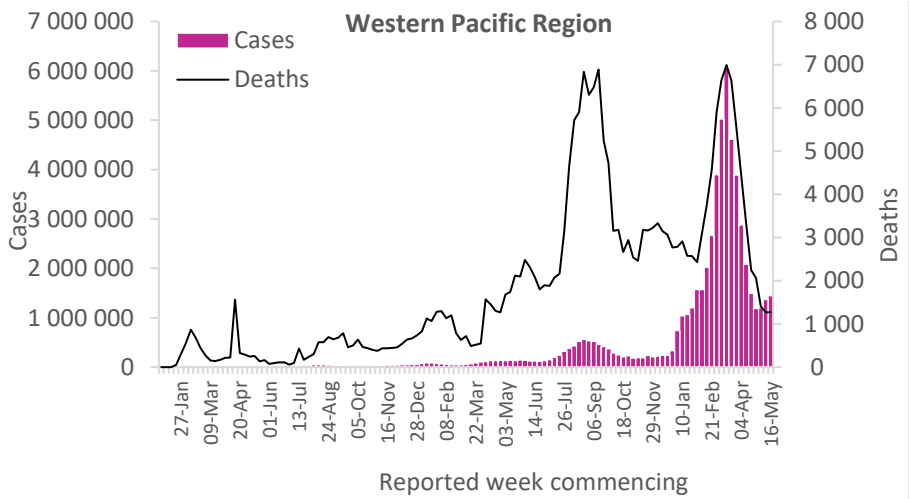


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region has shown an increasing trend in new weekly cases in the last three weeks, with over 1.4 million new cases, a 6% increase as compared to the previous week. Eight (25%) countries in the Region reported increases in new cases of 20% or greater, with the greatest proportional increases observed in Guam (238 vs 36 new cases; +562%), Fiji (116 vs 26 new cases; +346%) and Tonga (444 vs 246 new cases; +80%). The highest numbers of new cases were reported from China (543 290 new cases; 36.9 new cases per 100 000; +39%), Australia (360 323 new cases; 1413.0 new cases per 100 000; +8%), and Japan (249 210 new cases; 197.0 new cases per 100 000; -11%).

With over 1200 new deaths reported, the Region shows a stable trend (<1% increase) in new weekly deaths as compared to the previous week. The highest numbers of new deaths were reported from China (317 new deaths; <1 new death per 100 000; +64%), Australia (306 new deaths; 1.2 new deaths per 100 000; +15%), and the Republic of Korea (256 new deaths; <1 new death per 100 000; -27%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Annex 2. Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. Likewise, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection.
- Table 3 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than 4 months post final dose.
- Studies reporting VOC-specific VE estimates for full vaccination (≥7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for

AstraZeneca-Vaxzevria for infection (when a phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).

- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Neutralization studies that use samples collected >7 days and < 6 months after complete vaccination and that use an ancestral strain as the reference are included in the Table 3.

Annex 3. Methods for Figure 6

- VE studies included in the plot were identified from an ongoing systematic review of COVID-19 vaccine effectiveness studies. All studies were cohort or test-negative studies. Methods for the systematic review and inclusion/exclusion criteria are available on view-hub.org. The studies were conducted during a period when Omicron was the predominant circulating variant. Only studies providing VE estimates of individual vaccines are included in the plot (studies assessing combined VE of more than one vaccine are excluded). In addition, for the primary series VE, only studies providing VE estimates for discrete time intervals since vaccination, which evaluate changes in VE over time, are included.
- For the primary series VE, estimates are only included in the plot for studies that report absolute VE for more than one time period for an individual vaccine. Thirteen studies of VE against Omicron provided only a single cumulative VE estimate for an individual vaccine, which due to varying lengths of time since vaccination are difficult to interpret due to the marked waning of VE over time with omicron.

Annex 4. Summary of Primary Series Vaccine Performance against Variants of Concern (VE data as of 19 May 2022; Neutralization data as of 16 May 2022)

	WHO Emergency Use Listing (EUL) Qualified Vaccines[+]									Vaccines without WHO EUL[+]	
	AstraZeneca-Vaxzevria/ SII - Covishield	Beijing CNBG-BBIBP-CorV	Bharat-Covaxin	Cansino - Convidecia[30]	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Novavax-Nuvaxovid/ SII - Covavax	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Gamaleya-Sputnik V
Alpha, Beta, Gamma											
Summary of VE*	*see update from 11 January 2022 for details of vaccine performance against Alpha, Beta, and Gamma variants of concern*										
Delta											
Summary of VE*	*see update from 27 April 2022 for details of vaccine performance against Delta variant of concern*										
Omicron											
Summary of VE*	Reduced protection against infection and symptomatic disease; possible reduced protection against for severe disease but limited evidence										
- Severe disease	-	-	-	-	-	↓to↓↓/↓↓↓$_{2}$	-	↓↓ to ↓↓↓$_{5}$	-	-	-
- Symptomatic disease	↓↓↓$_{1}$	-	-	-	-	↓↓/↓↓↓$_{2}$	-	↓↓↓$_{3}$	-	-	-
- Infection	↓↓↓$_{1}$	-	-	-	-	↓↓↓$_{3}$	-	↓↓↓$_{3}$	-	-	-
Neutralization	↓↓↓$_{7}$	↔to↓↓$_{4}$	↓↓$_{1}$	-	↔to ↓↓↓$_{4}$	↓↓↓$_{18}$	-	↓↓↓$_{45}$	↓↓to↓↓↓$_{5}$	-	↓↓$_{1}$

VE refers to vaccine effectiveness and vaccine efficacy. *Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10 percentage point (pp) reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20 pp reductio[30]n in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30 pp reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30 pp reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in the study. The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources Library. References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public: Protect yourself; Questions and answers; Travel advice

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COVID-19 Weekly Epidemiological Update

Edition 92, published 18 May 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- Special Focus: Environmental surveillance for SARS-COV-2 to complement public health surveillance
- WHO regional overviews

Global overview

Data as of 15 May 2022

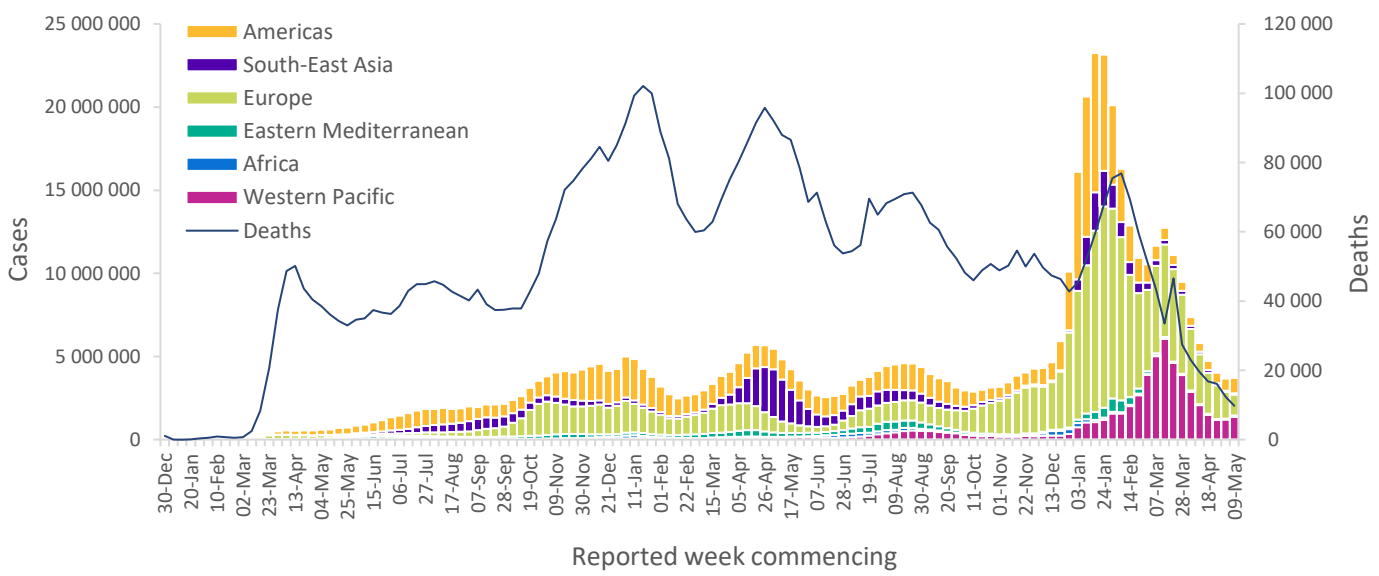
Globally, after the continued decline observed since the end of March 2022, new weekly COVID-19 cases have stabilized during the reporting period (9 May to 15 May 2022), with over 3.6 million cases reported, a 1% increase as compared to the previous week (figure 1). On the other hand, the number of new weekly deaths continues to decline, with over 9000 fatalities reported during the same period, representing a 21% decrease as compared to the previous week.

At the regional level, the number of new weekly cases increased in the Eastern Mediterranean Region (+63%), in the Region of the Americas (+26%), in the Western Pacific Region (+14%) and in the African Region (+6%) and decreased in the remaining two regions. The number of new weekly deaths decreased in all the regions except the African Region, where a 48% increase in new weekly deaths was reported.

As of 15 May 2022, over 518 million confirmed cases and over six million deaths have been reported globally.

These trends should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 15 May 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest number of new weekly cases were reported from the United States of America (605 547 new cases; +33%), China (389 901 new cases; +94%), Germany (376 959 new cases; -20%), Australia (332 451 new cases; -23%), and Japan (279 620 new cases; +54%).

The highest number of new weekly deaths were reported from the United States of America (1849 new deaths; -27%), Italy (765 new deaths; -16%), the Russian Federation (724 new deaths; -21%), Brazil (689 new deaths; +1%), and France (590 new deaths; -19%).

This week, state media in the Democratic People's Republic of Korea reported a COVID-19 outbreak for the first time.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 15 May 2022**

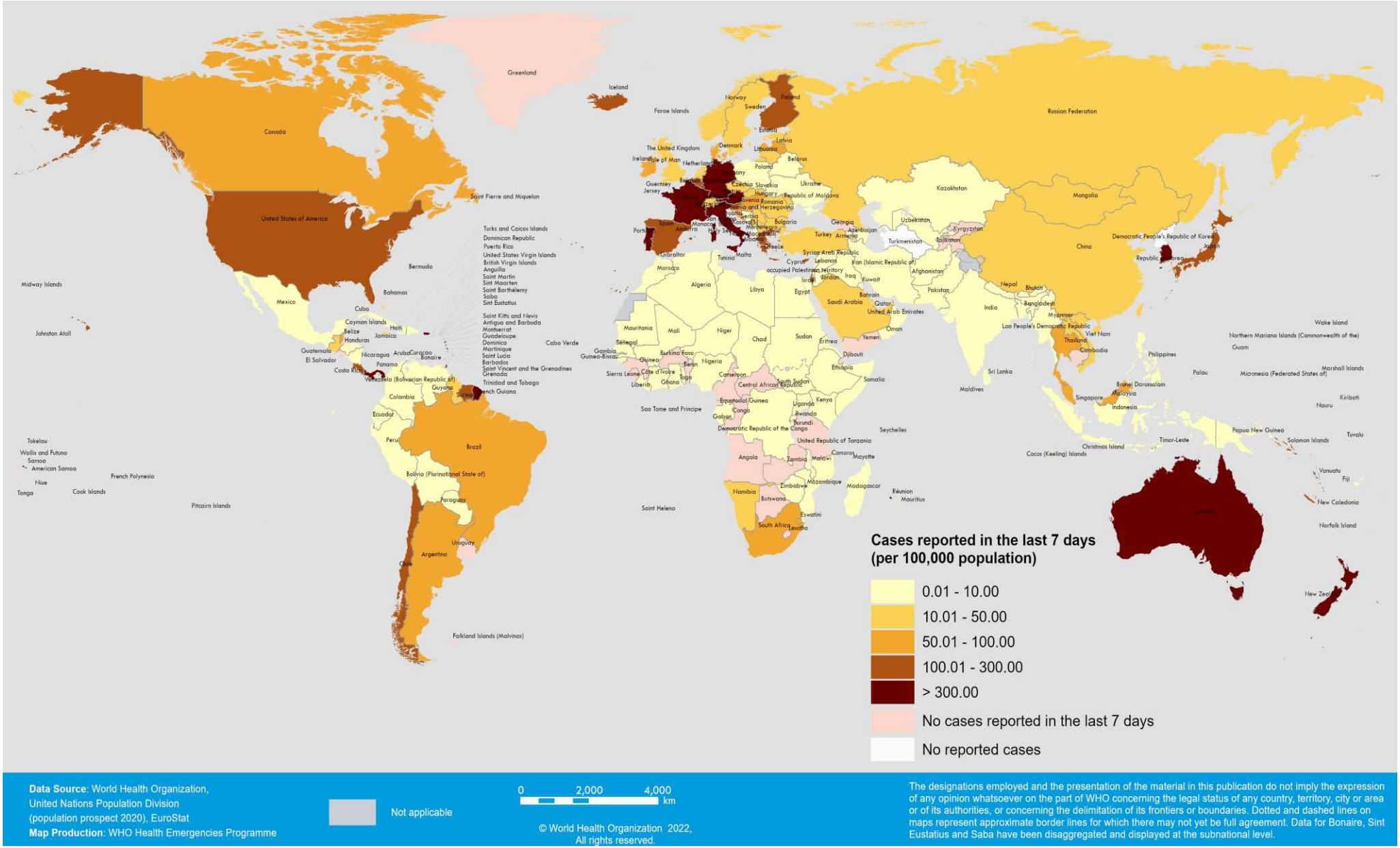
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Western Pacific	1 366 720 (37%)	14%	57 213 690 (11%)	1 267 (13%)	-10%	227 703 (4%)
Europe	1 266 355 (34%)	-20%	218 195 663 (42%)	3 951 (40%)	-29%	2 002 128 (32%)
Americas	912 887 (25%)	26%	154 815 697 (30%)	3 583 (37%)	-16%	2 733 894 (44%)
South-East Asia	71 347 (2%)	-19%	58 017 061 (11%)	614 (6%)	-24%	787 618 (13%)
Africa	63 149 (2%)	6%	8 897 180 (2%)	258 (3%)	48%	172 091 (3%)
Eastern Mediterranean	19 502 (1%)	63%	21 733 981 (4%)	133 (1%)	-20%	342 544 (5%)
Global	**3 699 960 (100%)**	**1%**	**518 874 036 (100%)**	**9 806 (100%)**	**-21%**	**6 265 991 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

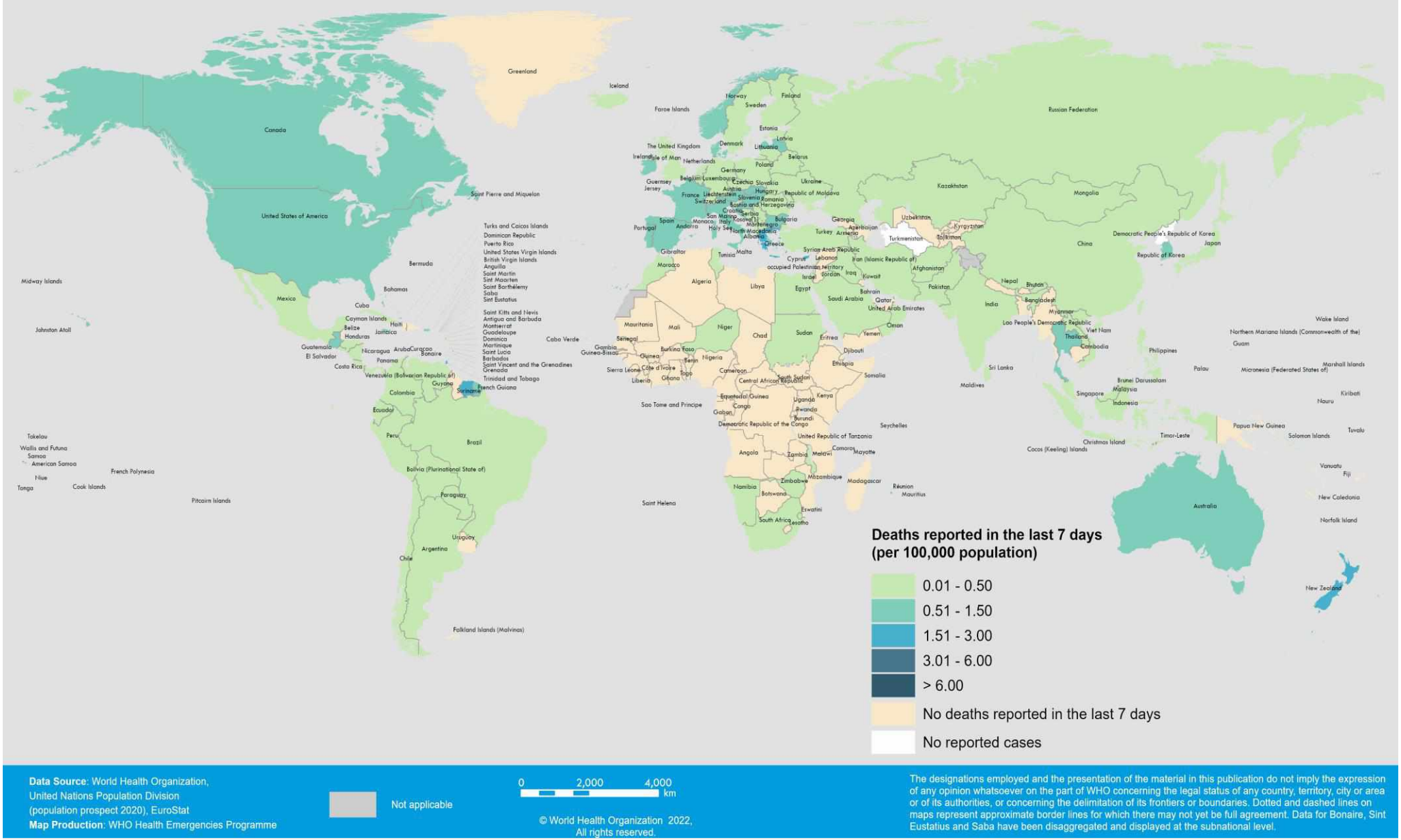
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 9 – 15 May 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 9-15 May 2022*



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.

Geographic spread and prevalence of VOCs

The Omicron VOC is the dominant variant circulating globally, accounting for nearly all sequences reported to GISAID. Among Omicron, BA.2 and its descendent lineages (i.e., BA.2.X) are the dominant variants, comprising 97% of all sequences submitted to GISAID from the week of 1 May 2022. Within the last 30 days, BA.1 and its descendent lineages (i.e., BA.1.X), BA.3 and the Delta variant have further declined in prevalence, falling below a global prevalence of <1%.

In recent weeks, Omicron descendent lineages BA.4, BA.5 and BA.2.12.1 (all three with characteristic mutations in the spike region and locus S: L452) have increased in prevalence within the countries in which they were first detected (South Africa and the United States of America, respectively) and spread to additional countries. To date, BA.4 has been detected in 20 countries (1 333 sequences submitted to GISAID), BA.5 has been detected in 19 countries (757 sequences), and BA.2.12.1 has been detected in 38 countries (21 711 sequences). At the global level, BA.4 and BA.5 account for 0.5% and 0.4% of all circulating variants, respectively. Lineage BA.2.12.1 accounts for 10% among BA.2 lineages globally as of 24 April 2022.[i]

In South Africa, BA.4 and BA.5 appear to be driving an increase in the numbers of cases, accounting for 89% and 7% of sequences submitted as of 13 May 2022, respectively.[1] Since late April, South Africa has also reported a moderate increase in hospital admissions, although this rise has been significantly lower than that observed during the emergence of Omicron in late 2021. Similarly, the first indications of a rise in the number of cases have been observed in Portugal, which recently confirmed circulation of BA.5. Hospital and ICU admissions remain stable in Portugal as of 13 May. In the United States of America, where the prevalence of BA.2.12.1 is 48%, the numbers of cases and hospitalizations have been rising since April 2022, with a 33% increase in cases and 19% increase in admissions during the week of 9 May, respectively, as compared to the previous week. [2]

Preliminary modelling by WHO based on sequences submitted to GISAID indicates that BA.4, BA.5 and BA.2.12.1 have a higher growth rate than other circulating variants, such as Delta, BA.1 and BA.2, that may be attributable to increased immune evasion and/or intrinsic transmissibility.

[i] Data for the last three weeks (25 April to 17 May 2022) were incomplete due to delays in submission and, thus, were excluded from the analysis.

BA.4, BA.5, and BA.2.12.1 remain lineages monitored by WHO under the umbrella of the Omicron VOC given their current low prevalence at the global level and the insufficient evidence of a change in diseases characteristics, such as severity, associated with these Omicron lineages.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

Special Focus: Environmental surveillance for SARS-CoV-2 to complement public health surveillance

The management of the COVID-19 pandemic continues to be challenging, for a number of reasons, including the evolution of the virus and the impact of VOCs on control measures.

The primary source of evidence about the incidence of SARS-CoV-2 infection in any geographic location is the testing of upper respiratory tract samples. However, in an increasing number of settings around the world, routine COVID-19 surveillance programmes have supplemented diagnostic testing with community-scale environmental surveillance (ES) of SARS-CoV-2 in wastewater samples.

Prior to the COVID-19 pandemic, ES to detect circulating pathogens in wastewater had been used extensively in public health, particularly for poliovirus[3], typhoid[4,5] and more recently antimicrobial resistance (AMR).[6]

On 14 April 2022, WHO released interim guidance on Environmental surveillance for SARS-COV-2 to complement public health surveillance in order to provide Member States with advice on how to establish an effective ES programme for SARS-CoV-2. This includes the minimum requirements for planning and coordinating ES in different resource settings and good practice for data collection, analysis, interpretation and communication.

Applications of environmental surveillance for SARS-CoV-2

Leadership by the public health agencies responsible for the overall COVID-19 response is critical for SARS-COV-2 ES programmes. Health authorities in charge of infectious disease surveillance should have the responsibility to design ES for SARS-CoV-2, coordinate interpretation and communicate findings.

At their most basic, SARS-CoV-2 ES programmes indicate whether, at the level of the community, the virus is above (present) or below (absent) the limits of detection of the testing methods used. This is particularly relevant in zero- or low-prevalence settings to confirm the absence of virus circulation or warn about the (re)emergence of the virus. Most ES programmes in high prevalence settings involve quantification of results to identify trends in SARS-CoV-2 infection in the community. In the most advanced settings, SARS-COV-2 ES programmes can detect emerging variants and monitor circulating variants. These findings can then help target SARS-CoV-2 responses and interventions.

SARS-CoV-2 ES programmes add value by:

- Early warning signalling of SARS-CoV-2 (re)emergence approximately seven days in advance of clinical case detection, including in areas thought to be free of SARS-CoV-2.
- Supporting risk communication to help promote good behaviours – detection of SARS-COV-2 in wastewater can be used to remind the community that the virus is circulating, encourage people to seek diagnostic testing, and reduce complacency about control interventions, such as masking, distancing and vaccination.
- Enabling cost-effective targeting of public health surveillance – hotspot areas with higher SARS-CoV-2 ES signals can be prioritized for the deployment of scarce diagnostic testing resources and implementation of localized restrictions.
- Allowing targeted surveillance for early warning of circulation in vulnerable or high-risk settings, isolated communities, transport vessels, and multi-day events and gatherings.

- Identifying known variants of interest or concern and detecting the emergence of novel variants (albeit challenging in sewage samples).
- Enabling retrospective analysis through banking of samples.

Key considerations for planning and coordination

The components of a wastewater surveillance programme and the requirements for establishing one that is credible and effective include:

- Public health agencies and policymakers who frame the questions that the programme needs to answer and use the information generated to guide decisions.
- Epidemiologists and data managers who collect, manage and interpret data.
- Water, sanitation and environment agencies and municipal authorities responsible for wastewater management and (usually) for sampling who understand wastewater flows and how they relate to residential locations of populations and to public health districts.
- Laboratories which perform the testing, report the results, and undertake quality management, and which have expertise in handling wastewater samples and molecular biology.
- Information technology and communications personnel who undertake spatial mapping and data interpretation, prepare reports and maintain dashboards on behalf of all parties.

The objective of the SARS-CoV-2 ES programme is to inform decision-making processes for SARS-CoV-2 monitoring and management as part of the broader COVID-19 response strategy. This requires linking the SARS-CoV-2 ES programme with other pillars of the response.

Conclusions

There is no universal standard method or approach to ES for SARS-CoV-2. However, there are several communities of practice at the national, regional and global scales, and several proficiency programs, along with many published protocols. The guidance has more information on the key considerations for data collection, analysis and interpretation.

A range of research projects and innovations are in progress to improve ES for SARS-CoV-2 and other pathogens. ES has the potential to detect novel variants, as well as to increase understanding of the ecology and zoonotic potential (e.g., from sampling of animal rearing operations) of SARS-CoV-2 that has not been identified in human clinical samples, and to monitor wastewater from transport hubs, to support global pandemic intelligence.

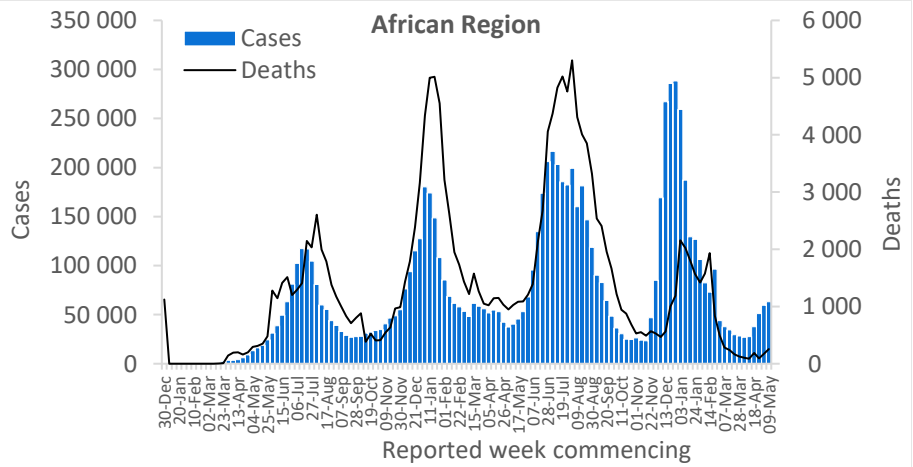
WHO regional overviews:

Epidemiological week 9-15 May 2022**

African Region

For almost a month, the African Region has shown an increasing trend in new weekly cases, with over 63 000 new weekly cases reported, a 6% increase as compared to the previous week. Seventeen (35%) countries in the Region reported an increase in cases of over 20%, with some of the greatest proportional increases observed in Malawi (76 vs 30 new cases; +153%), Mozambique (74 vs 32 new cases; +131%) and Mauritania (104 vs 48 new cases; +117%). The highest numbers of new cases were reported from South Africa (51 547 new cases; 86.9 new cases per 100 000; +17%), Réunion (7865 new cases; 878.5 new cases per 100 000; -28%), and Zimbabwe (674 new cases; 4.5 new cases per 100 000; +58%).

The Region reported over 250 new weekly deaths, a 48% increase as compared to the previous week. The highest numbers of new deaths were reported from South Africa (237 new deaths; <1 new death per 100 000; +55%), Zimbabwe (eight new deaths; <1 new death per 100 000; +100%), and Réunion (six new deaths; <1 new death per 100 000; -14%).

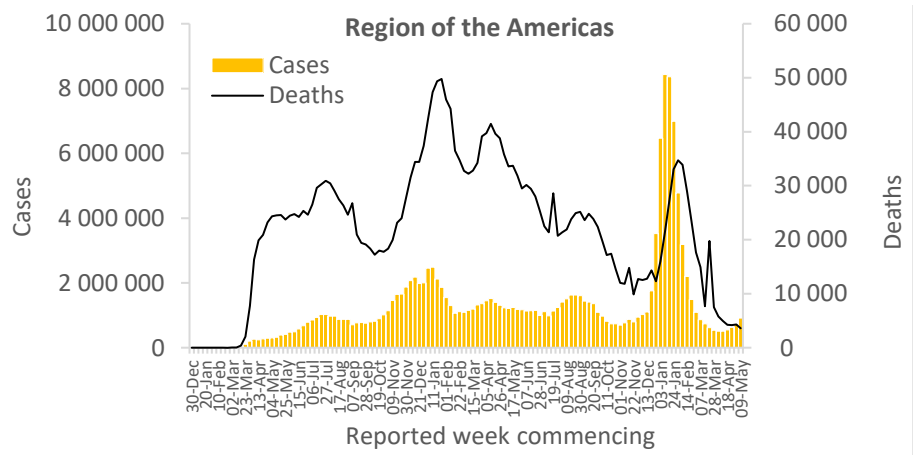


Updates from the African Region

Region of the Americas

The Region of the Americas has continued to report an increasing trend since mid-April 2022, with over 912 000 new weekly cases reported, a 26% increase as compared to the previous week. Twenty-six (46%) countries in the Region reported increases in new cases of 20% or greater, with some of the greatest proportional increases observed in Suriname (615 vs 57 new cases; +979%), Falkland Islands (Malvinas) (734 vs 211 new cases; +248%) and Guyana (233 vs 83 new cases; +184%). The highest numbers of new cases were reported from the United States of America (605 547 new cases; 182.9 new cases per 100 000; +33% increase), Brazil (120 831 new cases; 56.8 new cases per 100 000; +9%), and Argentina (33 989 new cases; 75.2 new cases per 100 000; +93%).

The number of new weekly deaths in the Region decreased by 16% as compared to the previous week, with over 3500 new deaths reported. The highest numbers of new deaths were reported from the United States of America (1849 new deaths; <1 new death per 100 000; -27%), Brazil (689 new deaths; <1 new death per 100 000; +1%), and Canada (501 new deaths; 1.3 new deaths per 100 000; +3%).

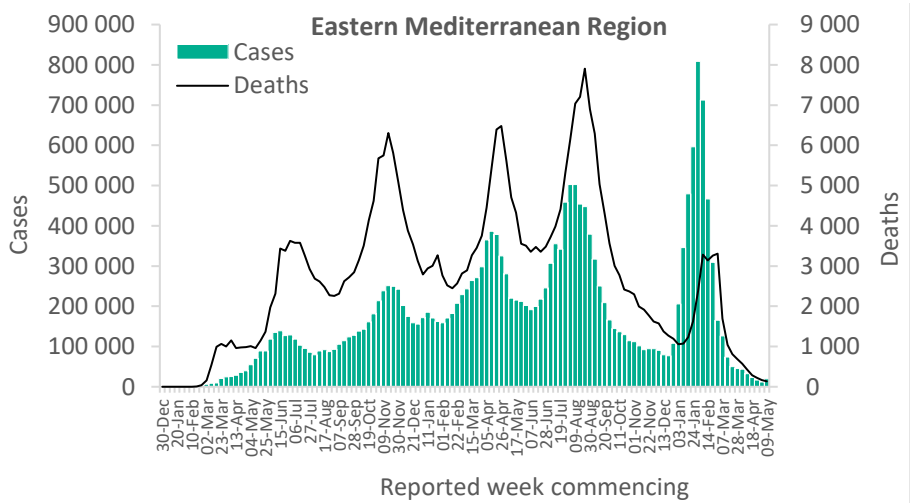


Updates from the Region of the Americas

Eastern Mediterranean Region

After the declining trend observed since mid-February 2022, the Eastern Mediterranean Region reported over 19 000 new weekly cases, representing a 63% increase as compared to the previous week. Nine (41%) countries in the Region reported increases in new cases of 20% or greater, with some of the greatest proportional increases observed in Libya (35 vs three new cases; +1067%), Afghanistan (320 vs 44 new cases; +627%) and Saudi Arabia (3719 vs 1065; +249%). The highest numbers of new cases were reported from Bahrain (4915 new cases; 288.9 new cases per 100 000; +46%), Saudi Arabia, and the Islamic Republic of Iran (2982 new cases; 3.6 new cases per 100 000; -2%).

The number of new weekly deaths in the Region decreased by 20% when compared to the previous week, with over 130 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (51 new deaths; <1 new death per 100 000; -38%), Egypt (28 new deaths; <1 new death per 100 000; -20%), and Saudi Arabia (15 new deaths; <1 new death per 100 000; +25%).

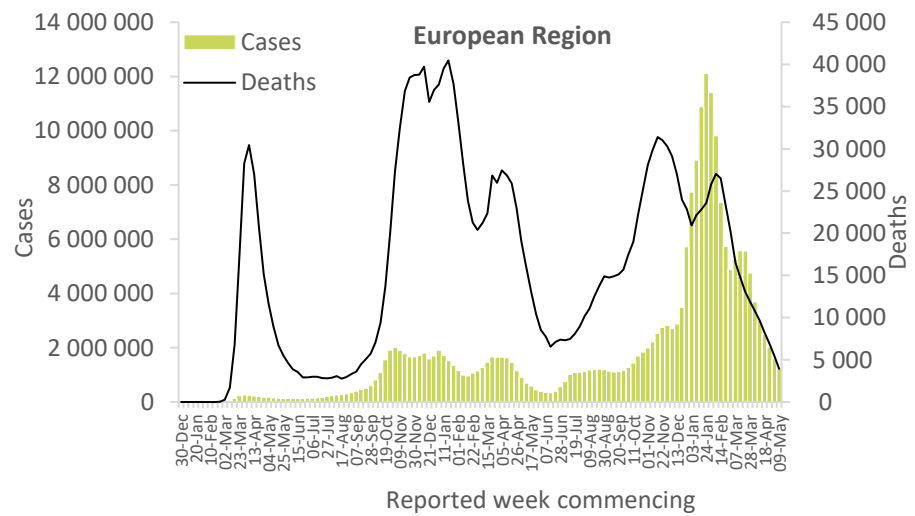


Updates from the Eastern Mediterranean Region

European Region

In the European region, cases have continued to decrease since mid-March 2022, with over 1.2 million new weekly cases, a 20% decrease as compared to the previous week. Five (8.2%) countries in the Region reported increases in new cases of 20% or greater, with some of the greatest proportional increases observed in Ukraine (3590 vs 200 new cases; +1695%), Hungary (6748 vs 2183 new cases; +209%) and Portugal (115 560 vs 85068 new cases; +36%). The cases in Ukraine should be interpreted carefully due to the impact of the ongoing conflict on testing capacities. The highest numbers of new cases were reported from Germany (376 959 new cases; 453.3 new cases per 100 000; -20%), Italy (262 374 new cases; 439.9 new cases per 100 000; -14%), and France (217 932 new cases; 335.1 new cases per 100 000; -18%).

The Region reported just over 3900 new deaths, a 29% decrease as compared to the previous week. The highest numbers of new deaths were reported from Italy (765 new deaths; 1.3 new deaths per 100 000; -16%), the Russian Federation (724 new deaths; <1 new death per 100 000; -21%), and France (590 new deaths; <1 new death per 100 000; -19%).



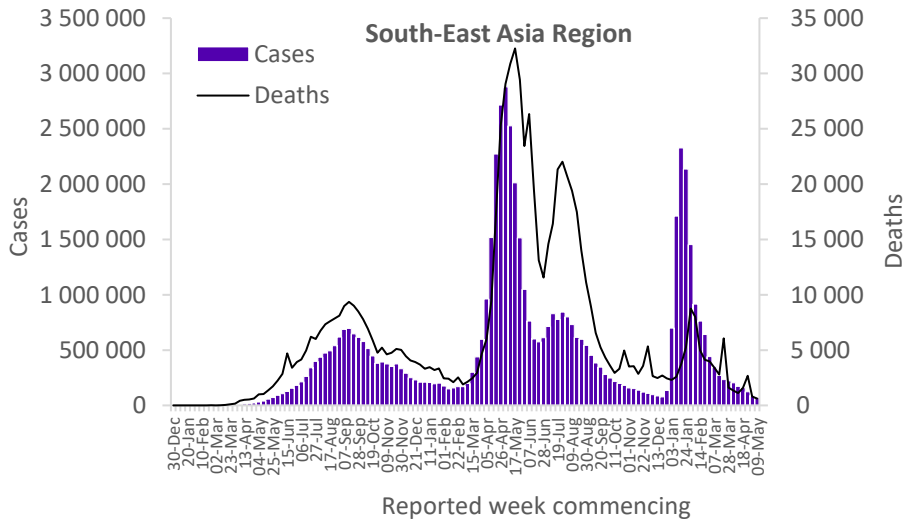
Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 71 000 new cases and 614 new deaths, decreases of 19% and 24% respectively as compared to the previous week. All countries except for Bangladesh (213 vs 83 new cases; +156%) and Indonesia (2345 vs 1391 new cases; +68%) reported a decrease in weekly cases. The highest numbers of new cases were reported from Thailand (48 996 new cases; 70.2 new cases per 100 000; -21%), India (19 405 new cases; 1.4 new cases per 100 000; -16%), and Indonesia (2345 new cases; <1 new case per 100 000; +69%).

The highest numbers of new weekly deaths in the Region were reported from Thailand (384 new deaths; <1 new death per 100 000; -18%), India (150 new deaths; <1 new death per 100 000; -32%), and Indonesia (77 new deaths; <1 new death per 100 000; -29%).

A first outbreak of COVID-19 has been reported in the Democratic People's Republic of Korea through official media on 12 May 2022. However, at this time no counts of confirmed cases or deaths are available.

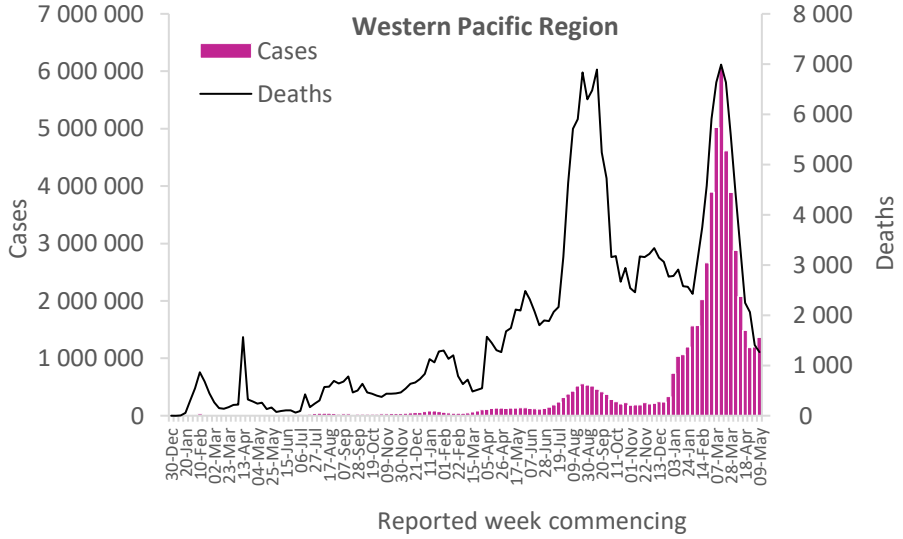


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region had shown decreasing trends in new weekly cases since mid-March 2022. However, an increase has been observed in weekly new cases in the last two weeks, with over 1.3 million new cases, a 14% increase as compared to the previous week. Nine (31%) countries in the Region reported increases in new cases of 20% or greater, with some of the greatest proportional increases observed in Papua New Guinea (279 vs 22 new cases; +1168%), Brunei Darussalam (1784 vs 77 new cases; +129%) and Malaysia (19 137 vs 8732 new cases; +119%). The highest numbers of new cases were reported from China (389 901 new cases; 26.5 new cases per 100 000; +94%), Australia (332 451 new cases; 1303.7 new cases per 100 000; -23%), and Japan (279 620 new cases; 221.1 new cases per 100 000; + 54%).

The Region reported just over 1200 new weekly deaths, a 10% decrease as compared to the previous week. The highest numbers of new deaths were reported from Republic of Korea (349 new deaths; <1 new death per 100 000; -28%), Australia (267 new deaths; <1 new death per 100 000; +16%), and Japan (254 new deaths; <1 new death per 100 000; +17%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public: Protect yourself; Questions and answers; Travel advice

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COVID-19 Weekly Epidemiological Update

Edition 91, published 11 May 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews

Global overview

Data as of 8 May 2022

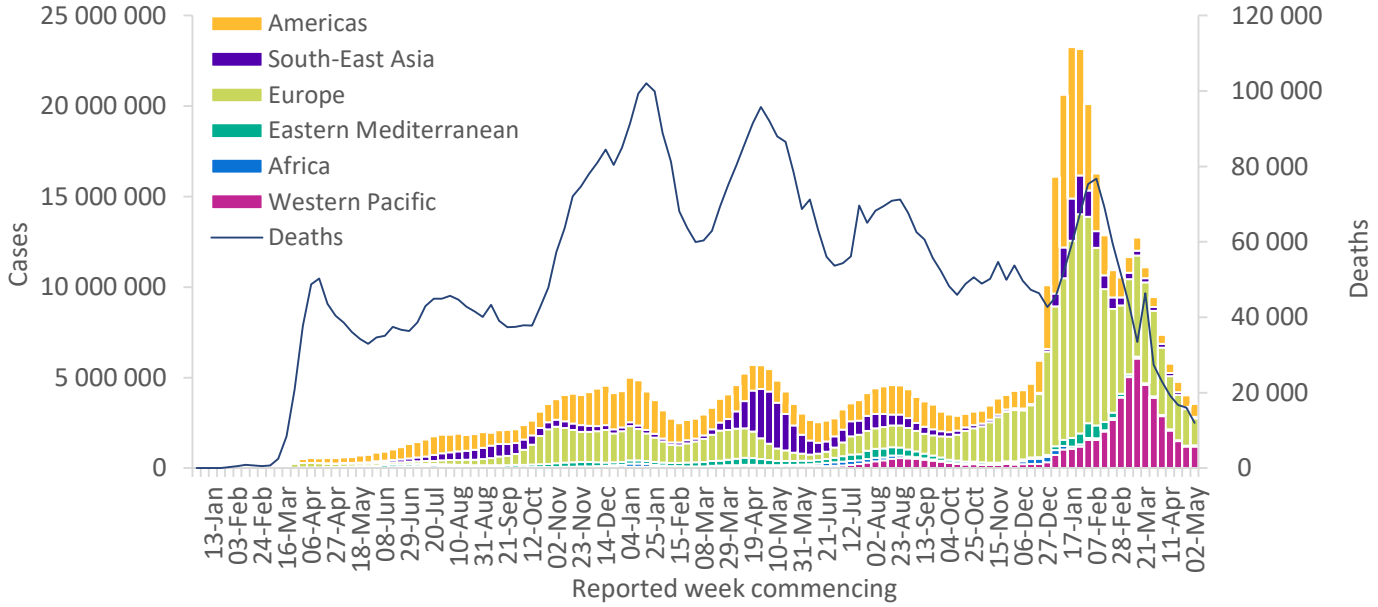
Globally, the number of new COVID-19 cases and deaths has continued to decline since the end of March 2022. During the week of 2 through 8 May 2022, over 3.5 million cases and over 12 000 deaths were reported, decreases of 12% and 25% respectively, as compared to the previous week (Figure 1).

At the regional level, the number of new weekly cases increased in the Region of the Americas (+14%) and in the African Region (+12%), remained stable in the Western Pacific Region (+1%), and decreased in the remaining three regions. The number of new weekly deaths increased in the African Region (+84%), remained stable in the Region of the Americas (+3%), while decreasing trends were reported in the other four regions.

As of 8 May 2022, over 514 million confirmed cases and over six million deaths have been reported globally.

These trends should be interpreted with caution as several countries have been progressively changing COVID--19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 8 May 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest number of new weekly cases were reported from the United States of America (451 414 new cases; +19%), Australia (431 410 new cases; +59%), Germany (427 044 new cases; -29%), Italy (304 573 new cases; -21%), and the Republic of Korea (268 749 new cases; -29%).

The highest number of new weekly deaths were reported from the United States of America (2 652 new deaths; +19%), the Russian Federation (915 new deaths; -19%), Italy (910 new deaths; +1%), France (732 new deaths; -19%), and Brazil (681 new deaths; -20%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 8 May 2022**

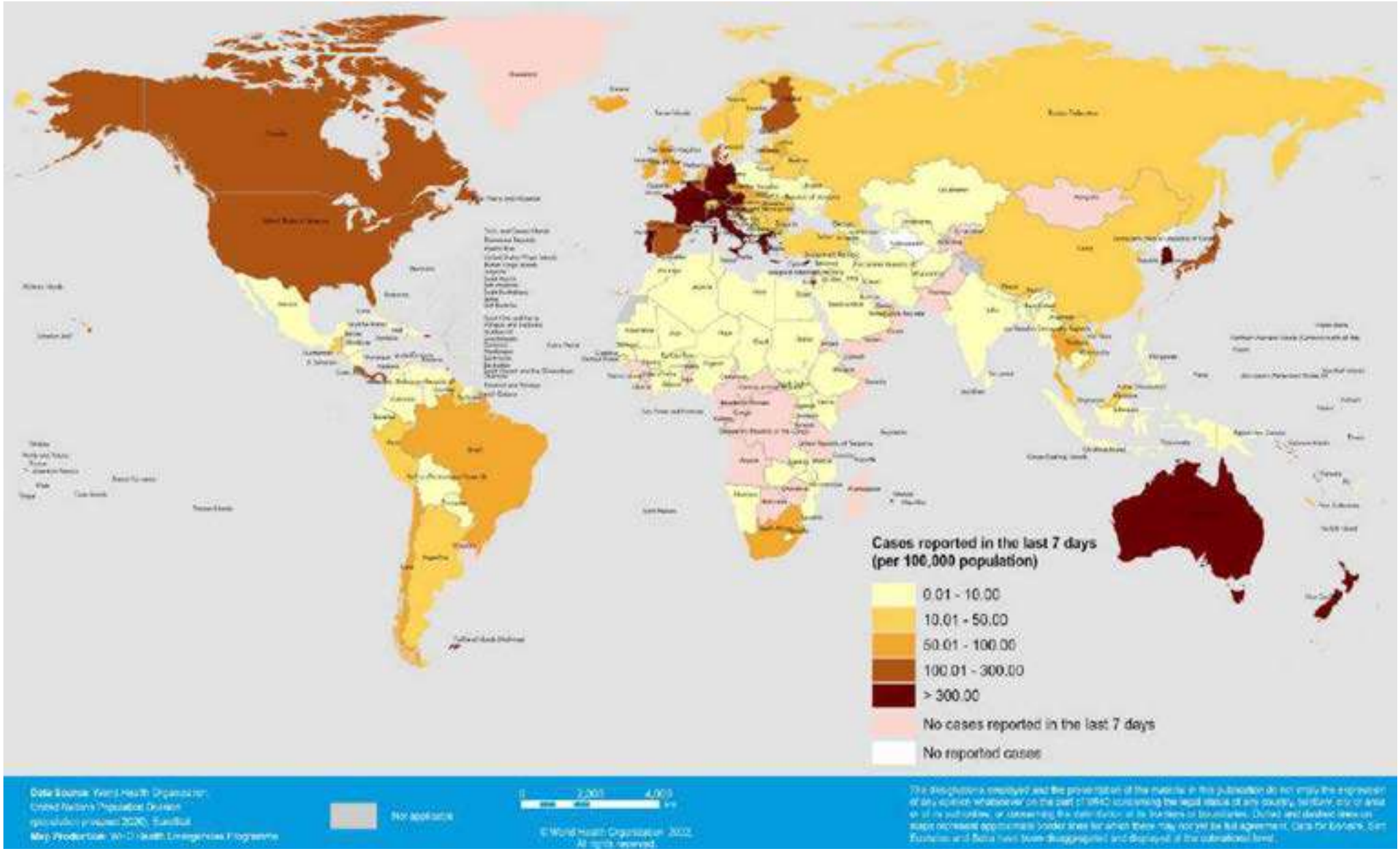
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	1 482 775 (42%)	-26%	216 726 575 (42%)	5 137 (43%)	-24%	1 996 028 (32%)
Western Pacific	1 197 250 (34%)	1%	55 846 326 (11%)	1 407 (12%)	-32%	226 437 (4%)
Americas	709 439 (20%)	14%	153 884 155 (30%)	4 344 (36%)	3%	2 729 790 (44%)
South-East Asia	87 674 (2%)	-29%	57 945 672 (11%)	805 (7%)	-70%	787 004 (13%)
Africa	56 983 (2%)	12%	8 830 808 (2%)	166 (1%)	84%	171 824 (3%)
Eastern Mediterranean	11 948 (<1%)	-28%	21 714 448 (4%)	166 (1%)	-26%	342 411 (5%)
Global	**3 546 069 (100%)**	**-12%**	**514 948 748 (100%)**	**12 025 (100%)**	**-25%**	**6 253 507 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

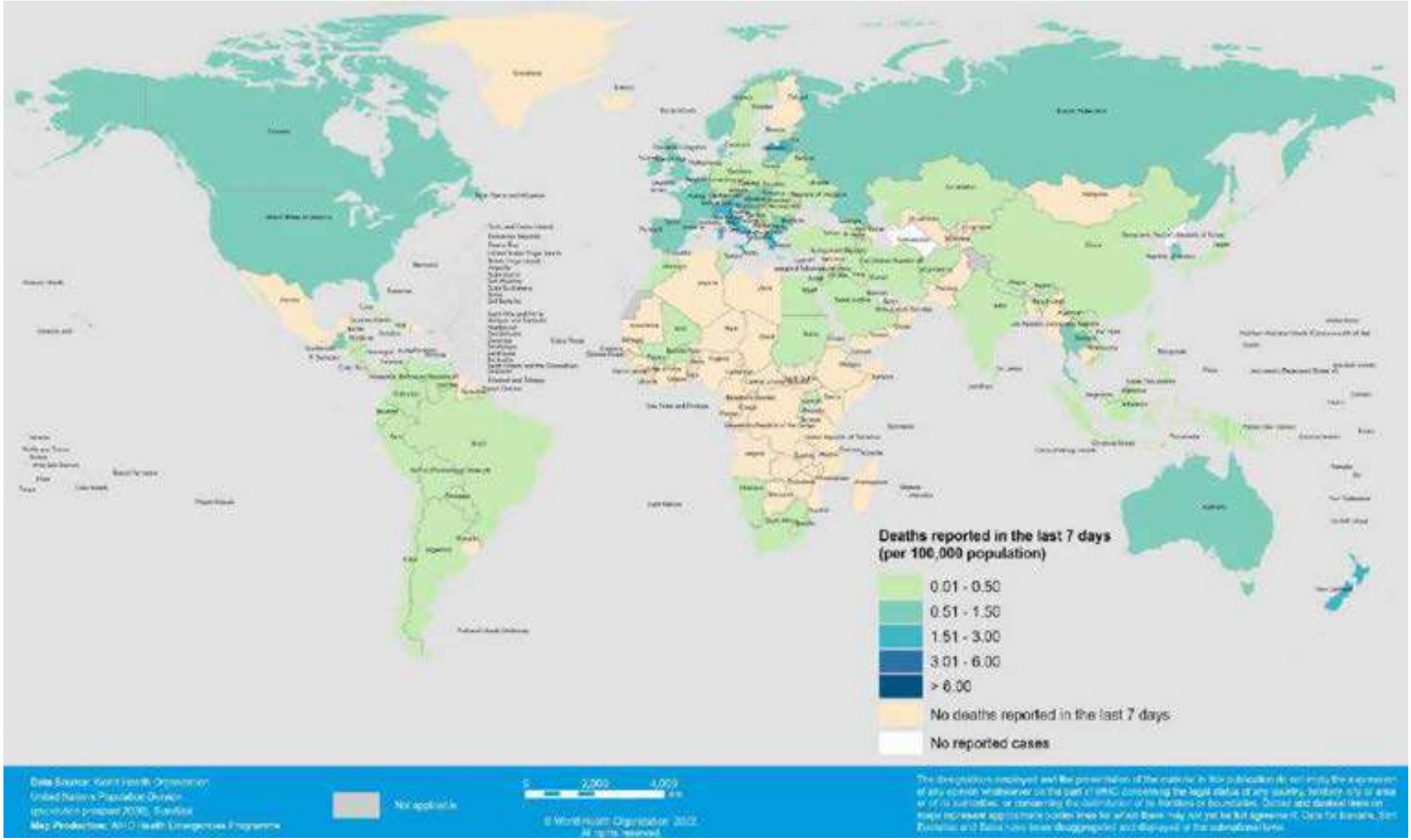
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 2 – 8 May 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 2-8 May 2022*



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

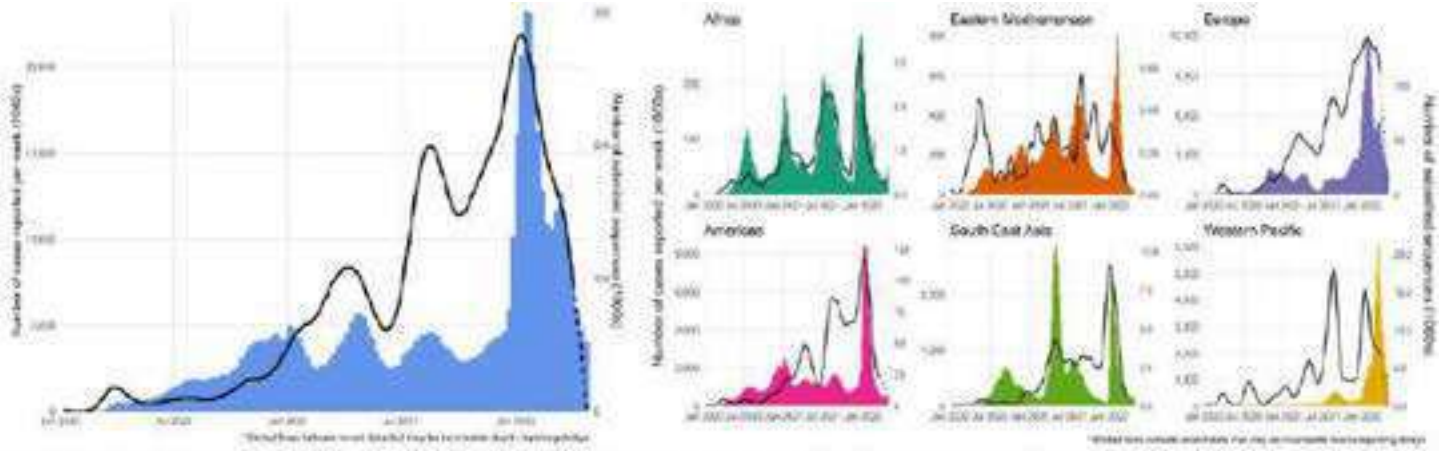
The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.

Geographic spread and prevalence of VOCs

Sequence availability

Figure 4 shows the number of cases reported and the number of SARS-CoV-2 sequences submitted to GISAID between 1 January 2020 and 5 May 2022, globally and by WHO region. Globally, the number of shared sequences has increased over time as countries strengthened sequencing capacity and intensified genomic surveillance in response to the ongoing pandemic and following the emergence of new VOCs. However, after reaching a peak in January 2022, the number of shared sequences fell to levels similar to those observed in June 2021, just after Delta started to spread and was designated a VOC. The recent declining trend is similar across WHO regions. It is unclear whether this decline is primarily driven by the reduction in the true number of cases, or changes in testing strategies in several countries, or a combination of both. A change in the proportion of cases sequenced per country may have also resulted in a decrease of available data.

Figure 4. The number of cases reported and the number of sequences submitted to GISAID, from 1 January 2020 to 10 May 2022, globally and by WHO region



Note: the dotted line represents the number of sequences submitted in the last four weeks. Due to delays in the submission of sequences, data in this period should be interpreted with caution.

Variant circulation

WHO continues to monitor circulating SARS-CoV-2 variants, including Omicron sublineages, thanks to the continued and transparent sharing of information from Member States, Regional Offices, partners and technical experts, such as the members of the Technical Advisory Group on SARS-CoV-2 Virus Evolution (TAG-VE).
The Omicron VOC remains the dominant variant circulating globally, accounting for nearly all sequences reported to GISAID in the last 30 days. Of note is the very low proportions of 'previously circulating VOCs' and of the Delta VOC. With variant diversification, Omicron sublineages have continued to be identified; however, only a few of these sublineages appear to have a growth advantage. These findings need to be interpreted with caution, as differences in sequence capacity across regions and countries may confound such interpretations and global distributions.

Characteristics of Omicron

Available evidence on the phenotypic impacts of VOCs has been reported in previous editions of the COVID-19 Weekly Epidemiological Update. Since the last update on 5 April 2022, there have been several new publications on the phenotypic characteristics of VOCs, including literature on Omicron (Table 2). Some of these studies have not been peer-reviewed and the findings must therefore be interpreted with due consideration of this limitation.

Table 2: Summary of current evidence on Omicron

Domain	Indicator	Main results
Epidemiology	**Impact on transmission**	Previous analyses of GISAID data[1] consistently showed Omicron having a steadily increasing growth rate advantage over Delta in all countries with sufficient sequence data (last update included data available up to 4 April 2022). Applying this approach yielded results in favour of a growth rate advantage of the Omicron sublineage BA.2 over the sublineage BA.1. However, the recent identification of several sublineages of the Omicron variant does not yet allow for updated estimates to be obtained. A recent modelling study in India[2] that included samples submitted to GISAID found a higher basic reproductive number for BA.2 (2.45, 95% highest posterior density [HPD] intervals: 1.53-3.76) compared to BA.1 (1.70, 95% HPD: 1.43-2.46).
	Impact on disease severity	Omicron had been associated with lower severity when compared to Delta across several settings.[3–7] A recent study conducted in England, United Kingdom[8] reported a lower risk of emergency unit attendance following infection with Omicron compared to infection with Delta (HR: 0.39 (95% CI: 0.30 – 0.51; P<.0001). On the contrary, a study in Indonesia [9] and the United States[10] found no difference in hospitalisation and mortality following infection with Omicron compared to infection with Delta. This suggests that the severity of Omicron infection could vary in different settings, although vaccination coverage, population immunity, age distribution and other factors could influence disease severity.
Immune response	**Impact on reinfection**	Higher rates of reinfection were initially reported for Omicron as compared to other SARS-CoV-2 VOCs. However, a protective effect of previous infection was reported in a recent study conducted in the United States of America[11], which found increased antibody titres and neutralisation activity (79.5%) against Omicron among vaccinated solid organ transplant recipients who were previously infected with SARS-CoV-2, compared to those who had no previous infection (34%). Similarly, another study conducted in Canada[12] reported that infection with a different SARS-CoV-2 variant resulted in a reduction in the risk of infection (44%; 95% CI: 38-48) and hospitalisation (81%; 95%CI: 66-89) with Omicron. Previous infection with one of the Omicron sublineages has been suggested as potentially conferring protection against infection with other Omicron sublineages: 94.9% (95% CI: 88.4-97.8%) protection against BA.2 following infection with BA.1, and 85.6% (95% CI: 77.4-90.9%) protection against BA.1 following infection with BA.2.[13]
	Impact on vaccination	Results of vaccine effectiveness (VE) studies should be interpreted with caution because estimates vary with the type of vaccine administered and the number of doses and scheduling (sequential administration of different vaccines). For further information, see the section Interpretation of the results of the VE for the Omicron variant.
	Impact on antibody responses	There have been no new studies on antibody responses to BA.2. Previous studies have reported lower neutralising antibody titers to BA.1 and BA.2 compared to the index virus, and similar responses for BA.1 and BA.2.[14,15] Similar non-neutralising antibody responses to BA.1 and BA.2 were also reported in vaccinated individuals.[16] However, another study reported reduced vaccine-induced and infection-induced neutralization of BA.1 and BA.2, with higher neutralisation activity against BA.2 compared to BA.1.[17] Therefore, these results indicate lower humoral responses to BA.1 and BA.2, but inconsistent findings regarding BA.1 versus BA.2.
Diagnostic tools	**Impact on PCR assays**	BA.1, BA.4 and BA.5 contain the 69-70 deletion, responsible for S-gene target failure. Most BA.2 sequences lack the 69-70 deletion and will be positive for the S-gene target. PCR assays that include multiple gene targets maintain their accuracy to detect Omicron. Specifically, early assessments of several PCR tests predicted limited impact of the Omicron variant (BA.1) on the accuracy of these assays. [18,19]

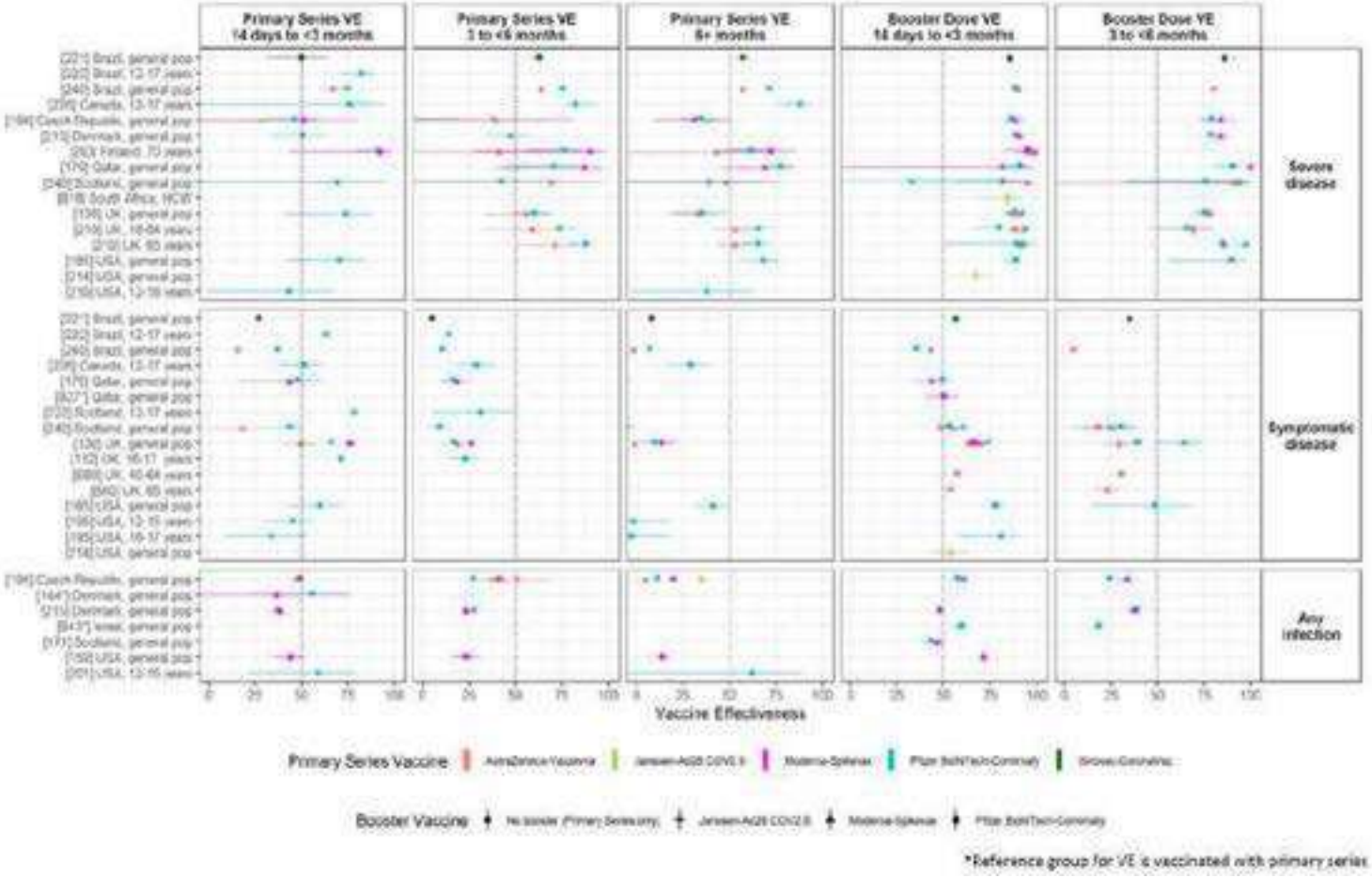
	Impact on Rapid Diagnostic tests	Though many studies have reported comparable sensitivity of Ag-RDTs to detect Omicron compared to other VOCs or the index virus[20–22], others have shown reduced sensitivity.[23,24] These contradictory findings will require further investigation.
Impact on treatment	**Impact on antivirals**	Consistent with preliminary data showing no difference in the effectiveness of antiviral agents (Remdesivir, Molnupiravir, and PF-07304814) against the Omicron variant, a recent review reported similar efficacy of antiviral agents against Omicron and previous SARS-CoV-2 variants.[25]
	Impact on biologicals	Initially, studies on the effectiveness of monoclonal antibodies for treating patients with Omicron reported conserved neutralizing activity for three broadly neutralizing monoclonal antibodies (sotrovimab, S2X259 and S2H97) and a reduced effectiveness of other monoclonal antibodies.[26–29] However, additional preclinical evidence shows reduced neutralizing activity of sotrovimab against the BA.2 sublineage and lack of efficacy of casirivimab-imdevimab against the BA.1 Omicron sublineage (see WHO Therapeutics living guideline). A recent phase 2 clinical trial[30] found a shorter time to hospital discharge among patients on high titre convalescent plasma compared to patients on standard titre (HR = 1.94 [95% CI 1.05, 3.58], p=0.02).
	Other treatment options	There is no evidence available on the effectiveness of interleukin-6 receptor blockers and corticosteroids for the management of severe patients with Omicron.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

Figure 5 summarizes the impact of Omicron variant on product-specific vaccine effectiveness (VE) over time for both primary series vaccines and booster vaccines. Since the last update, two new studies have been added to the figures.[31,32] Both studies (not yet peer reviewed) provided new VE data on both AstraZeneca-Vaxzevria and Pfizer BioNTech-Comirnaty. Additional information on vaccine performance against VOCs can also be found in Annex 4.

Figure 5. Vaccine effectiveness (VE) of primary series and booster vaccination against the Omicron variant of concern



*Indicates booster dose vaccine effectiveness evaluated using persons completing primary series as reference group, rather than unvaccinated persons. Abbreviations: pop=population; HCW=healthcare workers. Dots represent point estimates of vaccine effectiveness; horizontal lines represent the 95% confidence intervals. Labels along left side of plot indicate reference numbers [], country, and study population. Reference numbers identify the study and link to the summary table of VE effectiveness studies on view-hub.org (Table 1 in summary table); references starting with a 'B' are studies found in the booster VE table only (Table 2 in summary table). Primary series refers to the completion of two doses of vaccines for AstraZeneca-Vaxzevria; Moderna-Spikevax, Pfizer BioNTech-Comirnaty and Sinovac-CoronaVac and one dose of Janssen-Ad26.COV2.S. Severe disease includes severe disease, hospitalization, and pneumonia; symptomatic disease includes disease of any severity level; any infection can include symptomatic and asymptomatic infection. Additional details on the methods for inclusion of the estimates in the plots provided in Annex 3. Note, nine negative point estimates for the primary series are not shown in the Omicron plot: two estimates from reference #144 against infection at 3 to <6 months (Pfizer BioNTech-Comrinaty and Moderna-Spikevax), two estimates from reference #179 against symptomatic disease at 6+ months (Pfizer BioNTech-Comrinaty and Moderna-Spikevax), and five estimates from reference #240 (one AstraZeneca-Vaxzevria estimate at 3 to <6 months; three AstraZeneca-Vaxzevria estimates and one Pfizer BioNTech estimate at 6+ months).

Interpretation of the results of the VE for the Omicron variant

To date, 23 studies from ten countries (Brazil, Canada, Czech Republic, Denmark, Finland, Israel, Qatar, South Africa, the United Kingdom and the United States of America) have assessed the duration of protection of five vaccines against the Omicron variant (six studies assessed VE of primary series vaccination only, six assessed VE of a booster dose vaccination only, and 11 assessed both). Findings from these studies show reduced VE of COVID-19 primary series vaccines against the Omicron variant for all outcomes (*severe disease*, *symptomatic disease*, and *infection*) than has been observed for other four VOCs. Importantly though, in the majority of studies VE estimates against the Omicron variant remain higher for *severe disease.* Booster vaccination substantially improves VE for all outcomes and for all combinations of schedules with estimates available, for both primary series and booster vaccination. However, studies that assess VE of booster vaccination beyond six months are needed to evaluate the longer duration of protection.

For *severe disease*, within the first three months of primary series vaccination, seven of 12 (58%) VE estimates for the mRNA vaccines (Moderna-Spikevax and Pfizer BioNTech-Comirnaty) were ≥70%. Of the two studies available for vector vaccines, one reported a VE of <70% for AstraZeneca-Vaxzevria, and the other reported a VE of <50% for Janssen-Ad26.COV2.S. One study available for inactivated vaccines (Sinovac-CoronaVac) reported a VE of 50%. Beyond three months after vaccination, 12 of 27 (44%) VE estimates for the mRNA vaccines were ≥70% while 18 (77%) were ≥50%, one of the 12 (8%) VE estimates for AstraZeneca-Vaxzevria was ≥70% while eight (67%) were ≥50%, and the two available VE estimates for Sinovac-CoronaVac were ≥50%; both estimates for Janssen-Ad26.COV2.S beyond three months of vaccination were <50%.

A booster dose improved VE estimates against *severe disease* in all studies, with only one estimate for Pfizer BioNTech-Comrinaty and one for Janssen-Ad26.COV2.S as the booster dose below 70%, between 14 days and three months of receipt of the booster dose (33 estimates evaluated an mRNA booster, two estimates a booster dose of Janssen-Ad26.COV2.S, and one estimate a booster dose of Sinovac-CoronaVac). At three to six months post mRNA booster, 18 of 20 (90%) estimates showed VE ≥70% (an mRNA vaccine was given as the primary series in 13 of the 20 estimates while AstraZeneca-Vaxzevria and Sinovac-CoronaVac were given as the primary series for six and one of the twenty estimates, respectively).

VE estimates against *symptomatic disease* and *infection* within the first three months of primary series vaccination tended to be lower than those against *severe disease*, and VE decreased more substantially over time. For *symptomatic disease* within the first three months of primary series vaccination, only three of 13 (23%) VE estimates for the mRNA vaccines were ≥70%, and seven (54%) were ≥50%; all the three (100%) VE estimates for AstraZeneca-Vaxzevria and the single estimate for Sinovac (CoronaVac) were below 50%. Beyond three months after vaccination, none of the 28 VE estimates were ≥50% (20 estimates evaluated mRNA vaccines, six evaluated AstraZeneca-Vaxzevria, and two evaluated Sinovac-CoronaVac). An mRNA booster after completion of a primary series of an mRNA vaccine, AstraZeneca-Vaxzevria, or Sinovac-CoronaVac, improved VE estimates against *symptomatic disease,* with four of 21 (19%) VE estimates ≥70% and 16 (76%) estimates ≥50%, between 14 days and three months post booster. However, booster dose protection declined with time since vaccination, with only one of twelve (8%) available estimates indicating a VE of ≥50% at three to six months following receipt of an mRNA booster dose. Estimates for a booster dose of AstraZeneca-Vaxzevria (one estimate) and Sinovac-CoronaVac (one estimate) three to six months post vaccination indicated VE of <50%. VE estimates against *infection* showed a similar pattern as those against *symptomatic disease*.

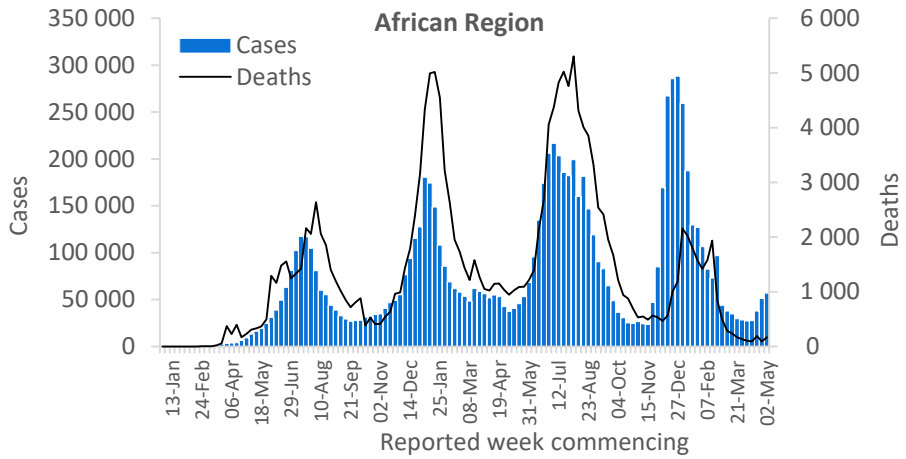
WHO regional overviews:

Epidemiological week 2-8 May 2022**

African Region

For the third consecutive week, the African Region has shown an increasing trend with just under 57 000 new weekly cases reported, a 12% increase as compared to the previous week. Six (12%) countries in the Region reported an increase of over 20% in cases, with some of the greatest proportional increases observed in Mauritania (48 vs 5 new cases; +860%), Niger (45 vs 27 new cases; +67%) and Nigeria (50 vs 31 new cases; +61%). The highest numbers of new cases were reported by South Africa (43 977 new cases; 74.1 new cases per 100 000; +36%), Réunion (10 931 new cases; 1220.9 new cases per 100 000; -15%), and Burundi (448 new cases; 3.8 new cases per 100 000; -64%).

The Region reported 166 new weekly deaths, an 84% increase as compared to the previous week. The highest numbers of new deaths were reported from South Africa (153 new deaths; <1 new death per 100 000 population; +135%), Réunion (seven new deaths; <1 new death per 100 000; similar to the previous week's figures), and Eswatini (two new deaths; <1 new death per 100 000; similar to the previous week's figures).

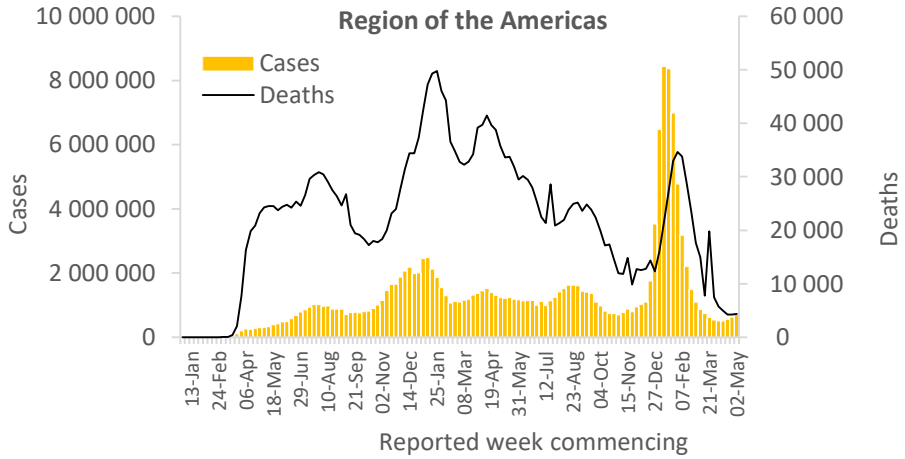


Updates from the African Region

Region of the Americas

The Region of the Americas has continued a gradual increasing trend observed since mid-April 2022, with over 709 000 new weekly cases reported, a 14% increase as compared to the previous week. Nineteen (34%) countries in the Region reported increases in new cases of 20% or greater, with some of the greatest proportional increases observed in Falkland Islands (Malvinas) (211 vs 29 new cases; +628%), Montserrat (236 vs 39 new cases; +505%) and the United States Virgin Islands (818 vs 258 new cases; +217%). The highest numbers of new cases were reported from the United States of America (451 414 new cases; 136.4 new cases per 100 000; +19%), Brazil (110 866 new cases; 52.2 new cases per 100 000; +18%), and Canada (41 069 new cases; 108.8 new cases per 100 000; -25%).

The number of new weekly deaths in the Region was similar to the previous week (+3%), with over 4300 new deaths reported. The highest numbers of new deaths were reported from the United States of America (2652 new deaths; <1 new death per 100 000; +19%), Brazil (681 new deaths; <1 new death per 100 000; -20%), and Canada (486 new deaths; 1.3 new deaths per 100 000; +2%).

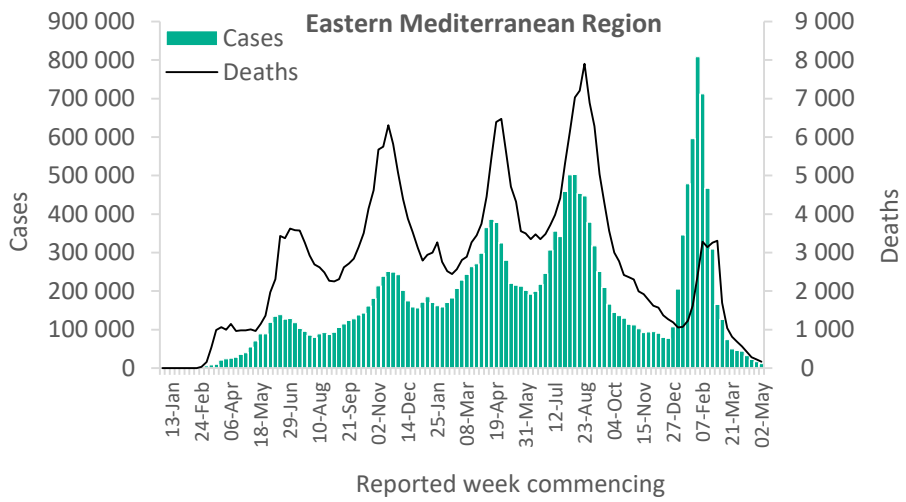


Updates from the Region of the Americas

Eastern Mediterranean Region

In the Eastern Mediterranean Region, new weekly cases have continued to decline after reaching a peak in early February 2022, with just under 12 000 new weekly cases reported last week, a 28% decrease as compared to the previous week. However, Saudi Arabia and the Syrian Arab Republic reported increases in new weekly cases of 57% (1065 vs 679 new cases) and 48% (31 vs 21 new cases), respectively. The highest numbers of new cases were reported from Bahrain (3376 new cases; 198.4 new cases per 100 000; +17%), the Islamic Republic of Iran (3048 new cases; 3.6 new cases per 100 000; -50%), and the United Arab Emirates (1455 new cases; 14.7 new cases per 100 000; -13%).

The number of new weekly deaths in the Region decreased by 26% when compared to the previous week, with 166 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (82 new deaths; <1 new death per 100 000; -32%), Egypt (35 new deaths; <1 new death per 100 000; -17%), and Tunisia (16 new deaths; <1 new death per 100 000; -6%).

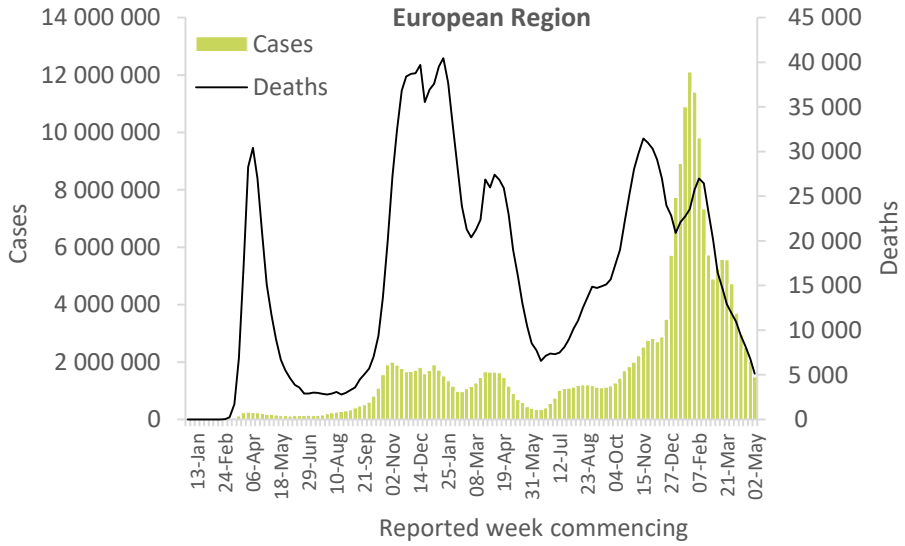


Updates from the Eastern Mediterranean Region

European Region

After the increase observed during the first half of March 2022, new weekly cases have continued to decrease in the European Region, with over 1.4 million new cases reported, a 26% decrease as compared to the previous week. However, the Republic of Moldova and Gibraltar reported increases in new weekly cases of 149% (547 vs 220 new cases) and 25% (161 vs 129 new cases), respectively. The highest numbers of new cases were reported from Germany (427 044 new cases; 513.5 new cases per 100 000; -29%), Italy (304 573 new cases; 510.7 new cases per 100 000; -21%), and France (267 172 new cases; 410.8 new cases per 100 000; -30%).

The number of new deaths has continued to decrease in the Region, with just over 5000 new deaths reported this week, a 24% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (915 new deaths; <1 new death per 100 000; -19%), Italy (910 new deaths; 1.5 new deaths per 100 000; +1%), and France (732 new deaths; 1.1 new death per 100 000; -19%).

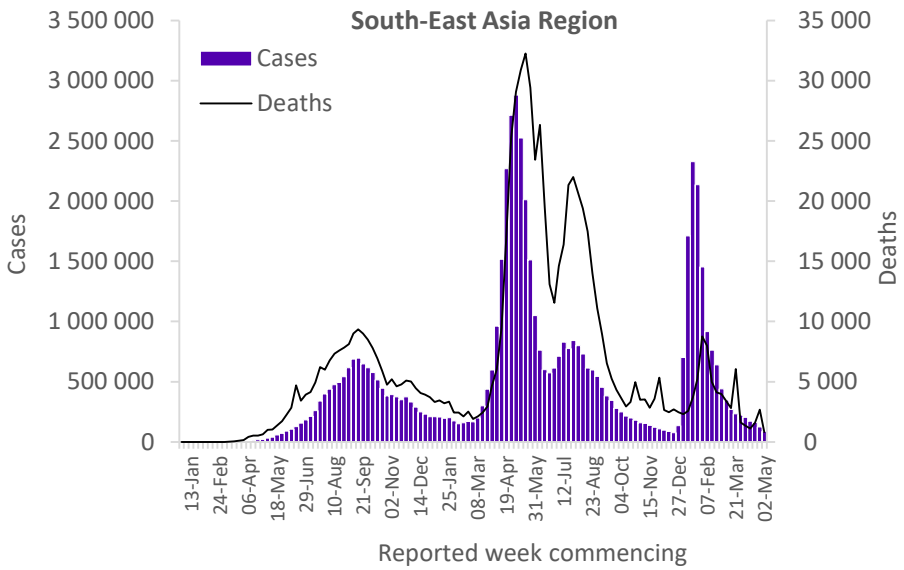


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 87 000 new weekly cases, a 29% decline as compared to the previous week, continuing the decreasing trend observed since January 2022. However, Nepal and Timor-Leste reported increases in new weekly cases of 34% (114 vs 85 new cases) and 27% (14 vs 2 new cases), respectively. The highest numbers of new cases were reported from Thailand (62 366 new cases; 89.3 new cases per 100 000; -35%), India (23 006 new cases; 1.7 new cases per 100 000; +6%), and Indonesia (1391 new cases; <1 new case per 100 000; -52%).

With 805 new weekly death reported last week in the Region, weekly deaths decreased by 70% as compared to the previous week, during which India reported a delayed batch of deaths. The highest numbers of new deaths were reported from Thailand (471 new deaths; <1 new death per 100 000; -44%), India (221 new deaths; <1 new death per 100 000; -87%), and Indonesia (108 new deaths; <1 new death per 100 000; -38%).

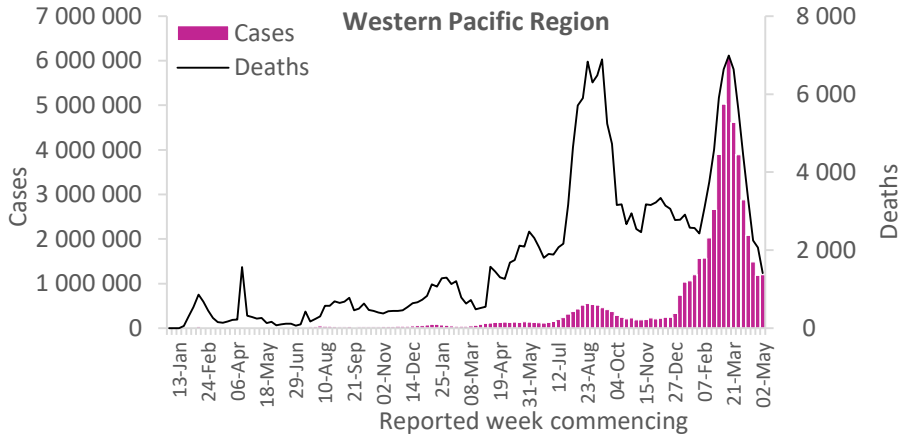


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region has shown decreasing trends in new weekly cases and deaths after peaks observed in mid-March 2022. However, the trend in new weekly cases has stabilized during the week ending on 8 May, with just under 1.2 million new weekly cases reported, which was similar to the previous week (+1%). Six (19%) countries in the Region reported an increase of 20% or greater, with some of the largest increases observed in China (200 968 vs 81 989 new cases; +145%), New Caledonia (232 vs 96 new cases; +142%) and Australia (431 410 vs 271 216 new cases; +59%). The sharp increase in Australia is due to the revision of the number of cases confirmed by rapid antigen detection tests. Australia also reported the highest numbers of new cases, followed by the Republic of Korea (268 749 new cases; 524.2 new cases per 100 000; -29%), and China.

The number of new weekly deaths shows a decrease of 32% as compared to the previous week, with over 1400 new deaths reported. The highest numbers of new deaths were reported from the Republic of Korea (485 new deaths; <1 new death per 100 000; -35%), Australia (231 new deaths; <1 new death per 100 000; -9%), and Japan (218 new deaths; <1 new death per 100 000; -23%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Annex 2. Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. Likewise, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection.
- Annex 4 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than 4 months post final dose.
- Studies reporting VOC-specific VE estimates for full vaccination (≥7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for

AstraZeneca-Vaxzevria for infection (when a phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).

- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Neutralization studies that use samples collected >7 days and < 6 months after complete vaccination and that use an ancestral strain as the reference are included in the Annex 4.

Annex 3. Methods for Figure 5

- VE studies included in the plot were identified from an ongoing systematic review of COVID-19 vaccine effectiveness studies. All studies were cohort or test-negative studies. Methods for the systematic review and inclusion/exclusion criteria are available on view-hub.org. The studies were conducted during a period when Omicron was the predominant circulating variant. Only studies providing VE estimates of individual vaccines are included in the plot (studies assessing combined VE of more than one vaccine are excluded). In addition, for the primary series VE, only studies providing VE estimates for discrete time intervals since vaccination, which evaluate changes in VE over time, are included.
- For the primary series VE, estimates are only included in the plot for studies that report VE for more than one time period for an individual vaccine. Thirteen studies of VE against Omicron provided only a single cumulative VE estimate for an individual vaccine, which due to varying lengths of time since vaccination are difficult to interpret due to the marked waning of VE over time with omicron.

Annex 4. Summary of Primary Series Vaccine Performance against Variants of Concern (VE data as of 5 May 2022; Neutralization data as of 2 May 2022)

	WHO Emergency Use Listing (EUL) Qualified Vaccines[+]								Vaccines without WHO EUL[+]	
	AstraZeneca-Vaxzevria/ SII - Covishield	Beijing CNBG-BBIBP-CorV	Bharat-Covaxin	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Novavax-Nuvaxovid/ SII - Covavax	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Gamaleya-Sputnik V
Alpha, Beta, Gamma										
Summary of VE*	*see update from 11 January 2022 for details of vaccine performance against Alpha, Beta, and Gamma variants of concern*									
Delta										
Summary of VE*	*see update from 27 April 2022 for details of vaccine performance against Delta variant of concern*									
Omicron										
Summary of VE*	Reduced protection against infection and symptomatic disease; possible reduced protection against for severe disease but limited evidence									
- Severe disease	-	-	-	-	↓to↓↓/↓↓↓$_{2}$	-	↓↓ to ↓↓↓$_{5}$	-	-	-
- Symptomatic disease	↓↓↓$_{1}$	-	-	-	↓↓/↓↓↓$_{2}$	-	↓↓↓$_{3}$	-	-	-
- Infection	↓↓↓$_{1}$	-	-	-	↓↓↓$_{3}$	-	↓↓↓$_{3}$	-	-	-
Neutralization	↓↓↓$_{7}$	↔to↓↓↓$_{3}$	↓↓$_{1}$	↔to ↓↓↓$_{4}$	↓↓↓$_{18}$	-	↓↓↓$_{45}$	↓↓to↓↓↓$_{5}$	-	↓↓$_{1}$

VE refers to vaccine effectiveness and vaccine efficacy. *Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10 percentage point (pp) reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20 pp reductio[32]n in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30 pp reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30 pp reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in the study. The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources Library. References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public: Protect yourself; Questions and answers; Travel advice

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COVID-19 Weekly Epidemiological Update

Edition 90, published 4 May 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews

Global overview

Data as of 1 May 2022

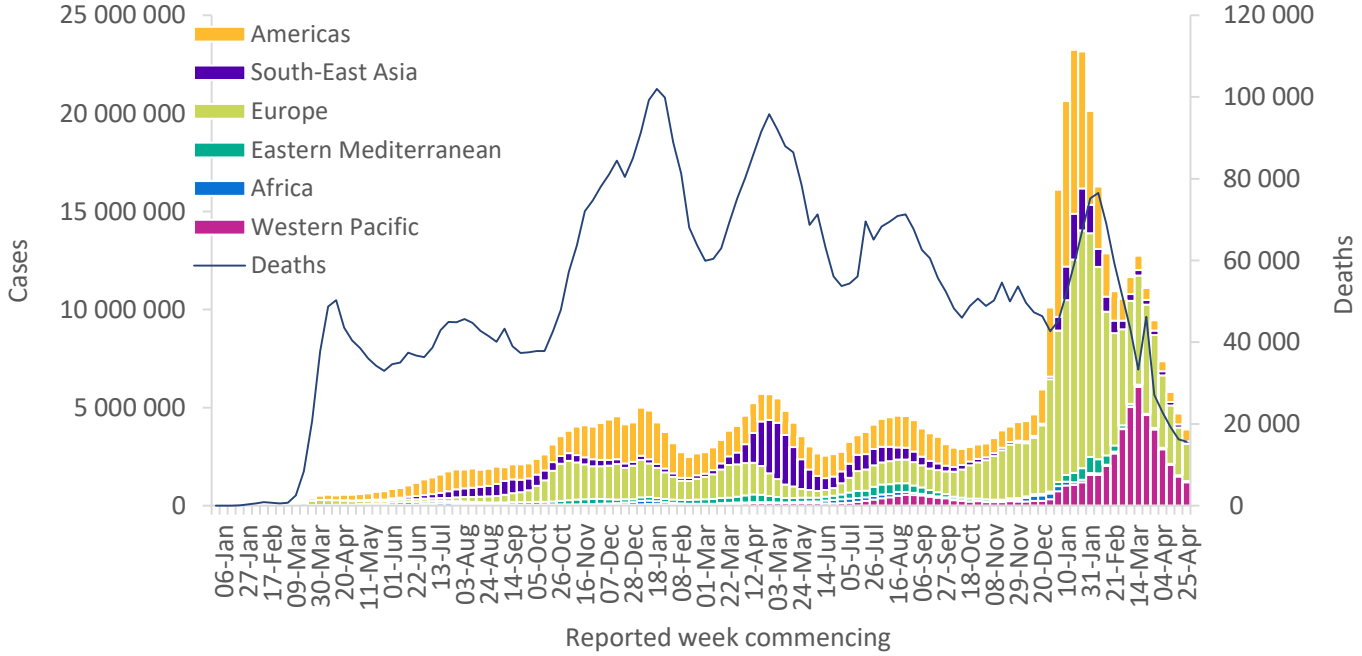
Globally, the number of new COVID-19 cases and deaths has continued to decline since the end of March 2022. During the week of 25 April through 1 May 2022, over 3.8 million cases and over 15 000 deaths were reported, decreases of 17% and 3% respectively, as compared to the previous week (Figure 1).

However, not all the Regions reported decreasing trends: the number of new weekly cases increased in the African Region (+31%) and in the Region of the Americas (+13%), while the number of new weekly deaths increased in the South-East Asia Region (+69%) largely due to a delay in the reporting of deaths from India.

As of 1 May 2022, over 500 million confirmed cases and over six million deaths have been reported globally.

These trends should be interpreted with caution as several countries have been progressively changing their COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 1 May 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest number of new weekly cases were reported from Germany (558 958 new cases; - 24%), Italy (384 825 new cases; -8%), France (382 208 new cases; -30%), the Republic of Korea (380 455 new cases; - 35%), and the United States of America (372 167 new cases; +27%).

The highest number of new weekly deaths were reported from the United States of America (2 199 new deaths; - 5%), India (1 650 new deaths; +273%), the Russian Federation (1 129 new deaths; -19%), France (900 new deaths; +2%), and Italy (898 new deaths; -11%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 1 May 2022**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	1 899 829 (49%)	-22%	215 107 376 (42%)	6 456 (41%)	-16%	1 988 860 (32%)
Western Pacific	1 188 038 (31%)	-20%	54 652 929 (11%)	2 063 (13%)	-8%	225 031 (4%)
Americas	616 348 (16%)	13%	153 159 475 (30%)	4 200 (27%)	<1%	2 724 151 (44%)
South-East Asia	123 210 (3%)	-24%	57 857 765 (11%)	2 669 (17%)	69%	786 199 (13%)
Africa	49 373 (1%)	31%	8 772 209 (2%)	84 (1%)	-56%	171 652 (3%)
Eastern Mediterranean	16 235 (0%)	-29%	21 702 163 (4%)	223 (1%)	-21%	342 243 (5%)
Global	**3 893 033 (100%)**	**-17%**	**511 252 681 (100%)**	**15 695 (100%)**	**-3%**	**6 238 149 (100%)**

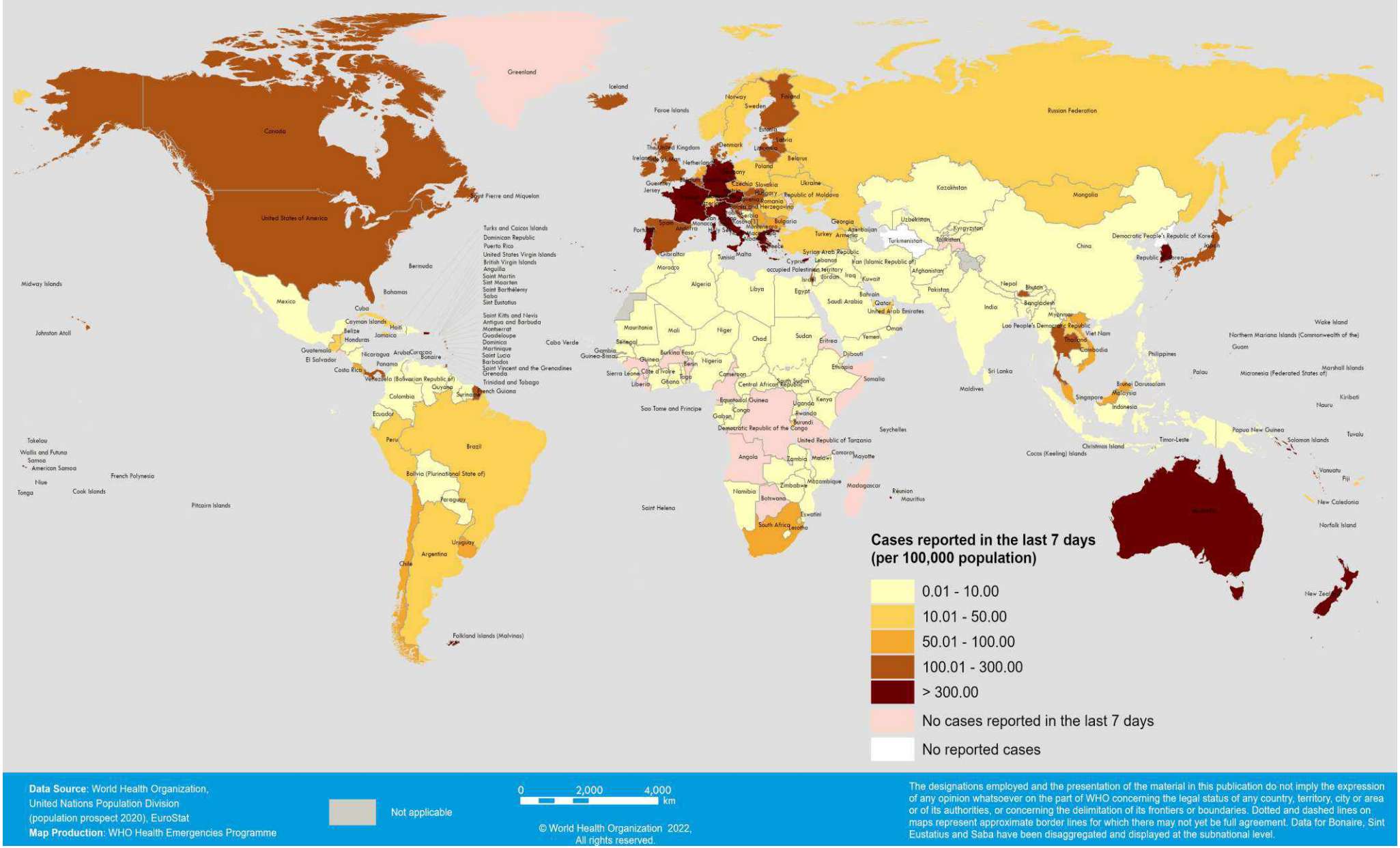
**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*

**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

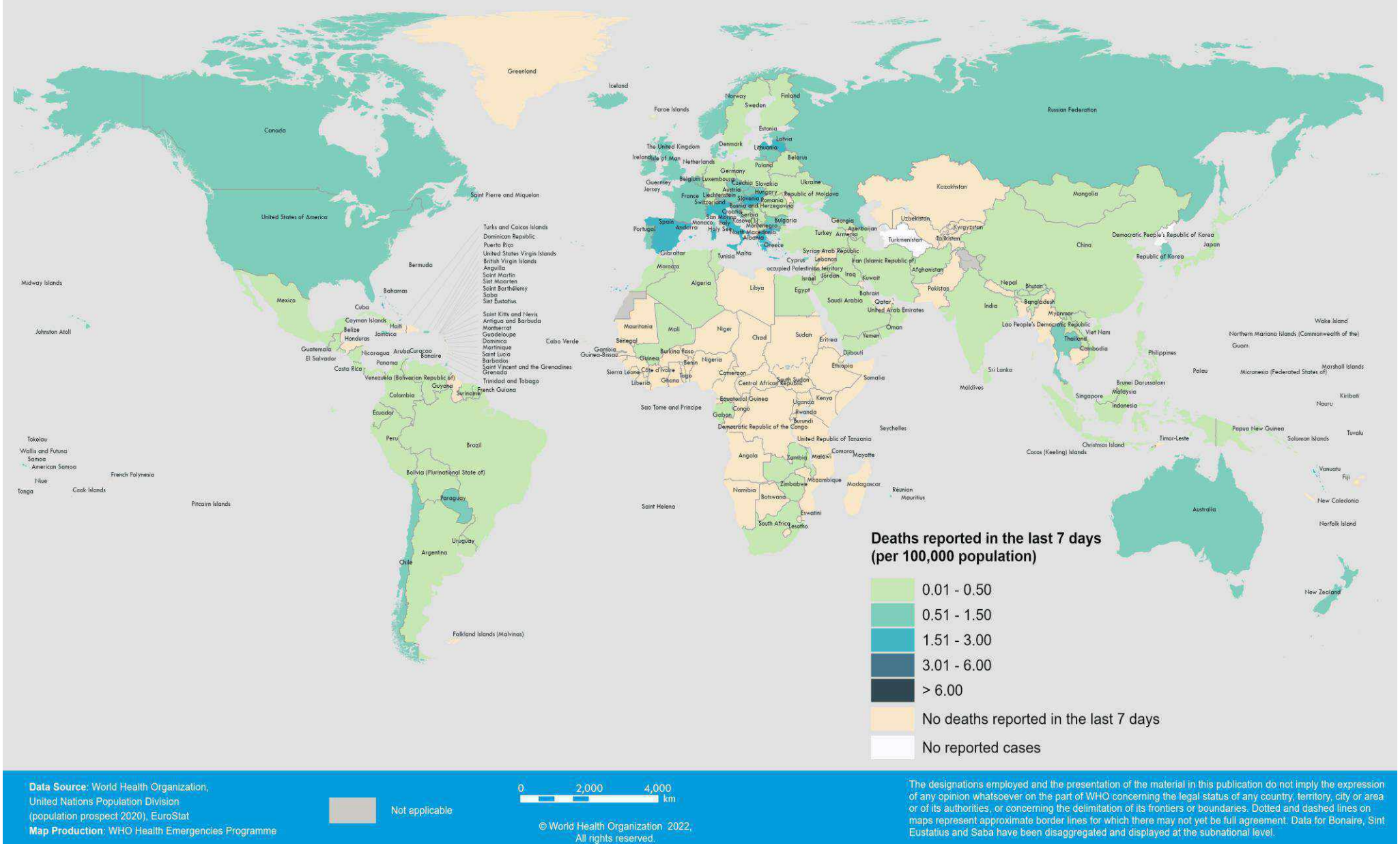
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 25 April - 1 May 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 25 April - 1 May 2022*



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.
The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are strongly encouraged to investigate and report newly emerging variants and their impact.

Geographic spread and prevalence of VOCs

The Omicron variant of concern is the dominant variant circulating globally, accounting for nearly all sequences reported to GISAID. Since its designation as a VOC by WHO on 26 November 2021, Omicron has continued to evolve, leading to variants with slightly different genetic constellations of mutations. Each constellation may differ in the public health risk it poses, including the change in epidemiology and or the severity profile. The main features of Omicron sublineages are the high growth advantage over other variants, which is mainly driven by immune evasion. Omicron sublineages have led and are still leading to a high number of cases and, as a result, to a high number of hospitalizations and deaths.

Three Omicron sublineages BA.4, BA.5 and BA.2.12.1 have acquired a few additional mutations that may impact their characteristics (BA.4 and BA.5 have the del69/70, L452R and F486V mutations; BA.2.12.1 has the L452Q and S704L mutations). Based on GISAID data and reports from WHO regional offices and countries, the number of cases and the number of countries reporting the detection of these three variants are rising. Limited evidence to date, does not indicate a rise in hospital admissions or other signs of increased severity. Preliminary data from South Africa using S gene target failure data (absent in BA.2, present in BA.4 and BA.5) indicate no difference in the risk of hospitalization for BA.4 and BA.5, as compared to BA.1; however, the short follow-up of BA.4 and BA.5 cases does not allow for conclusions on disease severity of these sublineages to be drawn at this stage.

WHO continues to closely monitor the BA.4, BA.5, and BA.2.12.1 variants as part of Omicron VOC and provide further updates as more evidence on severity becomes available. WHO requests countries to continue to be vigilant, to monitor and report sequences, as well as to conduct independent and comparative analyses of the different emerging variants.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

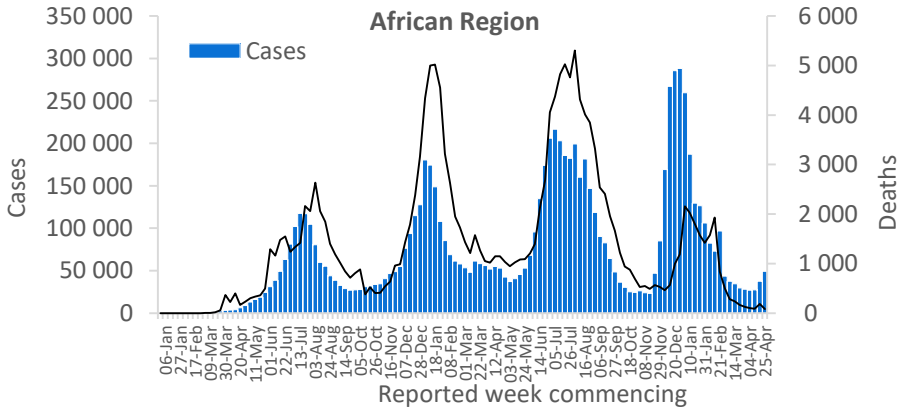
WHO regional overviews:

Epidemiological week 25 April - 1 May 2022**

African Region

Following the decreasing trend observed since January 2002, the Africa Region showed an increase in cases for the second consecutive week (+31% as compared to the previous week), with over 49 000 new weekly cases reported. Twelve (24%) countries in the region reported an increase of over 20% in cases, with some of the greatest proportional increases observed in Burundi (1253 vs 343 new cases; +265%), Rwanda (45 vs 18 new cases; +150%) and Eswatini (359 vs 186 new cases; +93%). The highest numbers of new cases were reported from South Africa (32 236 new cases; 54.4 new cases per 100 000 population; +67%), Réunion (12 889 new cases; 1439.6 new cases per 100 000; -7%), and Burundi (1253 new cases; 10.5 new cases per 100 000; +265%).

The Region reported 84 new weekly deaths, a 56% decrease as compared with the previous week. The highest numbers of new deaths were reported from South Africa (65 new deaths; <1 new death per 100 000 population; - 58%), Réunion (seven new deaths; <1 new death per 100 000; -36%), and Seychelles (three deaths; 3.1 new deaths per 100 000; similar to the previous week's figures).

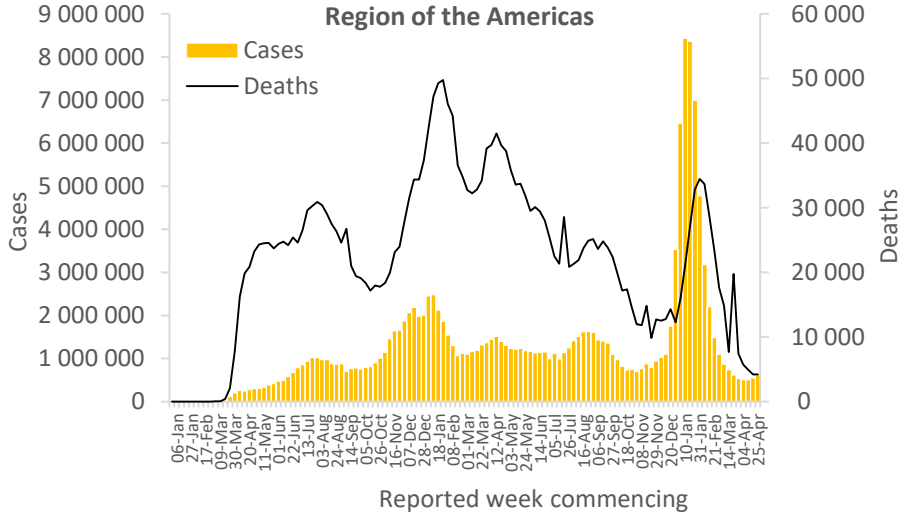


Updates from the African Region

Region of the Americas

The Region of the Americas shows an increasing trend for the third consecutive week, with over 616 000 new cases reported, a 13% increase as compared to the previous week. Twenty-two (39%) countries in the Region reported increases in new cases of 20% or greater, with the largest increases observed in Montserrat (39 vs one new case; +3800), Haiti (42 vs 15 new cases; +180%) and Costa Rica (4290 vs 1642 new cases; +161%). The highest numbers of new cases were reported from the United States of America (372 167 new cases; 112.4 new cases per 100 000; +27%), Brazil (94 345 new cases; 44.4 new cases per 100 000; +3%), and Canada (54 519 new cases; 144.5 new cases per 100 000; -14%).

The number of new weekly deaths in the Region remained similar to the number reported during the previous week, with 4200 new deaths reported. The highest numbers of new deaths were reported from the United States of America (2199 new deaths; <1 new death per 100 000; -5%), Brazil (853 new deaths; <1 new death per 100 000; +31%), and Canada (477 new deaths; 1.3 new deaths per 100 000; +6%).

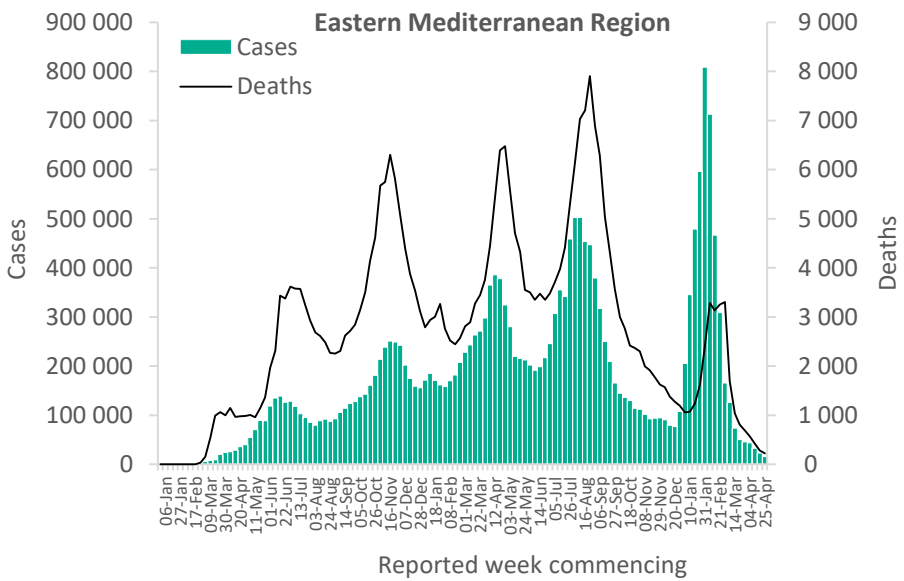


Updates from the Region of the Americas

Eastern Mediterranean Region

In the Eastern Mediterranean Region, new weekly cases have continued to decline after reaching a peak in early February 2022. Over 16 000 new weekly cases were reported last week, a 29% decrease as compared to the previous week. However, Djibouti reported an increase in new weekly cases of 54% (29 vs 13 new cases). The highest numbers of new cases were reported from the Islamic Republic of Iran (6141 new cases; 7.3 new cases per 100 000; - 41%), Bahrain (2876 new cases; 169.0 new cases per 100 000; -6%), and the United Arab Emirates (1679 new cases; 17.0 new cases per 100 000; +3%).

The number of new weekly deaths in the Region decreased by 21% when compared to the previous week, with 223 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (121 new deaths; <1 new death per 100 000; -25%), Egypt (42 new deaths; <1 new death per 100 000; similar to the previous week), and Tunisia (17 new deaths; <1 new death per 100 000; -29%).

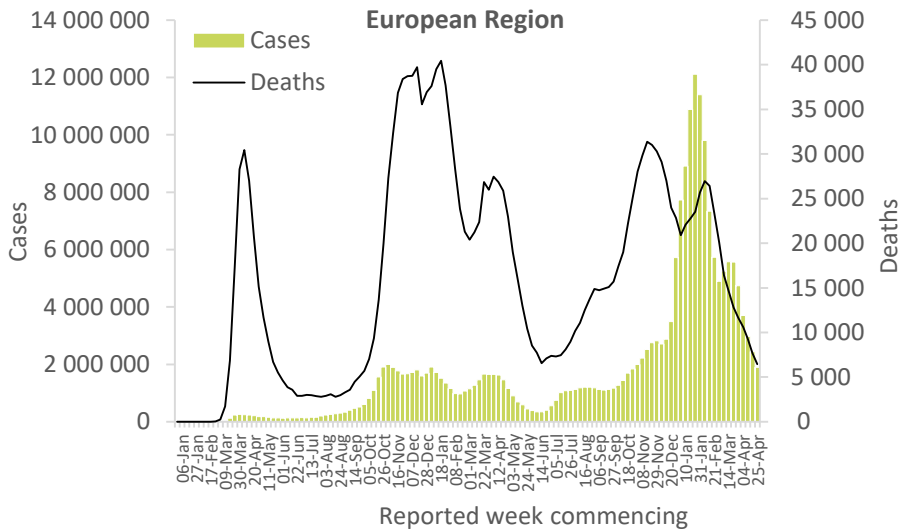


Updates from the Eastern Mediterranean Region

European Region

After the increase observed during the first half of March 2022, new weekly cases have continued to decrease in the European Region. Just under 1.9 million new cases were reported, a 22% decrease as compared to the previous week. However, six (10%) countries in the Region reported increases in new cases of 20% or greater, with the largest increases observed in Cyprus (9901 vs 6115 new cases; +62%), Spain (110 116 vs 76 005 new cases; +45%) and Kazakhstan (174 vs 125 new cases; +39%). The highest numbers of new cases were reported from Germany (558 958 new cases; 672.1 new cases per 100 000; -24%), Italy (384 825 new cases; 645.2 new cases per 100 000; -8%), and France (382 208 new cases; 587.7 new cases per 100 000; -30%).

The number of new deaths has continued to decrease in the Region, with just over 6400 new deaths reported this week, a 16% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (1129 new deaths; <1 new death per 100 000; -19%), France (900 new deaths; 1.4 new deaths per 100 000; +2%), and Italy (898 new deaths; 1.5 new deaths per 100 000; -11%).

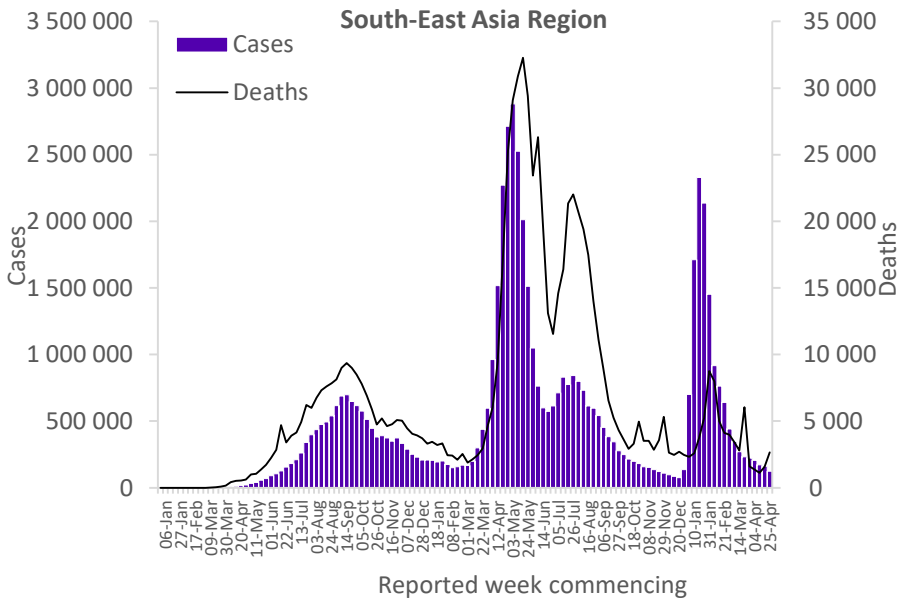


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 123 000 new weekly cases, a 24% decline as compared to the previous week, continuing the decreasing trend observed since January 2022. However, Timor-Leste and India reported increases in new weekly cases of 57% (11 vs 7 new cases) and 40% (21 643 vs 15 448 new cases), respectively. The highest numbers of new cases were reported from Thailand (96 610 new cases; 138.4 new cases per 100 000; -29%), India (21 643 new cases; 1.6 new cases per 100 000; +40%), and Indonesia (2890 new cases; 1.1 new cases per 100 000; -32%).

New weekly deaths increased by 69% in the Region as compared to the previous week, with over 2600 new deaths reported, mostly due to a delay in reporting of deaths from India. The highest numbers of new deaths were reported from India (1650 new deaths; <1 death per 100 000; +273%), Thailand (842 new deaths; 1.2 new deaths per 100 000; -6%) and Indonesia (173 new deaths; <1 new death per 100 000; -26%).

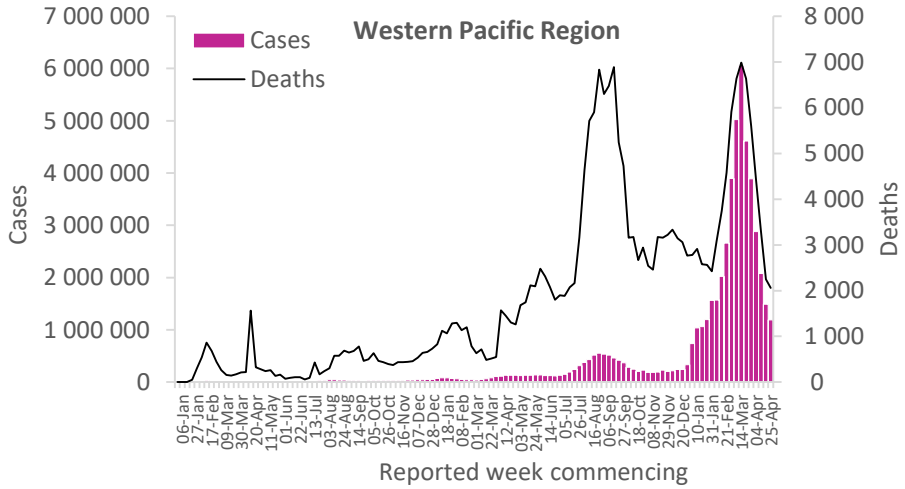


Updates from the South-East Asia Region

Western Pacific Region

In the Western Pacific Region, new weekly cases have continued to decline since March 2022. Over 1.1 million new cases were reported, a 20% decrease as compared to the previous week. However, nine (29%) countries in the Region reported an increase of 20% or greater, with some of the largest increases observed in the Solomon Islands (2202 vs 299 new cases; +636%), Fiji (110 vs 22 new cases; +400%) and New Caledonia (96 vs 36 new cases; 167%). The highest numbers of new cases were reported from the Republic of Korea (380 455 new cases; 742.1 new cases per 100 000; -35%), Australia (271 216 new cases; 1063.6 new cases per 100 000; -8%), and Japan (254 946 new cases; 201.6 new cases per 100 000; -11%).

The number of new weekly deaths in the Region shows a decrease of 8% as compared to the previous week, with over 2000 new deaths reported. The highest numbers of new deaths were reported from the Republic of Korea (742 new deaths; 1.4 new deaths per 100 000; -29%), China (416 new deaths; <1 new death per 100 000; +93%), and Japan (283 new deaths; <1 new death per 100 000; -3%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.
Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.
'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public: Protect yourself; Questions and answers; Travel advice

COVID-19 Weekly Epidemiological Update

Edition 89, published 27 April 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews

Global overview

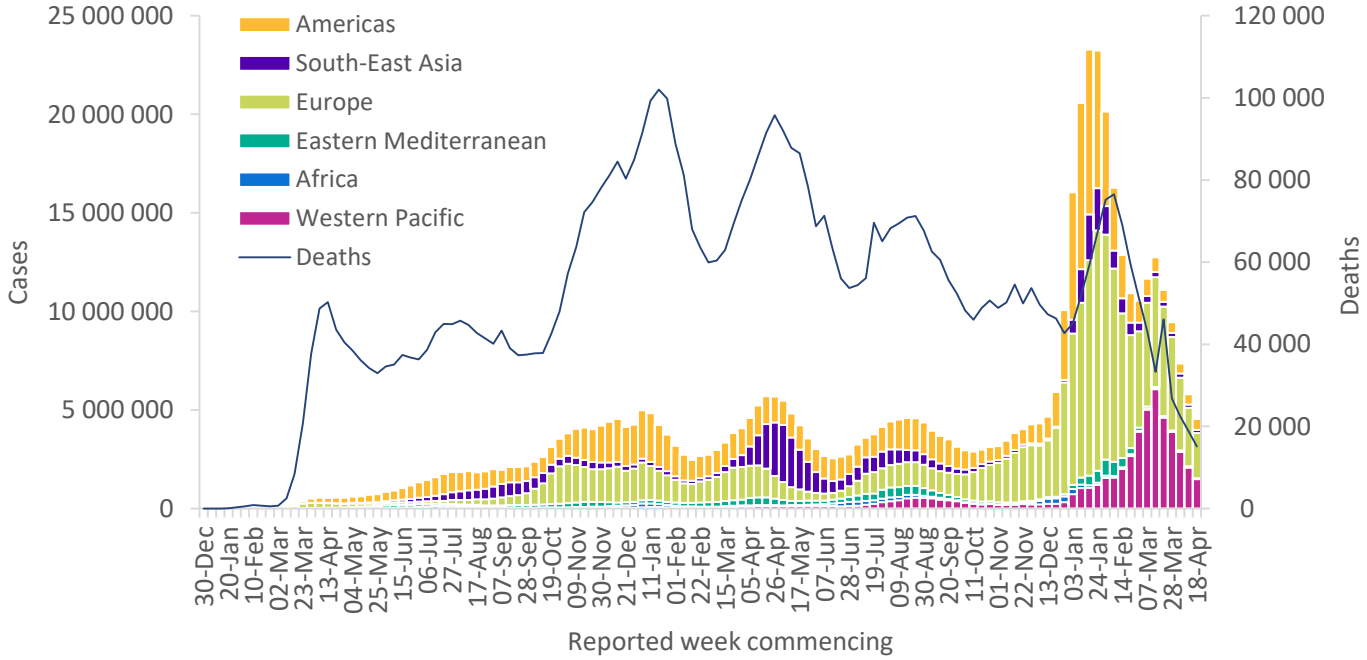
Data as of 24 April 2022

Globally, the number of new COVID-19 cases and deaths has continued to decline since the end of March 2022. During the week of 18 through 24 April 2022, over 4.5 million cases and over 15 000 deaths were reported, decreases of 21% and 20% respectively, as compared to the previous week (Figure 1).

However, not all the Regions have shown a decreasing trend: the number of new weekly cases increased in the Region of the Americas (+9%) and in the African Region (+32%) in the past week, while the number of new weekly deaths increased in the South-East Asia Region (+41%) - due to a delay in reporting of deaths from India - and in the Africa Region (+110%). As of 24 April 2022, over 500 million confirmed cases and over six million deaths have been reported globally.

These trends should be interpreted with caution as several countries have been progressively changing their COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 24 April 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest numbers of new weekly cases were reported from Germany (675 022 new cases; -13%), the Republic of Korea (589 442 new cases; -39%), France (542 896 new cases; -34%), Italy (419 374 new cases; -1%), and the United States of America (298 306 new cases; +21%).

The highest numbers of new weekly deaths were reported from the United States of America (2 354 new deaths; -24%), the Russian Federation (1 402 new deaths; -21%), the Republic of Korea (1 041 new deaths; -38%), Italy (1 007 new deaths; +7%), and the United Kingdom (903 new deaths; -47%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 24 April 2022**

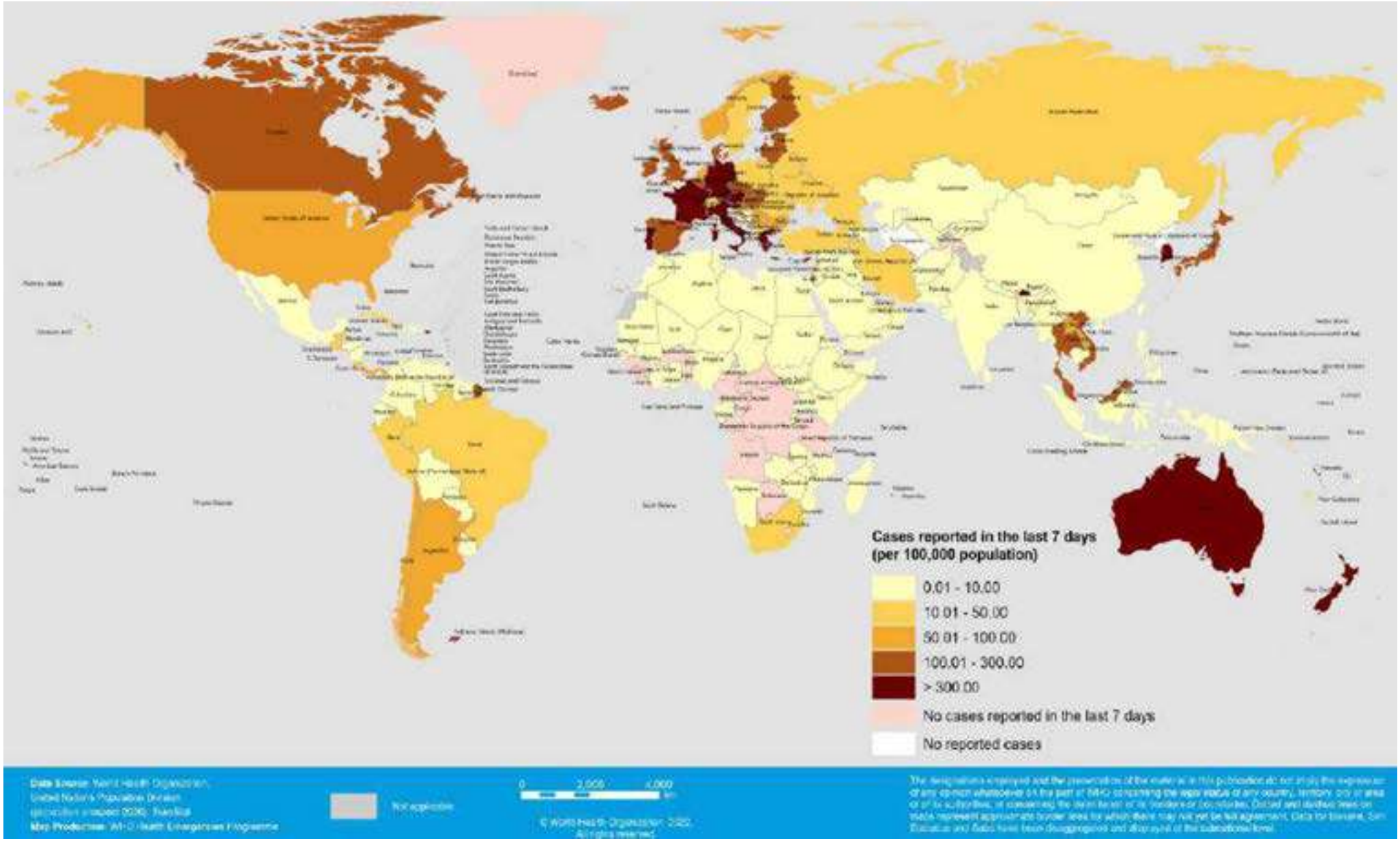
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	2 289 820 (50%)	-23%	213 043 360 (42%)	6 811 (45%)	-23%	1 980 000 (32%)
Western Pacific	1 487 880 (33%)	-28%	53 464 927 (11%)	2 246 (15%)	-33%	222 968 (4%)
Americas	550 015 (12%)	9%	152 533 748 (30%)	4 029 (27%)	-19%	2 719 562 (44%)
South-East Asia	161 639 (4%)	-6%	57 734 555 (11%)	1 580 (10%)	41%	783 530 (13%)
Africa	35 994 (1%)	32%	8 721 105 (2%)	185 (1%)	110%	171 564 (3%)
Eastern Mediterranean	22 878 (1%)	-30%	21 685 928 (4%)	283 (2%)	-34%	342 020 (5%)
Global	**4 548 226 (100%)**	**-21%**	**507 184 387 (100%)**	**15 134 (100%)**	**-20%**	**6 219 657 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

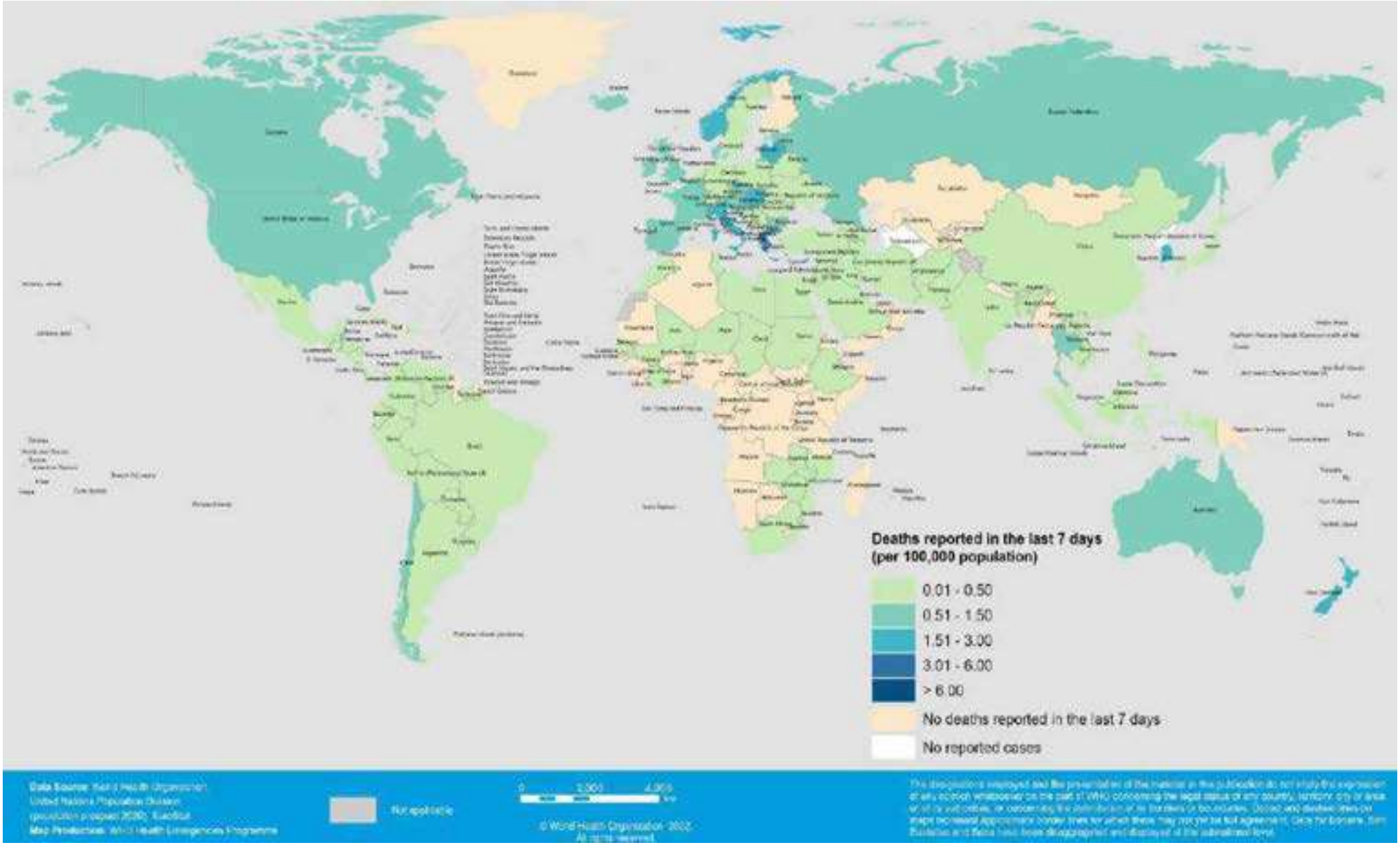
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 18 – 24 April 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 18 -24 April 2022*



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised as needed to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are encouraged to investigate and report on the impacts of these variants. *When referring to the genomic sequence of SARS-CoV-2 identified from the first cases (December 1) the term inde virus' should be used.*

Geographic spread and prevalence of VOCs

The Omicron VOC remains the dominant variant circulating globally. Among the 257 337 sequences uploaded to GISAID with specimens collected in the last 30 days[i], 256 684 (99.7%) were Omicron, 47 (<0.1%) were Delta, and 555 (0.2%) sequences were not assigned to a Pango lineage. While the decrease in sequences is consistent with the overall decreasing trend in new cases reported globally, it may also reflect changes in epidemiological surveillance policies in some countries, including changes in sampling and sequencing strategies. WHO recommends maintaining strong surveillance for SARS-CoV-2 through the remainder of the acute phase of the pandemic.

Since the emergence of Omicron in November 2021, the virus has continued to evolve, giving rise to many descendent and recombinant lineages. WHO is monitoring the different Omicron descendent lineages under the umbrella of Omicron (VOC). The genetic diversification of Omicron indicates ongoing selection pressure on the virus to adapt to its host and to its environment. Each lineage has additional and/or different mutations. These may or may not lead to amino acid substitutions in relevant genomic sites; the genetic differences may be small and are often related to local geographic genetic drift rather than having additional amino acid substitutions suspected to impact virus phenotype. Currently, the impacts of each single mutation or constellations of mutations are not well known, and thus it is important to continue to monitor for any associated changes in epidemiology. As for any emerging SARS-CoV-2 variant, WHO applies the same criteria for risk assessment apply to descendent and recombinant lineages.

The previously reported upsurge in cases observed in some countries may be due to the higher intrinsic transmissibility and/or higher immune escape properties of the circulating descendent lineages, waning immunity or a combination of these factors in the context of an evolving genetic landscape. To date, and with limited data currently available, there appears to be a growth advantage for BA.4, BA.5 and BA.2.12 over BA.2. Currently, available evidence does not suggest differences in severity or clinical manifestations. More data are expected as studies are ongoing.

[i]Includes sequences submitted to GISAID with sample collected dates from 23 March to 21 April 2022 (last reported sample at the time of data extraction), excluding low coverage sequences. Proportions are estimated for countries submitting more than 100 total sequences. In the past 30 days, 38 countries submitted a total of 100 sequences and above on GISAID.

Characteristics of Omicron

Available evidence on the phenotypic impacts of VOCs has been reported in previous editions of the COVID-19 Weekly Epidemiological Update. Since the last update on 5 April 2022, there have been several new publications on the phenotypic characteristics of VOCs, including literature on Omicron (Table 2). Some of these studies have not been peer-reviewed and the findings must therefore be interpreted with due consideration of this limitation.

Table 2: Summary of current evidence on Omicron

Domain	Indicator	Main results
Epidemiology	**Impact on disease prevalence/ incidence**	Following an increase in the first half of March 2022, the number of new COVID-19 cases has continued to decrease in most countries since the third week of March. There was a 21% decline during the week of 18 through 24 April 2022 as compared to the previous week (WEU 88). It is important to note that recent changes in testing policies may influence the number of reported cases. The Omicron variant is the dominant circulating variant globally, representing over 99.7% of samples collected between 23 March 2022 and 21 April 2022.[1]
	Impact on transmission	Analysis of GISAID data[2] have consistently shown Omicron (all lineages) having a higher growth rate advantage over Delta in all countries with sufficient sequence data (last update included data available up to 4 April 2022). In this iteration of the analysis, the results were consistent with the previous iteration regarding the growth rate advantage of the Omicron BA.2 descendent lineage over BA.1, with a pooled mean transmission advantage of 72% (95% CI: 55%-82%) under the assumption of an unchanged generation time. These estimates are stabilising as the cumulative number of Omicron sequences is increasing and data become available from more countries. However, an updated analysis will be performed taking into account the various sub-lineages of the Omicron variant that have recently been identified.
	Impact on disease severity	Omicron has consistently been associated with lower severity when compared to Delta across different settings. [3–6] A recent study conducted in England, United Kingdom, reported lower severity from infection with Omicron compared to infection with Delta. In this study, the adjusted hazard ratio (aHR) for hospitalisation among unvaccinated individuals was 0.41 (95% CI: 0.39-0.43) and the aHR for death was 0.31 (95% CI: 0.26-0.37), which suggests lower intrinsic severity of the Omicron variant.[7]
Immune response	**Impact on reinfection**	Higher rates of reinfection have been reported for Omicron as compared to other SARS-CoV-2 variants. However, a protective effect of previous infection was reported in a recent study conducted in the United States of America[8], which found increased antibody titres and neutralisation activity (79.5%) against Omicron among vaccinated solid organ transplant recipients who were previously infected with SARS-CoV-2 infection compared to those who had no previous infection (34%). Previous infection with BA.1 has been suggested as potentially conferring protection against infection with BA.2: 94.9% (95% CI: 88.4-97.8%), and 85.6% (95% CI: 77.4-90.9%) protection against BA.1 following infection with BA.2.[9]
	Impact on vaccination	Results of vaccine effectiveness (VE) studies should be interpreted with caution because estimates vary with the type of vaccine administered and the number of doses and scheduling (sequential administration of different vaccines). For further information, see the section 'Interpretation of the results of the VE for the Omicron variant'.
	Impact on antibody responses	Several studies have found lower neutralising antibody titers to BA.1 and BA.2 when compared to the index virus, and similar responses for BA.1 and BA.2.[10,11] Similar non-neutralising antibody responses to BA.1 and BA.2 have also been reported in vaccinated individuals (Bartsch 2022). However, another study reported reduced vaccine-induced and infection-induced neutralization of BA.1 and BA.2, with higher neutralisation activity against BA.2 compared to BA.1.[12] In summary, these results indicate lower humoral responses to BA.1 and BA.2 but inconsistent findings regarding BA.1 versus BA.2.

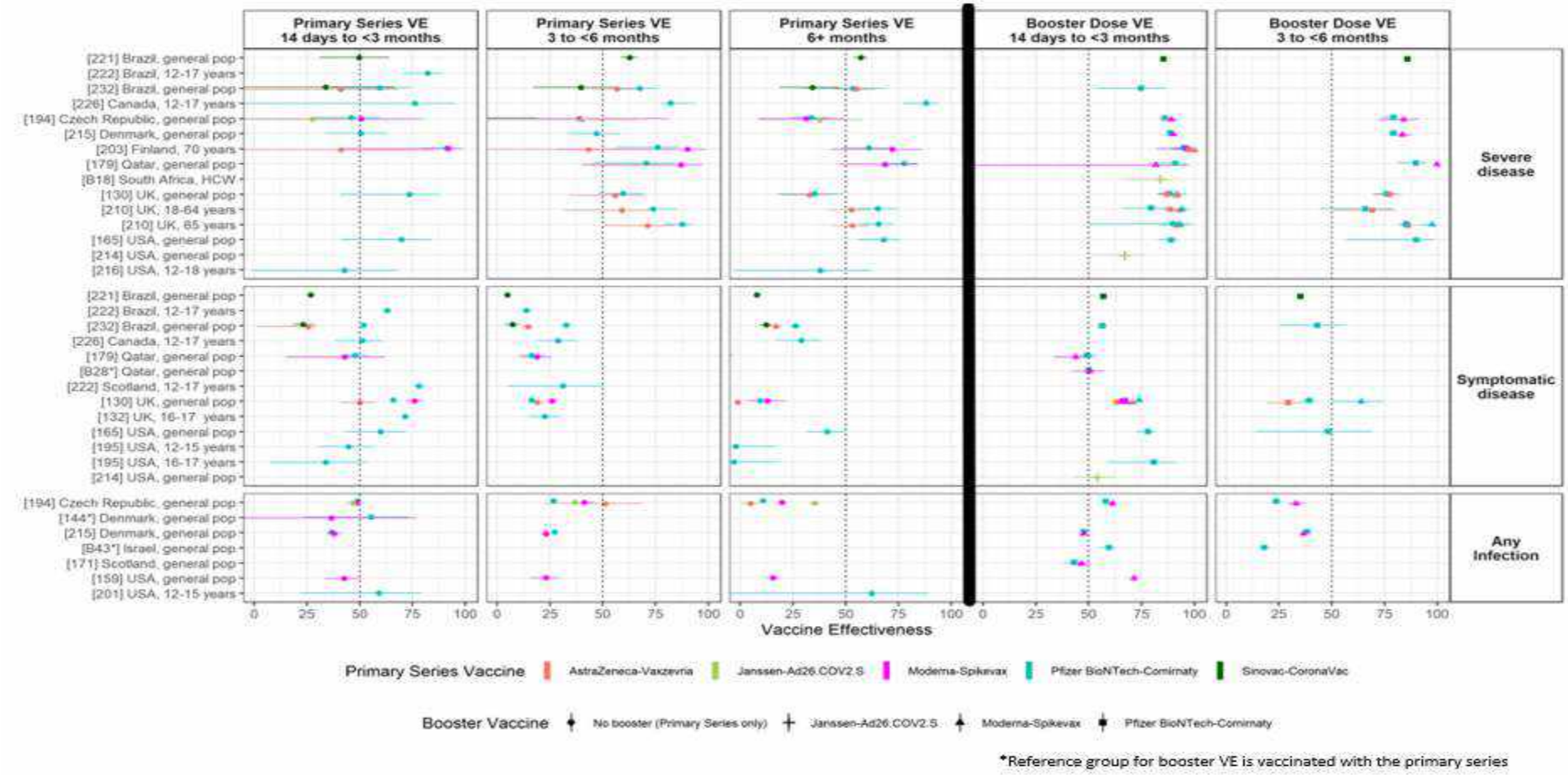
Diagnostic tools	**Impact on PCR assays**	Most BA.2 sequences lack the 69-70 deletion responsible for S-gene target failure; however, a number of BA.2 sequences have been identified having the 69-70 deletion.[1] Assessment of PCR tests for SARS-CoV-2 that include multiple gene targets have predicted limited impact of the Omicron variant on the accuracy of these assays.[13,14]
	Impact on Rapid Diagnostic tests	A recent study conducted in the United States of America found that the sensitivity of Ag-RDT tests was similar for Omicron, Delta and the index virus.[15]
Impact on treatment	**Impact on antivirals**	Consistent with preliminary data showing no difference in the effectiveness of antiviral agents against the Omicron variant, a recent review reported similar efficacy of antiviral agents against Omicron and previous SARS-CoV-2 variants.[16]
	Impact on biologicals	Initially, studies on the effectiveness of monoclonal antibodies for treating patients with Omicron reported conserved neutralizing activity for three broadly neutralizing monoclonal antibodies (sotrovimab, S2X259 and S2H97) and a reduction in effectiveness of other monoclonal antibodies.[12,17–20] However, additional preclinical evidence has shown reduced neutralizing activity of sotrovimab against the BA.2, and lack of efficacy of casirivimab-imdevimab against the BA.1.[21]
	Other treatment options	There is no evidence available on the effectiveness of interleukin-6 receptor blockers and corticosteroids for the management of severe patients with Omicron.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

Figure 4 summarizes the impact of Omicron VOC, on product-specific vaccine effectiveness (VE) over time for both primary series vaccination and booster vaccination. Since the last update, four new studies, one of which assessed VE against Omicron, and three which assessed VE against both Delta and Omicron, have been added to the figure.[22–26] One study (not yet peer reviewed) provided new VE data on Sinovac-CoronaVac[23], two (both not yet peer-reviewed) on Pfizer BioNTech-Comirnaty[24,25], and one (not yet peer reviewed) on AstraZeneca-Vaxzevria, Janssen-Ad26.Cov2.S, Pfizer BioNtech-Comirnaty, and Sinovac-CoronaVac.[26] Additional information on vaccine performance against VOCs can also be found in Annex 4.

Figure 4. Vaccine effectiveness (VE) of primary series and booster vaccination against the Omicron variant of concern



*Indicates booster dose vaccine effectiveness evaluated using persons completing primary series as reference group, rather than unvaccinated persons. Abbreviations: pop=population; HCW=healthcare workers; EU=European Union. Dots represent point estimates of vaccine effectiveness; horizontal lines represent the 95% confidence intervals. Labels along left side of plot indicate reference numbers [], country, and study population. Reference numbers identify the study and link to the summary table of VE effectiveness studies on view-hub.org (Table 1 in summary table); references starting with a 'B' are studies found in the booster VE table only (Table 2 in summary table). Primary series refers to the completion of two doses of vaccines for AstraZeneca-Vaxzevria; Moderna-Spikevax, Pfizer BioNTech-Comirnaty and Sinovac-CoronaVac and one dose of Janssen-Ad26.COV2.S. Severe disease includes severe disease, hospitalization, and pneumonia; symptomatic disease includes disease of any severity level; any infection can include symptomatic and asymptomatic infection. Additional details on the methods for inclusion of the estimates in the plots provided in Annex 3. Note, three negative point estimates for the primary series are not shown in the Omicron plot: Moderna-Spikevax VE against symptomatic disease at 6+ months (reference 179) as well as Moderna-Spikevax and Pfizer BioNTech-Comirnaty VE against infection at 3-6 months (reference 144).

Interpretation of the results of the VE for the Omicron variant

To date, 17 studies of VE against the Omicron variant show reduced protection of primary series COVID-19 vaccinations for all outcomes (*severe disease*, *symptomatic disease*, and *infection*) than has been observed for other variants of concern. Importantly though, VE estimates against the Omicron variant remain higher for *severe disease* than for other outcomes in most studies. Booster vaccination substantially improves VE for all outcomes for all products. However, few studies have followed persons for six months or more after booster vaccination to evaluate longer duration of protection.

For *severe disease*, within the first three months of primary series vaccination, six of 11 (55%) VE estimates for the mRNA vaccines were ≥70%. Three studies for vector vaccines (AstraZeneca-Vaxzevria and Janssen-Ad26.COV2.S) and two studies for inactivated vaccines (Sinovac-CoronaVac) reported VE of <50%. Beyond three months after vaccination, 10 of 25 (40%) VE estimates for the mRNA vaccines were ≥70% while 18 (72%) were ≥50%, one of the 11 (9%) VE estimates for the adenovector vaccines (AstraZeneca-Vaxzevria and Janssen-Ad26.COV2.S) was ≥70% while seven estimates (64%) were ≥50%, and none of the four (0%) VE estimates for Sinovac-CoronaVac were ≥70%, while two (50%) were ≥50%. Between 14 days and three months of receipt of a booster dose, VE against *severe disease* improved in all studies, with only one estimate for Janssen-Ad26.COV2.S below 70% (28 studies evaluated an mRNA booster, three studies a booster dose of Janssen-Ad26.COV2.S, one studies a booster dose of AstraZeneca-Vaxzevria, and two studies a booster dose of Sinovac-CoronaVac). At three to six months post mRNA booster, 12 of 15 (80%) estimates showed VE ≥ 70%, including 11 studies in which an mRNA vaccine was given as the primary series, three studies in which AstraZeneca-Vaxzevria was given as the primary series, and one study in which Sinovac-CoronaVac was given as the primary series.

VE estimates against *symptomatic disease* and *infection* within the first three months of primary series vaccination tended to be lower than against *severe disease*, and VE decreased more substantially over time. For *symptomatic disease* within the first three months of primary series vaccination, three of twelve (25%) VE estimates for the mRNA vaccines were ≥70%; both estimates for AstraZeneca-Vaxzevria and both estimates for Sinovac (CoronaVac) were below 50%. Beyond three months after vaccination, none of the 26 VE estimates were ≥50% (18 studies evaluated mRNA vaccines, four evaluated AstraZeneca-Vaxzevria, and four evaluated Sinovac-CoronaVac). Booster vaccination with an mRNA vaccine after completion of a primary series of an mRNA vaccine, AstraZeneca-Vaxzevria, or Sinovac-CoronaVac improved VE against *symptomatic disease*, with four of 14 (29%) VE estimates ≥70% and 12 (86%) estimates ≥50% between 14 days and three months post booster dose. However, booster dose protection declined with time since vaccination, with only one of six (17%) available estimates indicating a VE of ≥50% at three to six months following receipt of an mRNA booster dose. All estimates for a booster dose of Sinovac-CoronaVac (two estimates) or AstraZeneca-Vaxzevria (one estimate) indicated VE <50%. VE against *infection* showed a similar pattern as that against *symptomatic disease*.

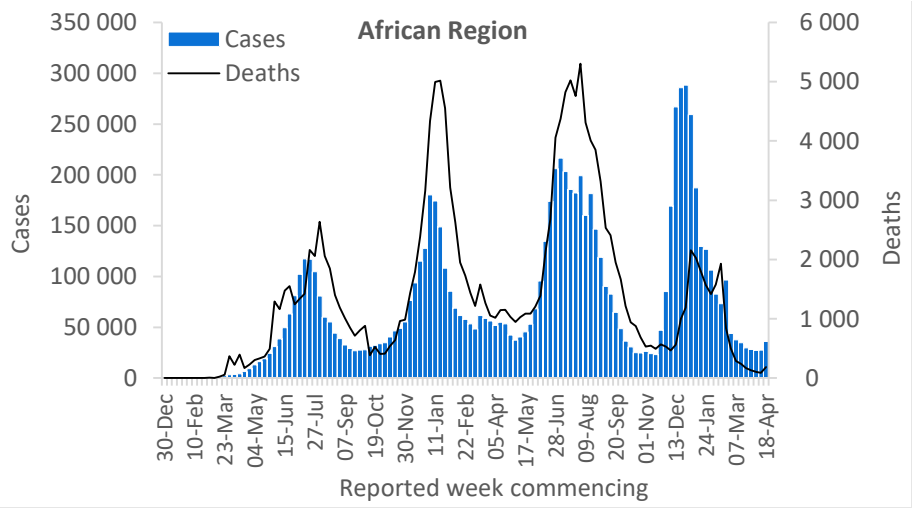
WHO regional overviews:

Epidemiological week 18 – 24 April 2022**

African Region

After a continued decreasing trend in weekly cases since January 2022, the Africa Region reported just under 36 000 new cases and over 185 new deaths, a 32% and a 110% increase respectively as compared to the previous week. Four (18%) countries in the Region reported an increase of over 20% in cases, with some of the greatest proportional increases observed in Burundi (343 vs 103 new cases; +233%), South Africa (19 291 vs 9151 new cases; +111%) and Eswatini (186 vs 132 new cases; +41%). After South Africa, the highest numbers of new cases were reported from Réunion (13 850 new cases; 1546.9 new cases per 100 000; +11%), and Zambia (517 new cases; 2.8 new cases per 100 000; -47%).

The highest numbers of new weekly deaths in the Region were reported from South Africa (154 new deaths; <1 new death per 100 000 population; +221%), Réunion (11 new deaths; 1.2 new deaths per 100 000; similar to the previous week's figures), and Zimbabwe (6 new deaths; <1 new death per 100 000; +20%).

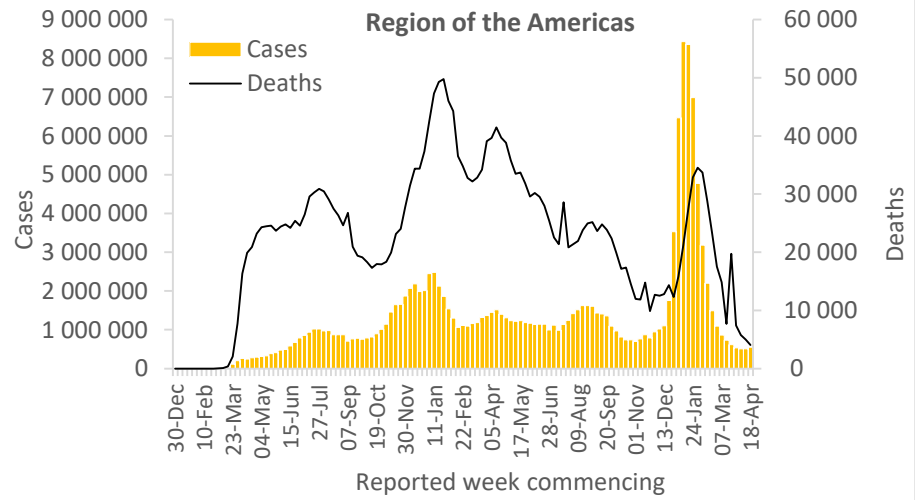


Updates from the African Region

Region of the Americas

The Region of the Americas shows an increasing trend after the continued decline observed since January 2022, with over 550 000 new cases reported, a 9% increase as compared to the previous week. Eighteen (32%) countries in the Region reported increases in new cases of 20% or greater, with the largest increases observed in Saint Vincent and the Grenadines (45 vs 9 new cases; +400%), Puerto Rico (21 622 vs 5106; +323%) and Argentina (24 832 vs 6695 new cases; +271%). The highest numbers of new cases were reported from the United States of America (298 306 new cases; 90.1 new cases per 100 000; +21%), Brazil (91 395 new cases; 43.0 new cases per 100 000; -26%), and Canada (63 247 new cases; 167.6 new cases per 100 000; -6%).

The number of new weekly deaths in the Region decreased by 19% as compared to the previous week, with just over 400 new deaths reported. The highest numbers of new deaths were reported from the United States of America (2354 new deaths; <1 new death per 100 000; -24%), Brazil (650 new deaths; <1 new death per 100 000; -17%), and Canada (452 new deaths; 1.2 new deaths per 100 000; +40%).

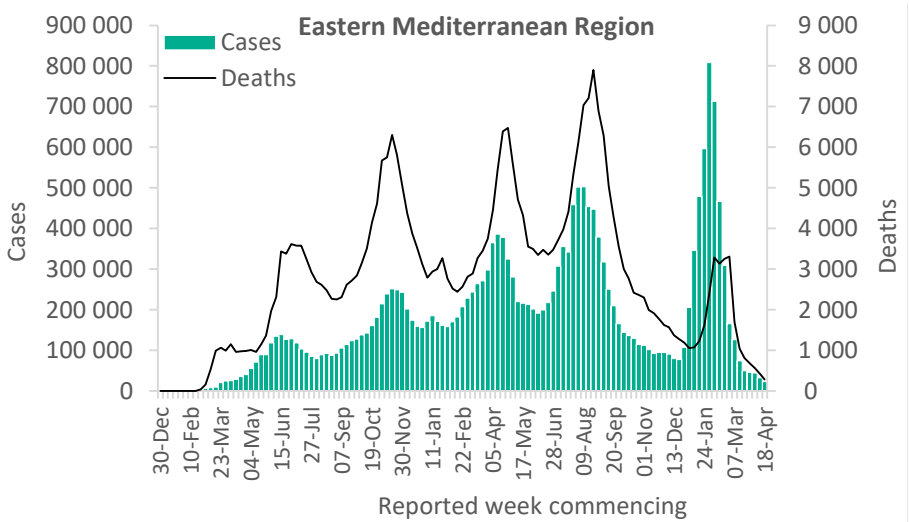


Updates from the Region of the Americas

Eastern Mediterranean Region

In the Eastern Mediterranean Region, new weekly cases have continued to decline after reaching a peak in early February 2022. Over 22 000 new weekly cases were reported last week, a 30% decrease as compared to the previous week. Three (14%) countries in the Region have reported increases in new cases of 20% or greater, with the largest proportional increases observed in Sudan (40 vs 23 new cases; +74%) and Libya (42 vs 28 new cases; +50%). The highest numbers of new cases were reported from the Islamic Republic of Iran (10 448 new cases; 12.4 new cases per 100 000; -36%), Bahrain (3071 new cases; 180.5 new cases per 100 000; -8%), and the United Arab Emirates (1628 new cases; 16.5 new cases per 100 000; -6%).

The number of new weekly deaths in the Region decreased by 34% when compared to the previous week, with just 283 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (162 new deaths; <1 new death per 100 000; -27%), Egypt (42 new deaths; <1 new death per 100 000; -14%), and Tunisia (24 new deaths; <1 new death per 100 000; -71%).

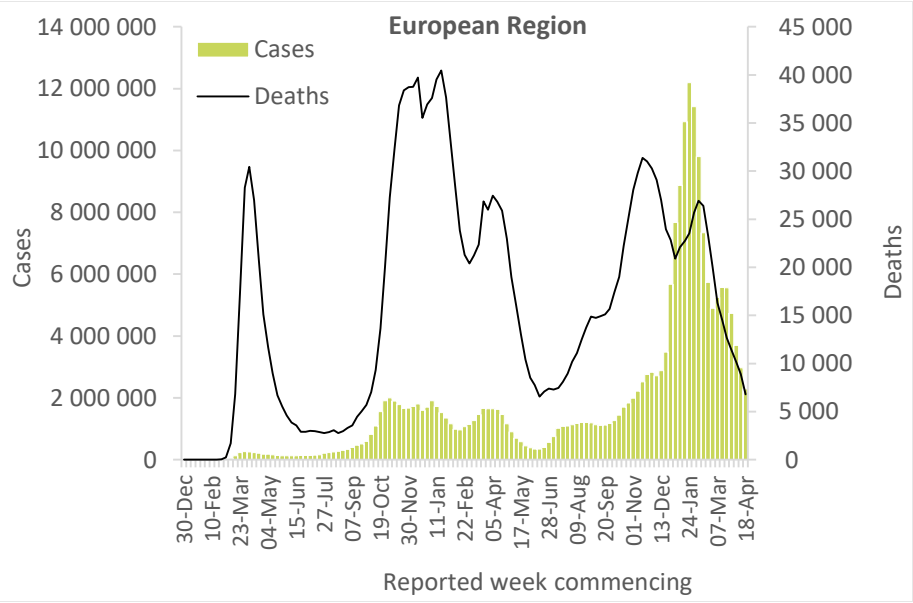


Updates from the Eastern Mediterranean Region

European Region

After the increase observed during the first half of March 2022, new weekly cases continue to decrease in the European Region. Over 2.2 million new cases were reported, a 23% decrease as compared to the previous week. Only one country, Albania, reported an increase in new cases of 21% (329 vs 271 new cases). The highest numbers of new cases were reported from Germany (675 022 new cases; 811.6 new cases per 100 000; -13%), France (542 896 new cases; 834.7 new cases per 100 000; -34%), and Italy (419 374 new cases; 703.2 new cases per 100 000; -1%).

The number of new deaths has continued to decrease in the Region, with just over 6800 new deaths reported this week, a 23% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (1402 new deaths; 1.0 new deaths per 100 000; -21%), Italy (1007 new deaths; 1.7 new deaths per 100 000; +7%), and the United Kingdom (903 new deaths; 1.3 new deaths per 100 000; -47%).

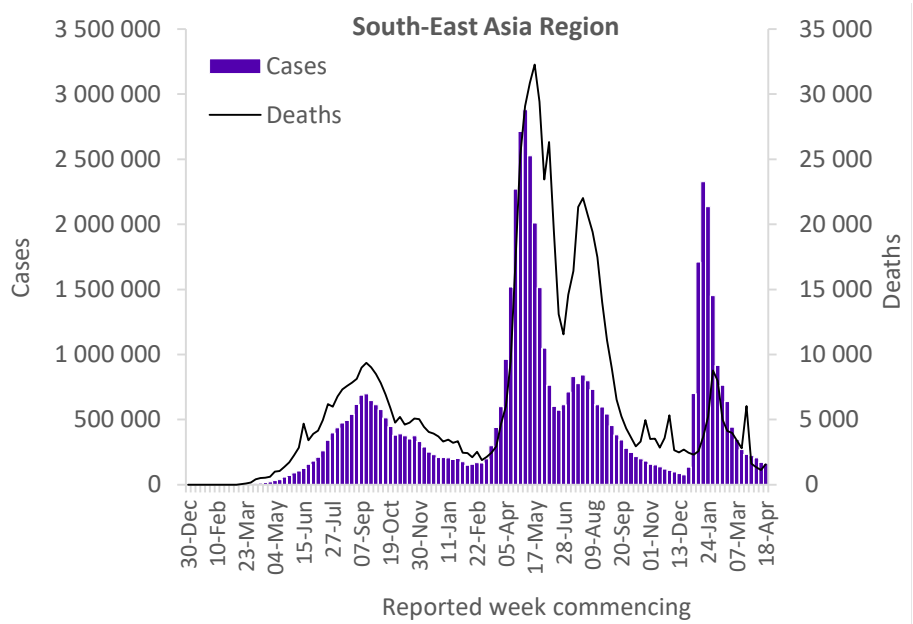


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 161 000 new weekly cases, a 6% decline as compared to the previous week, continuing the decreasing trend observed since January 2022. However, India reported an increase in new weekly cases of 126% (15448 vs 6826 new cases). The highest numbers of new cases were reported from Thailand (135 915 new cases; 194.7 new cases per 100 000; -7%), India (15 448 new cases; 1.1 new cases per 100 000; +126% increase), and Bhutan (4975 new cases; 644.8 new cases per 100 000; -53%).

New weekly deaths increased by 41% in the Region as compared to the previous week, partly due to a delay in reporting of deaths from India (n= 150 new deaths). The highest numbers of new deaths were reported from Thailand (893 new deaths; 1.3 new deaths per 100 000; +12%), India (442 new deaths; <1 new death per 100 000; +570%), and Indonesia (234 new deaths; <1 new death per 100 000; -3%).

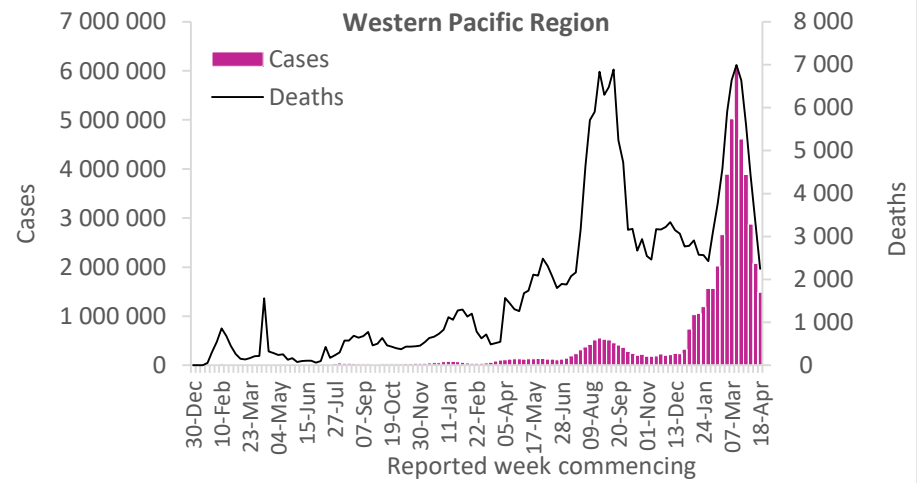


Updates from the South-East Asia Region

Western Pacific Region

After the increasing trend in new cases observed in the Western Pacific Region between December 2021 and March 2022, new weekly cases declined for a fifth consecutive week (-28% as compared to the previous week), with over 1.4 million new cases reported. However, nine (29%) countries in the Region reported an increase of 20% or greater, with some of the largest increases observed in Samoa (2702 vs 772 new cases; +250%), Palau (157 vs 52 new cases; +202%), and New Caledonia (72 vs 27 new cases; +167%). The highest numbers of new cases were reported from the Republic of Korea (589 442 new cases; 1149.7 new cases per 100 000; -39%), Australia (294 982 new cases; 1156.8 new cases per 100 000; -11%), and Japan (287 210 new cases; 227.1 new cases per 100 000; -16%).

The number of new weekly deaths shows a decrease of 33% as compared to the previous week, with over 2200 new deaths reported. The highest numbers of new deaths were reported from the Republic of Korea (1041 new deaths; 2.0 new deaths per 100 000; -38%), Japan (292 new deaths; <1 new death per 100 000; -16%), and China (215 new deaths; <1 new death per 100 000; -47%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Annex 2. Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. Likewise, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection.
- Annex 4 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than 4 months post final dose.
- Studies reporting VOC-specific VE estimates for full vaccination (≥7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca-Vaxzevria for infection (when a phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Neutralization studies that use samples collected >7 days and < 6 months after complete vaccination and that use an ancestral strain as the reference are included in the Annex 4.

Annex 3. Methods for Figure 4

- Figures include 22 studies from Brazil, Canada, the Czech Republic, Denmark, Finland, Israel, Qatar, South Africa, the United Kingdom, and the United States of America evaluating the VE against the Omicron variant.
- VE studies included in the plot were identified from an ongoing systematic review of COVID-19 vaccine effectiveness studies. All studies were cohort or test-negative studies. Methods for the systematic review and inclusion/exclusion criteria are available on view-hub.org. The studies were conducted during a period when either Delta or Omicron was the predominant circulating variant. Estimates were included if they were of laboratory-confirmed cases of the Omicron or Delta variant. In addition, for the primary series VE, only studies providing VE estimates for discrete time intervals since vaccination, which evaluate changes in VE over time, are included.
- For the primary series VE, estimates are only included in the plot for studies that report VE for more than one time period.

Annex 4. Summary of Primary Series Vaccine Performance against Variants of Concern (VE data as of 21 April 2022; Neutralization data as of 20 April 2022)

	WHO Emergency Use Listing (EUL) Qualified Vaccines[+]								Vaccines without WHO EUL[+]	
	AstraZeneca-Vaxzevria/ SII - Covishield	Beijing CNBG-BBIBP-CorV	Bharat-Covaxin	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Novavax-Nuvaxovid/ SII - Covavax	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Gamaleya-Sputnik V
Alpha, Beta, Gamma										
Summary of VE*	*See update from 11 January 2022 for details of vaccine performance against Alpha, Beta, and Gamma variants of concern*									
Delta										
Summary of VE*	*See update from 12 April 2022 for details of vaccine performance against Delta variant of concern*									
Omicron										
Summary of VE*	Reduced protection against infection and symptomatic disease; possible reduced protection against for severe disease but limited evidence									
- Severe disease	-	-	-	-	↓/↓↓$_{1}$	-	↓↓ to ↓↓↓$_{4}$	-	-	-
- Symptomatic disease	↓↓↓$_{1}$	-	-	-	↓↓/↓↓↓$_{2}$	-	↓↓↓$_{3}$	-	-	-
- Infection	↓↓↓$_{1}$	-	-	-	↓↓↓$_{3}$	-	↓↓↓$_{3}$	-	-	-
Neutralization	↓↓↓$_{7}$	↔to↓↓↓$_{3}$	↓↓$_{1}$	↔to ↓↓↓$_{4}$	↓↓↓$_{18}$	-	↓↓↓$_{45}$	↓↓to↓↓↓ $_{5}$	-	↓↓$_{1}$

VE refers to vaccine effectiveness and vaccine efficacy. *Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10 percentage point (pp) reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20 pp reductio[27]n in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30 pp reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30 pp reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in the study. The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources Library. References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public: Protect yourself; Questions and answers; Travel advice

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COVID-19 Weekly Epidemiological Update

Edition 88, published 20 April 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- Special Focus: Applying Geographic Information Systems to the COVID-19 response
- WHO regional overviews

Global overview

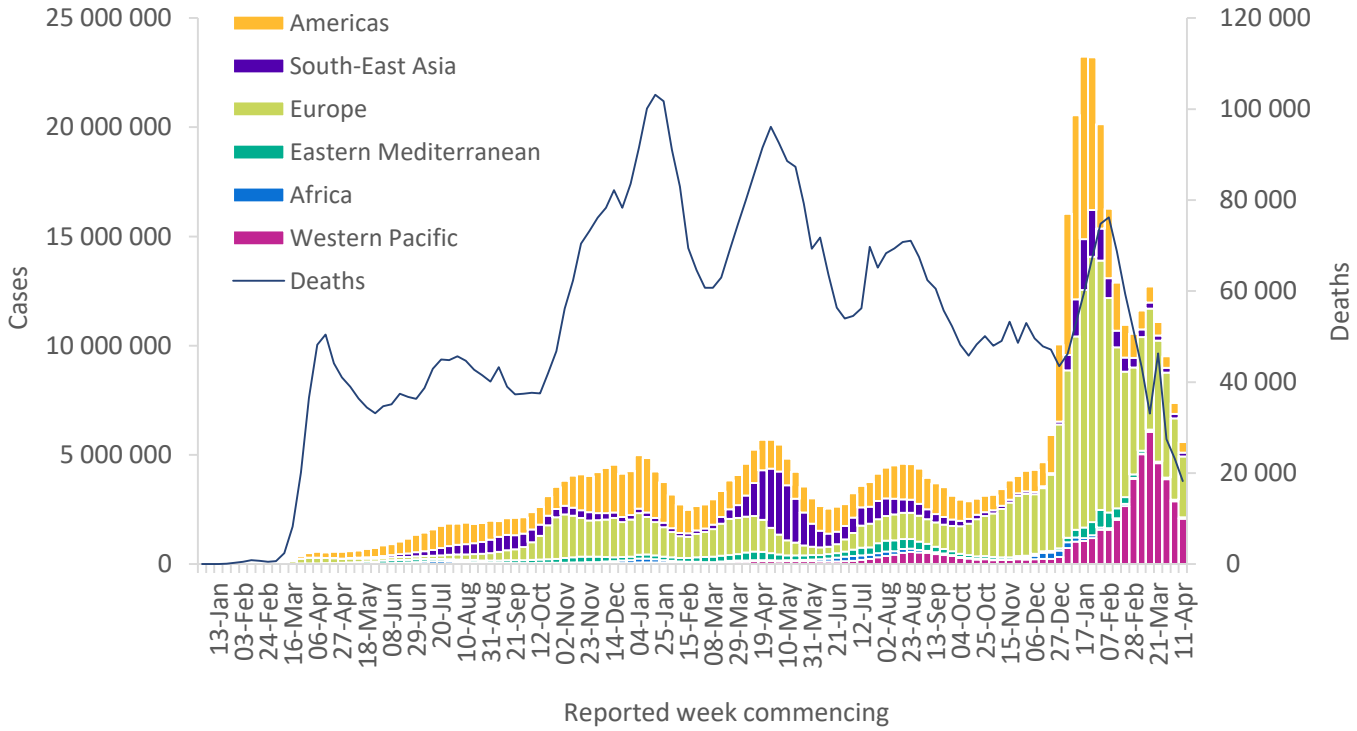
Data as of 17 April 2022

Globally, the number of new COVID-19 cases and deaths has continued to decline since the end of March 2022. During the week of 11 through 17 April 2022, over 5 million cases and over 18 000 deaths were reported, decreases of 24% and 12% respectively, as compared to the previous week (Figure 1).

All regions reported decreasing trends in the number of new weekly cases and deaths (Table 1). As of 17 April 2022, over 500 million confirmed cases and over 6 million deaths have been reported globally.

These trends should be interpreted with caution as several countries are progressively changing their COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 17 April 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest number of new weekly cases were reported from the Republic of Korea (972 082 new cases; -33%), France (827 350 new cases; -11%), Germany (769 466 new cases; -25%), Italy (421 707 new cases; -6%), and Japan (342 665 new cases; +1%).

The highest number of new weekly deaths were reported from the United States of America (3 076 new deaths; -9%), the Russian Federation (1 784 new deaths; -11%), the Republic of Korea (1 671 new deaths; -24%), Germany (1227 new deaths; -27%), and Italy (944 new deaths; -5%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 17 April 2022**

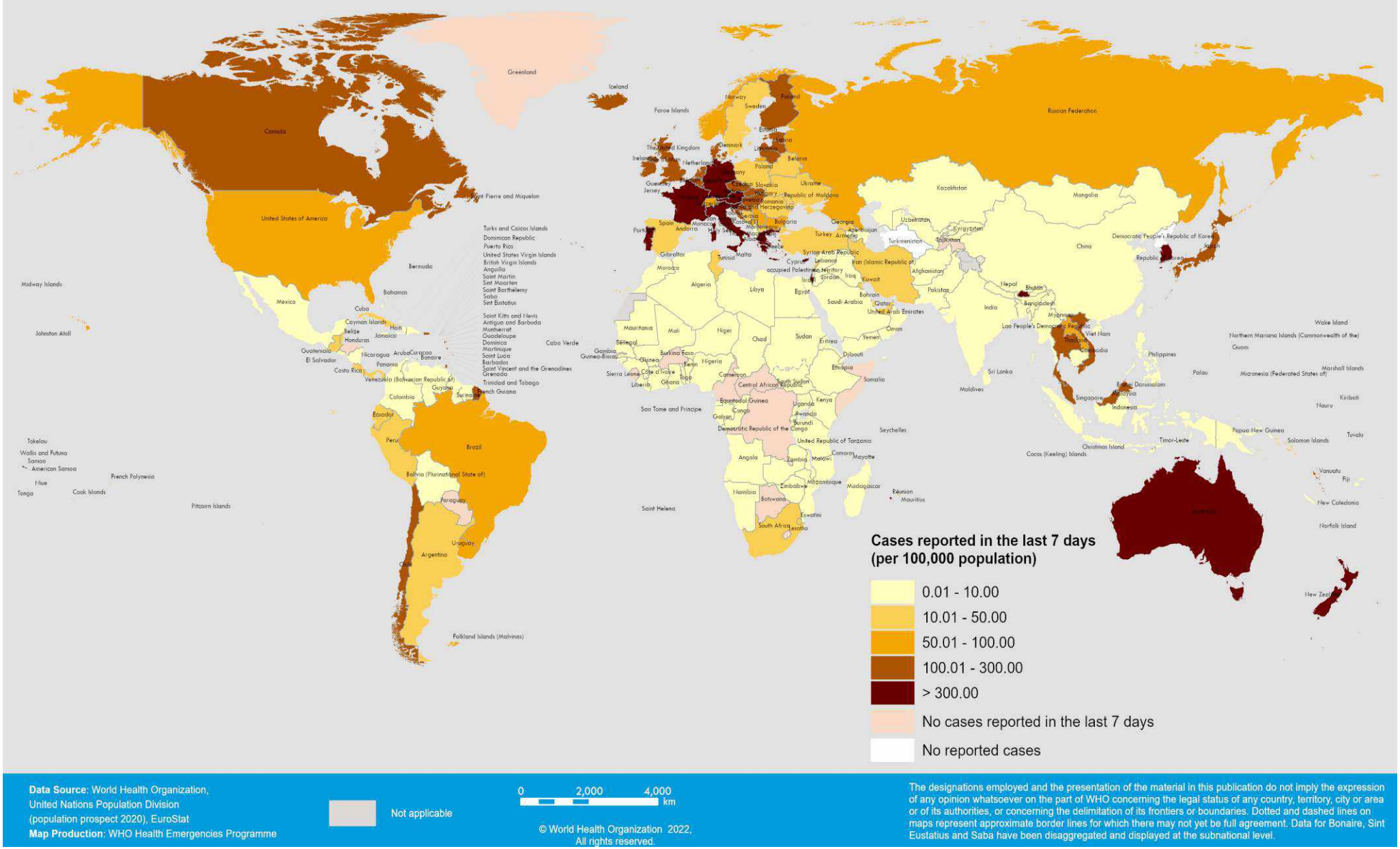
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	2 790 061 (50%)	-25%	210 461 092 (42%)	8 450 (46%)	-23%	1 967 276 (32%)
Western Pacific	2 078 718 (37%)	-28%	51 977 047 (10%)	3 336 (18%)	-25%	220 722 (4%)
Americas	490 525 (9%)	-2%	151 955 885 (30%)	4 797 (26%)	-15%	2 714 852 (44%)
South-East Asia	172 308 (3%)	-16%	57 572 881 (11%)	1 117 (6%)	-18%	781 950 (13%)
Eastern Mediterranean	32 550 (1%)	-26%	21 662 992 (4%)	428 (2%)	-25%	341 737 (6%)
Africa	25 107 (<1%)	-7%	8 682 837 (2%)	87 (<1%)	-16%	171 378 (3%)
Global	**5 589 269 (100%)**	**-24%**	**502 313 498 (100%)**	**18 215 (100%)**	**-21%**	**6 197 928 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

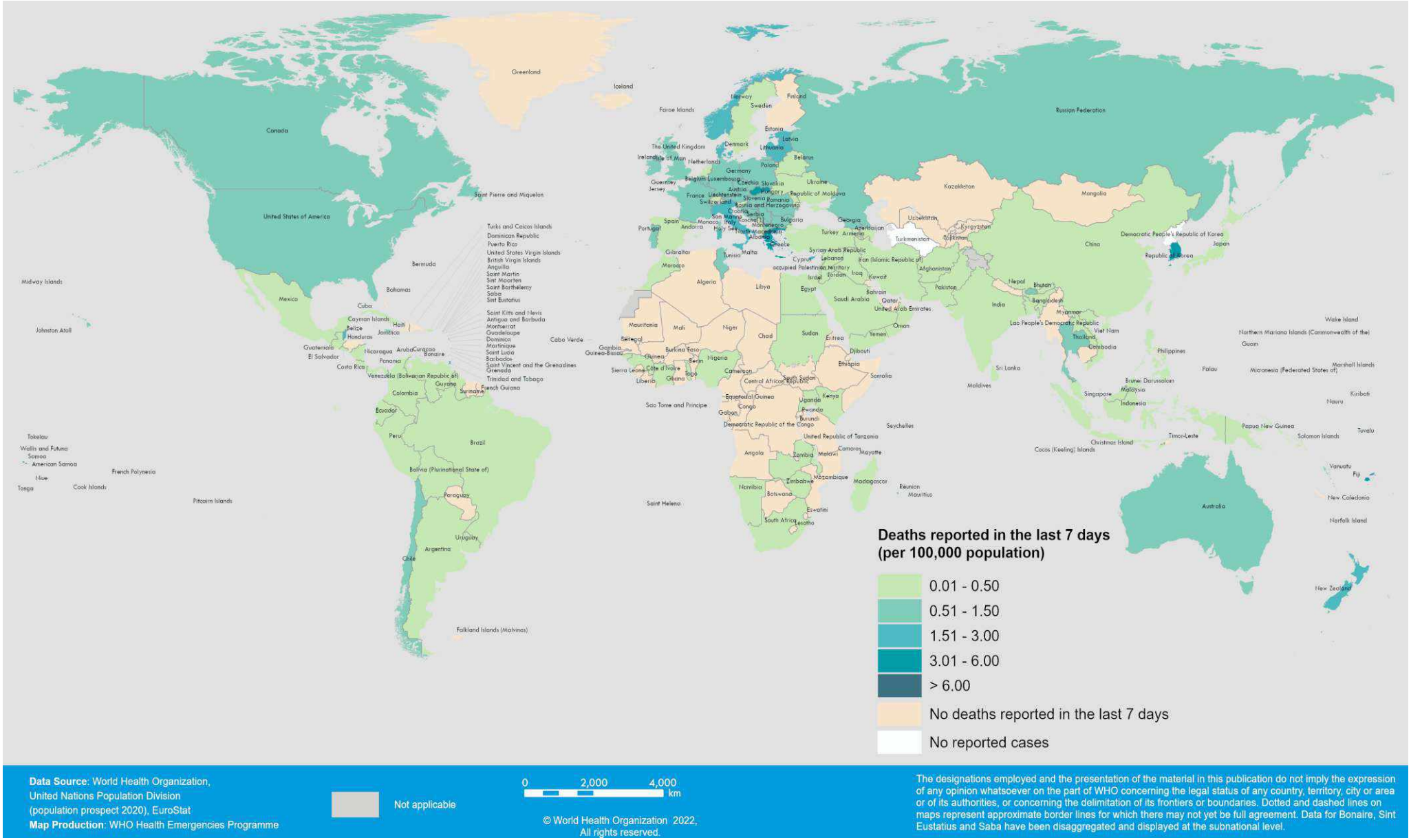
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 11 – 17 April 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 11 – 17 April 2022*



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact the effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.
The classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the lists of currently circulating and previously circulating VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are encouraged to investigate and report on the impacts of these variants. When referring to the genomic sequence of SARS-CoV-2 identified from the first cases (December 2019), the term 'index virus' should be used.

The Omicron variant remains the dominant variant circulating globally, accounting for nearly all sequences recently reported to GISAID. Among the 313 715 sequences uploaded to GISAID with specimens collected in the last 30 days[i], 312 033 (99.5%) were Omicron, 136 (<0.1%) were Delta and 1 393 (0.4%) sequences were not assigned to a Pango lineage.

These trends should be interpreted with due consideration of the limitations of surveillance systems, including differences in sequencing capacity and sampling strategies between countries, as well as laboratory turn-around times for sequencing and delays in reporting.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

[i] Includes sequences submitted to GISAID with sample collected dates from 16 March to 14 April 2022 (last reported sample at the time of data extraction), excluding low coverage sequences. Proportions are estimated for countries submitting more than 100 total sequences. In the past 30 days, 42 countries submitted a total of 100 sequences and above on GISAID.

Special Focus: Applying Geographic Information Systems to the COVID-19 response

What is a Geographic Information System?

A Geographic Information System (GIS) is a "collection of computer software and data used to view and manage information about geographic objects, analyse spatial relationships and model spatial processes".[1] GIS sciences have evolved to integrate the storage of spatial information, spatial and statistical analysis, investment in infrastructure for data acquisition, such as the use of remote sensing and machine learning, incorporating crowdsourcing and big data.[2] GIS and other geospatial technologies can be used as practical tools for data-driven decision-making in a wide array of disciplines, including public health. GIS has long been utilised in epidemiology, including by John Snow in 1854 to investigate a cholera epidemic in the United Kingdom,[3] and continues to be widely utilised today.

How does the use of GIS contribute to health emergency response?

When applied to public health, GIS can analyse the spatial distribution of health outcomes and risk factors, to identify, prevent and control diseases, and improve the impact of health interventions. For example, GIS is easily integrated with demographic data, and can also help achieve equitable vaccine distribution and access to care. GIS also enables the spatial representation of data to support better public health planning and decision-making.

In health emergencies, GIS can support the identification of disease clusters and their possible causes, improve deployment for emergency services, determine if an area is being served adequately by health services, and support operational decision-making in other ways. GIS can also visualise and communicate spatial data intuitively to a wide variety of audiences in a timely manner. The effective use of GIS can strengthen countries' capacities to detect and respond to health emergencies.
For many years, WHO and partners have employed GIS to support the response to health emergencies, including outbreaks of Ebola virus disease, polio, measles, Zika virus disease, yellow fever, plague and cholera, as well as natural disasters and humanitarian crises such as famine and armed conflicts. The use of GIS can be adapted depending on the scale of the emergency and the extent of the affected areas. For example, GIS can support a local response by analysing the space-time travel patterns of patients to efficiently allocate available health screening resources, identifying the location of health facilities, and delineating health administrative boundaries to better understand healthcare accessibility in areas where there were previously sparse or inaccurate data. Mapping environmental factors related to disease, such as the distribution of disease-carrying mosquitoes, can inform risk assessments. At a regional or global level, GIS can inform data-driven decision-making by consolidating and presenting the epidemiological situation in multiple countries through GIS dashboards. WHO has drawn upon the knowledge accumulated in past health emergencies to strengthen the COVID-19 response.

How has WHO applied GIS to the COVID-19 pandemic response?

In the early stages of the pandemic, WHO used GIS to guide response activities by creating operational maps presenting data, such as flight patterns and air passenger volume, subnational level locations of reported cases, and laboratory networks of WHO collaborating centres worldwide to show laboratory testing capacity. Some regions also developed interactive dashboards to present the location of alerts (possible COVID-19 cases which required verification). WHO has also applied GIS to ensure that rural indigenous populations are considered in the COVID-19 response using spatial analyses, geotagging cases and contacts, and coordinating digital microplanning to ensure equitable vaccine access.

As SARS-CoV-2 variants of concern (VOCs) emerged, WHO produced maps to visualise the evolving proportion of VOCs in countries, based on genetic sequences uploaded to GISAID. In the Weekly Epidemiological Update on COVID-19, WHO publishes maps of the weekly case and death incidences. Such maps continue to support high-level decision-making at the World Health Assembly, and by its external advisory groups, including the IHR Emergency Committee on COVID-19. At the regional level, maps regularly contribute to operational decision-making and data visualisation and are included in internal and external information products. Examples of indicators presented in these maps included monthly attack and mortality rates, the evolution of the geographic spread of cases, distribution of VOCs, vaccine coverage, recent trends in the number of new weekly cases, and testing rates.

In addition to the above activities, one of the main applications of GIS in WHO's pandemic response at the global level is visualising and sharing data through public dashboards. WHO launched a global COVID-19 Dashboard in January 2020 to rapidly share daily epidemic situation updates with the number of cases and deaths that were reported by Member States through the International Health Regulations (2005), based on the WHO case definitions (figure 4).

Figure 4. WHO COVID-19 Dashboard showing cases reported globally

Since then, WHO has added features to the WHO COVID-19 Dashboard in response to evolving needs and interests related to the pandemic. Some examples include the addition of data visualisation for:

- Vaccination, with associated data download functionality, to better understand vaccine delivery and implementation worldwide.
- Public Health and Social Measures (PHSM) and the types of PHSM implemented by countries at any given time.

As of 20 April 2022, the WHO COVID-19 Dashboard has been visited by over 58 million users, with approximately 100 000 daily visitors globally. Additionally, all six WHO Regions host region-specific dashboards which, in some cases, present subnational data, providing a more granular view of COVID-19 epidemiology (African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, Western Pacific Region), which can inform risk assessments and provide an enhanced alerting system for local health authorities (figure 5).

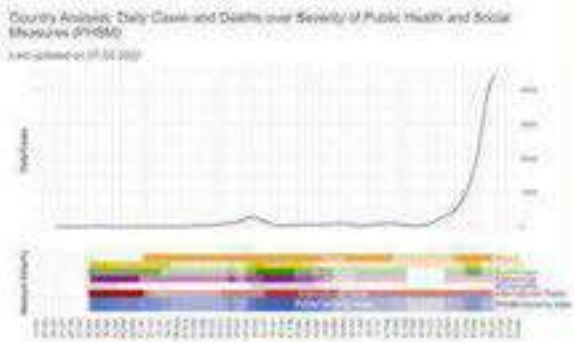
Figure 5. Select features of WHO Regional Office COVID-19 dashboards*

AFR: WHO African Region; AMR: WHO Regional of the Americas; EMR: WHO Eastern Mediterranean Region; EURO: WHO European Region; SEARO: WHO South-East Asia Region; WPR: WHO Western Pacific Region

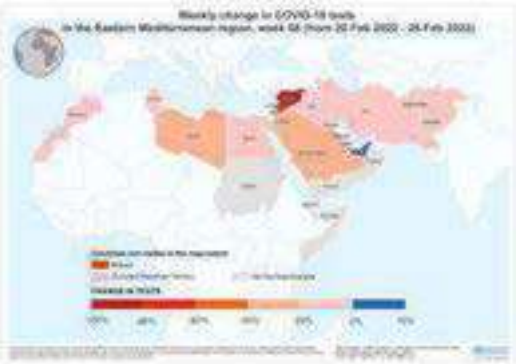
Cumulative cases by country (AFRO)

Subnational cumulative incidence rate and total cumulative cases by country (PAHO)

Stringency of Public Health and Social Measures at country level (EURO)



Weekly change in COVID-19 tests (EMRO)



Subnational-level case data in the last 7 days (SEARO)

Transmission stage assessment by country (WPRO)

*The images are for demonstration purposes only and do not reflect the latest situation.

Regional response teams apply GIS technology in a multitude of ways, including:

- Developing an urbanism index using remote sensing at the district and regional levels. This index is used to track the impact of COVID-19 and differences in equity between rural and urban areas.
- Transferring technology and skills to national authorities to support the automation of calculating complex COVID-19 indicators.
- Publicly sharing subnational-level data in a format that is readily re-usable by the media, academia, governments and researchers.
- Creating map animations to show changes in case distribution over time.

Conclusion

Maps can effectively and intuitively visualize information for health professionals and key decision-makers to support a timely response during a health emergency. Data visualisation on dashboards, especially when numbers change rapidly, is an effective way to share data, and has become a standard way to communicate data during the COVID-19 pandemic. The pandemic has posed unique challenges to employing GIS, such as implementing new data management systems to respond to a global event, the requirement for significant investment and expertise to maintain and develop them, and ensuring their ongoing performance despite very large datasets. The response to COVID-19 has highlighted that these systems need to be designed to be adaptable. The content and granularity of data, reporting practices, and epidemiological and social contexts can change as information becomes available at different stages of a pandemic response. GIS is a critical component of response activities to deliver timely and accurate data, information, analysis and visualization to support key public health decision-making for preparedness and response activities.

For more information

- WHO COVID-19 dashboard
- WHO Regional COVID-19 Dashboards: AFRO, PAHO, EMRO, EURO, SEARO, WPRO
- WHO GIS Center for Health: Cutting Edge GIS Technologies for COVID-19 Vaccine Delivery

References

1. Gavi The Vaccine Alliance, UNICEF. Improving Immunisation Coverage and Equity through the Effective Use of Geospatial Technologies and Data: A Landscape Analysis & Theory of Change September 2020.; 2020:40. https://www.gavi.org/sites/default/files/document/2020/GIS-and-Immunisation-Landscape_EN.pdf

2. Duckham M, Worboys M. Foundations of Geographic Information Science.; 2004. Accessed April 5, 2022. http://ebookcentral.proquest.com/lib/qut/detail.action?docID=214487

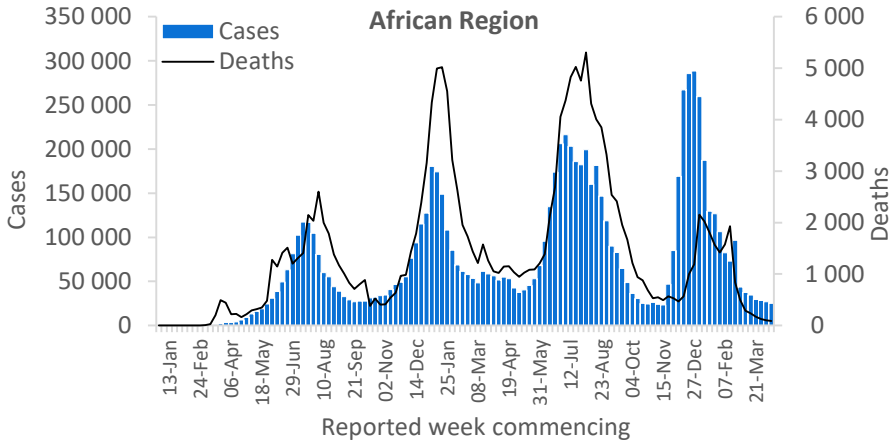
3. University of California Los Angeles Fielding School of Public Health Department of Epidemiology. Maps of the 1854 Broad Street Pump Outbreak. Accessed April 1, 2022. https://www.ph.ucla.edu/epi/snow/mapsbroadstreet.html

WHO regional overviews: Epidemiological week 11 – 17 April 2022*

African Region

The African Region has continued to report a decreasing trend in new cases since January 2022, with just over 25 000 new weekly cases reported, representing a 7% decrease as compared to the previous week. However, seven (14%) countries in the Region reported an increase of over 20% in cases, with some of the greatest proportional increases observed in Niger (48 vs 13 new cases; +269%), Mozambique (43 vs 16 new cases; +169%) and Zambia (984 vs 452; +118%). The highest numbers of new cases were reported from Réunion (12 504 new cases; 1396.6 new cases per 100 000 population; +14%), South Africa (9151 new cases; 15.4 new cases per 100 000; similar to previous week figures), and Zambia (984 new cases; 5.4 new cases per 100 000; +118%).

The number of new weekly deaths in the Region decreased by 16% as compared to the previous week, with 87 new deaths reported. The highest numbers of new deaths were reported from South Africa (48 new deaths; <1 new death per 100 000 population; -4%), Réunion (11 new deaths; 1.2 new deaths per 100 000; similar to the previous week), and Zambia (6 new deaths; <1 new death per 100 000 population; similar to the previous week's figures).

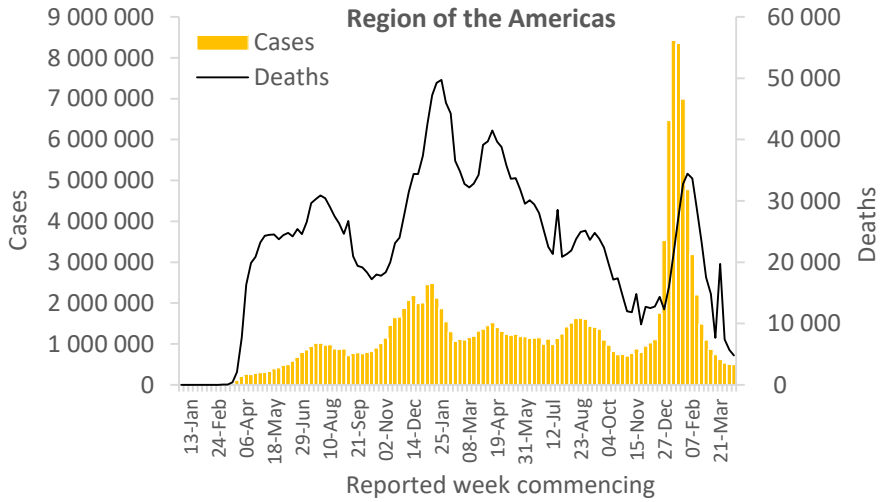


Updates from the African Region

Region of the Americas

With just over half a million new weekly cases and just below 5000 new weekly deaths (representing decreases of 2% and 15% respectively as compared to the previous week), the declining trends observed since mid-January 2022 have continued in the Region of the Americas. However, 13 (23%) countries in the Region reported increases in new cases of 20% or greater, with some of the largest proportional increases observed in Suriname (35 vs 12 new cases; +192%), Haiti (29 vs 11 new cases; +164%) and Saint Lucia (84 vs 51 new cases; +65%). The highest numbers of new cases were reported from the United States of America (245 594 new cases; 74.2 new cases per 100 000; +24%), Brazil (123 339 new cases; 58.0 new cases per 100 000; -17%), and Canada (53 391 new cases; 141.5 new cases per 100 000; -22%).

The highest numbers of new deaths were reported from the United States of America (3076 new deaths; <1 new death per 100 000; -9%), Brazil (785 new deaths; <1 new death per 100 000; -30%), and Chile (234 new deaths; 1.2 new deaths per 100 000; -24%).

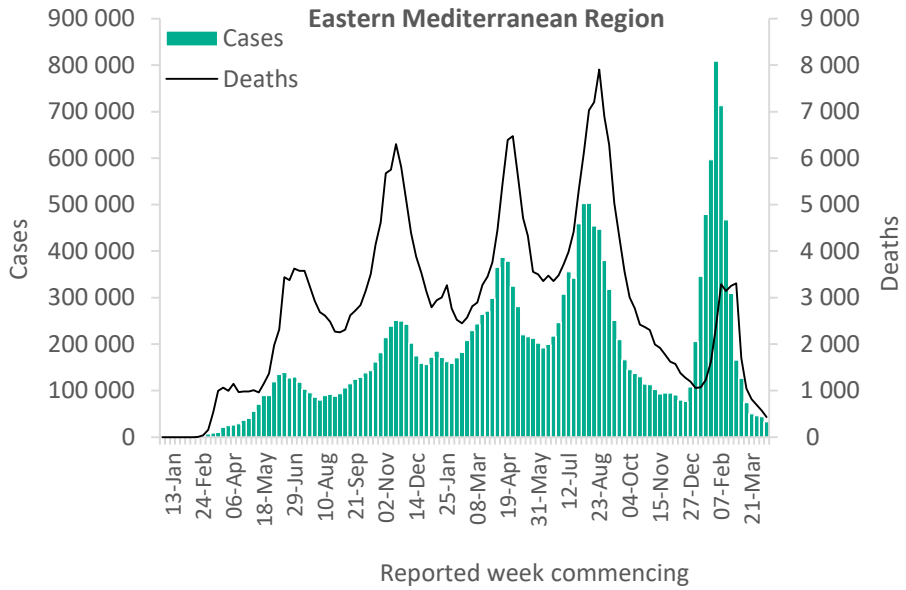


Updates from the Region of the Americas

Eastern Mediterranean Region

In the Eastern Mediterranean Region, the numbers of new weekly cases and deaths continue the decreasing trends observed since early February 2022, with over 32 000 new cases and 428 new deaths reported, representing decreases of 26% and 25% respectively as compared to the previous week. No country in the Region reported increases in new cases of 20% or greater. The highest numbers of new cases were reported from the Islamic Republic of Iran (16 315 new cases; 19.4 new cases per 100 000; -27%), Bahrain (3328 new cases; 195.6 new cases per 100 000; -14%), and Egypt (2800 new cases; 2.7 new cases per 100 000; -28%).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (223 new deaths; <1 new death per 100 000; -26%), Tunisia (84 new deaths; <1 new death per 100 000; -18%), and Egypt (49 new deaths; <1 new death per 100 000; -13%).

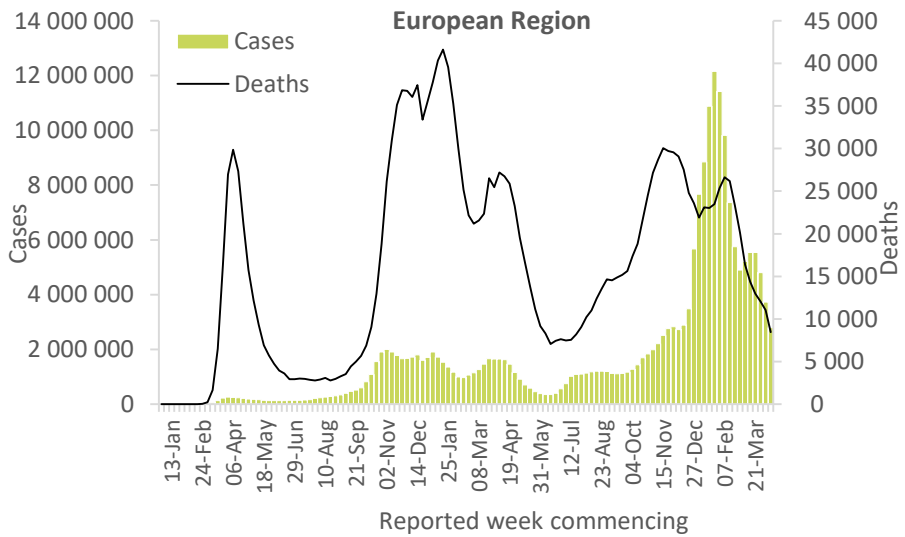


Updates from the Eastern Mediterranean Region

European Region

After the increase observed in mid-March 2022, the number of new weekly cases in the European Region has continued to decline for a month, with just under 2.8 million new cases reported, a 25% decrease as compared to the previous week. However, two countries in the Region reported an increase of over 20% in cases: Kyrgyzstan (10 vs 2 new cases; +400%) and Andorra (381 vs 304 new cases; +25%). The highest numbers of new cases were reported from France (827 350 new cases; 1272.1 new cases per 100 000; -11%), Germany (769 466 new cases; 925.2 new cases per 100 000; -25%), and Italy (421 707 new cases; 707.1 new cases per 100 000; -6%).

The number of new weekly deaths has continued to decrease in the Region, with over 8400 new deaths reported, a 23% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (1784 new deaths; 1.2 new deaths per 100 000; -11%), Germany (1227 new deaths; 1.5 new deaths per 100 000; -27%), and Italy (944 new deaths; 1.6 new deaths per 100 000; -5%).

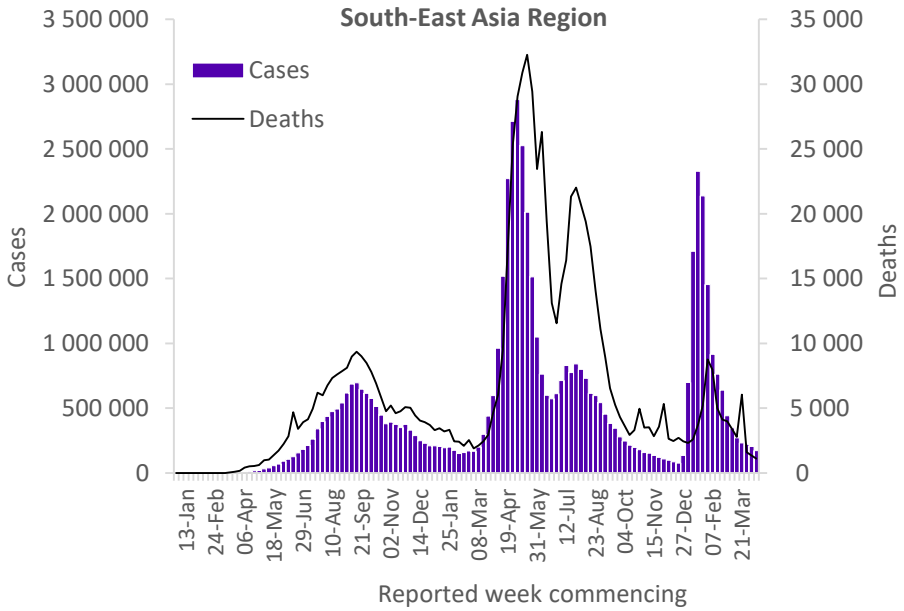


Updates from the European Region

South-East Asia Region

In the South-East Asia Region, the numbers of new weekly cases and deaths continue the decreasing trends observed since mid-January 2022, with just over 172 000 new cases and just over 1100 new deaths, decreases of 16% and 18% respectively as compared to the previous week. No country in the Region reported increases in new cases of 20% or greater. The highest numbers of new cases were reported from Thailand (146 474 new cases; 209.8 new cases per 100 000; -15%), Bhutan (10 574 new cases; 1370.4 new cases per 100 000; -2%), and Indonesia (7166 new cases; 2.6 new cases per 100 000; -44%).

The highest numbers of new deaths were reported from Thailand (799 new deaths; 1.1 new deaths per 100 000; + 20%), Indonesia (240 new deaths; <1 new death per 100 000; -29%), and India (66 new deaths; <1 new death per 100 000; -81%).

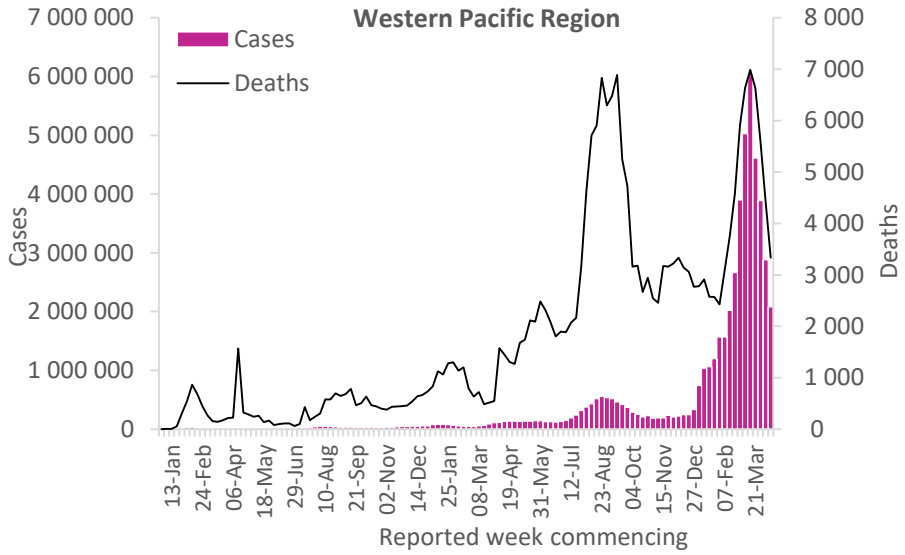


Updates from the South-East Asia Region

Western Pacific Region

After the peak reached in early March 2022, the number of new weekly cases has continued to decline in the Western Pacific Region, with just over two million new weekly cases reported, representing a 28% decrease as compared to the previous week. However, Guam and China reported increases of 121% (128 vs 58 new cases) and 28% (28 823 vs 22 519 new cases), respectively. The highest numbers of new cases were reported from the Republic of Korea (972 082 new cases; 1896.0 new cases per 100 000; -33%), Japan (342 665 new cases; 270.9 new cases per 100 000; 1%), and Australia (330 266 new cases; 1295.2 new cases per 100 000; -16%).

The number of new weekly deaths also continues the decreasing trend with over 3300 new deaths reported, a 25% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Republic of Korea (1671 new deaths; 3.3 new deaths per 100 000; -24%), China (405 new deaths; <1 new death per 100 000; -37%), and Japan (346 new deaths; <1 new death per 100 000; -13%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purpose.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public: Protect yourself; Questions and answers; Travel advice

COVID-19 Weekly Epidemiological Update

Edition 87, published 12 April 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- Special Focus: Update on WHO COVID-19 global rapid risk assessment
- WHO regional overviews

Global overview

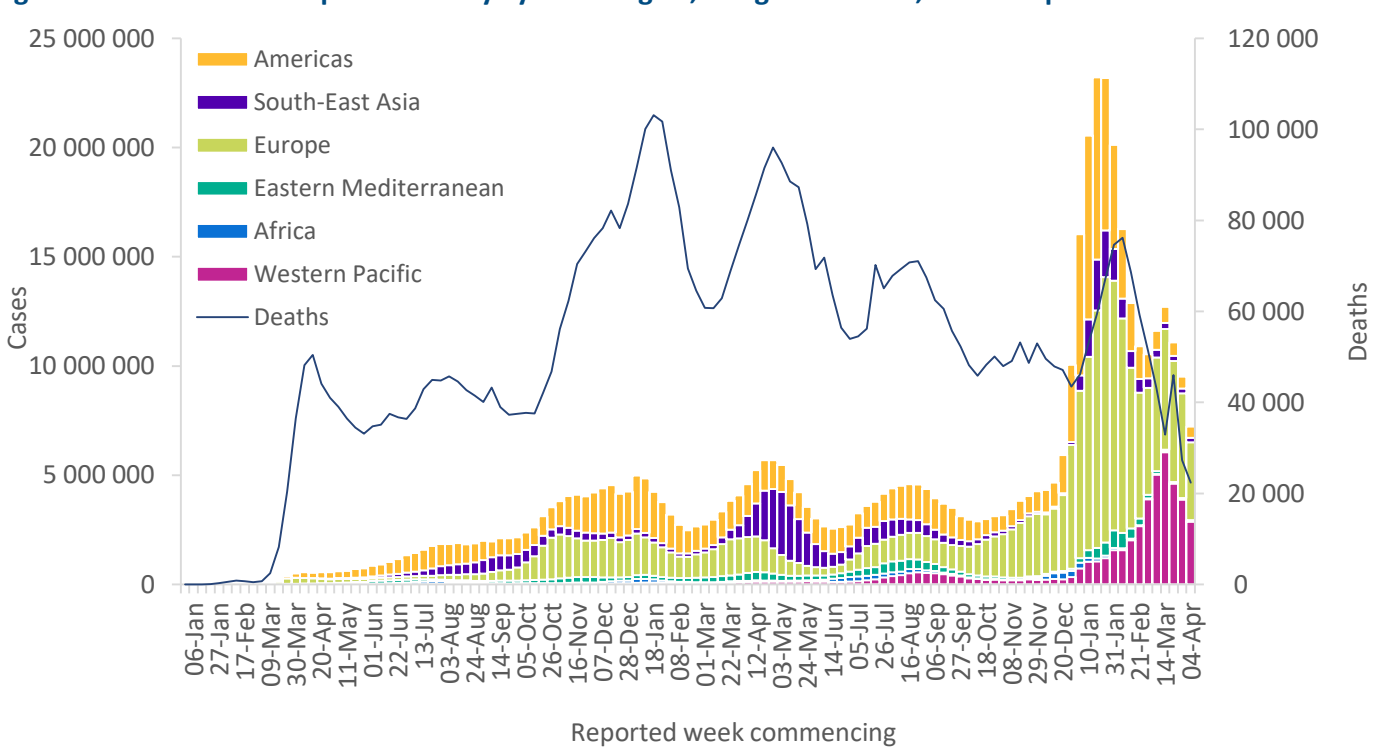
Data as of 10 April 2022

Globally, during the week of 4 through 10 April 2022, the number of new COVID-19 cases and deaths has continued to decline for a third consecutive week, with over 7 million cases and over 22 000 deaths reported, a decrease of 24% and 18% respectively, as compared to the previous week (Figure 1).

All regions reported decreasing trends in the number of new weekly cases and deaths (Table 1). As of 10 April 2022, over 496 million confirmed cases and over 6 million deaths have been reported globally.

These trends should be interpreted with caution as several countries are progressively changing their COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 10 April 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest numbers of new weekly cases were reported from the Republic of Korea (1 459 454 new cases; -29%), Germany (1 019 649 new cases; -26%), France (927 073 new cases; -3%), Viet Nam (453 647 new cases; -43%), and Italy (447 322 new cases; -8%).

The highest numbers of new weekly deaths were reported from the United States of America (3 682 new deaths; -9%), Republic of Korea (2 186 new deaths; -6%), the Russian Federation (2 008 new deaths; -15%), Germany (1 686 new deaths; +6%), and Brazil (1 120 new deaths; -22%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 10 April 2022**

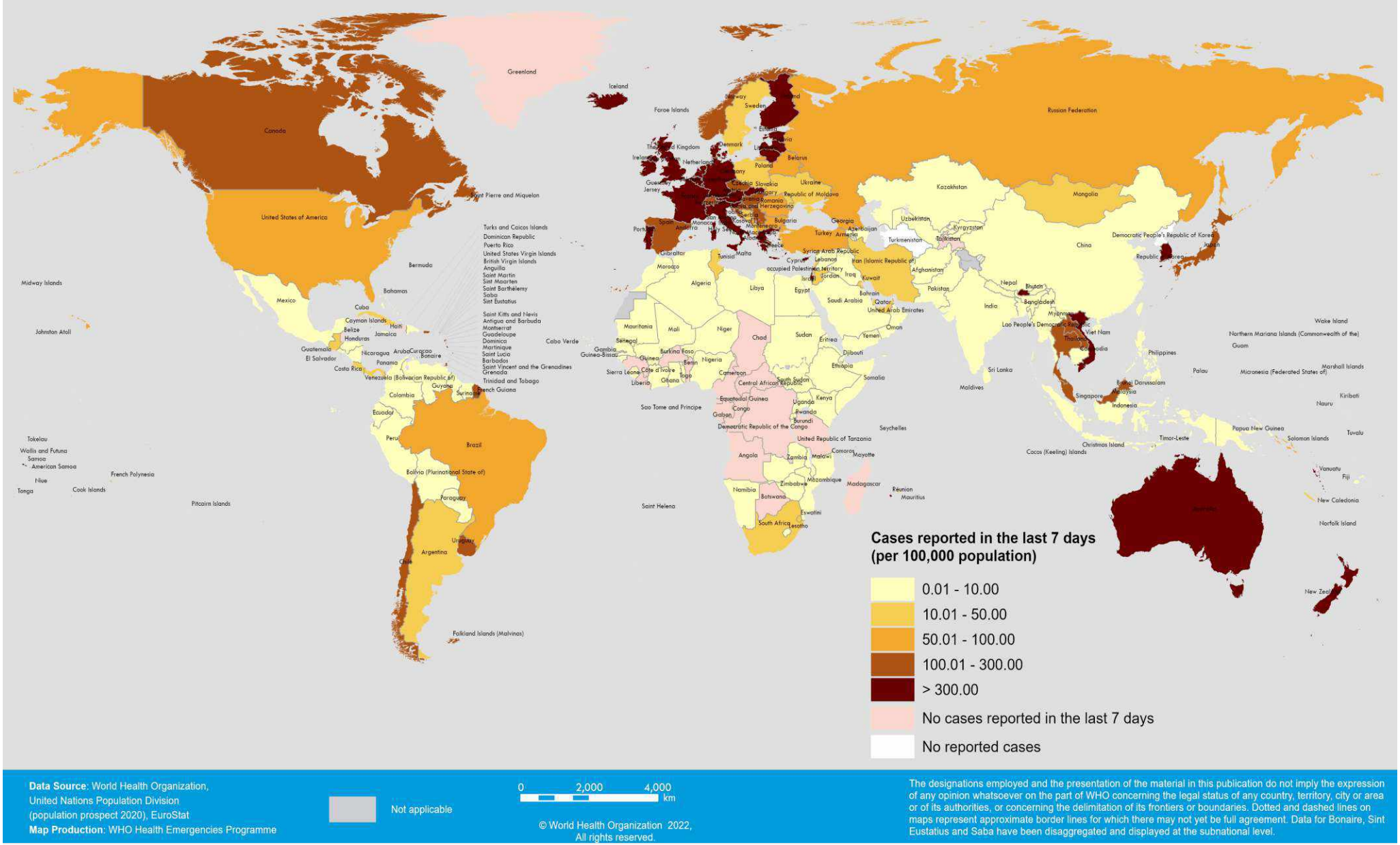
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	3 554 764 (49%)	-26%	207 509 074 (42%)	9 920 (44%)	-16%	1 957 395 (32%)
Western Pacific	2 879 100 (40%)	-26%	49 898 300 (10%)	4 431 (20%)	-21%	217 386 (4%)
Americas	516 017 (7%)	-4%	151 456 460 (31%)	5 980 (27%)	-19%	2 709 204 (44%)
South-East Asia	204 527 (3%)	-8%	57 400 374 (12%)	1 358 (6%)	-15%	780 833 (13%)
Eastern Mediterranean	43 920 (1%)	-4%	21 630 352 (4%)	565 (3%)	-18%	341 304 (6%)
Africa	23 323 (<1%)	-17%	8 612 215 (2%)	82 (<1%)	-40%	171 219 (3%)
Global	**7 221 651 (100%)**	**-24%**	**496 507 539 (100%)**	**22 336 (100%)**	**-18%**	**6 177 354 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

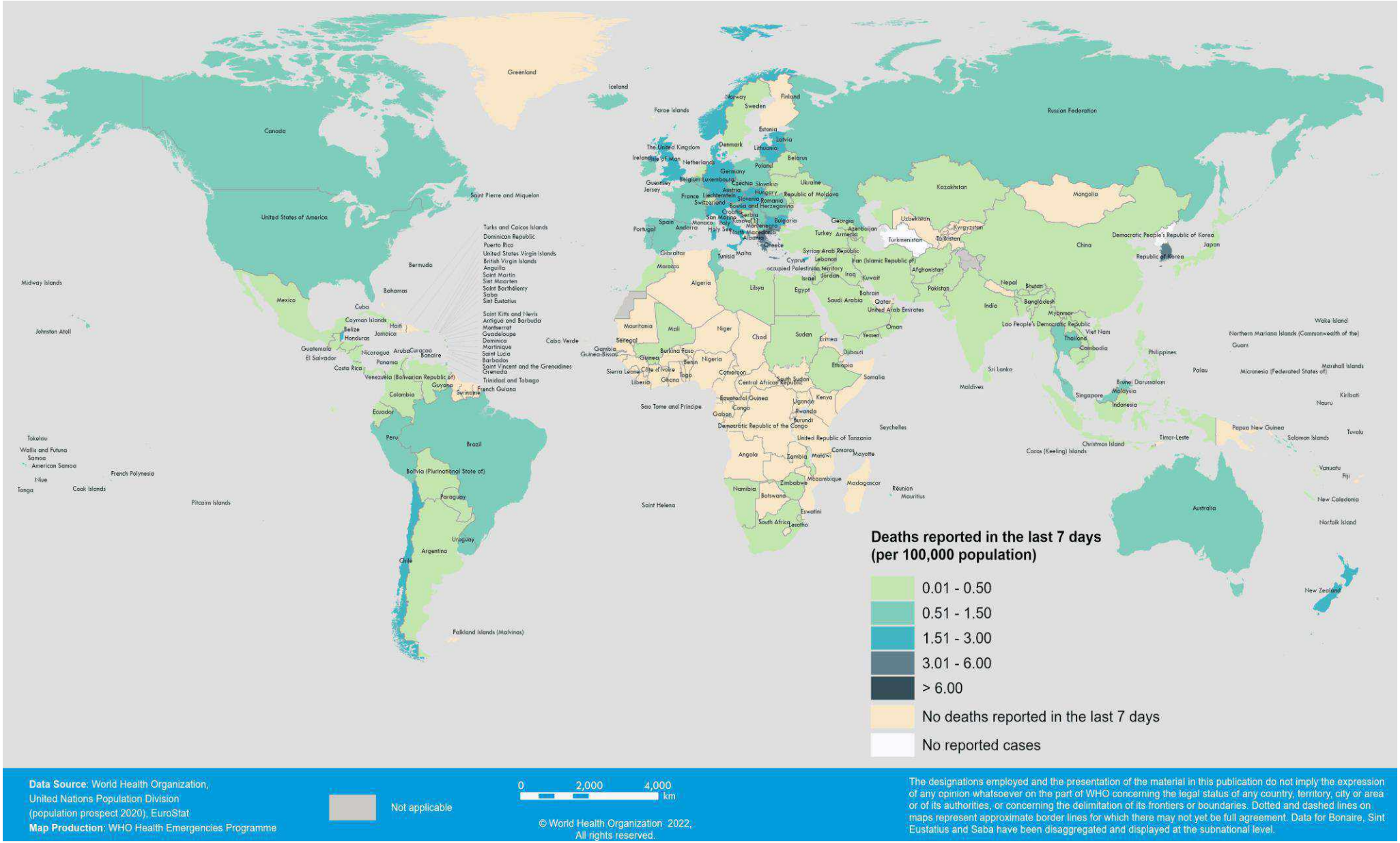
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 4 – 10 April 2022*



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 4 – 10 April 2022*



**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.
The classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are encouraged to investigate and report on the impacts of these variants. When referring to the genomic sequence of SARS-CoV-2 identified from the first cases (December 2019), the term 'index virus' should be used.

Geographic spread and prevalence of VOCs

The Omicron variant remains the dominant variant circulating globally, accounting for nearly all sequences recently reported to GISAID. Among the 379 278 sequences uploaded to GISAID with specimens collected in the last 30 days[i], 376 082 (99.2%) were Omicron, 125 (<0.1%) were Delta and 2 961 (0.8%) sequences were not assigned to a Pango lineage. These trends should be interpreted with due consideration of the limitations of surveillance systems, including differences in sequencing capacity and sampling strategies between countries, as well as laboratory turn-around times for sequencing and delays in reporting.

Omicron VOC

WHO continues to monitor several descendent lineages under the Omicron VOC, including BA.1, BA.2, BA.3 as well as now BA.4 and BA.5 . It also includes BA.1/BA.2 circulating recombinant forms, such as XE. The full list can be found here https://cov-lineages.org/lineage_list.html

A small number of sequences of BA.4 and BA.5 descendent lineages have now been detected in a few countries. Both have additional mutations in the Spike region (S:L452R, S:F486V) and unique mutations outside of Spike. The S:L452R and S:F486V mutations are associated with potential immune escape characteristics. In addition, the majority of BA.4 and BA.5 sequences have the 69-70 deletion responsible for S gene target failure (SGTF) in some PCR assays. This may prove useful for surveillance purposes in places where BA.2 is dominant, as the 69-70 deletion is largely not present in BA.2 sequences.

WHO is working with scientists to further assess the characteristics of these lineages and their public health implications. WHO recommends countries to continue surveillance, where possible, and rapid data sharing on publicly available databases.

[i] Includes sequences submitted to GISAID with sample collected dates from 9 March to 7 April 2022 (last reported sample at the time of data extraction), excluding low coverage sequences. Proportions are estimated for countries submitting more than 100 total sequences. In the past 30 days, 42 countries submitted a total of 100 sequences and above on GISAID.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

Special Focus: Update on WHO COVID-19 global rapid risk assessment

The COVID-19 pandemic continues to evolve, as does our understanding of the SARS-CoV-2 virus, and the response needed to control its spread and impact. In WHO's most recent rapid risk assessment, which was completed on 6 April 2021, the global public health risk was assessed to remain very high due to the ongoing risks to human health, risk of spread and risk of insufficient control capacities.
Under the Emergency Response Framework, WHO undertakes risk assessments and situation analyses on a regular basis to inform its response to emerging situations. In addition, WHO periodically reviews the current risk status of public health events through an in-depth hazard, exposure and context assessment. This also includes a review of the vulnerabilities and capacities available to respond to the public health event and to investigate the current risk to human health, risks of ongoing spread globally, and risk of insufficient control capacities. Such assessments are used as an internal WHO decision-making tool, and to support independent deliberations, including but not limited to meetings of the International Health Regulations (IHR 2005) Emergency Committee regarding the COVID-19 pandemic.

To date, 13 global rapid risk assessments have been undertaken for COVID-19, and additional assessments have been conducted for specific events, such as the emergence of SARS-CoV-2 variants. Here, we provide a synopsis of the most recent in-depth global rapid risk assessment for COVID-19.

Despite a reduction in SARS-CoV-2 testing observed since the beginning of 2022 in many Member States, the COVID-19 pandemic continues with intense transmission and high levels of death primarily among unvaccinated at-risk populations. The highly transmissible Omicron variant of concern has rapidly replaced all other circulating variants in almost all countries in which it has been reported, and has become dominant globally.

Omicron's properties of immune escape have been associated with the rapid and almost synchronous increase in the global incidence of COVID-19 cases reported until the end of January 2022. A further increase observed at the beginning of March was driven primarily by a delayed increase in case incidence in the Western Pacific Region and a rebound in the number of new cases reported in the European Region. This trend was likely due to a combination of factors, including the predominance of the Omicron Pango lineages BA.1, and then BA.2, with a transmission advantage over other Omicron lineages; relaxation of public health and social measures (PHSM); and waning of humoral immunity following vaccination and/or prior infection. The recent detection of emerging recombinants of the Delta-Omicron and Omicron descendent lineages requires ongoing close monitoring.
Unlike previous waves, the most recent wave due to Omicron can be characterized by a decoupling between the number of cases, hospitalizations (particularly for intensive care) and deaths in many countries. However, data continue to show that those who are unvaccinated remain at higher risk of severe disease following infection with Omicron as compared to those who have been vaccinated. Despite the reduction in severity, the massive increases

in cases with Omicron have led to large numbers of hospitalizations, putting further pressure on healthcare systems, and in some countries, similar or higher numbers of deaths when compared to previous peaks.

While vaccine effectiveness (VE) wanes against Omicron for all disease outcomes as compared to other VOCs following the primary vaccination series, VE estimates for Omicron remain the highest for severe disease. Furthermore, there is evidence that a booster dose substantially improves VE for all outcomes; however, more data are needed to characterize the duration of this protection.
Over 11 billion vaccine doses have been distributed globally. Nevertheless, substantial inequities remain, with only 11% of those in low-income countries (LICs) having completed the primary series; and major differences among regions, with vaccination coverage ranging from 82% in the Western Pacific Region to 13% in the African Region. There is particular concern about reaching the most vulnerable populations who remain unvaccinated, particularly those of older age and those with comorbidities. Globally, an estimated 35% of those aged 60 years and over are awaiting completion of the primary vaccination series. Despite low vaccination coverage in the African Region, the most recent estimates of combined seroprevalence (vaccine and infection-derived humoral immune response) were 72.6% (95% CI: 71.7-73.5%). Considering the low vaccine coverage, such seroprevalence estimates highlight the extent of SARS-CoV-2 transmission across the Region.
WHO Emergency Use Listing (EUL) approved diagnostic tests, including nucleic acid amplification tests (e.g. polymerase chain reaction (PCR) assays) with more than one viral target or antigen-detection rapid diagnostic tests (Ag-RDTs), remain effective at detecting Omicron infection, including BA.1 and BA.2. WHO is concerned that during recent months, some countries have significantly reduced SARS-CoV-2 testing, despite widespread availability of diagnostic tests. Unless robust surveillance systems are retained, countries may lose the ability to accurately interpret epidemiological trends, implement the appropriate measures necessary to reduce transmission and monitor and assess the evolution of the virus.

Despite current high rates of transmission of SARS-CoV-2, many countries have dropped most PHSM without following a layered or staged approach to relaxation. This can lead to the erosion of public trust and PHSM may not be easily re-implemented should the future need arise, for example following the emergence of a new VOC.
Each country faces different circumstances based on the epidemiological situation and the context. WHO has published an updated Strategic Preparedness, Readiness and Response Plan to End the Global COVID-19 Emergency in 2022 which outlines future scenarios of COVID-19 and how the current strategy needs to be adjusted taking into account the difficulties posed by the pandemic in the light of the many other public health and global challenges. This is particularly apparent during other emergencies including the war in Ukraine and protracted conflicts in many other countries.

The confidence in the available information on the global public health risk remains moderate. There are still gaps in knowledge about the phenotypic impact of emerging SARS-CoV-2 variants and recombinants; the long-term duration of infection and vaccine-derived protection, particularly against severe disease and hospitalization; and the impact of lifting and changing PHSM on transmission, hospitalization and mortality.

Additional resources

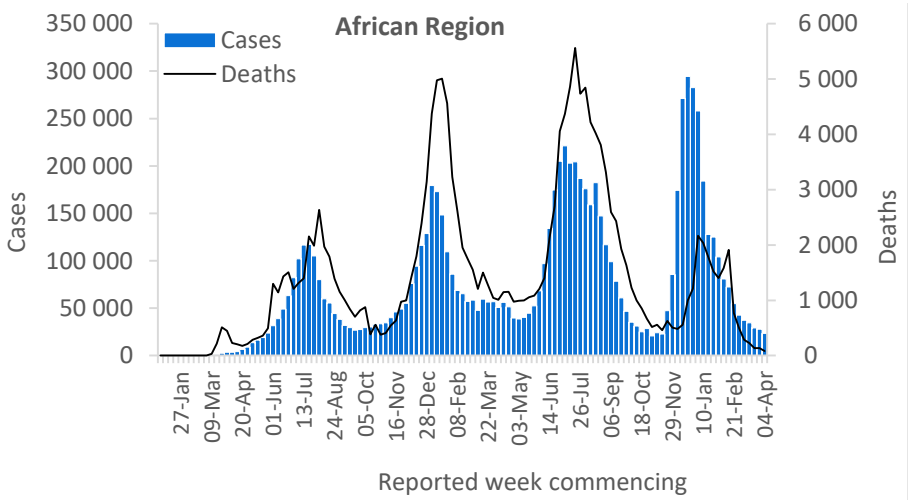
- Further information about the WHO risk assessment process
- COVID-19 IHR Emergency Committe

WHO regional overviews: Epidemiological week 4 – 10 April 2022*

African Region

The African Region has continued to report a decreasing trend in new cases since January 2022, with just under 23 000 new weekly cases reported, representing a 17% decrease as compared to the previous week. However, seven (14%) countries in the Region reported an increase of over 20% in cases, with some of the greatest proportional increases observed in Lesotho (58 vs 15 new cases; +287%), Mali (53 vs 23 new cases; +130%) and Mayotte (67 vs 52 new cases; +29%). The highest numbers of new cases were reported from Réunion (10 996 new cases; 1228.2 new cases per 100 000 population; +13%), South Africa (9182 new cases; 15.5 new cases per 100 000; -6%), and Seychelles (510 new cases; 518.6 new cases per 100 000; -1%).

The number of new weekly deaths in the Region decreased by 40% as compared to the previous week, with over 80 new deaths reported. The highest numbers of new deaths were reported from South Africa (50 new deaths; <1 new death per 100 000 population; -38%), Réunion (11 new deaths; 1.2 new deaths per 100 000; +57%), and Zimbabwe (11 new deaths; <1 new deaths per 100 000; +22%).

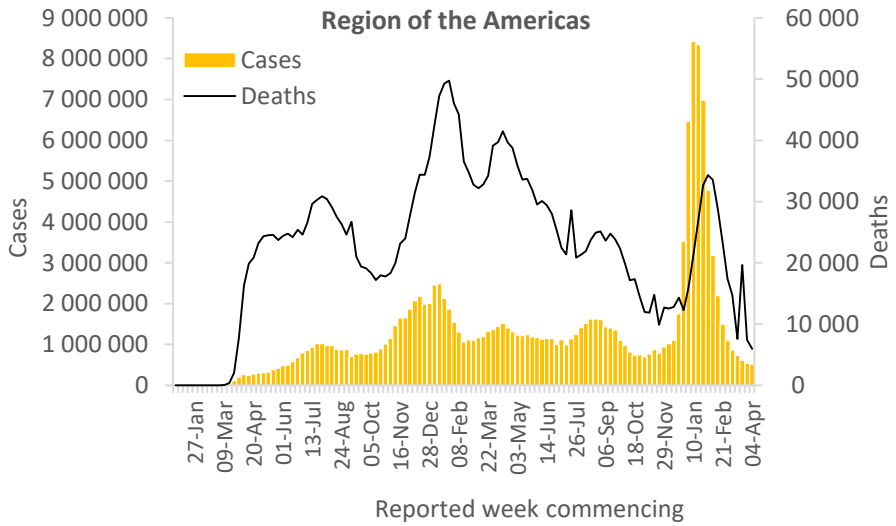


Updates from the African Region

Region of the Americas

With just over half a million new weekly cases and just below 6000 new weekly deaths (representing decreases of 4% and 19% respectively as compared to the previous week), the decreasing trend observed since mid-January 2022 has continued in the Region of the Americas. However, twelve (21%) countries in the Region reported increases in new cases of 20% or greater, including the United States Virgin Islands (108 vs 45 new cases; +140%), Sint Maarten (89 vs 41 new cases; +117%), Puerto Rico (4236 vs 2396 new cases; +77%) and Argentina (22468 vs 12894 new cases; +74%). The highest numbers of new cases were reported from the United States of America (208 732 new cases; 63.1 new cases per 100 000; +4%), Brazil (148 798 new cases; 70.0 new cases per 100 000; -14%), and Canada (60 099 new cases; 159.2 new cases per 100 000; +7%).

The highest numbers of new deaths were reported from the United States of America (3682 new deaths; 1.1 new deaths per 100 000; -9%), Brazil (1120 new deaths; <1 new death per 100 000; -22%), and Chile (308 new deaths; 1.6 new deaths per 100 000; -21%).

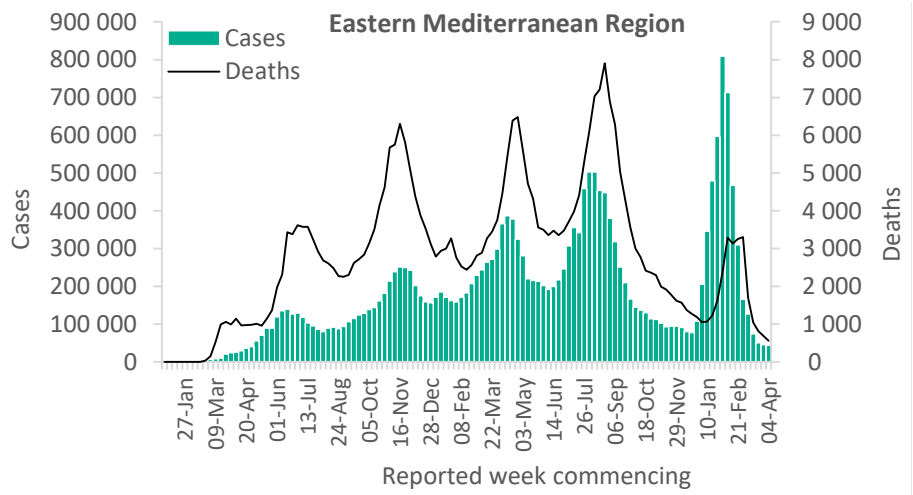


Updates from the Region of the Americas

Eastern Mediterranean Region

In the Eastern Mediterranean Region, new weekly cases have continued to decline since early February 2022. Just under 44 000 new weekly cases were reported last week, a 4% decrease as compared to the previous week. However, three (14%) countries in the Region have reported increases in new cases of 20% or greater, with the largest observed in the occupied Palestinian territory (537 vs 282 new cases; +90%) and the Islamic Republic of Iran (22378 vs 17582; +27%). The highest numbers of new cases were reported from the Islamic Republic of Iran (22 378 new cases; 26.6 new cases per 100 000; +27%), Egypt (3913 new cases; 3.8 new cases per 100 000; -11%), and Bahrain (3871 new cases; 227.5 new cases per 100 000; -26%).

The number of new weekly deaths in the Region decreased by 18% when compared to the previous week, with over 550 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (300 new deaths; <1 new death per 100 000; -2%), Tunisia (102 new deaths; <1 new death per 100 000; -35%), and Egypt (56 new deaths; <1 new death per 100 000; similar to the previous week's figures).

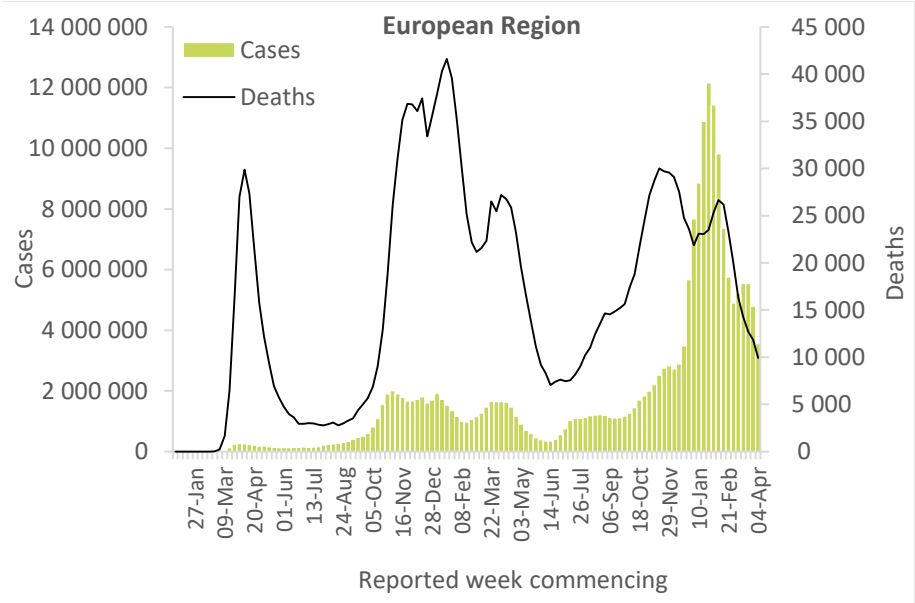


Updates from the Eastern Mediterranean Region

European Region

In the European Region, new weekly cases have continued to decline for a third consecutive week after the increase observed in mid-March 2022, with over 3.5 million new cases reported, a 26% decrease as compared to the previous week. None of the countries in the Region reported increases in new cases of 20% or greater. The highest numbers of new cases were reported from Germany (1 019 649 new cases; 1226.0 new cases per 100 000; -26%), France (927 073 new cases; 1425.4 new cases per 100 000; -3%), and Italy (447 322 new cases; 750.0 new cases per 100 000; -8%).

Also the number of new weekly deaths has continued to decrease in the Region, with over 9900 new deaths reported, a 16% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (2008 new deaths; 1.4 new deaths per 100 000; -15%), Germany (1686 new deaths; 2.0 new deaths per 100 000; +6%), and the United Kingdom (1026 new deaths; 1.5 new deaths per 100 000; -35%).

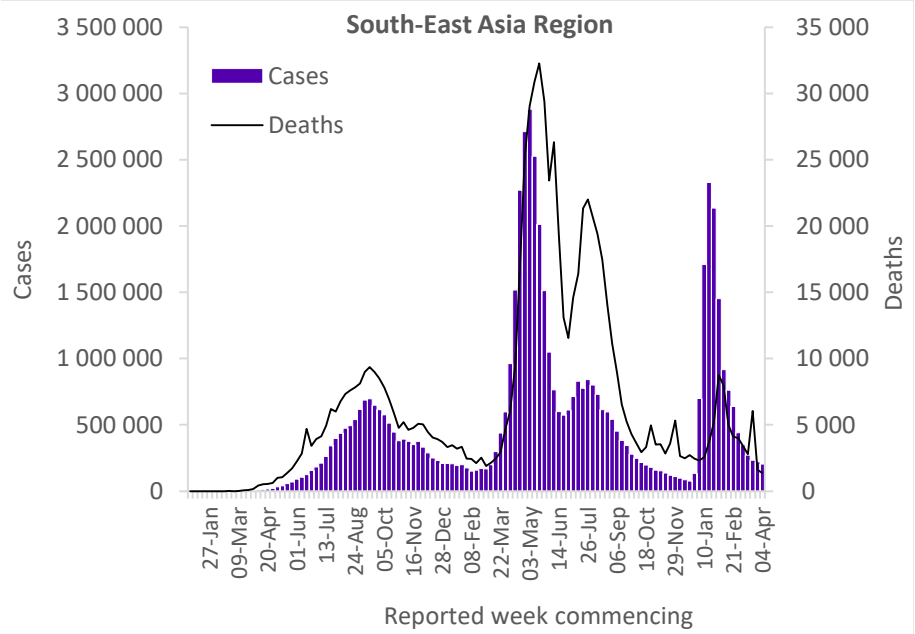


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 204 000 new weekly cases, an 8% decline as compared to the previous week, continuing the decreasing trend observed since mid-January 2022. However, Bhutan reported an increase in new weekly cases of 70% (10785 vs 6357 new cases). The highest numbers of new cases were reported from Thailand (171 890 new cases; 246.3 new cases per 100 000; -6%), Indonesia (12 726 new cases; 4.7 new cases per 100 000; -39%), and Bhutan (10 785 new cases; 1397.7 new cases per 100 000; +70%).

The Region reported just over 1300 new weekly deaths, representing a 15% decrease as compared to the previous week. The highest numbers of new deaths were reported from Thailand (668 new deaths; 1.0 new deaths per 100 000; +8%), India (340 new deaths; <1 new death per 100 000; similar to the previous week's figures), and Indonesia (338 new deaths; <1 new death per 100 000; -45%).

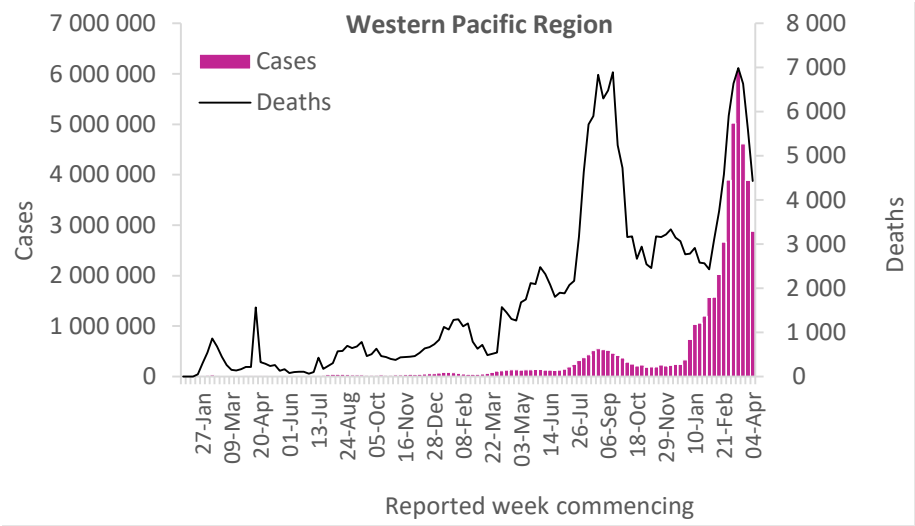


Updates from the South-East Asia Region

Western Pacific Region

After the peak reached in early March 2022, cases have continued to decline in the Western Pacific Region, with over 2.8 million new weekly cases reported, representing a 26% decrease as compared to the previous week. However, five (16%) countries in the Region reported an increase of 20% or greater, with some of the largest increases observed American Samoa (1208 vs 600 new cases; +101%), Samoa (1607 vs 917 new cases; +75%) and Fiji (67 vs 39 new cases; +72%). The highest numbers of new cases were reported from the Republic of Korea (1 459 454 new cases; 2846.6 new cases per 100 000; -29%), Viet Nam (453 647 new cases; 466.1 new cases per 100 000; -43%), and Australia (392 569 new cases; 1539.5 new cases per 100 000; -2%).

The number of new weekly deaths shows a decrease of 21% as compared to the previous week, with just under 4400 new deaths reported. The highest numbers of new deaths were reported from the Republic of Korea (2186 new deaths; 4.3 new deaths per 100 000; -6%), China (645 new deaths; <1 new death per 100 000; -33%), and the Philippines (406 new deaths; <1 new death per 100 000; -8%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.
Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.
'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purpose.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public: Protect yourself; Questions and answers; Travel advice

COVID-19 Weekly Epidemiological Update

Edition 86, published 5 April 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews

Global overview

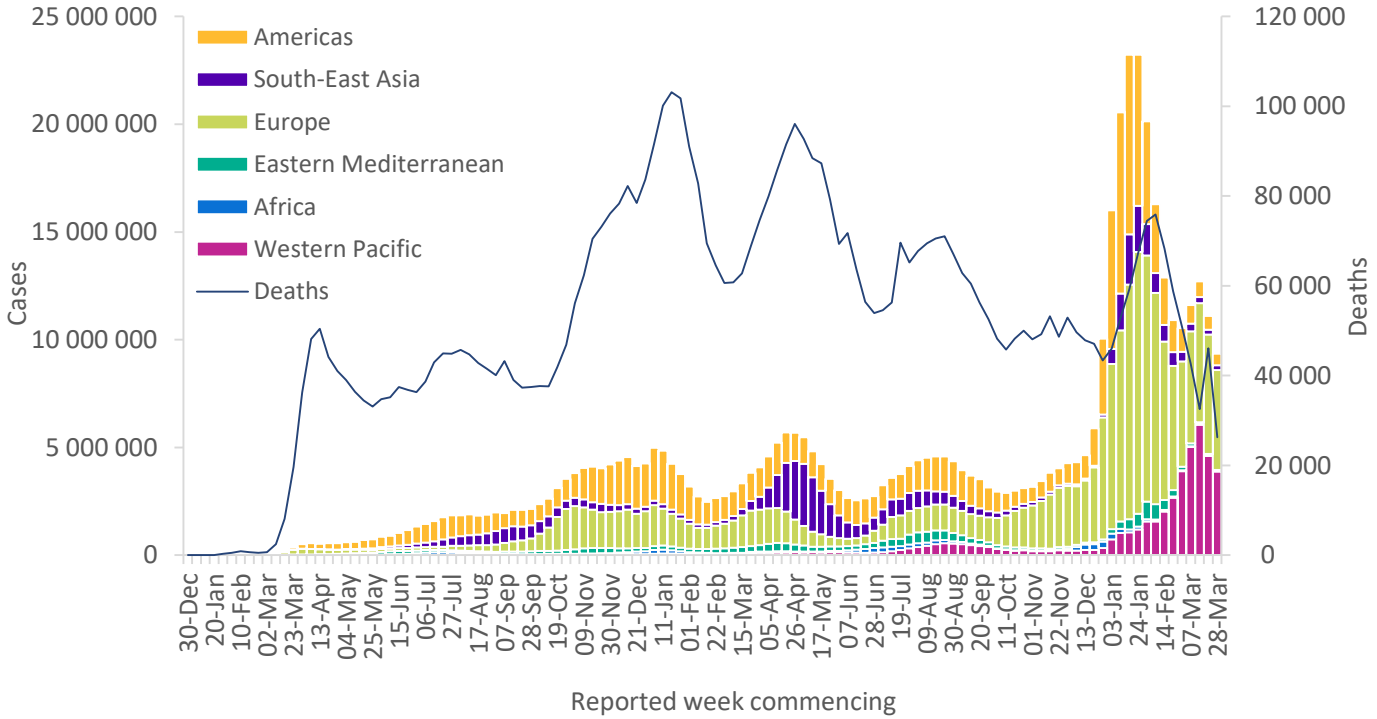
Data as of 3 April 2022

After the increase observed during the first half of March 2022, the number of new COVID-19 cases has decreased for a second consecutive week, with a 16% decline during the week of 28 March through 3 April 2022 as compared to the previous week (Figure 1). The number of new weekly deaths also decreased sharply (-43%) as compared to the previous week, when an artificial spike in deaths was observed (see WEU 85).

Across the six WHO regions, over nine million new cases and over 26 000 new deaths were reported. All regions reported decreasing trends both in the number of new weekly cases and new weekly deaths (Table 1). As of 3 April 2022, just over 489 million cases and over 6 million deaths have been reported globally.

These trends should be interpreted with caution as several countries are progressively changing their COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 3 April 2022**



**See *Annex 1: Data, table, and figure notes*

At the country level, the highest number of new weekly cases were reported from the Republic of Korea (2 058 375 new cases; -16%), Germany (1 371 270 new cases; -13%), France (959 084 new cases; +13%), Viet Nam (796 725 new cases; -29%), and Italy (486 695 new cases; -3%).

The highest number of new weekly deaths were reported from the United States of America (4 435 new deaths; -10%), the Russian Federation (2 357 new deaths; -18%), the Republic of Korea (2 336 new deaths; -5%), Germany (1 592 new deaths; +5%), and Brazil (1 436 new deaths; -19%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 3 April 2022**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	4 633 407 (50%)	-16%	203 782 791 (42%)	10 448 (40%)	-15%	1 943 512 (32%)
Western Pacific	3 888 889 (42%)	-16%	47 019 130 (10%)	5 592 (21%)	-16%	212 955 (3%)
Americas	538 114 (6%)	-15%	150 891 428 (31%)	7 822 (30%)	-61%	2 702 528 (44%)
South-East Asia	221 895 (2%)	-5%	57 195 752 (12%)	1 607 (6%)	-73%	779 475 (13%)
Eastern Mediterranean	45 545 (<1%)	-9%	21 586 380 (4%)	687 (3%)	-16%	340 735 (6%)
Africa	23 968 (<1%)	-19%	8 584 490 (2%)	129 (<1%)	-21%	171 115 (3%)
Global	**9 351 818 (100%)**	**-16%**	**489 060 735 (100%)**	**26 285 (100%)**	**-43%**	**6 150 333 (100%)**

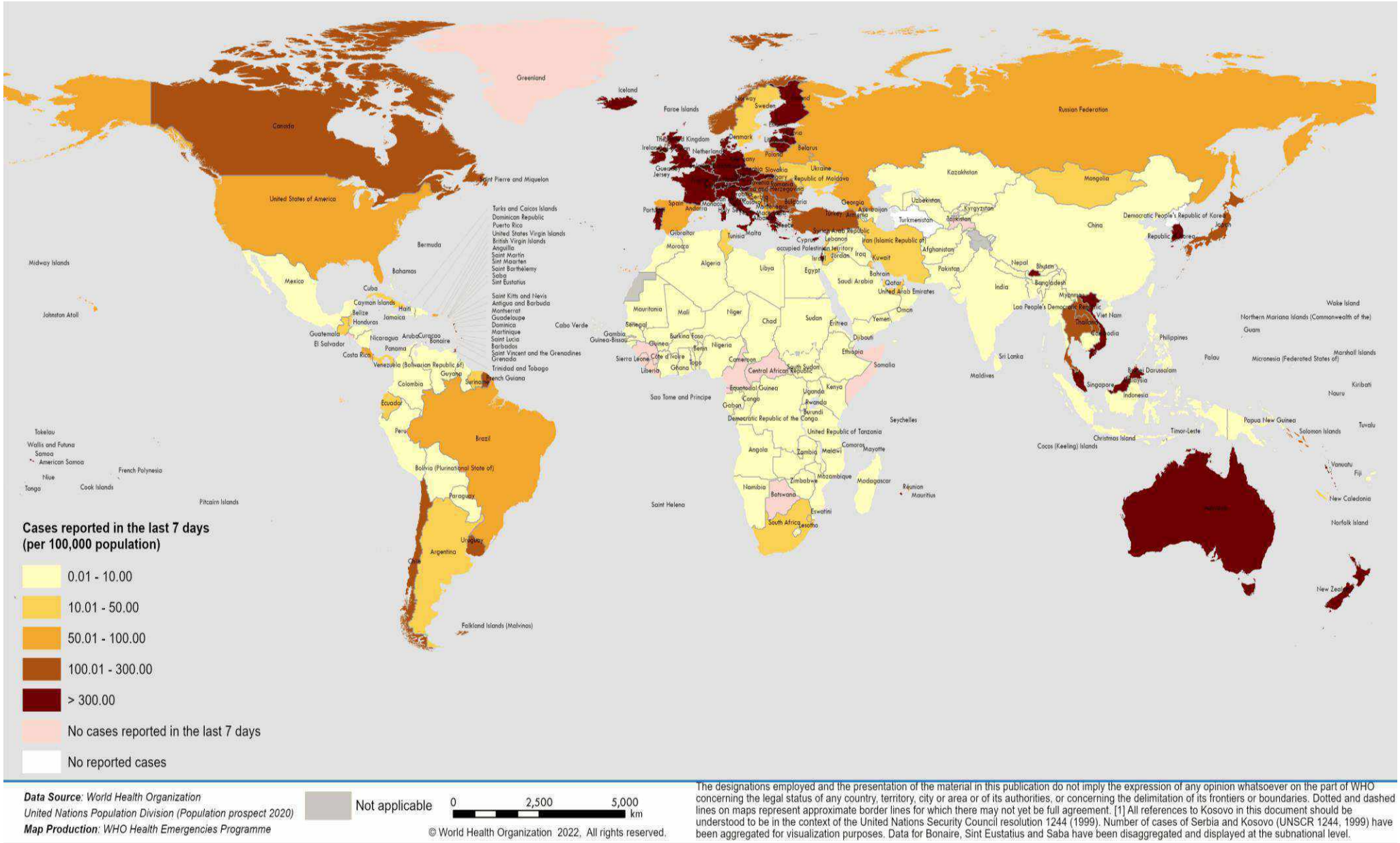
**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*

**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 28 March – 3 April 2022*



***Data Source**: World Health Organization*
United Nations Population Division (Population prospect 2020)
***Map Production**: WHO Health Emergencies Programme*

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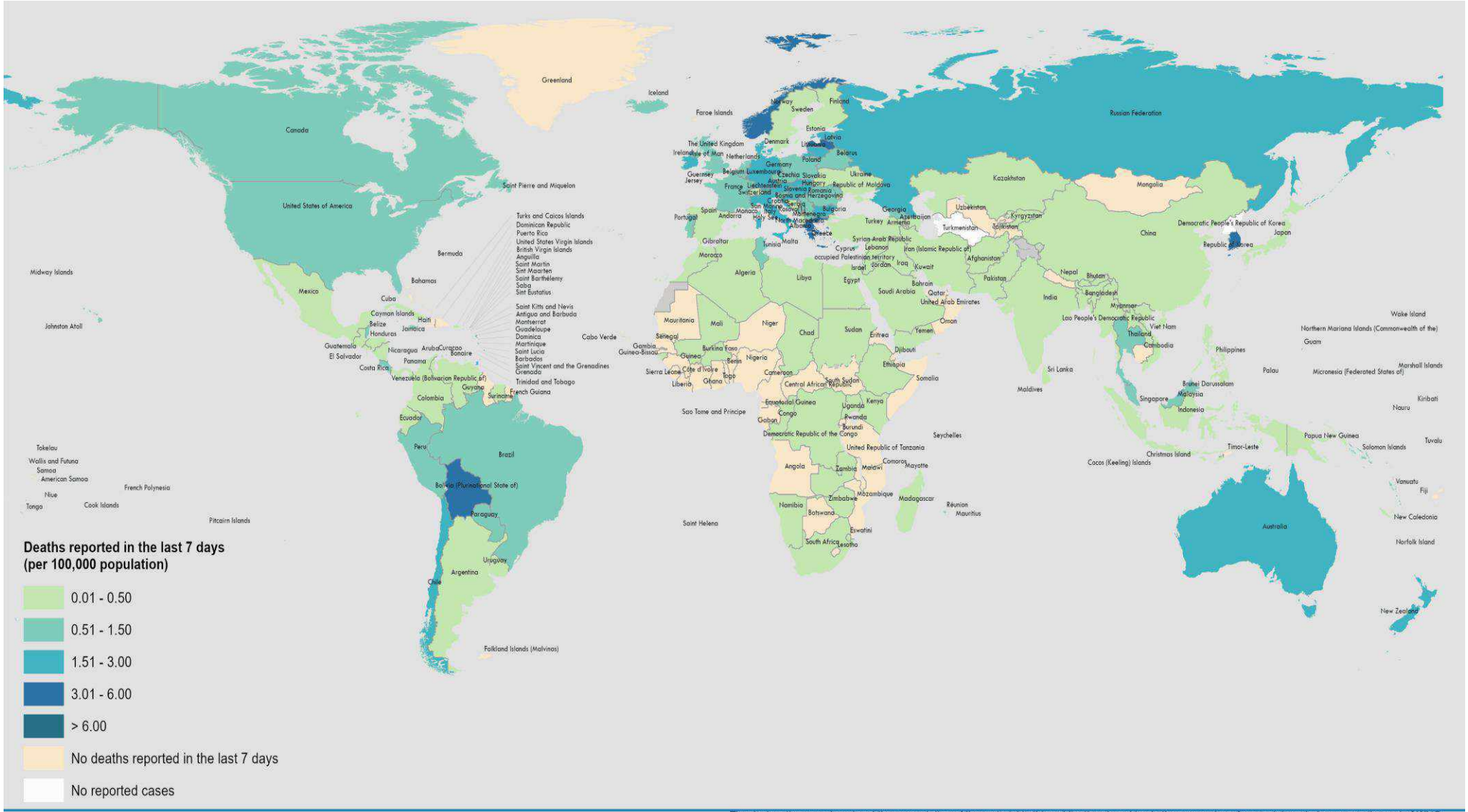
**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 28 March – 3 April 2022*



***Data Source**: World Health Organization*
United Nations Population Division (Population prospect 2020)
***Map Production**: WHO Health Emergencies Programme*

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**See *Annex 1: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health.

The classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are encouraged to investigate and report on the impacts of these variants. When referring to the genomic sequence of SARS-CoV-2 identified from the first cases (December 2019), the term 'index virus' should be used.

Geographic spread and prevalence of VOCs

The Omicron variant remains the dominant variant circulating globally, accounting for nearly all sequences recently reported to GISAID. Among the 417 147 sequences uploaded to GISAID with specimens collected in the last 30 days[i], 416 175 (99.8%) were Omicron, 141 (<0.1%) were Delta, and 562 sequences were not assigned to a Pango lineage (<0.2%). The total number of submitted Omicron sequences continues to decline, a trend observed for each of the Omicron descendent variants. Among the Omicron descendent lineages, the relative proportion of BA.2 has increased to 93.6%, while BA.1.1 accounts for 4.8% and BA.1 and BA.3 account for <0.1% (figure 4, panels A and B) of all Omicron lineages. BA.2 has become dominant in all six WHO regions (figure 4, panel C) and in 68 countries for which sequence data are available. However, there have been subregional differences in the rise of BA.2; notably in South America: BA.2 began to rise later and at a slower rate as compared to other subregions, accounting for 28% of Omicron lineages in week 11 (14 to 20 March 2022). These trends should be interpreted with due consideration of the limitations of surveillance systems, including differences in sequencing capacity and sampling strategies between countries, as well as laboratory turn-around times for sequencing and delays in reporting.

Figure 4. Global distribution and relative proportion of Omicron lineages for sequences submitted to GISAID presented by week of specimen collection

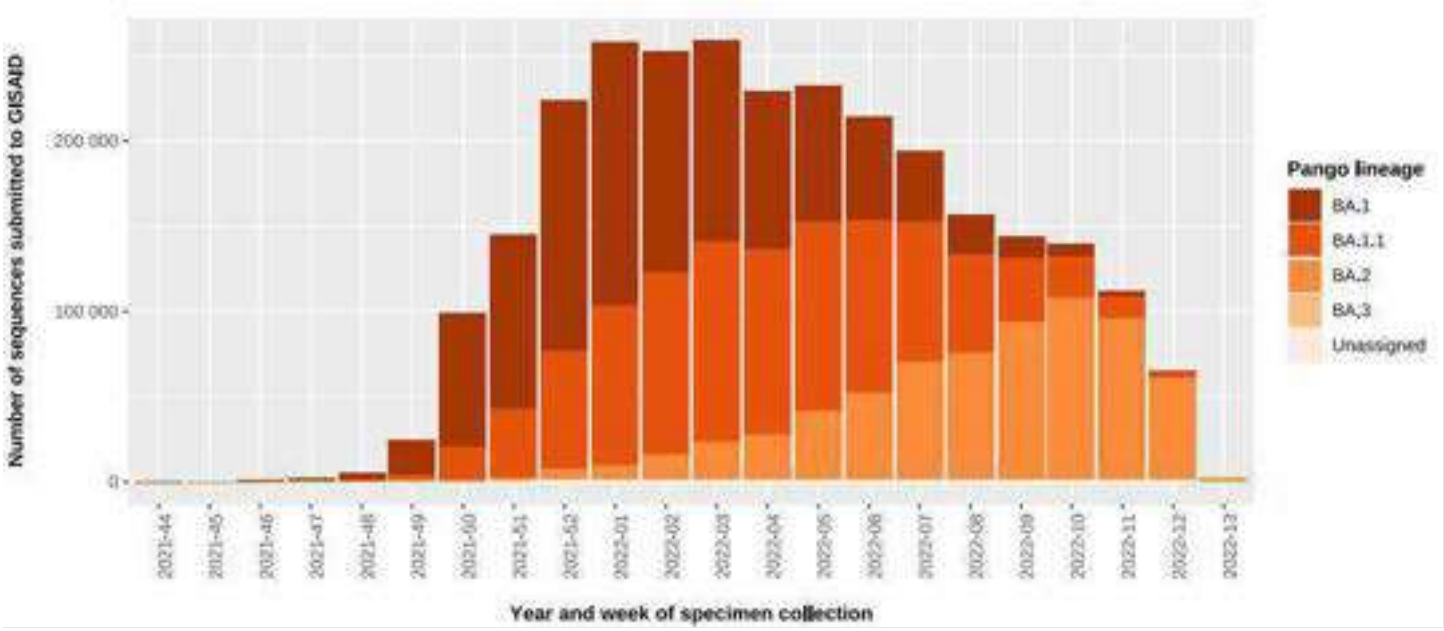
Panel A. Relative proportions of Omicron lineages over the last four weeks by week of specimen collection

				Overall (%)	Last 4 weeks by collection date (%)			
Lineage	Countries	Sequences[a]	SGTF[b]	Total	2022-10	2022-11	2022-12	2022-13
BA.1	174	1 124 247	95.93	39.56	5.51	3.18	1.57	0.94
BA.1.1	155	1 017 287	95.35	35.79	17.47	10.99	4.54	4.81
BA.2	114	693 654	0.24	24.41	76.56	85.38	93.44	93.63
BA.3	23	690	97.25	0.02	0.02	0.01	0.01	0.06
Unassigned	68	6 193	29.68	0.22	0.44	0.44	0.45	0.56

[a] Data source: sequences and metadata from GISAID
[b] Percentage of sequences with Spike H 69-70 deletion associated with S gene failure

[i] Includes sequences submitted to GISAID with sample collected dates from 02 to 31 March 2022 (last reported sample at the time of data extraction), excluding low coverage sequences. Proportions are estimated for countries submitting more than 100 total sequences. In the past 30 days, 45 countries submitted a total of 100 sequences and above on GISAID.

Panel B. Incidence of Omicron lineages by week of specimen collection.



Global distribution of Omicron lineages from sequences and metadata submitted to GISAID
Data was extracted from GISAID on 22 March 2022 at 14:00 CET; figures are correct at the time of printing

Panel C. Proportion of Omicron descendent lineage BA.2 since January 2021 by WHO region

	Omicron sequences			Proportion BA.2 by specimen collection week (%)												
WHO region	Total[a]	Weekly[b]	TAT[c]	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2022-13
Africa	8 742	574	28 days	12.03	17.40	38.74	37.66	45.07	59.90	76.59	86.25	83.33	79.09	91.18	88.24	
Eastern Mediterranean	1 297	147	38 days	30.31	33.14	32.77	12.93	16.67	45.58	44.32	40.82	50.00	100.00			
Europe	1 425 279	124 128	10 days	3.20	8.04	12.80	17.52	22.81	32.59	46.11	60.06	74.32	82.90	90.02	94.17	94.33
Americas	685 187	51 459	19 days	0.17	0.36	0.75	1.26	1.75	2.92	5.35	9.67	17.48	32.10	48.67	65.88	65.79
South-East Asia	47 348	4 132	27 days	52.48	57.87	47.99	58.62	78.47	82.90	82.48	79.28	86.14	85.16	94.16	93.10	
Western Pacific	89 145	5 302	29 days	5.20	4.40	6.55	10.65	14.72	21.07	30.22	40.97	49.87	70.58	81.66	92.14	93.10

[a] Total number of Omicron sequences in GISAID with specimen dates from 3 January 2022
[b] Median number of sequences per specimen week (excludes weeks with no Omicron sequences)
[c] Median number of days from specimen collection to sequence deposition in GISAID

Reduced number of SARS-CoV-2 sequences in publicly available database

Since the first epidemiological week of 2022, when the highest number of weekly sequences was reported in GISAID (284 061 sequences), the number of weekly sequences has declined progressively. During week 12 (21 to 27 March 2022), only 65 381 sequences were collected and submitted to GISAID. There has been an average of 12% reduction in the weekly collection and submission of sequences. While the decrease in sequences is consistent with the overall trend in new cases observed globally, it may also reflect changes in epidemiological surveillance policies in some countries, including changes in sampling and sequencing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Recombinants update

The SARS-CoV-2 virus continues to evolve. Given the current high level of transmission worldwide, it is likely that further variants, including recombinants, will continue to emerge. Recombination is common among coronaviruses and is regarded as an expected mutational event.

WHO is tracking recombinant variants, both recombinants of Delta (AY.4) and Omicron (BA.1) (e.g., XD Pango lineage), as well as recombinants of BA.1 and BA.2 (e.g., XE Pango lineage). The XD recombinant is being tracked as a VUM by WHO, although its spread appears to have remained limited at present (26 sequences in GISAID). Currently available evidence does not suggest that it is more transmissible than other circulating variants. The XE recombinant is being tracked as part of the Omicron variant. This recombinant was first detected in the United Kingdom on 19 January and approximately 600 sequences have been reported and confirmed as of 29 March 2022. Early estimates suggest that XE has a community growth rate advantage of 1.1 (which represents a 10% transmission advantage) as compared to BA.2; however, this finding requires further confirmation.

The evolution rate and the risk of the emergence of new variants, including recombinants, is still very high. The implementation of continuous, comprehensive and representative community sampling and sequencing strategies, alongside timely sharing of data by Member States, remain critical for tracking and understanding the behaviour of SARS-CoV-2 (see WEU 85). WHO continues to closely monitor and assess the public health risk associated with recombinant variants, alongside other SARS-CoV-2 variants, and will provide updates as further evidence becomes available.

Characteristics of Omicron

Available evidence on the phenotypic impacts of VOCs is reported in previous editions of the COVID-19 Weekly Epidemiological Update. Since the last update on 22 March 2022, there have been several new publications on the phenotypic characteristics of VOCs**,** including literature on Omicron (Table 2). Some of these studies have not been peer-reviewed and the findings must therefore be interpreted with due consideration of this limitation.

Table 2: Summary of current evidence on Omicron

Domain	Indicator	Main results
Epidemiology	Impact on disease prevalence/ incidence	Following an increase in the first half of March 2022, the number of new COVID-19 cases has decreased for a second consecutive week, with a 16% decline during the week of 28 March through 3 April 2022 as compared to the previous week. It is important to note that recent changes in testing policies may influence the number of reported cases. The Omicron variant is the dominant circulating variant globally, representing 99.8% of samples collected between 2 and 31 March 2022 (GISAID), while the Delta variant represents <0.1%. Among the Omicron Pango lineages, BA.2 is the most prevalent (93.6%), followed by BA.1.1 (4.8%), BA.1 and BA.3 account for <0.1%.
	Impact on transmission	In an updated analysis of GISAID data[1], Omicron continues to show a growth advantage over Delta in 67 countries with sufficient sequence data available up to 4 April 2022, translating to a pooled mean transmission advantage (i.e., relative difference in effective reproduction numbers) of 110% (95% CI: 90%-131%) across epidemiological contexts, under the assumption of an unchanged generation time (i.e., duration between the moment a person gets infected to the moment they infect another person). However, evidence for a reduced generation time of Omicron suggests the transmission advantage may be lower; for a 20% shorter generation time, the estimated pooled mean transmission advantage of Omicron over Delta is 91% (95% CI: 71%-112%). The same analysis yielded identical results to the previous iteration regarding the growth rate advantage of the Omicron Pango lineage BA.2 over the Pango lineage BA.1, with a pooled mean transmission advantage of 72% (95% CI: 55%-82%), under the assumption of an unchanged generation time. These estimates are stabilising as the cumulative number of Omicron sequences is increasing and data become available from more countries. An updated analysis published on 25 March 2022 by the United Kingdom Health Security Agency[2], which used data on samples collected between 15 December 2021 and 15 March 2022, supports BA.2 as having a higher growth rate compared to BA.1 (median: 75.3% per week).
	Impact on disease severity	Omicron has consistently been associated with lower severity when compared to Delta across different settings.[3–6] Although reported hospitalisation rates among children 0-4 years in the United States of America were about five times higher during periods of Omicron predominance compared to Delta predominance (14.5 vs. 2.9 per 100,000), length of hospital stay was shorter (2 vs 1.5 days, p = 0.002) and the proportion of children requiring ICU admissions was lower (27% vs 21%, p = 0.02) during Omicron predominance.[7] An updated analysis found no difference in the risk of hospitalisation between individuals infected with BA.1 compared to BA.2 (HR=0.94; 95% CI: 0.88-1.0) in the United Kingdom.[2]
Immune response	Impact on reinfection	Higher rates of reinfection have been reported for Omicron as compared to other SARS-CoV-2 variants. Reinfection with BA.2 following BA.1 has been associated with mild disease in Denmark [8] while in Qatar, previous infection with one of the Omicron Pango lineages was found to potentially confer protection against infection with other Omicron Pango lineages: 94.9% (95% CI: 88.4-97.8%) protection against BA.2 following infection with BA.1, and 85.6% (95% CI: 77.4-90.9%) protection against BA.1 following infection with BA.2.[9]

Domain	Indicator	Main results
	Impact on vaccination	Results of vaccine effectiveness (VE) studies should be interpreted with caution because estimates vary with the type of vaccine administered and the number of doses and scheduling (sequential administration of different vaccines). For further information, see the section Interpretation of the results of the VE for the Omicron variant.
	Impact on antibody responses	There are no new data on antibody responses to Omicron since the epidemiological update published on 22 March 2022. An analysis of neutralization data from 23 laboratories found a 20-fold reduction in neutralization associated with the Omicron variant.[10] These findings are consistent with results of recent studies that reported lower neutralising antibody titers to BA.1 and BA.2 compared to wild-type SARS-CoV-2 and similar responses for BA.1 and BA.2.[11,12] Another recent study found similar non-neutralising antibody responses to BA.1 and BA.2 in vaccinated individuals.[13] Overall, these results indicate similar humoral responses among BA.1 and BA.2.
Diagnostic tools	**Impact on PCR assays**	Most BA.2 sequences lack the 69-70 deletion responsible for S-gene target failure, with only a limited number of sequences (0.24% out of 693 654) having the 69-70 deletion (GISAID). Assessment of PCR tests for SARS-CoV-2 that include multiple gene targets predicted limited impact of the Omicron variant on the accuracy of these assays. [14,15]
	Impact on Rapid Diagnostic tests	Based on evidence from a recent study conducted in the United States of America, the sensitivity of Ag-RDT tests to detect Omicron compared to Delta and wild-type SARS-CoV-2 is similar.[16]
Impact on treatment	**Impact on antivirals**	Consistent with preliminary data showing no difference in the effectiveness of antiviral agents against the Omicron variant, a recent review reported similar efficacy of antiviral agents against Omicron and previous SARS-CoV-2 variants.[17]
	Impact on biologicals	Initially, studies on the effectiveness of monoclonal antibodies for treating patients with Omicron reported conserved neutralizing activity for three broadly neutralizing monoclonal antibodies (sotrovimab, S2X259 and S2H97) and a reduction in effectiveness of other monoclonal antibodies.[18–21] However, additional preclinical evidence shows reduced neutralizing activity of sotrovimab against the BA.2 Pango lineage and lack of efficacy of casirivimab-imdevimab against the BA.1 Omicron Pango lineage.[22]
	Other treatment options	There is no evidence available on the effectiveness of Interleukin-6 receptor blockers and corticosteroids for the management of severe patients with Omicron.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

Figure 5. Vaccine effectiveness (VE) of primary series and booster vaccination against the Delta variant of concern

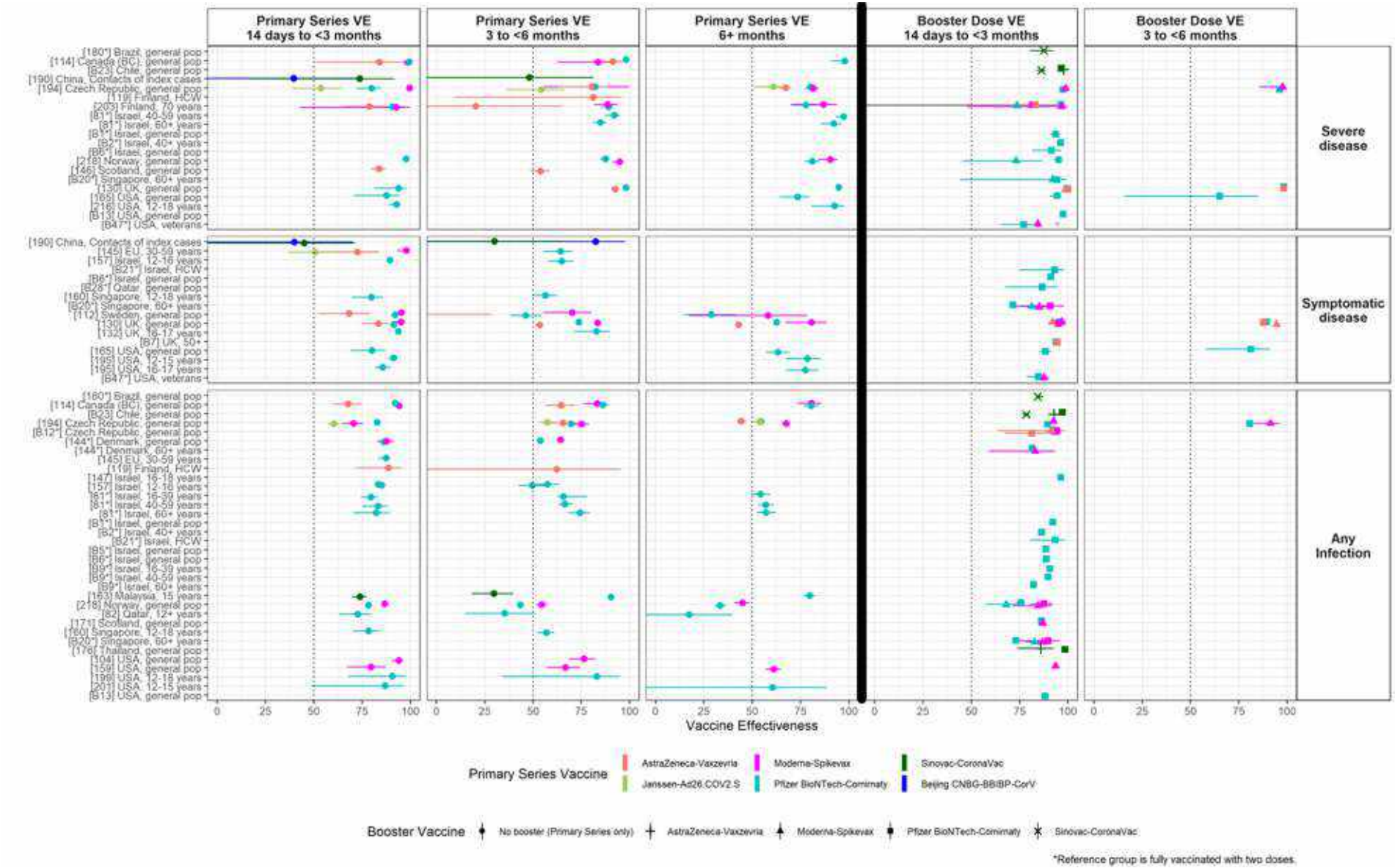
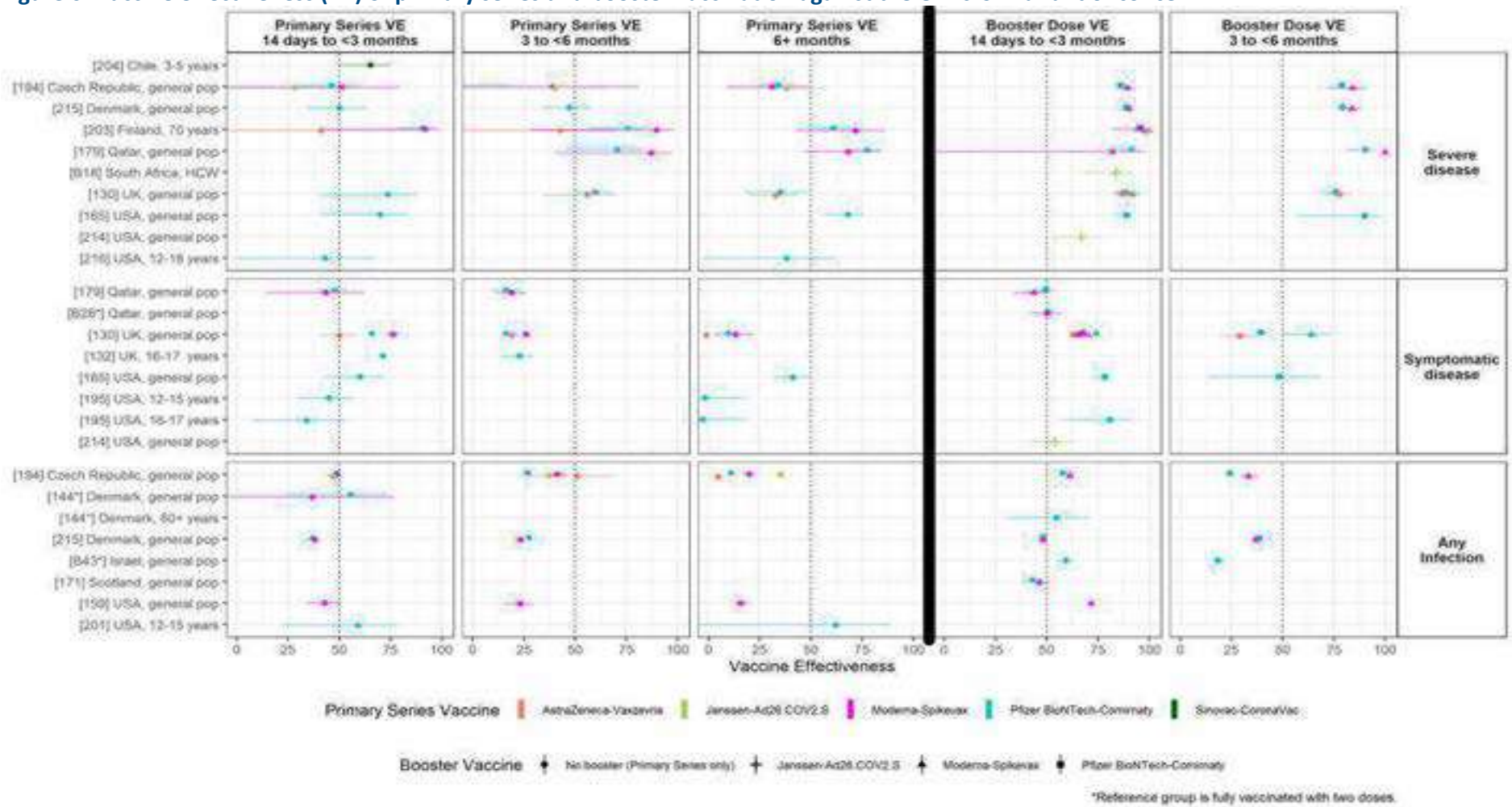


Figure 6. Vaccine effectiveness (VE) of primary series and booster vaccination against the Omicron variant of concern



*Indicates booster dose vaccine effectiveness evaluated using persons completing primary series as reference group, rather than unvaccinated persons. Abbreviations: pop=population; HCW=healthcare workers; EU=European Union. Dots represent point estimates of vaccine effectiveness; horizontal lines represent the 95% confidence intervals. Labels along left side of plot indicate reference numbers [], country, and study population. Reference numbers identify the study and link to the summary table of VE effectiveness studies on view-hub.org (Table 1 in summary table); references starting with a 'B' are studies found in the booster VE table only (Table 2 in summary table). Primary series refers to the completion of two doses of vaccines for AstraZeneca-Vaxzevria; Moderna-Spikevax, Pfizer BioNTech-Comirnaty and Sinovac-CoronaVac and one dose of Janssen-Ad26.COV2.S. Severe disease includes severe disease, hospitalization, and pneumonia; symptomatic disease includes disease of any severity level; any infection can include symptomatic and asymptomatic infection. Additional details on the methods for inclusion of the estimates in the plots provided in Annex 3. Note, three negative point estimates for the primary series are not shown in the Omicron plot: Moderna-Spikevax VE against symptomatic disease at 6+ months (reference 179) as well as Moderna-Spikevax and Pfizer BioNTech-Comirnaty VE against infection at 3-6 months (reference 144); one negative point estimate for primary series is not shown in the Delta plot: AstraZeneca-Vaxzevria VE against Delta symptomatic disease (reference 112) with 95% CIs crossing 0 is not fully visible in the plot.

Figures 5 and 6 summarize the impact of Delta and Omicron variants, respectively, on product-specific vaccine effectiveness (VE) over time for both primary series vaccines and booster vaccines. Since the last update, four new studies, one of which assessed VE against Delta, two of which assessed VE against Omicron, and one which also assessed VE against both Delta and Omicron, have been added to the figures.[23–26] Of the studies on Omicron, one peer-reviewed study provided new VE data on Janssen-Ad26.COV2.S[23], one (not yet peer-reviewed) on Moderna-Spikevax[24], and two (one not yet peer-reviewed) on Pfizer BioNTech-Comirnaty.[24,26] Additional information on vaccine performance against VOCs can also be found in Annex 4.

Interpretation of the results of the VE for the Omicron variant

To date, twelve studies reporting VE estimates against the Omicron variant show reduced protection of the primary series COVID-19 vaccines for all outcomes (*severe disease*, *symptomatic disease*, and *infection*) than has been observed for other VOCs. Importantly, VE estimates against the Omicron variant remain highest for *severe disease.* Booster vaccination substantially improves VE for all outcomes for all vaccine products. However, due to the short follow-up time, more data are needed to characterize the duration of VE following a booster dose for all outcomes.

For protection against *severe disease*, within the first three months of primary series vaccination, four of eight (50%) VE estimates for the mRNA vaccines (Moderna-Spikevax and Pfizer BioNTech-Comirnaty) were ≥70%; while only two VE were available for vector vaccines (AstraZeneca-Vaxzevria and Janssen-Ad26.COV2.S), both of which reported a VE of <50%. Beyond three months after the primary series vaccination, six of 17 (35%) VE estimates for the mRNA vaccines and none of the five available VE estimates for the vector vaccines were ≥70%. A booster dose improved VE against *severe disease* in all 12 studies, with only one estimate for Janssen-Ad26.COV2.S being <70% between 14 days and three months of receipt of a booster dose (17 VE estimates evaluated an mRNA booster dose and two estimates evaluated a booster dose of Janssen-Ad26.COV2.S). At three to six months post mRNA booster dose, all nine available estimates showed VE ≥70%, including six studies in which an mRNA vaccine was given as the primary series and three studies in which AstraZeneca-Vaxzevria was given as the primary series.

Initial VE estimates against *symptomatic disease* and *infection* tended to be lower than against severe disease, and VE decreased more substantially over time. For *symptomatic disease* within the first three months of primary series vaccination, two of eight (25%) VE estimates for the mRNA vaccines were ≥70%, and the single VE estimate for the AstraZeneca-Vaxzevria was <70%. Beyond three months after vaccination, none of the 14 VE estimates were ≥50% (12 estimates evaluated mRNA vaccines and two evaluated AstraZeneca-Vaxzevria). An mRNA booster dose after completion of a primary series of an mRNA vaccine or a vector vaccine improved VE against *symptomatic disease,* with four of 13 (31%) VE estimates of ≥70%, and 11 of 13 (85%) VE estimates of ≥50% between 14 days and three months post booster. However, booster dose protection appeared to decline over time since vaccination, with one of four (25%) available estimates indicating a VE of ≥50% at three to six months following receipt of an mRNA booster dose. VE against *infection* showed a similar pattern as that against *symptomatic disease*.

Interpretation of the results of the VE for the Delta variant

To date, 41 studies contribute evidence of the effectiveness of COVID-19 vaccines against disease and infection due to the Delta variant. VE estimates against Delta are substantially higher as compared to those against Omicron and decline more gradually over time for symptomatic disease and infection. There are only slight declines over time for VE estimates against severe disease caused by Delta.

For *severe disease* outcomes with the Delta variant within the first three months of vaccination with the primary series, all 10 available VE estimates for the mRNA vaccines (Moderna-Spikevax and Pfizer BioNTech-Comirnaty) and four of five

(80%) VE estimates for the vector vaccines (AstraZeneca-Vaxzevria and Janssen-Ad26.COV2.S) were ≥70%. In addition, one of the two available VE estimates for the inactivated vaccines (Beijing CNBG-BBIBP-CorV and Sinovac-CoronaVac), from a study among a high risk population of close contacts of Delta index cases, was ≥70%.[27] Beyond three months after vaccination, all of the 23 available VE estimates for the mRNA vaccines, and five of the 10 (50%) VE estimates for the vector vaccines, were ≥70%. A booster dose improved VE against *severe disease,* with all 25 VE estimates being ≥70% between 14 days and three months of receipt of a booster dose (22 estimates evaluated an mRNA booster, one evaluated a booster dose of AstraZeneca-Vaxzevria, and one evaluated a booster dose of Sinovac-CoronaVac). Between three and six months post mRNA booster, four of five (80%) estimates showed a VE of ≥70%.

For *symptomatic disease* and *infection*, initial VE estimates tended to be lower than against severe disease, and VE estimates decreased more significantly over time. Nonetheless, for *symptomatic disease* outcomes within the first three months of vaccination with the primary series, all 11 available VE estimates for the mRNA vaccines were ≥70%; two of four (50%) VE estimates for the vector vaccines were ≥70%. Both VE estimates for the inactivated vaccines among the high-risk group of close contacts of Delta index cases were <50%. Beyond three months after vaccination, seven of 15 (47%) VE estimates for the mRNA vaccines and none of the three VE estimates for AstraZeneca-Vaxzevria were ≥70%. An mRNA booster dose after completion of a primary series of an mRNA vaccine or AstraZeneca-Vaxzevria restored VE against *symptomatic disease* to ≥70% in all studies (18 VE estimates) within three months of a booster dose. This persisted across six months post booster dose, with all the four VE estimates ≥70%. Limited data were available for VE of inactivated vaccines against symptomatic disease, though a similar pattern was seen with VE estimates of inactivated vaccines against *infection* over time: the single VE estimate within the first three months of completion for Sinovac-CoronaVac was ≥70%, which declined to <50% between three to six months; however, a booster dose with various platforms following Sinovac-CoronaVac primary series restored VE to ≥70% in all studies (six VE estimates) within the first three months of receipt of any booster dose.

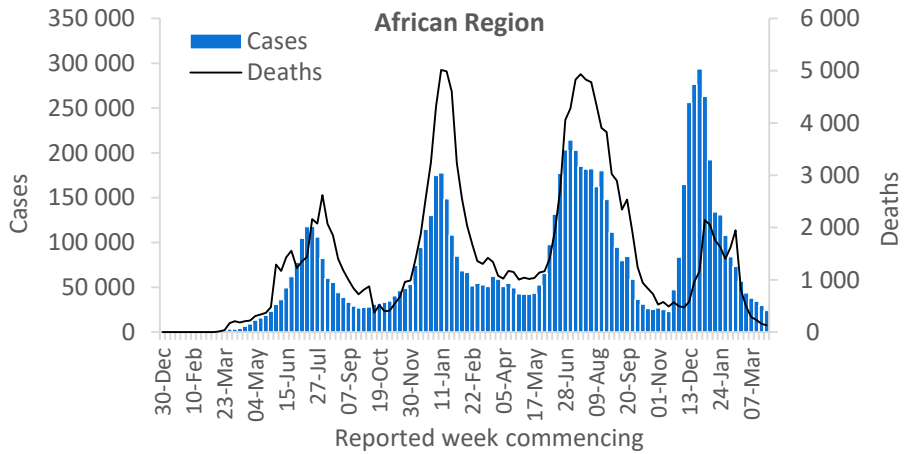
WHO regional overviews:

Epidemiological week 28 March – 3 April 2022**

African Region

The African Region has continued to report a decreasing trend in weekly cases since January 2022, with just under 24 000 new weekly cases reported, representing a 19% decrease as compared to the previous week. However, nine (18%) countries in the Region reported an increase of over 20% in cases, with some of the greatest proportional increases observed in Mauritania (39 vs 4 new cases; +875%), Seychelles (442 vs 206 new cases; +115%) and Namibia (97 vs 63 new cases; +54%). The highest numbers of new cases were reported from South Africa (9802 new cases; 16.5 new cases per 100 000 population; +10%), Réunion (9756 new cases; 1089.7 new cases per 100 000; +15%), and Mauritius (794 new cases; 62.4 new cases per 100 000; -90%).

The number of new weekly deaths in the Region decreased by 21% as compared to the previous week, with over 100 new deaths reported. The highest numbers of new deaths were reported from South Africa (81 new deaths; <1 new death per 100 000 population; -6%), Ethiopia (12 new deaths; <1 new death per 100 000; +300%), and Zimbabwe (9 new deaths; <1 new death per 100 000; -18%).

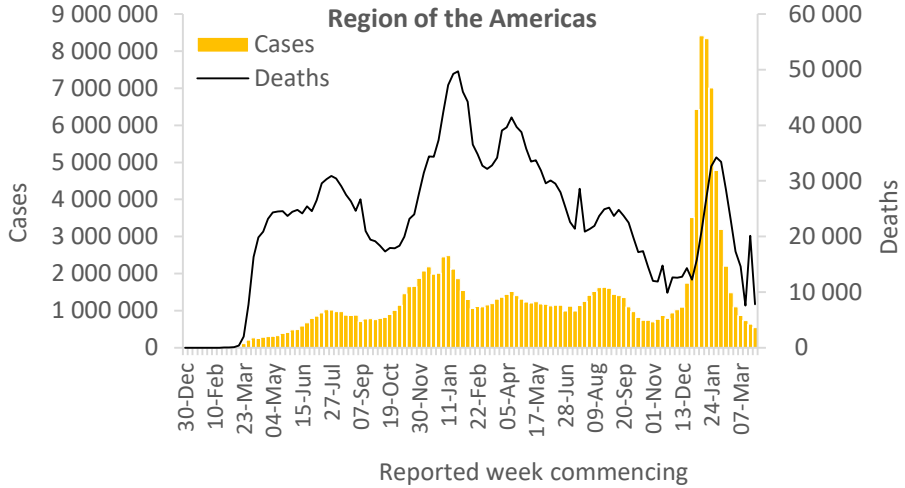


Updates from the African Region

Region of the Americas

The Region of the Americas has also been reporting a decreasing trend in weekly cases since mid-January 2022, with over 538 000 new weekly cases reported, corresponding to a 15% decrease as compared to the previous week. However, thirteen (23%) countries in the Region reported increases in new cases of 20% or greater, with the largest increases observed in Saba (55 vs 3 new cases; +1733), Aruba (123 vs 26 new cases; +373) and Saint Barthélemy (186 vs 78 new cases; +139%). The highest numbers of new cases were reported from the United States of America (205 433 new cases; 62.1 new cases per 100 000; +2%), Brazil (172 908 new cases; 81.3 new cases per 100 000; -25%) and Canada (48 853 new cases; 129.4 new cases per 100 000; +16%).

The number of new weekly deaths decreased by 61% as compared to the previous week, when an artificial spike was observed due to changes in the definition of COVID-19 deaths in Chile and in the United States of America. The highest numbers of new deaths were reported from the United States of America (4435 new deaths; 1.3 new deaths per 100 000; -10%), Brazil (1436 new deaths; <1 new death per 100 000; -19%), and Bolivia (Plurinational State of) that shows a sharp increase in deaths due to backlog reporting (408 new deaths; 3.5 new deaths per 100 000; +8060%).

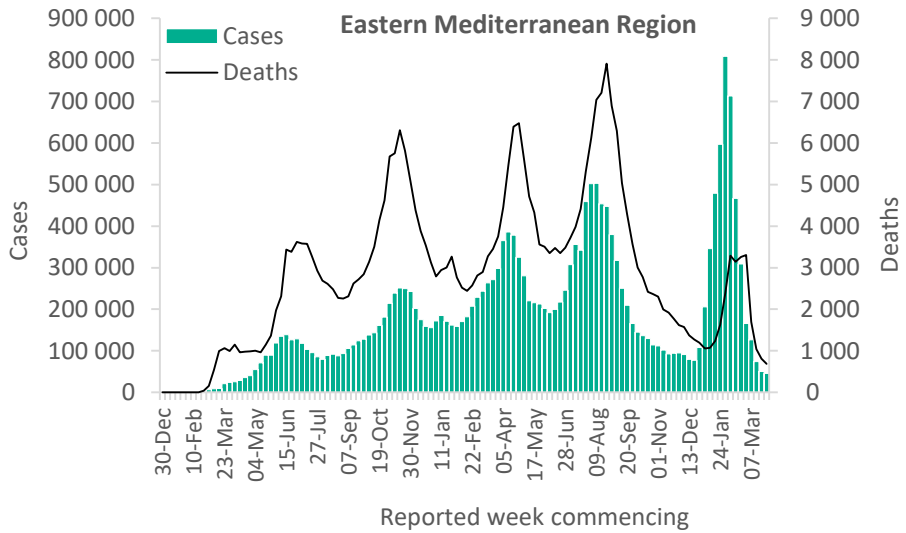


Updates from the Region of the Americas

Eastern Mediterranean Region

In the Eastern Mediterranean Region, new weekly cases have continued to decline after reaching a peak in early February 2022. Just over 45 000 new weekly cases were reported last week, a 9% decrease as compared to the previous week. However, two (9%) countries in the Region have reported increases in new cases of 20% or greater: Islamic Republic of Iran) (17 582 vs 9572 new cases; +84%) and Iraq (2379 vs 1956 new cases; +22%). The highest numbers of new cases were reported from the Islamic Republic of Iran (20.9 new cases per 100 000), Bahrain (5198 new cases; 305.5 new cases per 100 000; -20%) and Egypt (4375 new cases; 4.3 new cases per 100 000; -21%).

The number of new weekly deaths in the Region decreased by 16% when compared to the previous week, with just over 600 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (306 new deaths; <1 new death per 100 000; -27%), Tunisia (158 new deaths; 1.3 new deaths per 100 000; +58%), and Egypt (56 new deaths; <1 new death per 100 000; -33%).

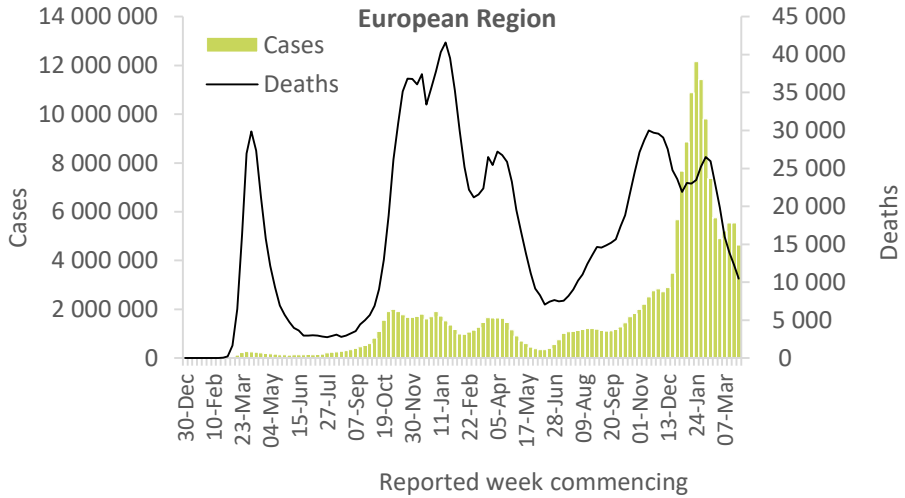


Updates from the Eastern Mediterranean Region

European Region

After the increase in cases observed in the European Region during the first half of March 2022, new weekly cases have decreased for the second consecutive week (-16% as compared to the previous week), with over 4.6 million new cases reported. Four (7%) countries in the Region reported increases in new cases of 20% or greater, with the largest observed in Malta (4243 vs 2434 new cases; +74%), Uzbekistan (212 vs 165 new cases; +28%) and Kyrgyzstan (89 vs 70 new cases; +27%). The highest numbers of new cases were reported from Germany (1 371 270 new cases; 1648.8 new cases per 100 000; -13%), France (959 084 new cases; 1474.6 new cases per 100 000; +13%) and Italy (486 695 new cases; 816.0 new cases per 100 000; -3%).

The number of new deaths has continued to decrease in the Region, with over 10 000 new deaths reported this week, a 15% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (2357 new deaths; 1.6 new deaths per 100 000; -18%), Germany (1592 new deaths; 1.9 new deaths per 100 000; +5%), and Italy (966 new deaths; 1.6 new deaths per 100 000; -4%).

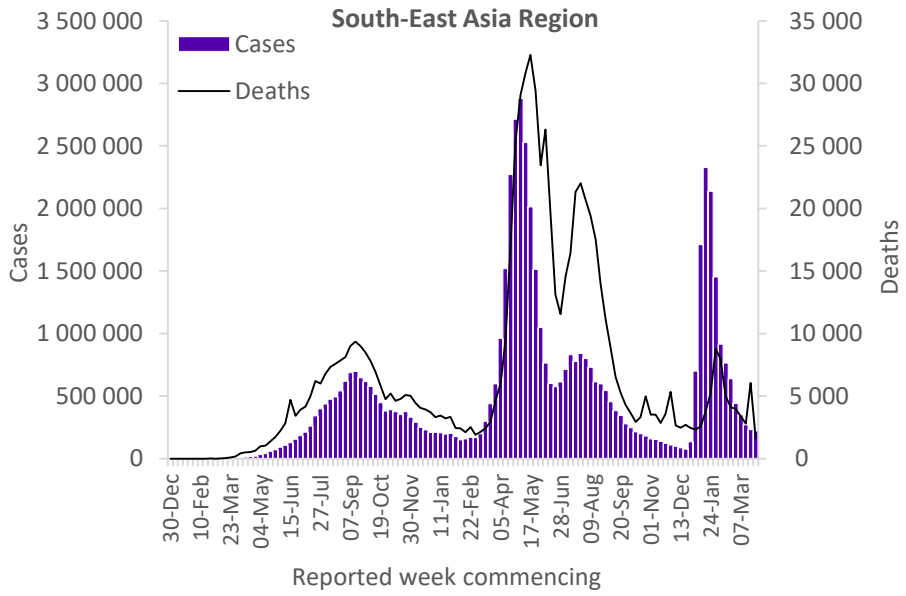


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 221 000 new weekly cases, a 5% decline as compared to the previous week, continuing the decreasing trend observed since mid-January 2022. However, Bhutan reported an increase in new weekly cases of 107% (6357 vs 3076 new cases). The highest numbers of new cases were reported from Thailand (182 510 new cases; 261.5 new cases per 100 000; +4%), Indonesia (21 028 new cases; 7.7 new cases per 100 000; -42%), and India (8678 new cases; <1 new case per 100 000; -25%).

The Region reported just over 1600 new weekly deaths, representing a 73% decrease as compared to the previous week, when an artificial spike was observed due to retrospective adjustments reported from India. The highest numbers of new deaths were reported from Indonesia (618 new deaths; <1 new death per 100 000; -34%), Thailand (616 new deaths; <1 new death per 100 000; +11%), and India (341 new deaths; <1 new death per 100 000; -92%).

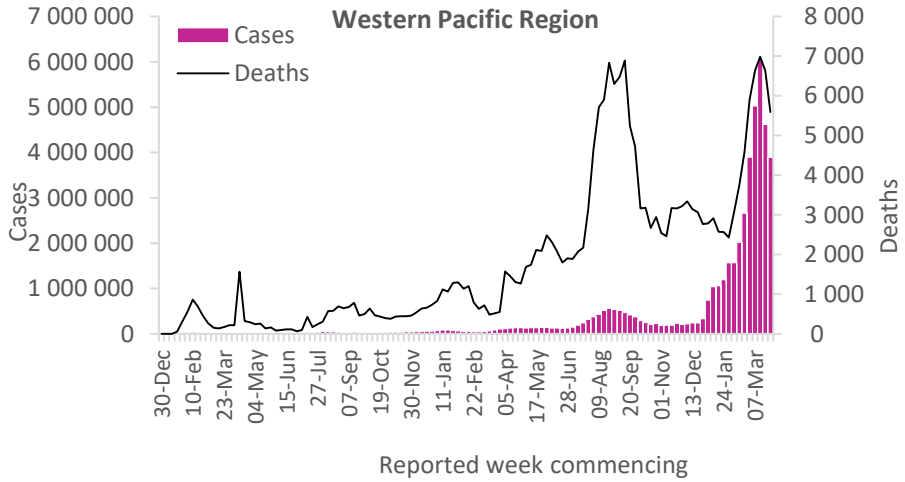


Updates from the South-East Asia Region

Western Pacific Region

After the increasing trend in new cases observed in the Western Pacific Region since the end of December 2021, new weekly cases declined for a second consecutive week (-16% as compared to the previous week), with over 3.8 million new cases reported. However, seven (23%) countries in the Region reported an increase of 20% or greater, with some of the largest increases observed in Mongolia (1628 vs 622 new cases reported; +162%), Solomon Islands (1044 vs 668 new cases; +56%) and Cook Islands (828 vs 554 new cases; +49%). The highest numbers of new cases were reported from the Republic of Korea (2 058 375 new cases; 4014.8 new cases per 100 000; -16%), Viet Nam (796 725 new cases; 818.5 new cases per 100 000; -29%), and Australia (399 479 new cases; 1566.6 new cases per 100 000; +9%).

The number of new weekly deaths shows a decrease of 16% as compared to the previous week, with just under 5600 new deaths reported. The highest numbers of new deaths were reported from the Republic of Korea (2336 new deaths; 4.6 new deaths per 100 000; -5%), China (960 new deaths; <1 new death per 100 000; -34%), and Japan (549 new deaths; <1 new death per 100 000; -16%).



Updates from the Western Pacific Region

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.
Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.
'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Annex 2. Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. Likewise, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection.
- Annex 4 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than 4 months post final dose.
- Studies reporting VOC-specific VE estimates for full vaccination (≥7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca-Vaxzevria for infection (when a phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).

- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Neutralization studies that use samples collected >7 days and < 6 months after complete vaccination and that use an ancestral strain as the reference are included in the Table

Annex 3. Methods for Figures 5 and 6

Figures include fourteen studies from the Czech Republic, Denmark, Finland, Israel, Qatar, South Africa, the United Kingdom, and the United States of America evaluating the VE against the Omicron variant, and 31 studies of the VE against the Delta variant from various countries from the European Region, Region of the Americas, and South-East Asia Region as well as Qatar and Thailand.

VE studies included in the plot were identified from an ongoing systematic review of COVID-19 vaccine effectiveness studies. All studies were cohort or test-negative studies. Methods for the systematic review and inclusion/exclusion criteria are available on view-hub.org. The studies were conducted during a period when either Delta or Omicron was the predominant circulating variant. Estimates were included if they were of laboratory-confirmed cases of the Omicron or Delta variant. In addition, for the primary series VE, only studies providing VE estimates for discrete time intervals since vaccination, which evaluate changes in VE over time, are included. For the primary series VE, estimates are only included in the plot for studies that report VE for more than one time period.

Annex 4. Summary of Primary Series Vaccine Performance against Variants of Concern *(VE data as of 31 March 2022; Neutralization data as of 28 March 2022)*

	WHO Emergency Use Listing (EUL) Qualified Vaccines[+]								Vaccines without WHO EUL[+]	
	AstraZeneca-Vaxzevria/ SII - Covishield	Beijing CNBG-BBIBP-CorV	Bharat-Covaxin	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Novavax-Nuvaxovid/ SII - Covavax	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Gamaleya-Sputnik V
Alpha, Beta, Gamma										
Summary of VE*	*(see update from 11 January 2022 for details of vaccine performance against Alpha, Beta, and Gamma variants of concern*									
Delta[28]										
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection									
- Severe disease	↔$_{3}$	-	-	↓$_{1}$	↔$_{4}$	-	↔$_{7}$	-	-	-
- Symptomatic disease	↔to↓↓$_{6}$	-	↓$_{1}$	-	↔$_{2}$	-	↔to↓$_{5}$	-	-	-
- Infection	↔to↓$_{5}$	-	-	↓↓↓$_{1}$	↔$_{6}$	-	↔to↓$_{7}$	-	-	-
Neutralization	↓$_{15}$	↔to↓$_{3}$	↔to↓$_{4}$	↔to↓↓$_{11}$	↓$_{15}$	-	↔to↓$_{41}$	↓to↓↓$_{10}$	↔to↓$_{2}$	↓to↓↓↓$_{3}$
Omicron										
Summary of VE*	Reduced protection against infection and symptomatic disease; possible reduced protection against for severe disease but limited evidence									
- Severe disease	-	-	-	-	↓/↓↓$_{1}$	-	↓↓/↓↓↓$_{3}$	-	-	-
- Symptomatic disease	↓↓↓$_{1}$	-	-	-	↓↓/↓↓↓$_{2}$	-	↓↓↓$_{2}$	-	-	-
- Infection	↓↓↓$_{1}$	-	-	-	↓↓↓$_{3}$	-	↓↓↓$_{3}$	-	-	-
Neutralization	↓↓↓$_{7}$	↔to↓↓↓$_{3}$	↓↓$_{1}$	↔to↓↓↓$_{4}$	↓↓↓$_{18}$	-	↓↓↓$_{38}$	↓↓to↓↓↓$_{5}$	-	↓↓$_{1}$

VE refers to vaccine effectiveness and vaccine efficacy. *Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10 percentage point (pp) reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20 pp reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30 pp reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30 pp reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study. The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources Library. References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table.

Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. Likewise, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection.
- Annex 4 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than four months post final dose.
- Studies reporting VOC-specific VE estimates for full vaccination (seven days and over after the final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca-Vaxzevria for infection (where a phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Neutralization studies that use samples collected more than seven days and less than six months after complete vaccination and that use an ancestral strain as the reference are included in Annex 4

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public: Protect yourself; Questions and answers; Travel advice

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COVID-19 Weekly Epidemiological Update

Edition 85, published 29 March 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews

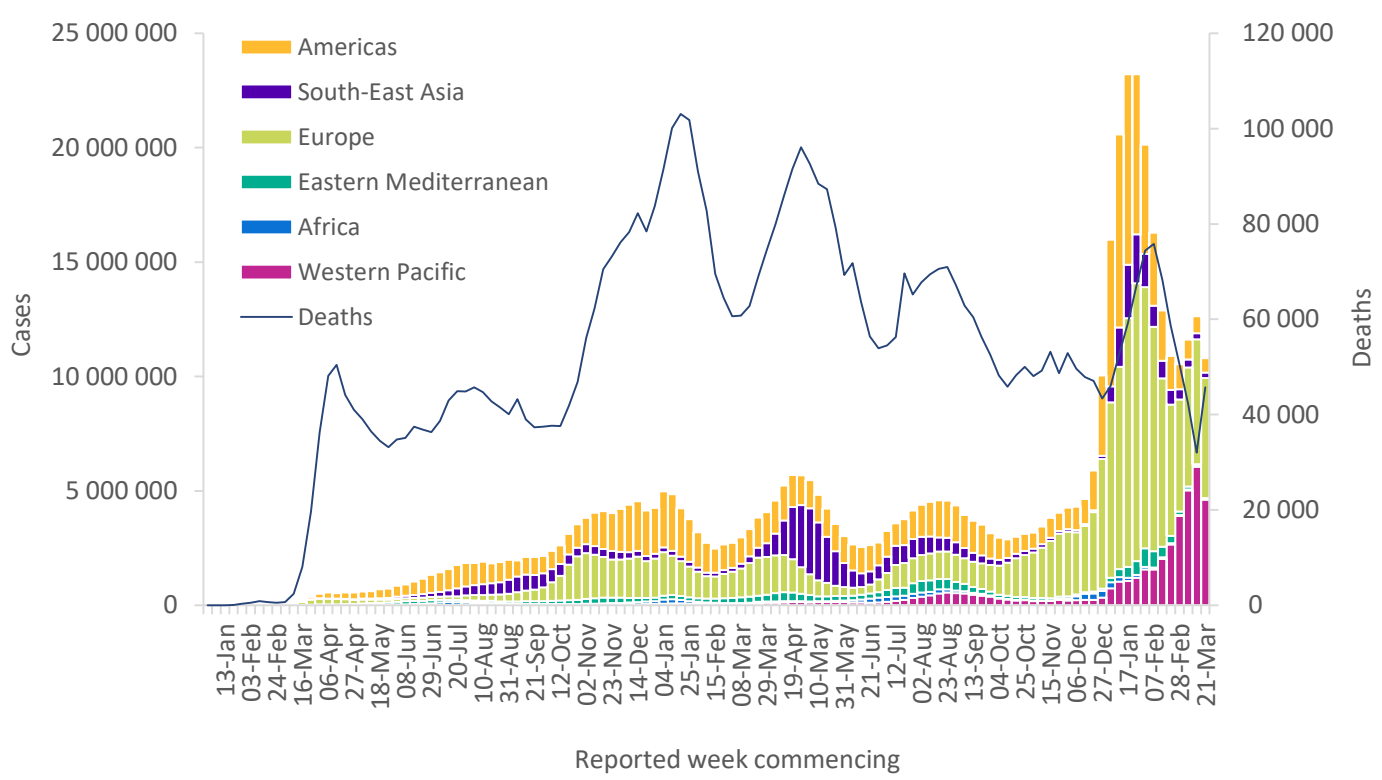
Global overview

Data as of 27 March 2022

Between the end of January and early March 2022, there was a decreasing trend in the number of new COVID-19 cases, which was followed by two consecutive weeks of increases in cases. During the week of 21 through 27 March 2022, the number of new cases declined again with a 14% decrease as compared to the previous week (Figure 1). On the other hand, during the same period, the number of new weekly deaths increased by 43%, likely driven by changes in the definition of COVID-19 deaths in some countries in the Region of the Americas (Chile and the United States of America) and by retrospective adjustments reported from India in the South-East Asia Region.

Across the six WHO regions, over 10 million new cases and over 45 000 new deaths were reported. All regions reported decreasing trends in the number of new weekly cases and four regions reported a decreasing trend in new weekly deaths (Table 1). As of 27 March 2022, over 479 million confirmed cases and over 6 million deaths have been reported globally.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 27 March 2022**



**See *Annex 2: Data, table, and figure notes*

At the country level, the highest number of new weekly cases were reported from the Republic of Korea (2 442 195 new cases; -13%), Germany (1 576 261 new cases; +2%), Viet Nam (1 127 716 new cases; -40%), France (845 119 new cases; +45%), and Italy (503 932 new cases; +6%).

The highest number of new weekly deaths were reported from Chile (11 858 new deaths; +1710%), the United States of America (5 367 new deaths; +83%), India (4 525 new deaths; +619%), the Russian Federation (2 859 new deaths; -22%), and the Republic of Korea (2 471 new deaths; +22%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 27 March 2022**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	5 247 550 (49%)	-4%	198 772 221 (41%)	11 320 (25%)	-17%	1 931 515 (32%)
Western Pacific	4 615 737 (43%)	-24%	43 133 218 (9%)	6 633 (15%)	-5%	207 363 (3%)
Americas	634 618 (6%)	-14%	150 335 637 (31%)	20 737 (45%)	182%	2 694 328 (44%)
South-East Asia	232 702 (2%)	-14%	56 973 754 (12%)	6 046 (13%)	116%	777 868 (13%)
Eastern Mediterranean	50 199 (0%)	-32%	21 540 822 (4%)	811 (2%)	-22%	340 045 (6%)
Africa	24 326 (0%)	-29%	8 555 173 (2%)	164 (0%)	-30%	170 986 (3%)
Global	**10 805 132 (100%)**	**-14%**	**479 311 589 (100%)**	**45 711 (100%)**	**43%**	**6 122 118 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 2: Data, table, and figure notes*

The trends reported above should be interpreted with caution as several countries are progressively changing their COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected. Despite a generalized decline in the rate of SARS-CoV-2 testing observed across the six WHO regions, the number of new weekly cases increased again in early to mid-March, indicating that the virus is currently circulating at very high levels.

WHO is concerned about the recent significant reduction in SARS-CoV-2 testing by several Member States. Data are becoming progressively less representative, less timely, and less robust. This inhibits our collective ability to track where the virus is, how it is spreading and how it is evolving: information and analyses that remain critical to effectively end the acute phase of the pandemic.

Decreases in testing, unless done judiciously as part of a strategy aimed at maintaining robust surveillance where it is most impactful, may affect the capacity of countries to identify cases and enable their timely treatment or isolation, and implement other necessary control measures, with the consequent risk of increased spread of SARS-CoV-2.

This may translate in an increase in hospitalizations and deaths, and significant strains on healthcare systems, particularly in areas where public health and social measures have been lifted and where vaccination coverage

against COVID-19 is low. Furthermore, reduced testing impacts the capacity of countries to detect emerging variants early, ultimately impairing response efforts.

COVID-19 remains a Public Health Emergency of International Concern, and it is too early to reduce the quality of surveillance. The uncertainty around the characteristics of emerging variants limits our ability to confidently predict the behavior of this disease, as the evolution rate and risk of emerging variants are still high, which could undermine prevention and mitigation measures.

Until we reach the end of the acute phase of the pandemic, countries must maintain sufficient epidemiologic surveillance to inform evidence-based operational decision-making on crucial parameters, including vaccination strategies, vaccine composition, use of therapeutics, and tailored and appropriate public health and social measures.

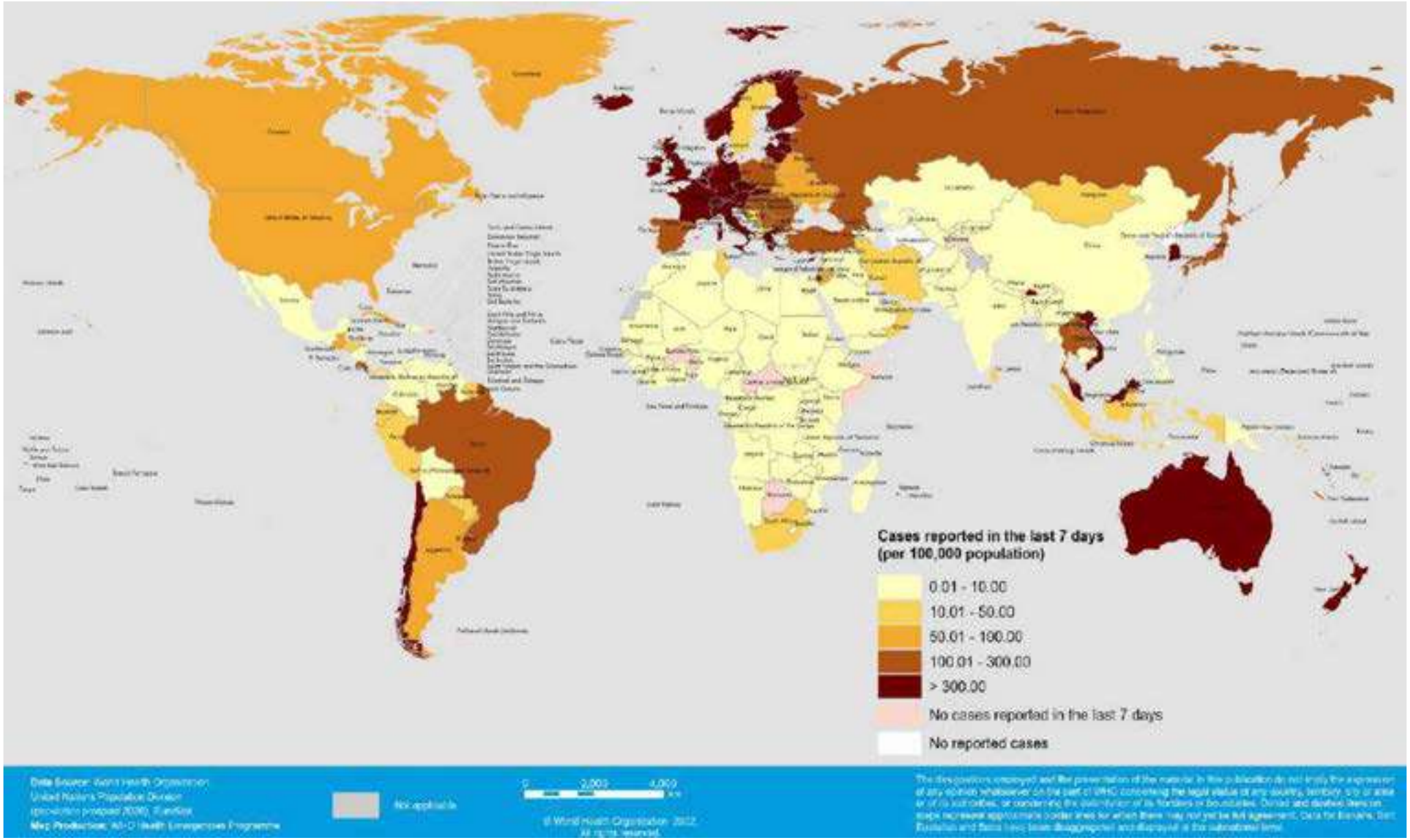
At this stage of the pandemic, WHO recommends that Member States:

- Continue representative testing financially accessible to all, providing useable and timely epidemiological evidence on the circulation of SARS-CoV-2;
- Focus on early warning and trend monitoring, which could alert to a change in the transmission dynamics of SARS-CoV-2;
- Continue with the daily tracking and reporting of cases and deaths for the duration of the acute phase of the pandemic;
- Monitor severity of COVID-19 in vulnerable groups;
- Enhance genomic surveillance to detect variants, and monitor the evolution of SARS-CoV-2.

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 21-27 March 2022*



**See *Annex 2: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 21-27 March 2022**

**See *Annex 2: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

The current global epidemiology of SARS-CoV-2 is characterized by the global dominance of the Omicron variant. Among the 382 789 sequences uploaded to GISAID with specimens collected in the last 30 days[i], 381 824 (99.7%) were Omicron, 175 (<0.1%) were Delta, and 649 sequences were not assigned to a Pango lineage (0.2%).
To note, the global distribution of VOCs should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting. In addition, some countries may have changed their testing and sequencing policies during the presented period.

Recombinant variants

The same process of risk assessment is applied to recombinant variants as for any other emerging variant. Since the epidemiological update published on 22 March 2022, no new evidence indicates that the recombinant variant assigned XD Pango lineage (Delta-Omicron) is associated with higher transmissibility or more severe outcomes. The XE recombinant (BA.1-BA.2), was first detected in the United Kingdom on 19 January and >600 sequences have been reported and confirmed since. Early-day estimates indicate a community growth rate advantage of ~10% as compared to BA.2, however this finding requires further confirmation. XE belongs to the Omicron variant until significant differences in transmission and disease characteristics, including severity, may be reported. WHO continues to closely monitor and assess the public health risk associated with recombinant variants, alongside other SARS-CoV-2 variants, and will provide updates as further evidence becomes available.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

[i] Includes sequences submitted to GISAID with sample collected dates from 23 February to 24 March 2022 (last reported sample at the time of data extraction), excluding low coverage sequences. Proportions are estimated for countries submitting more than 100 total sequences. In the past 30 days, 44 countries submitted a total of 100 sequences and above on GISAID.

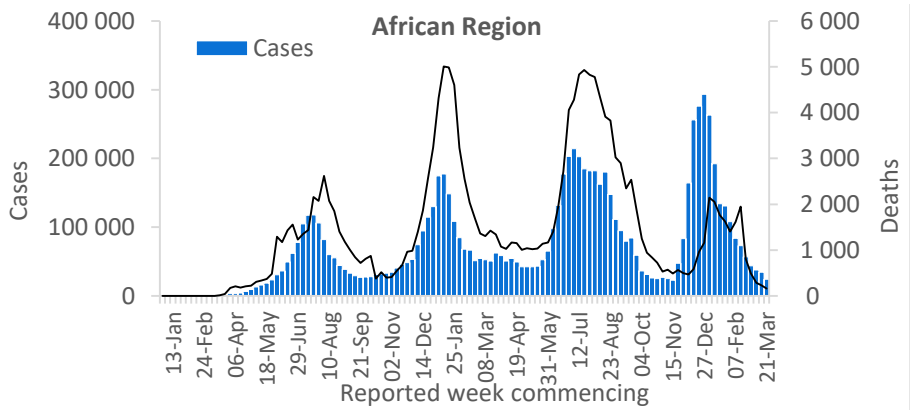
WHO regional overviews:

Epidemiological week 21-27 March 2022**

African Region

The decreasing trend observed in the African Region since January 2022 continues, with over 24 000 new weekly cases reported, representing a 29% decrease as compared to the previous week. However, fourteen (29%) countries in the Region reported an increase of over 20% in cases, with some of the greatest proportional increases observed in Equatorial Guinea (101 vs 4 new cases; +2425%), Lesotho (105 vs 59 new cases; +78%), and Rwanda (71 vs 48 new cases; +48%). The highest numbers of new cases were reported from South Africa (8934 new cases; 15.1 new cases per 100 000 population; -9%), Réunion (8494 new cases; 948.7 new cases per 100 000; similar to the previous week's figures), and Mauritius (2410 new cases; 189.5 new cases per 100 000; -77%).

The number of new weekly deaths in the Region decreased by 30% as compared to the previous week, with over 150 new deaths reported. The highest numbers of new deaths were reported from South Africa (86 new deaths; <1 new death per 100 000 population; -49%), Mauritius (34 new deaths; 2.7 new deaths per 100 000 population; similar to the previous week's figures, and Réunion (13 new deaths; 1.5 new deaths per 100 000; +44%).

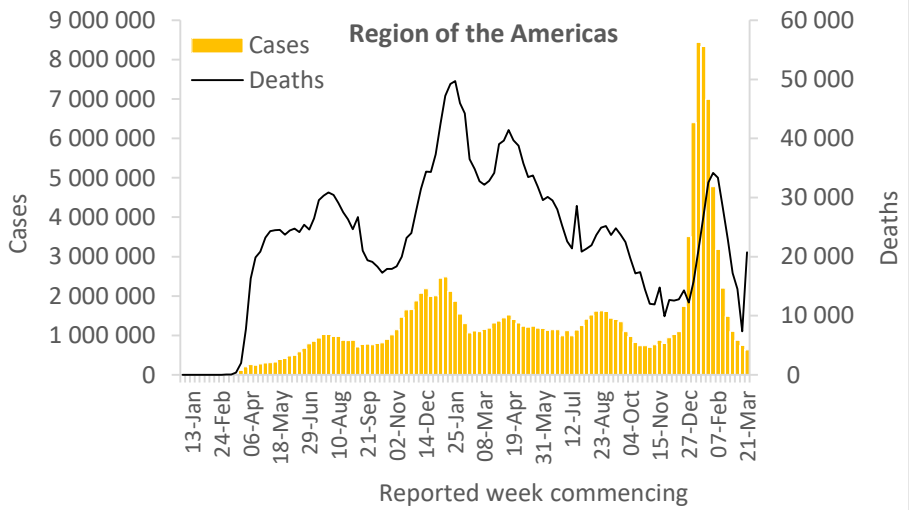


Updates from the African Region

Region of the Americas

The Region of the Americas has been reporting a decreasing trend since mid-January 2022, with over 634 000 new weekly cases reported, corresponding to a 14% decrease as compared to the previous week. However, eleven (20%) countries in the Region reported increases in new cases of 20% or greater, with the greatest increases observed in the islands of Sint Eustatius (142 vs 13 new cases; +992%), Anguilla (39 vs 20 new cases; +95%) and Saint Pierre and Miquelon (577 vs 298 new cases; +94%). The highest numbers of new cases were reported from Brazil (229 145 new cases; 107.8 new cases per 100 000; -15%), the United States of America (207 093 new cases; 62.6 new cases per 100 000; -6%), and Chile (61 337 new cases; 320.9 new cases per 100 000; -36%).

The Region reported over 20 000 new weekly deaths, a 182% increase as compared to the previous week, which was partly due to changes in the definition of COVID-19 deaths in Chile and in one state in the United States of America. The highest numbers of new deaths were reported from Chile (11 858 new deaths; 62.0 new deaths per 100 000; +1710%), the United States of America (5367 new deaths; 1.6 new deaths per 100 000; +83%), and Brazil (1768 new deaths; <1 new death per 100 000; -21%).

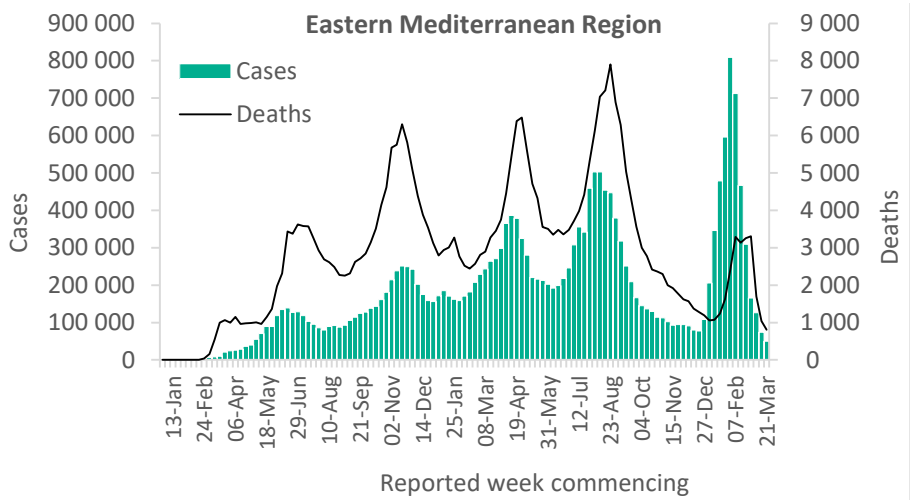


Updates from the Region of the Americas

Eastern Mediterranean Region

In the Eastern Mediterranean Region, new weekly cases have continued to decline following a peak reached in early February 2022. Just over 50 000 new weekly cases were reported, a 32% decrease as compared to the previous week. However, two (9%) countries in the Region have reported increases in new cases of 20% or greater: Tunisia (3969 vs 534 new cases; +643%) and occupied Palestinian territory (1088 vs 718 new cases; +52%). The highest numbers of new cases were reported from the Islamic Republic of Iran (9572 new cases; 11.4 new cases per 100 000; -51%), Jordan (9135 new cases; 89.5 new cases per 100 000; -64%), and Bahrain (6527 new cases; 383.6 new cases per 100 000; -14%).

The number of new weekly deaths in the Region decreased by 22% when compared to the previous week, with just over 800 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (421 new deaths; <1 new death per 100 000; -41%), Tunisia (100 new deaths; <1 new death per 100 000; +426%), and Egypt (84 new deaths; <1 new death per 100 000; -20%).

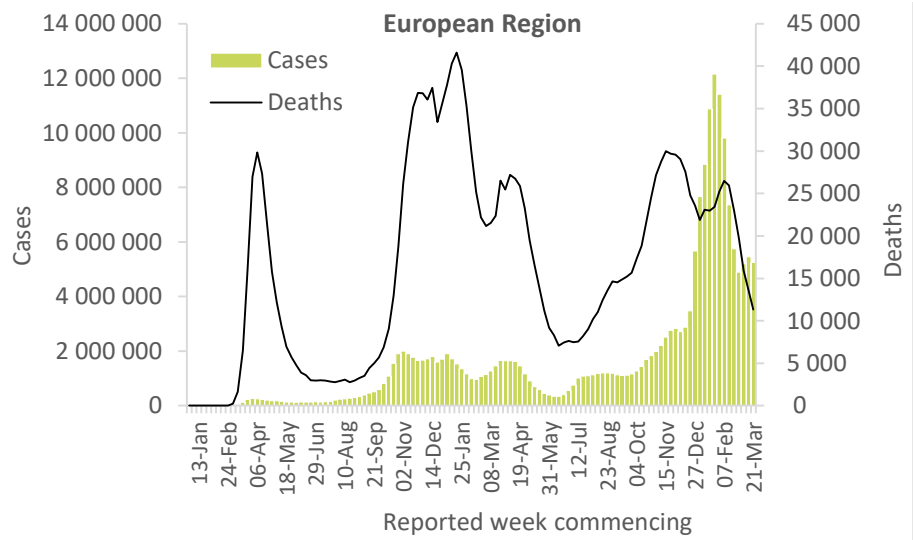


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 5.2 million new weekly cases, representing a 4% decrease as compared to the previous week. Six (10%) countries in the Region reported increases in new cases of 20% or greater, with the largest observed in Israel (88 869 vs 47 796 new cases; +86%), Hungary (15 269 vs 9727 new cases; +57%) and Malta (2434 vs 1628 new cases; +50%). The highest numbers of new cases were reported from Germany (1 576 261 new cases; 1895.3 new cases per 100 000; +2%), France (845 119 new cases; 1299.4 new cases per 100 000; +45%), and Italy (503 932 new cases; 844.9 new cases per 100 000; +6%).

The number of new deaths has continued to decrease in the Region, with over 11 000 new deaths reported this week, a 17% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (2859 new deaths; 2.0 new deaths per 100 000; -22%), Germany (1521 new deaths; 1.8 new deaths per 100 000; +13%), and Italy (1008 new deaths; 1.7 new deaths per 100 000; +11%).

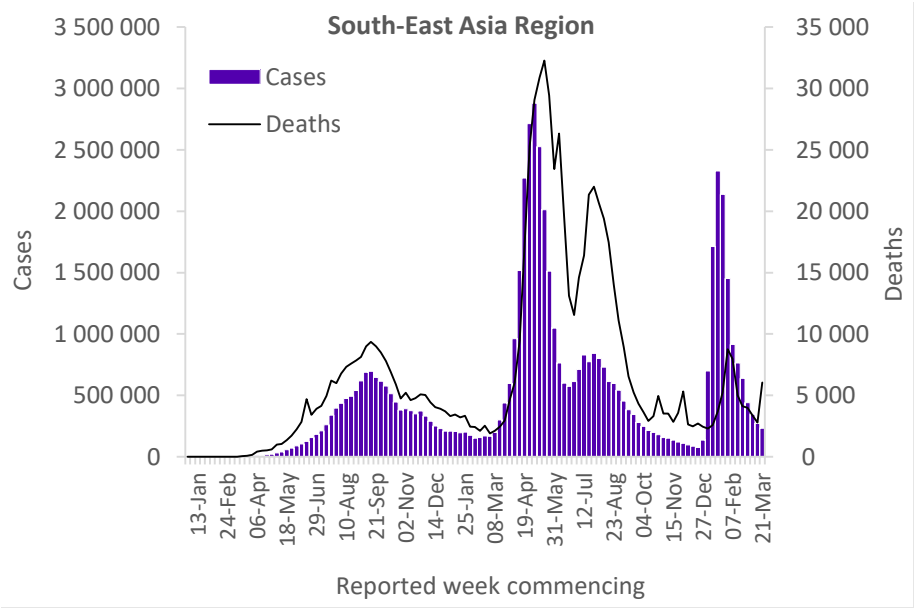


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 232 000 new weekly cases, a 14% decline as compared to the previous week, continuing the decreasing trend observed since mid-January 2022. However, Sri Lanka reported an increase in new weekly cases of 25% (2693 vs 2156 new cases). The highest numbers of new cases were reported from Thailand (175 116 new cases; 250.9 new cases per 100 000; +4% increase), Indonesia (36 470 new cases; 13.3 new cases per 100 000; -49%), and India (11 612 new cases; <1 new case per 100 000; -31%).

The Region reported just over 6000 new weekly deaths, representing a 116% increase as compared to the previous week. The highest numbers of new deaths were reported from India (4525 new deaths; <1 new death per 100 000; +619%) due to retrospective adjustments in some states, followed by Indonesia (932 new deaths; <1 new death per 100 000; -41%), and Thailand (553 new deaths; <1 new death per 100 000; +3%).

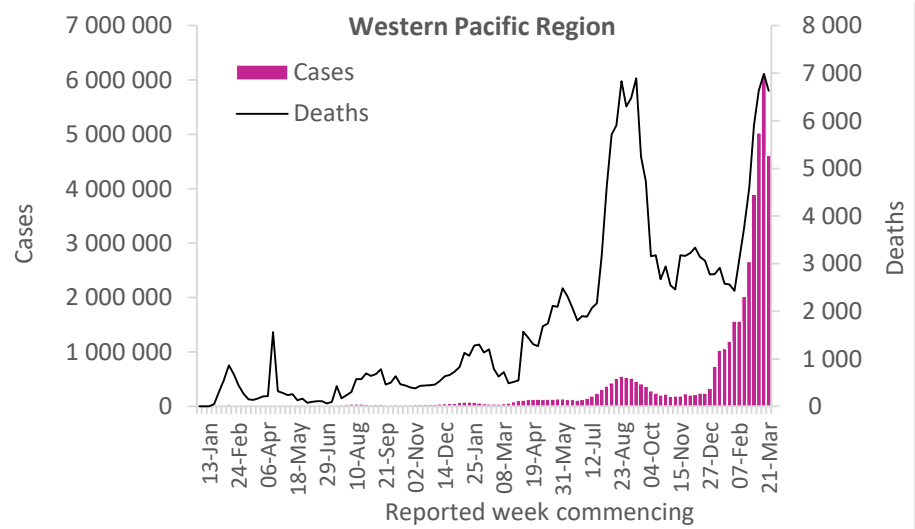


Updates from the South-East Asia Region

Western Pacific Region

With over 4.6 million new weekly cases, the Region reported a 24% decrease as compared to the previous week, reversing the increasing trend observed since the end of December 2021. Seven (23%) countries in the Region reported an increase of 20% or greater, with some of the largest increases observed in Vanuatu (1234 vs 352 new cases; +251%), Guam (487 vs 142 new cases; +243%) and Lao People's Democratic Republic (16 037 vs 6449; +149%). The highest numbers of new cases were reported from the Republic of Korea (2 442 195 new cases; 4763.5 new cases per 100 000; -13%), Viet Nam (1 127 716 new cases; 1158.5 new cases per 100 000; -40%), and Australia (368 028 new cases; 1443.3 new cases per 100 000; -28%).

The number of new weekly deaths shows a decrease of 5% as compared to the previous week, with just over 6600 new deaths reported. The highest numbers of new deaths were reported from the Republic of Korea (2471 new deaths; 4.8 new deaths per 100 000; +22%), China (1453 new deaths; <1 new death per 100 000; -24%), and the Philippines (861 new deaths; <1 new death per 100 000; +48%).



Updates from the Western Pacific Region

Annex 1. List of countries/territories/areas reporting currently circulating variants of concern as of 29 March 2022

Country/Territory/Area	Delta	Omicron
Afghanistan	●	-
Albania	○	●
Algeria	●	●
American Samoa	○	○
Andorra	○	○
Angola	●	●
Anguilla	●	●
Antigua and Barbuda	●	●
Argentina	●	●
Armenia	●	●
Aruba	●	●
Australia	●	●
Austria	●	●
Azerbaijan	○	●
Bahamas	●	●
Bahrain	●	●
Bangladesh	●	●
Barbados	●	●
Belarus	○	●
Belgium	●	●
Belize	●	●
Benin	●	●
Bermuda	●	●
Bhutan	●	●
Bolivia (Plurinational State of)	●	●
Bonaire	●	●
Bosnia and Herzegovina	○	○
Botswana	●	●
Brazil	●	●
British Virgin Islands	●	●
Brunei Darussalam	●	●
Bulgaria	●	●

Country/Territory/Area	Delta	Omicron
Burkina Faso	●	●
Burundi	●	-
Cabo Verde	●	●
Cambodia	●	●
Cameroon	●	●
Canada	●	●
Cayman Islands	●	●
Central African Republic	●	●
Chad	●	○
Chile	●	●
China	●	●
Colombia	●	●
Comoros	●	●
Congo	●	●
Costa Rica	●	●
Croatia	●	●
Cuba	●	●
Curaçao	●	●
Cyprus	●	●
Czechia	●	●
Côte d'Ivoire	●	●
Democratic Republic of the Congo	●	●
Denmark	●	●
Djibouti	●	●
Dominica	●	-
Dominican Republic	●	●
Ecuador	●	●
Egypt	●	●
El Salvador	●	●
Equatorial Guinea	●	-
Estonia	○	●

Country/Territory/Area	Delta	Omicron
Eswatini	●	●
Ethiopia	●	●
Falkland Islands (Malvinas)	-	-
Faroe Islands	-	-
Fiji	●	●
Finland	●	●
France	●	●
French Guiana	●	●
French Polynesia	●	●
Gabon	●	●
Gambia	●	●
Georgia	●	●
Germany	●	●
Ghana	●	●
Gibraltar	○	●
Greece	●	●
Greenland	●	-
Grenada	●	●
Guadeloupe	●	●
Guam	●	●
Guatemala	●	●
Guernsey	-	●
Guinea	●	●
Guinea-Bissau	●	-
Guyana	●	●
Haiti	●	●*
Honduras	●	●
Hungary	○	●
Iceland	●	●
India	●	●
Indonesia	●	●
Iran (Islamic Republic of)	●	●

Country/Territory/Area	Delta	Omicron
Iraq	●	●
Ireland	●	●
Israel	●	●
Italy	●	●
Jamaica	●	●
Japan	●	●
Jordan	●	●
Kazakhstan	●	●
Kenya	●	●
Kiribati	-	●
Kosovo[1]	○	●
Kuwait	●	●
Kyrgyzstan	●	●
Lao People's Democratic Republic	●	●
Latvia	○	●
Lebanon	●	●
Lesotho	●	-
Liberia	●	-
Libya	●	-
Liechtenstein	○	○
Lithuania	○	●
Luxembourg	●	●
Madagascar	-	-
Malawi	●	●
Malaysia	●	●
Maldives	●	●
Mali	●	○
Malta	○	●
Martinique	●	●
Mauritania	●	●
Mauritius	●	●

Country/Territory/Area	Delta	Omicron
Mayotte	●	●
Mexico	●	●
Monaco	●	●
Mongolia	●	●
Montenegro	○	○
Montserrat	●	●
Morocco	●	●
Mozambique	●	●
Myanmar	●	●
Namibia	●	●
Nepal	●	●
Netherlands	●	●
New Caledonia	●	●
New Zealand	●	●
Nicaragua	●	●
Niger	●	●
Nigeria	●	●
North Macedonia	○	○
Northern Mariana Islands (Commonwealth of the)	●	●
Norway	●	●
Occupied Palestinian Territory	●	●
Oman	●	●
Pakistan	●	●

Country/Territory/Area	Delta	Omicron
Palau	○	○
Panama	●	●
Papua New Guinea	●	●
Paraguay	●	●
Peru	●	●
Philippines	●	●
Poland	●	●
Portugal	●	●
Puerto Rico	●	●
Qatar	●	●
Republic of Korea	●	●
Republic of Moldova	●	●
Romania	●	●
Russian Federation	●	●
Rwanda	●	●
Réunion	●	●
Saba	●	●*
Saint Barthélemy	●	●
Saint Kitts and Nevis	●	●
Saint Lucia	●	●
Saint Martin	●	●
Saint Pierre and Miquelon	●	●
Saint Vincent and the Grenadines	●	●

Country/Territory/Area	Delta	Omicron
Sao Tome and Principe	○	-
Saudi Arabia	●	●
Senegal	●	●
Serbia	●	○
Seychelles	●	●
Sierra Leone	●	●
Singapore	●	●
Sint Maarten	●	●
Slovakia	●	●
Slovenia	●	●
Solomon Islands	●	●
Somalia	●	-
South Africa	●	●
South Sudan	●	●
Spain	●	●
Sri Lanka	●	●
Sudan	●	●
Suriname	●	●
Sweden	●	●
Switzerland	●	●
Thailand	●	●
Timor-Leste	●	●
Togo	●	●
Tonga	-	○

Country/Territory/Area	Delta	Omicron
Trinidad and Tobago	●	●
Tunisia	●	●
Turkey	●	●
Turks and Caicos Islands	●	●
Uganda	●	●
Ukraine	○	●
United Arab Emirates	●	●
United Kingdom	●	●
United Republic of Tanzania	●	●
United States Virgin Islands	●	●
United States of America	●	●
Uruguay	●	●
Uzbekistan	○	●
Vanuatu	●	-
Venezuela (Bolivarian Republic of)	●	●
Viet Nam	●	●
Wallis and Futuna	-	-
Yemen	-	-
Zambia	●	●
Zimbabwe	●	●

**Newly reported in this update. "●" indicates that information for this variant was received by WHO from official sources. "○" indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information becomes available. **Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern.*

See also Annex 2: Data, table, and figure notes

Annex 2. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.
Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.
'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public: Protect yourself; Questions and answers; Travel advice

COVID-19 Weekly Epidemiological Update

Edition 84, published 22 March 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews
- Summary of the Weekly Operational Update

Global overview

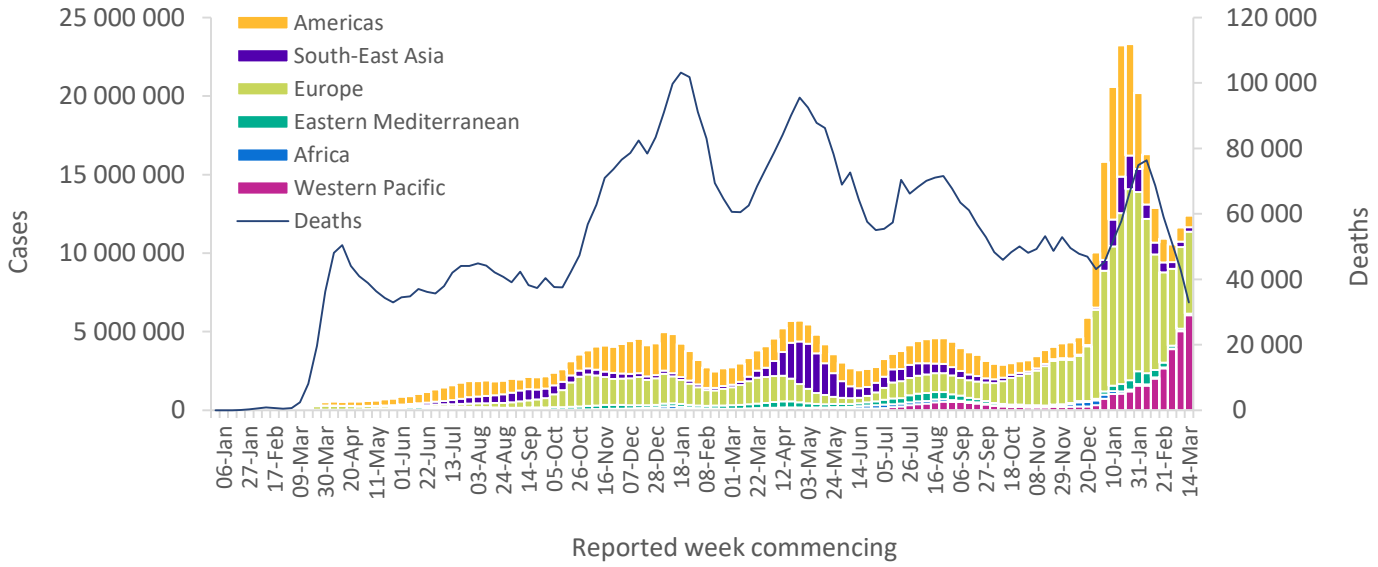
Data as of 20 March 2022

After a consistent decrease since the end of January 2022, the number of new weekly cases rose for a second consecutive week, with a 7% increase reported during the week of 14 through 20 March 2022, as compared to the previous week. The number of new deaths has continued a decreasing trend (-23% as compared to the previous week) (Figure 1). Across the six WHO regions, over 12 million cases and just under 33 000 deaths were reported (Table 1). As of 20 March 2022, over 468 million confirmed cases and just over 6 million deaths have been reported globally.

At the regional level, the number of new weekly cases increased in the Western Pacific Region (+21%), remained stable in the European Region, and decreased in the Eastern Mediterranean (-41%), Africa (-33%), South-East Asia (-23%) and Americas (-17%) regions. On the other hand, the number of new weekly deaths increased in the Western Pacific Region (+5%), while decreasing in the other regions: Americas (-42%), Eastern Mediterranean (-38%), Africa (-19%), Europe (-18%) and South-East Asia (-18%).

These trends should be interpreted with caution as several countries are progressively changing their testing strategies, resulting in lower overall numbers of tests performed and consequently numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 20 March 2022**



**See *Annex 2: Data, table, and figure notes*

At the country level, the highest number of new weekly cases were reported from the Republic of Korea (2 817 214 new cases; +34%), Viet Nam (1 888 694 new cases; +13%), Germany (1 538 666 new cases; +14%), France (582 344 new cases; +39%), and Australia (513 388 new cases; +161%).

The highest number of new weekly deaths were reported from the Russian Federation (3 681 new deaths; -19%), the United States of America (3 612 new deaths; -58%), Brazil (2 242 new deaths; -32%), the Republic of Korea (2 033 new deaths; +41%), and China (1 921 new deaths; -2%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 20 March 2022**

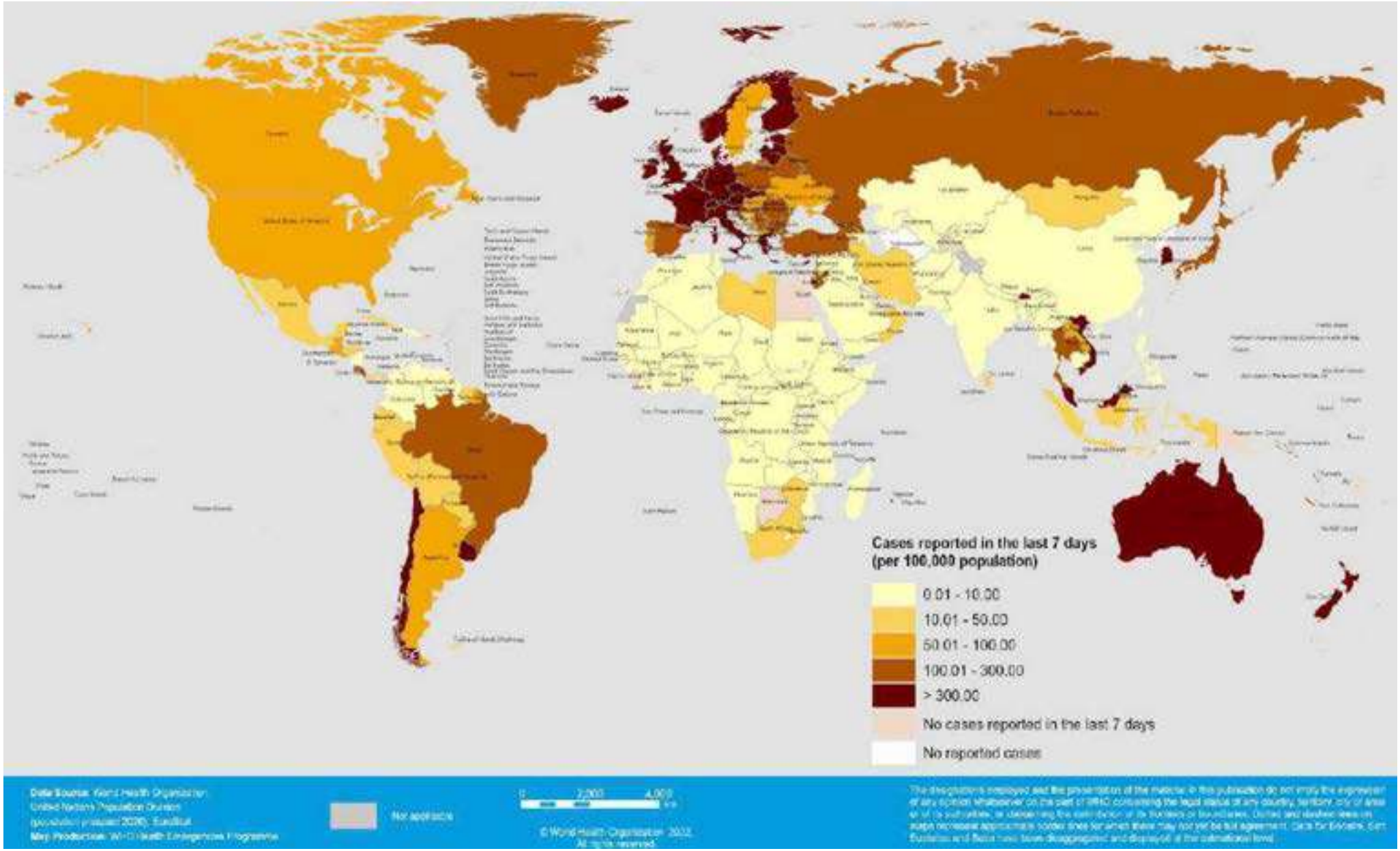
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Western Pacific	6 055 914 (49%)	21%	38 516 204 (8%)	6 995 (21%)	5%	200 735 (3%)
Europe	5 221 339 (42%)	0%	193 241 723 (41%)	13 047 (40%)	-18%	1 918 389 (32%)
Americas	738 048 (6%)	-17%	149 691 756 (32%)	8 845 (27%)	-42%	2 673 043 (44%)
South-East Asia	269 520 (2%)	-23%	56 739 711 (12%)	2 797 (8%)	-18%	771 822 (13%)
Eastern Mediterranean	74 004 (1%)	-41%	21 490 623 (5%)	1 042 (3%)	-38%	339 234 (6%)
Africa***	25 475 (0%)	-33%	8 521 974 (2%)	233 (1%)	-19%	170 822 (3%)
Global	**12 384 300 (100%)**	**7%**	**468 202 755 (100%)**	**32 959 (100%)**	**-23%**	**6 074 058 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 2: Data, table, and figure notes*
**** In the last WEU, there was an increase in the number of cases in the Africa Region due to the artifact*

For the latest data and other updates on COVID-19, please see:

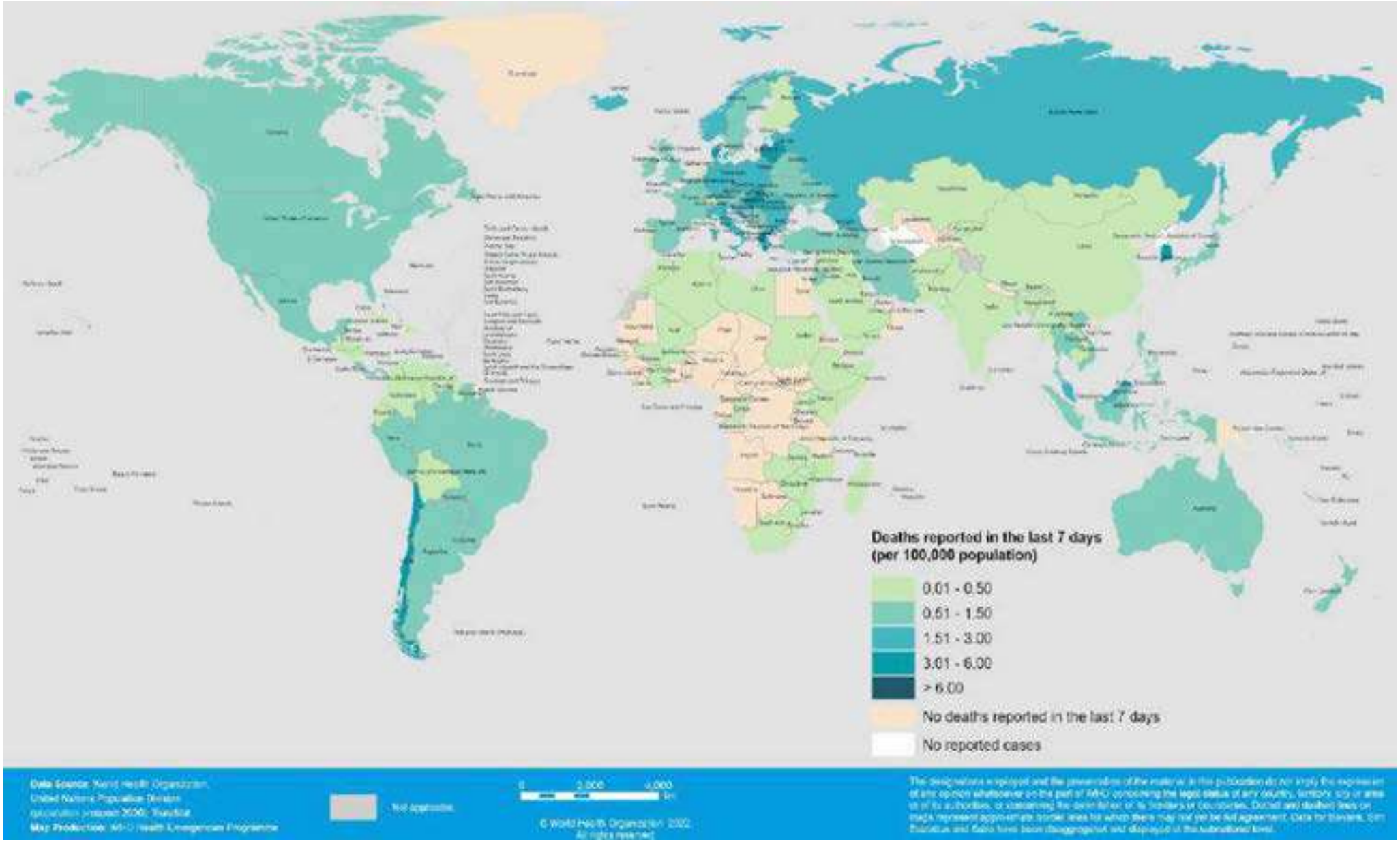
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 14-20 March 2022*



**See *Annex 2: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 14-20 March 2022**



**See *Annex 2: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

The current global epidemiology of SARS-CoV-2 is characterized by the global dominance of the Omicron variant. Among the 412 982 sequences uploaded to GISAID with specimens collected in the last 30 days[i], 412 119 (99.8%) were Omicron and 259 (0.1%) were Delta.

Since the first reporting of the Omicron variant in November 2021, more than 2.4 million sequences have been deposited in GISAID. By the first week of January 2022, Omicron accounted for 90% of submitted sequences; by week five, Omicron had largely replaced all other variants and now accounts for over 99.8% of submitted sequences globally.
Omicron has a number of descendant lineages, including BA.1, BA.1.1, BA.2 and BA.3. In the last 30 days[ii], BA.2 has become the predominant variant, with 251 645 sequences (85.96%) reported. During the same period, 125 485 BA.1.1 sequences (8.98%), 54 724 BA.1 sequences (4.26%) and 70 BA.3 sequences (<0.1%) have been also uploaded to GISAID.

Among the major Omicron descendent lineages, weekly trends (figure 4, panel A) show that the relative proportion of BA.2 has increased steadily since the end of 2021, with BA.2 becoming the dominant lineage by week seven of 2022. This trend is most pronounced in the South-East Asia Region, followed by the Eastern Mediterranean, African, Western Pacific and European Regions. BA.2 is currently dominant in the Region of the Americas.
However, the absolute numbers of submitted BA.1 and BA.1.1 sequences, as well as an apparent plateau in the absolute number of BA.2 sequences indicate a recent declining trend in the descendent lineages of Omicron since the beginning of 2022 (figure 4, panel B). This trend should be interpreted with some caution, as data for the most recent weeks may be incomplete due to the delay between specimen collection and submission of sequences to GISAID.

To note, the global distribution of VOCs should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting. In addition, some countries may have changed their testing and sequencing policies during the presented period.

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[i] Includes sequences submitted to GISAID with sample collected dates from 16 February to 17 March 2022 (last reported sample at the time of data extraction), excluding low coverage sequences. Proportions are estimated for countries submitting more than 100 total sequences. In the past 30 days, 47 countries submitted a total of 100 sequences and above on GISAID.

[ii] Please note that uploaded GISAID data for the maps and the global epidemiological reporting are slightly different in absolute numbers as compared to Omicron descendent lineage sequence data. The latter is taken from the manual GISAID data availability.

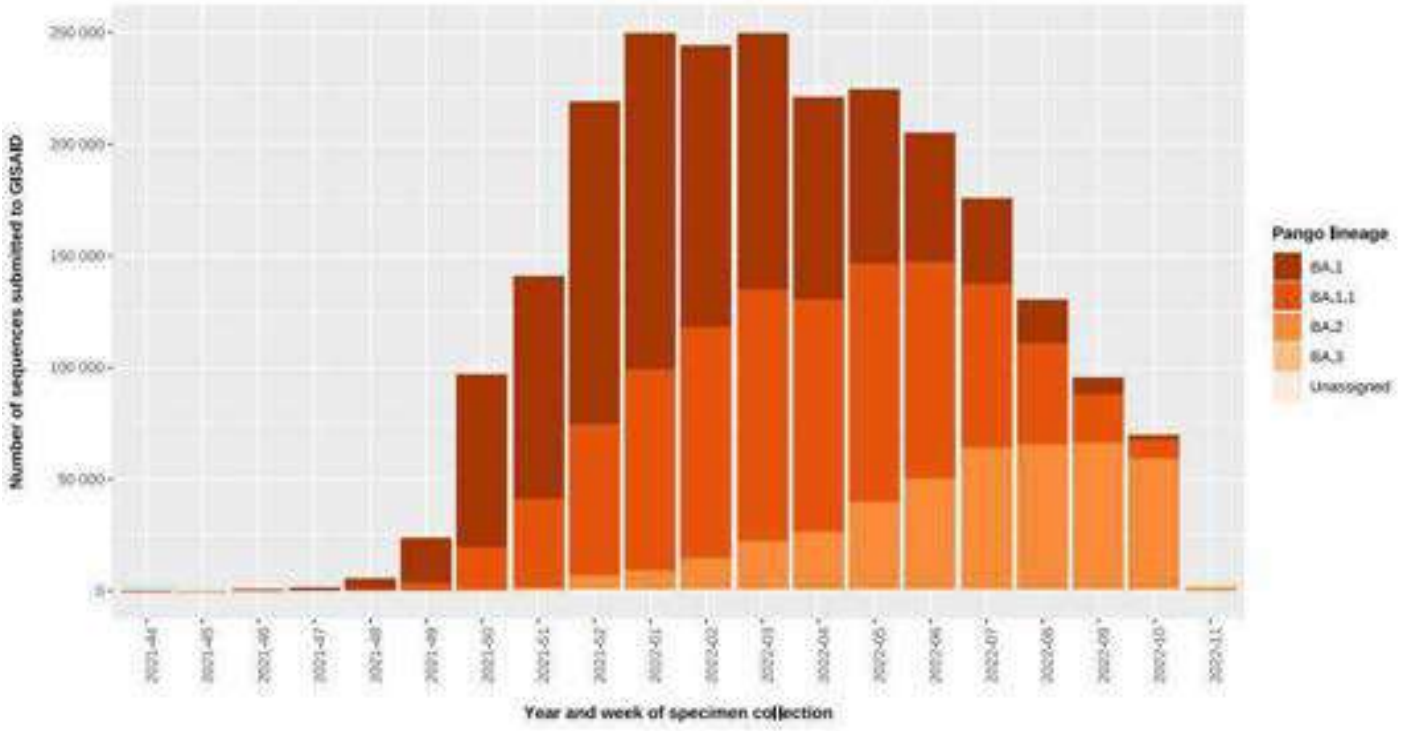
Figure 4. Global distribution and relative proportion of Omicron lineages for sequences submitted to GISAID presented by week of specimen collection

Panel A. Relative proportions of Omicron lineages over the last 4 weeks by specimens collection week

				Overall (%)	Last 4 weeks by collection date (%)			
Lineage	Countries	Sequences[a]	SGTF[b]	Total	2022-08	2022-09	2022-10	2022-11
BA.1	164	1 077 755	96.26	44.40	15.21	8.24	3.98	4.26
BA.1.1	151	913 277	95.72	37.62	34.51	22.29	11.61	8.98
BA.2	106	431 242	0.18	17.77	49.93	69.12	83.95	85.96
BA.3	21	648	96.91	0.03	0.01	0.02	0.01	0.00
Unassigned	62	4 536	34.99	0.19	0.35	0.34	0.44	0.80

[a] Data source: sequences and metadata from GISAID
[b] Percentage of sequences with Spike H 69-70 deletion associated with S gene failure

Panel B. Incidence of Omicron lineages by week of specimens collection.



Global distribution of Omicron lineages from sequences and metadata submitted to GISAID
Data was extracted from GISAID on 22 March 2022 at 14:00 CET; figures are correct at the time of printing

SARS-CoV-2 recombinant variants

Recombination of variants of the same virus is a natural phenomenon and can be regarded as an expected mutational event. WHO has been notified of several recombinant variants, either recombination between Delta and BA.1 variants, or BA.1 and BA.2 variants. The same monitoring and assessment process is applied to these recombinants as for any other emerging variant, after verification and exclusion of potential contamination or co-infection. Two Delta and Omicron recombinants and one BA.1 x BA.2 recombinant have now been given Pango lineage designations XD, XE and XF. None of the preliminary available evidence indicates that these recombinant variants are associated with higher transmissibility or more severe outcomes. WHO continues to monitor recombinant variants, alongside other SARS-CoV-2 variants, and will provide updates as further evidence becomes available.

Characteristics of Omicron

Available evidence on the phenotypic impacts of VOCs is reported in previous editions of the COVID-19 Weekly Epidemiological Update. Since the last update on 8 March 2022, there have been several new publications on the phenotypic characteristics of VOCs**,** including literature on Omicron (Table 2). Some of these studies have not been peer-reviewed and the findings must therefore be interpreted with due consideration of this limitation.

Table 2: Summary of current evidence on Omicron

Domain	Indicator	Main results
Epidemiology	Impact on disease prevalence/incidence	After a consistent decrease since the end of January 2022, for the second week in a row, the number of new weekly cases increased by 7% during the week of 14 through 20 March 2022, as compared to the previous week. The number of new weekly cases increased in the Western Pacific Region (+21%), remained stable in the European Region, while decreased in the Eastern Mediterranean Region (-41%), Africa Region (-33%), South-East Asia Region (-23%) and the America Region (-17%). It is important to note that changes in testing policies may influence the number of reported cases. The Omicron variant is the dominant circulating variant globally, representing 99.8% of samples collected between 16 February and 17 March 2022 (GISAID), while the Delta variant represents 0.1%. Among the Omicron Pango lineages, BA.2 is now the most prevalent (86%), followed by BA.1.1 (9%), BA.1 (4%) and BA.3 (<0.1%).
	Impact on transmission	An updated analysis of GISAID data[1] shows Omicron still having a growth rate advantage over Delta in 67 countries with sufficient sequence data available up to 21 March 2022, translating to a pooled mean transmission advantage (i.e. relative difference in effective reproduction numbers) of 5% (95% CI: 74%-103%) across epidemiological contexts under the assumption of an unchanged generation time (i.e. duration between the moment a person gets infected to the moment they infect another person). However, evidence for a reduced generation time of Omicron suggests the transmission advantage may be lower; for a 20% shorter generation time, the estimated pooled mean transmission advantage of Omicron over Delta is 74% (95% CI: 66%-90%). The same analysis demonstrates a growth rate advantage of the Omicron Pango lineage BA.2 over the Pango lineage BA.1, with a pooled mean transmission advantage of 72% (95% CI: 55%-82%) under the assumption of an unchanged generation time. These estimates are stabilising as the number of Omicron sequences is increasing and data become available from more countries. An updated analysis published on 11 March 2022 by the United Kingdom[2], which used data on samples collected between 01 December 2021 and 01 March 2022, confirms that BA.2 has a higher growth rate compared to BA.1 (median: 78.8 % per week) and higher secondary attack rates for household (13.6%; 95%CI: 13.2%-14.0% vs. 10.7%; 95%CI: 10.6%-10.8%) and non-household (5.3%; 95%CI:4.7%-5.8% vs. 4.2%; 95%CI: 4.0%-4.3%) contacts.
	Impact on disease severity	Omicron has consistently been found to have lower severity when compared to Delta across different settings[3–7]. An updated analysis comparing patients infected with BA.1 and BA.2 shows similar findings to previously published data, with no difference in the risk of hospitalisation (HR=0.91; 95% CI: 0.85-0.98) in the United Kingdom [2]. There is still a sustained decrease in the number of reported hospitalisations since the end of January 2022 in the United States of America[8] and South Africa[9] while the United Kingdom reported an increase in hospitalisations in week 10 (7-10 March) compared to week 9 (28 February – 6 March) of 2022 (13.38 per 100,000 vs 11.67 per 100,000)[10].
Immune response	Impact on reinfection	Higher rates of reinfection have been reported for the Omicron variant among individuals previously infected with other SARS-CoV-2 variants. Reinfection with BA.2 following BA.1 was associated with mild disease in Denmark[11] while a study conducted in Qatar reported that previous infection with one of the Omicron Pango lineages may confer protection against infection with other Omicron Pango lineages; 94.9% (95% CI: 88.4-97.8%) protection against BA.2 following infection with BA.1, and 85.6% (95% CI: 77.4-90.9%) protection against BA.1 following infection with BA.2[12].
	Impact on vaccination	Results of vaccine effectiveness (VE) studies should be interpreted with caution because estimates vary with the type of vaccine administered and the number of doses and scheduling (sequential administration of different vaccines). For further information, see the section Interpretation of the results of the VE for the Omicron variant.

Domain	Indicator	Main results
	Impact on antibody responses	There are no new data on antibody responses to Omicron since the last update. An analysis of neutralization data from 23 laboratories found a 20-fold reduction in neutralization associated with the Omicron variant[13]. These findings are consistent with results of recent studies that reported lower neutralising antibody titers to BA.1 and BA.2 compared to wild-type SARS-CoV-2 and similar responses for BA.1 and BA.2 [14,15]. Another recent study found similar non-neutralising antibody responses to BA.1 and BA.2 in vaccinated individuals[16]. Overall, these results indicate similar humoral responses to BA.1 and BA.2.
Diagnostic tools	**Impact on PCR assays**	There is no new evidence on the impact of Omicron on PCR assays, which include multiple gene targets. The BA.2 lineage is the only descendant variant of Omicron that lacks the 69-70 deletion responsible for S-gene target failure. Assessment of PCR tests for SARS-CoV-2 that include multiple gene targets predicted limited impact of the Omicron variant on the accuracy of these assays[17,18].
	Impact on Rapid Diagnostic tests	There is no new evidence on the impact of Omicron on antigen-based rapid diagnostic tests (Ag-RDTs). Available data show contradictory results on the diagnostic performance of Ag-RDTs to detect Omicron compared to other variants: while some studies have shown reduced sensitivity of Ag-RDTs [19–22], others have reported comparable sensitivity of Ag-RDT tests to detect Omicron compared to Delta or other VOCs[23–26].
Impact on treatment	**Impact on antivirals**	There has been no new evidence since the publication of preliminary data showing no difference in the effectiveness of antiviral agents against the Omicron variant[27–29].
	Impact on biologicals	Initially, studies on the effectiveness of monoclonal antibodies for treating patients with Omicron reported conserved neutralizing activity for three broadly neutralizing monoclonal antibodies (sotrovimab, S2X259 and S2H97) and a reduction in effectiveness of other monoclonal antibodies [30–34]. However, additional preclinical evidence shows reduced neutralizing activity of sotrovimab against the BA.2 Pango lineage and lack of efficacy of casirivimab-imdevimab against the BA.1 Omicron Pango lineage [35].
	Other treatment options	There is no evidence to suggest that Interleukin-6 receptor blockers and corticosteroids are not effective in the management of patients with severe and critical disease.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

Figure 5. Vaccine effectiveness (VE) of primary series and booster vaccination against the Delta variant of concern

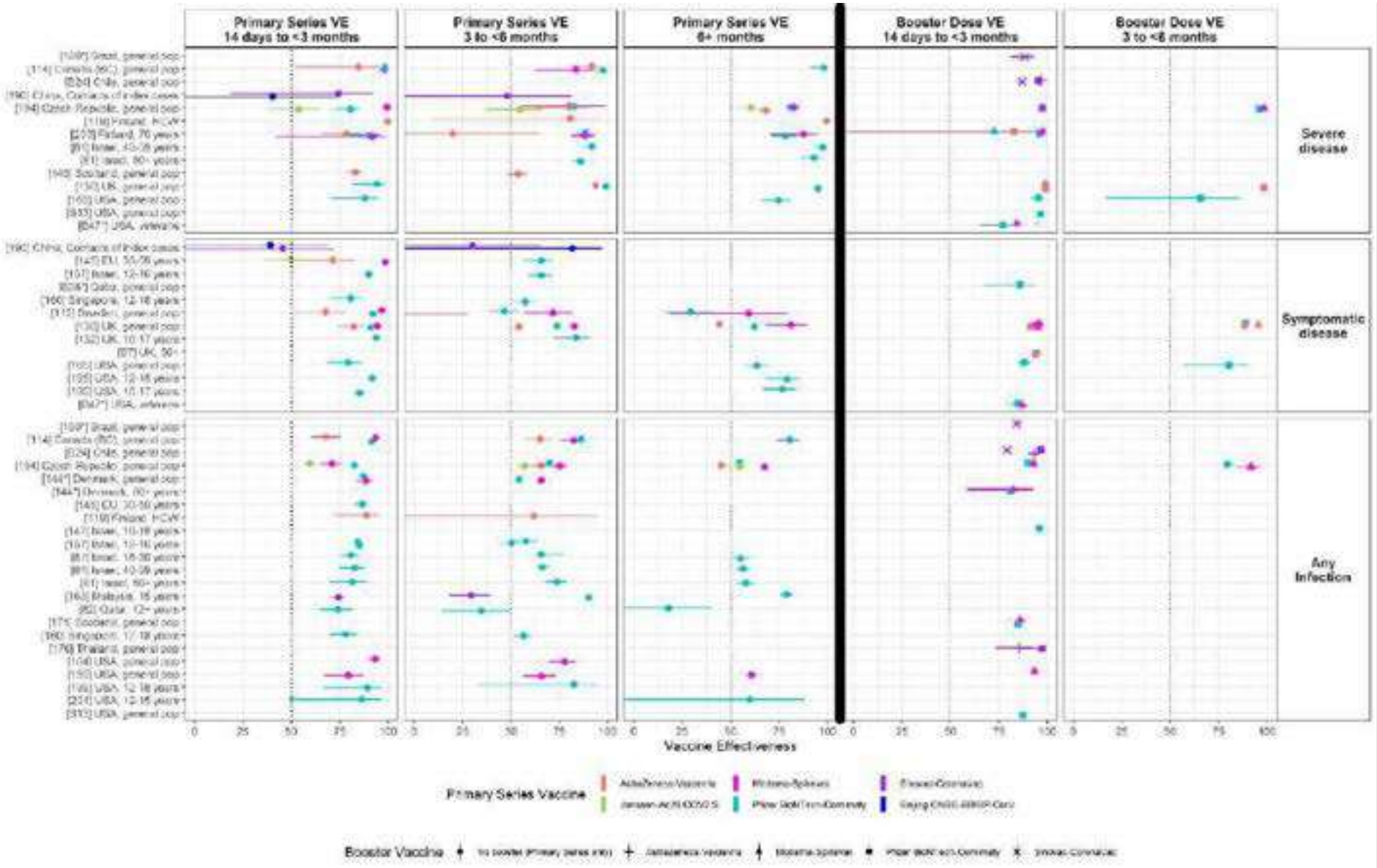
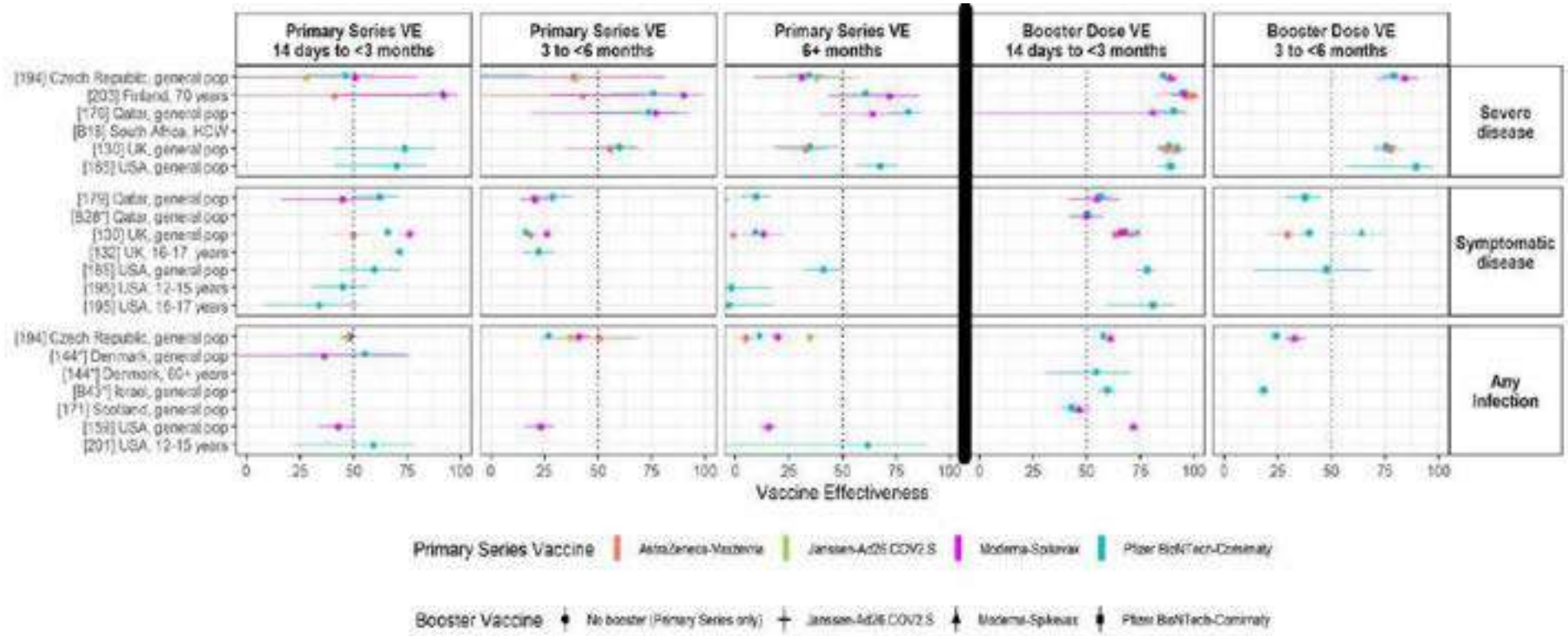


Figure 6. Vaccine effectiveness (VE) of primary series and booster vaccination against the Omicron variant of concern



*Indicates booster dose vaccine effectiveness evaluated using persons completing primary series as reference group, rather than unvaccinated persons. Abbreviations: pop=population; HCW=healthcare workers; EU=European Union. Dots represent point estimates of vaccine effectiveness; horizontal lines represent the 95% confidence intervals. Labels along left side of plot indicate reference numbers [], country, and study population. Reference numbers identify the study and link to the summary table of VE effectiveness studies on view-hub.org (Table 1 in summary table); references starting with a 'B' are studies found in the booster VE table only (Table 2 in summary table). Primary series refers to the completion of two doses of vaccines for AstraZeneca-Vaxzevria; Moderna-Spikevax, Pfizer BioNTech-Comirnaty and Sinovac-CoronaVac and one dose of Janssen-Ad26.COV2.S. Severe disease includes severe disease, hospitalization, and pneumonia; symptomatic disease includes disease of any severity level; any infection can include symptomatic and asymptomatic infection. Additional details on the methods for inclusion of the estimates in the plots provided in Annex 3. Note, three negative point estimates for the primary series are not shown in the Omicron plot: Moderna-Spikevax VE against symptomatic disease at 6+ months (reference 179) as well as Moderna-Spikevax and Pfizer BioNTech-Comirnaty VE against infection at 3-6 months (reference 144); one negative point estimate for primary series is not shown in the Delta plot: AstraZeneca-Vaxzevria VE against Delta symptomatic disease (reference 112) with 95% CIs crossing 0 is not fully visible in the plot.

Figures 5 and 6 summarize the impact of Delta and Omicron variants, respectively, on product-specific vaccine effectiveness (VE) over time for both primary series vaccines and booster vaccines. Since the last update, five new studies, all of which assessed VE against Delta and three which also assessed VE against Omicron, have been added to the figures.[36–40] Of the Omicron studies, one study provided new VE data on AstraZeneca-Vaxzevria[37], two (not yet peer-reviewed) on Moderna-Spikevax[37,38], and four (two not yet peer-reviewed) on Pfizer BioNTech-Comirnaty.[37–40] Additional information on vaccine performance against VOCs can also be found in Annex 4.

Interpretation of the results of the VE for the Delta variant[iii]

To date, 31 studies contribute evidence of the effectiveness of COVID-19 vaccines against disease and infection due to the Delta variant. VE against Delta is substantially higher than that of Omicron and declines more gradually over time for *symptomatic disease* and *infection*, with only slight declines over time against *severe disease*.

For *severe disease* outcomes with the Delta variant within the first three months of vaccination with the primary series, all eight (100%) VE estimates for the mRNA vaccines (Moderna-Spikevax and Pfizer BioNTech-Comirnaty) and four of five (80%) VE estimates for the adenovector vaccines (AstraZeneca-Vaxzevria and Janssen-Ad26.COV2.S) were ≥ 70%. Beyond three months after vaccination, all 18 (100%) VE estimates for the mRNA vaccines and five of 10 (50%) VE estimates for the adenovector vaccines were ≥ 70%.

For *symptomatic disease* and *infection*, initial VE estimates tended to be lower than against *severe disease*, and VE decreased more significantly over time. Still, for *symptomatic disease* outcomes within the first three months of vaccination with the primary series, all 11 (100%) VE estimates for the mRNA vaccines were ≥ 70%; two of four (50%) VE estimates for the adenovector vaccines were ≥ 70%. Beyond three months after vaccination, seven of 15 (47%) VE estimates for the mRNA vaccines and none of three (0%) VE estimates for the adenovector vaccines were ≥ 70%. mRNA booster vaccination after completion of a primary series of an mRNA vaccine or of AstraZeneca-Vaxzevria restored VE against *symptomatic disease* to ≥ 70% in all studies (12/12 estimates) within three months of a booster dose which persisted through six months post booster (all four VE estimates ≥ 70%). Limited data were available for VE of inactivated vaccines (Beijing CNBG-BBIBP-CorV and Sinovac-CoronaVac) against *symptomatic disease*, though a similar pattern was seen with VE of inactivated vaccines against *infection* over time: the only VE estimate within the first three months of completion of Sinovac-CoronaVac was ≥ 70%, which declined to <50% at three to six months; however, booster vaccination with various platforms following Sinovac-CoronaVac primary series restored VE to ≥ 70% in all studies (6/6 VE estimates) within the first three months of receipt of any booster dose.

Interpretation of the results of the VE for the Omicron variant [iii]

To date, ten studies of VE against the Omicron variant show reduced protection of the primary series COVID-19 vaccines for all outcomes (*severe disease*, *symptomatic disease*, and *infection*) than has been observed for other variants of concern. Importantly though, VE estimates against the Omicron variant remain highest for *severe disease*, while they are lower for s*ymptomatic disease and infection.* Booster vaccination substantially improves VE for all outcomes for all products. However, due to short follow-up time after boosters, more data are needed to

[iii] Summarize the totality of the evidence for Omicron and Delta by disease outcome (infection, symptomatic disease, severe disease) for each of the vaccine platforms by calculating the proportion of all VE estimates that are at or above 70% within each vaccine platform for each disease outcome. Please note that a single study may contribute multiple VE estimates.

characterize the duration of VE following a booster dose. No data is yet available on the duration of protection of inactivated vaccines against Omicron.

For *severe disease*, within the first three months of primary series vaccination, four of six (67%) VE estimates for the mRNA vaccines were ≥70%, with only two studies available for vector vaccines both which reported a VE of <50%. Beyond three months after vaccination, six of 15 (40%) VE estimates for the mRNA vaccines and none of five (0%) VE estimates for the adenovector vaccines were ≥ 70%. Booster vaccination improved VE against *severe disease* in all studies, with all 16 estimates showing VE ≥ 70% (15 estimates evaluated an mRNA booster and one estimate evaluated a booster dose of Janssen-Ad26.COV2.S) between 14 days and three months of receipt of a booster dose. At three to six months post mRNA booster, all five (100%) estimates showed VE ≥ 70%.

Initial VE estimates against *symptomatic disease* and *infection* tended to be lower than against *severe disease*, and VE decreased more substantially over time. For *symptomatic disease,* outcomes within the first three months of vaccination with the primary series, two of eight (25%) VE estimates for the mRNA vaccines were ≥ 70% and none of the VE estimates for the adenovector vaccines (AstraZeneca-Vaxzevria and Janssen-Ad26.COV2.S). Beyond three months after vaccination, none of 12 (0%) VE estimates for the mRNA vaccines and none of two (0%) VE estimates for AstraZeneca-Vaxzevria were ≥ 50%. mRNA booster vaccination after completion of a primary series of an mRNA vaccine or of AstraZeneca-Vaxzevria improved VE against *symptomatic disease* with four of 10 (40%) VE estimates ≥ 70% and all 12 (100%) ≥ 50% 14 days to three months post booster. However, booster dose protection declined with time since vaccination with one of five (20%) of available estimates indicating a VE of ≥ 50% at three to six months following receipt of an mRNA booster dose. VE against *infection* showed a similar pattern.

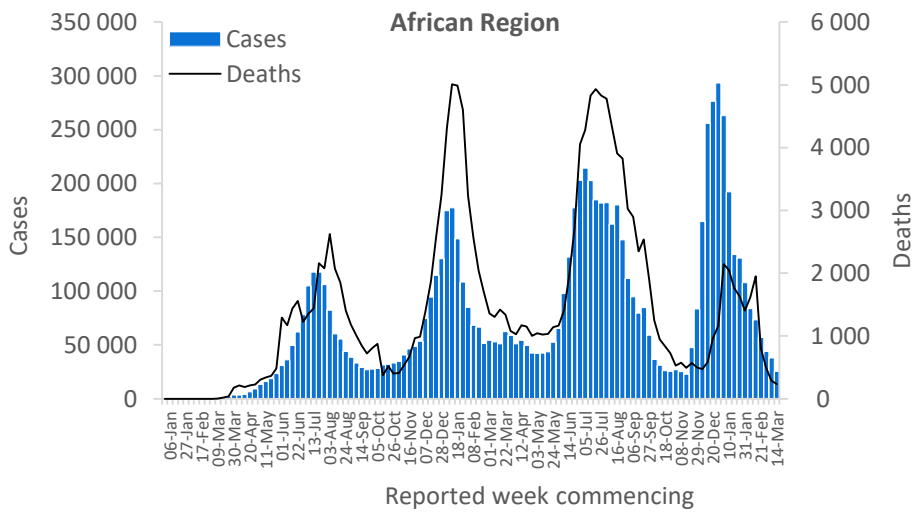
One new pre-print study from Chile (not included in the plots due to not meeting the criterion of presenting VE estimates for more than one time point after vaccination) assessed VE of Sinovac-CoronaVac against *infection* and hospitalization among children aged three to five years during an Omicron dominant period.[41] VE against hospitalization and infection 14 or more days after receipt of the second dose of Sinovac-CoronaVac was 65.2% (95% CI: 50.4-75.6%) and 37.9% (95% CI: 36.1-39.6%), respectively, with a maximum follow-up time of approximately 14 weeks following receipt of the second dose.

WHO regional overviews Epidemiological week 14-20 March 2022**

African Region

The Africa Region reported over 25 000 new cases, a 33% decrease as compared to the previous week. The number of cases has continued to decrease since late December 2021. Nine (18%) countries in the Region reported an increase in cases by over 20% this week, although these countries reported fewer than 100 new cases. The highest numbers of new cases were reported from South Africa (9797 new cases; 16.5 new cases per 100 000 population; similar to the previous week's figures), Réunion (8514 new cases; 951.0 new cases per 100 000; +6%), and Zimbabwe (2095 new cases; 14.1 new cases per 100 000; -37%).

The number of new weekly deaths in the Region decreased by 19% as compared to the previous week, with over 200 new deaths reported. The highest numbers of new deaths were reported from South Africa (167 new deaths; <1 new death per 100 000 population; similar to the previous week's figures), Zimbabwe (12 new deaths; <1 new death per 100 000; -29%), Algeria (9 new deaths; <1 new death per 100 000; similar to the previous week's figures), and Réunion (9 new deaths; 1.0 new deaths per 100 000; -36%).

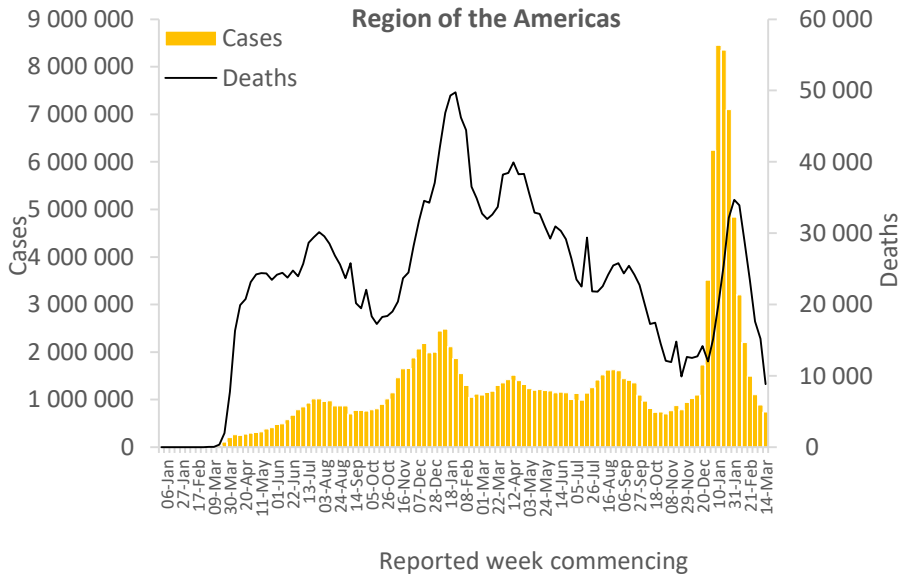


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 738 000 new cases and over 8800 new deaths, decreases of 17% and 42% respectively as compared to the previous week. However, 13 (23%) countries in the Region reported increases in new cases of 20% or greater, with some of the largest increases reported from Saint Pierre and Miquelon (298 vs 52 new cases,+473%), Curacao (375 vs 102 new cases, +268%) and Mexico (22 418 vs 11 193 new cases, +100%). The highest numbers of new cases were reported from Brazil (267 998 new cases; 126.1 new cases per 100 000; -19%), the United States of America (212 751 new cases; 64.3 new cases per 100 000; -16%), and Chile (95 205 new cases; 498.0 new cases per 100 000; -19%).

The highest numbers of new deaths were reported from the United States of America (3612 new deaths; 1.1 new deaths per 100 000; -58%), Brazil (2242 new deaths; 1.1 new deaths per 100 000; -32%), and Mexico (829 new deaths; <1 new death per 100 000; +156%).

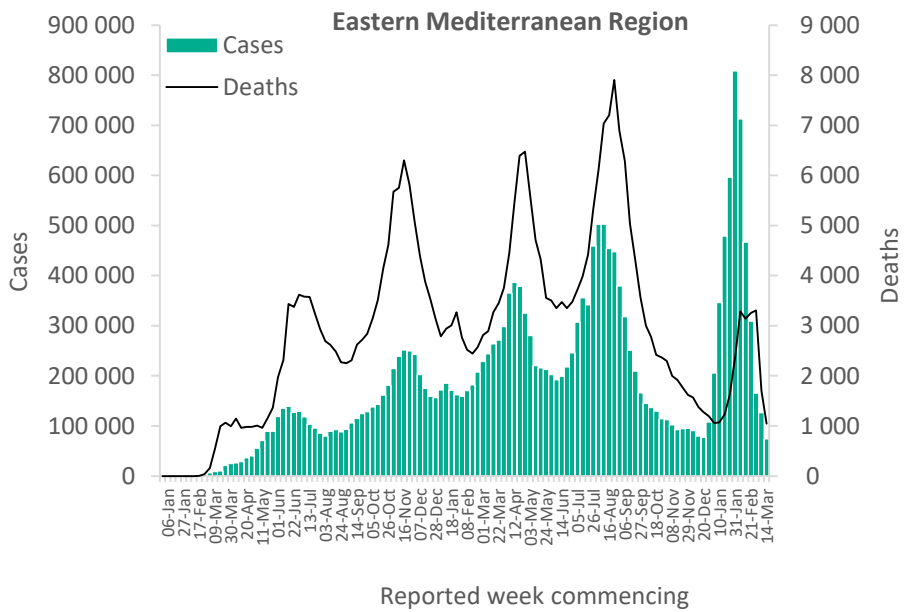


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region continued to report a decrease in new weekly cases with over 74 000 new cases, a 41% decrease as compared to the previous week. However, Jordan reported an increase in new weekly cases of 20% or greater (25 502 vs 16 449 new cases; +55%). The highest numbers of new cases were reported from Jordan (25 502 new cases; 249.9 new cases per 100 000; +55%), the Islamic Republic of Iran (19 454 new cases; 23.2 new cases per 100 000; -45%), and Bahrain (7594 new cases; 446.3 new cases per 100 000; -31%).

In the past week, the Region reported 1000 new deaths, a 38% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Islamic Republic of Iran (719 new deaths; <1 new death per 100 000; -34%), Jordan (77 new deaths; <1 new deaths per 100 000; +133%), and Lebanon (43 new deaths; <1 new deaths per 100 000; -26%).

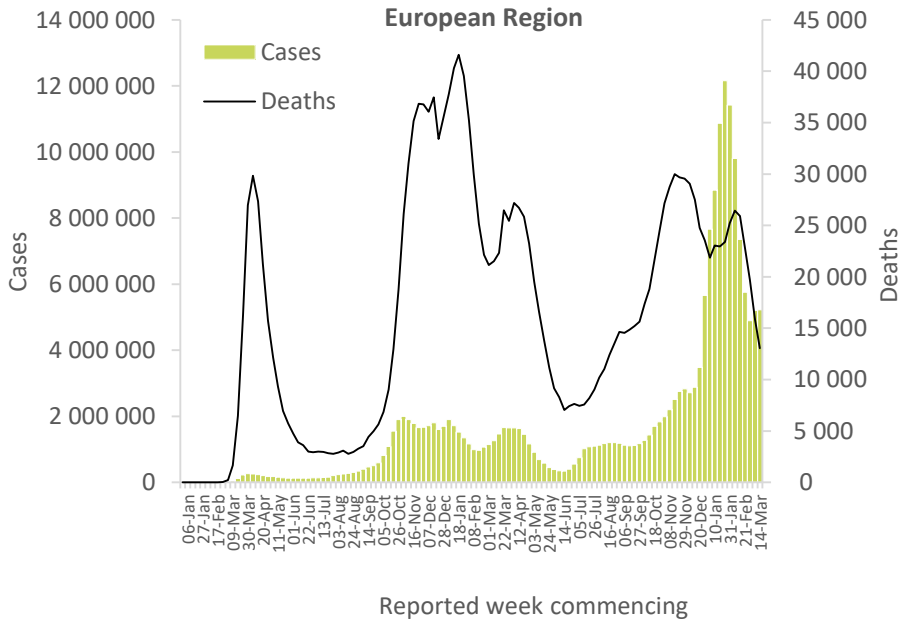


Updates from the Eastern Mediterranean Region

European Region

Following the increase reported during the week of 7 through 13 March 2022, the number of new weekly cases appears to have stabilized in the European Region (<1%) with over 5.2 million new cases reported. Ten countries (18%) in the Region reported increases in new cases of 20% or greater, with the largest observed in Gibraltar (471 vs 231 new cases; +104%), Isle of Man (1814 vs 903 new cases; +101%), Malta (1628 vs 887 new cases; +84%) and Guernsey (2077 vs 1196 new cases; +74%)

The number of new deaths has continued to decrease in the Region, with over 13 000 new deaths reported this week, an 18% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (3681 new deaths; 2.5 new deaths per 100 000; -19%), Germany (1345 new deaths; 1.6 new deaths per 100 000; -8%), and Italy (910 new deaths; 1.5 new deaths per 100 000; -9%)

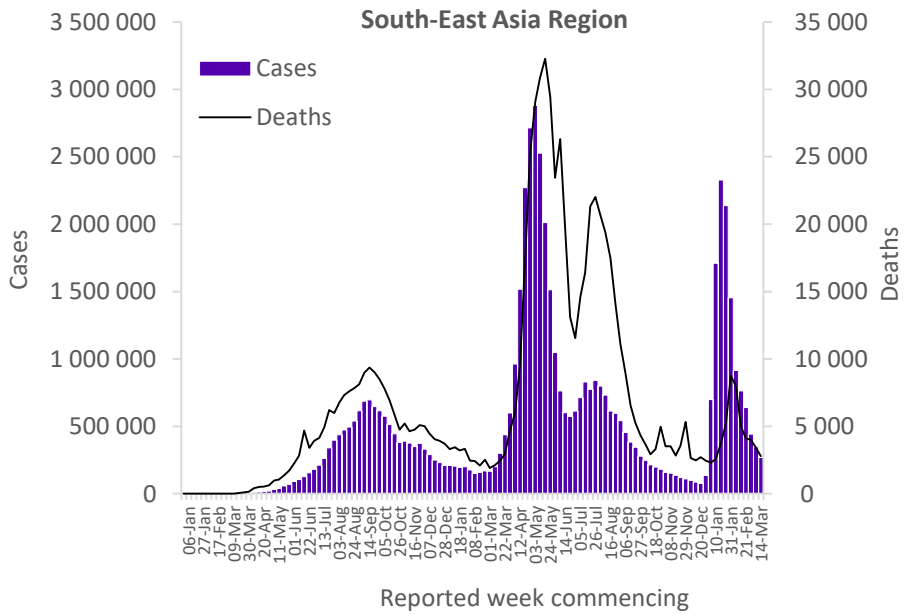


Updates from the European Region

South-East Asia Region

The decreasing trend observed in the South-East Asia Region since the end of January 2022 continues, with over 269 000 new cases reported, a 23% decrease as compared to the previous week. One country in the Region, reported an increase of 20% or greater in the past week: Bhutan (4384 vs 2822 new cases; +55%). The highest numbers of new cases were reported from Thailand (169 144 new cases; 242.3 new cases per 100 000; +7%), Indonesia (71 988 new cases; 26.3 new cases per 100 000; -49% decrease), and India (16 850 new cases; 1.2 new cases per 100 000; -40%).

Regionally, the number of new weekly deaths continues to decline, with just under 2800 new deaths reported, an 18% decrease as compared to the previous week. The highest numbers of new deaths were reported from Indonesia (1572 new deaths; <1 new death per 100 000; -21%), India (629 new deaths; <1 new death per 100 000; -23%), and Thailand (537 new deaths; <1 new death per 100 000; +13%).

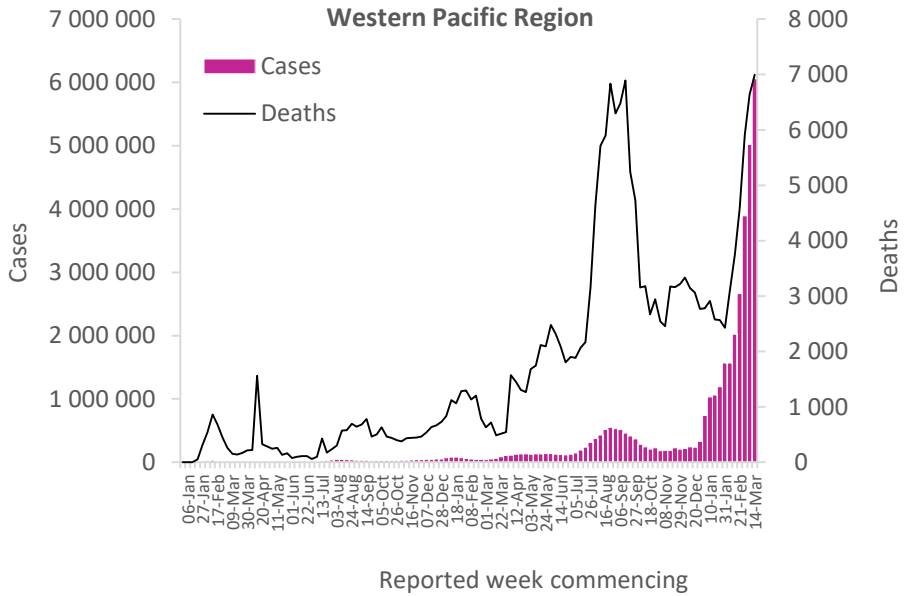


Updates from the South-East Asia Region

Western Pacific Region

Consistent with the increasing trend observed since the end of December 2021, the Western Pacific Region reported an increase of 21% in the number of new weekly cases as compared to the previous week, with over 6 million new cases. Ten (44%) countries in the Region reported an increase of 20% or greater in the past week, with the largest increases observed in Lao People's Democratic Republic (6449 vs 1538 new cases; +319%), Australia (513 388 vs 196 803 new cases; +161%), American Samoa (623 vs 247 new cases; +152%), Vanuatu (352 vs 146 new cases; +141%) and Fiji (148 vs 63 new cases; +135%).

The number of new weekly deaths also continued to increase, with just under 7000 new deaths reported, a 5% increase as compared to the previous week. The highest numbers of new deaths were reported from the Republic of Korea (2033 new deaths; 4.0 new deaths per 100 000; +41%), China (1921 new deaths; <1 new death per 100 000; -2%), and Japan (1016 new deaths; <1 new death per 100 000; -18%).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition, highlights include the following:

- Rallying to combat COVID-19 rumours in the Democratic Republic of the Congo through a rumour alert and refutation system
- WHO recommends the Kingdom of Saudi Arabia's public health laboratory for recognition as a national influenza centre
- WHO and Ministry of Health Zambia scale-up COVID-19 response and continuity of health services through the support of the Act-A Health Systems Connector
- WHO/Europe holds a workshop on data analysis and information management for emergency response for Azerbaijan through the Emergency Response Information Management System (ERIMS) initiative
- Lao People's Democratic Republic Ministry of Health and WHO prepare local media for potential Omicron surge
- The Plurinational State of Bolivia leverages influenza capacities for COVID-19 response
- WHO builds a Global Health Facilities Database: Leveraging insights from COVID-19 to ensure better access to primary healthcare and Universal Health Coverage (UHC)
- Updates from the UN Crisis Management Team (UNCMT)
- Measuring the impact of online COVID-19 vaccine training courses
- Operations Support and Logistics
- Progress on a subset of global indicators that demonstrate country and global progress to end the acute phase of the pandemic

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice

Annex 1. List of countries/territories/areas reporting currently circulating variants of concern as of 22 March 2022.

Country/Territory/Area	Delta	Omicron
Afghanistan	●	-
Albania	○	●
Algeria	●	●
American Samoa	○	○
Andorra	○	○
Angola	●	●
Anguilla	●	●
Antigua and Barbuda	●	●
Argentina	●	●
Armenia	●	●
Aruba	●	●
Australia	●	●
Austria	●	●
Azerbaijan	○	●
Bahamas	●	●
Bahrain	●	●
Bangladesh	●	●
Barbados	●	●
Belarus	○	●
Belgium	●	●
Belize	●	●
Benin	●	●
Bermuda	●	●
Bhutan	●	●
Bolivia (Plurinational State of)	●	●
Bonaire	●	●
Bosnia and Herzegovina	○	○
Botswana	●	●
Brazil	●	●
British Virgin Islands	●	●
Brunei Darussalam	●	●
Bulgaria	●	●

Country/Territory/Area	Delta	Omicron
Burkina Faso	●	●
Burundi	●	-
Cabo Verde	●	●
Cambodia	●	●
Cameroon	●	●
Canada	●	●
Cayman Islands	●	●
Central African Republic	●	●
Chad	●	○*
Chile	●	●
China	●	●
Colombia	●	●
Comoros	●	●
Congo	●	●
Costa Rica	●	●
Croatia	●	●
Cuba	●	●
Curaçao	●	●
Cyprus	●	●
Czechia	●	●
Côte d'Ivoire	●	●
Democratic Republic of the Congo	●	●
Denmark	●	●
Djibouti	●	●
Dominica	●	-
Dominican Republic	●	●
Ecuador	●	●
Egypt	●	●
El Salvador	●	●
Equatorial Guinea	●	-
Estonia	○	●

Country/Territory/Area	Delta	Omicron
Eswatini	●	●
Ethiopia	●	●
Falkland Islands (Malvinas)	-	-
Faroe Islands	-	-
Fiji	●	●
Finland	●	●
France	●	●
French Guiana	●	●
French Polynesia	●	●
Gabon	●	●
Gambia	●	●
Georgia	●	●
Germany	●	●
Ghana	●	●
Gibraltar	○	●
Greece	●	●
Greenland	●	-
Grenada	●	●
Guadeloupe	●	●
Guam	●	●
Guatemala	●	●
Guernsey	-	●
Guinea	●	●
Guinea-Bissau	●	-
Guyana	●	●
Haiti	●	-
Honduras	●	●
Hungary	○	●
Iceland	●	●
India	●	●
Indonesia	●	●
Iran (Islamic Republic of)	●	●

Country/Territory/Area	Delta	Omicron
Iraq	●	●
Ireland	●	●
Israel	●	●
Italy	●	●
Jamaica	●	●
Japan	●	●
Jordan	●	●
Kazakhstan	●	●
Kenya	●	●
Kiribati	-	●
Kosovo[1]	○	●
Kuwait	●	●
Kyrgyzstan	●	●
Lao People's Democratic Republic	●	●
Latvia	○	●
Lebanon	●	●
Lesotho	●	-
Liberia	●	-
Libya	●	-
Liechtenstein	○	○
Lithuania	○	●
Luxembourg	●	●
Madagascar	-	-
Malawi	●	●
Malaysia	●	●
Maldives	●	●
Mali	●	○
Malta	○	●
Martinique	●	●
Mauritania	●	●
Mauritius	●	●

Country/Territory/Area	Delta	Omicron
Mayotte	●	●
Mexico	●	●
Monaco	●	●
Mongolia	●	●
Montenegro	○	○
Montserrat	●	●
Morocco	●	●
Mozambique	●	●
Myanmar	●	●
Namibia	●	●
Nepal	●	●
Netherlands	●	●
New Caledonia	●	●
New Zealand	●	●
Nicaragua	●	●
Niger	●	●
Nigeria	●	●
North Macedonia	○	○
Northern Mariana Islands (Commonwealth of the)	●	●
Norway	●	●
Occupied Palestinian Territory	●	●
Oman	●	●
Pakistan	●	●

Country/Territory/Area	Delta	Omicron
Palau	○	○
Panama	●	●
Papua New Guinea	●	●
Paraguay	●	●
Peru	●	●
Philippines	●	●
Poland	●	●
Portugal	●	●
Puerto Rico	●	●
Qatar	●	●
Republic of Korea	●	●
Republic of Moldova	●	●
Romania	●	●
Russian Federation	●	●
Rwanda	●	●
Réunion	●	●
Saba	●	-
Saint Barthélemy	●	●
Saint Kitts and Nevis	●	●
Saint Lucia	●	●
Saint Martin	●	●
Saint Pierre and Miquelon	●	●
Saint Vincent and the Grenadines	●	●

Country/Territory/Area	Delta	Omicron
Sao Tome and Principe	○	-
Saudi Arabia	●	●
Senegal	●	●
Serbia	●	○
Seychelles	●	●
Sierra Leone	●	●
Singapore	●	●
Sint Maarten	●	●
Slovakia	●	●
Slovenia	●	●
Solomon Islands	●	●
Somalia	●	-
South Africa	●	●
South Sudan	●	●
Spain	●	●
Sri Lanka	●	●
Sudan	●	●
Suriname	●	●
Sweden	●	●
Switzerland	●	●
Thailand	●	●
Timor-Leste	●	●
Togo	●	●
Tonga	-	○

Country/Territory/Area	Delta	Omicron
Trinidad and Tobago	●	●
Tunisia	●	●
Turkey	●	●
Turks and Caicos Islands	●	●*
Uganda	●	●
Ukraine	○	●
United Arab Emirates	●	●
United Kingdom	●	●
United Republic of Tanzania	●	●
United States Virgin Islands	●	●
United States of America	●	●
Uruguay	●	●
Uzbekistan	○	●
Vanuatu	●	-
Venezuela (Bolivarian Republic of)	●	●
Viet Nam	●	●
Wallis and Futuna	-	-
Yemen	-	-
Zambia	●	●
Zimbabwe	●	●

**Newly reported in this update. "●" indicates that information for this variant was received by WHO from official sources. "○" indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information becomes available. **Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern.*

See also Annex 2: Data, table, and figure notes

Annex 2. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Annex 3. Methods for Figures 5 and 6

Figures include fourteen studies from the Czech Republic, Denmark, Finland, Israel, Qatar, South Africa, the United Kingdom, and the United States of America evaluating the VE against the Omicron variant, and 31 studies of the VE against the Delta variant from various countries from the European Region, Region of the Americas, and South-East Asia Region as well as Qatar and Thailand.

VE studies included in the plot were identified from an ongoing systematic review of COVID-19 vaccine effectiveness studies. All studies were cohort or test-negative studies. Methods for the systematic review and inclusion/exclusion criteria are available on view-hub.org. The studies were conducted during a period when either Delta or Omicron was the predominant circulating variant. Estimates were included if they were of laboratory-confirmed cases of the Omicron or Delta variant. In addition, for the primary series VE, only studies providing VE estimates for discrete time intervals since vaccination, which evaluate changes in VE over time, are included.
For the primary series VE, estimates are only included in the plot for studies that report VE for more than one time period.

Annex 4. Summary of primary series vaccine performance against Variants of Concern *(VE data as of 17 March 2022; Neutralization data as of 14 March 2022)*

	WHO Emergency Use Listing (EUL) Qualified Vaccines[+]								Vaccines without WHO EUL[+]	
	AstraZeneca-Vaxzevria/ SII - Covishield	Beijing CNBG-BBIBP-CorV	Bharat-Covaxin	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Novavax-Nuvaxovid/ SII - Covavax	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Gamaleya-Sputnik V
Alpha, Beta, Gamma										
Summary of VE*	*(see update from 11 January 2022 for details of vaccine performance against Alpha, Beta, and Gamma variants of concern*									
Delta[42]										
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection									
- Severe disease	↔$_{3}$	-	-	↓$_{1}$	↔$_{4}$	-	↔$_{7}$	-	-	-
- Symptomatic disease	↔to↓↓$_{6}$	-	↓$_{1}$	-	↔$_{2}$	-	↔to↓$_{5}$	-	-	-
- Infection	↔to↓$_{5}$	-	-	↓↓↓$_{1}$	↔$_{6}$	-	↔to↓$_{7}$	-	-	-
Neutralization	↓$_{15}$	↔to↓$_{2}$	↔to↓$_{4}$	↔to↓↓$_{11}$	↓$_{15}$	-	↔to↓$_{40}$	↓to↓↓$_{10}$	↔to↓$_{2}$	↓to↓↓↓$_{3}$
Omicron										
Summary of VE*	Reduced protection against infection and symptomatic disease; possible reduced protection against for severe disease but limited evidence									
- Severe disease	-	-	-	-	↓/↓↓$_{1}$	-	↓↓/↓↓↓$_{3}$	-	-	-
- Symptomatic disease	↓↓↓$_{1}$	-	-	-	↓↓/↓↓↓$_{2}$	-	↓↓↓$_{2}$	-	-	-
- Infection	↓↓↓$_{1}$	-	-	-	↓↓↓$_{3}$	-	↓↓↓$_{3}$	-	-	-
Neutralization	↓↓↓$_{7}$	↔to↓↓↓$_{3}$	↓↓$_{1}$	↔to↓↓↓$_{3}$	↓↓↓$_{17}$	-	↓↓↓$_{37}$	↓↓to↓↓↓$_{4}$	-	↓↓$_{1}$

VE refers to vaccine effectiveness and vaccine efficacy. *Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10 percentage point (pp) reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20 pp reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30 pp reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30 pp reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in the study. The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources Library. References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table.

Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. Likewise, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection.
- Annex 4 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than four months post final dose.
- Studies reporting VOC-specific VE estimates for full vaccination (seven days and over after the final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca-Vaxzevria for infection (where a phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Neutralization studies that use samples collected more than seven days and less than six months after complete vaccination and that use an ancestral strain as the reference are included in Annex 4.

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COVID-19 Weekly Epidemiological Update

Edition 83, published 15 March 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- Special Focus: Contact tracing and quarantine in the context of the Omicron SARS-CoV-2 variant: interim guidance
- WHO regional overviews
- Summary of the Weekly Operational Update

Global overview

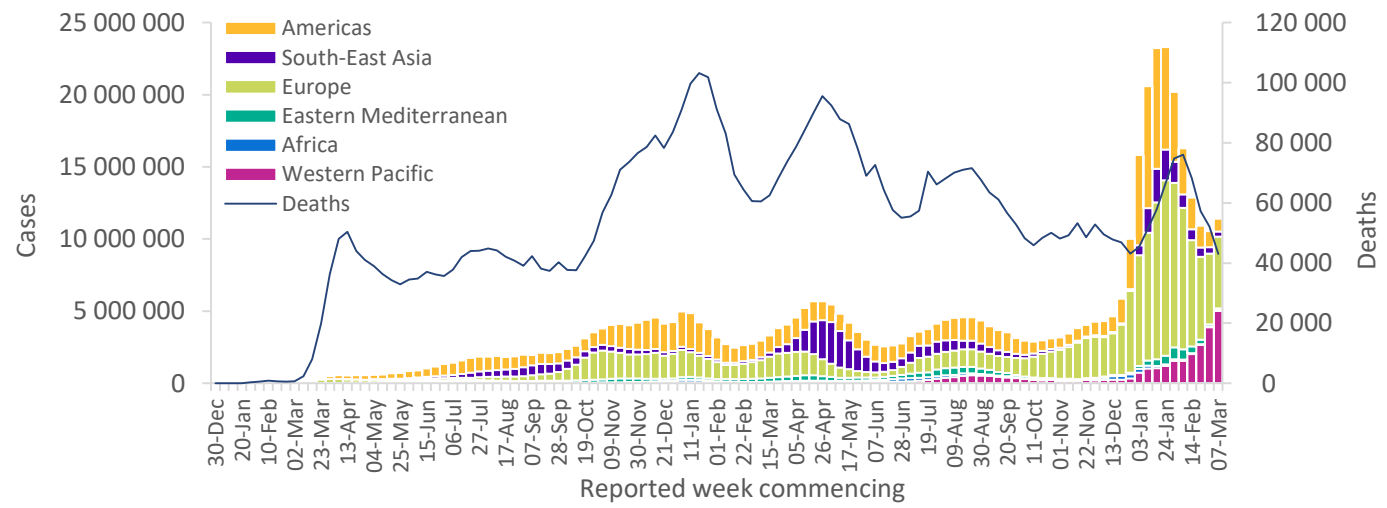
Data as of 13 March 2022

After a consistent decrease since the end of January 2022, the number of new weekly cases increased by 8% during the week of 7 through 13 March 2022. The number of new deaths continued a decreasing trend (-17% as compared to the previous week) (Figure 1). Across the six WHO regions, over 11 million new cases and just over 43 000 new deaths were reported (Table 1). As of 13 March 2022, over 455 million confirmed cases and over 6 million deaths have been reported globally.

At the regional level, the Western Pacific Region, the African Region and the European Region reported increases in new weekly cases of 29%, 12% and 2%, respectively, as compared to the previous week; while decreases were reported by the Eastern Mediterranean Region (-24%), the South-East Asia Region (-21%) and the Region of the Americas (-20%).

These trends should be interpreted with caution as several countries are progressively changing their testing strategies, resulting in lower overall numbers of tests performed and consequently numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 13 March 2022**



**See *Annex 2: Data, table, and figure notes*

The highest numbers of new cases were reported from the Republic of Korea (2 100 171 new cases; +44%), Viet Nam (1 670 627 new cases; +65%), Germany (1 350 362 new cases; +22%), Netherlands (475 290 new cases; +42%), and France (419 632 new cases; +20%).

The highest numbers of new deaths were reported from the United States of America (9078 new deaths; -13%), the Russian Federation (4530 new cases; -15%), Brazil (3301 new cases; -15%), Indonesia (1994 new cases; -5%) and China (1955 new deaths; +63%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 13 March 2022**

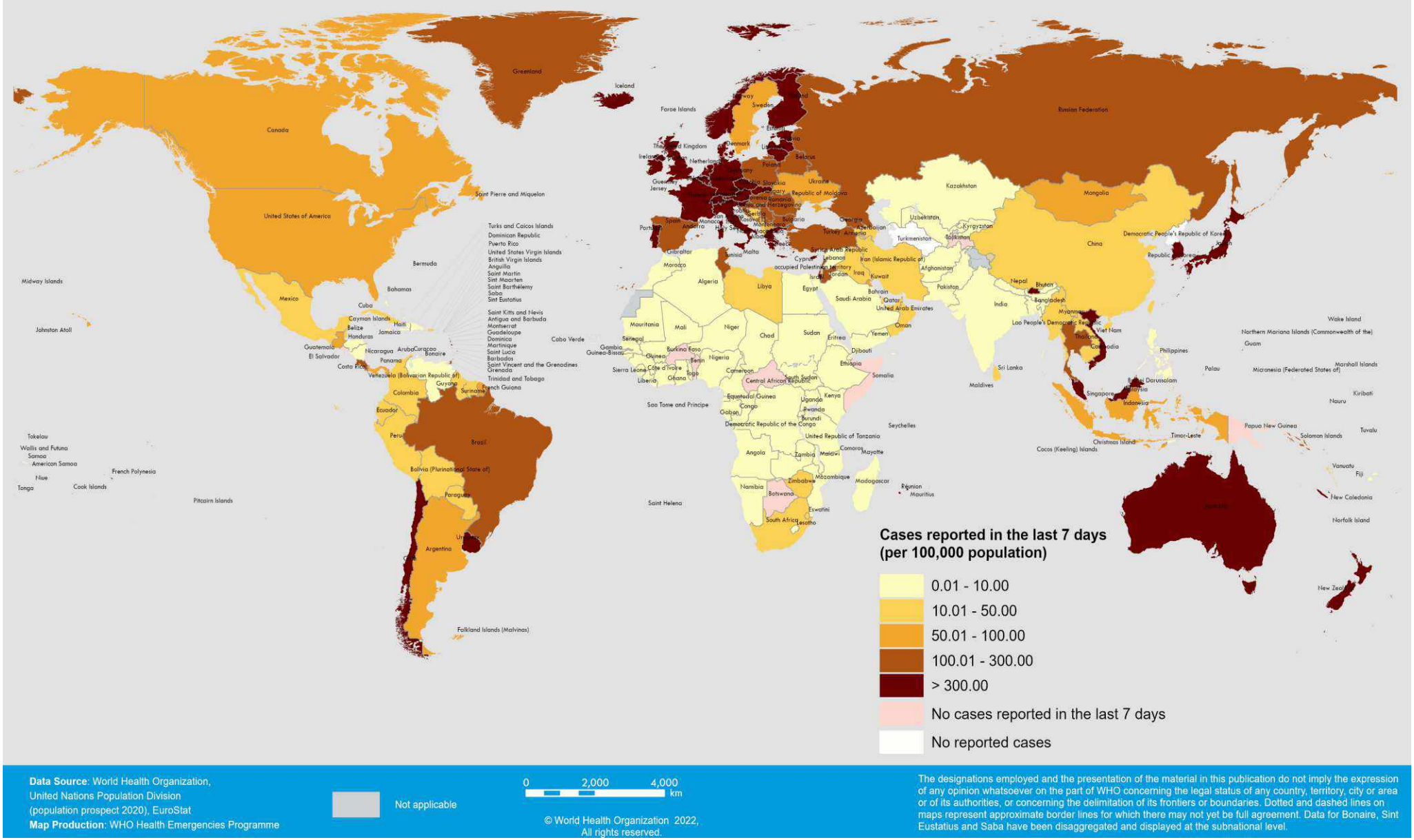
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Western Pacific	5 022 507 (44%)	29%	32 460 327 (7%)	6 639 (15%)	12%	193 740 (3%)
Europe	4 985 405 (44%)	2%	187 814 829 (41%)	14 985 (35%)	-23%	1 904 095 (32%)
Americas	887 162 (8%)	-20%	148 915 745 (33%)	16 093 (37%)	-15%	2 663 786 (44%)
South-East Asia	348 330 (3%)	-21%	56 470 189 (12%)	3 397 (8%)	-15%	769 025 (13%)
Eastern Mediterranean	126 257 (1%)	-24%	21 416 619 (5%)	1 694 (4%)	-49%	338 192 (6%)
Africa	38 053 (0%)	12%	8 486 757 (2%)	289 (1%)	-41%	170 589 (3%)
Global	**11 407 714 (100%)**	**8%**	**455 565 230 (100%)**	**43 097 (100%)**	**-17%**	**6 039 440 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 2: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

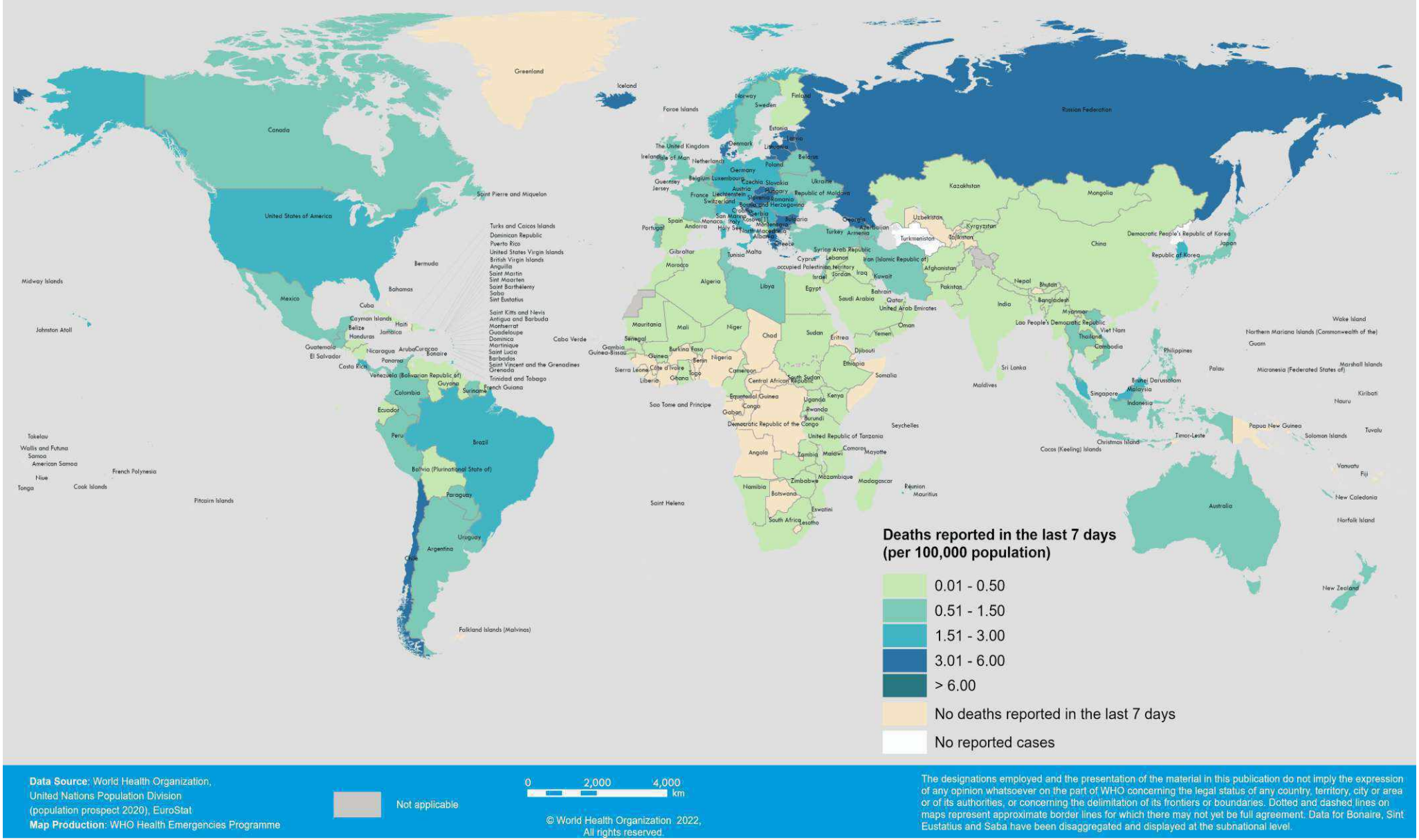
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 7-13 March 2022*



**See *Annex 2: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 7-13 March 2022**



**See *Annex 2: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

The current global epidemiology of SARS-CoV-2 is characterized by the global dominance of the Omicron variant. Delta remains the only other VOC with reported circulation at non-negligible levels. Among the 430 487 sequences uploaded to GISAID with specimens collected in the last 30 days[i], 429 994 (99.9%) were Omicron and 400 (0.1%) were Delta. To note, the global distribution of VOCs should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

Designation of SARS-CoV-2 VOCs as currently and previously circulating VOCs

During the last six months, a significant decline in the circulation of the **VOCs Alpha, Beta and Gamma** has been observed in all six WHO regions. Over the past 90 days, few to no sequences of these variants have been reported. The WHO Technical Advisory Group on SARS-CoV-2 Virus Evolution (TAG-VE) convened on 7 March 2022 to discuss the classification of these variants. While the classification of VOCs and VOIs remains unchanged, VOCs and VOIs will further be designated as either **'currently circulating**' or **'previously circulating**' depending on current epidemiological trends. On 9 March 2022, on the advice of the TAG-VE, WHO designated Alpha, Beta and Gamma as 'previously circulating VOCs' and Delta and Omicron as 'currently circulating VOCs'.

Once a variant has been classified by WHO as a VOC using an assessment based on several criteria (WHO Tracking SARS-CoV-2 variants website, see list of criteria), it remains a VOC. Low circulation of a VOC does not alter the concerning characteristics of the virus; its initial phenotypic characteristics remain unchanged. Given the uncertainty regarding the existence and low circulation of any of these VOCs in regions with limited sampling and sequencing capacity, all VOCs should continue to be monitored within the framework of representative community sampling and sequencing.

[i] Includes sequences submitted to GISAID with sample collected dates from 10 February to 11 March 2022 (last reported sample at the time of data extraction), excluding low coverage sequences. Proportions are estimated for countries submitting more than 100 total sequences. In the past 30 days, 44 countries submitted a total of 100 sequences and above on GISAID.10 February to 11 March 2022.

Designation of SARS-CoV-2 VOIs Lambda and Mu as previously circulating VOIs

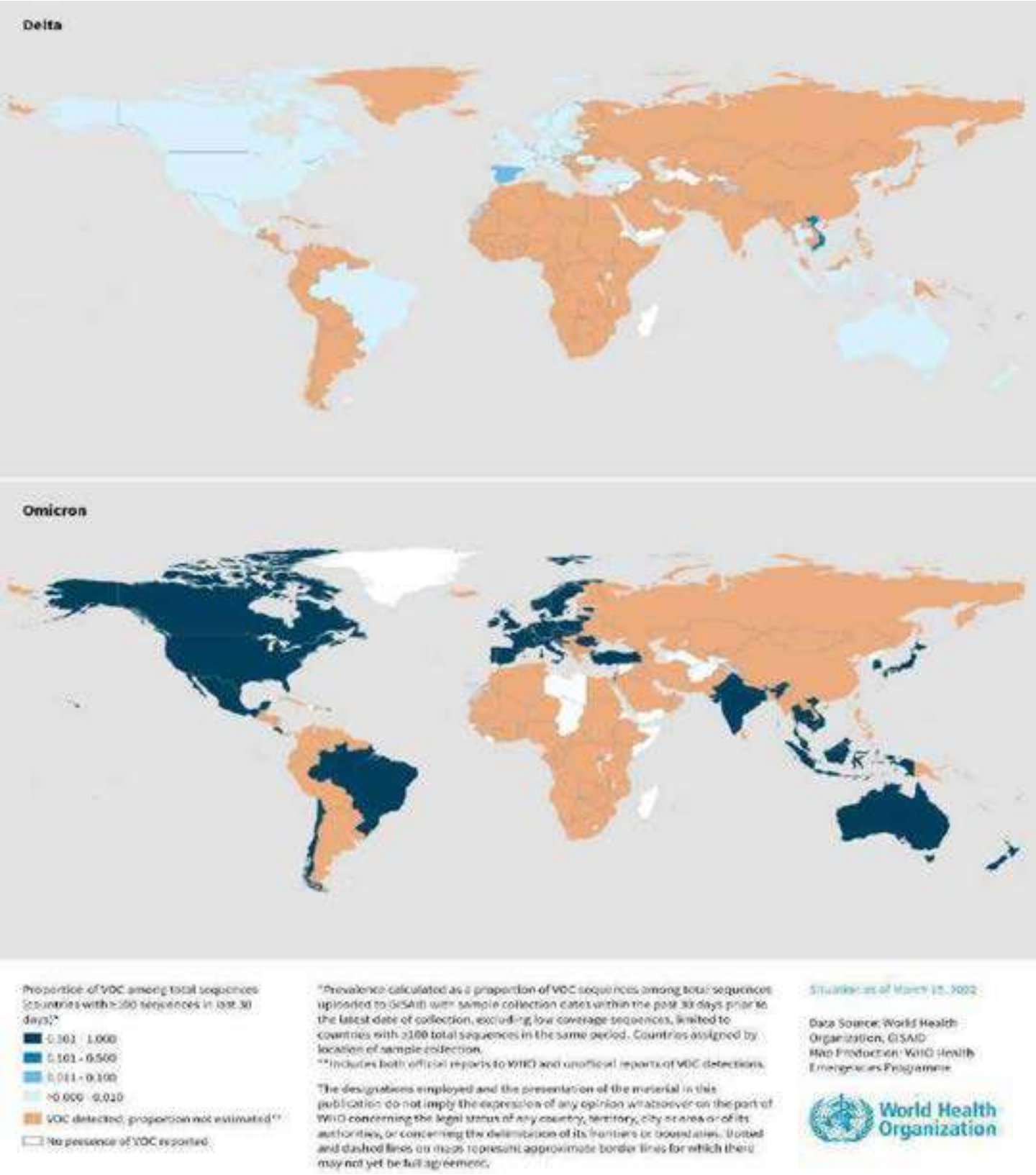
On 9 March 2022, Lambda, first detected in Peru in December 2020, and Mu, first detected in Colombia in January 2021, were designated as 'previously circulating VOIs'. Their prevalence has declined significantly over the last year, with no circulation reported during the past 90 days in any of the six WHO regions.

The actions required by Member States remain the same whether the VOC or VOI is further categorized as currently or previously circulating, for more details see the WHO Tracking SARS-CoV-2 variants website. Member States should continue to monitor SARS-CoV-2 variants, including current and previously circulating VOCs and VOIs, and flag any observed upsurge of cases linked to these variants. The designation from currently circulating VOC or VOI to previously circulating VOC or VOI reflects the declined circulation of the variant but does not exclude the possibility of a future upsurge of this variant.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

Figure 4: Prevalence of currently circulating variants of concern (VOCs) in the last 30 days, data as of 15 March 2022



See also Annex 1 for reported VOC detections by country/territory/area

Special Focus: Contact tracing and quarantine in the context of the Omicron SARS-CoV-2 variant: interim guidance

With the emergence of the Omicron variant and the significant surge in SARSCoV-2 infections, many countries experienced overwhelmed public health capacities to effectively conduct comprehensive contact tracing as part of the COVID-19 response. The increasing number of contacts needing quarantine also risked leading to the disruption of essential societal services, including health services.

In light of these challenges and with the increasing levels of population immunity, both from past infection and vaccination, on 17 February 2022 WHO released updated interim guidance for contact tracing and quarantine in the context of the Omicron variant.[1] This document was produced in collaboration with the Contact Tracing Guideline Development Group and the Infection Prevention and Control Guideline Development Group. Both groups of external experts, together with WHO technical experts, reviewed the available evidence on Omicron transmission dynamics and the persistence of immunity. The guidance document recommends a risk-based approach that focuses on reducing the morbidity and mortality from infection rather than attempting to break all chains of transmission when the number of cases is overwhelming capacities to respond.

Prioritizing contacts to follow up

In situations where contact tracing and public health capacities are overstretched, and there is a risk of essential societal service disruption, prioritization for contact tracing should be given to:

- contacts at highest risk of getting infected and those, such as health and care workers, who are at highest risk of spreading the virus to vulnerable people – particularly those working in nursing homes, long-term care facilities and hospitals; and other frontline essential workers.
- contacts at highest risk for developing severe disease, such as people with comorbidities, those who are immunosuppressed, the elderly, and adults who are unvaccinated or partially-vaccinated with no known prior SARS-CoV-2 infection.

In these situations, there is a particular added value in educating and encouraging cases to notify their own contacts, and where possible, using automated contact notification technologies (e.g., digital contact tracing apps) to quickly reach and provide guidance to multiple contacts simultaneously.

Quarantine in a high COVID-19 incidence area

The document offers guidance on the possibility to shorten the quarantine period from 14 to seven days, provided a negative PCR or an antigen rapid test result is obtained on day seven. In the case of overstretched testing capacity, authorities can shorten the quarantine period from 14 to 10 days, provided that contacts do not have any COVID-19 symptoms. Both options present some risk of further transmission, but in a situation of high incidence and considering the disruption of essential services, the benefits in doing so may outweigh the risks. If the quarantine is shortened, WHO recommends that contacts wear a well-fitted medical mask, monitor symptoms and avoid contact with vulnerable people for the remained 14-day period.

Vaccinated and previously infected contacts

The available evidence on vaccine effectiveness suggests that protection against infection wanes over time. The likelihood of infection with the Omicron variant is reduced within 90 days after the primary series or booster vaccination. Therefore, contacts vaccinated within the last 90 days can be considered a lower priority for contact tracing and may undergo a shorter quarantine. Similarly, infection-derived immunity wanes over time, but it is

expected to persist at least 90 days from infection. Thus, contacts infected within the last 90 days can also be considered a lower priority for contact tracing and may undergo a shorter quarantine.

Conclusions

As per the experience with the Omicron variant, countries may need to take policy decisions before the evidence on an emerging future variant is consolidated. In this case, WHO advises Member States to consider applying risk-based approaches that take into account different aspects of the epidemic, such as the intensity of transmission, the severity of disease associated with circulating variants, the levels of population immunity from past infection and vaccination, the capacity to track and trace contacts, access to rapid and accurate SARS-CoV-2 diagnostics, the capacity to assess the risk of exposure in health and care workers and other essential services personnel, and the overall pre-existing capacities of the health care system.

Any interruption of contact tracing activities or shortening of the duration of quarantine will increase the risk of onward transmission and this must be weighed against healthcare capacity, population immunity against the Omicron variant, and other health and socioeconomic priorities.

Additional resources

- Contact tracing in the context of COVID-19
- Considerations for quarantine of contacts of COVID-19 cases
- Critical preparedness, readiness and response actions for COVID-19
- Recommendations for national SARS-CoV-2 testing strategies and diagnostic capacities

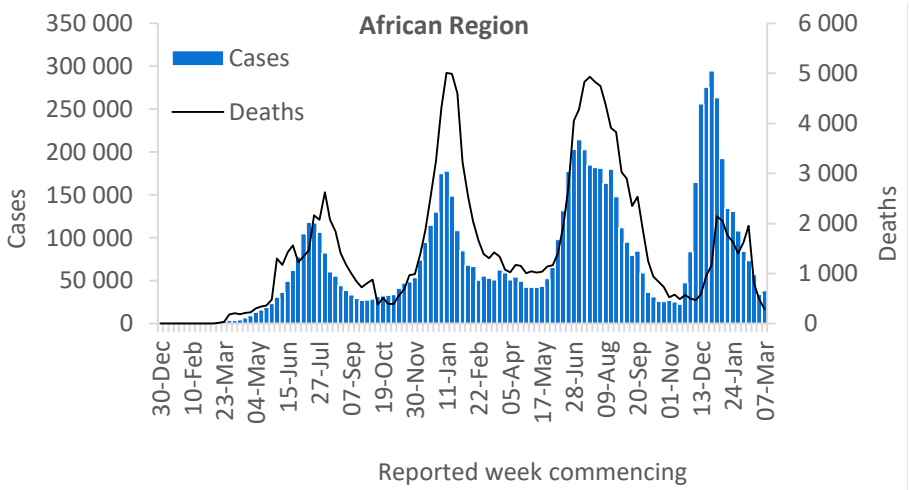
WHO regional overviews

Epidemiological week 7-13 March 2022**

African Region

The African Region reported over 38 000 new weekly cases, an 8% increase as compared to the previous week. This followed on from a declining trend observed since January 2022. Eleven (22%) countries in the Region reported an increase of over 20% in cases, with some of the highest proportional increases observed in Mauritius (11566 vs 4133 new cases; +180%), Nigeria (308 vs 136 new cases; +126%), and the Democratic Republic of Congo (190 vs 136 new cases; +40%). The highest numbers of new cases were reported from Mauritius (11 566 new cases; 909.4 new cases per 100 000 population; +180%), South Africa (10 360 new cases; 17.5 new cases per 100 000; -7%), and Réunion (8019 new cases; 895.7 new cases per 100 000; -20%).

The number of new weekly deaths in the Region decreased by 41% as compared to the previous week, with just under 300 new deaths reported. The highest numbers of new deaths were reported from South Africa (169 new deaths; <1 new death per 100 000 population; -52%), Mauritius (30 new deaths; 2.4 new deaths per 100 000; +233%), and Zimbabwe (17 new deaths; <1 new death per 100 000; +325%).

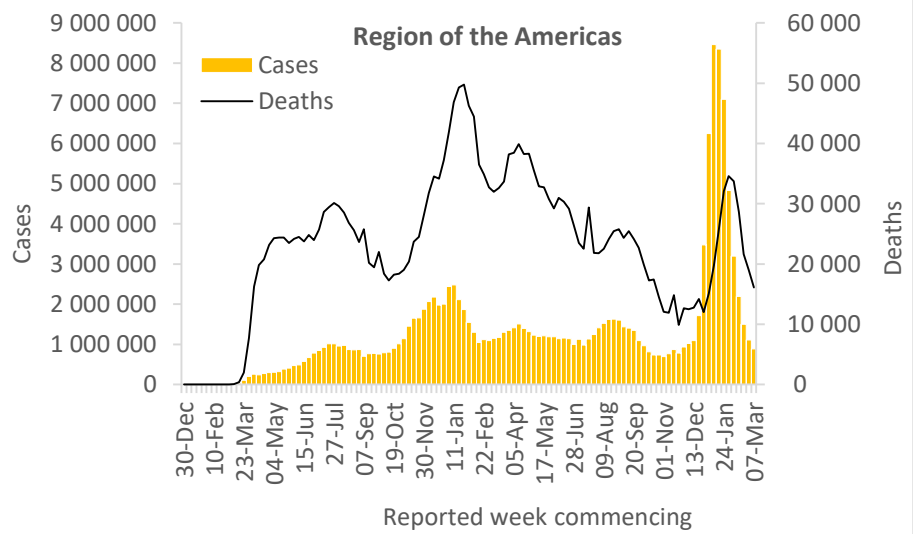


Updates from the African Region

Region of the Americas

With over 887 000 new weekly cases reported, the Region of the Americas continued to experience a decreasing trend (20% decrease as compared to the previous week). However, nine (16%) countries in the Region reported increases in new cases of 20% or greater, with the greatest increases observed in the islands of Saint Pierre and Miquelon (52 vs 8 new cases; +550%), Martinique (13686 vs 3216 new cases; +326%), and the United States Virgin Islands (130 vs 31 new cases; +319%). The highest numbers of new cases were reported from Brazil (331 315 new cases; 155.9 new cases per 100 000; -16%), the United States of America (247 936 new cases; 74.9 new cases per 100 000; -28%), and Chile (118 141 new cases; 618.0 new cases per 100 000; -23%).

The Region reported over 16 000 new deaths this week, a 15% decrease as compared to the previous week. The highest numbers of new deaths were reported from the United States of America (9078 new deaths; 2.7 new deaths per 100 000; -13%), Brazil (3301 new deaths; 1.6 new deaths per 100 000; -15%), and Mexico (976 new deaths; <1 new death per 100 000; +69%).

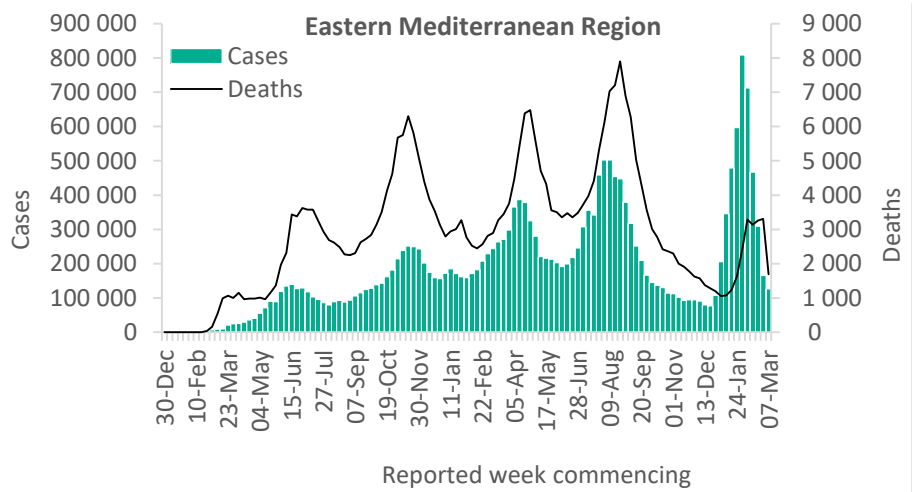


Updates from the Region of the Americas

Eastern Mediterranean Region

In the Eastern Mediterranean Region, new weekly cases have continued to decline following a peak reached in early February 2022. Over 126 000 new weekly cases were reported, a 24% decrease as compared to the previous week. However, two countries in the Region have reported increases in new cases of 20% or greater: Tunisia (24061 vs 9454 new cases; +155%) and Afghanistan (1715 vs 1167 new cases; +47%). The highest numbers of new cases were reported from the Islamic Republic of Iran (35 457 new cases; 42.2 new cases per 100 000; -34%), Tunisia (24 061 new cases; 203.6 new cases per 100 000; +155%), and Jordan (16 449 new cases; 161.2 new cases per 100 000; -22%).

The number of new weekly deaths decreased by 49% in the Region when compared to the previous week, with just under 1700 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (1084 new deaths; 1.3 new deaths per 100 000; -20%), Tunisia (124 new deaths; 1.0 new deaths per 100 000; -44%), and Egypt (105 new deaths; <1 new death per 100 000; -42%).

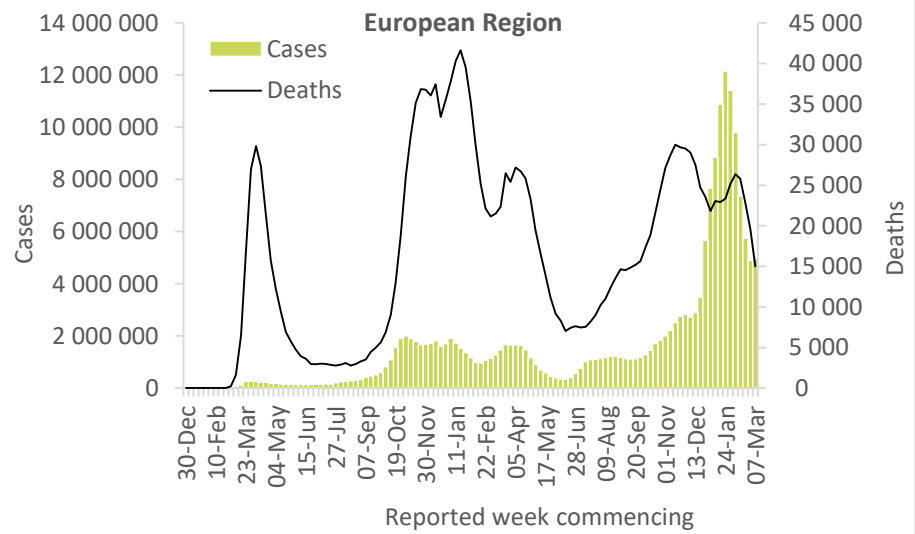


Updates from the Eastern Mediterranean Region

European Region

After a decreasing trend observed since the end of January 2022, the European Region reported a slight increase (+2%) in the number of new weekly cases as compared to the previous week, with just under 5 million new cases. Twelve countries (20%) in the Region reported increases in new cases of 20% or greater, with the largest observed in Monaco (240 vs 162 new cases; +48%), Malta (887 vs 621 new cases; +43%) and the Netherlands (475 290 vs 335 283 new cases; +42%). The highest numbers of new cases were reported from Germany (1 350 362 new cases; 1623.7 new cases per 100 000; +22%), the Netherlands (475 290 new cases; 2730.4 new cases per 100 000; +42%), and France (419 632 new cases; 645.2 new cases per 100 000; +20%).

The number of new deaths has continued to decrease in the Region, with just under 15 000 new deaths reported this week, a 23% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (4530 new deaths; 3.1 new deaths per 100 000; -15%), Germany (1469 new deaths; 1.8 new deaths per 100 000; +3%), and Italy (1000 new deaths; 1.7 new deaths per 100 000; -27%).

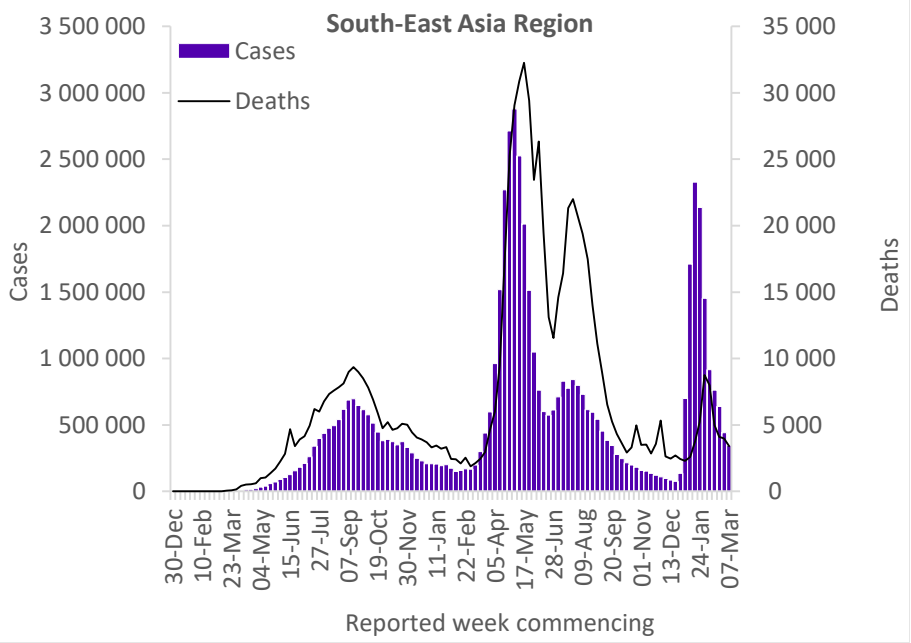


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 348 000 new weekly cases, a 21% decline as compared to the previous week, continuing the decreasing trend observed since mid-January 2022. The highest numbers of new cases were reported from Thailand (158 130 new cases; 226.5 new cases per 100 000; a +1%), Indonesia (141 770 new cases; 51.8 new cases per 100 000; -32%), and India (28 038 new cases; 2.0 new cases per 100 000; -40%).

Regionally, the number of new weekly deaths declined, with just under 3400 new deaths reported, a 15% decrease as compared to the previous week. The highest numbers of new deaths were reported from Indonesia (1994 new deaths; <1 new death per 100 000; -5%), India (814 new deaths; <1 new death per 100 000; -38%), and Thailand (474 new deaths; <1 new death per 100 000; +38%).

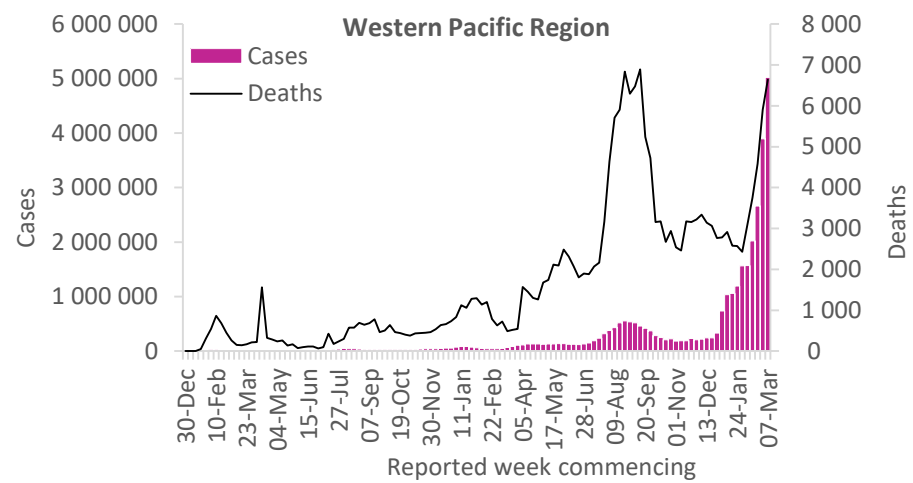


Updates from the South-East Asia Region

Western Pacific Region

Consistent with the increasing trend observed since the end of December 2021, the Western Pacific Region reported an increase of 29% in the number of new weekly cases as compared to the previous week, with over 5 million new cases. Seven (23%) countries in the region reported an increase of 20% or greater in the past week, with the largest increases observed in Vanuatu (146 vs 3 new cases; +4767%), Tonga (685 vs 280 new cases; +145%), and American Samoa (257 vs 112 new cases; +121%). The highest numbers of new cases were reported from the Republic of Korea (2 100 171 new cases; 4096.4 new cases per 100 000; +44%), Viet Nam (1 670 627 new cases; 1716.3 new cases per 100 000; +65%), and Japan (382 278 new cases; 302.3 new cases per 100 000; -16%).

The number of new weekly deaths continues to increase, with over 660 new deaths reported, a 12% increase as compared to the previous week. The highest numbers of new deaths were reported from China (1955 new deaths; <1 new death per 100 000; +63%), the Republic of Korea (1438 new deaths; 2.8 new deaths per 100 000; +42%), and Japan (1240 new deaths; 1.0 new deaths per 100 000; -18%).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition, highlights include the following:

- WHO scales-up sub-regional training on intra and after-action reviews (IAR/AARs) for COVID-19 in the European Region
- Women in India lead the fight against COVID-19 in communities
- Nigeria holds its first infodemic management workshop
- Update on the joint PAHO/WHO-ITU initiative in the Eastern Caribbean to leverage digital technology to promote COVID-19 vaccines
- WHO in partnership with UNICEF hands over reconstructed central drug warehouse to serve over 1 million residents in Lebanon
- WHO Information Network for Epidemics (EPI-WIN) co-developing solutions with networks
- OpenWHO COVID-19 vaccination training: Health workers' experiences in India, Indonesia, Kenya and Pakistan
- Progress on a subset of global indicators that demonstrate country and global progress to end the acute phase of the pandemic

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice

Annex 1. List of countries/territories/areas reporting currently circulating variants of concern as of 15 March 2022

Country/Territory/Area	Delta	Omicron
Afghanistan	●	-
Albania	○	●
Algeria	●	●
American Samoa	○	○
Andorra	○	○
Angola	●	●
Anguilla	●	●
Antigua and Barbuda	●	●
Argentina	●	●
Armenia	●	●
Aruba	●	●
Australia	●	●
Austria	●	●
Azerbaijan	○	●
Bahamas	●	●
Bahrain	●	●
Bangladesh	●	●
Barbados	●	●
Belarus	○	●
Belgium	●	●
Belize	●	●
Benin	●	●
Bermuda	●	●
Bhutan	●	●
Bolivia (Plurinational State of)	●	○
Bonaire	●	●
Bosnia and Herzegovina	○	○
Botswana	●	●
Brazil	●	●
British Virgin Islands	●	●
Brunei Darussalam	●	●
Bulgaria	●	●

Country/Territory/Area	Delta	Omicron
Burkina Faso	●	●
Burundi	●	-
Cabo Verde	●	●
Cambodia	●	●
Cameroon	●	●
Canada	●	●
Cayman Islands	●	●
Central African Republic	●	●
Chad	●	-
Chile	●	●
China	●	●
Colombia	●	●
Comoros	●	●
Congo	●	●
Costa Rica	●	●
Croatia	●	●
Cuba	●	●
Curaçao	●	●
Cyprus	●	●
Czechia	●	●
Côte d'Ivoire	●	●
Democratic Republic of the Congo	●	●
Denmark	●	●
Djibouti	●	●
Dominica	●	-
Dominican Republic	●	●
Ecuador	●	●
Egypt	●	●
El Salvador	●	●
Equatorial Guinea	●	-
Estonia	○	●

Country/Territory/Area	Delta	Omicron
Eswatini	●	●
Ethiopia	●	●
Falkland Islands (Malvinas)	-	-
Faroe Islands	-	-
Fiji	●	●
Finland	●	●
France	●	●
French Guiana	●	●
French Polynesia	●	●
Gabon	●	●
Gambia	●	●
Georgia	●	●
Germany	●	●
Ghana	●	●
Gibraltar	○	●
Greece	●	●
Greenland	●	-
Grenada	●	●
Guadeloupe	●	●
Guam	●	●
Guatemala	●	●
Guernsey	-	●
Guinea	●	●
Guinea-Bissau	●	-
Guyana	●	●
Haiti	●	-
Honduras	●	●
Hungary	○	●
Iceland	●	●
India	●	●
Indonesia	●	●
Iran (Islamic Republic of)	●	●

Country/Territory/Area	Delta	Omicron
Iraq	●	●
Ireland	●	●
Israel	●	●
Italy	●	●
Jamaica	●	●
Japan	●	●
Jordan	●	●
Kazakhstan	●	●
Kenya	●	●
Kiribati	-	●
Kosovo[1]	○	●
Kuwait	●	●
Kyrgyzstan	●	●
Lao People's Democratic Republic	●	●
Latvia	○	●
Lebanon	●	●
Lesotho	●	-
Liberia	●	-
Libya	●	-
Liechtenstein	○	○
Lithuania	○	●
Luxembourg	●	●
Madagascar	-	-
Malawi	●	●
Malaysia	●	●
Maldives	●	●
Mali	●	○
Malta	○	●
Martinique	●	●
Mauritania	●	●
Mauritius	●	●

Country/Territory/Area	Delta	Omicron
Mayotte	●	●
Mexico	●	●
Monaco	●	●
Mongolia	●	●
Montenegro	○	○
Montserrat	●	●
Morocco	●	●
Mozambique	●	●
Myanmar	●	●
Namibia	●	●
Nepal	●	●
Netherlands	●	●
New Caledonia	●	●
New Zealand	●	●
Nicaragua	●	●
Niger	●	●
Nigeria	●	●
North Macedonia	○	○
Northern Mariana Islands (Commonwealth of the)	●	●
Norway	●	●
Occupied Palestinian Territory	●	●
Oman	●	●
Pakistan	●	●

Country/Territory/Area	Delta	Omicron
Palau	○	○
Panama	●	●
Papua New Guinea	●	●
Paraguay	●	●
Peru	●	●
Philippines	●	●
Poland	●	●
Portugal	●	●
Puerto Rico	●	●
Qatar	●	●
Republic of Korea	●	●
Republic of Moldova	●	●
Romania	●	●
Russian Federation	●	●
Rwanda	●	●
Réunion	●	●
Saba	●	-
Saint Barthélemy	●	●
Saint Kitts and Nevis	●	●
Saint Lucia	●	●
Saint Martin	●	●
Saint Pierre and Miquelon	●	●
Saint Vincent and the Grenadines	●	●

Country/Territory/Area	Delta	Omicron
Sao Tome and Principe	○	-
Saudi Arabia	●	●
Senegal	●	●
Serbia	●	○
Seychelles	●	●
Sierra Leone	●	●
Singapore	●	●
Sint Maarten	●	●
Slovakia	●	●
Slovenia	●	●
Solomon Islands	●	●
Somalia	●	-
South Africa	●	●
South Sudan	●	●
Spain	●	●
Sri Lanka	●	●
Sudan	●	●
Suriname	●	●
Sweden	●	●
Switzerland	●	●
Thailand	●	●
Timor-Leste	●	●
Togo	●	●
Tonga	-	○

Country/Territory/Area	Delta	Omicron
Trinidad and Tobago	●	●
Tunisia	●	●
Turkey	●	●
Turks and Caicos Islands	●	-
Uganda	●	●
Ukraine	○	●
United Arab Emirates	●	●
United Kingdom	●	●
United Republic of Tanzania	●	●
United States Virgin Islands	●	●
United States of America	●	●
Uruguay	●	●
Uzbekistan	○	●
Vanuatu	●	-
Venezuela (Bolivarian Republic of)	●	●
Viet Nam	●	●
Wallis and Futuna	-	-
Yemen	-	-
Zambia	●	●
Zimbabwe	●	●

**Newly reported in this update. "●" indicates that information for this variant was received by WHO from official sources. "○" indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information becomes available. **Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern.*

See also Annex 2: Data, table, and figure notes

Annex 2. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

References

1. World Health Organization, Contact tracing and quarantine in the context of the Omicron SARS-CoV-2 variant: interim guidance, 17 February 2022. Available at https://www.who.int/publications/i/item/WHO-2019-nCoV-Contact-tracing-and-quarantine-Omicron-variant-2022.1

COVID-19 Weekly Epidemiological Update

Edition 82, published 8 March 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews
- Summary of the Weekly Operational Update

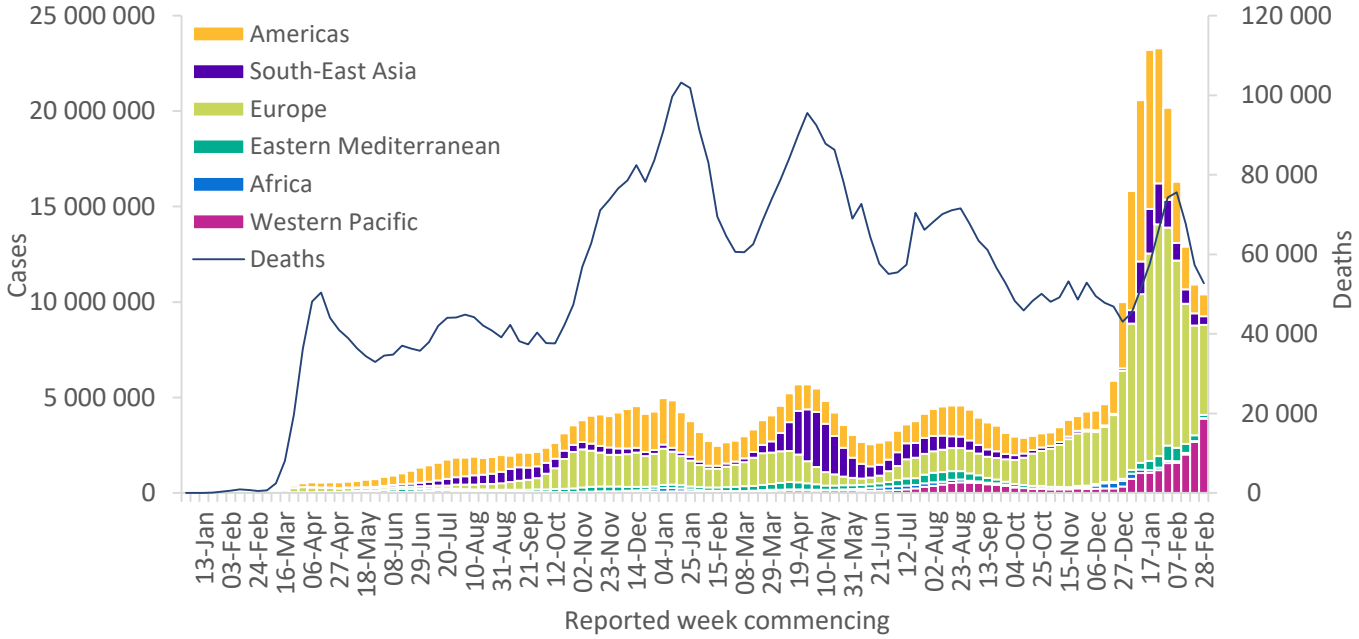
Global overview

Data as of 6 March 2022

Globally, during the week of 28 February through 6 March 2022, the number of new COVID-19 cases and deaths continued to decline by 5% and 8% respectively, as compared to the previous week (Figure 1). Across the six WHO regions, over 10 million new cases and over 52 000 new deaths were reported (Table 1). As of 6 March 2022, over 433 million confirmed cases and over 5.9 million deaths have been reported globally.

At the regional level, while the Western Pacific Region continued to report an increase (+46%) in the number of new weekly cases, all other regions reported decreases: the Eastern Mediterranean Region (-46%), the African Region (-40%), the South-East Asia Region (-31%), the Region of the Americas (-24%), and the European Region (-18%). The number of new weekly deaths increased in the Western Pacific Region (+29%) and remained stable in the Eastern Mediterranean Region (+2%), while decreases were reported by the African Region (-39%), the European Region (-15%), the Region of the Americas (-9%) and the South-East Asia Region (-3%). These trends should be interpreted with caution as several countries are progressively adopting targeted testing strategies, resulting in lower overall numbers of tests performed and consequently of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 6 March 2022**



**See *Annex 2: Data, table, and figure notes*

The highest numbers of new cases were reported from the Republic of Korea (1 461 431 new cases; +42%), Germany (1 108 231 new cases; -1%), Viet Nam (1 013 343 new cases; +112%), the Russian Federation (650 540 new cases; -29%), and Japan (452 763 new cases; +4%).

The highest number of new deaths were reported from the United States of America (10 579 new deaths; -9%), Russian Federation (5354 new deaths; -1%), Brazil (3865 new deaths; -11%), Indonesia (2099 new deaths, +23%), and Japan (1519 new deaths; -7%)

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 6 March 2022**

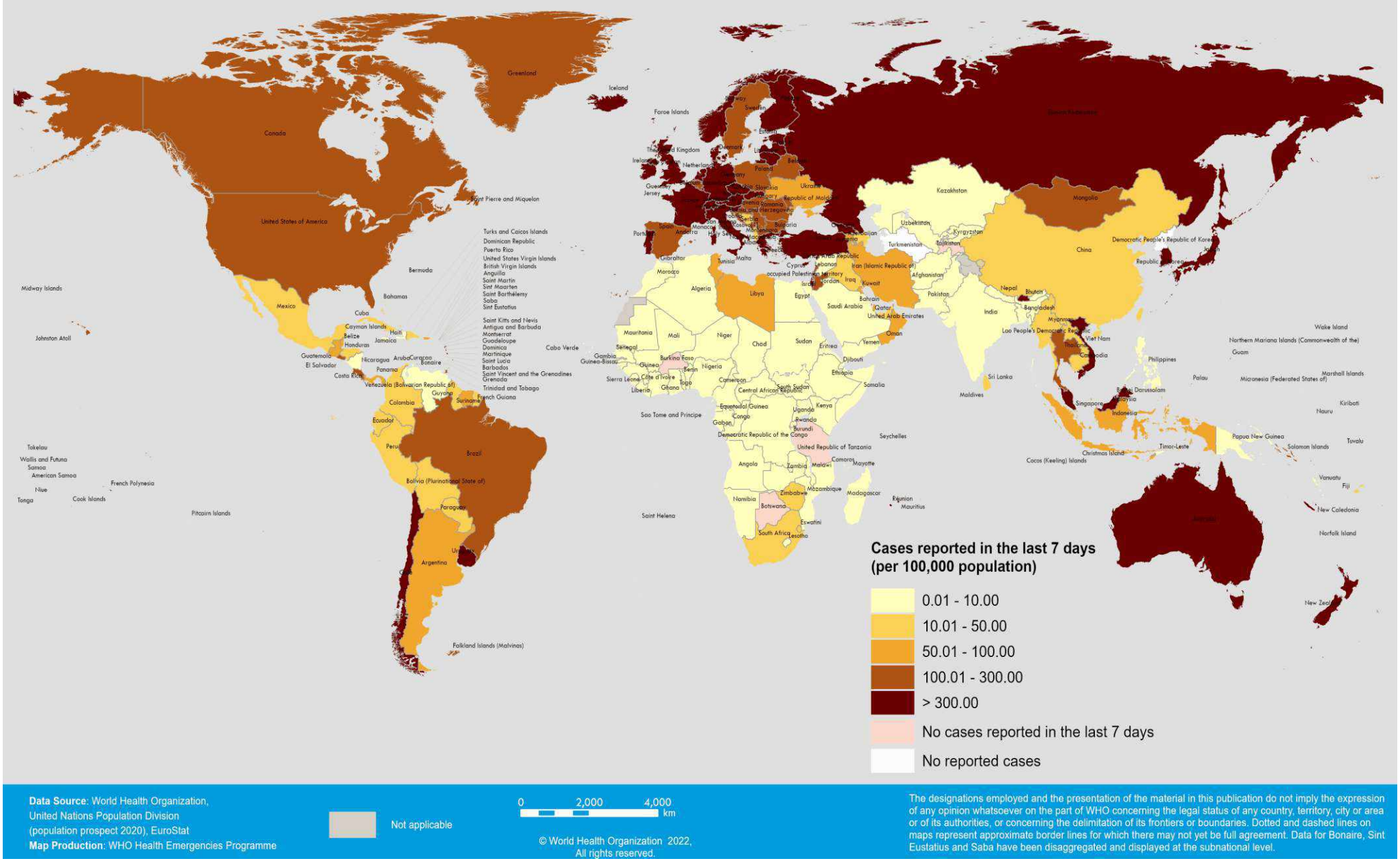
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	4 715 598 (45%)	-18%	182 589 794 (41%)	19 076 (36%)	-15%	1 887 611 (31%)
Western Pacific	3 895 780 (37%)	46%	27 437 820 (6%)	5 907 (11%)	29%	187 100 (3%)
Americas	1 139 607 (11%)	-24%	148 006 597 (33%)	19 974 (38%)	-9%	2 646 751 (44%)
South-East Asia	441 458 (4%)	-31%	56 121 859 (13%)	3 986 (8%)	-3%	765 628 (13%)
Eastern Mediterranean	165 460 (2%)	-46%	21 290 362 (5%)	3 308 (6%)	2%	336 498 (6%)
Africa	33 951 (0%)	-40%	8 448 709 (2%)	489 (1%)	-39%	170 300 (3%)
Global	**10 391 854 (100%)**	**-5%**	**443 895 905 (100%)**	**52 740 (100%)**	**-8%**	**5 993 901 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 2: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

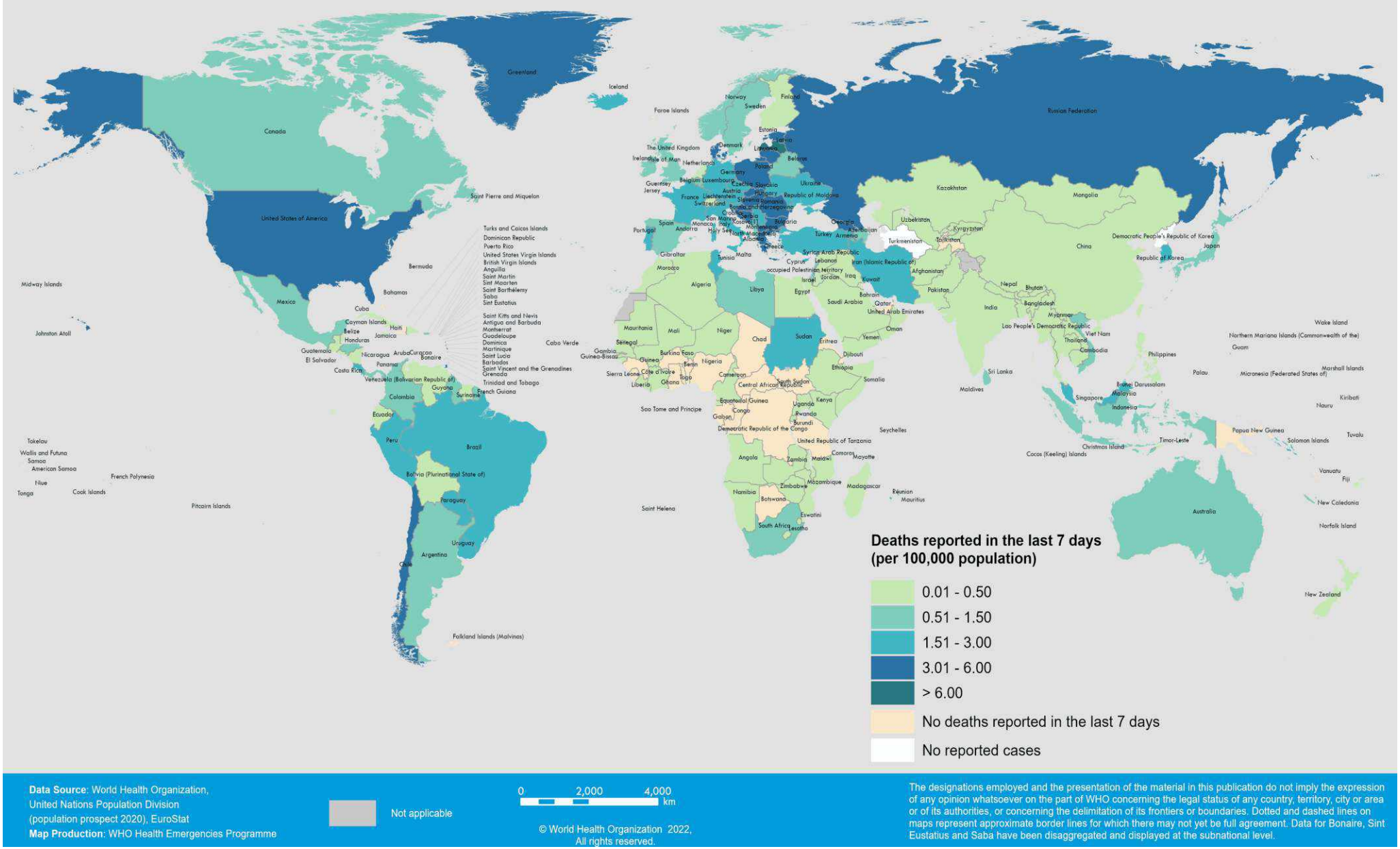
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 28 February – 6 March 2022**



**See *Annex 2: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 28 February – 6 March 2022**



**See *Annex 2: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

The current global epidemiology of SARS-CoV-2 is characterized by the global dominance of the Omicron variant. Delta remains the only other named variant with significant reported circulation. Among the 428 417 sequences uploaded to GISAID with specimen collection date in the last 30 days,[i] 427 152 (99.7%) were Omicron and 580 (0.1%) were Delta. For all countries/areas/territories with 100 or more sequences uploaded to GISAID within the last 30 days, Omicron remains the dominant variant.

Among Omicron descendent lineages reported within the last 30 days[i], BA.1.1 is the predominant sub-variant, accounting for 187 058 sequences (41%); BA.2 accounts for 156 014 sequences (34.2%); BA.1 accounts for 112 655 sequences (24.7%); and BA.3 accounts for 101 sequences (<1%).[ii] To note, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

Both the Technical Advisory Group on SARS-CoV-2 Virus Evolution (TAG-VE) and WHO are aware of reports on recombinant variants, both recombinants of Delta and Omicron, as well as recombinants of BA.1 and BA.2. Recombination is a natural phenomenon and can be regarded as an expected mutational event. The same monitoring and assessment process is applied to these recombinants, after verification and exclusion of potential contamination or co-infection, as for any other emerging variant. Current epidemiological and sequencing information for these recombinants do not indicate any sign of rapid transmission or a change in clinical severity. Only a few clusters have been reported to date and show very low to almost undetectable levels of transmission to contacts. No recombinant variant has been given a Pango lineage name.

The Omicron variant

Differences in the characteristics of VOCs

Available evidence on the phenotypic impacts of VOCs is reported in previous editions of the COVID-19 Weekly Epidemiological Update. Since the last update on 15 February 2022, there have been several new publications on the phenotypic characteristics of VOCs**,** including literature on Omicron (Table 2). Some of these studies have not been peer-reviewed and the findings must therefore be interpreted with due consideration of this limitation.

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[i] Includes sequences submitted to GISAID with sample collected dates from 4 February to 5 March 2022 (last reported sample at the time of data extraction), excluding low coverage sequences. Proportions are estimated for countries submitting more than 100 total sequences. In the past 30 days, 46 countries submitted a total of 100 sequences and above on GISAID.

[ii] Please note that uploaded GISAID data for the maps and the global epidemiological reporting are slightly different in absolute numbers as compared to Omicron descendent lineage sequence data. The latter is taken from the manual GISAID data availability

Table 2: Summary of current evidence on Omicron

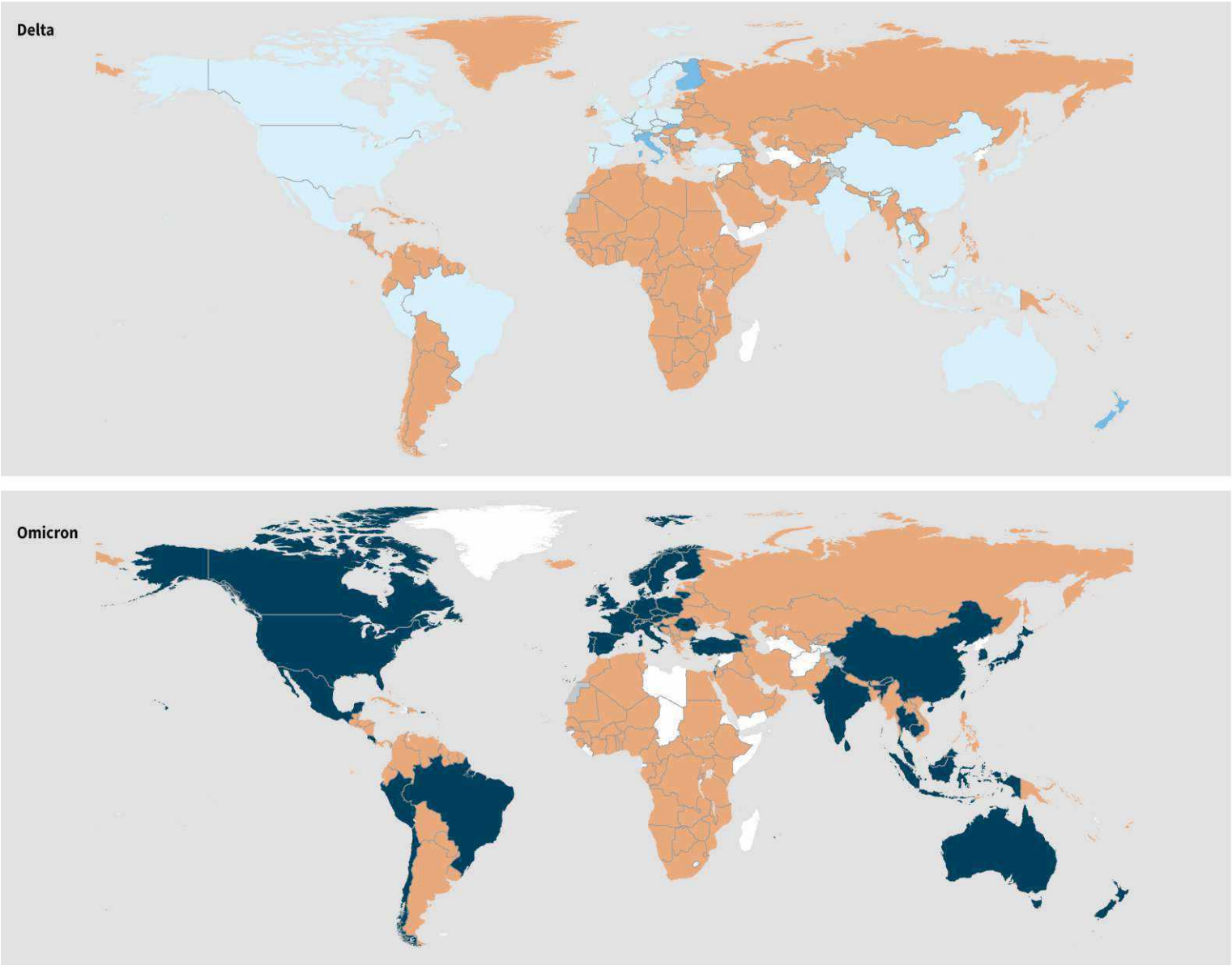
Domain	Indicator	Main results
Epidemiology	**Impact on disease prevalence/incidence**	There has been a decreasing trend in the number of COVID-19 cases reported globally. When compared to the previous week, the number of new COVID-19 cases decreased by 5% during the week of 28 February through 6 March 2022. The Western Pacific Region reported a 46% increase in the number of new cases while all other regions reported decreases. It is important to note that the decrease in the number of reported cases might be partly due to changes in testing policies in a number of countries, resulting in a reduction in testing and consequently of cases detected. The Omicron variant is the dominant circulating variant globally, representing 99.7% of samples collected from 4 February to 5 March 2022, while the Delta variant represents 0.1%.
	Impact on transmission	An updated analysis of GISAID data[1] shows similar results to the previous iteration, with Omicron still having a growth rate advantage over Delta in all countries with sufficient sequence data available up to 3 March 2022, translating to a pooled mean transmission advantage (i.e. relative difference in effective reproduction numbers) of 75% (95% Confidence Interval: 64%-93%) across epidemiological contexts under the assumption of an unchanged generation time (i.e. duration between the time a person gets infected to the time that person infects another person). However, evidence for a reduced generation time of Omicron suggests the transmission advantage may be lower; for a 20% shorter generation time, the estimated pooled mean transmission advantage of Omicron over Delta is 64% (95% CI: 59%-80%). The same analysis demonstrates a growth rate advantage of the Omicron Pango lineage BA.2 over the Pango lineage BA.1, with a pooled mean transmission advantage of 56% (95% CI: 42%-72%) under the assumption of an unchanged generation time. These estimates are stabilising as the number of BA.1/BA.2/BA.3 sequences per country are increasing and data become available from more countries. In the United Kingdom[2], BA.2 has been found to have a higher growth rate compared to BA.1 (82.7 %; range: 54%-100%) and higher secondary attack rates for household (14.3%; 95%CI: 13.6%-14.9% vs. 11.4%; 95%CI: 11.2%-11.5%) and non-household (6.1%; 95%CI:5.0%-7.2% vs. 4.6%; 95%CI: 4.5%-4.8%) contacts.
	Impact on disease severity	Omicron has consistently been found to have lower severity when compared to Delta across different settings. There was no difference in the risk of hospitalisation (HR=0.87; 95% CI: 0.75-1.00) between patients infected with BA.1 and BA.2 in the United Kingdom37.[2] Similarly, the odds of hospitalisation among SARS-CoV-2-infected patients did not differ between those with BA.1 and BA.2 (aOR=0.96; 95%CI: 0.85-1.09) in South Africa.[3]
Immune response	**Impact on reinfection**	Higher rates of reinfection have been reported for the Omicron variant than among individuals previously infected with other SARS-CoV-2 variants. Recent data from Qatar suggest that previous infection with one of the Omicron Pango lineages may confer protection against infection with other Omicron Pango lineages: 94.9% (95% CI: 88.4-97.8%) protection against BA.2 following infection with BA.1 and 85.6% (95% CI: 77.4-90.9%) protection against BA.1 following infection with BA.2 over a period of two months of follow-up.[4] The duration of this protection is not currently known.
	Impact on vaccination	For further information, see the section *Interpretation of the results of the VE for the Omicron variant.* Results of vaccine effectiveness (VE) studies should be interpreted with caution because estimates vary with the type of vaccine administered and the number of doses and scheduling (sequential administration of different vaccines).

	Impact on antibody responses	An analysis of neutralization data from 23 laboratories found a 20-fold reduction in neutralization associated with the Omicron variant.[5] These findings are consistent with results of recent studies that reported lower neutralising antibody titers to BA.1 and BA.2 compared to wild-type SARS-CoV-2, and similar responses for BA.1 and BA.2.[8] Another recent study found similar non-neutralising antibody responses to BA.1 and BA.2 in vaccinated individuals. [7] Overall, these results indicate similar humoral responses for BA.1 and BA.2.
Diagnostic tools	**Impact on PCR assays**	There is no recent evidence on the impact of Omicron on PCR assays. The BA.2 lineage is the only descendant variant of Omicron that lacks the 69-70 deletion responsible for S-gene target failure. Evaluation of PCR tests for SARS-CoV-2 that include multiple gene targets revealed limited impact of the Omicron variant on the diagnostic test accuracy of these assays.[8]
	Impact on Rapid Diagnostic tests	Preliminary data showed contradictory results on the diagnostic performance of Ag-RDTs on Omicron compared to Delta, the wild-type virus or other VOCs.[12,13] While some studies have shown reduced sensitivity of Ag-RDTs [9,10] a recent study from the United States of America reported comparable sensitivity of three Ag-RDT tests for Omicron and Delta.[11]
Impact on treatment	**Impact on antivirals**	Preliminary data have shown no difference in the effectiveness of antiviral agents against the Omicron variant.[12–14]
	Impact on biologicals	Initially, studies on the effectiveness of monoclonal antibodies for treating patients with Omicron reported conserved neutralizing activity for three broadly neutralizing monoclonal antibodies (sotrovimab, S2X259 and S2H97) and a reduction in effectiveness of other monoclonal antibodies. [15–19] However, additional preclinical evidence shows reduced neutralizing activity of sotrovimab against the BA.2 lineage and lack of efficacy of casirivimab-imdevimab against the BA.1 lineage.[20]
	Other treatment options	There is no evidence to suggest a reduction in the effectiveness of Interleukin-6 receptor blockers and corticosteroids in the management of patients with severe and critical disease.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

Figure 4: Prevalence of variants of concern (VOCs) Delta and Omicron in the last 30 days, data as of 8 March 2022



Proportion of VOC among total sequences (countries with ≥100 sequences in last 30 days)*

- 0.501 - 1.000
- 0.101 - 0.500
- 0.011 - 0.100
- >0.000 - 0.010
- VOC detected, proportion not estimated**
- No presence of VOC reported

Situation as of March 8, 2022

*Prevalence calculated as a proportion of VOC sequences among total sequences uploaded to GISAID with sample collection dates within the past 30 days prior to the latest date of collection, excluding low coverage sequences, limited to countries with ≥100 total sequences in the same period. Countries assigned by location of sample collection.
**Includes both official reports to WHO and unofficial reports of VOC detections.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization, GISAID
Map Production: WHO Health Emergencies Programme

World Health Organization

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See also Annex 1 for reported VOC detections by country/territory/area

Figure 5. Vaccine effectiveness (VE) of primary series and booster vaccination against the Delta variant of concern

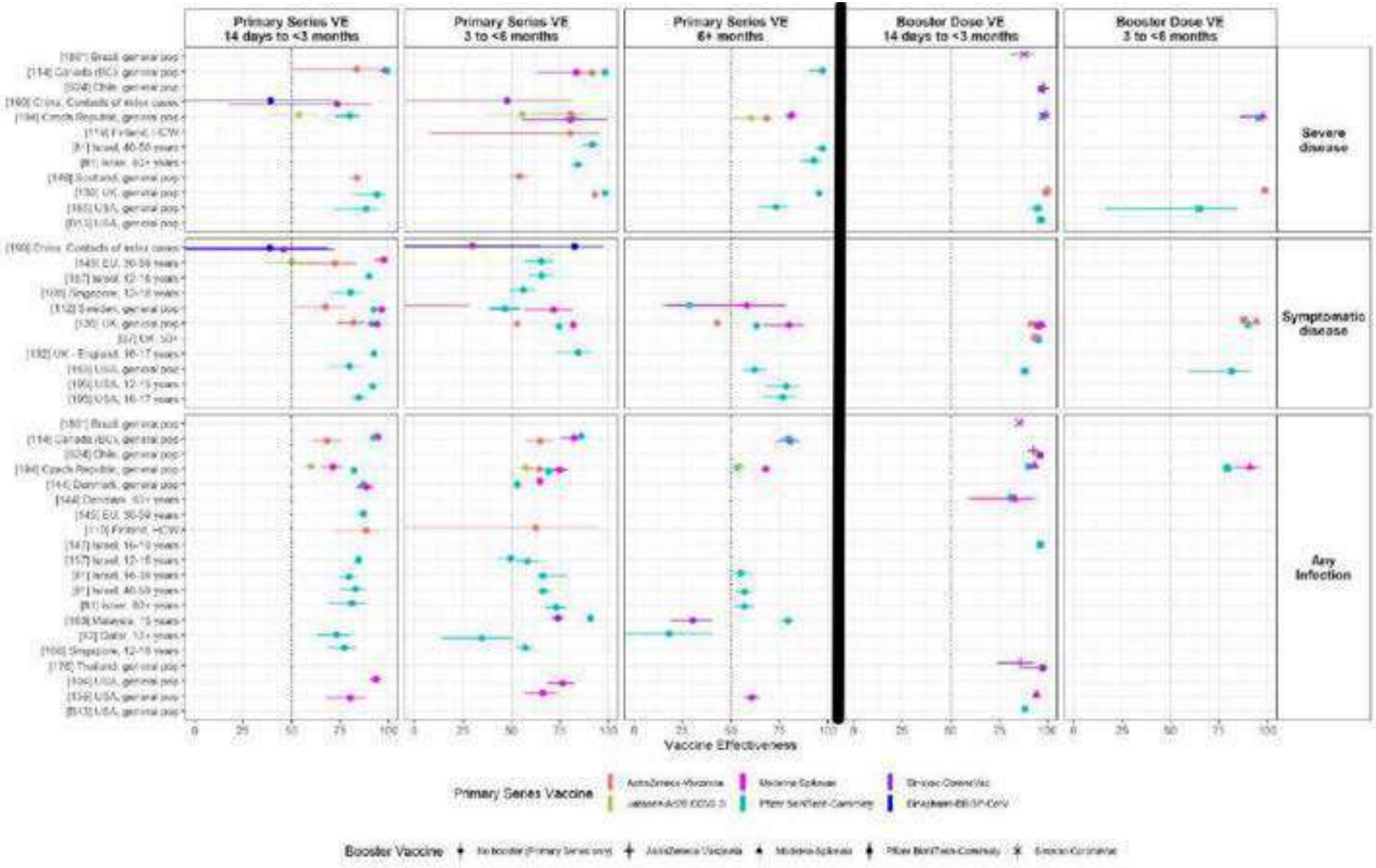
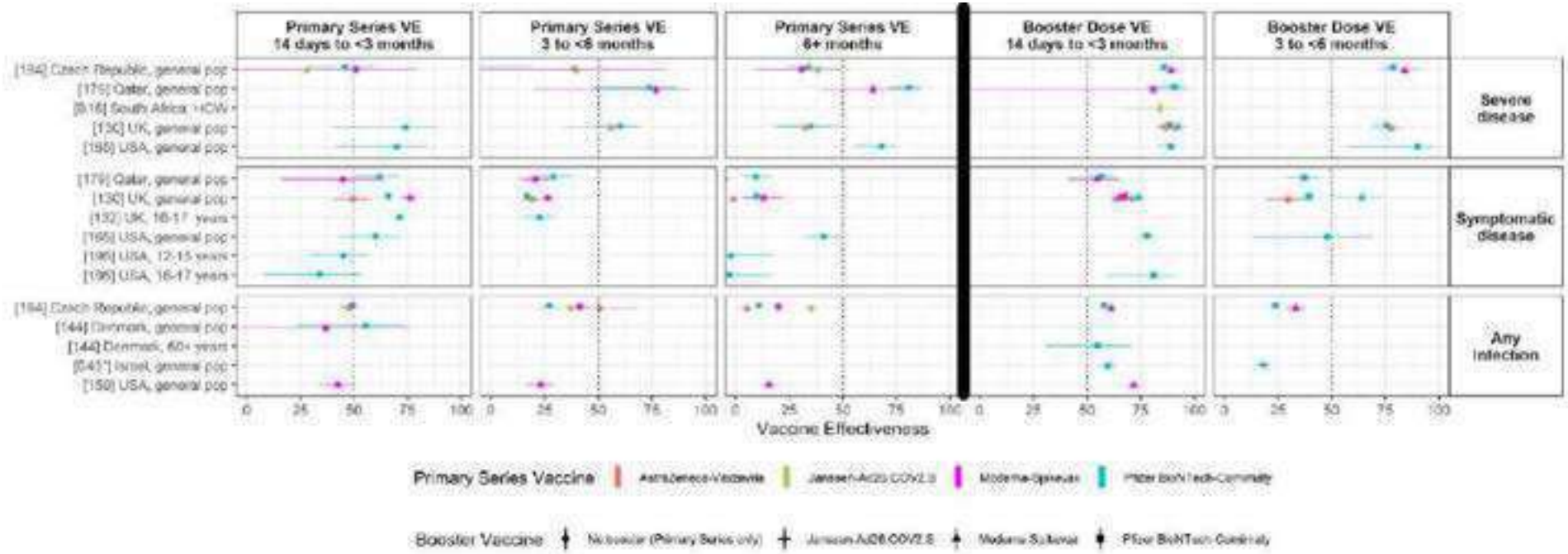


Figure 6. Vaccine effectiveness (VE) of primary series and booster vaccination against the Omicron variant



*Indicates booster dose vaccine effectiveness evaluated using persons completing primary series as reference group, rather than unvaccinated persons. Abbreviations: pop=population; HCW=healthcare workers; EU=European Union. Dots represent point estimates of vaccine effectiveness; horizontal lines represent the 95% confidence intervals. Labels along left side of plot indicate reference numbers [], country, and study population. Reference numbers identify the study and link to the summary table of VE effectiveness studies on view-hub.org (Table 1 in summary table); references starting with a 'B' are studies found in the booster VE table only (Table 2 in summary table). Primary series refers to the completion of two doses of vaccines for AstraZeneca-Vaxzevria; Moderna-Spikevax, Pfizer BioNTech-Comirnaty and Sinovac-CoronaVac and one dose of Janssen-Ad26.COV2.S. Severe disease includes hospitalization and pneumonia. Symptomatic disease includes disease of any severity level; any infection can include symptomatic and asymptomatic infection. Additional details on the methods for inclusion of the estimates in the plots are provided in Annex 3. Note, three negative point estimates for the primary series are not shown in the Omicron plot: Moderna-Spikevax VE against symptomatic disease at 6+ months (reference 179) as well as Moderna-Spikevax and Pfizer BioNTech-Comirnaty VE against infection at 3-6 months (reference 144); one negative point estimate for primary series is not shown in the Delta plot: AstraZeneca-Vaxzevria VE against Delta symptomatic disease (reference 112) with 95% CIs crossing 0 is not fully visible in the plot.

Figures 5 and 6 summarize the impact of the Delta and Omicron variants, respectively, on product-specific vaccine effectiveness (VE) over time for both primary series vaccines and booster vaccines. Since the last update, six new studies (of which three not peer-reviewed) have been added to the figures.[21–26] One study provided new Omicron VE data on AstraZeneca-Vaxzevria vaccine, one on Janssen-Ad26.COV2.S vaccine, one on Moderna-Spikevax vaccine, and four on Pfizer BioNTech-Comirnaty vaccine. Of note, recently published studies from China and Thailand contributed data on VE of two inactivated vaccines, Beijing CNBG - BBIBP-CorVand Sinovac-CoronaVac, against the Delta variant. Additional information on vaccine performance against VOCs can also be found in Annex 4.

Interpretation of the results of VE studies for the Delta variant

Most of the evidence to date suggests that the effectiveness of mRNA vaccines (Pfizer BioNTech-Comirnaty and Moderna-Spikevax) remains high against *severe disease* associated with Delta variant infection at six or more months after the primary series, with five of six studies reporting VE estimates of >80% and one study reporting a VE of 74% at six months or more. One study reported VE estimates against *severe disease* of 61% and 68% for Janssen-Ad26.COV2.S and AstraZeneca-Vaxzevria vaccines, respectively. Four studies report high VE (≥80%) of the AstraZeneca-Vaxzevria vaccine three to six months following the primary series, while one study reports a lower VE (54%) after six months as compared to the first three months (84%). An additional study showed VE of AstraZeneca-Vaxzevria vaccine against *severe disease* decreased from 80% at three to less than six months after completion of the primary series, to 68% at six or more months after the second dose. One study providing evidence of protection against *severe disease* due to Delta variant for Janssen-Ad26.COV2, showed that the VE stayed relatively constant at 54-61% up to six months after the primary series of vaccination. One new study showed that the VE of Sinovac-CoronaVac against the development of pneumonia (classified as severe COVID-19 in Figure 5) among close contacts of Delta index cases decreased from 74% in the first three months following completion of the primary series to 47% from three to six months.

VE estimates against *symptomatic disease* and *infection* range from 71-96% following the primary series of one of the two mRNA vaccines from 14 days up to three months after vaccination, and from 68-88% and 50-60% following the primary series of the AstraZeneca-Vaxzevria and Janssen-Ad26.COV2.S vaccines, respectively, during the same time period. There is consistent evidence of decreasing VE against *symptomatic disease* and *infection* over time following the primary series for all of the vaccines for which data are available. Despite this, most of the evidence still suggests VE estimates of >50% (59-80%) at six months or more following either mRNA vaccine, with two estimates falling below 50%. Four of the five studies evaluating the AstraZeneca-Vaxzevria vaccine also showed a VE >50% (54-65%) at three to six months, though in one of these studies, the VE decreased to 43% at six or more months following the primary series. The VE of Janssen-Ad26.COV2.S vaccine ranged from 50-60% up to six months following vaccination (two studies). One study from Malaysia of Sinovac-CoronaVac vaccine reported a VE against *infection* of 74% at three to six months following the primary series, which decreased to 30% beyond six months. A second study of Sinovac-CoronaVac vaccine from China found that the VE against *symptomatic disease* among close contacts of index cases decreased from 46% at 14 days to less than three months to 30% from three to six months. This same study estimated the VE of Beijing CNBG - BBIBP-CorV vaccine against *symptomatic disease* among close contacts index cases to be 39% shortly after completion of the primary series, increasing to 82% from three to six months, though confidence intervals are wide and should be interpreted with caution.

Receipt of a booster dose of mRNA, vector-based or inactivated vaccines for which there are data available, resulted in VE estimates of ≥79% for *all outcomes* within the first three months. At three to six months following the booster dose, the VE of a Pfizer BioNTech-Comirnaty booster following Pfizer BioNTech-Comirnaty or AstraZeneca-Vaxzevria primary series, as well as the VE of three doses of Moderna-Spikevax vaccine, remained >95% against *severe disease*

in two studies conducted in the United Kingdom and the Czech Republic, but decreased from 95% to 65% with Pfizer BioNTech-Comirnaty primary series and booster in a single study conducted in the United States of America. In the same studies mentioned above from the United Kingdom and the United States of America, the VE against *symptomatic disease* at three months or more following a booster dose with an mRNA vaccine was >75% after a primary series of either the AstraZeneca-Vaxzevria or Pfizer BioNTech-Comirnaty vaccine.

Interpretation of the results of VE studies for the Omicron variant

Four studies of VE for the Omicron variant show a lower protection of the primary series COVID-19 vaccines for all outcomes (*severe disease*, *symptomatic disease*, and *infection*) than has been observed for other VOCs. Nevertheless, VE estimates against the Omicron variant remain highest against *severe disease*, and lower for s*ymptomatic disease and infection* outcomes. Booster doses of vaccine appear to substantially improve VE for all outcomes for all products for which data are available. However, due to short follow-up time in studies available to date, additional data are needed to characterize the duration of VE following a booster dose.

Studies from Qatar, the United Kingdom, and the United States of America report VE estimates for the Pfizer BioNTech-Comirnaty vaccine against *severe disease* due to the Omicron variant of >70% up to six months following the primary series, which remained stable after six months in the studies conducted in Qatar and the United States of America, but decreased to <50% in the study conducted in the United Kingdom. In the study from Qatar, VE of the Moderna-SpikeVax mRNA vaccine remained >70% up to and beyond six months after vaccination. In contrast, one recent study (not peer-reviewed) from the Czech Republic found lower VE (<50%) at all time points of follow-up for both mRNA vaccines, as well as the Janssen-Ad26.COV.2 vaccine. Fluctuation in VE estimates over time since vaccination in this study may be due to underlying biases in the data (e.g. low ascertainment rate), and results should be interpreted with caution. In a study from the United Kingdom, VE estimates for the AstraZeneca-Vaxzevria vaccine against *severe disease* reduced from 56% to 33% from three months or more, with relatively wide confidence intervals (see Figure 6 for details).

Early VE estimates (measured from 14 days up to three months after vaccination) of the primary series against *symptomatic disease* are generally lower than those for *severe disease*, though they remain at or above 50% for the AstraZeneca-Vaxzevria, Moderna-Spikevax, and Pfizer BioNTech-Comirnaty vaccines. Lower VE estimates for the same time period were observed in two studies, one which reported VE of 45% for the Moderna-Spikevax vaccine and another which reported VE estimates of 34% and 45% for the Pfizer BioNTech-Comirnaty vaccine for adolescents 16-17 years and 12-15 years, respectively.
VE against *infection* at 14 days up to three months after the primary series ranged from 37-55%. All available estimates against both *symptomatic disease* and *infection* measured three or more months after completion of the primary series indicate VE estimates of less than 52% for the three vaccines (Pfizer BioNTech-Comirnaty, Moderna-Spikevax and AstraZeneca-Vaxzevria).

In all the six new studies, a booster dose increased VE estimates against *severe disease* to above 75% for all vaccines for which data are available, with this effect maintained up to six months after the booster dose. A booster dose increased VE estimates against *symptomatic disease* in the first three months following vaccination substantially, by at least 37 percentage points across all vaccines, with VE estimates ranging from 55%-81%. However, VE estimates decreased to 29-64% beyond three months. VE against *infection* due to the Omicron variant in the first three months following a booster dose ranged from 55-71% and decreased to 18-33% at three to less than six months post-booster.

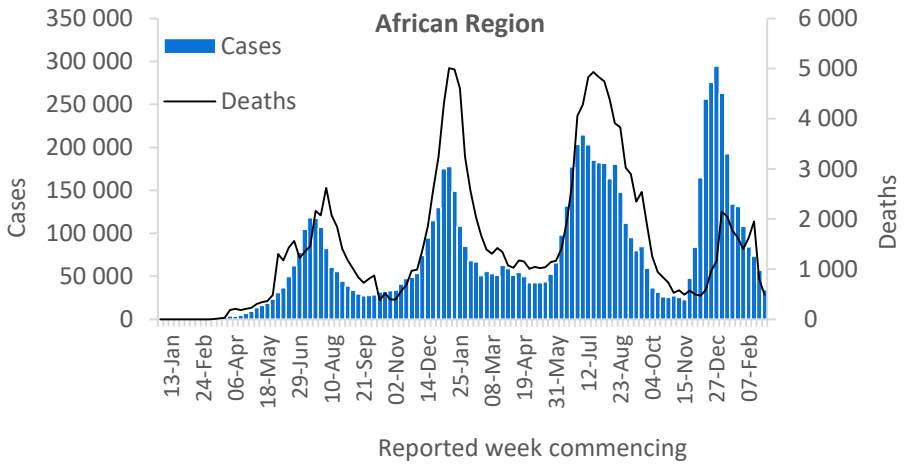
WHO regional overviews

Epidemiological week 28 February – 6 March 2022**

African Region

The African Region has continued to report a decrease in the number of cases since the beginning of January 2022, with just under 34 000 new cases reported this week, a 40% decrease as compared to the previous week. However, six countries in the Region (12%) reported an increase of over 20% in new weekly cases, with the largest observed in Central African Republic (95 vs 38 new cases; +150%). The highest numbers of new cases were reported from South Africa (11 181 new cases; 18.9 new cases per 100 000 population; -25%), Réunion (10 036 new cases; 1121.0 new cases per 100 000; -26%), and Mauritius (4133 new cases; 325.0 new cases per 100 000; -75%).

With over 400 new deaths reported this week, the Region observed a 39% decrease in new weekly deaths as compared to the previous week (during which a backlog of deaths was reported by South Africa following an ongoing audit exercise). The highest numbers of new deaths were reported from South Africa (352 new deaths; <1 new death per 100 000 population; -39%), Réunion (26 new deaths; 2.9 new deaths per 100 000; -30%), and Algeria (25 new deaths; <1 new deaths per 100 000; -39%).

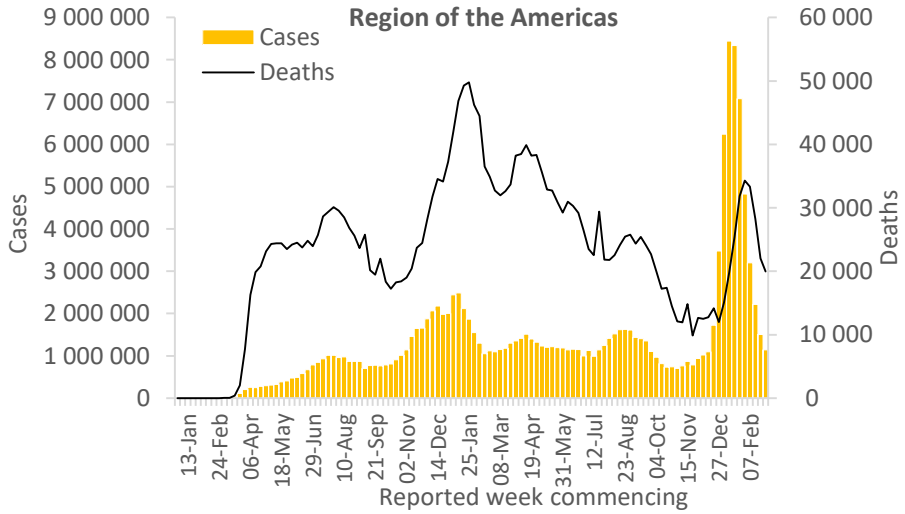


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 1.1 million new cases, a 24% decrease as compared to the previous week, continuing the declining trend that has been observed since mid-January 2022. However, three countries have reported increases in new cases of 20% or greater, with the largest increases observed in Martinique (5569 vs 1381 new cases; +303%) and Mexico (46 765 vs 27 427 new cases; +71%). The highest numbers of new cases were reported from Brazil (395 152 new cases; 185.9 new cases per 100 000; -24%), the United States of America (343 096 new cases; 103.7 new cases per 100 000; -29%), and Chile (152 705 new cases; 798.8 new cases per 100 000; -22%).

The Region reported just under 20 000 new deaths this week, a 9% decrease as compared to the previous week. The highest numbers of new deaths were reported from the United States of America (10 579 new deaths; 3.2 new deaths per 100 000; -9%), Brazil (3865 new deaths; 1.8 new deaths per 100 000; -11%), and Mexico (1513 new deaths; 1.2 new deaths per 100 000; +49%).

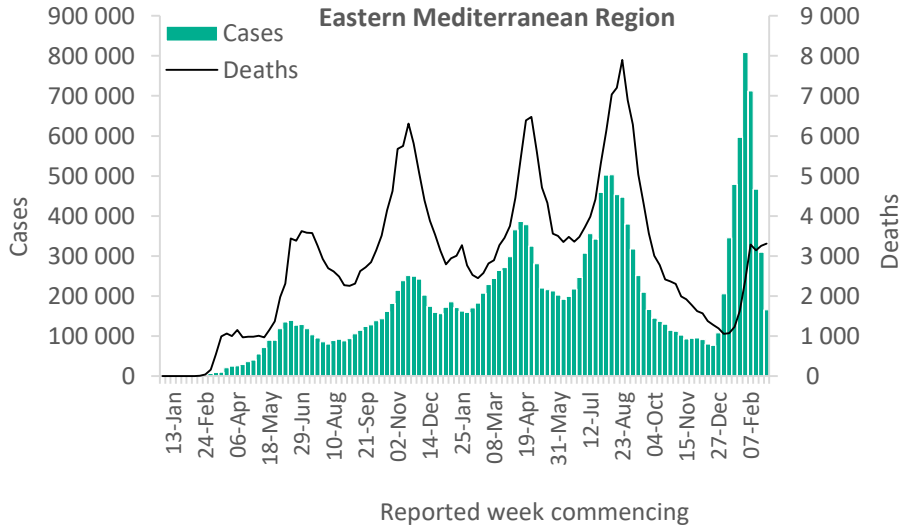


Updates from the Region of the Americas

Eastern Mediterranean Region

In the Eastern Mediterranean Region, new weekly cases declined for a third consecutive week since the peak reached in early February 2022. Over 165 000 new cases were reported this week, representing a 46% decrease as compared to the previous week. However, Somalia reported a 64% increase in new cases (87 vs 53 new cases). The highest numbers of new cases were reported from the Islamic Republic of Iran (53 363 new cases; 63.5 new cases per 100 000; -49%), Jordan (21 050 new cases; 206.3 new cases per 100 000; -63%), and Bahrain (15 781 new cases; 927.4 new cases per 100 000; -25%).

The number of new weekly deaths remained stable (+2%) when compared to the previous week's figure, with over 3300 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (1357 new deaths; 1.6 new deaths per 100 000; -15%), Sudan (956 new deaths; 2.2 new deaths per 100 000; +1012%) which shows an abnormal increase due to a backlog reporting of deaths, and Tunisia (220 new deaths; 1.9 new deaths per 100 000; -33%).

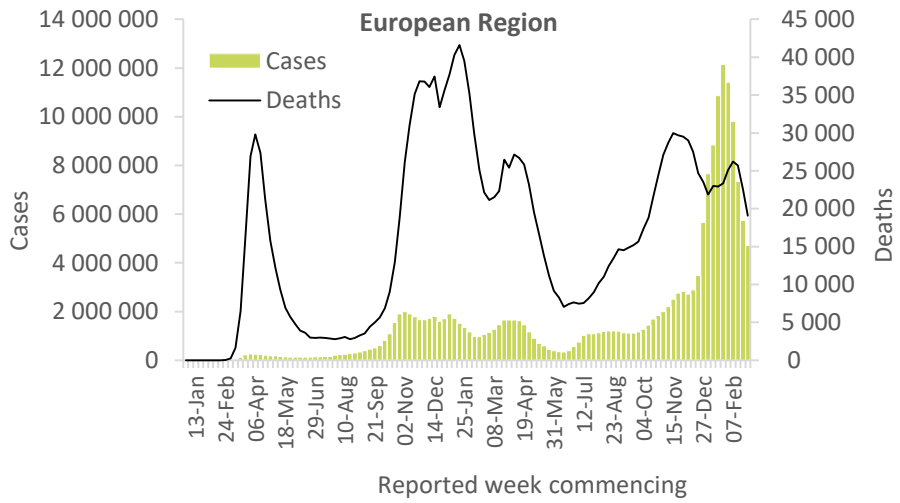


Updates from the Eastern Mediterranean Region

European Region

The European Region continued to report a decline in new weekly cases this week, with over 4.7 million new cases, an 18% decrease as compared to the previous week. The Region has reported a decrease in the number of new cases since a peak in late-January 2022. This week, the Region accounted for 45% of new cases reported globally. The highest numbers of new cases were reported from Germany (1 108 231 new cases; 1332.5 new cases per 100 000; similar to the previous week's figures), the Russian Federation (650 540 new cases; 445.8 new cases per 100 000; -29%), and Turkey (350 828 new cases; 416.0 new cases per 100 000; -35%).

This week, over 19 000 new deaths were reported in the Region, a 15% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (5354 new deaths; 3.7 new deaths per 100 000; similar to the previous week's figures), Germany (1424 new deaths; 1.7 new deaths per 100 000; similar to the previous week's figures), and Italy (1366 new deaths; 2.3 new deaths per 100 000; -13%).

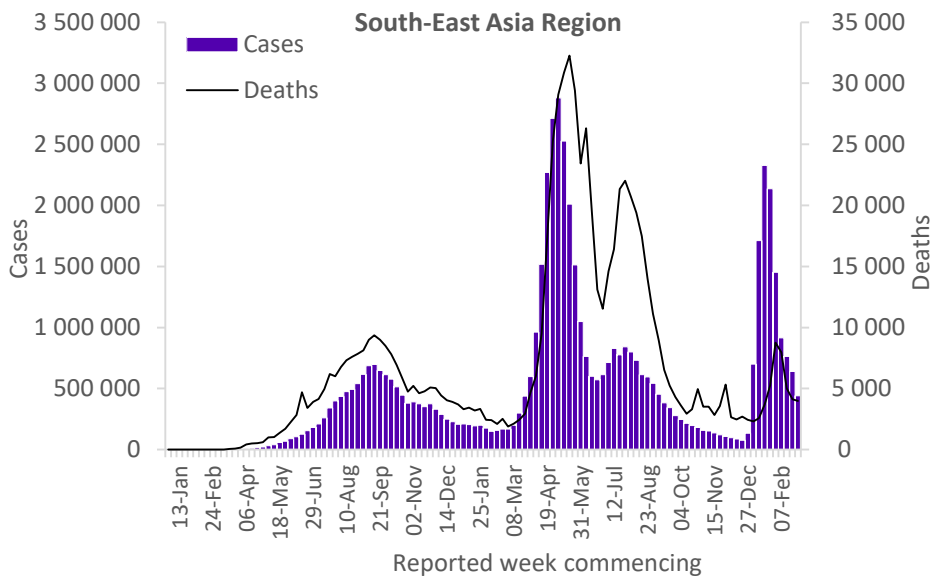


Updates from the European Region

South-East Asia Region

The South-East Asia Region has continued to report a decrease in the number of new cases since mid-January 2022. Over 441 000 new cases were reported in the Region this week, a 31% decrease as compared to the previous week. Although a declining trend in the number of cases was reported regionally, Bhutan reported a 23% increase as compared to the previous week (2604 vs 2116 cases). The highest numbers of new cases were reported from Indonesia (209 331 new cases; 76.5 new cases per 100 000; -39%), Thailand (157 079 new cases; 225.0 new cases per 100 000; similar to the previous week's figures), and India (46 836 new cases; 3.4 new cases per 100 000; -50%).

The number of new deaths was similar to that of the previous week, with just over 3900 new deaths reported. The highest numbers of new deaths were reported from Indonesia (2099 new deaths; <1 new death per 100 000; +23%), India (1312 new deaths; <1 new death per 100 000; -28%), and Thailand (344 new deaths; <1 new death per 100 000; +29%).

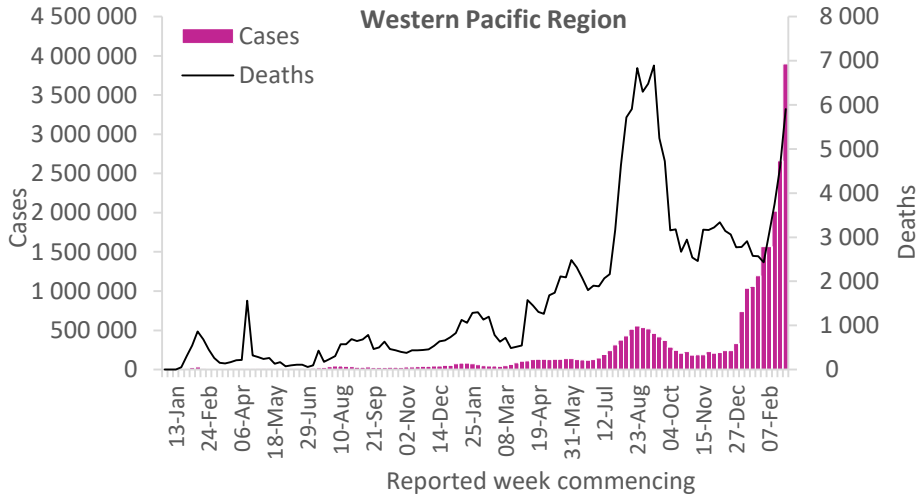


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported a steep increase (46%) in new weekly cases as compared to the previous week, with over 3.8 million new cases, continuing its upward trend since early January. Ten of 29 (34%) countries reported an increase of 20% or greater in the past week, including several Pacific Island countries (Cook Islands, American Samoa, Tonga, Fiji and Kiribati and New Zealand), China, and Viet Nam. The highest numbers of new cases were reported from the Republic of Korea (1 461 431 new cases; 2850.5 new cases per 100 000; +42%), Viet Nam (1 013 343 new cases; 1041.0 new cases per 100 000; +112%), and Japan (452 763 new cases; 358.0 new cases per 100 000; -4%).

The Region has reported an increase in the number of deaths for a month, with over 5900 new deaths this week, a 29% increase as compared to the previous week. The highest numbers of new deaths were reported from Japan (1519 new deaths; 1.2 new deaths per 100 000; -7%), China (1197 new deaths; <1 new death per 100 000; +296%), and the Republic of Korea (1013 new deaths; 2.0 new deaths per 100 000; +88%).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 8 March, highlights include the following:

- Scale-up of COVID-19 vaccination in priority countries in the African Region with a target to reach 100 million by end of April 2022
- Rapid scale-up of WHO Regional Office for Europe support to address urgent health needs of populations affected by the crisis in Ukraine and refugees in the surrounding countries
- Ramping up COVID-19 vaccination among hard-to-reach communities in Kenya
- Reaching 76% vaccination coverage through a vaccination drive in Mauritius
- Strengthening resilience in vulnerable communities impacted by COVID-19 in India
- Developing key support to address increase in prevalence of anxiety and depression worldwide during the COVID-19 pandemic
- Establishing a global biomanufacturing training hub in the Republic of Korea
- Developing learning resources for leadership in health emergencies accessible via OpenWHO
- Progress on a subset of global indicators that demonstrate country and global progress to end the acute phase of the pandemic

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice

Annex 1. List of countries/territories/areas reporting variants of concern as of 8 March 2022

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Afghanistan	●	-	●	-	-
Albania	●	-	○	-	●
Algeria	●	-	●	-	●
American Samoa	-	-	○	-	○
Andorra	○	○	○	-	○
Angola	●	●	●	●	●
Anguilla	●	-	●	-	●
Antigua and Barbuda	●	●	●	●	●
Argentina	●	●	●	●	●
Armenia	●	-	●	-	●
Aruba	●	●	●	●	●
Australia	●	●	●	●	●
Austria	●	●	●	●	●
Azerbaijan	●	-	○	-	●
Bahamas	●	-	●	●	●
Bahrain	●	●	●	●	●
Bangladesh	●	●	●	○	●
Barbados	●	-	●	●	●
Belarus	●	-	○	-	●
Belgium	●	●	●	●	●
Belize	●	-	●	●	●
Benin	●	●	●	●	●
Bermuda	●	●	●	-	●
Bhutan	●	●	●	-	●
Bolivia (Plurinational State of)	●	-	●	●	○
Bonaire	●	-	●	●	●
Bosnia and Herzegovina	●	●	○	●	○
Botswana	○	●	●	-	●
Brazil	●	●	●	●	●
British Virgin Islands	●	-	●	●	●
Brunei Darussalam	●	●	●	-	●
Bulgaria	●	●	●	-	●
Burkina Faso	●	●	●	-	●
Burundi	●	●	●	-	-
Cabo Verde	●	●	●	-	●
Cambodia	●	●	●	-	●
Cameroon	●	●	●	●	●
Canada	●	●	●	●	●
Cayman Islands	●	●	●	●	●
Central African Republic	●	●	●	-	●
Chad	●	●	●	-	-
Chile	●	●	●	●	●
China	●	●	●	●	●
Colombia	●	-	●	●	●
Comoros	●	●	●	-	●
Congo	●	●	●	●	●
Costa Rica	●	●	●	●	●
Croatia	●	●	●	●	●
Cuba	●	●	●	-	●
Curaçao	●	●	●	●	●
Cyprus	●	●	●	-	●
Czechia	●	●	●	●	●
Côte d'Ivoire	●	●	●	●	●
Democratic Republic of the Congo	●	●	●	-	●
Denmark	●	●	●	●	●
Djibouti	●	●	●	-	●
Dominica	●	-	●	-	-
Dominican Republic	●	-	●	●	●
Ecuador	●	-	●	●	●
Egypt	●	-	●	-	●
El Salvador	●	-	●	●	●
Equatorial Guinea	●	●	●	●	-
Estonia	●	●	○	○	●
Eswatini	●	●	●	-	●
Ethiopia	●	●	●	-	●
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	-	●	-
Fiji	○	-	●	-	●
Finland	●	●	●	●	●
France	●	●	●	●	●
French Guiana	●	●	●	●	●
French Polynesia	●	●	●	●	●
Gabon	●	●	●	●	●
Gambia	●	●	●	●	●
Georgia	●	○	●	-	●
Germany	●	●	●	●	●
Ghana	●	●	●	●	●
Gibraltar	●	-	○	-	●
Greece	●	●	●	●	●
Greenland	-	-	●	-	-
Grenada	●	-	●	●	●
Guadeloupe	●	●	●	●	●
Guam	●	●	●	●	●
Guatemala	●	●	●	●	●
Guernsey	-	-	-	-	●
Guinea	●	●	●	-	●
Guinea-Bissau	●	●	●	-	-
Guyana	●	-	●	●	●
Haiti	●	-	●	●	-
Honduras	●	-	●	●	●
Hungary	●	○	○	●	●
Iceland	●	●	●	●	●
India	●	●	●	●	●
Indonesia	●	●	●	-	●
Iran (Islamic Republic of)	●	●	●	-	●
Iraq	●	●	●	●	●
Ireland	●	●	●	●	●
Israel	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Italy	●	●	●	●	●
Jamaica	●	-	●	-	●
Japan	●	●	●	●	●
Jordan	●	●	●	●	●
Kazakhstan	●	○	●	-	●
Kenya	●	●	●	●	●
Kiribati	-	-	-	-	●
Kosovo[1]	●	○	○	-	●
Kuwait	●	●	●	-	●
Kyrgyzstan	●	●	●	-	●
Lao People's Democratic Republic	●	-	●	-	●
Latvia	●	●	○	●	●
Lebanon	●	-	●	-	●
Lesotho	●	●	●	-	-
Liberia	●	●	●	-	-
Libya	●	●	●	-	-
Liechtenstein	●	-	○	○	○
Lithuania	●	●	○	●	●
Luxembourg	●	●	●	●	●
Madagascar	●	●	-	○	-
Malawi	●	●	●	-	●
Malaysia	●	●	●	-	●
Maldives	●	-	●	-	●
Mali	●	●	●	-	○
Malta	●	○	○	●	●
Martinique	●	●	●	●	●
Mauritania	●	●	●	-	●
Mauritius	●	●	●	-	●
Mayotte	●	●	●	-	●
Mexico	●	●	●	●	●
Monaco	●	●	●	-	●
Mongolia	●	-	●	-	●
Montenegro	●	-	○	○	○

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Montserrat	●	-	●	●	●
Morocco	●	●	●	-	●
Mozambique	●	●	●	-	●
Myanmar	●	-	●	-	●
Namibia	●	●	●	●	●
Nepal	●	-	●	-	●
Netherlands	●	●	●	●	●
New Caledonia	●	-	●	-	●
New Zealand	●	●	●	●	●
Nicaragua	●	●	●	●	●
Niger	○	-	●	-	●
Nigeria	●	●	●	-	●
North Macedonia	●	●	○	-	○
Northern Mariana Islands (Commonwealth of the)	○	-	●	-	●
Norway	●	●	●	●	●
Occupied Palestinian Territory	●	●	●	-	●
Oman	●	●	●	-	●
Pakistan	●	●	●	●	●
Palau	-	-	○	-	○
Panama	●	●	●	●	●
Papua New Guinea	-	-	●	-	●
Paraguay	●	-	●	●	●
Peru	●	-	●	●	●
Philippines	●	●	●	●	●
Poland	●	○	●	●	●
Portugal	●	●	●	●	●
Puerto Rico	●	●	●	●	●
Qatar	●	●	●	-	●
Republic of Korea	●	●	●	●	●
Republic of Moldova	●	-	●	-	●
Romania	●	●	●	●	●
Russian Federation	●	●	●	○	●
Rwanda	●	●	●	-	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Réunion	●	●	●	●	●
Saba	-	-	●	-	-
Saint Barthélemy	●	-	●	-	●
Saint Kitts and Nevis	-	-	●	-	●
Saint Lucia	●	-	●	-	●
Saint Martin	●	●	●	-	●
Saint Pierre and Miquelon	-	-	●	-	●*
Saint Vincent and the Grenadines	-	-	●	●	●
Sao Tome and Principe	●	●	○	-	-
Saudi Arabia	●	●	●	-	●
Senegal	●	●	●	-	●
Serbia	●	-	●	○	○
Seychelles	●	●	●	-	●
Sierra Leone	●	●	●	-	●
Singapore	●	●	●	●	●
Sint Maarten	●	●	●	●	●
Slovakia	●	●	●	-	●
Slovenia	●	●	●	●	●
Solomon Islands	-	-	●	-	●
Somalia	●	●	●	-	-
South Africa	●	●	●	●	●
South Sudan	●	●	●	-	●
Spain	●	●	●	●	●
Sri Lanka	●	●	●	-	●
Sudan	●	●	●	●	●
Suriname	●	●	●	●	●
Sweden	●	●	●	●	●
Switzerland	●	●	●	●	●
Thailand	●	●	●	●	●
Timor-Leste	●	-	●	-	●
Togo	●	●	●	●	●
Tonga	-	-	-	-	○
Trinidad and Tobago	●	-	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Tunisia	●	●	●	-	●
Turkey	●	●	●	●	●
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	●	-	●
Ukraine	●	○	○	-	●
United Arab Emirates	●	●	●	●	●
United Kingdom	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
United Republic of Tanzania	●	●	●	●	●
United States Virgin Islands	●	●	●	●	●
United States of America	●	●	●	●	●
Uruguay	●	●	●	●	●
Uzbekistan	●	●	○	-	●
Vanuatu	-	-	●	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Venezuela (Bolivarian Republic of)	●	-	●	●	●
Viet Nam	●	●	●	-	●
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	●	-	●
Zimbabwe	●	●	●	-	●

**Newly reported in this update. "●" indicates that information for this variant was received by WHO from official sources. "○" indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information becomes available. **Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern.*

See also Annex 2: Data, table, and figure notes

Annex 2. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.
Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.
[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Annex 3. Methods for Figures 5 and 6

- Figures include ten studies from the Czech Republic, Denmark, Israel, Qatar, South Africa, the United Kingdom, and the United States of America evaluating the VE against the Omicron variant, and 25 studies of the VE against the Delta variant from various countries from the European Region, Region of the Americas, and South-East Asian Region as well as Qatar and Thailand.
- VE studies included in the plot were identified from an ongoing systematic review of COVID-19 vaccine effectiveness studies. All studies were cohort or test-negative studies. Methods for the systematic review and inclusion/exclusion criteria are available on view-hub.org. The studies were conducted during a period when either Delta or Omicron was the predominant circulating variant. Estimates were included if they were of laboratory-confirmed cases of the Omicron or Delta variant. In addition, for the primary series VE, only studies providing VE estimates for discrete time intervals since vaccination, which evaluate changes in VE over time, are included.
- For the primary series VE, estimates are only included in the plot for studies that report VE for more than one time period.

Annex 4. Summary of primary series vaccine performance against Variants of Concern *(VE data as of 3 March 2022; Neutralization data as of 28 February 2022)*

	WHO Emergency Use Listing (EUL) Qualified Vaccines[+]								Vaccines without WHO EUL[+]	
	AstraZeneca-Vaxzevria/ SII - Covishield	Beijing CNBG-BBIBP-CorV	Bharat-Covaxin	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Novavax-Nuvaxovid/ SII - Covavax	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Gamaleya-Sputnik V
Alpha, Beta, Gamma										
Summary of VE*	*(see update from 11 January 2022 for details of vaccine performance against Alpha, Beta, and Gamma variants of concern*									
Delta[27]										
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection									
- Severe disease	↔$_{3}$	-	-	↓$_{1}$	↔$_{4}$	-	↔$_{7}$	-	-	-
- Symptomatic disease	↔to↓↓$_{6}$	-	↓$_{1}$	-	↔$_{2}$	-	↔to↓$_{5}$	-	-	-
- Infection	↔to↓$_{5}$	-	-	↓↓↓$_{1}$	↔$_{6}$	-	↔to↓$_{6}$	-	-	-
Neutralization	↓$_{14}$	↔to↓$_{2}$	↔to↓$_{4}$	↔to↓↓$_{10}$	↓$_{14}$	-	↔to↓$_{40}$	↓to↓↓$_{9}$	↔to↓$_{2}$	↓to↓↓↓$_{3}$
Omicron										
Summary of VE*	Reduced protection against infection and symptomatic disease; possible reduced protection against for severe disease but limited evidence									
- Severe disease	-	-	-	-	↓/↓↓$_{1}$	-	↓↓/↓↓↓$_{3}$	-	-	-
- Symptomatic disease	↓↓↓$_{1}$	-	-	-	↓↓/↓↓↓$_{2}$	-	↓↓↓$_{2}$	-	-	-
- Infection	↓↓↓$_{1}$	-	-	-	↓↓↓$_{3}$	-	↓↓↓$_{3}$	-	-	-
Neutralization	↓↓↓$_{7}$	↔to↓↓↓$_{3}$	↓↓$_{1}$	↔to↓↓↓$_{3}$	↓↓↓$_{16}$	-	↓↓↓$_{35}$	↓↓to↓↓↓$_{4}$	-	↓↓$_{1}$

VE refers to vaccine effectiveness and vaccine efficacy. *Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10 percentage point (pp) reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20 pp reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30 pp reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30 pp reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in the study. The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources Library. References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table.

Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. Likewise, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection.
- Annex 4 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than four months after the final dose.
- Studies reporting VOC-specific VE estimates for full vaccination (seven days and over after the final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca-Vaxzevria for infection (when a phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in Annex 4 represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Neutralization studies that use samples collected more than seven days and less than six months after complete vaccination and that use an ancestral strain as the reference are included in Annex 4.

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COVID-19 Weekly Epidemiological Update

Edition 81, published 1 March 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews
- Summary of the Weekly Operational Update

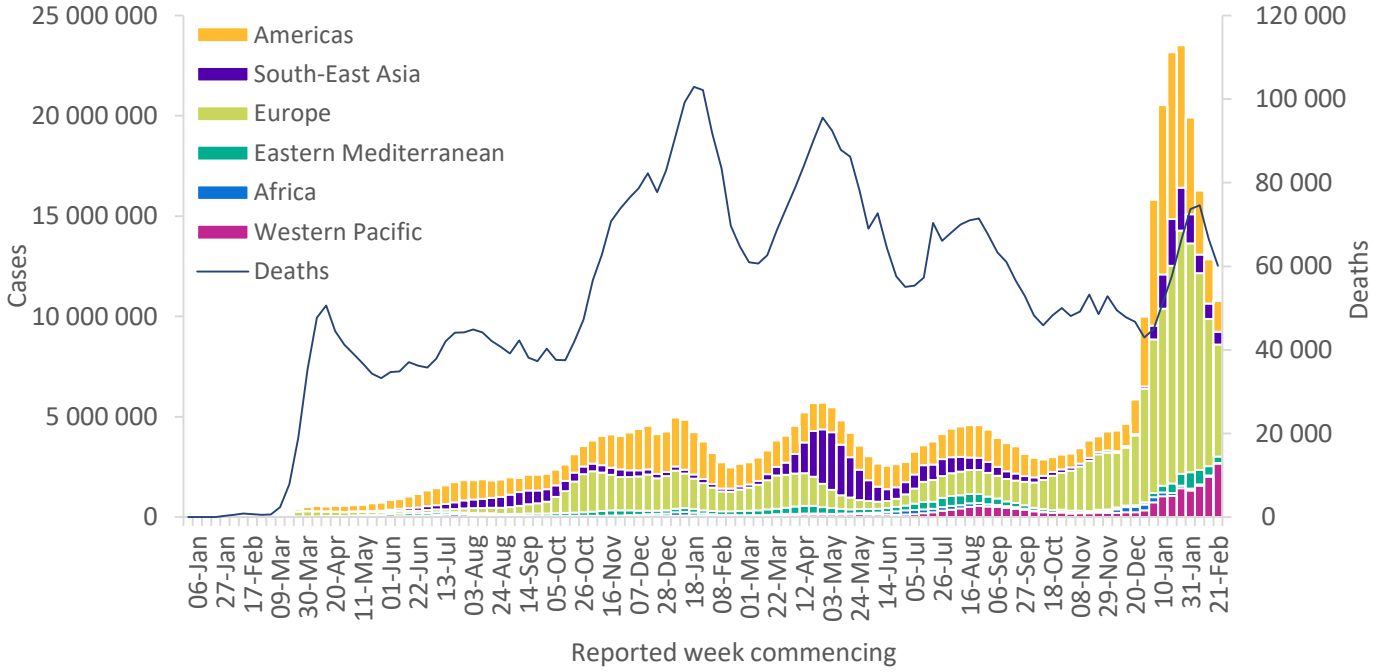
Global overview

Data as of 27 February 2022

Globally, during the week of 21 through 27 February 2022, the number of new COVID-19 cases and deaths has continued to decline by 16% and 10% respectively, as compared to the previous week (Figure 1). Across the six WHO regions, over 10 million new cases and over 60 000 new deaths were reported (Table 1). As of 27 February 2022, over 433 million confirmed cases and over 5.9 million deaths have been reported globally.

At the regional level, while the Western Pacific Region reported an increase (+32%) in the number of new weekly cases, all other regions reported decreases: the Eastern Mediterranean Region (-34%), the Region of the Americas (-30%), the African Region (-25%), the European Region (-24%), and the South-East Asia Region (-16%). The number of new weekly deaths increased in the Western Pacific (+22%) and the Eastern Mediterranean (+4%) Regions, while decreases were reported by the African Region (-59%), South-East Asia Region (-18%), Europe Region (-13%), and the Region of the Americas (-8%).

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 27 February 2022**



**See *Annex 2: Data, table, and figure notes*

The highest numbers of new cases were reported from Germany (1 119 632 new cases; -8%), the Republic of Korea (1 032 008 new cases; +69%), the Russian Federation (920 697 new cases; -26%), Turkey (541 259 new cases; -10%), and Brazil (519 785 new cases; -33%).

The highest number of new deaths were reported from the United States of America (13 663 new deaths; 0%), the Russian Federation (5427 new deaths; +3%), Brazil (4361 new deaths; -26%), Mexico (2027 new deaths; +39%), and Turkey (1838 new deaths; -4%)

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 27 February 2022**

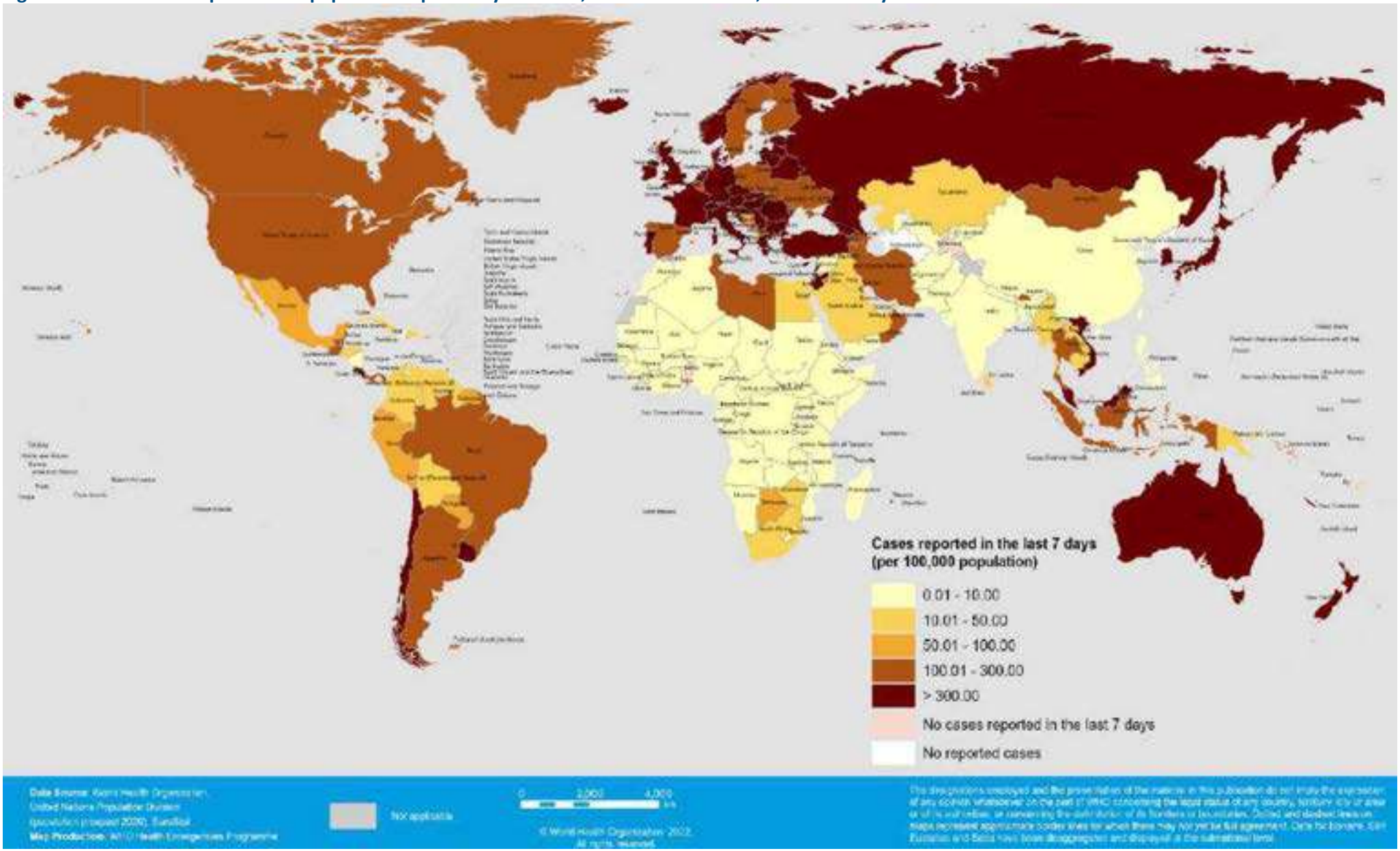
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	5 592 900 (52%)	-24%	177 622 681 (41%)	22 289 (37%)	-13%	1 867 028 (31%)
Western Pacific	2 661 755 (25%)	32%	23 542 040 (5%)	4 580 (8%)	22%	181 193 (3%)
Americas	1 533 368 (14%)	-30%	146 848 490 (34%)	25 127 (42%)	-8%	2 626 369 (44%)
South-East Asia	639 245 (6%)	-16%	55 680 401 (13%)	4 117 (7%)	-18%	761 642 (13%)
Eastern Mediterranean	309 018 (3%)	-34%	21 124 902 (5%)	3 256 (5%)	4%	333 190 (6%)
Africa	40 296 (0%)	-25%	8 319 957 (2%)	786 (1%)	-59%	169 702 (3%)
Global	**10 776 582 (100%)**	**-16%**	**433 139 235 (100%)**	**60 155 (100%)**	**-10%**	**5 939 137 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 2: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

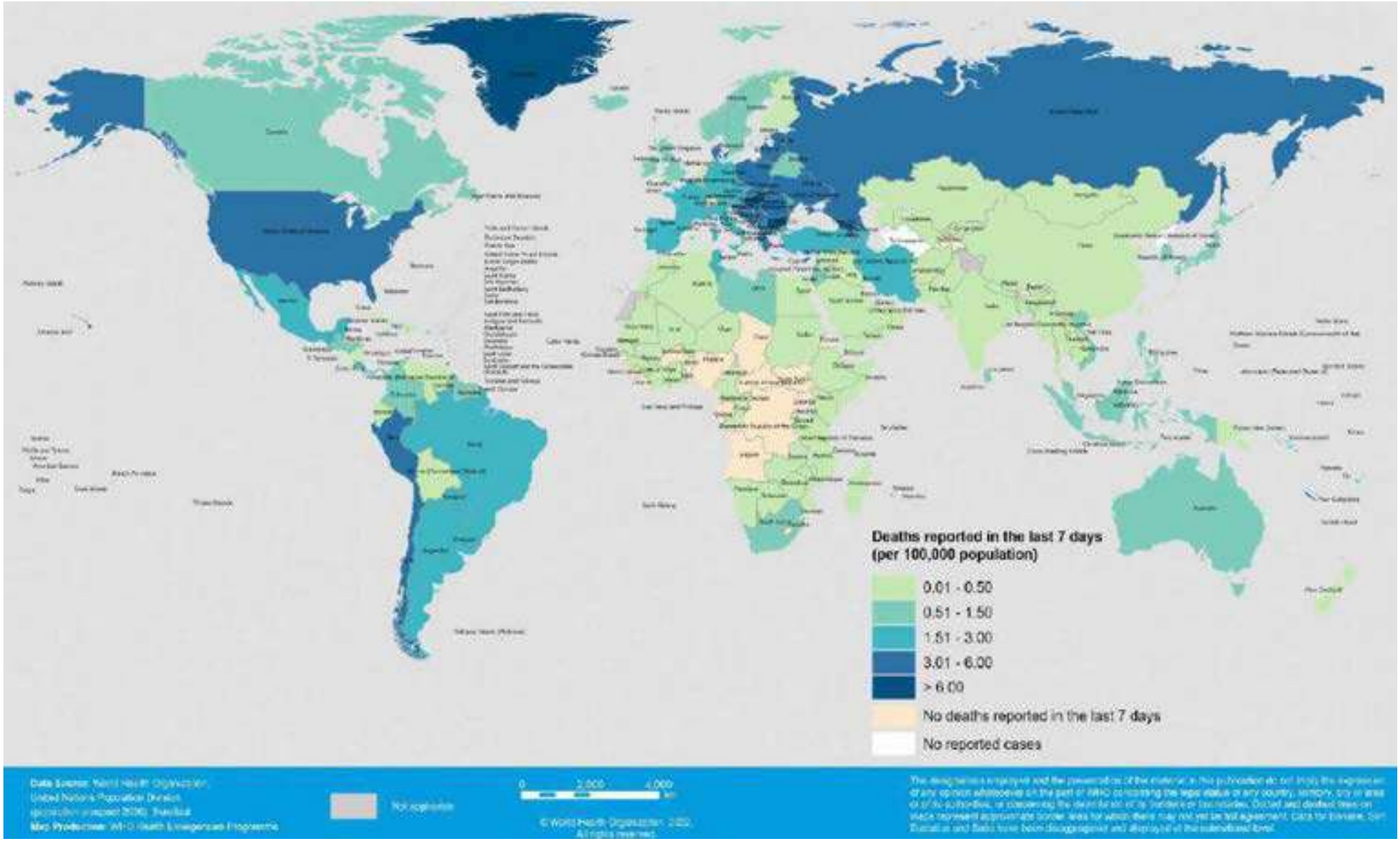
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 21-27 February 2022**



**See *Annex 2: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 21-27 February 2022**



**See *Annex 2: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

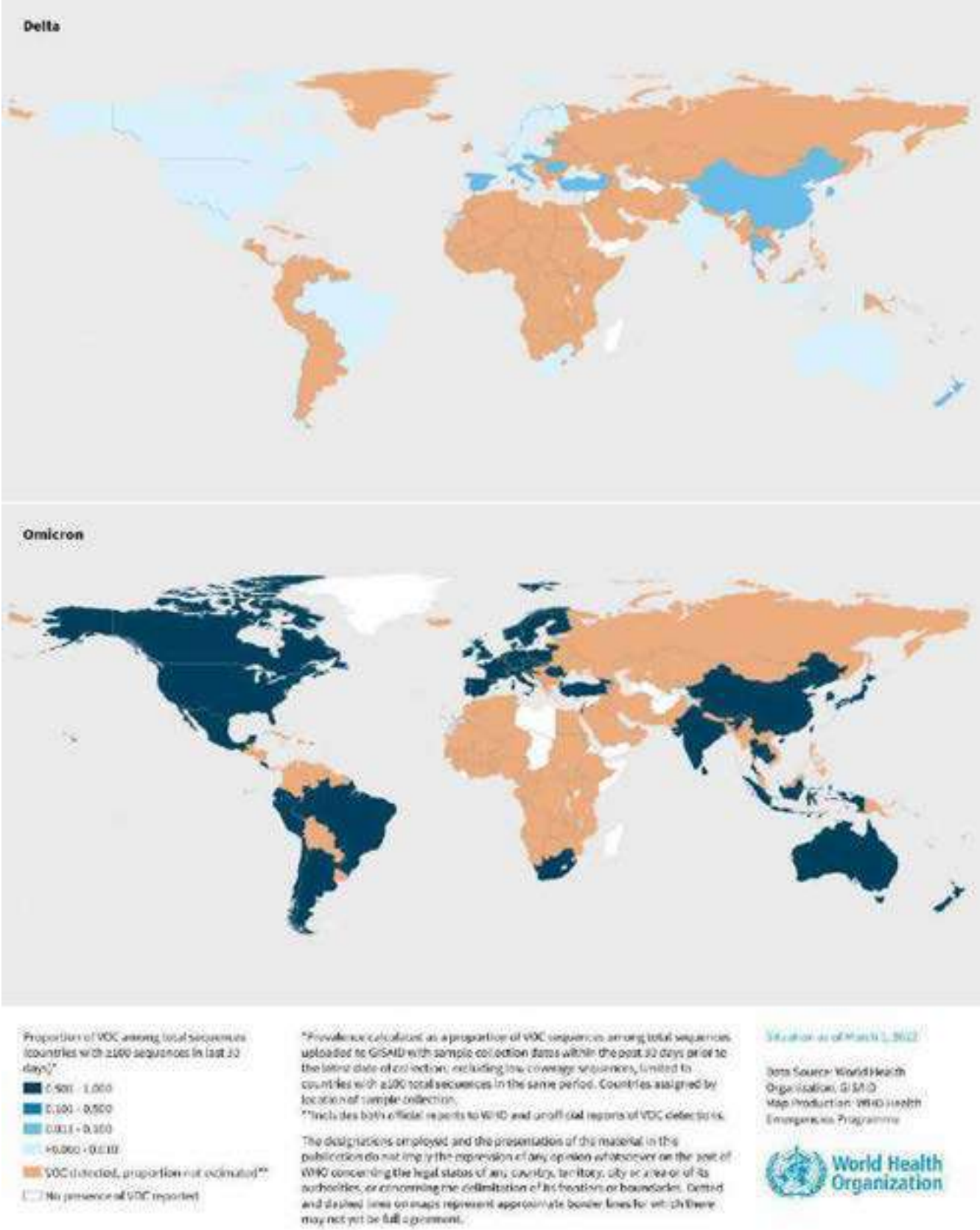
The current global epidemiology of SARS-CoV-2 is characterized by the global dominance of the Omicron variant. Delta remains the only other named variant with significant reported circulation. Among the 488 463 sequences uploaded to GISAID with specimens collected in the last 30 days[i], 486 182 (99.5%) were Omicron, 1 601 (0.3%) were Delta, and six (<0.1%) were Alpha. In the last 30 days, no Beta, Gamma, Lambda, Mu or any other non-VOC/VOI sequences were reported to GISAID. To note, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

[i] Includes sequences submitted to GISAID with sample collected dates from 26 January to 24 February 2022 (last reported sample at the time of data extraction), excluding low coverage sequences. Proportions are estimated for countries submitting more than 100 total sequences. In the past 30 days, 49 countries submitted a total of 100 sequences and above on GISAID.

Figure 5: Prevalence of variants of concern (VOCs) Delta and Omicron in the last 30 days, data as of 1 March 2022



See also Annex 1 for reported VOC detections by country/territory/area

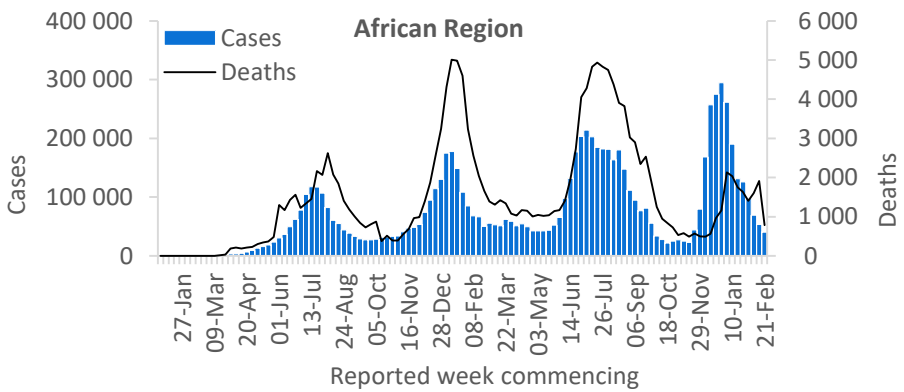
WHO regional overviews

Epidemiological week 21-27 February 2022**

African Region

Since the beginning of January 2022, the African Region has continued to report a decreasing trend in the number of new weekly cases, with over 40 000 new cases reported, a 25% decrease as compared to the previous week. However, eight countries in the Region (16%) reported an increase of over 20% in cases, with the highest proportional increases observed in Lesotho (178 vs 62 new cases; +187%), Congo (73 vs 34 new cases; +115%), and Ghana (904 vs 469 new cases; +93%). The highest numbers of new cases were reported from South Africa (14 900 new cases; 25.1 new cases per 100 000 population; +12%), Réunion (13 632 new cases; 1522.6 new cases per 100 000; -37%), and Zimbabwe (2579 new cases; 17.4 new cases per 100 000; +34%).

The number of new weekly deaths in the Region decreased by 59% as compared to the previous week, with over 700 new deaths reported. The highest numbers of new deaths were reported from South Africa (574 new deaths; 1.0 new deaths per 100 000 population; -65%), Algeria (41 new deaths; <1 new death per 100 000; -43%), and Réunion (37 new deaths; 4.1 new death per 100 000; -3%).

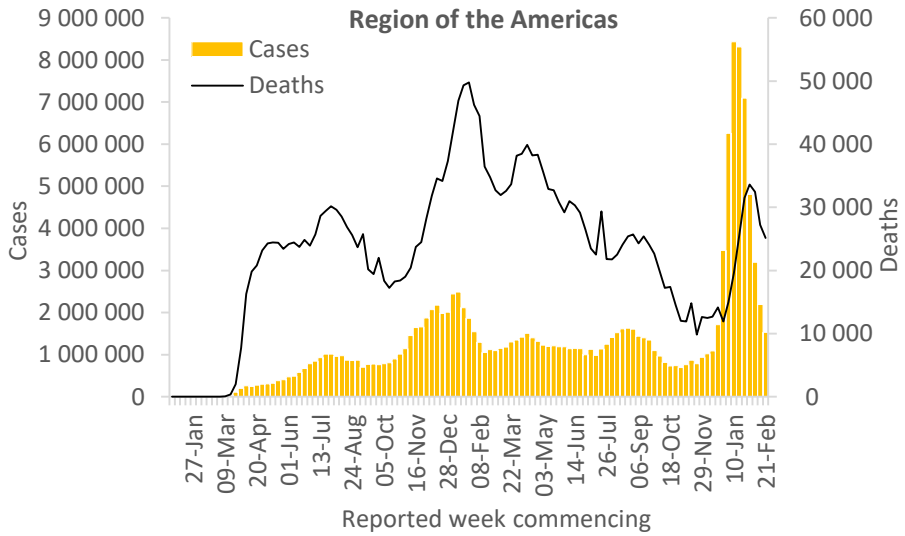


Updates from the African Region

Region of the Americas

With over 1.5 million new cases reported this week, the Region of the Americas continues to report a decreasing trend (30% decrease as compared to the previous week). However, two countries in the Region have reported increases in new cases of 20% or greater: Honduras (4340 vs 2108 new cases; +106%) and Mexico (76 587 vs 38 921 new cases; +97%). The highest numbers of new cases were reported from Brazil (519 785 new cases; 244.5 new cases per 100 000; -33%), the United States of America (457 058 new cases; 138.1 new cases per 100 000; -36%), and Chile (196 384 new cases; 1027.3 new cases per 100 000; -17%).

The Region reported over 25 000 new deaths this week, an 8% decrease as compared to the previous week. The highest numbers of new deaths were reported from the United States of America (13 663 new deaths; 4.1 new deaths per 100 000; similar to the previous week's figures), Brazil (4361 new deaths; 2.1 new deaths per 100 000; -26%), and Mexico (2027 new deaths; 1.6 new deaths per 100 000; +38%).

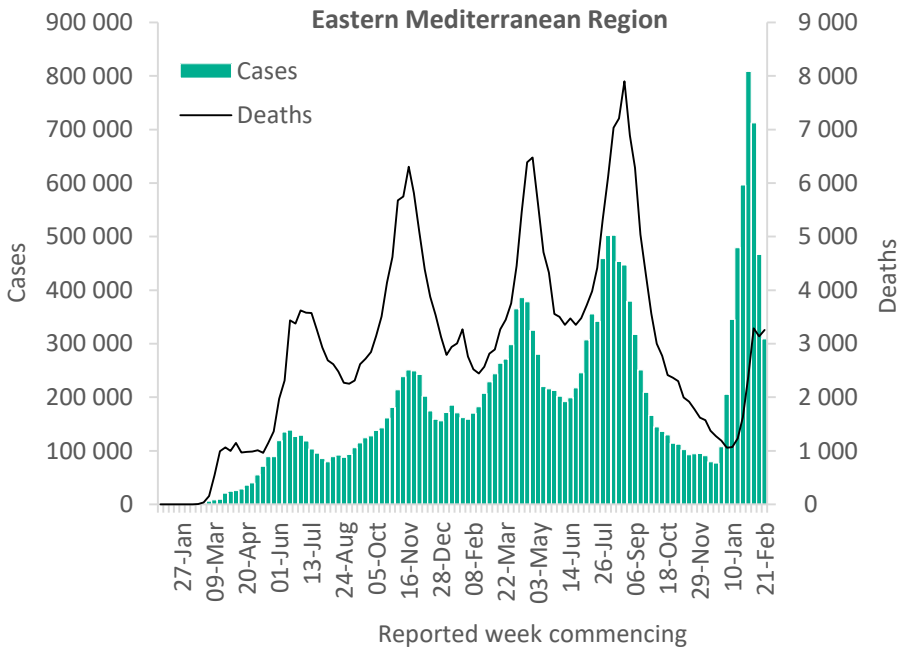


Updates from the Region of the Americas

Eastern Mediterranean Region

In the Eastern Mediterranean Region, new weekly cases have continued to decline following a peak reached in early February 2022. Over 309 000 new cases were reported this week, a 34% decrease as compared to the previous week. The highest numbers of new cases were reported from the Islamic Republic of Iran (105 458 new cases; 125.6 new cases per 100 000; -27%), Jordan (56 356 new cases; 552.3 new cases per 100 000; -49%), and Lebanon (22 279 new cases; 326.4 new cases per 100 000; -28%).

The number of new weekly deaths increased by 4% in the Region when compared to the previous week's figures, with over 3200 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (1592 new deaths; 1.9 new deaths per 100 000; +30%), Tunisia (327 new deaths; 2.8 new deaths per 100 000; +5%), and Egypt (298 new deaths; <1 new death per 100 000; -26%).

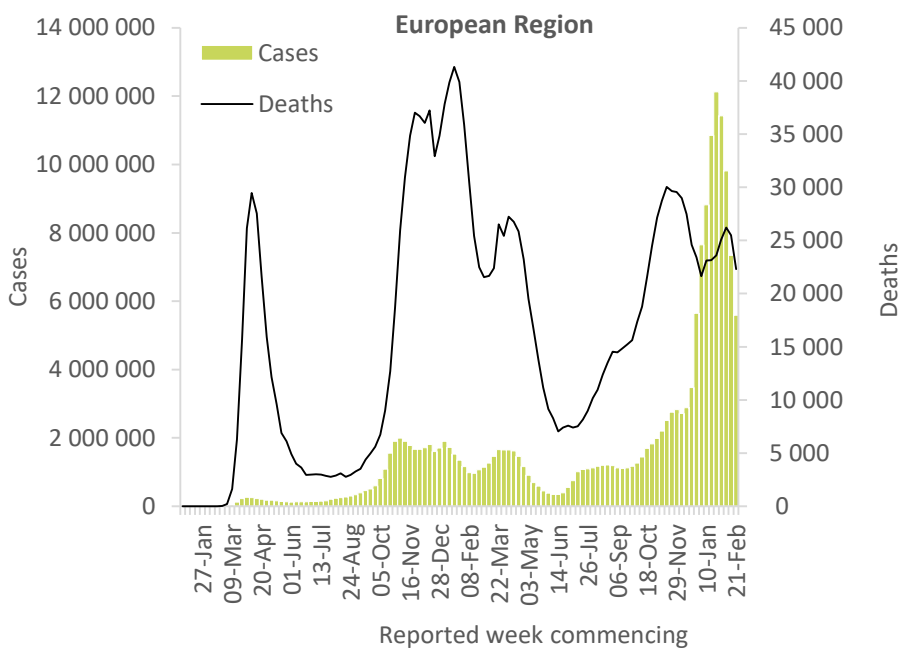


Updates from the Eastern Mediterranean Region

European Region

The European Region has continued to report a decline in new weekly cases following a peak observed at the end of January 2022, with just under 5.6 million new cases reported this week, a 24% decrease as compared to the previous week. The highest numbers of new cases were reported from Germany (1 119 632 new cases; 1346.3 new cases per 100 000; -8%), the Russian Federation (920 697 new cases; 630.9 new cases per 100 000; -26%), and Turkey (541 259 new cases; 641.8 new cases per 100 000; -10%).

The number of new deaths has continued to decrease in the Region, with over 22 000 new fatalities reported this week, a 13% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (5427 new deaths; 3.7 new deaths per 100 000; +3%), Turkey (1838 new deaths; 2.2 new deaths per 100 000; -4%), and Italy (1568 new deaths; 2.6 new deaths per 100 000; -23%).

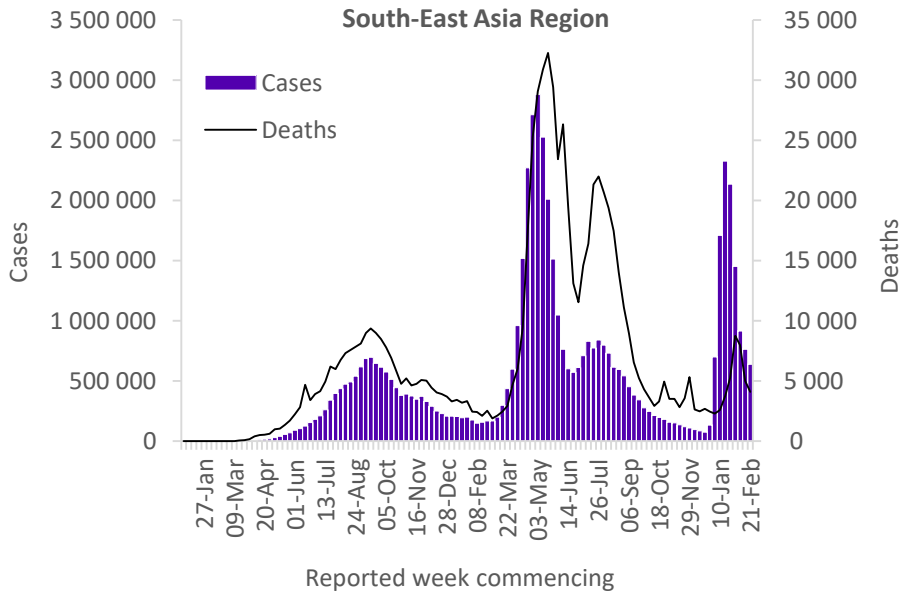


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 639 000 new cases this week, a 16% decline as compared to the previous week, continuing the decreasing trend observed since mid-January 2022. However, Thailand has reported an increase of 32% in new weekly cases (157 301 vs 118 988 new cases) as compared to the previous week. The highest numbers of new cases were reported from Indonesia (341 889 new cases; 125.0 new cases per 100 000; -12%), Thailand (225.4 new cases per 100 000; +32%), and India (93 644 new cases; 6.8 new cases per 100 000; -51%).

Regionally, the number of new deaths declined this week with just over 4100 new deaths reported, an 18% decrease as compared to the previous week. The highest numbers of new deaths were reported from India (1821 new deaths; <1 new death per 100 000; -44%), Indonesia (1708 new deaths; <1 new death per 100 000; +44% increase), and Thailand (267 new deaths; <1 new death per 100 000; +42%).

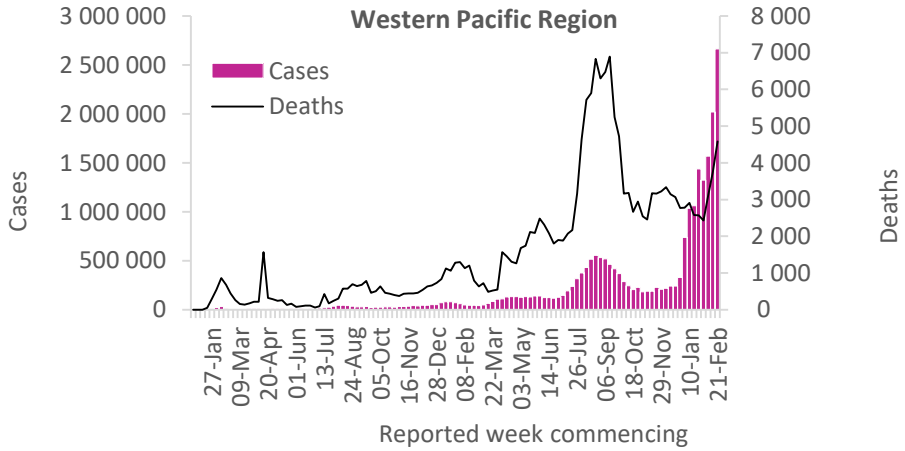


Updates from the South-East Asia Region

Western Pacific Region

Since the end of December 2021, the Western Pacific Region has continued to report an increase in new weekly cases, with over 2.6 million new cases reported this week, a 32% increase as compared to the previous week. Six countries (22%) in the region reported an increase of 20% or greater in the past week, with the largest increases observed in New Zealand (55 145 vs 10 361 new cases; +432%), China (100 347 vs 26 329; +281%), and Brunei Darussalam (22 972 vs 10 934 new cases; +110%). The highest numbers of new cases were reported from the Republic of Korea (1 032 008 new cases; 2012.9 new cases per 100 000; +69%), Viet Nam (478 884 new cases; 492.0 new cases per 100 000; +87%), and Japan (473 461 new cases; 374.3 new cases per 100 000; -18%).

The number of new weekly deaths continue to increase, with over 4500 new deaths reported, a 22% increase as compared to the previous week. The highest numbers of new deaths were reported from Japan (1634 new deaths; 1.3 new deaths per 100 000; +14%), the Philippines (744 new deaths; <1 new death per 100 000; +10%), and Viet Nam (627 new deaths; <1 new death per 100 000; +12%).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition, highlights include the following:

- Scaling-up IPC capacity in Cox's Bazar in response to COVID-19 pandemic furthers streamlining of best practices in general health facilities
- Conducting health worker training on Acute Respiratory Distress Syndrome Clinical Management in Nepal
- Supporting mass gathering risk-based approaches to hosting Africa Cup of Nations (AFCON) in Cameroon
- Integrating COVID-19 and influenza sentinel surveillance in Mongolia
- Supporting Infection Prevention and Control as part of Yemen's COVID-19 response with technical mission
- Training of national mentors and laboratory experts on verification and validation of examination procedures in Kyrgyzstan
- Hosting vaccine pop-ups in the Bahamas with PAHO support
- Supporting students in Cambodia with psychological first aid framework and operationalization during the COVID-19 pandemic
- Host new Myanmar learning channel for COVID-19 vaccination training in local languages
- Progress on a subset of global indicators that demonstrate country and global progress to end the acute phase of the pandemic

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice

Annex 1. List of countries/territories/areas reporting variants of concern as of 1 March 2022

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Afghanistan	●	-	●	-	-
Albania	●	-	○	-	●
Algeria	●	-	●	-	●
American Samoa	-	-	○	-	○
Andorra	○	○	○	-	○
Angola	●	●	●	●	●
Anguilla	●	-	●	-	●
Antigua and Barbuda	●	●	●	●	●
Argentina	●	●	●	●	●
Armenia	●	-	●	-	●
Aruba	●	●	●	●	●
Australia	●	●	●	●	●
Austria	●	●	●	●	●
Azerbaijan	●	-	○	-	●
Bahamas	●	-	●	●	●*
Bahrain	●	●	●	●	●
Bangladesh	●	●	●	○	●
Barbados	●	-	●	●	●
Belarus	●	-	○	-	●
Belgium	●	●	●	●	●
Belize	●	-	●	●	●
Benin	●	●	●	●	●
Bermuda	●	●	●	-	●
Bhutan	●	●	●	-	●
Bolivia (Plurinational State of)	●	-	●	●	○
Bonaire	●	-	●	●	●
Bosnia and Herzegovina	●	●	○	●	○
Botswana	○	●	●	-	●
Brazil	●	●	●	●	●
British Virgin Islands	●	-	●	●	●
Brunei Darussalam	●	●	●	-	●
Bulgaria	●	●	●	-	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Burkina Faso	●	●	●	-	●
Burundi	●	●	●	-	-
Cabo Verde	●	●	●	-	●
Cambodia	●	●	●	-	●
Cameroon	●	●	●	●	●
Canada	●	●	●	●	●
Cayman Islands	●	●	●	●	●
Central African Republic	●	●	●	-	●
Chad	●	●	●	-	-
Chile	●	●	●	●	●
China	●	●	●	●	●
Colombia	●	-	●	●	●
Comoros	●	●	●	-	●
Congo	●	●	●	●	●
Costa Rica	●	●	●	●	●
Croatia	●	●	●	●	●
Cuba	●	●	●	-	●
Curaçao	●	●	●	●	●
Cyprus	●	●	●	-	●
Czechia	●	●	●	●	●
Côte d'Ivoire	●	●	●	●	●
Democratic Republic of the Congo	●	●	●	-	●
Denmark	●	●	●	●	●
Djibouti	●	●	●	-	●
Dominica	●	-	●	-	-
Dominican Republic	●	-	●	●	●
Ecuador	●	-	●	●	●
Egypt	●	-	●	-	●
El Salvador	●	-	●	●	●
Equatorial Guinea	●	●	●	●	-
Estonia	●	●	○	○	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Eswatini	●	●	●	-	●
Ethiopia	●	●	●	-	●
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	-	●	-
Fiji	○	-	●	-	●
Finland	●	●	●	●	●
France	●	●	●	●	●
French Guiana	●	●	●	●	●
French Polynesia	●	●	●	●	●
Gabon	●	●	●	●	●
Gambia	●	●	●	●	●
Georgia	●	○	●	-	●
Germany	●	●	●	●	●
Ghana	●	●	●	●	●
Gibraltar	●	-	○	-	●
Greece	●	●	●	●	●
Greenland	-	-	●	-	-
Grenada	●	-	●	●	●
Guadeloupe	●	●	●	●	●
Guam	●	●	●	●	●
Guatemala	●	●	●	●	●
Guernsey	-	-	-	-	●
Guinea	●	●	●	-	●
Guinea-Bissau	●	●	●	-	-
Guyana	●	-	●	●	●*
Haiti	●	-	●	●	-
Honduras	●	-	●	●	●
Hungary	●	○	○	●	●
Iceland	●	●	●	●	●
India	●	●	●	●	●
Indonesia	●	●	●	-	●
Iran (Islamic Republic of)	●	●	●	-	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Iraq	●	●	●	●	●
Ireland	●	●	●	●	●
Israel	●	●	●	●	●
Italy	●	●	●	●	●
Jamaica	●	-	●	-	●
Japan	●	●	●	●	●
Jordan	●	●	●	●	●
Kazakhstan	●	○	●	-	●
Kenya	●	●	●	●	●
Kiribati	-	-	-	-	●
Kosovo[1]	●	○	○	-	●
Kuwait	●	●	●	-	●
Kyrgyzstan	●	●	●	-	●
Lao People's Democratic Republic	●	-	●	-	●
Latvia	●	●	○	●	●
Lebanon	●	-	●	-	●
Lesotho	●	●	●	-	-
Liberia	●	●	●	-	-
Libya	●	●	●	-	-
Liechtenstein	●	-	○	○	○
Lithuania	●	●	○	●	●
Luxembourg	●	●	●	●	●
Madagascar	●	●	-	○	-
Malawi	●	●	●	-	●
Malaysia	●	●	●	-	●
Maldives	●	-	●	-	●
Mali	●	●	●	-	○
Malta	●	○	○	●	●
Martinique	●	●	●	●	●
Mauritania	●	●	●	-	●
Mauritius	●	●	●	-	●
Mayotte	●*	●*	●*	-	●*
Mexico	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Monaco	●	●	●	-	●*
Mongolia	●	-	●	-	●
Montenegro	●	-	○	○	○
Montserrat	●	-	●	●	●
Morocco	●	●	●	-	●
Mozambique	●	●	●	-	●
Myanmar	●	-	●	-	●
Namibia	●	●	●	●	●
Nepal	●	-	●	-	●
Netherlands	●	●	●	●	●
New Caledonia	●	-	●	-	●
New Zealand	●	●	●	●	●
Nicaragua	●	●	●	●	●
Niger	○	-	●	-	●
Nigeria	●	●	●	-	●
North Macedonia	●	●	○	-	○
Northern Mariana Islands (Commonwealth of the)	○	-	●	-	●
Norway	●	●	●	●	●
Occupied Palestinian Territory	●	●	●	-	●
Oman	●	●	●	-	●
Pakistan	●	●	●	●	●
Palau	-	-	○	-	○*
Panama	●	●	●	●	●
Papua New Guinea	-	-	●	-	●
Paraguay	●	-	●	●	●
Peru	●	-	●	●	●
Philippines	●	●	●	●	●
Poland	●	○	●	●	●
Portugal	●	●	●	●	●
Puerto Rico	●	●	●	●	●
Qatar	●	●	●	-	●
Republic of Korea	●	●	●	●	●
Republic of Moldova	●	-	●	-	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Romania	●	●	●	●	●
Russian Federation	●	●	●	○	●
Rwanda	●	●	●	-	●
Réunion	●*	●*	●*	●*	●*
Saba	-	-	●	-	-
Saint Barthélemy	●	-	●	-	○
Saint Kitts and Nevis	-	-	●	-	●
Saint Lucia	●	-	●	-	●
Saint Martin	●	●	●	-	●
Saint Pierre and Miquelon	-	-	●	-	-
Saint Vincent and the Grenadines	-	-	●	●	●
Sao Tome and Principe	●	●	○	-	-
Saudi Arabia	●	●	●	-	●
Senegal	●	●	●	-	●
Serbia	●	-	●	○	○
Seychelles	●	●	●	-	●
Sierra Leone	●	●	●	-	●
Singapore	●	●	●	●	●
Sint Maarten	●	●	●	●	●
Slovakia	●	●	●	-	●
Slovenia	●	●	●	●	●
Solomon Islands	-	-	●	-	●
Somalia	●	●	●	-	-
South Africa	●	●	●	●	●
South Sudan	●	●	●	-	●
Spain	●	●	●	●	●
Sri Lanka	●	●	●	-	●
Sudan	●	●	●	●	●*
Suriname	●	●	●	●	●
Sweden	●	●	●	●	●
Switzerland	●	●	●	●	●
Thailand	●	●	●	●	●
Timor-Leste	●	-	●	-	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Togo	●	●	●	●	●
Tonga	-	-	-	-	○
Trinidad and Tobago	●	-	●	●	●
Tunisia	●	●	●	-	●
Turkey	●	●	●	●	●
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	●	-	●
Ukraine	●	○	○	-	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
United Arab Emirates	●	●	●	●	●
United Kingdom	●	●	●	●	●
United Republic of Tanzania	●	●	●	●	●
United States Virgin Islands	●	●	●	●	●
United States of America	●	●	●	●	●
Uruguay	●	●	●	●	●
Uzbekistan	●	●	○	-	●
Vanuatu	-	-	●	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Venezuela (Bolivarian Republic of)	●	-	●	●	●
Viet Nam	●	●	●	-	●
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	●	-	●
Zimbabwe	●	●	●	-	●

**Newly reported in this update. "●" indicates that information for this variant was received by WHO from official sources. "○" indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information becomes available. **Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern.*

See also Annex 2: Data, table, and figure notes

Annex 2. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

COVID-19 Weekly Epidemiological Update

Edition 80, published 22 February 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews
- Summary of the Weekly Operational Update

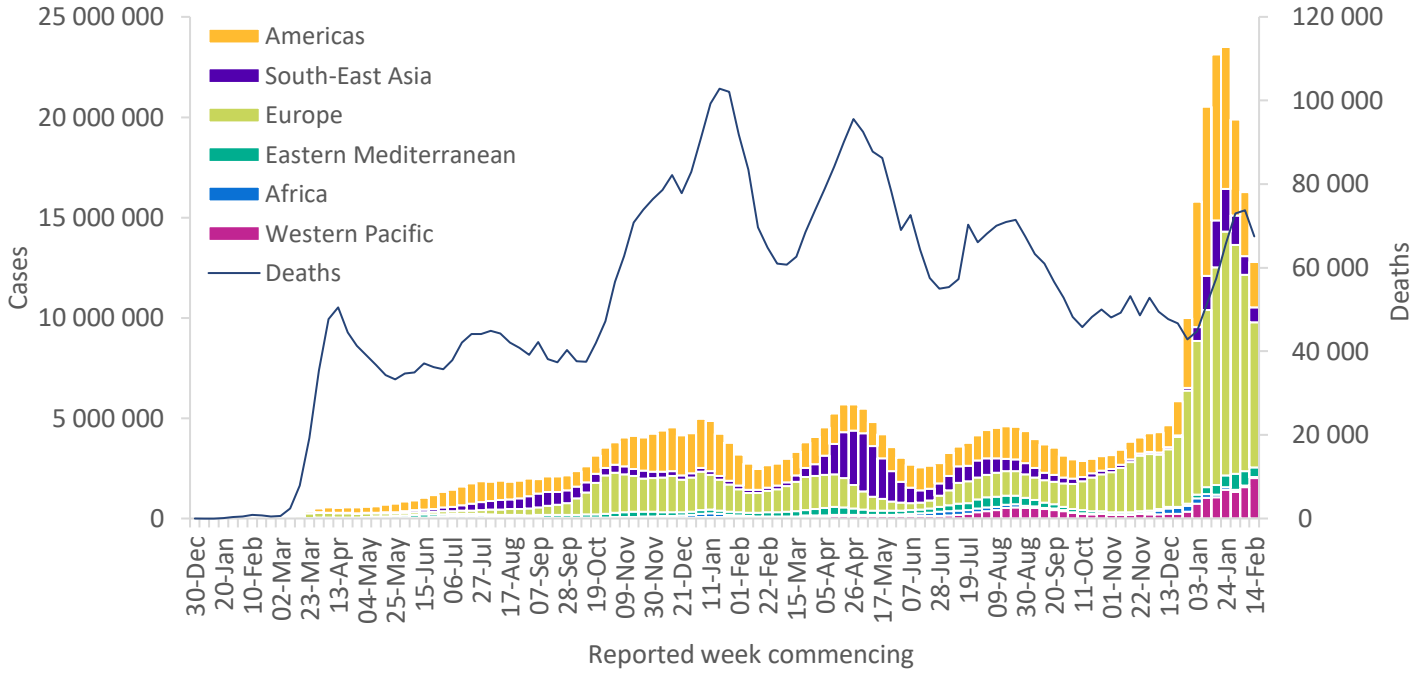
Global overview

Data as of 20 February 2022

Globally, during the week of 14 through 20 February 2022, the number of new COVID-19 cases decreased by 21% as compared to the previous week. In addition, the number of new deaths showed a decreasing trend (-8%) when compared to the previous week (Figure 1). Across the six WHO regions, over 12 million new cases and over 67 000 new deaths were reported (Table 1). As of 20 February 2022, over 422 million confirmed cases and over 5.8 million deaths have been reported globally.

At the regional level, the Western Pacific Region reported a 29% increase in the number of new weekly cases, while all other regions reported decreases: the Eastern Mediterranean Region (-34%), the Region of the Americas (-29%), the European Region (-26%), the African Region (-22%) and the South-East Asia Region (-17%). The number of new weekly deaths increased in the Western Pacific (+21%) and African (+20%) Regions and decreased in the South-East Asia (-37%), the Regions of Americas (-9%), the European Region (-5%) and the Eastern Mediterranean Region (-4%).

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 20 February 2022**



**See *Annex 2: Data, table, and figure notes*

The highest numbers of new cases were reported from the Russian Federation (1 236 910 new cases; -7%), Germany (1 218 465 new cases; -8%), Brazil (773 353 new cases; -23%), the United States of America (746 129 new cases; -39%), and the Republic of Korea (612 195 new cases; +80%).

The highest number of new deaths were reported from the United States of America (14 723 new deaths; -6%), Brazil (5877 new deaths; -11%), the Russian Federation (5252 new deaths; +8%), India (3238 new deaths; -51%), and Mexico (2221 new deaths; +8%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 20 February 2022**

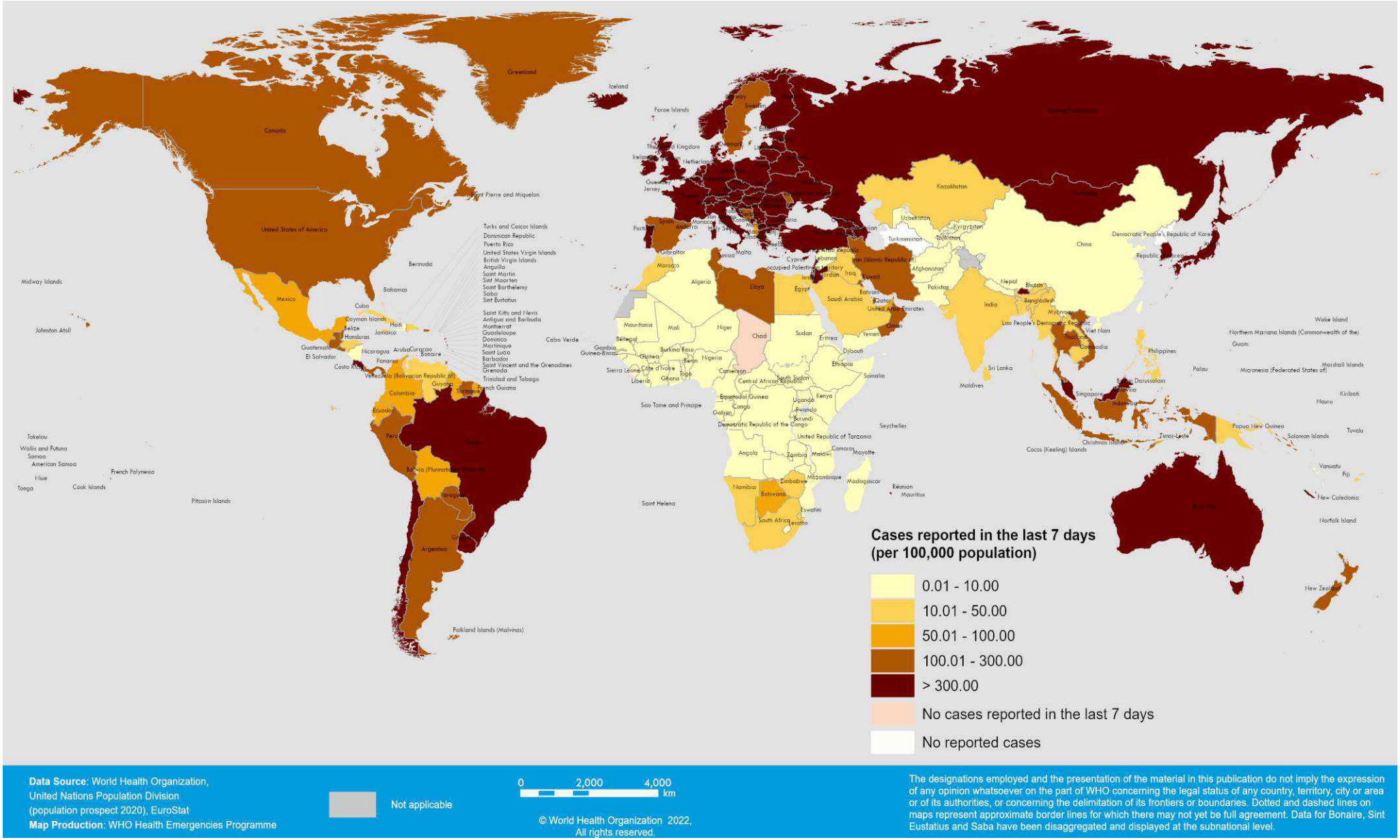
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	7 224 687 (56%)	-26%	171 887 349 (41%)	24 772 (37%)	-5%	1 843 169 (31%)
Americas	2 265 214 (18%)	-29%	145 283 655 (34%)	28 945 (43%)	-9%	2 600 596 (44%)
Western Pacific	2 020 878 (16%)	29%	20 880 285 (5%)	3 749 (6%)	21%	176 613 (3%)
South-East Asia	762 899 (6%)	-17%	55 041 156 (13%)	5 001 (7%)	-37%	757 525 (13%)
Eastern Mediterranean	466 795 (4%)	-34%	20 815 884 (5%)	3 139 (5%)	-4%	329 934 (6%)
Africa	53 489 (0%)	-22%	8 279 661 (2%)	1 913 (3%)	20%	168 916 (3%)
Global	**12 793 962 (100%)**	**-21%**	**422 188 754 (100%)**	**67 519 (100%)**	**-8%**	**5 876 766 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 2: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

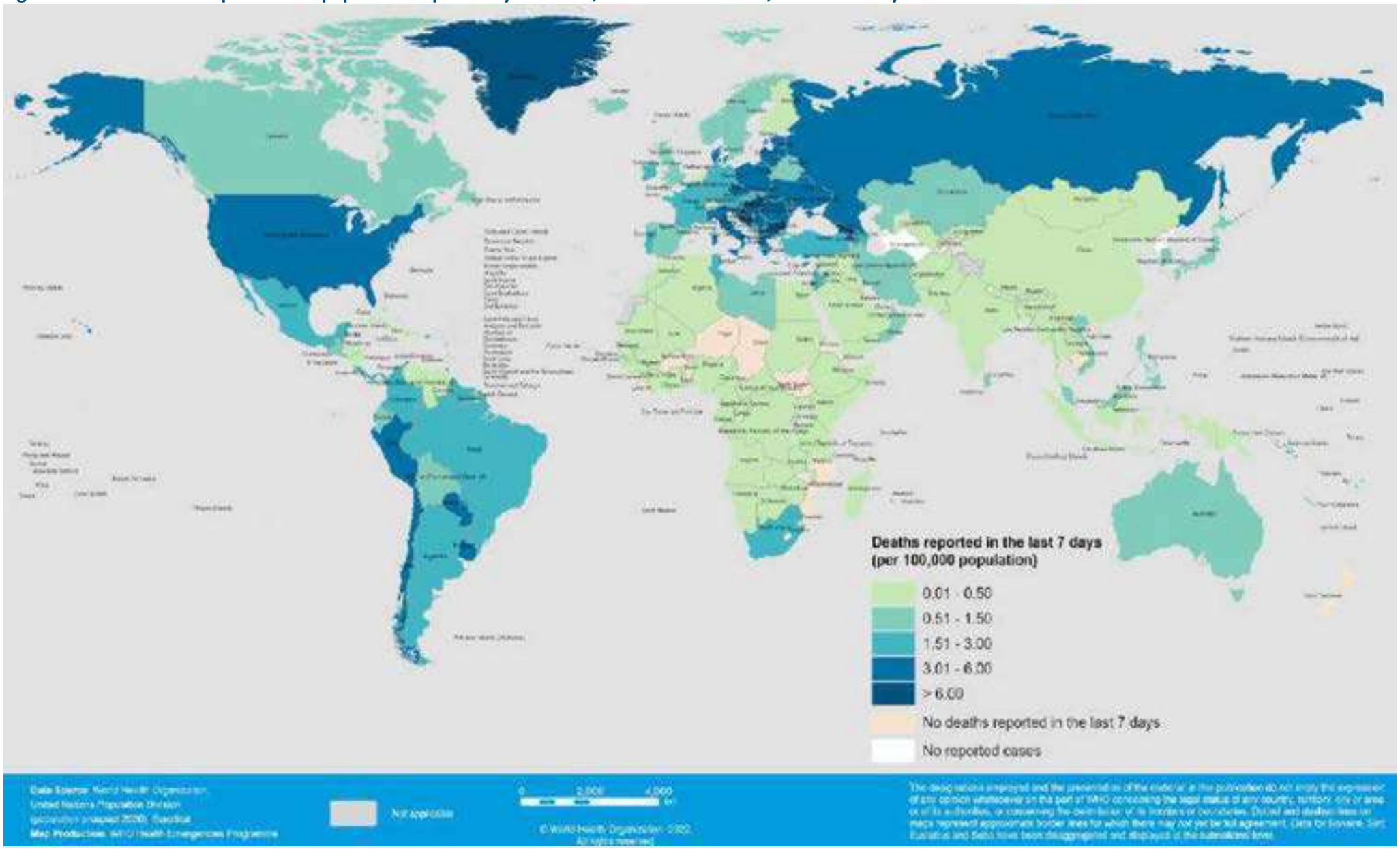
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 14-20 February 2022**



**See *Annex 2: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 14-20 February 2022**



**See *Annex 2: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

The current global epidemiology of SARS-CoV-2 is characterized by the global dominance of the Omicron variant. Delta remains the only other named variant with significant reported circulation. Among the 495 016 sequences uploaded to GISAID with specimens collected in the last 30 days[i] 490 519 (99.1%) were Omicron, 3 841 (0.8%) were Delta, one (<0.1%) was Alpha and one non VOI/VOC sequence. In the last 30 days, no Beta, Gamma, Lambda or Mu sequences were reported to GISAID. To note, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

The Omicron variant

Differences in the characteristics of VOCs

Available evidence on the phenotypic impacts of VOCs is reported in previous editions of the COVID-19 Weekly Epidemiological Update. Since the last update on 8 February 2022, there have been several new publications on the phenotypic characteristics of VOCs**,** including Omicron. Some of these studies have not been peer-reviewed and the findings must therefore be interpreted with due consideration of this limitation.

Update on the Omicron VOC

This section provides a summary of the potential impact of the Omicron variant. Detailed information on this variant and related recommended priority actions for Member States can be found in the updated Technical Brief and Priority Actions for Member States as well as under the Country and Technical Guidance – Coronavirus Disease (COVID-19). Based on the currently available evidence (Table 2), the overall global risk related to the Omicron variant remains very high.

Since the first reporting of the Omicron variant in November 2021, almost 1.5 million sequences have been deposited in GISAID. By the first week of January 2022, Omicron accounted for 90% of submitted sequences; by week five, Omicron had largely replaced all other variants and now accounts for over 99% of submitted sequences. Amongst the major Omicron lineages, BA.1 predominates overall, followed by BA.1.1 and BA.2, with BA.3 being the

[i] Includes sequences submitted to GISAID with sample collected dates from 19 January to 17 February 2022 (last reported sample at the time of data extraction), excluding low coverage sequences. Proportions are estimated for countries submitting more than 100 total sequences. In the past 30 days, 30 countries submitted a total of 100 sequences and above on GISAID.

least frequently detected. Weekly trends (figure 4, panel A) show that the relative proportion of BA.2 has increased over time, becoming the second most frequently detected lineage after BA.1.1 by week 6, and the dominant lineage in 18 countries. This trend is most pronounced in the South-East Asia region, followed by the Eastern Mediterranean, African, Western Pacific and European Regions. In contrast, very little BA.2 has been detected in the Americas, and no growth has been observed for the BA.3 lineage. Increased sequence variation has been observed within the BA.1 and BA.2 lineages over time, in line with increasing transmission. The weekly number of Omicron sequences has been steadily decreasing since the beginning of 2022 (figure 4, panel B). This trend should be interpreted with some caution, as data for the most recent weeks may be incomplete due to the delay between specimen collection and submission of sequences to GISAID (median delay from week 1 of 2022: 13 days). In addition, some countries may have changed their testing and sequencing policies during the presented period.

Figure 4. Global distribution and relative proportion of Omicron lineages for sequences submitted to GISAID presented by week of specimen collection

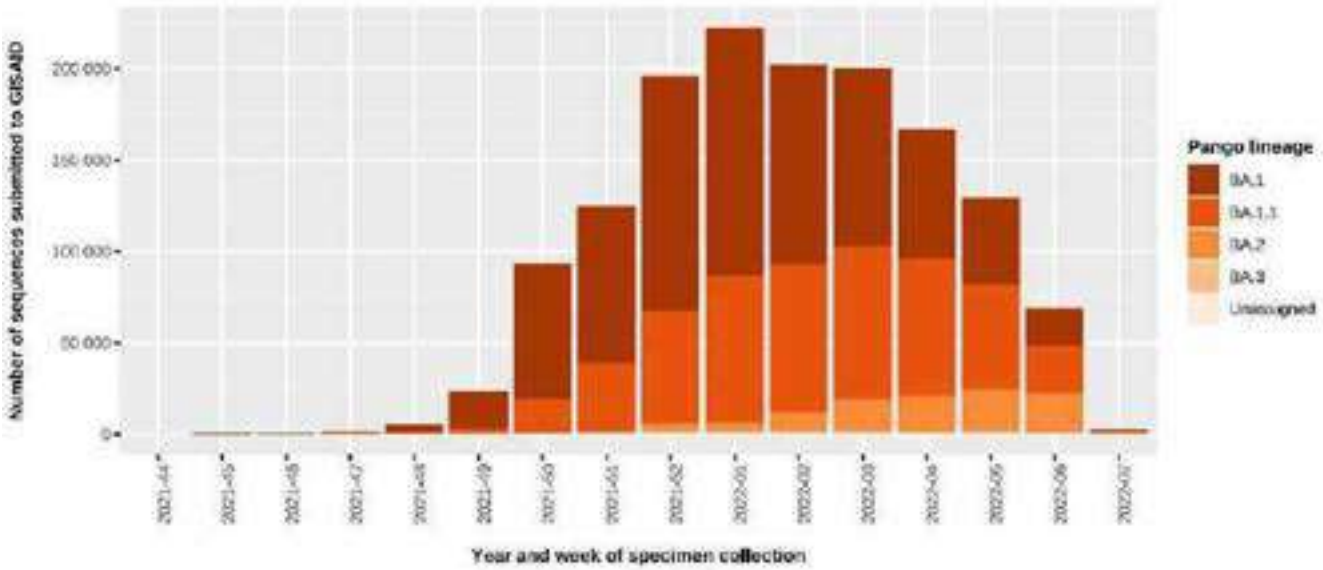
A.

				Overall (%)	Last 4 weeks by collection date (%)			
Lineage	Countries	Sequences[a]	SGTF[b]	Total	2022-04	2022-05	2022-06	2022-07
BA.1	151	831 022	98.42	56.89	42.18	37.04	30.21	26.67
BA.1.1	139	539 618	95.66	36.29	45.25	43.93	37.41	38.49
BA.2	85	110 905	0.10	7.46	12.23	18.56	31.91	35.80
BA.3	19	422	99.05	0.03	0.04	0.02	0.02	0.05
Unassigned	56	4 834	17.81	0.33	0.31	0.45	0.46	0.99

[a]Data source: sequences and metadata from GISAID

[b]Percentage of sequences with Spike H 69-70 deletion associated with S gene target failure

B.



Global distribution of Omicron lineages from sequences and metadata submitted to GISAID.

Panel A: Relative proportions of Omicron lineages over the last 4 weeks by specimen collection week.

Panel B: Incidence of Omicron lineages by week of specimen collection.

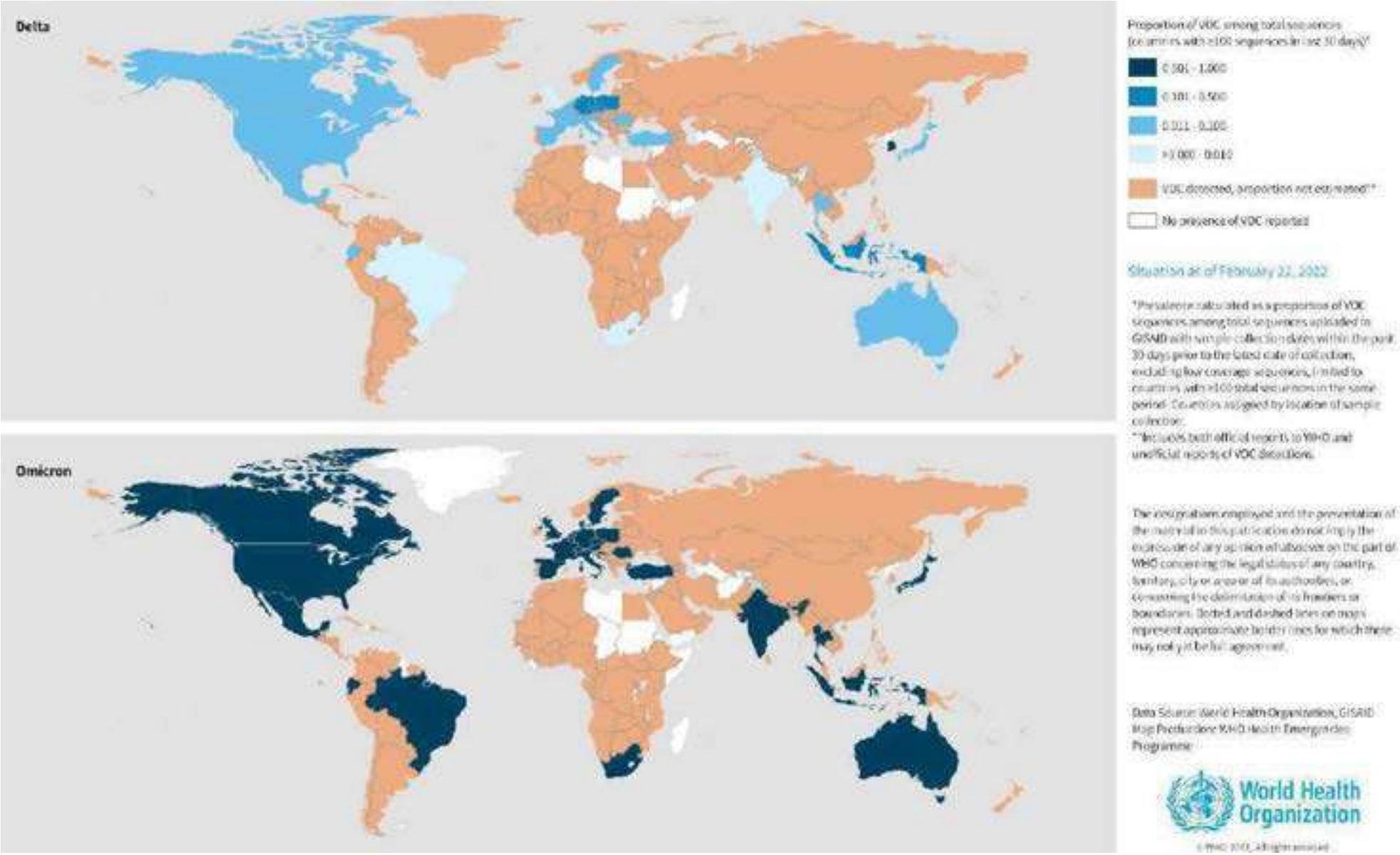
Data was extracted from GISAID on 21 February 2022 at 14:00 CET; figures are correct at the time of printing.

Table 2: Summary of current evidence on the Omicron variant of concern

Domain	Indicator	Main results
Epidemiology	Impact on disease incidence	- Omicron continues to spread globally and has been identified in most countries in all six WHO regions. - Globally, during the week of 14 through 20 February 2022, the number of new COVID-19 cases decreased by 21% as compared to the previous week. The number of new deaths also showed a decreasing trend (8%). At the regional level, the Western Pacific Region reported a 29% increase in the number of new weekly cases while all other regions reported decreases. - It is important to note that these trends may be due, in part, to an overall decrease in testing as some countries may have changed their testing and sequencing policies during the presented period.
	Impact on transmission	- An analysis based on the methods used by Campbell et al [1], and that focused on countries with sufficient sequence data uploaded to GISAID as of 18 February, found a growth rate advantage of Omicron over Delta in all countries. - This translated to a pooled mean transmission advantage (i.e., relative difference in effective reproduction numbers) of 77% (95% CI: 66% – 95%) across epidemiological contexts, under the assumption of an unchanged generation time (i.e. the duration between the moment a person gets infected to the moment they infect another person). The generation time of Omicron has been found to be shorter as compared to Delta, which suggests the transmission advantage may be lower than estimated above; for a 20% shorter generation time, the estimated pooled mean transmission advantage of Omicron over Delta is 66% (95% CI: 60% – 82%). - The same analysis demonstrates a growth rate advantage of the Omicron Pango lineage BA.2 over the Pango lineage BA.1, with a pooled mean transmission advantage of 63% (95% CI: 47% – 77%), under the assumption of an unchanged generation time. - Higher secondary attack rates were reported for Omicron compared to Delta: 13.6% (95% CI: 13.1%-14.1%) vs 10.1% (95% CI: 10.0%-10.2%) in the United Kingdom,[2] and 31% vs. 21% in Denmark.[3] - Researchers in China, Hong Kong SAR[4] found that Omicron had a higher tropism for the bronchi tissue compared to lungs. In the United Kingdom,[5] Omicron was found to infect the upper respiratory tract more rapidly than Delta, yielding about 100-fold higher titres. - Two studies conducted in South Africa [6,7] reported evasion from vaccine-induced and infection-induced immunity by Omicron. This could also be a contributing factor to the higher growth rates of Omicron compared to Delta.
	Impact on disease severity	Following analyses of patterns in recent medical consultations and hospitalizations, Omicron was consistently found to be associated with less severe disease compared to Delta across studies conducted in the United Kingdom,[8] the United States of America,[9,10] Canada[11] and South Africa.[12]
Immune response	Impact on reinfection	Preliminary data on Omicron in individuals previously infected with SARS-CoV-2 since the start of the pandemic showed an increase in the number of reinfections in Denmark[13] and Israel.[14] A higher risk (RR = 3.3; 95%CI: 2.8 – 3.8) of reinfection with Omicron compared to other SARS-CoV-2 variants was reported across the United Kingdom, with an even higher risk (RR = 5.4; 95%CI: 4.9 – 6.0) when reported only from England. [15]
	Impact on vaccination	Results of vaccine effectiveness (VE) studies are difficult to interpret, and estimates vary with the type of vaccine administered and the number of doses and scheduling (sequential administration of different vaccines). Studies conducted in the United Kingdom and the United States of America reported 60% – 75% vaccine effectiveness against symptomatic infection with Omicron.[16] See more details in the section below.
	Impact on antibody responses and cellular immunity	An analysis of neutralization data from 23 laboratories found a 20-fold reduction in neutralization associated with the Omicron variant in unvaccinated, previously infected individuals or individuals who had received two vaccine doses, while sera from vaccinated individuals with previous infection or individuals who had received three vaccine doses showed a seven-fold reduction.[17] This reduced

Domain	Indicator	Main results
		humoral response could be associated with an increased risk of reinfection. Conversely, studies on cellular immunity showed well preserved responses (70% – 80% of CD4+ and CD8+ responses) that could be associated with a decreased risk of severe disease.[18–22]
Diagnostic tools	Impact on PCR assays	Apart from the BA.2 lineage, all Omicron descendent variants have the 69-70 deletion responsible for S-gene target failure. Evaluation of PCR tests for SARS-CoV-2 that include multiple gene targets revealed limited impact of the Omicron variant on the diagnostic test accuracy of these assays.[23,24]
	Impact on Rapid Diagnostic tests	Preliminary data showed contradictory results, with some indicating that Ag-RDTs have similar sensitivity to Omicron as to the wild-type virus or other VOCs, while other studies found a difference. This variability in test performance was also found in more recent studies.[25,26]
Impact on treatment	Impact on antivirals	Preliminary data from several research projects showed no difference in the effectiveness of antiviral agents against Omicron.[27–29]
	Impact on biologicals	Studies on the effectiveness of monoclonal antibodies for treating patients with Omicron reported conserved neutralizing activity for three broadly neutralizing monoclonal antibodies (sotrovimab, S2X259 and S2H97) and a reduction in effectiveness of other monoclonal antibodies (**Planas 2021, VanBlargan 2021, Cameroni 2021, Wilhelm 2021, Roche 2021**).[30–34]
	Other treatment options	It is anticipated that other therapeutics for the clinical management of severe and critical COVID-19 patients (e.g. Interleukin-6 receptor blockers and corticosteroids, will maintain their effectiveness.

Figure 5: Prevalence of variants of concern (VOCs) Delta and Omicron in the last 30 days, data as of 22 February 2022



See also Annex 2 for reported VOC detections by country/territory/area

Figure 6. Vaccine effectiveness (VE) of primary series and booster vaccination against the Delta variant of concern

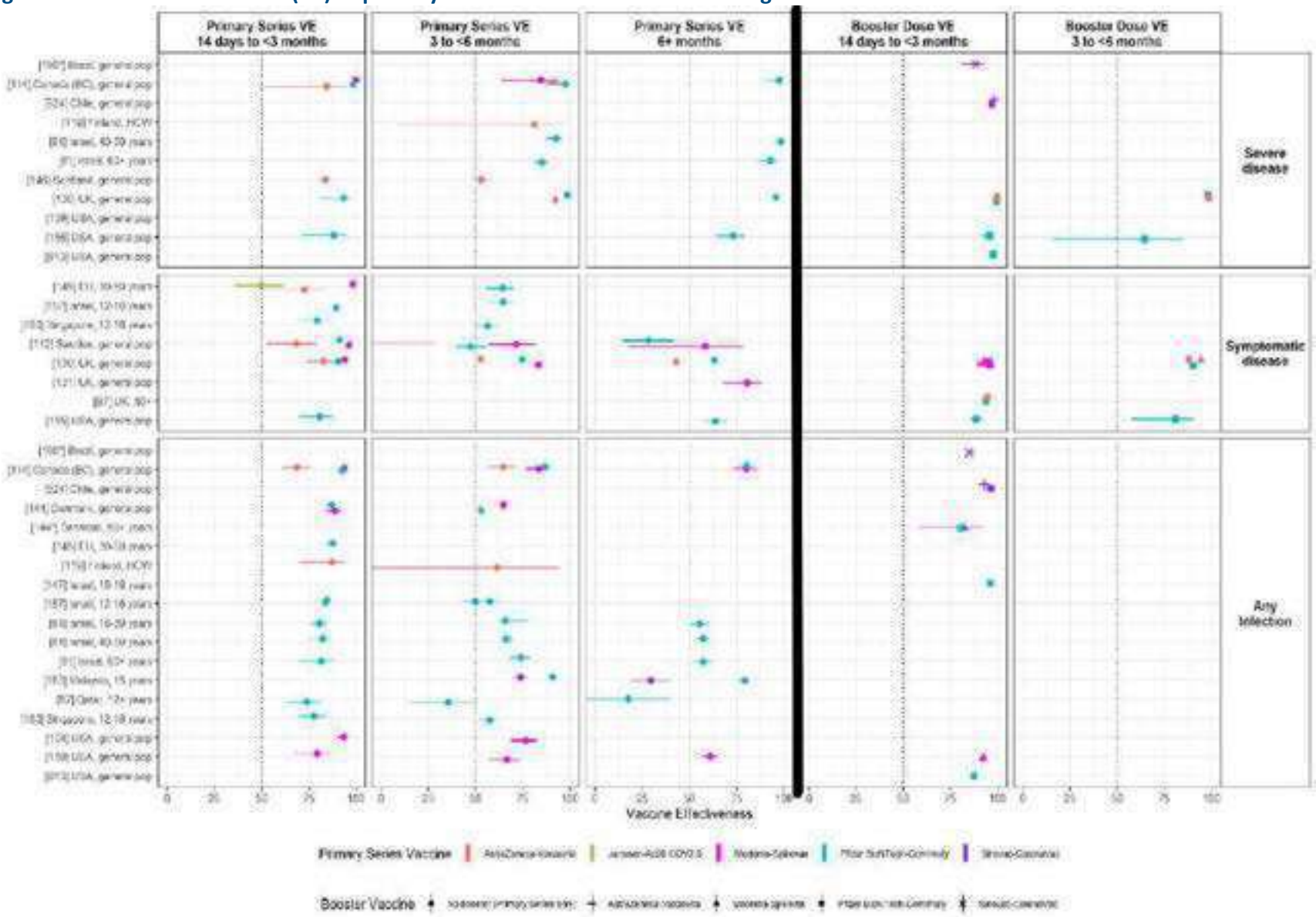
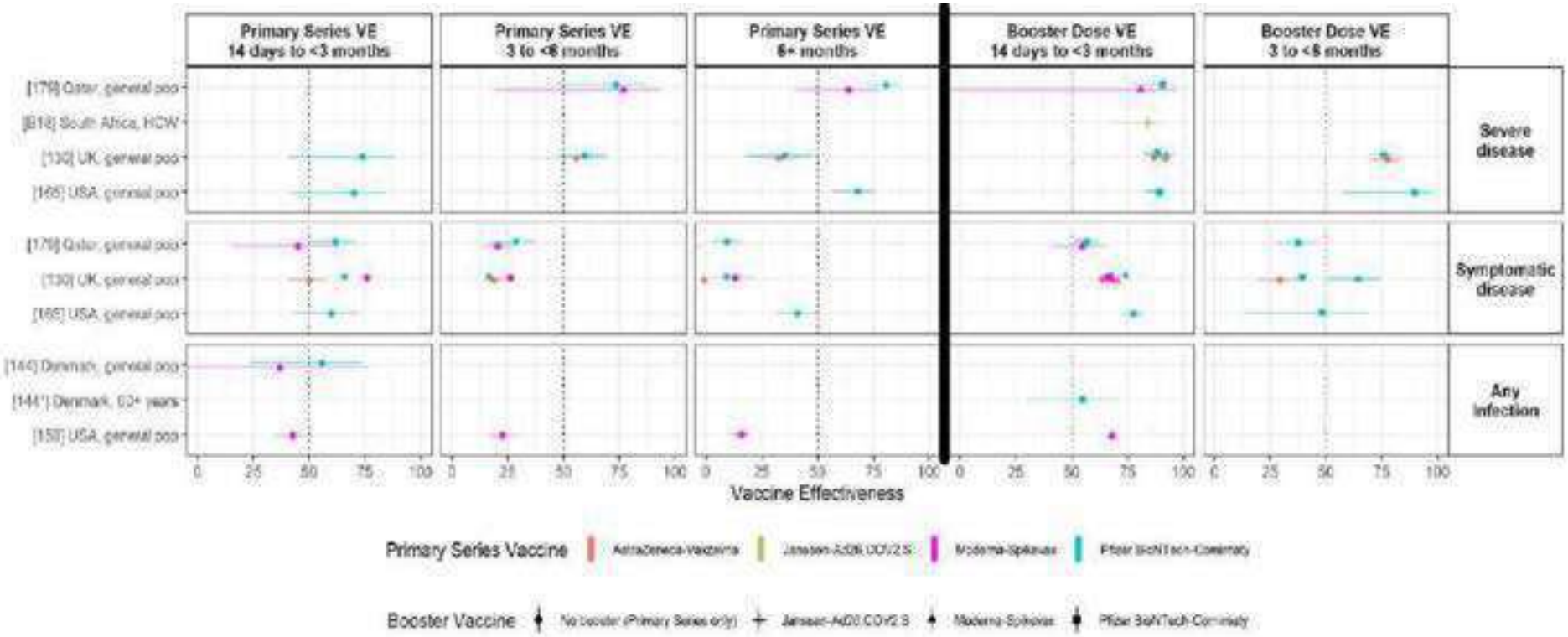


Figure 7. Vaccine effectiveness (VE) of primary series and booster vaccination against the Omicron variant of concern



*Indicates booster dose vaccine effectiveness evaluated using persons completing primary series as reference group, rather than unvaccinated persons.Abbreviations: pop=population; HCW=healthcare workers; EU=European Union. Dots represent point estimates of vaccine effectiveness; horizontal lines represent the 95% confidence intervals. Labels along left side of plot indicate reference numbers [], country, and study population. Reference numbers identify the study and link to the summary table of VE effectiveness studies on view-hub.org (Table 1 in summary table); references starting with a 'B' are studies found in the booster VE table only (Table 2 in summary table). Primary series refers to the completion of two doses of vaccines for Astra-Zeneca-Vaxzevria; Moderna-Spikevax, Pfizer BioNTech-Comirnaty and Sinovac-CoronaVac and one dose of Janssen-Ad26.COV2. Severe disease includes hospitalization; symptomatic disease includes disease of any severity level; any infection can include symptomatic and asymptomatic infection. Additional details on the methods for inclusion of the estimates in the plots provided in Annex 3. Note, three negative point estimates for the primary series are not shown in the Omicron plot: Moderna-Spikevax VE against symptomatic disease at 6+ months (reference 179) as well as Moderna-Spikevax and Pfizer BioNTech-Comirnaty VE against infection at 3-6 months (reference 144); one negative point estimate for primary series is not shown in the Delta plot: AstraZeneca-Vaxzevria VE against Delta symptomatic disease (reference 112) with 95% Cis crossing 0 is not fully visible in the plot.

Figures 6 and 7 summarize the impact of Delta and Omicron variants, respectively, on product-specific vaccine effectiveness (VE) over time for both primary series vaccines and booster vaccines. Since the last update, one new study (pre-print) from Qatar[35] has evaluated primary series and booster dose VE of Pfizer BioNTech-Comirnaty and Moderna-Spikevax vaccines against symptomatic and severe disease due to Omicron; and one new peer-reviewed study from Brazil[36] has assessed VE of three doses of Sinovac-CoronaVac against infection and severe disease in the context of Delta. The methods for including estimates in the plot are described below. Additional information on vaccine performance against VOCs can also be found in Annex 4.

Interpretation of the results of VE for the Delta variant

Most of the evidence to date indicates that effectiveness of the mRNA vaccines (Pfizer BioNTech-Comirnaty and Moderna-Spikevax) remains high against *severe disease* associated with Delta variant infection at six or more months after the primary series, with three of four studies reporting VE estimates of >90% and one study reporting a VE of 74% at six months or more. Three studies report high VE (>80%) of the AstraZeneca-Vaxzevria vaccine three to six months following the primary series, while one study reports a lower VE (54%), compared to the first three months (84%).

VE estimates against *symptomatic disease* and *infection* range from 73 to 96% following the primary series of one of the two mRNA vaccine from 14 days up to three months after vaccination and 68-88% following the primary series of the AstraZeneca-Vaxzevria vaccine during the same time period. There is, however, consistent evidence of decreasing VE against *symptomatic disease* and *infection* over time following the primary series for all of the vaccines for which data are available. Despite this, most of the evidence still shows VE estimates of >50% (59-80%) at six months or more following mRNA vaccine, with four estimates falling below 50%. Three of the four studies evaluating the AstraZeneca-Vaxzevria vaccine also showed a VE >50% (54-65%) at three to six months, though in one of these studies the VE decreased to 43% at six or more months following the primary series. A single study of Sinovac-CoronaVac (an inactivated vaccine) conducted in Malaysia reported a VE against *infection* of 74% three to six months following the primary series, which decreased to 30% beyond six months.

Receipt of a booster dose of mRNA, vector-based and inactivated vaccines for which there are data available resulted in a VE of ≥79% for *all outcomes* within the first three months. At three to six months following the booster dose, the VE of a Pfizer BioNTech-Comirnaty booster following Pfizer BioNTech-Comirnaty or AstraZeneca-Vaxzevria primary series remained >95% against *severe disease* in a single study conducted in the United Kingdom, but decreased from 95% to 65% with Pfizer BioNTech-Comirnaty primary series and booster in a single study conducted in the United States of America. In the same two studies, the VE against *symptomatic disease* at three months or more following a booster dose with an mRNA vaccine was >75% after a primary series of either the AstraZeneca-Vaxzevria or the Pfizer BioNTech-Comirnaty vaccines.

Interpretation of the results of VE for the Omicron variant

Six studies of VE for the Omicron variant show lower protection of the primary series COVID-19 vaccines for all outcomes (*severe disease*, *symptomatic disease*, and *infection*) than has been observed previously for other VOCs. Importantly, VE estimates against the Omicron variant remains highest for *severe disease*, while they are lower for s*ymptomatic disease and infection.* Booster vaccination substantially improves VE for all outcomes for all products for which there are data. More data are needed to characterize the duration of the VE following a booster dose.

VE estimates for the Pfizer BioNTech-Comirnaty vaccine against *severe disease* due to the Omicron variant within the first three months following the primary series (without a booster dose) range from 70 to 74% and decrease over time since vaccination, with VE estimates of 60-74% between three and six months, and 35-80% at six months or more. In three to six months versus six months or longer, VE estimates for the AstraZeneca-Vaxzevria vaccine against *severe disease* reduced from 56% to 33%, with relatively wide confidence intervals (see Figure 7 for details).

Early VE estimates (measured from 14 days up to three months after vaccination) of the primary series against *symptomatic disease* are generally lower than those for *severe disease*, though they remain at or above 50% for AstraZeneca-Vaxzevria, Moderna-Spikevax, and Pfizer BioNTech-Comirnaty vaccines, except for one study that reported VE of 45% (95% CI: 16-64%) for Moderna-Spikevax. VE against *infection* at 14 days up to three months after the primary series was lower, ranging from 37 to 55%. All available estimates against both *symptomatic disease* and *infection* measured three or more months after completion of the primary series indicate VE estimates of less than 50% for the three vaccines.

A booster dose increases VE estimates against *severe disease* to above 75% for all vaccines for which data are available, with this effect maintained up to six months after the booster dose. A booster dose increased VE estimates against *symptomatic disease* in the first three months following vaccination substantially, by at least 37 percentage points across all studied vaccines, with VE ranging from 55% to 78%. However, VE decreased to 29-64% at three to six months. Limited evidence is available for VE against *infection* due to the Omicron variant following a booster dose, with only one study showing a VE of 68% within the first three months of a booster dose of Moderna-Spikevax.

Additional resources

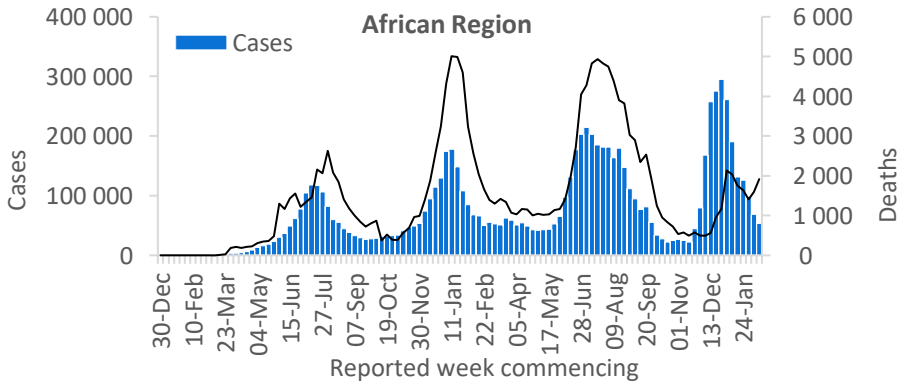
- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data

WHO regional overviews Epidemiological week 14-20 February 2022**

African Region

The African Region has reported a continued decrease in the number of cases since the beginning of January 2022, with over 53 000 new cases reported, a 22% decrease as compared to the previous week. However, four countries in the Region (8%) reported an increase of over 20% in cases: Ghana (469 vs 210 new cases; +123%), Equatorial Guinea (17 vs 8 new cases; +112%), Zimbabwe (1925 vs 964 new cases; +99%) and Burkina Faso (40 vs 26 new cases; +53%). The highest numbers of new cases were reported from Réunion (21 707 new cases; 2424.5 new cases per 100 000 population; -29%), South Africa (16 929 new cases; 28.5 new cases per 100 000; -6%), and Algeria (2710 new cases; 6.2 new cases per 100 000; -25%).

With just over 1900 new deaths reported this week, the Region shows a 20% increase when compared to the previous week. This increase is driven by a backlog of deaths reported by South Africa following an ongoing audit exercise. The highest numbers of new deaths were reported from South Africa (1632 new deaths; 2.8 new deaths per 100 000 population; +40%), Algeria (72 new deaths; <1 new death per 100 000; similar to previous week), and Réunion (38 new deaths; 4.2 new deaths per 100 000; +12%).

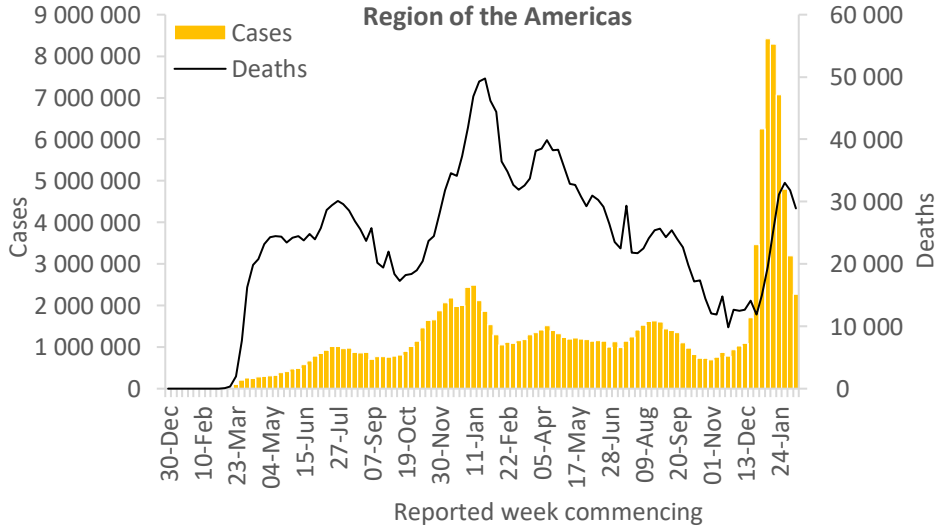


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 2.2 million new cases, a 29% decrease as compared to the previous week, a trend that has continued since mid-January. However, three countries have reported increases in new cases of 20% or greater, with the highest proportional increases reported from Mexico (90 422 vs 53 344 new cases; +70%), Nicaragua (85 vs 65 new cases; +31%) and, Saint Lucia (536 vs 419; +28%). The highest numbers of new cases were reported from Brazil (773 353 new cases; 363.8 new cases per 100 000; -23%), the United States of America (746 129 new cases; 225.4 new cases per 100 000; -39%), and Chile (236 312 new cases; 1236.2 new cases per 100 000; -5%).

The Region reported just under 29 000 new deaths this week, a 9% increase as compared to the previous week. The highest numbers of new deaths were reported from the United States of America (14 723 new deaths; 4.4 new deaths per 100 000; -6%), Brazil (5877 new deaths; 2.8 new deaths per 100 000; -12%), and Mexico (2221 new deaths; 1.7 new deaths per 100 000; +8%).

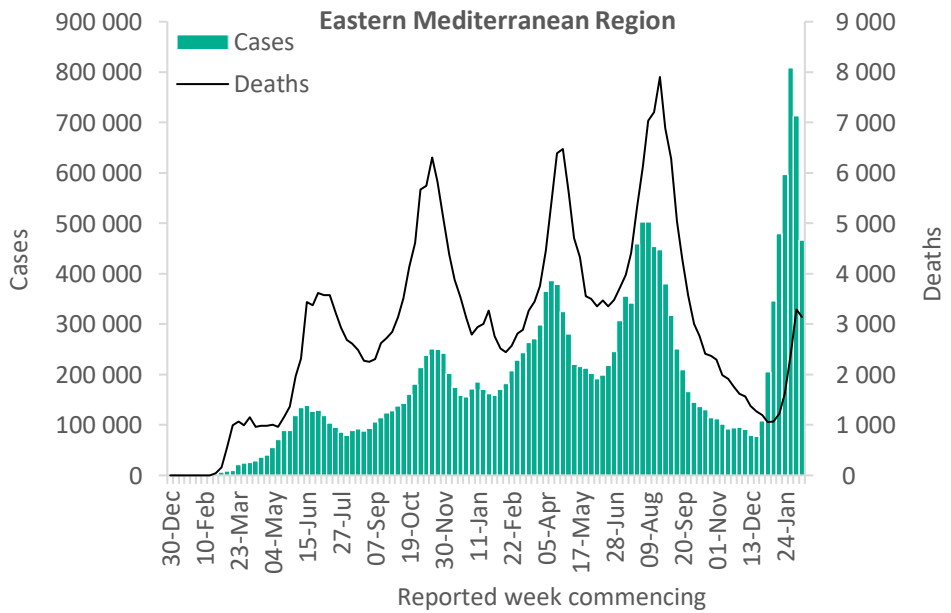


Updates from the Region of the Americas

Eastern Mediterranean Region

In the Eastern Mediterranean Region, new weekly cases continue to decline for the second consecutive week since the peak reached in early February 2022. Over 466 000 new cases were reported this week, representing a 34% decrease as compared to the previous week. The highest numbers of new cases were reported from the Islamic Republic of Iran (145 032 new cases; 172.7 new cases per 100 000; -39%), Jordan (110 012 new cases; 1078.2 new cases per 100 000; -19%), and Lebanon (30 984 new cases; 453.9 new cases per 100 000; -33%).

The number of new weekly deaths remains stable when compared to the previous week's figures, with over 3100 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (1228 new deaths; 1.5 new deaths per 100 000; +49%), Egypt (402 new deaths; <1 new death per 100 000; -3%), and Tunisia (310 new deaths; 2.6 new deaths per 100 000; -32%).

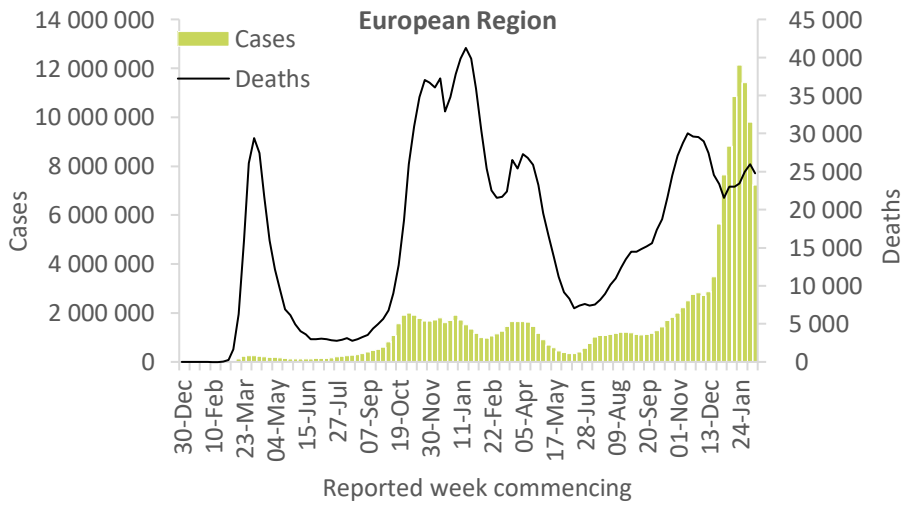


Updates from the Eastern Mediterranean Region

European Region

The European Region reported a further decline this week with over 7.2 million new cases, a 26% decrease as compared to the previous week. This is the third consecutive week of a decline in the number of new cases since the Region observed a peak at the end of January. Only one country – Iceland - reported a greater than 20% increase this week (17 293 vs 13 333 new cases; +30%). The highest numbers of new cases were reported from the Russian Federation (1 236 910 new cases; 847.6 new cases per 100 000; -7%), Germany (1 218 465 new cases; 1465.1 new cases per 100 000; -8%), and Turkey (599 596 new cases; 710.9 new cases per 100 000; -12%).

This week, over 24 000 new deaths were reported in the Region, a 5% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (5252 new deaths; 3.6 new deaths per 100 000; +9%), Italy (2024 new deaths; 3.4 new deaths per 100 000; -11%), and Turkey (1922 new deaths; 2.3 new deaths per 100 000; +11%).

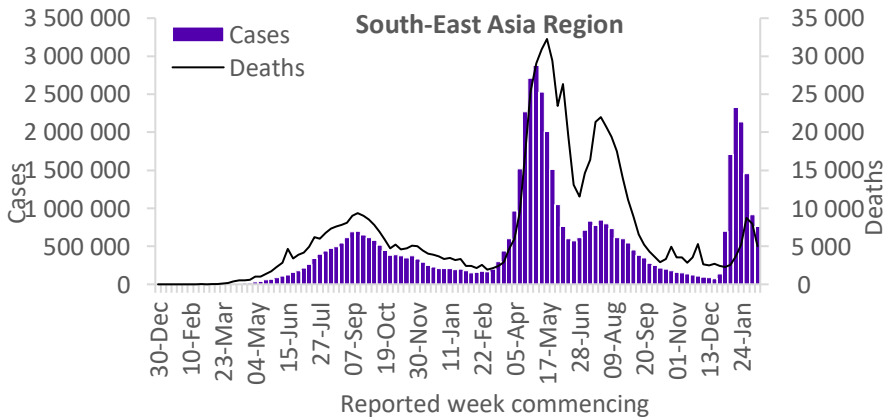


Updates from the European Region

South-East Asia Region

A decline in new cases has been observed in the South-East Asia Region since mid-January. Over 762 000 new cases were reported in the Region this week, a 17% decrease as compared to the previous week. Despite the declining trend at the regional level, four countries reported an increase of over a 20% e: Myanmar (18 896 vs 8870 new cases; +113%), Bhutan (2649 vs 1337 new cases; +98%), Indonesia (389 727 vs 291 298 new cases; +34%) and Thailand (118 988 vs 96 326 new cases; +24%). The highest numbers of new cases were reported from Indonesia (142.5 new cases per 100 000), India (191 052 new cases; 13.8 new cases per 100 000; -57%), and Thailand (170.5 new cases per 100 000).

Regionally, the number of new deaths also declined this week with just over 5000 new deaths reported, a 37% decrease as compared to the previous week. The highest numbers of new deaths were reported from India (3238 new deaths; <1 new death per 100 000; -52%), Indonesia (1189 new deaths; <1 new death per 100 000; +91%), and Thailand (188 new deaths; <1 new death per 100 000; +30%).

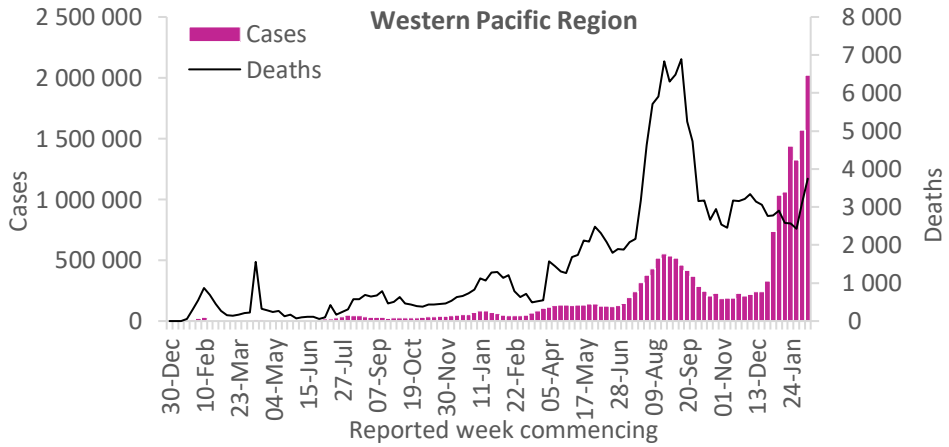


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported a sharp increase (29%) in new weekly cases as compared to the previous week, with over two million new cases. More than a third (11/28; 39%) of the countries in the Region reported an increase of 20% or greater in the past week. The most substantial increases were observed in New Zealand (10 361 vs 2792 new cases; +271%), China (26 329 vs 7571 new cases; +248%) and Brunei Darussalam (10 934 vs 4175 new cases; +162%). The highest numbers of new cases were reported from the Republic of Korea (612 195 new cases; 1194.1 new cases per 100 000; +80%), Japan (579 928 new cases; 458.5 new cases per 100 000; -7%), and Viet Nam (255 812 new cases; 262.8 new cases per 100 000; +63%).

Over 3700 new deaths were reported in the Region this week, a 21% increase as compared to the previous week. The highest numbers of new deaths were reported from Japan (1434 new deaths; 1.1 new deaths per 100 000; +52%), the Philippines (677 new deaths; <1 new death per 100 000; -5%), and Viet Nam (561 new deaths; <1 new death per 100 000; -7%).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 22 February, highlights include the following:

- Supporting the acceleration of COVID-19 vaccination rollout in Georgia through technical support
- Scaling up genomic sequencing in Nigeria to support policymakers
- WHO and partners working together to support Pacific Island Countries as COVID-19 gains a foothold in the Region
- WHO supports the scaling-up suicide prevention during COVID-19 in Bhutan
- With support of WHO's core contributors, health services and on-site vaccine opportunities were implemented in Iraq
- GOARN expert deployed by WHO to support the Commonwealth of Northern Mariana Islands' COVID-19 response
- Overview of OpenWHO superusers and the most popular COVID-19 online courses
- Progress on a subset of global indicators that demonstrate country and global progress to end the acute phase of the pandemic

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice

Annex 1. List of countries/territories/areas reporting variants of concern as of 22 February 2022

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Afghanistan	●	-	●	-	-
Albania	●	-	○	-	●
Algeria	●	-	●	-	●
American Samoa	-	-	○	-	○
Andorra	○	○	○	-	○
Angola	●	●	●	●	●
Anguilla	●	-	●	-	●
Antigua and Barbuda	●	●	●	●	●
Argentina	●	●	●	●	●
Armenia	●	-	●	-	●
Aruba	●	●	●	●	●
Australia	●	●	●	●	●
Austria	●	●	●	●	●
Azerbaijan	●	-	○	-	●
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	●
Bangladesh	●	●	●	○	●
Barbados	●	-	●	●	●
Belarus	●	-	○	-	●
Belgium	●	●	●	●	●
Belize	●	-	●	●	●
Benin	●	●	●	●	●*
Bermuda	●	●	●	-	●
Bhutan	●	●	●	-	●
Bolivia (Plurinational State of)	●	-	●	●	●
Bonaire	●	-	●	●	●
Bosnia and Herzegovina	●	●	○	●	○
Botswana	○	●	●	-	●
Brazil	●	●	●	●	●
British Virgin Islands	●	-	●	●	●
Brunei Darussalam	●	●	●	-	●
Bulgaria	●	●	●	-	●
Burkina Faso	●	●	●	-	●
Burundi	●	●	●	-	-
Cabo Verde	●	●	●	-	●
Cambodia	●	●	●	-	●
Cameroon	●	●	●	●	●
Canada	●	●	●	●	●
Cayman Islands	●	●	●	●	●
Central African Republic	●	●	●	-	●*
Chad	●	●	●	-	-
Chile	●	●	●	●	●
China	●	●	●	●	●
Colombia	●	-	●	●	●
Comoros	●	●	●	-	●*
Congo	●	●	●	●	●
Costa Rica	●	●	●	●	●
Croatia	●	●	●	●	●
Cuba	●	●	●	-	●
Curaçao	●	●	●	●	●
Cyprus	●	●	●	-	●
Czechia	●	●	●	●	●
Côte d'Ivoire	●	●	●	●	●
Democratic Republic of the Congo	●	●	●	-	●
Denmark	●	●	●	●	●
Djibouti	●	●	●	-	●
Dominica	●	-	●	-	-
Dominican Republic	●	-	●	●	●
Ecuador	●	-	●	●	●
Egypt	●	-	●	-	●
El Salvador	●	-	●	●	●
Equatorial Guinea	●	●	●	●	-
Estonia	●	●	○	○	●
Eswatini	●	●	●	-	●
Ethiopia	●	●	●	-	●
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	-	●	-
Fiji	○	-	●	-	●
Finland	●	●	●	●	●
France	●	●	●	●	●
French Guiana	●	●	●	●	●
French Polynesia	●	●	●	●	●
Gabon	●	●	●	●	●
Gambia	●	●	●	●	●
Georgia	●	○	●	-	●
Germany	●	●	●	●	●
Ghana	●	●	●	●	●
Gibraltar	●	-	○	-	●
Greece	●	●	●	●	●
Greenland	-	-	●	-	-
Grenada	●	-	●	●	●
Guadeloupe	●	●	●	●	●
Guam	●	●	●	●	●
Guatemala	●	●	●	●	●
Guernsey	-	-	-	-	●
Guinea	●	●	●	-	●
Guinea-Bissau	●	●	●	-	-
Guyana	●	-	●	●	-
Haiti	●	-	●	●	-
Honduras	●	-	●	●	●
Hungary	●	○	○	●	●
Iceland	●	●	●	●	●
India	●	●	●	●	●
Indonesia	●	●	●	-	●
Iran (Islamic Republic of)	●	●	●	-	●
Iraq	●	●	●	●	●
Ireland	●	●	●	●	●
Israel	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Italy	●	●	●	●	●
Jamaica	●	-	●	-	●
Japan	●	●	●	●	●
Jordan	●	●	●	●	●
Kazakhstan	●	○	●	-	●
Kenya	●	●	●	●	●
Kiribati	-	-	-	-	●
Kosovo[1]	●	○	○	-	●
Kuwait	●	●	●	-	●
Kyrgyzstan	●	●	●	-	●
Lao People's Democratic Republic	●	-	●	-	○
Latvia	●	●	○	●	●
Lebanon	●	-	●	-	●
Lesotho	●	●	●	-	-
Liberia	●	●	●	-	-
Libya	●	●	●*	-	-
Liechtenstein	●	-	○	○	○
Lithuania	●	●	○	●	●
Luxembourg	●	●	●	●	●
Madagascar	●	●	-	○	-
Malawi	●	●	●	-	●
Malaysia	●	●	●	-	●
Maldives	●	-	●	-	●
Mali	●	●	●	-	○
Malta	●	○	○	●	●
Martinique	●	●	●	●	●
Mauritania	●	●	●	-	●
Mauritius	●	●	●	-	●
Mayotte	●	●	●	-	●
Mexico	●	●	●	●	●
Monaco	●	●	●	-	-
Mongolia	●	-	●	-	●
Montenegro	●	-	○	○	○

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Montserrat	●	-	●	●	●
Morocco	●	●	●	-	●
Mozambique	●	●	●	-	●
Myanmar	●	-	●	-	●
Namibia	●	●	●	●	●
Nepal	●	-	●	-	●
Netherlands	●	●	●	●	●
New Caledonia	●	-	●	-	●
New Zealand	●	●	●	●	●
Nicaragua	●	●	●	●	●
Niger	○	-	●	-	●
Nigeria	●	●	●	-	●
North Macedonia	●	●	○	-	○
Northern Mariana Islands (Commonwealth of the)	○	-	●	-	○
Norway	●	●	●	●	●
Occupied Palestinian Territory	●	●	●	-	●
Oman	●	●	●	-	●
Pakistan	●	●	●	●	●
Palau	-	-	○	-	-
Panama	●	●	●	●	●
Papua New Guinea	-	-	●	-	●
Paraguay	●	-	●	●	●
Peru	●	-	●	●	●
Philippines	●	●	●	●	●
Poland	●	○	●	●	●
Portugal	●	●	●	●	●
Puerto Rico	●	●	●	●	●
Qatar	●	●	●	-	●
Republic of Korea	●	●	●	●	●
Republic of Moldova	●	-	●	-	●
Romania	●	●	●	●	●
Russian Federation	●	●	●	○	●
Rwanda	●	●	●	-	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Réunion	●	●	●	●	●
Saba	-	-	●	-	-
Saint Barthélemy	●	-	●	-	●
Saint Kitts and Nevis	-	-	●	-	●
Saint Lucia	●	-	●	-	●
Saint Martin	●	●	●	-	●
Saint Pierre and Miquelon	-	-	●	-	-
Saint Vincent and the Grenadines	-	-	●	●	●
Sao Tome and Principe	●	●	○	-	-
Saudi Arabia	●	●	●	-	●
Senegal	●	●	●	-	●
Serbia	●	-	●	○	○
Seychelles	●	●	●	-	●
Sierra Leone	●	●	●	-	●
Singapore	●	●	●	●	●
Sint Maarten	●	●	●	●	●
Slovakia	●	●	●	-	●
Slovenia	●	●	●	●	●
Solomon Islands	-	-	●	-	●
Somalia	●	●	●	-	-
South Africa	●	●	●	●	●
South Sudan	●	●	●	-	●
Spain	●	●	●	●	●
Sri Lanka	●	●	●	-	●
Sudan	●	●	●*	●	-
Suriname	●	●	●	●	●
Sweden	●	●	●	●	●
Switzerland	●	●	●	●	●
Thailand	●	●	●	●	●
Timor-Leste	●	-	●	-	●
Togo	●	●	●	●	●
Tonga	-	-	-	-	○
Trinidad and Tobago	●	-	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Tunisia	●	●	●	-	●
Turkey	●	●	●	●	●
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	●	-	●
Ukraine	●	○	○	-	●
United Arab Emirates	●	●	●	●	●
United Kingdom	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
United Republic of Tanzania	●	●	●	●	●
United States Virgin Islands	●	●	●	●	●
United States of America	●	●	●	●	●
Uruguay	●	●	●	●	●
Uzbekistan	●	●	○	-	●
Vanuatu	-	-	●	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Venezuela (Bolivarian Republic of)	●	-	●	●	●
Viet Nam	●	●	●	-	●
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	●	-	●
Zimbabwe	●	●	●	-	●

*indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information becomes available. **Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern.*

See also Annex 2: Data, table, and figure notes

Annex 2. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Annex 3. Methods for the update on BA.2 Pango lineage of the Omicron variant of concern

We conducted a search for published and unpublished studies on the BA.2 Pango lineage of the Omicron variant. The search for published studies was conducted in Medline while the search for unpublished literature was conducted in MedRxiv, which is a repository for preprints. We searched for studies and reports with an abstract in English, that were accessible up to 14 February 2022. Search terms used were "BA.2" and "Omicron Pango lineages".

We also searched the GISAID website and websites of the following public health agencies: Health Security Agency (UKHSA) of the United Kingdom, Centers for Disease Control and Prevention of the United States of America (USCDC), Statens Serum Institute (SSI) of Denmark, the National Institute for Communicable Diseases (NICD) of South Africa and the European Centre for Disease Prevention and Control (ECDC).

The summary of the evidence was done based on the risk assessment framework implemented by the UKHSA. Following the assessment, each indicator was assigned one of four colours: red, amber, yellow and green. Red implies a difference

in the indicator between BA.2 and BA.1. Amber implies there is a difference in the indicator between BA.2 and BA.1 in certain population subgroups. Yellow implies there is limited evidence suggesting a difference in the indicator between BA.2 and BA.1. Green implies there is no difference in the indicator between BA.2 and BA.1. Grey implies there is insufficient data on the indicator. The confidence grading was classified as: “Low” when there was little or poor-quality evidence, uncertainty or conflicting views amongst experts or no experience with previous similar incidents; “Moderate” when there was adequate quality evidence – including consistent results published only in grey literature, reliable source(s), assumptions made on analogy and agreement between experts or opinion of at least 2 trusted experts; and “High” when there was good quality evidence, multiple reliable sources, verified, expert opinion concurs, and experience of previous similar incidents.

Annex 4. Methods for Figures 6 and 7

• Figures include six studies from Denmark, Qatar, South Africa, the United Kingdom, and the United States of America evaluating the VE against the Omicron variant, and 20 studies of the VE against the Delta variant from various countries from the European Region and Region of the Americas, as well as Qatar, Malaysia and Singapore.

• VE studies included in the plot were identified from an ongoing systematic review of COVID-19 vaccine effectiveness studies. All studies were cohort or test-negative studies. Methods for the systematic review and inclusion/exclusion criteria are available on view-hub.org. The studies were conducted during a period when either Delta or Omicron was the predominant circulating variant. Estimates were included if they were of laboratory-confirmed cases of the Omicron or Delta variant. In addition, for the primary series VE, only studies providing VE estimates for discrete time intervals since vaccination, which evaluate changes in VE over time, are included.

• For the primary series VE, estimates are only included in the plot for studies that report VE for more than one time period.

Annex 5. Summary of primary series vaccine performance against Variants of Concern (data as of 18 February 2022)

	WHO Emergency Use Listing (EUL) Qualified Vaccines[+]								Vaccines without WHO EUL[+]	
	AstraZeneca-Vaxzevria/ SII - Covishield	Beijing CNBG-BBIBP-CorV	Bharat-Covaxin	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Novavax-Nuvaxovid/ SII - Covavax	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Gamaleya-Sputnik V
Alpha, Beta, Gamma										
Summary of VE*	*(see update from 11 January 2022 for details of vaccine performance against Alpha, Beta, and Gamma variants of concern*									
Delta[37]										
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection									
- Severe disease	↔$_{3}$	-	-	↓$_{1}$	↔$_{4}$	-	↔$_{7}$	-	-	-
- Symptomatic disease	↔to↓↓$_{6}$	-	↓$_{1}$	-	↔$_{2}$	-	↔to↓$_{5}$	-	-	-
- Infection	↔to↓$_{5}$	-	-	↓↓↓$_{1}$	↔$_{6}$	-	↔to↓$_{6}$	-	-	-
Neutralization	↓$_{14}$	↔to↓$_{2}$	↔to↓$_{4}$	↔to↓↓$_{10}$	↓$_{14}$	-	↔to↓$_{40}$	↓to↓↓$_{9}$	↔to↓$_{2}$	↓to↓↓↓$_{3}$
Omicron										
Summary of VE*	Reduced protection against infection and symptomatic disease; possible reduced protection against for severe disease but limited evidence									
- Severe disease	-	-	-	-	↓/↓↓$_{1}$	-	↓↓/↓↓↓$_{3}$	-	-	-
- Symptomatic disease	↓↓↓$_{1}$	-	-	-	↓↓/↓↓↓$_{2}$	-	↓↓↓$_{2}$	-	-	-
- Infection	↓↓↓$_{1}$	-	-	-	↓↓↓$_{3}$	-	↓↓↓$_{3}$	-	-	-
Neutralization	↓↓↓$_{6}$	↔to↓↓↓$_{3}$	↓↓$_{1}$	↔to↓↓$_{4}$	↓↓↓$_{16}$	-	↓↓↓$_{34}$	↓to↓↓↓$_{4}$	-	↓↓$_{1}$

VE refers to vaccine effectiveness and vaccine efficacy. *Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10 percentage point (pp) reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20 pp reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30 pp reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30 pp reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study. The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources Library . References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table. + Severe disease is defined differently across studies and may include outcomes such as hospitalization, critical disease, and other forms of 'severe' disease.

Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean a loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. Likewise, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection.
- Annex 5 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than four months post final dose.
- Studies reporting VOC-specific VE estimates for full vaccination (≥seven days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase three randomized controlled trial (RCT) results from non-VOC settings. For severe disease and infection, due to instability or lack of phase three RCT estimates, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca-Vaxzevria for infection (when a phase three estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Neutralization studies that use samples collected >seven days and < six months after complete vaccination and that use an ancestral strain as the reference are included in Annex 5.

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COVID-19 Weekly Epidemiological Update

Edition 79, published 15 February 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- Special Focus: Update on the Pango Lineage BA.2 of the Omicron variant of concern
- Summary of the Weekly Operational Update

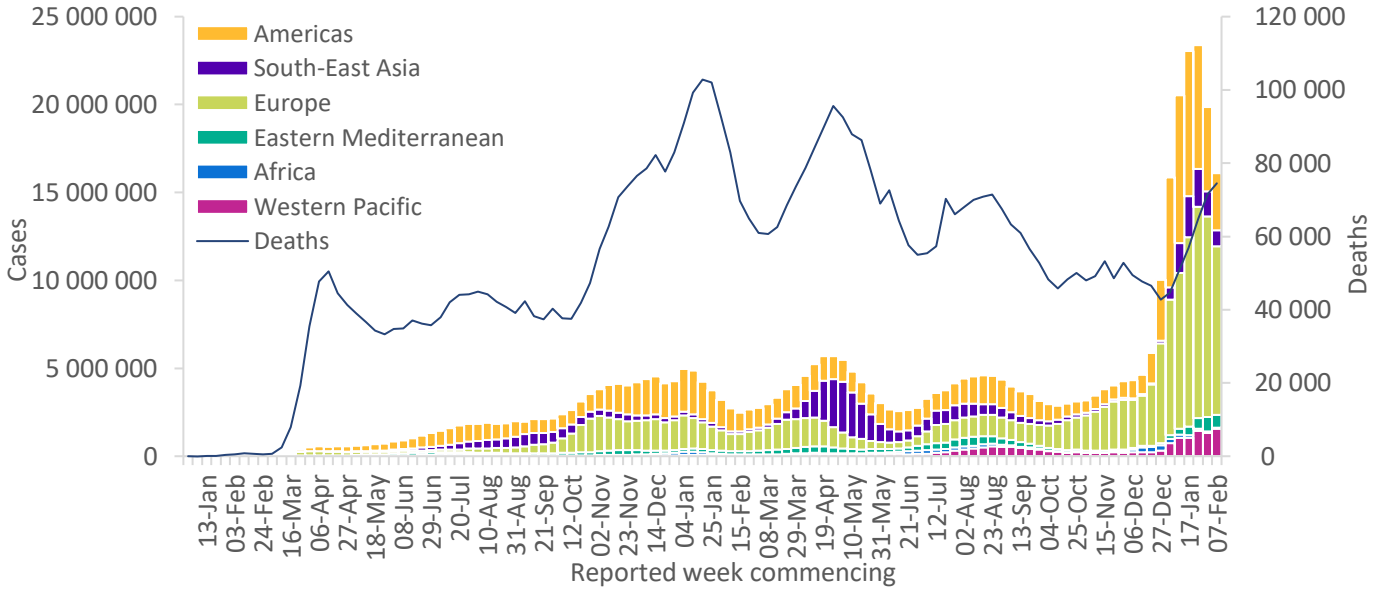
Global overview

Data as of 13 February 2022

Globally, during the week of 7 to 13 February 2022, the number of new COVID-19 cases decreased by 19% as compared to the number reported during the previous week, while the number of new deaths remained similar to that of the previous week (Figure 1). Across the six WHO regions, just over 16 million new cases and just under 75 000 new deaths were reported (Table 1). As of 13 February 2022, over 409 million confirmed cases and over 5.8 million deaths have been reported globally.

At the regional level, the Western Pacific Region reported an increase of 19% in the number of new weekly cases while all other regions reported decreases: the South-East Asia Region (37% decrease), the Region of the Americas (32% decrease), the African Region (30% decrease), the European Region (16% decrease) and the Eastern Mediterranean Region (12% decrease). The number of new weekly deaths increased in the Eastern Mediterranean Region (38%), the Western Pacific Region (27%), the African Region (14%) and the Region of the Americas (5%), while it remained similar to that of the previous week in the European Region and decreased in the South-East Asia Region (9%).

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 13 February 2022**



**See *Annex 2: Data, table, and figure notes*

The highest numbers of new cases were reported from the Russian Federation (1 323 391 new cases; a 23% increase), Germany (1 322 071 new cases; similar to the previous week's figures), the United States of America (1 237 530 new cases; a 43% decrease), Brazil (1 009 678 new cases; a 19% decrease), and France (979 228 new cases; a 43% decrease). The highest number of new deaths were reported from the United States of America (17 225 new deaths; similar to the previous week's figures), India (6686 new deaths; a 15% decrease), Brazil (6658 new deaths; a 44% increase), the Russian Federation (4834 new deaths; similar to the previous week's figures) and Mexico (2530 new deaths; a 7% increase).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 13 February 2022**

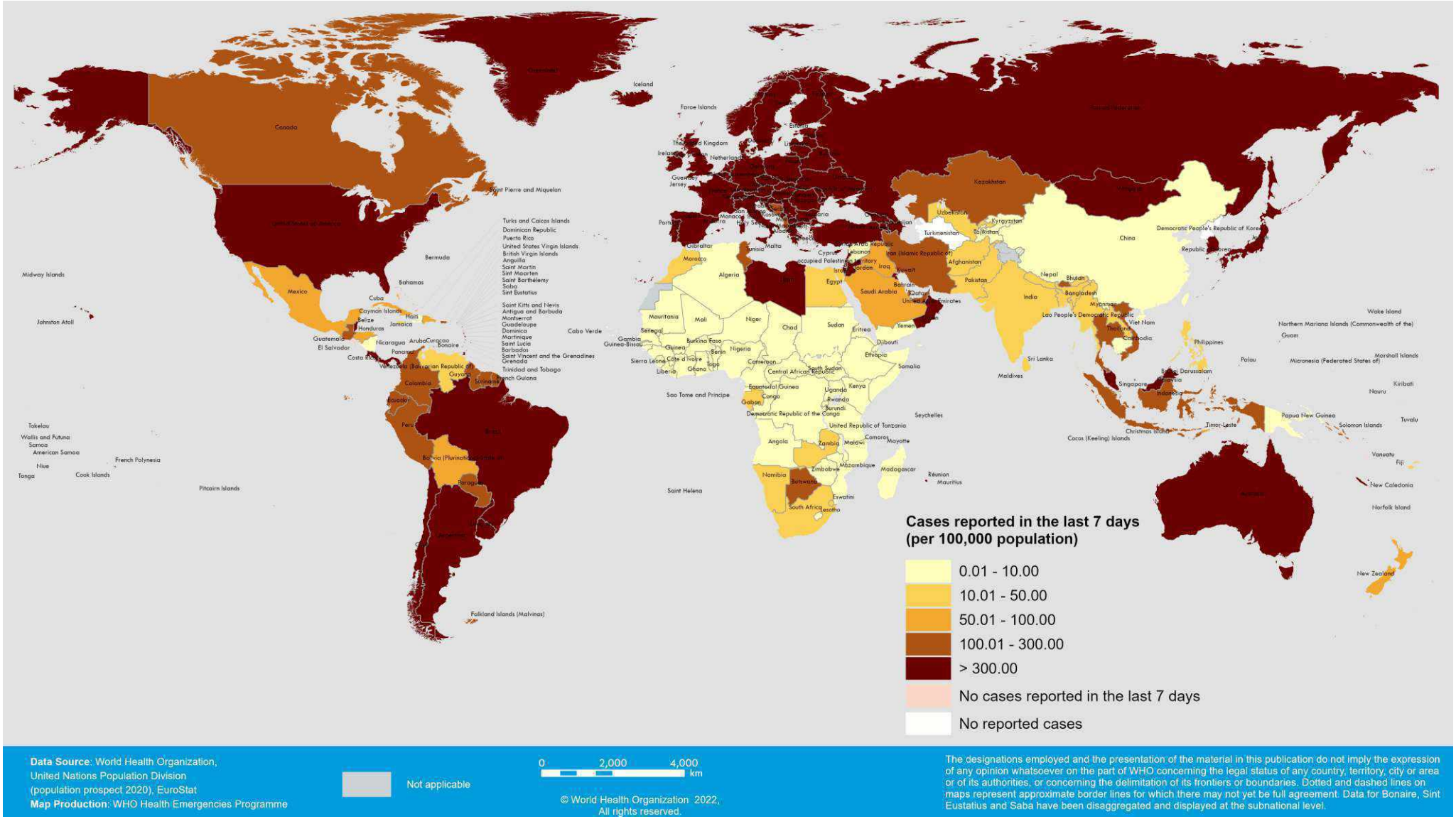
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	9 595 045 (60%)	-16%	164 431 350 (40%)	24 817 (33%)	1%	1 815 834 (31%)
Americas	3 236 405 (20%)	-32%	142 966 356 (35%)	33 722 (45%)	5%	2 570 792 (44%)
Western Pacific	1 569 099 (10%)	19%	18 859 407 (5%)	3 087 (4%)	27%	172 864 (3%)
South-East Asia	915 448 (6%)	-37%	54 278 257 (13%)	7 983 (11%)	-9%	752 524 (13%)
Eastern Mediterranean	712 632 (4%)	-12%	20 349 089 (5%)	3 286 (4%)	38%	326 795 (6%)
Africa	69 013 (0%)	-30%	8 226 172 (2%)	1 599 (2%)	14%	167 003 (3%)
Global	**16 097 642 (100%)**	**-19%**	**409 111 395 (100%)**	**74 494 (100%)**	**4%**	**5 805 825 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 2: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

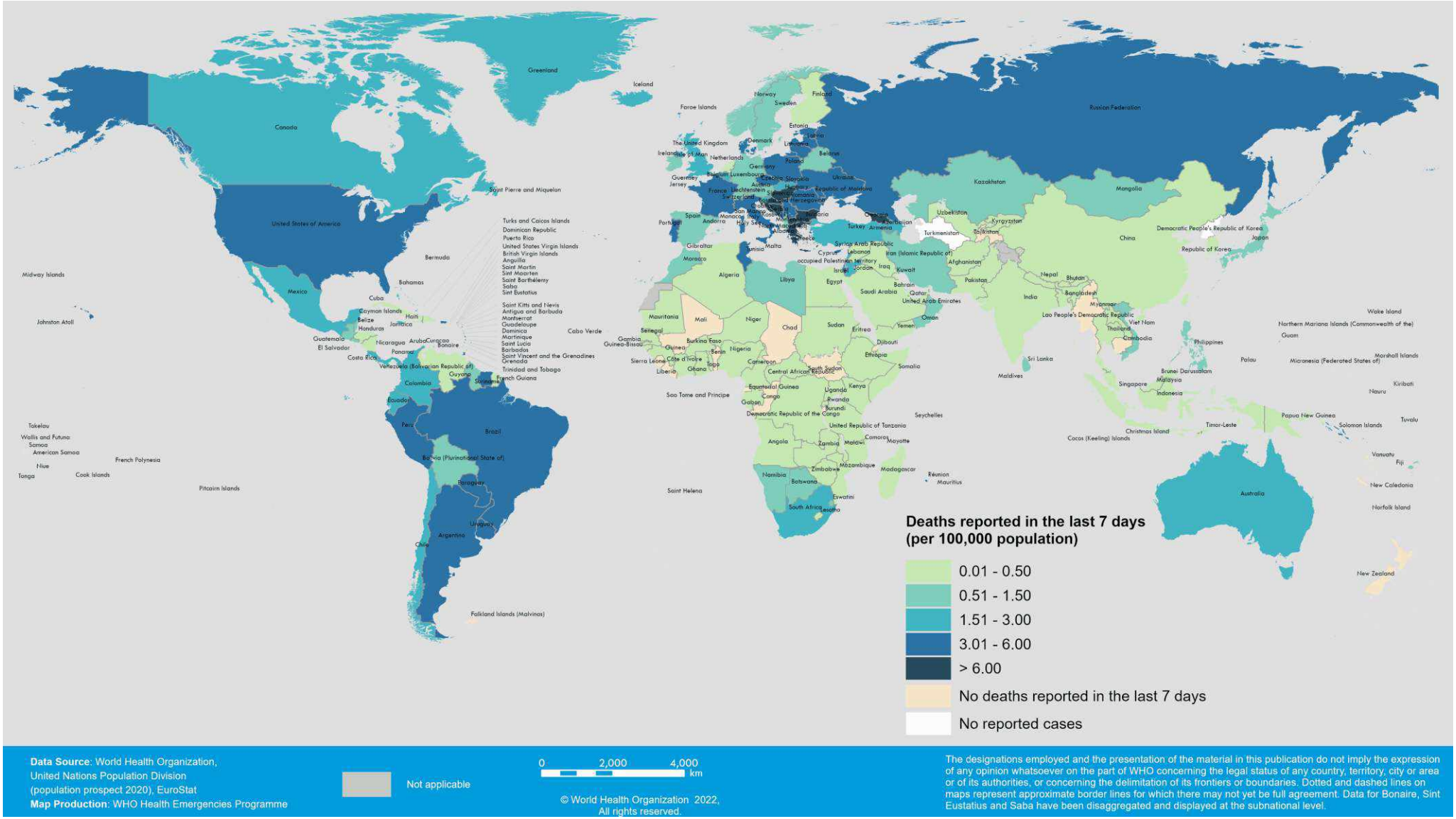
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 7-13 February 2022**



**See *Annex 2: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 7-13 February 2022**



**See *Annex 2: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARSCoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential Variants of Concern (VOCs), Variants of Interest (VOIs) or Variants under Monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

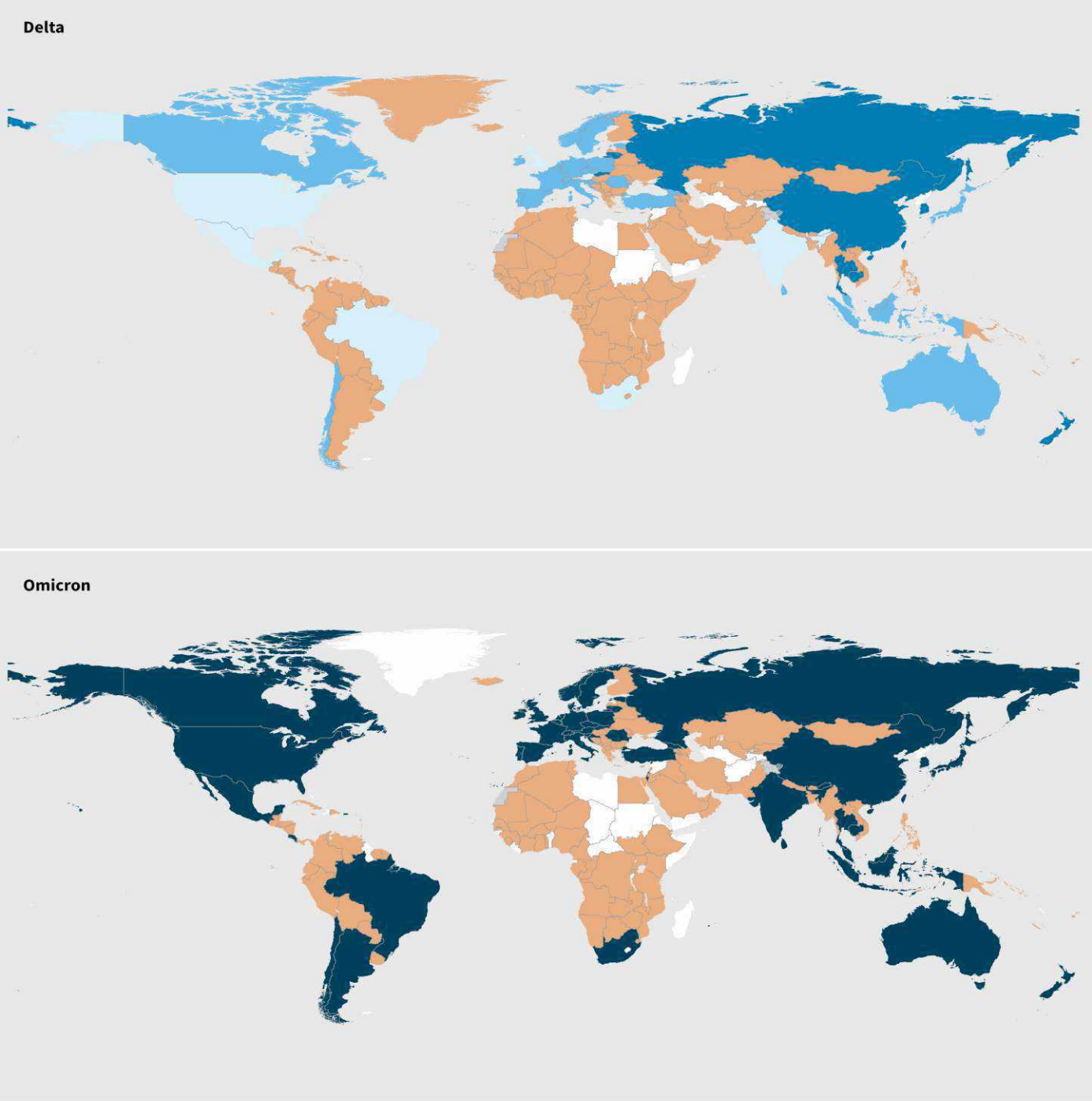
The current global epidemiology of SARS-CoV-2 is characterized by the global dominance of the Omicron variant. All other variants, including VOCs (Alpha, Beta, Gamma and Delta) and VOIs (Lambda and Mu) continue to decline in all six WHO regions. Among the 432 470 sequences uploaded to GISAID with specimens collected in the last 30 days[1], 425 227 (98.3%) were Omicron, 7 191 (1.7%) were Delta and one (<0.1%) was Lambda. During this same period, there were no Alpha, Beta, Gamma or Mu sequences reported. To note, global VOCs and VOIs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

[i] Includes sequences submitted to GISAID with sample collected dates from 13 January to 11 February 2022 (last reported sample at the time of data extraction), excluding low coverage sequences.

Figure 5. Prevalence of variants of concern (VOCs) Delta and Omicron in the last 30 days, data as of 15 February 2022



Proportion of VOC among total sequences (countries with ≥100 sequences in last 30 days)*

- 0.501 - 1.000
- 0.101 - 0.500
- 0.011 - 0.100
- >0.000 - 0.010
- VOC detected, proportion not estimated**
- No presence of VOC reported

*Prevalence calculated as a proportion of VOC sequences among total sequences uploaded to GISAID with sample collection dates within the past 30 days prior to the latest date of collection, excluding low coverage sequences, limited to countries with ≥100 total sequences in the same period. Countries assigned by location of sample collection.
**Includes both official reports to WHO and unofficial reports of VOC detections.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Situation as of February 15, 2022

Data Source: World Health Organization, GISAID
Map Production: WHO Health Emergencies Programme

World Health Organization

See also Annex 2 for reported VOC detections by country/territory/area

Special Focus: Update on BA.2 Pango lineage of the Omicron variant of concern

Since the designation of B.1.1.529 as a VOC on 26 November 2021, several lineages have been identified. These include Pango lineages BA.1, BA.1.1, BA.2 and BA.3, which are all being monitored by WHO under the umbrella of 'Omicron'.

Recent data on BA.2 is summarised based on a targeted literature search and an assessment based on the framework applied by the UK Health Security Agency (UKHSA).[1] The Annex 3 provides further information on how the evidence was gathered and appraised.

Epidemiology

The prevalence of BA.2 among sequenced Omicron cases globally submitted to GISAID has been steadily increasing,[2] reaching 21.09% in week 5 of 2022.[3] As of 14 February, 10 countries reported a predominance of BA.2 (>50%): Bangladesh, Brunei Darussalam, China, Denmark, Guam, India, Montenegro, Nepal, Pakistan, Philippines. However, there are differences between regions observed, with the South-East Asia Region reporting the highest prevalence of BA.2 among Omicron sequences (44.7%) and the Region of the Americas reporting the lowest prevalence (1%). This analysis is based on all sequences submitted to GISAID with samples collected from 13 January to 11 February 2022. These trends should be interpreted with due consideration of the limitations of surveillance systems, including differences in sequencing capacity and sampling strategies between countries, as well as laboratory turn-around times for sequencing and delays in reporting. Additionally, it is important to consider the relative proportions of the BA.2 sequences in the context of the case incidence when interpreting the spread and relative growth of different lineages.

Examples of countries which have seen an increase in the prevalence of BA.2 include: South Africa where the prevalence rose from 27% on 4 February 2022[4] to 86% by 11 February 2022[5]; the United Kingdom[6] where the prevalence increased six-fold from 17 to 31 January 2022 (from 2.2% to 12%); Denmark where the prevalence doubled from week 52 of 2021 to week 2 of 2022 (from 20% to 45%) and became the dominant variant (66% of sequenced by week 3 of 2022[7]) and the United States of America where the prevalence tripled from 1.2% during the week ending 29 January 2022 to 3.6% during the week ending 5 February 2022.[8] The prevalence of BA.2 appears to be increasing both in countries experiencing a decline in Omicron cases and in countries that are in the growing phase of the wave.

Transmission

Early evidence from limited studies suggests BA.2 is more transmissible as compared to BA.1. Estimates of growth rates in Denmark indicate that BA.2 is 30% more transmissible than BA.1.[7] An analysis of GISAID data[9] shows a growth rate advantage of BA.2 over BA.1 in all 43 countries with sufficient sequence data and co-circulation of the two lineages, translating to a pooled mean transmission advantage (i.e. relative difference in effective reproduction numbers) of 84% (95% CI: 68% – 101%) across epidemiological contexts under the assumption of an unchanged generation time.

Currently available evidence on the secondary attack rate (SAR) among contacts of BA.2 compared to BA.1 was obtained from household transmission studies in Denmark and the United Kingdom. Danish researchers[10] found higher SAR for BA.2 compared to BA.1 at one (8% vs 6%), seven (39% vs 29%) and 14 (42% vs 36%) days of follow-up. Similar results were reported in the United Kingdom[6] with a higher SAR for BA.2 (13.4%; 95% CI:10.7%-16.8%) compared to BA.1 (10.3%; 95% CI: 10.1%-10.4%). These estimates are likely to change over time as more data become available.

It is currently unclear what factors drive the growth advantage of BA.2 over BA.1. Preliminary data[11] show similar antibody responses to BA.1 and BA.2. This supports findings from a household transmission study[10] conducted in Denmark, in which unvaccinated primary cases infected with BA.2 were more likely to transmit to household contacts when compared to BA.1. The increase in proportion of BA.2 relative to BA.1 in contexts with decreasing case numbers also supports increased transmissibility of BA.2 in comparison to BA.1, rather than immune evasion.

Diagnostic testing

In contrast to Omicron Pango lineages BA.1 and BA.1.1, the BA.2 Pango lineage does not have the 69-70 deletion in the Spike protein which is responsible for S-gene target failure (SGTF) on certain PCR assays. The presence of SGTF was previously considered to screen for Omicron, enabling a proxy to distinguish between BA.1 and other VOCs, such as Delta, in the absence of sequencing. In settings where Omicron is the dominant circulating variant, employing this screening approach could enable some distinction between BA.1 (SGTF) and BA.2 in which the result would be S-gene target positive (SGTP).[6] This approach is only possible in settings where the prevalence of Omicron is very high and it should be noted that sequencing is the only way to definitively confirm a particular variant.

Following analysis of publicly available sequences, several antigen, antibody and PCR tests were found to perform equally well in detecting SARS-CoV-2 infections caused by BA.1 and BA.2.[12] Another study found differences in sensitivity of various PCR assays in detecting BA.1 and BA.2 Pango lineages (from 0% to 100%).[13] Further studies are underway to fully understand the impact of Omicron Pango lineages on diagnostic assays.

There are other mutations/deletions in Omicron that may overlap with primer or probe targets of commercially available PCR kits, leading to target failure. One example includes a report in which N-gene target failure (NGTF) has been reported for one assay in individuals with sequence-confirmed infection with Omicron variant (including BA.1 and BA.2) due to the lineage-defining ERS31-33 deletion, but not in those infected with the Delta variant.[14] This implies that multigene PCR assays which target this region of the N gene may be considered as a way to screen for Omicron (NGTF) to distinguish it from other VOCs, including Delta (NGTP) in settings where there is incomplete replacement of Delta by Omicron.

Disease severity

At present, there is limited evidence on the severity of BA.2 relative to BA.1 or other Omicron Pango lineages. As the proportion of BA.2 has steadily increased in recent weeks in the United Kingdom, there has been a consistent decrease in the number of hospitalizations and deaths.[15] In the United States of America,[8] there have been decreases in hospitalizations and increases in the number of deaths across successive weeks. In this context, a 5.9% reduction in the number of new deaths was reported during the week ending 8 February 2022 as compared to the previous week ending 1 February 2022. However, this does not allow inferences to be made as to the relative severity of BA.2 as in both these countries, BA.1 or BA.1.1 was the dominant Pango lineage during this period.

An analysis conducted in Denmark showed no difference in risk of hospitalisation between those infected with BA.2 and those infected with BA.1, although as BA.2 has become the dominant variant, there has been a recent rise in the number of hospitalisations and deaths in the country.[16] In Nepal, as published on 1 February 2022, ten of eleven samples sequenced at Kathmandu University, Nepal were of the BA.2 lineage.[17] However, the number of patients in hospital in the Kathmandu Valley has been decreasing since a peak on 23 January 2022 with the numbers in intensive care and on mechanical ventilation also showing some initial signs of a decrease. In South Africa, BA.2 now accounts for 86% of all sequences; however, hospital admissions continue to decline.[18]

Overall, there is no difference in severity when looking at countries where BA.2 is dominant and those where BA.1 is dominant.

Impact on immunity:

- ***Neutralization***

A preprint study including eight individuals with a history of SARS-CoV-2 infection and 24 individuals who had received primary series vaccination and a booster with Pfizer BioNTech-Comirnaty showed similar neutralizing antibody titres to BA.1 and BA.2. [11]

- ***Vaccination***

Preliminary results from a test-negative case control study in the United Kingdom found no difference in vaccine effectiveness against symptomatic disease between BA.1 and BA.2 25 weeks after two doses of the primary series (9% [95%CI:7-10] vs13% [95%CI: -26-40]) or two weeks after an additional booster vaccine dose (63%% [95%CI:63-64] vs 70% [95%CI: 58-79]).[19]

Preliminary results from a household transmission study conducted in Denmark showed that primary cases infected with BA.2 who had received two doses of vaccine (OR = 0.60; 85%CI: 0.42-0.85) and primary cases infected with BA.2 who had received a booster dose (OR = 0.62; 95%CI: 0.42-0.91) were less likely to infect household contacts compared to primary cases infected with BA.1. There was no difference in susceptibility for vaccinated and unvaccinated household contacts of primary cases who were infected with either BA.1 or BA.2. This suggests that vaccination is at least equally effective in preventing acquisition of BA.2 and could be more effective in preventing transmission of BA.2 compared to BA.1.

Treatment

There is currently insufficient evidence on differences in efficacy of treatment options for BA.2 compared to other Omicron Pango lineages.

Summary

Summary assessment of evidence on BA.2 compared to BA.1

Indicator	Assessment	Confidence level	Rationale for assessment
Transmissibility	Red	Moderate	Evidence from Denmark and the UK indicating higher growth rates of BA.2 when compared to BA.1.~~,~~
Disease severity	Green	Low	No evidence of increase in severity of BA.2 relative to BA.1
Immune escape	Green	Moderate	Similar vaccine effectiveness on BA.2 and BA.1. Comparable neutralizing antibody titres against BA.1 and BA.2 in both previously infected and booster vaccinated individuals
Impact on detection capacity	Green	Low	No difference in diagnostic accuracy of some PCR, antigen and antibody tests that were assessed.
Impact on therapeutics			Insufficient data on differences in effectiveness of current treatments between BA.2 and other Pango lineages

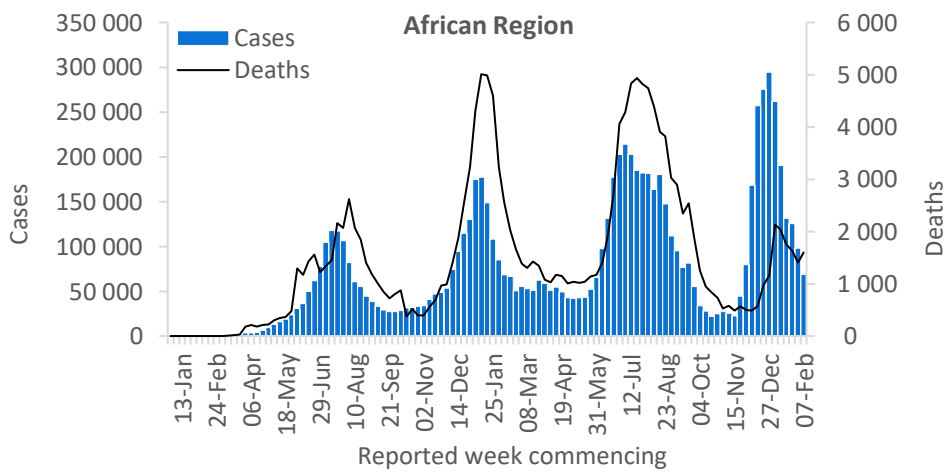
*Refer to the UKHSA framework on risk assessment for SARS-CoV-2 variants and Annex 3.

WHO regional overviews Epidemiological week 7-13 February 2022**

African Region

The African Region reported a continued decrease in the number of cases since the beginning of January with over 69 000 new cases reported, a 30% decrease as compared to the previous week. However, four countries reported an increase of over 20% in cases; Congo (130 vs 25 new cases; a 420% increase), Liberia (82 vs 22 new cases; a 273% increase), Lesotho (114 vs 82; a 39% increase) and Central African Republic (131 vs 104; a 26% increase). The highest numbers of new cases were reported from Réunion (30 782 new cases; 3438.1 new cases per 100 000 population; a 32% decrease), South Africa (17 952 new cases; 30.3 new cases per 100 000; a 13% decrease), and Algeria (3628 new cases; 8.3 new cases per 100 000; a 56% decrease).

The African Region reported just under 1600 new deaths, a 14% increase as compared to the previous week. The highest numbers of new deaths were reported from South Africa (1168 new deaths; 2.0 new deaths per 100 000 population; a 28% increase), Algeria (75 new deaths; <1 new death per 100 000; a 12% decrease), and Ethiopia (65 new deaths; <1 new death per 100 000; a 124% increase).

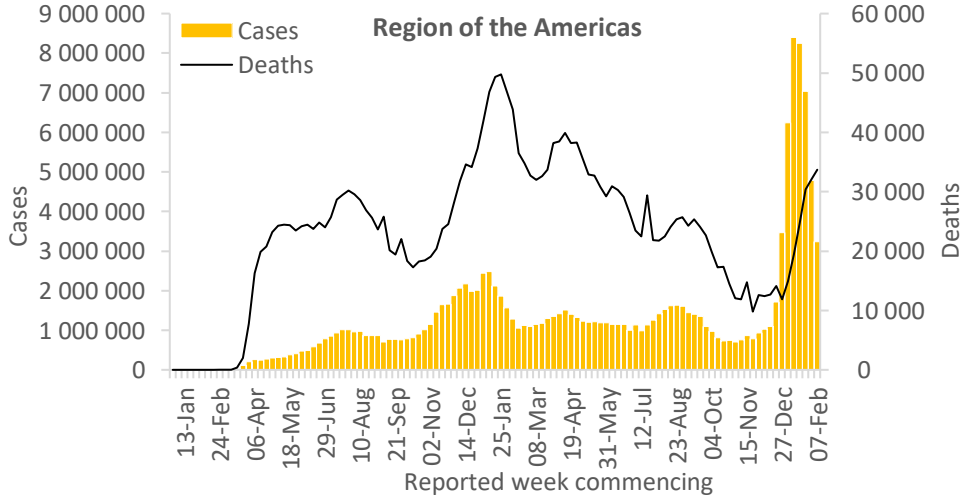


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 3.2 million new cases, a 32% decrease as compared to the previous week, a trend that has continued since mid-January. However, ten countries reported increases in new cases of 20% or greater, with the highest proportional increases reported from the Falkland Islands (seven vs two new cases; an 250% increase), Antigua and Barbuda (559 vs 174 new cases; a 244% increase) and Haiti (358 vs 105 new cases; a 241% increase). The highest numbers of new cases were reported from the United States of America (1 237 530 new cases; 373.9 new cases per 100 000; a 43% decrease), Brazil (1 009 678 new cases; 475.8 new cases per 100 000; a 19% decrease) and Chile (247 900 new cases; 1296.8 new cases per 100 000; a 9% increase).

The Region reported over 33 000 new deaths this week, a 5% increase as compared to the previous week. The highest numbers of new deaths were reported from the United States of America (17 225 new deaths; 5.2 new deaths per 100 000; similar to the previous week's figures), Brazil (6658 new deaths; 3.1 new deaths per 100 000; a 44% increase) and Mexico (2530 new deaths; 2.0 new deaths per 100 000; a 7% increase).

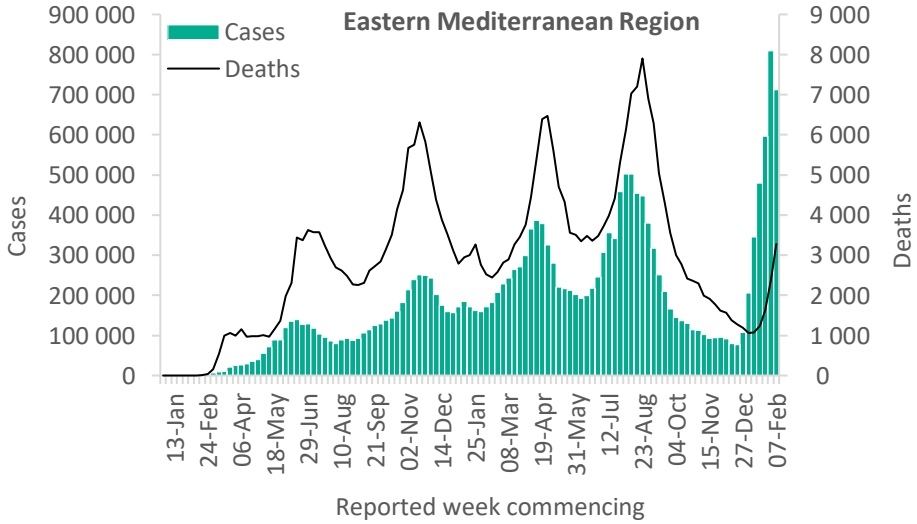


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 712 000 new cases this week, a 12% decrease as compared to the previous week. This is the first reported decline in incidence following weekly increases from early December 2021. An increase of over 20% in new cases was reported by two countries: Yemen (415 vs 251 new cases; a 65% increase) and the Syrian Arab Republic (800 vs 542 new cases; 48%). The highest numbers of new cases were reported from the Islamic Republic of Iran (236 616 new cases; 281.7 new cases per 100 000; a 7% increase), Jordan (136 567 new cases; 1338.5 new cases per 100 000; a 17% increase), and Lebanon (46 417 new cases; 680.1 new cases per 100 000; a 20% decrease).

Over 3200 new deaths were reported in the Region this week, a 38% increase as compared to the previous week. The highest numbers of new deaths were reported from the Islamic Republic of Iran (825 new deaths; 1.0 new death per 100 000; a 126% increase), Tunisia (453 new deaths; 3.8 new deaths per 100 000; an 18% increase), and Egypt (415 new deaths; <1 new death per 100 000; a 33% increase).

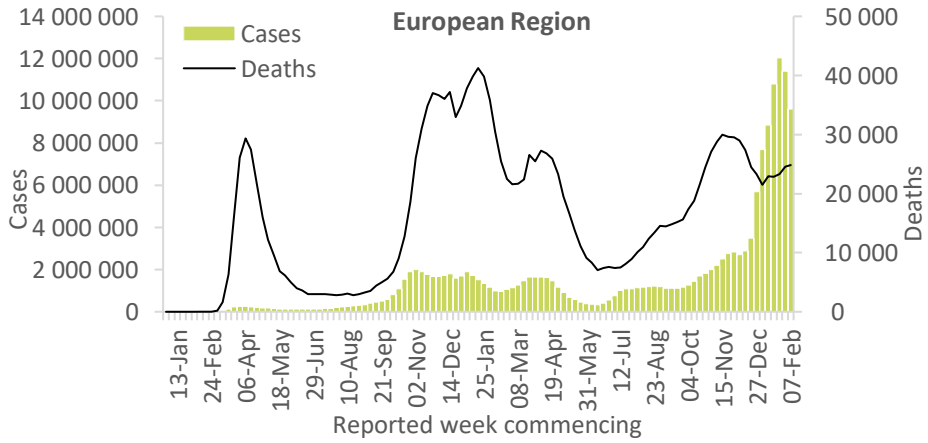


Updates from the Eastern Mediterranean Region

European Region

The European Region reported just under 9.6 million new cases, a 16% decrease as compared to the previous week, the second consecutive week of a decline in the number of new cases since the peak observed at the end of January. However, four countries reported increases of 20% or greater over the past week; Belarus (53 969 vs 30 475 new cases; a 77% increase), the Netherlands (877 154 vs 561 539 new cases; a 56% increase), Iceland (13 802 vs 9797 new cases; a 41% increase) and the Russian Federation. The highest numbers of new cases were reported from the Russian Federation (1 323 391 new cases; 906.8 new cases per 100 000; a 23% increase), Germany (1 322 071 new cases; 1589.7 new cases per 100 000; similar to the previous week's figures), and France (979 228 new cases; 1505.6 new cases per 100 000; a 43% decrease).

The European Region reported over 24 000 new deaths, similar to the previous week's figures. The highest numbers of new deaths were reported from the Russian Federation (4834 new deaths; 3.3 new deaths per 100 000; similar to the previous week's figures), Italy (2282 new deaths; 3.8 new deaths per 100 000; a 13% decrease), and France (2270 new deaths; 3.5 new deaths per 100 000; a 23% increase).

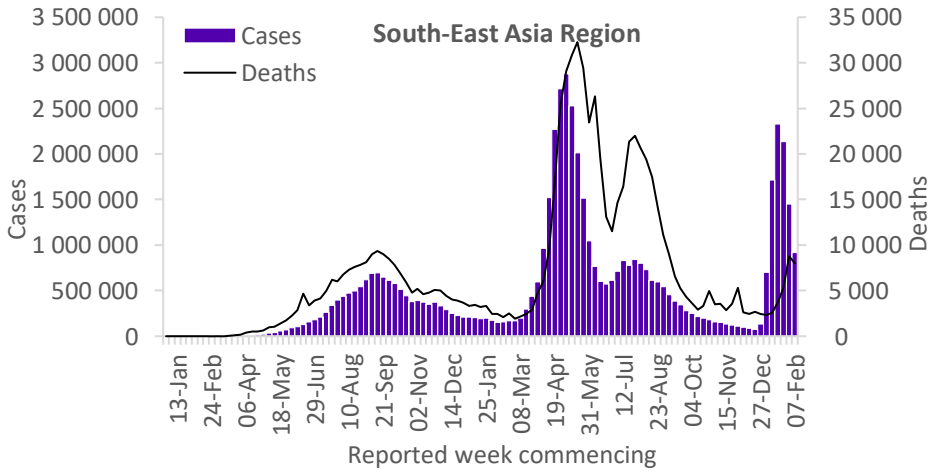


Updates from the European Region

South-East Asia Region

The number of new weekly cases has continued to decline in the South-East Asia Region since mid-January, with over 915 000 new cases reported, a 37% decrease as compared to the previous week. This week, four countries reported increases of 20% or greater: Myanmar (8870 vs 2647 new cases; a 235% increase), Timor-Leste (1228 vs 466 new cases; a 164% increase), Indonesia (291 298 vs 173 295 new cases; a 68% increase), and Thailand (96 326 vs 64 467 new cases; a 49% increase). The highest numbers of new cases were reported from India (443 283 new cases; 32.1 new cases per 100 000; a 60% decrease), Indonesia (291 298 new cases; 106.5 new cases per 100 000; a 68% increase), and Thailand (96 326 new cases; 138.0 new cases per 100 000; a 49% increase).

Over 7900 new deaths were reported in the Region this week, a 9% decrease as compared to the previous week. The highest numbers of new deaths were reported from India (6686 new deaths; <1 new death per 100 000; a 15% decrease), Indonesia (622 new deaths; <1 new death per 100 000; a 148% increase), and Bangladesh (230 new deaths; <1 new death per 100 000; similar to the previous week's figures).

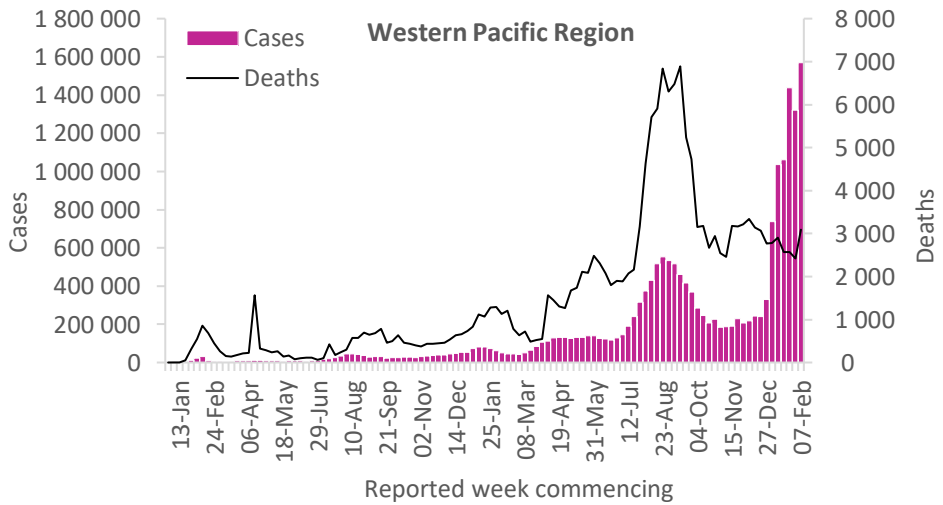


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported over 1.5 million new cases, a 19% increase as compared to the previous week. Half of the countries (14/28) and territories of the Region reported increases in new cases of 20% or greater, with the highest proportional increases reported from Tonga (62 vs 10 new cases; a 520% increase), China (7571 vs 1787 new cases; a 324% increase), and Brunei Darussalam (4175 vs 1059 new cases; a 294% increase). The highest numbers of new cases were reported from Japan (624 240 new cases; 493.6 new cases per 100 000; similar to the previous week's figures), the Republic of Korea (340 950 new cases; 665.0 new cases per 100 000; an 88% increase), and Australia (162 079 new cases; 635.6 new cases per 100 000; a 25% decrease).

There was a 27% increase in the number of new deaths as compared to the previous week, with over 3000 new deaths reported in the Region. The highest numbers of new deaths were reported from Japan (945 new deaths; <1 new death per 100 000; a 79% increase), the Philippines (716 new deaths; <1 new death per 100 000; a 109% increase), and Viet Nam (601 new deaths; <1 new death per 100 000; a 16% decrease).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 15 February, highlights include the following:

- Strengthening South Sudan's emergency response with phase two of public health emergency operations center
- Romania: boosting the mobility of health-care workers to support communities during the pandemic and beyond
- WHO and the Syrian Arab Republic combine efforts to raise COVID-19 vaccine accessibility and uptake
- Maintaining influenza surveillance and SARS-CoV-2 monitoring in Indonesia
- Online courses in Ukrainian support national response to the COVID-19 pandemic and other emergencies
- Updates on WHO's financing to support countries on COVID-19 response implementation to suppress transmission, reduce exposure, and protect the vulnerable and save lives
- Progress on a subset of global indicators that demonstrate country and global progress to end the acute phase of the pandemic

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice

Annex 1. List of countries/territories/areas reporting variants of concern as of 13 February 2022

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Afghanistan	●	-	●	-	-
Albania	●	-	○	-	●
Algeria	●	-	●	-	●
American Samoa	-	-	○	-	○
Andorra	○	○	○	-	○
Angola	●	●	●	●	●
Anguilla	●	-	●	-	●
Antigua and Barbuda	●	●	●	●	●
Argentina	●	●	●	●	●
Armenia	●	-	●	-	●
Aruba	●	●	●	●	●
Australia	●	●	●	●	●
Austria	●	●	●	●	●
Azerbaijan	●	-	○	-	●
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	●
Bangladesh	●	●	●	○	●
Barbados	●	-	●	●	●
Belarus	●	-	○	-	●
Belgium	●	●	●	●	●
Belize	●	-	●	●	●*
Benin	●	●	●	●	-
Bermuda	●	●	●	-	●
Bhutan	●	●	●	-	●
Bolivia (Plurinational State of)	●	-	●	●	●
Bonaire	●	-	●	●	●
Bosnia and Herzegovina	●	●	○	●	○
Botswana	○	●	●	-	●
Brazil	●	●	●	●	●
British Virgin Islands	●	-	●	●	●
Brunei Darussalam	●	●	●	-	●
Bulgaria	●	●	●	-	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Burkina Faso	●	●	●	-	●
Burundi	●	●	●	-	-
Cabo Verde	●	●	●	-	●
Cambodia	●	●	●	-	●
Cameroon	●	●	●	●	●*
Canada	●	●	●	●	●
Cayman Islands	●	●	●	●	●
Central African Republic	●	●	●	-	-
Chad	●	●	●	-	-
Chile	●	●	●	●	●
China	●	●	●	●	●
Colombia	●	-	●	●	●
Comoros	●	●	●	-	-
Congo	●	●	●	●	●
Costa Rica	●	●	●	●	●
Croatia	●	●	●	●	●
Cuba	●	●	●	-	●
Curaçao	●	●	●	●	●
Cyprus	●	●	●	-	●
Czechia	●	●	●	●	●
Côte d'Ivoire	●	●	●	●	●
Democratic Republic of the Congo	●	●	●	-	●
Denmark	●	●	●	●	●
Djibouti	●	●	●	-	●*
Dominica	●	-	●	-	●
Dominican Republic	●	-	●	●	●
Ecuador	●	-	●	●	●
Egypt	●	-	●	-	●
El Salvador	●	-	●	●	○
Equatorial Guinea	●	●	●	●	-
Estonia	●	●	○	○	●
Eswatini	●	●	●	-	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Ethiopia	●	●	●	-	●
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	-	●	-
Fiji	○	-	●	-	●
Finland	●	●	●	●	●
France	●	●	●	●	●
French Guiana	●	●	●	●	●
French Polynesia	●	●	●	●	●
Gabon	●	●	●	●	●
Gambia	●	●	●	●	●
Georgia	●	○	●	-	●
Germany	●	●	●	●	●
Ghana	●	●	●	●	●
Gibraltar	●	-	○	-	●
Greece	●	●	●	●	●
Greenland	-	-	●	-	-
Grenada	●	-	●	●	●
Guadeloupe	●	●	●	●	●
Guam	●	●	●	●	●
Guatemala	●	●	●	●	●
Guernsey	-	-	-	-	●
Guinea	●	●	●	-	●
Guinea-Bissau	●	●	●	-	-
Guyana	●*	-	●	●	-
Haiti	●	-	●	●	-
Honduras	●	-	●	●	●
Hungary	●	○	○	●	●
Iceland	●	●	●	●	●
India	●	●	●	●	●
Indonesia	●	●	●	-	●
Iran (Islamic Republic of)	●	●	●	-	●
Iraq	●	●	●	●	●
Ireland	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Israel	●	●	●	●	●
Italy	●	●	●	●	●
Jamaica	●	-	●	-	●
Japan	●	●	●	●	●
Jordan	●	●	●	●	●
Kazakhstan	●	○	●	-	●
Kenya	●	●	●	●	●
Kiribati	-	-	-	-	●
Kosovo[1]	●	○	○	-	●
Kuwait	●	●	●	-	●
Kyrgyzstan	●	●	●	-	●
Lao People's Democratic Republic	●	-	●	-	○
Latvia	●	●	○	●	●
Lebanon	●	-	●	-	●
Lesotho	●	●	●	-	-
Liberia	●	●	●	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	○	○	○
Lithuania	●	●	○	●	●
Luxembourg	●	●	●	●	●
Madagascar	●	●	-	○	-
Malawi	●	●	●	-	●
Malaysia	●	●	●	-	●
Maldives	●	-	●	-	●
Mali	●	●	●	-	○
Malta	●	○	○	●	●
Martinique	●	●	●	●	●
Mauritania	●	●	●	-	●
Mauritius	●	●	●	-	●
Mayotte	●	●	●	-	●
Mexico	●	●	●	●	●
Monaco	●	●	●	-	-
Mongolia	●	-	●	-	●
Montenegro	●	-	○	○	○

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Montserrat	●	-	●	●	●
Morocco	●	●	●	-	●
Mozambique	●	●	●	-	●
Myanmar	●	-	●	-	●
Namibia	●	●	●	●	●
Nepal	●	-	●	-	●
Netherlands	●	●	●	●	●
New Caledonia	●	-	●	-	●
New Zealand	●	●	●	●	●
Nicaragua	●	●	●	●	●
Niger	○	-	●	-	●
Nigeria	●	●	●	-	●
North Macedonia	●	●	○	-	○
Northern Mariana Islands (Commonwealth of the)	○	-	●	-	○*
Norway	●	●	●	●	●
Occupied Palestinian Territory	●	●	●	-	●
Oman	●	●	●	-	●
Pakistan	●	●	●	●	●
Palau	-	-	○	-	-
Panama	●	●	●	●	●
Papua New Guinea	-	-	●	-	●
Paraguay	●	-	●	●	●
Peru	●	-	●	●	●
Philippines	●	●	●	●	●
Poland	●	○	●	●	●
Portugal	●	●	●	●	●
Puerto Rico	●	●	●	●	●
Qatar	●	●	●	-	●
Republic of Korea	●	●	●	●	●
Republic of Moldova	●	-	●	-	●
Romania	●	●	●	●	●
Russian Federation	●	●	●	○	●
Rwanda	●	●	●	-	●
Réunion	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Saba	-	-	●	-	-
Saint Barthélemy	●	-	●	-	●
Saint Kitts and Nevis	-	-	●	-	●
Saint Lucia	●	-	●	-	●
Saint Martin	●	●	●	-	●
Saint Pierre and Miquelon	-	-	●	-	-
Saint Vincent and the Grenadines	-	-	●	●	●
Sao Tome and Principe	●	●	○	-	-
Saudi Arabia	●	●	●	-	●
Senegal	●	●	●	-	●
Serbia	●	-	●	○	○
Seychelles	●	●	●	-	●
Sierra Leone	●	●	●	-	●
Singapore	●	●	●	●	●
Sint Maarten	●	●	●	●	●
Slovakia	●	●	●	-	●
Slovenia	●	●	●	●	●
Solomon Islands	-	-	●	-	●
Somalia	●	●	●	-	-
South Africa	●	●	●	●	●
South Sudan	●	●	●	-	●
Spain	●	●	●	●	●
Sri Lanka	●	●	●	-	●
Sudan	●	●	-	●	-
Suriname	●	●	●	●	●
Sweden	●	●	●	●	●
Switzerland	●	●	●	●	●
Thailand	●	●	●	●	●
Timor-Leste	●	-	●	-	●
Togo	●	●	●	●	●
Tonga	-	-	-	-	○*
Trinidad and Tobago	●	-	●	●	●
Tunisia	●	●	●	-	●
Turkey	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	●	-	●
Ukraine	●	○	○	-	●
United Arab Emirates	●	●	●	●	●
United Kingdom	●	●	●	●	●
United Republic of Tanzania	●	●	●	●	●
United States Virgin Islands	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
United States of America	●	●	●	●	●
Uruguay	●	●	●	●	●
Uzbekistan	●	●	○	-	●
Vanuatu	-	-	●	-	-
Venezuela (Bolivarian Republic of)	●	-	●	●	●
Viet Nam	●	●	●	-	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	●	-	●
Zimbabwe	●	●	●	-	●

*tes that information for this variant was received by WHO from of was received by WHO from unofficial sources and will be reviewed as more information become available. **Includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes co untries, territories, and areas that have never reported the detection of a variant of concern.*

See also Annex 2: Data, table, and figure notes

Annex 2. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Annex 3. Methods for the update on BA.2 Pango lineage of the Omicron variant of concern

We conducted a search for published and unpublished studies on the BA.2 Pango lineage of the Omicron variant. The search for published studies was conducted in Medline while the search for unpublished literature was conducted in MedRxiv, which is a repository for preprints. We searched for studies and reports with an abstract in English, that were accessible up to 14 February 2022. Search terms used were "BA.2" and "Omicron Pango lineages".

We also searched the GISAID website and websites of the following public health agencies: Health Security Agency (UKHSA) of the United Kingdom, Centers for Disease Control and Prevention of the United States of America (USCDC), Statens Serum Institute (SSI) of Denmark, the National Institute for Communicable Diseases (NICD) of South Africa and the European Centre for Disease Prevention and Control (ECDC).

The summary of the evidence was done based on the risk assessment framework implemented by the UKHSA. Following the assessment, each indicator was assigned one of four colours: red, amber, yellow and green. Red implies a difference in the indicator between BA.2 and BA.1. Amber implies there is a difference in the indicator between BA.2 and BA.1 in

certain population subgroups. Yellow implies there is limited evidence suggesting a difference in the indicator between BA.2 and BA.1. Green implies there is no difference in the indicator between BA.2 and BA.1. Grey implies there is insufficient data on the indicator. The confidence grading was classified as: "Low" when there was little or poor-quality evidence, uncertainty or conflicting views amongst experts or no experience with previous similar incidents; "Moderate" when there was adequate quality evidence - including consistent results published only in grey literature, reliable source(s), assumptions made on analogy and agreement between experts or opinion of at least 2 trusted experts; and "High" when there was good quality evidence, multiple reliable sources, verified, expert opinion concurs, and experience of previous similar incidents.

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COVID-19 Weekly Epidemiological Update

Edition 78, published 8 February 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews
- Summary of the Weekly Operational Update

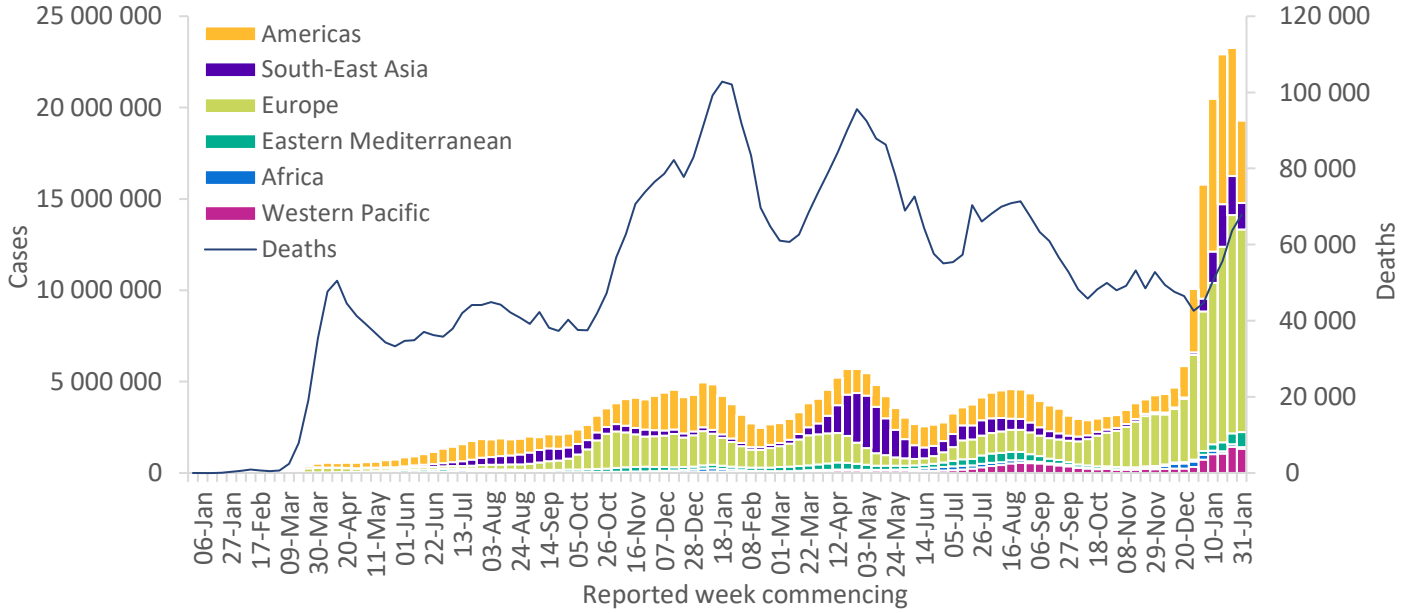
Global overview

Data as of 6 February 2022

Globally, during the week of 31 January to 6 February 2022, the number of new COVID-19 cases decreased by 17% as compared to the number reported during the previous week, while the number of new deaths increased by 7% (figure 1). Across the six WHO regions, over 19 million new cases and just under 68 000 new deaths were reported (table 1). As of 6 February 2022, over 392 million confirmed cases and over 5.7 million deaths have been reported globally.

At the regional level, the Eastern Mediterranean Region reported an increase of 36% in the number of new weekly cases while all other regions reported decreases: The Region of the Americas (36%), the South-East Asia Region (32%), the African Region (22%), the Western Pacific Region (8%) and the European Region (7%). The number of new weekly deaths continued to increase in the South-East Asia (67%) and Eastern Mediterranean Regions (45%), while the number remained similar to that of the previous week in the Region of the Americas and the European Region and decreased in the African (14%) and Western Pacific Regions (5%).

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 6 February 2022**



**See *Annex 2: Data, table, and figure notes*

At the country level, the highest numbers of new cases were reported from the United States of America (1 874 006 new cases; a 50% decrease), France (1 738 189 new cases; a 26% decrease), Germany (1 285 375 new cases; a 22% increase), Brazil (1 241 025 new cases; similar to the previous week's figures) and India (1 095 616 new cases; a 41% decrease). The highest number of new deaths were reported from the United States of America (14 090 new deaths; a 15% decrease), India (7888 new deaths; a 69% increase), the Russian Federation (4686 new deaths; similar to the previous week's figures), Brazil (4610 new deaths; an 39% increase) and Mexico (2910 new deaths; a 48% increase).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 6 February 2022**

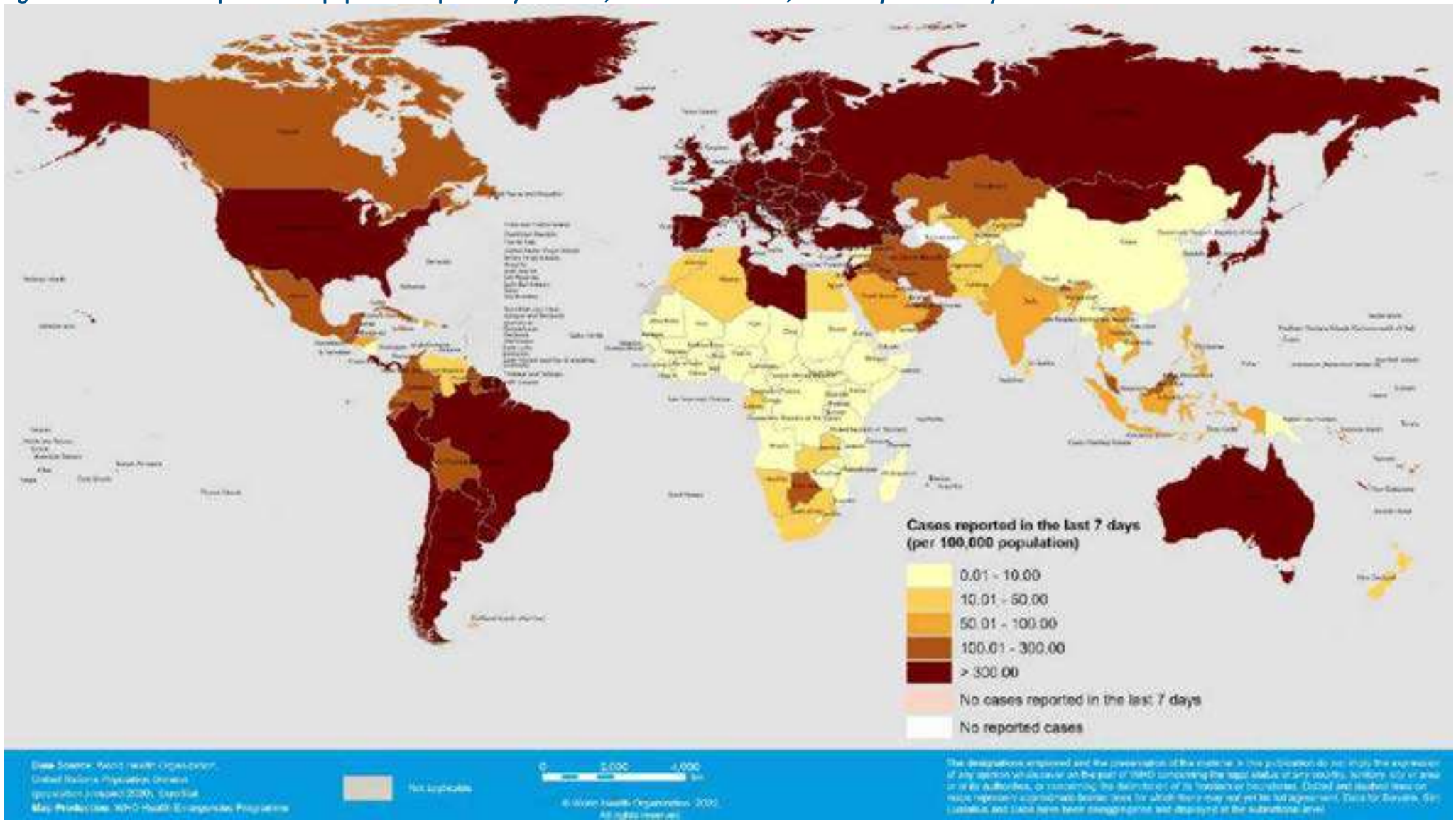
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	11 106 661 (58%)	-7%	154 414 207 (39%)	23 446 (35%)	2%	1 789 169 (31%)
Americas	4 487 367 (23%)	-36%	139 283 017 (36%)	29 560 (44%)	0%	2 531 968 (44%)
South-East Asia	1 452 690 (8%)	-32%	53 362 809 (14%)	8 761 (13%)	67%	744 541 (13%)
Western Pacific	1 323 186 (7%)	-8%	17 291 386 (4%)	2 427 (4%)	-5%	169 777 (3%)
Eastern Mediterranean	808 497 (4%)	36%	19 636 359 (5%)	2 357 (3%)	45%	323 481 (6%)
Africa	98 071 (1%)	-22%	8 157 159 (2%)	1 402 (2%)	-14%	165 404 (3%)
Global	**19 276 472 (100%)**	**-17%**	**392 145 701 (100%)**	**67 953 (100%)**	**7%**	**5 724 353 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 2: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 31 January – 6 February 2022**



**See *Annex 2: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 31 January – 6 February 2022**

**See *Annex 2: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

The current global epidemiology of SARS-CoV-2 is characterized by the continued rapid global spread of the Omicron variant. All other variants, including VOCs (Alpha, Beta, Gamma and Delta) and VOIs (Lambda and Mu) continue to decline in all six WHO regions. Among the 426 363 sequences uploaded to GISAID with specimens collected in the last 30 days[i], 412 265 (96.7%) were Omicron, 13 972 (3.3%) were Delta, two (<0.1%) were Gamma, and two (<0.1%) were Alpha. There were no sequences reported for any other variant, including for VOIs Mu and Lambda. To note, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

The spread and prevalence of the Omicron variant

Since the designation of B.1.1.529 as a VOC on 26 November 2021, several lineages have been identified. These include Pango lineages BA.1, BA.1.1, BA.2 and BA.3, which are all being monitored by WHO under the umbrella of 'Omicron'. BA.2 shares many mutations with BA.1, but also has a number of differences, including in the Spike protein – critically, it does not carry the Spike 69-70 deletion associated with S-gene target failure, used as a proxy for detecting BA.1, BA.1.1, B.1.1.529 and BA.3. BA.1.1 carries an additional R346K mutation, which is suspected to provide additional immune escape potential.

Most of the current evidence describing the phenotypic characteristics of the Omicron variant is based on the BA.1 Pango lineage. However, a relative increase in the BA.2 lineage has been observed in multiple countries and investigations into the characteristics of BA.2, including its transmissibility, immune escape properties and virulence, need to be prioritized independently (and comparatively) to BA.1 (WHO Tracking SARS-CoV-2 variants website). Additionally, it is important to consider the relative proportions of the BA.1 and BA.2 sequences in the context of the case incidence when interpreting the spread and relative growth of different lineages.

The prevalence of the Omicron variant has increased globally and is now detected in almost all countries. However, many of the countries which reported an early rise in the number of cases due to the Omicron variant have now reported a decline in the total number of new cases since the beginning of January 2022. Figure 4, plot A shows a decrease in the proportion of BA.1 sequences compared to the other lineages since epidemiological week 2 (10-16 January 2022) with a proportional increase in BA.1.1 and BA.2 sequences. Figure 4, plot B shows an increase in the

[i] Includes sequences submitted to with sample collected dates from 7 January to 5 February 2022 (last reported sample at the time of data extraction, excluding low coverage sequences)

number of sequences of the Omicron lineages submitted to GISAID in December 2021 and a decrease since the beginning of January 2022. This global trend has been observed in several countries, including some with high sequencing capacity; the pattern may be different in others. These trends should be interpreted with due consideration of the limitations of surveillance systems, including differences in sequencing capacity and sampling strategies between countries, as well as laboratory turn-around times for sequencing and delays in reporting.

Figure 4. Global distribution and relative proportion of Omicron lineages for sequences submitted to GISAID presented by epidemiological week of specimen collection

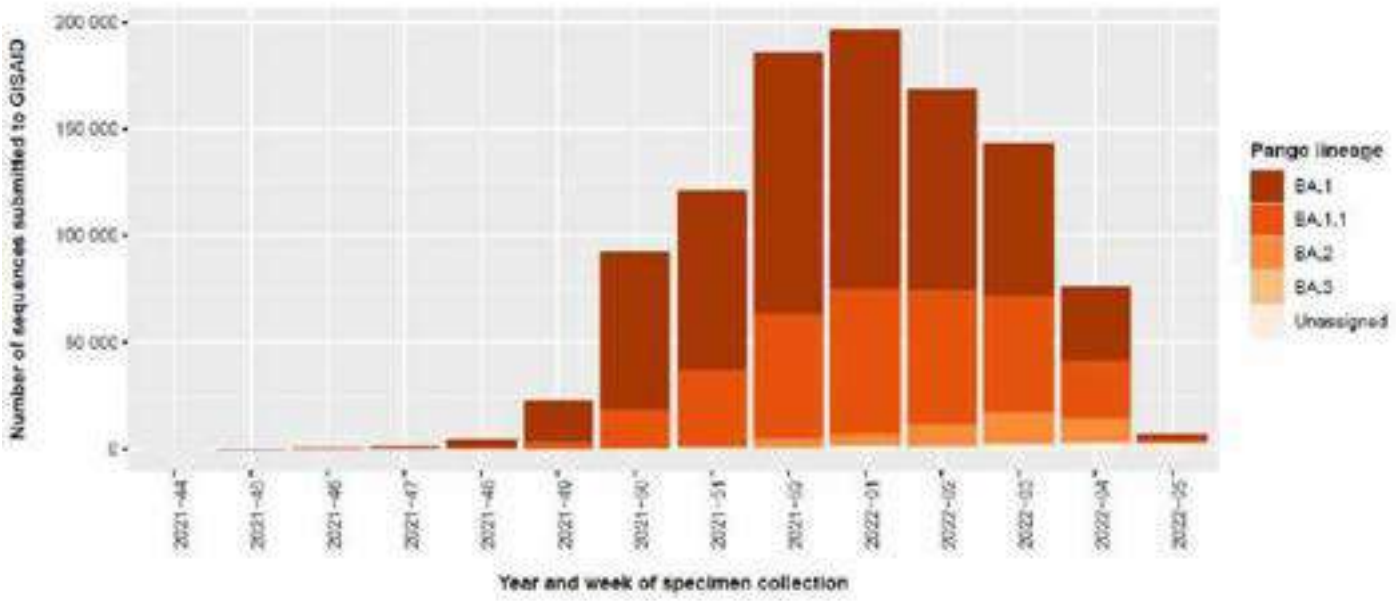
A.

			Overall (%)		Last 4 weeks by collection date (%)			
Lineage	Countries	Sequences[a]	SGTF[b]	Total	2022-02	2022-03	2022-04	2022-05
BA.1	140	655 702	96.51	62.07	58.17	50.32	45.19	30.55
BA.1.1	125	339 667	95.63	32.15	37.12	37.90	35.48	28.57
BA.2	69	49 835	0.07	4.72	5.96	10.43	15.56	7.68
BA.3	16	269	96.96	0.03	0.04	0.05	0.01	0.06
Unassigned	37	10 945	0.05	1.04	0.70	1.30	3.76	33.15

[a]Data source: sequences and metadata from GISAID

[b]Percentage of sequences with Spike H 69-70 deletion associated with S gene target failure

B.



Global distribution of Omicron lineages from sequences and metadata submitted to GISAID.

Panel A. Relative proportions of Omicron lineages over the last 4 weeks by specimen collection week.

Panel B. Incidence of Omicron lineages by week of specimen collection.

Data was extracted from GISAID on 8 February 2022 at 14:00 CET; figures are correct at the time of printing.

WHO continues to monitor circulating and emerging variants and to identify and address relevant knowledge gaps through the development of coordinated, multi-layered surveillance, preparedness, and response strategies for addressing COVID-19.

Differences in the phenotypic characteristics of VOCs

Available evidence on the phenotypic impacts of the VOCs is summarized in Table 2, as well as in previous editions of the COVID-19 Weekly Epidemiological Update. Since the 25 January 2022 update there are several new publications on the phenotypic characteristics of VOCs, including recent literature on the Omicron variant. Some of the studies reported have not been peer-reviewed and the findings must therefore be interpreted with due consideration of this limitation.

Detailed information on Omicron variant and related recommended priority actions for Member States can be found in the updated Technical Brief and Priority Actions for Member States which can be found under the Country and Technical Guidance – Coronavirus Disease (COVID-19). Based on the currently available evidence, the overall risk related to the Omicron variant remains very high.

Table 2: Summary of phenotypic impacts* of variants of concern

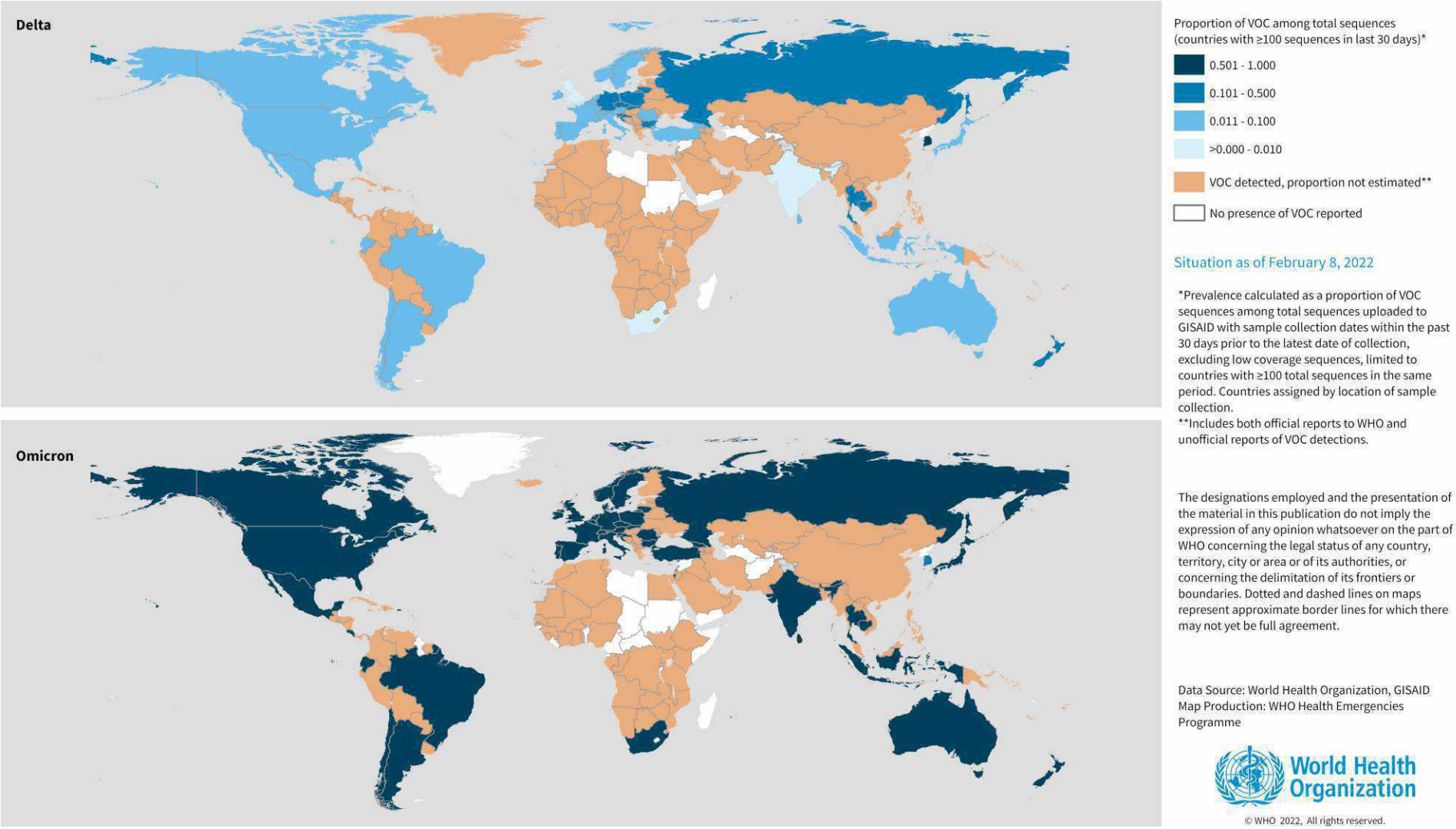
WHO label	Alpha	Beta	Gamma	Delta	Omicron
Transmissibility	Increased transmissibility[1]	Increased transmissibility[2,3]	Increased transmissibility[3,4]	Increased transmissibility [3,5,6]	Increased transmissibility.[7–10]
Disease severity	Possible increased risk of hospitalization[11,12], possible increased risk of severe disease and death[13,14]	Possible increased risk of hospitalization[12], possible increased in-hospital mortality[15]	Possible increased risk of hospitalization[12], possible increased risk of severe disease[16]	Possible increased risk of hospitalization[17,18]	Reduced risk of hospitalization and severe disease [19–22]
Risk of reinfection	Neutralizing activity retained[23], risk of reinfection remains similar[24]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[25]	Moderate reduction in neutralizing activity reported[26]	Reduction in neutralizing activity reported[27–29]	Increased risk of reinfection [30,31]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF), no impact on overall result from multiple target RT-PCR; No impact on Ag RDTs observed[32]	No impact on RT-PCR or Ag RDTs observed[29]	None reported to date	No impact on RT-PCR or Ag RDTs observed[33]	PCR continues to detect Omicron. Impact on Ag-RDTs is under investigation: Results are mixed as to whether or not there may be decreased sensitivity to detect Omicron. [7,22,34–36]

**Generalized findings as compared to previously/co-circulating variants. Based on emerging* evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Figure 5. Prevalence of variants of concern (VOCs) Delta and Omicron in the last 30 days, data as of 8 February 2022



See also Annex 2 for reported VOC detections by country/territory/area

Figure 6. Vaccine effectiveness (VE) of primary series and booster vaccination against the Omicron variant of concern

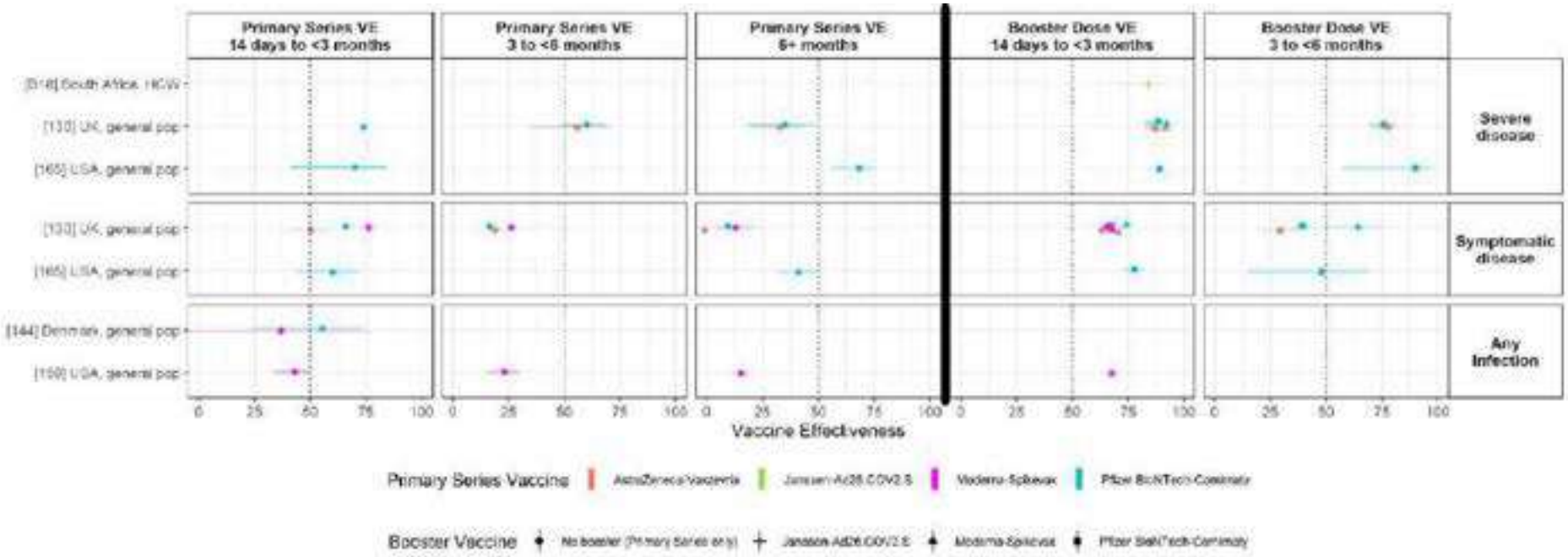
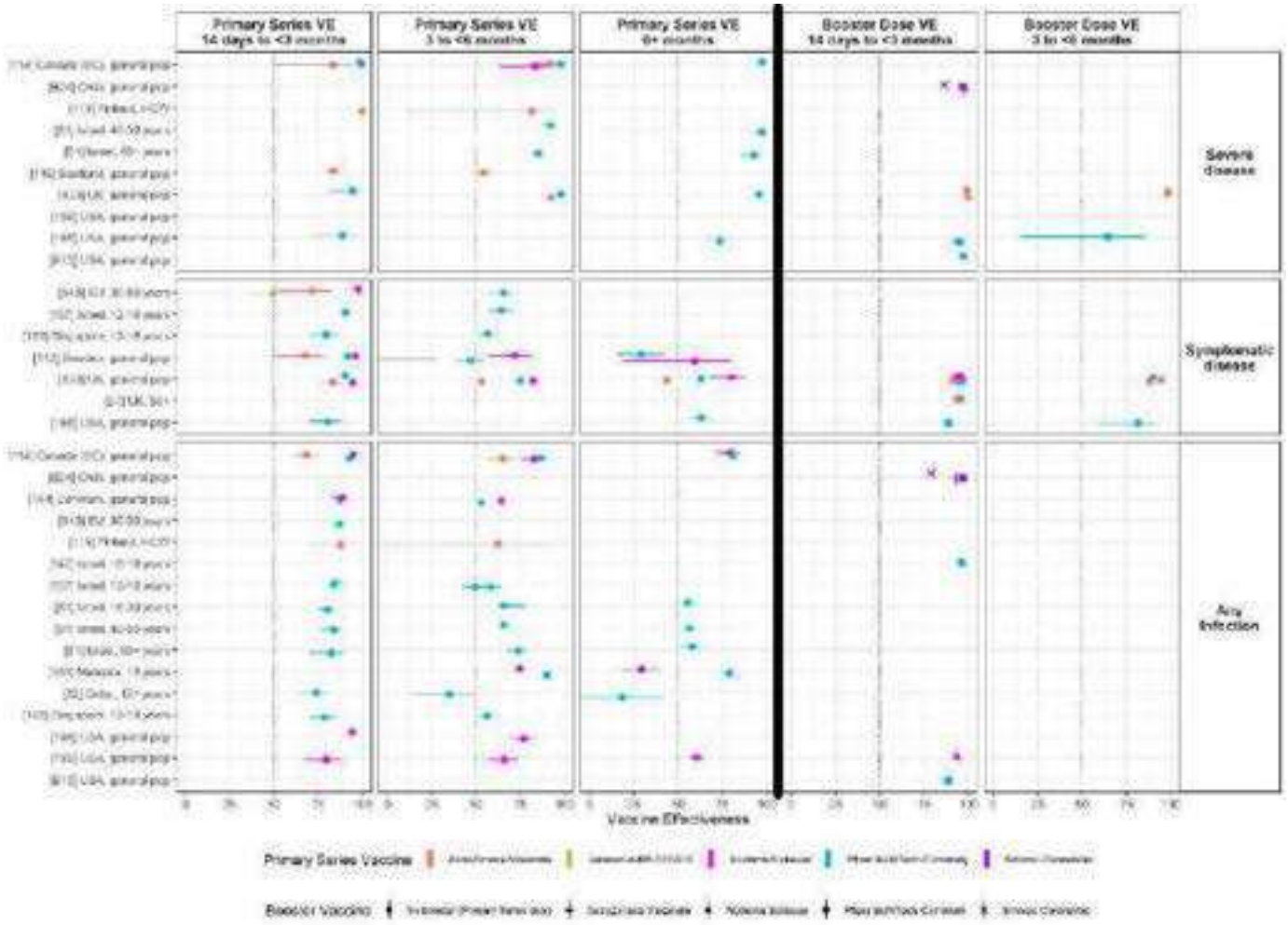


Figure 7. Vaccine effectiveness (VE) of primary series and booster vaccination against the Delta variant of concern



Abbreviations: pop=population; HCW=healthcare workers; EU=European Union. Dots represent point estimates of vaccine effectiveness; horizontal lines represent the 95% confidence intervals. Labels along left side of plot indicate reference numbers [], country, and study population. Reference numbers identify the study and link to the summary table of VE effectiveness studies on view-hub.org (Table 1 in summary table); references starting with a 'B' are studies found in the booster VE table only (Table 2 in summary table). Primary series refers to the completion of two doses of vaccines for Astra-Zeneca-Vaxzevria; Moderna-Spikevax, Pfizer BioNTech-Comirnaty and Sinovac-CoronaVac and one dose of Janssen-Ad26.COV2.S. Severe disease includes hospitalization; symptomatic disease includes both mild and severe disease; any infection includes both asymptomatic infections and any symptomatic disease. Additional details on the methods for inclusion of the estimates in the plots provided in Annex 3. Note, one negative point estimate for AstraZeneca-Vaxzevria VE against Delta symptomatic disease (reference 112) with 95% CIs crossing 0 is not fully visible in the plot.

Figures 6 and 7 summarize the impact of Omicron and Delta variants, respectively, on product-specific vaccine effectiveness (VE) over time for both primary series vaccines and booster vaccines. The methods for including estimates in the plot are described below. Additional information on vaccine performance against VOCs can also be found in Annex 4.

Interpretation of the results of the VE for the Omicron variant

Limited data are available for the VE for the Omicron variant. However, available estimates show reduced protection of the primary series COVID-19 vaccines against the Omicron variant for all outcomes (*severe disease*, *symptomatic disease*, and *infection*) than has been observed previously for other variants of concern. Importantly, VE estimates against the Omicron variant remains highest for *severe disease*, while they are lower for s*ymptomatic disease and infection.* Booster vaccination substantially improves VE for all outcomes for all products with available data. More data are needed on the duration of the VE following a booster dose.

VE estimates for the Pfizer BioNTech-Comirnaty vaccine against *severe disease* due to the Omicron variant within the first three months following the primary series (without a booster dose) range from 70-74% and decrease over time since vaccination, with VE estimates of 60% between three and six months, and 35-68% at six months or more. Between three and six months and six months and over, VE estimates for the AstraZeneca-Vaxzevria vaccine against *severe disease* reduced from 56% to 33%, with relatively wide confidence intervals (see Figure 5 for details).

Early VE estimates (measured from 14 days up to three months after vaccination) of the primary series against *symptomatic disease* are generally lower than those for *severe disease*, though it remains at or above 50% for AstraZeneca-Vaxzevria, Moderna-Spikevax, and Pfizer BioNTech-Comirnaty vaccines. In contrast, most estimates of VE against *infection* at 14 days up to three months after the primary series are below 50%. All available estimates against both *symptomatic disease* and *infection* measured three or more months after completion of the primary series indicate VE estimates of less than 50% for the three vaccines (Pfizer BioNTech-Comirnaty, Moderna-Spikevax and AstraZeneca-Vaxzevria).

A booster dose increases VE estimates against *severe disease* to above 75% for all vaccines for which data are available, with this effect maintained up to six months after the booster dose. A booster dose increased VE estimates against *symptomatic disease* in the first three months following vaccination to 63%-78% for all vaccines, however, these decreased to 29-64% at 3-6 months. Limited evidence is available for VE against *infection* due to the Omicron variant following a booster dose, with only one study showing a VE of 68% within the first 3 months of a booster dose of Moderna-Spikevax.

Interpretation of the results of the VE for the Delta variant

Most of the evidence to date supports effectiveness of the mRNA vaccines (Pfizer BioNTech-Comirnaty and Moderna-Spikevax) remains high against *severe disease* associated with Delta variant infection at six or more months after the primary series, with three of four studies reporting VE estimates of >90% and one study reporting a VE of 74% at six months or more. Three studies report high VE (>80%) of the AstraZeneca-Vaxzevria vaccine three to six months following the primary series, while one study reports a lower VE (54%), compared to the first three months (84%).

VE estimates against *symptomatic disease* and *infection* range from 73-96% following the primary series of one of the two mRNA vaccine from 14 days up to three months after vaccination and 68-88% following the primary series of the AstraZeneca-Vaxzevria vaccine during the same time period. There is, however, consistent evidence of decreasing VE against *symptomatic disease* and *infection* over time following the primary series for all of the vaccines for which data are available. Despite this, most of the evidence still report VE estimates of >50% (59-80%) at six months or more following either mRNA vaccine, with two estimates falling below 50%. Three of the four studies of evaluating the AstraZeneca-Vaxzevria vaccine also showed a VE >50% (54-65%) at three to six months, though in one of these studies the VE decreased

to 43%. A single study of Sinovac-CoronaVac (an inactivated vaccine) conducted in Malaysia reported a VE against *infection* of 74% three to six months following the primary series, which decreased to 30% beyond six months.

Receipt of a booster dose of mRNA, vector-based and inactivated vaccines, for which there is data available, resulted in a VE of >79% for *all outcomes* within the first three months. At three to six months following the booster dose, the VE of an mRNA booster vaccine against *severe disease* remained >95% in a single study conducted in the United Kingdom, but decreased to 65% from 95% in a single study conducted in the United States of America in the same time period. The VE against *symptomatic disease* at three months or more following a booster dose with an mRNA vaccine was >75% after a primary series of either the AstraZeneca-Vaxzevria or the Pfizer BioNTech-Comirnaty vaccines.

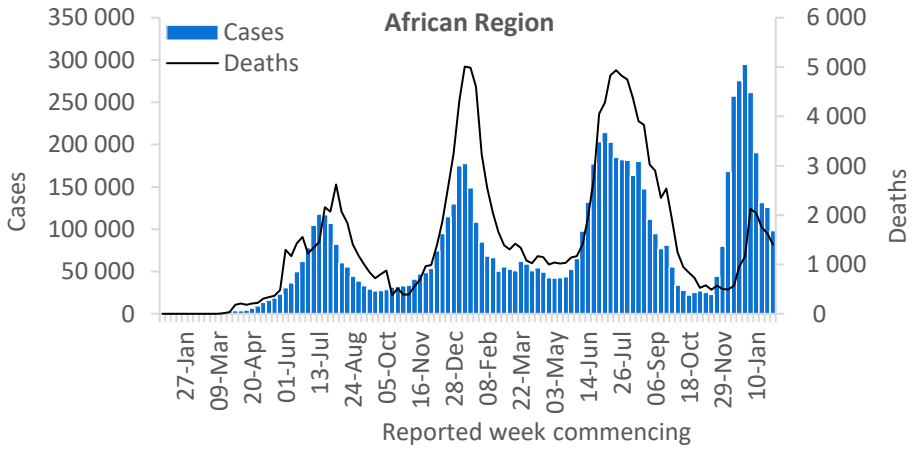
WHO regional overviews

Epidemiological week 31 January – 6 February 2022**

African Region

The African Region reported over 98 000 new cases, a 22% decrease as compared to the previous week. This follows the declining trend observed since early January 2022. Despite this, two countries still reported increases in new cases of over 20%; Comoros (101 vs 34 new cases, a 197% increase) and Guinea (250 vs 155 new cases; a 61% increase). The highest numbers of new cases were reported from Réunion (45 474 new cases; 5079.1 new cases per 100 000 population; similar to the previous week's figures), South Africa (20 580 new cases; 34.7 new cases per 100 000; a 7% decrease) and Algeria (8288 new cases; 18.9 new cases per 100 000; a 44% decrease).

This week, over 1400 new deaths were reported in the Region, corresponding to a 14% decrease as compared to the previous week. The highest numbers of new deaths were reported from South Africa (912 new deaths; 1.5 new deaths per 100 000 population; an 8% increase), Algeria (85 new deaths; <1 new death per 100 000; a 15% increase) and Uganda (34 new deaths; <1 new death per 100 000; a 31% decrease).

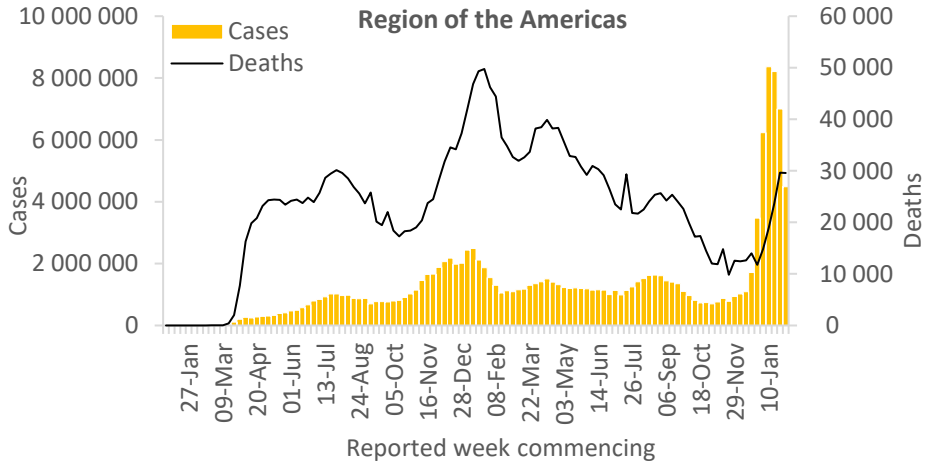


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 4.4 million new cases, a 36% decrease as compared to the previous week, a trend that has continued since mid-January. However, eight countries reported increases in new cases of 20% or greater, with the highest proportional increases reported from the Dominica (968 vs 515 new cases; an 88% increase) and Honduras (5674 vs 3438 new cases; a 65% increase). The highest numbers of new cases were reported from the United States of America (1 874 006 new cases; 566.2 new cases per 100 000; a 50% decrease), Brazil (1 241 025 new cases; 583.8 new cases per 100 000; similar to the previous week's figures) and Argentina (283 743 new cases; 627.8 new cases per 100 000; a 51% decrease).

This week the number of new deaths remained similar to that of last week with over 29 000 new deaths reported in the Region. The highest numbers of new deaths were reported from the United States of America (14 090 new deaths; 4.3 new deaths per 100 000; a 15% decrease), Brazil (4610 new deaths; 2.2 new deaths per 100 000; a 39% increase) and Mexico (2910 new deaths; 2.3 new deaths per 100 000; a 48% increase).

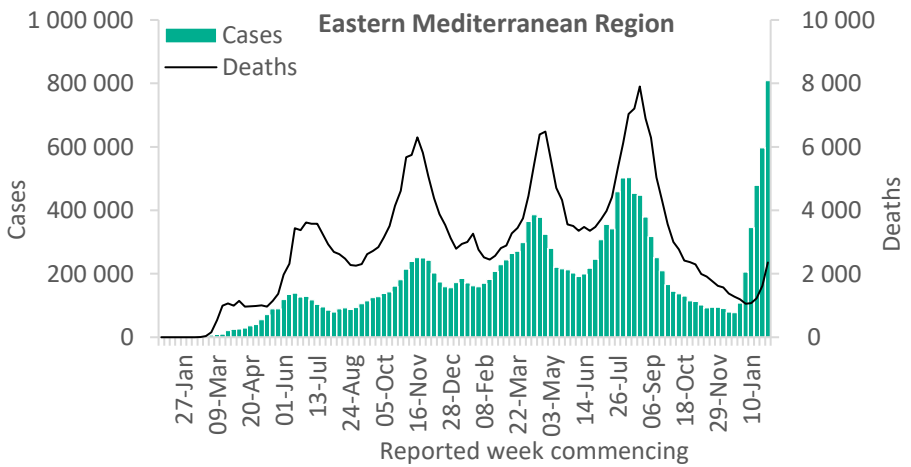


Updates from the Region of the Americas

Eastern Mediterranean Region

The number of new weekly cases has continued to increase in the Eastern Mediterranean Region this week, with over 808 000 new cases reported, a 36% increase as compared to the previous week. Increasing numbers of new cases have been reported in the Region since the end of December 2021. This week, nine countries reported increases of 20% or greater, with the highest relative increases reported from the Islamic Republic of Iran, Afghanistan (4046 vs 2118 new cases; a 91% increase) and Jordan. The highest numbers of new cases were reported from the Islamic Republic of Iran (221 654 new cases; 263.9 new cases per 100 000; a 188% increase), Jordan (116 993 new cases; 1146.6 new cases per 100 000; an 85% increase) and the occupied Palestinian territory (58 046 new cases; 1137.8 new cases per 100 000; a 75% increase).

Over 2300 new deaths were reported in the Region this week, corresponding to a 45% increase as compared to the previous week. The highest numbers of new deaths were reported from Tunisia (383 new deaths; 3.2 new deaths per 100 000; a 39% increase), the Islamic Republic of Iran (365 new deaths; <1 new death per 100 000; a 105% increase) and Egypt (311 new deaths; <1 new death per 100 000; a 32% increase).

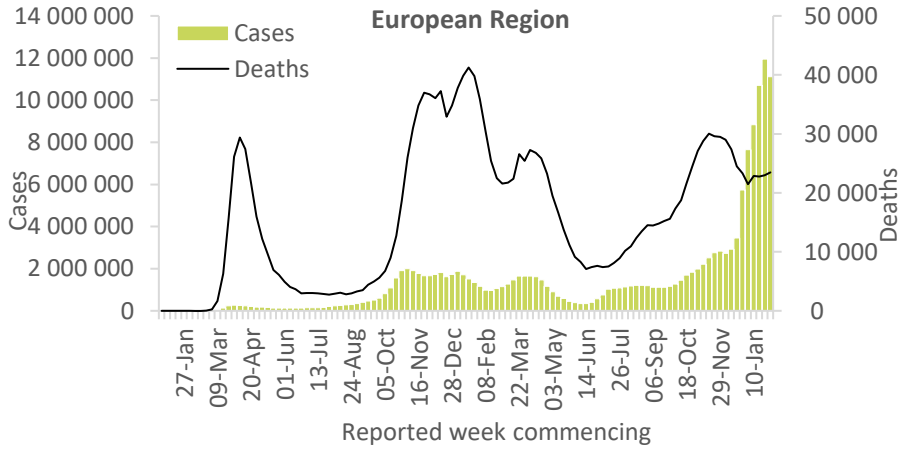


Updates from the Eastern Mediterranean Region

European Region

Following an increase in the incidence of weekly cases since mid-December 2021, the European Region reported over 11.1 million new cases this week, a 7% decrease as compared to the previous week. However, eleven countries reported an increase in new cases of 20% or greater in the past week. Those reporting the highest relative increase were Belarus (30 475 vs 13 698 new cases; a 122% increase), Azerbaijan (39 839 vs 19 307 new cases; a 106% increase) and the Russian Federation. The highest numbers of new cases were reported from France (1 738 189 new cases; 2672.5 new cases per 100 000; a 26% decrease), Germany (1 285 375 new cases; 1545.5 new cases per 100 000; a 22% increase), and the Russian Federation (1 073 111 new cases; 735.3 new cases per 100 000; a 71% increase).

Over 23 000 new deaths were reported, in the Region, similar to the previous week's number. The highest numbers of new deaths were reported from the Russian Federation (4686 new deaths; 3.2 new deaths per 100 000; similar to the previous week), Italy (2628 new deaths; 4.4 new deaths per 100 000; similar to the previous week), and France (1867 new deaths; 2.9 new deaths per 100 000; similar to the previous week's figures).

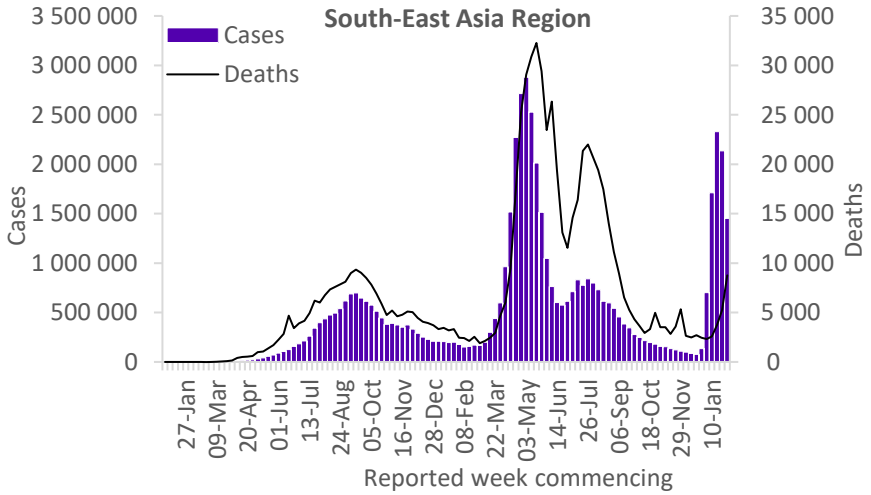


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported a marked decline of 32% in new cases in the past week, with over 1.4 million new cases reported. However, half of the countries in the Region (5/10) still reported increases in new cases of 20% or greater, with the countries reporting the highest proportional increase including: Timor-Leste (466 vs 69 new cases; a 575% increase), Indonesia and Myanmar (2647 vs 1183 new cases; a 124% increase). The highest numbers of new cases were reported from India (1 095 616 new cases; 79.4 new cases per 100 000; a 41% decrease), Indonesia (173 295 new cases; 63.4 new cases per 100 000; a 205% increase), and Bangladesh (76 200 new cases; 46.3 new cases per 100 000; a 24% decrease).

Conversely, the Region reported a 67% increase in the number of newly reported deaths as compared to the previous week, with over 8700 new deaths reported. This is largely due to reporting of back-dated deaths in India. The highest numbers of new deaths were reported from India (7888 new deaths; <1 new death per 100 000; a 68% increase), Indonesia (251 new deaths; <1 new death per 100 000; a 202% increase), and Bangladesh (226 new deaths; <1 new death per 100 000; a 61% increase).

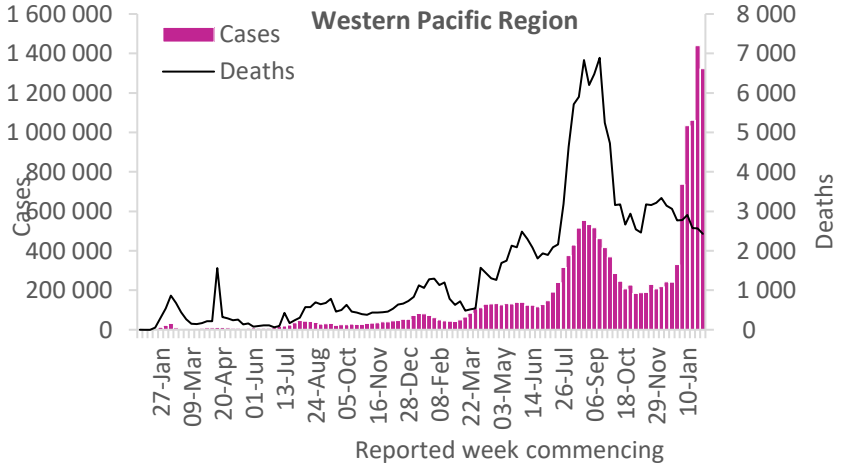


Updates from the South-East Asia Region

Western Pacific Region

Following an increase in the number new cases last week, the Western Pacific Region reported over 1.3 million new cases, an 8% decrease as compared to the previous week. However, nearly half (13/28; 46%) of the countries in the Region reported increases in new cases of 20% of greater with the highest increases reported from Kiribati (1206 vs 142 new cases; a 749% increase), Brunei Darussalam (1059 vs 261 new cases; a 306% increase) and the Solomon Islands (1892 vs 609 new cases; a 211% increase). The highest numbers of new cases were reported from Japan (623 128 new cases; 492.7 new cases per 100 000; a 34% increase), Australia (215 234 new cases; 844.1 new cases per 100 000; a 57% decrease), and the Republic of Korea (181 053 new cases; 353.1 new cases per 100 000; a 91% increase).

The number of new deaths also declined in the Region with over 2400 new deaths reported, a 5% decrease as compared to the previous week. The highest numbers of new deaths were reported from Viet Nam (714 new deaths; <1 new death per 100 000; a 25% decrease), Australia (528 new deaths; 2.1 new deaths per 100 000; a 7% decrease), and Japan (528 new deaths; <1 new death per 100 000; a 121% increase).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 8 February, highlights include the following:

- Donating SD Biosensor Test Kits to support Belize's COVID-19 response
- Enhancing risk communication and community engagement activities in Thailand
- Italy joins other European Union Member States to increase pledge of COVID-19 vaccines to Syria
- Integration and expansion: Leveraging influenza systems for the COVID-19 response
- Launching the SocialNet online course on OpenWHO
- Updates on WHO's financing to support countries on COVID-19 response implementation to suppress transmission, reduce exposure, and protect the vulnerable and save lives
- Progress on a subset of global indicators that demonstrate country and global progress to end the acute phase of the pandemic

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice

Annex 1. List of countries/territories/areas reporting variants of concern as of 8 February 2022

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Afghanistan	●	-	●	-	-
Albania	●	-	○	-	●
Algeria	●	-	●	-	●
American Samoa	-	-	○*	-	○*
Andorra	○	○	○	-	○*
Angola	●	●	●	●	●
Anguilla	●	-	●	-	●
Antigua and Barbuda	●	●	●	●	●
Argentina	●	●	●	●	●
Armenia	●	-	●	-	●
Aruba	●	●	●	●	●
Australia	●	●	●	●	●
Austria	●	●	●	●	●
Azerbaijan	●	-	○	-	●
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	●
Bangladesh	●	●	●	○	●
Barbados	●	-	●	●	●
Belarus	●	-	○	-	●
Belgium	●	●	●	●	●
Belize	●	-	●	●	-
Benin	●	●	●	●	-
Bermuda	●	●	●	-	●
Bhutan	●	●	●	-	●
Bolivia (Plurinational State of)	●	-	●	●	●
Bonaire	●	-	●	●	●
Bosnia and Herzegovina	●	●	○	●	○
Botswana	○	●	●	-	●
Brazil	●	●	●	●	●
British Virgin Islands	●	-	●	●	●
Brunei Darussalam	●	●	●	-	●
Bulgaria	●	●	●	-	●
Burkina Faso	●	●	●	-	●
Burundi	●	●	●	-	-
Cabo Verde	●	●	●	-	●
Cambodia	●	●	●	-	●
Cameroon	●	●	●	●	-
Canada	●	●	●	●	●
Cayman Islands	●	●	●	●	●
Central African Republic	●	●	●	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Chad	●	●	●	-	-
Chile	●	●	●	●	●
China	●	●	●	●	●
Colombia	●	-	●	●	●
Comoros	●	●	●	-	-
Congo	●	●	●	●	○
Costa Rica	●	●	●	●	●
Croatia	●	●	○	●	●
Cuba	●	●	●	-	●
Curaçao	●	●	●	●	●
Cyprus	●	●	○	-	●
Czechia	●	●	●	●	●
Côte d'Ivoire	●	●	○	●	○
Democratic Republic of the Congo	●	●	●	-	●
Denmark	●	●	●	●	●
Djibouti	●	●	●	-	-
Dominica	●	-	●	-	●*
Dominican Republic	●	-	●	●	●
Ecuador	●	-	●	●	●
Egypt	●	-	●	-	●
El Salvador	●	-	●	●	○
Equatorial Guinea	●	●	●	●	-
Estonia	●	●	○	○	●
Eswatini	●	●	●	-	●
Ethiopia	●	●	●	-	●
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	-	●	-
Fiji	○	-	●	-	●
Finland	●	●	●	●	●
France	●	●	●	●	●
French Guiana	●	●	●	●	●
French Polynesia	●	●	●	●	●
Gabon	●	●	●	●	○
Gambia	●	●	●	●	●
Georgia	●	○	●	-	●
Germany	●	●	●	●	●
Ghana	●	●	●	●	●
Gibraltar	●	-	○	-	●
Greece	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Greenland	-	-	●	-	-
Grenada	●	-	●	●	●
Guadeloupe	●	●	●	●	●
Guam	●	●	●	●	●
Guatemala	●	●	●	●	●
Guernsey	-	-	-	-	●
Guinea	●	●	●	-	●
Guinea-Bissau	●	●	●	-	-
Guyana	-	-	●	●	-
Haiti	●	-	●	●	○*
Honduras	●	-	●	●	●
Hungary	●	○	○	●	●
Iceland	●	●	●	●	●
India	●	●	●	●	●
Indonesia	●	●	●	-	●
Iran (Islamic Republic of)	●	●	●	-	●
Iraq	●	●	●	●	●
Ireland	●	●	●	●	●
Israel	●	●	●	●	●
Italy	●	●	●	●	●
Jamaica	●	-	●	-	●
Japan	●	●	●	●	●
Jordan	●	●	●	●	●
Kazakhstan	●	○	●	-	●
Kenya	●	●	●	●	●
Kiribati	-	-	-	-	●
Kosovo[1]	●	○	○	-	●
Kuwait	●	●	●	-	●
Kyrgyzstan	●	●	●	-	●
Lao People's Democratic Republic	●	-	●	-	○
Latvia	●	●	○	●	●
Lebanon	●	-	●	-	●
Lesotho	●	●	●	-	-
Liberia	●	●	●	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	○	○	○
Lithuania	●	●	○	●	●
Luxembourg	●	●	●	●	●
Madagascar	●	●	-	○	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Malawi	●	●	●	-	●
Malaysia	●	●	●	-	●
Maldives	●	-	●	-	●
Mali	●	●	●	-	○
Malta	●	○	○	●	●
Martinique	●	●	●	●	●
Mauritania	●	●	●	-	●
Mauritius	●	●	●	-	●
Mayotte	●	●	○	-	●
Mexico	●	●	●	●	●
Monaco	●	●	●	-	-
Mongolia	●	-	●	-	○
Montenegro	●	-	○	○	○
Montserrat	●	-	●	●	●
Morocco	●	●	●	-	●
Mozambique	●	●	●	-	●
Myanmar	●	-	●	-	●
Namibia	●	●	●	●	●
Nepal	●	-	●	-	●
Netherlands	●	●	●	●	●
New Caledonia	●	-	●	-	●
New Zealand	●	●	●	●	●
Nicaragua	●	●	●	●	●
Niger	○	-	●	-	●
Nigeria	●	●	●	-	●
North Macedonia	●	●	○	-	○
Northern Mariana Islands (Commonwealth of the)	○	-	●	-	-
Norway	●	●	●	●	●
Occupied Palestinian Territory	●	●	●	-	●
Oman	●	●	●	-	●
Pakistan	●	●	●	●	●
Palau	-	-	○	-	-
Panama	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Papua New Guinea	-	-	●	-	●
Paraguay	●	-	●	●	●
Peru	●	-	●	●	●
Philippines	●	●	●	●	●
Poland	●	○	●	●	●
Portugal	●	●	●	●	●
Puerto Rico	●	●	●	●	●
Qatar	●	●	●	-	●
Republic of Korea	●	●	●	●	●
Republic of Moldova	●	-	●	-	●
Romania	●	●	●	●	●
Russian Federation	●	●	●	○	●
Rwanda	●	●	●	-	●
Réunion	●	●	○	●	●
Saba	-	-	●	-	-
Saint Barthélemy	●	-	●	-	●
Saint Kitts and Nevis	-	-	●	-	○
Saint Lucia	●	-	●	-	●*
Saint Martin	●	●	●	-	●
Saint Pierre and Miquelon	-	-	●	-	-
Saint Vincent and the Grenadines	-	-	●	●	●
Sao Tome and Principe	●	●	○	-	-
Saudi Arabia	●	●	●	-	●
Senegal	●	●	●	-	●
Serbia	●	-	●	○	○
Seychelles	●	●	●	-	●
Sierra Leone	●	●	●	-	●
Singapore	●	●	●	●	●
Sint Maarten	●	●	●	●	●
Slovakia	●	●	●	-	●
Slovenia	●	●	●	●	●
Solomon Islands	-	-	●	-	●
Somalia	●	●	●	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
South Africa	●	●	●	●	●
South Sudan	●	●	●	-	●
Spain	●	●	●	●	●
Sri Lanka	●	●	●	-	●
Sudan	●	●	-	●	-
Suriname	●	●	●	●	●
Sweden	●	●	●	●	●
Switzerland	●	●	●	●	●
Thailand	●	●	●	●	●
Timor-Leste	●	-	●	-	●
Togo	●	●	●	●	●
Trinidad and Tobago	●	-	●	●	●
Tunisia	●	●	●	-	●
Turkey	●	●	●	●	●
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	●	-	●
Ukraine	●	○	○	-	●
United Arab Emirates	●	●	●	●	●
United Kingdom	●	●	●	●	●
United Republic of Tanzania	●	●	●	●	○
United States Virgin Islands	●	●	●	●	●
United States of America	●	●	●	●	●
Uruguay	●	●	●	●	●
Uzbekistan	●	●	○	-	●
Vanuatu	-	-	●	-	-
Venezuela (Bolivarian Republic of)	●	-	●	●	●
Viet Nam	●	●	●	-	●
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	●	-	●
Zimbabwe	●	●	●	-	●

*

*unofficial sources and will be reviewed as more information become available. **Includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes co untries, territories, and areas that have never reported the detection of a variant of concern.*

See also Annex 2: Data, table, and figure notes

Annex 2. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Annex 3. Methods for Figures 6 and 7

- Figures include five studies from Denmark, South Africa, the United Kingdom, and the United States of America evaluating the VE against the Omicron variant, and 19 studies of the VE against the Delta variant from various countries from the European Region and Region of the Americas, as well as Qatar, Malaysia and Singapore.
- VE studies included in the plot were identified from an ongoing systematic review of COVID-19 vaccine effectiveness studies. All studies were cohort or test-negative studies. Methods for the systematic review and inclusion/exclusion criteria are available on view-hub.org. The studies were conducted during a period when either Delta or Omicron was the predominant circulating variant. Estimates were included if they were of laboratory-confirmed cases of the Omicron or Delta variant. In addition, for the primary series VE, only studies providing VE estimates for discrete time intervals since vaccination, which evaluate changes in VE over time, are included.
- For the primary series VE, estimates are only included in the plot for studies that report VE for more than one time period.

- When the time interval post vaccination spanned two intervals in the plot, the estimate was placed in the time period (panel in the plot) based on the median time point of the interval.
- Estimates are not plotted if different vaccine products are combined to produce the VE estimate. Heterologous schedules are included if all individuals in the study received the vaccine products in the same order (for example, VE estimates of AstraZeneca-Vaxzevria primary series followed by Pfizer BioNTech-Comirnaty booster are included; VE estimates of AstraZeneca-Vaxzevria primary series followed by any mRNA booster are excluded).

Annex 4. Summary of primary series vaccine performance against Variants of Concern (data as of 4 February 2022)

	WHO Emergency Use Listing (EUL) Qualified Vaccines[+]								Vaccines without WHO EUL[+]	
	AstraZeneca-Vaxzevria/SII - Covishield	Beijing CNBG-BBIBP-CorV	Bharat-Covaxin	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Novavax-Covavax	Pfizer BioNTech-Comirnaty	Sinovac - Corona Vac	Anhui ZL-Recombinant	Gamaleya-Sputnik V
Alpha, Beta, Gamma										
Summary of VE*	*(see* update from 11 January 2022 *for details of vaccine performance against Alpha, Beta, and Gamma variants of concern*									
Delta										
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection									
- Severe disease+	↔$_{3}$	-	-	↓$_{1}$	↔ $_{4}$	-	↔ $_{7}$	-	-	-
- Symptomatic disease	↔to ↓↓$_{6}$	-	↓$_{1}$	-	↔$_{2}$	-	↔ to ↓$_{5}$	-	-	-
- Infection	↔to ↓$_{5}$	-	-	↓↓↓$_{1}$	↔ $_{6}$	-	↔ to ↓$_{6}$	-	-	-
Neutralization	↓$_{13}$	↓$_{2}$	↔ to ↓$_{4}$	↔ to ↓↓$_{10}$	↓$_{13}$	-	↔ to ↓$_{39}$	↓to ↓↓$_{9}$	↔ to ↓$_{2}$	↓to ↓↓↓$_{3}$
Omicron										
Summary of VE*	Reduced protection against infection and symptomatic disease; possible reduced protection against for severe disease but limited evidence									
- Severe disease+	-	-	-	-	-	-	↓↓/ ↓↓↓$_{2}$	-	-	-
- Symptomatic disease	↓↓↓$_{1}$	-	-	-	↓↓$_{1}$	-	↓↓↓$_{1}$	-	-	-
- Infection	↓↓↓$_{1}$	-	-	-	↓↓↓$_{3}$	-	↓↓↓$_{3}$	-	-	-
Neutralization	↓↓↓$_{6}$	↔to ↓↓↓$_{3}$	↓↓$_{1}$	↓↓$_{2}$	↓↓↓$_{15}$	-	↓↓↓$_{3}$ 2	↓↓to ↓↓↓$_{4}$	-	↓↓$_{1}$

refers to vaccine effectiveness and vaccine efficacy. *Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10 percentage point (pp) reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20 pp reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30 pp reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30 pp reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study. The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources Library. References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table. + Severe disease is defined differently across studies and may include outcomes such as hospitalization, critical disease, and other forms of 'severe' disease.

Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean a loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. Likewise, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection.
- Table 3 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than 4 months post final dose.
- Studies reporting VOC-specific VE estimates for full vaccination (≥7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca-Vaxzevria for infection (when a phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Neutralization studies that use samples collected >7 days and < 6 months after complete vaccination and that use an ancestral strain as the reference are included in the Table 3.

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COVID-19 Weekly Epidemiological Update

Edition 77, published 01 February 2022

In this edition:

- Global overview
- Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews
- Summary of the Weekly Operational Update

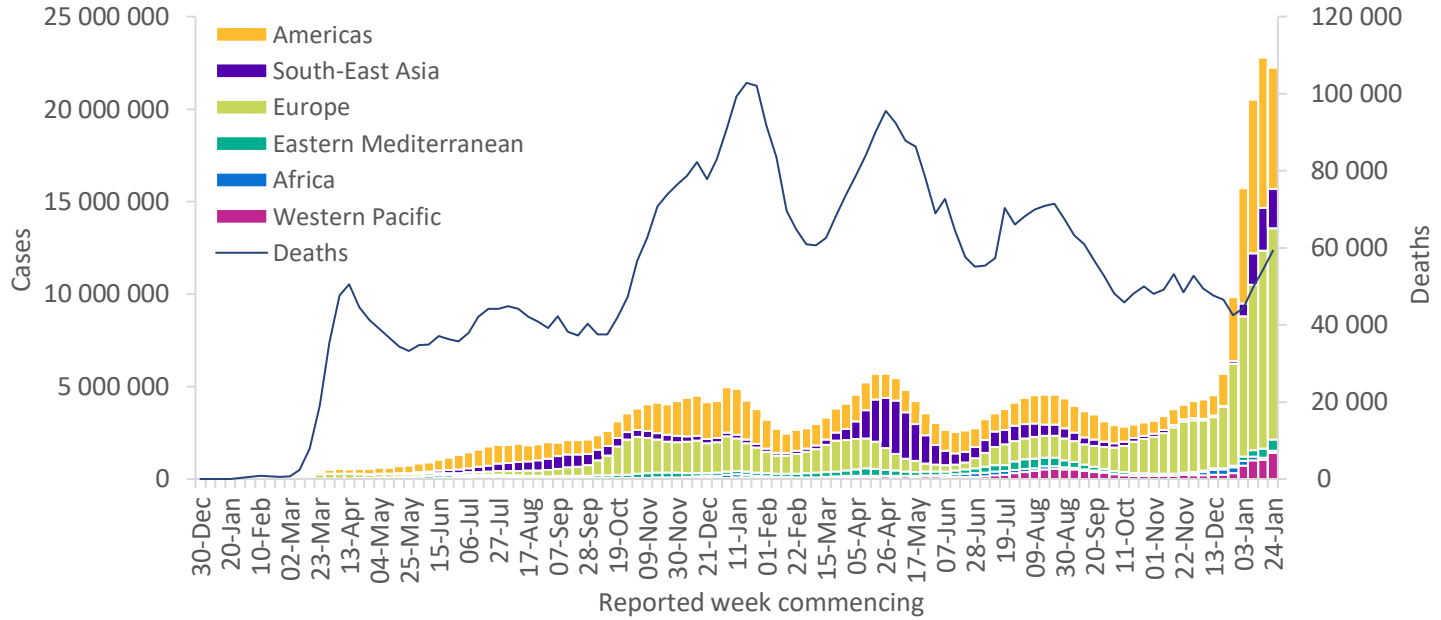
Global overview

Data as of 30 January 2022

Globally, during the week of 24 to 30 January 2022, the number of new COVID-19 cases remained similar to the number reported during the previous week, while the number of new deaths increased by 9% (figure 1). Across the six WHO regions, over 22 million new cases and over 59 000 new deaths were reported (table 1). As of 30 January 2022, over 370 million confirmed cases and over 5.6 million deaths have been reported globally.

At the Regional level, increases in the number of new cases were reported by the Western Pacific (37%) the Eastern Mediterranean (24%) and the European (7%) Regions, while decreases were reported by the Region of the Americas (20%) and the South-East Asia Region (8%). The number of new cases reported in the African Region remained similar to that of the previous week. The number of new weekly deaths continued to increase in the South-East Asia Region (41%), the Eastern Mediterranean Region (32%) and the Region of the Americas (16%), while the African Region reported a decrease of 7%. The incidence of deaths remained similar to the previous week in the European and the Western Pacific regions.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 30 January 2022**



**See *Annex 2: Data, table, and figure notes*

At the country level, the highest numbers of new cases were reported from the United States of America (3 279 226 new cases; a 34% decrease), France (2 357 129 new cases; similar to the previous week's figures), India (1 855 258 new cases; a 12% decrease), Brazil (1 283 024 new cases; a 56% increase), and Germany (1 055 768 new cases; a 48% increase). The highest number of new deaths were reported from the United States of America (13 558 new deaths; a 5% decrease), India (4682 new deaths; a 40% increase), the Russian Federation (4616 new deaths; similar to the previous week), Brazil (3321 new deaths; an 88% increase) and Italy (2618 new deaths; a 7% increase).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 30 January 2022**

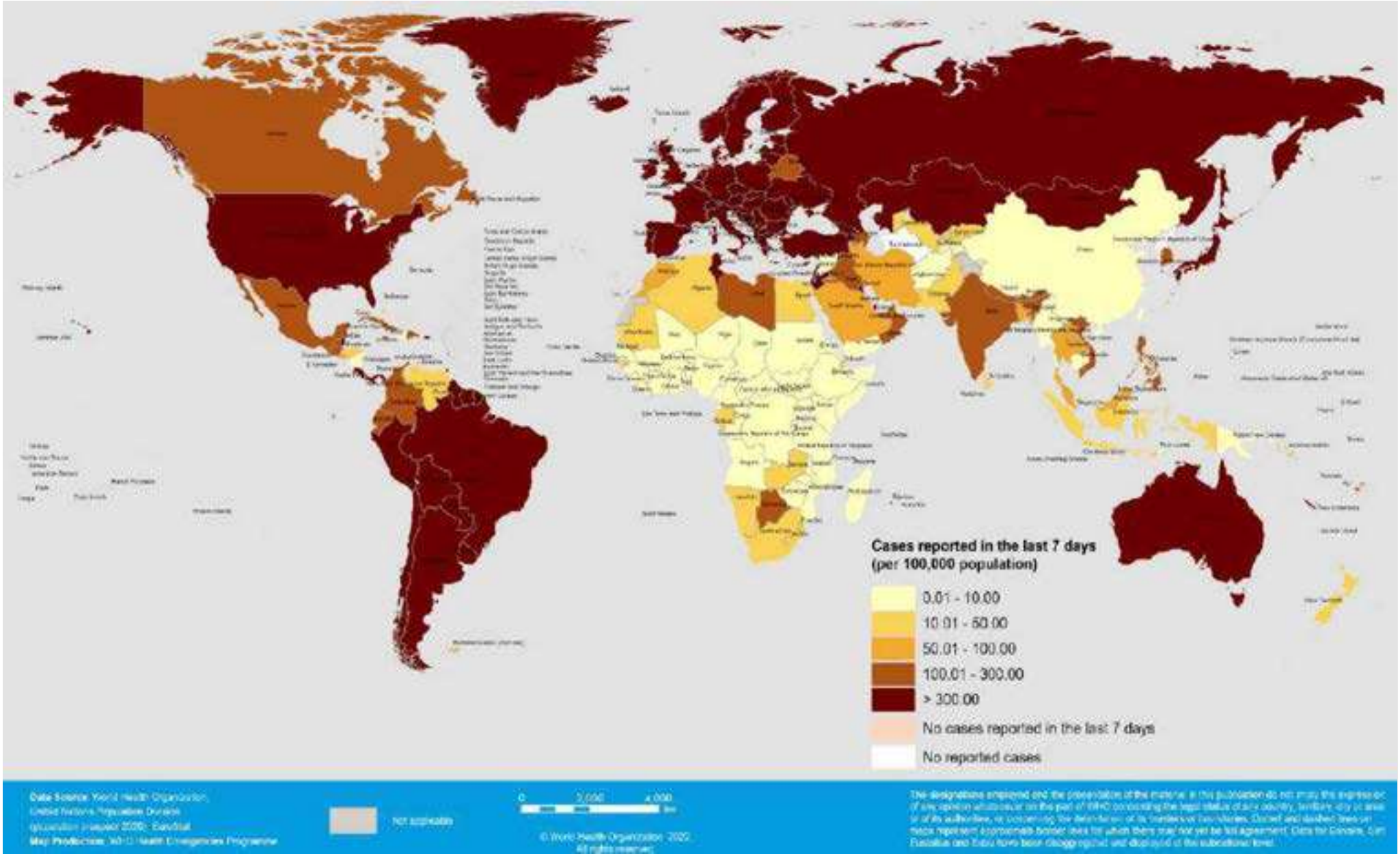
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	11 425 243 (51%)	7%	142 000 542 (38%)	21 586 (36%)	-2%	1 763 374 (31%)
Americas	6 548 409 (29%)	-20%	134 200 558 (36%)	26 553 (45%)	16%	2 497 750 (44%)
South-East Asia	2 136 512 (10%)	-8%	51 910 119 (14%)	5 237 (9%)	41%	735 780 (13%)
Western Pacific	1 407 547 (6%)	37%	15 573 280 (4%)	2 564 (4%)	0%	167 347 (3%)
Eastern Mediterranean	596 306 (3%)	24%	18 827 862 (5%)	1 624 (3%)	32%	321 124 (6%)
Africa	125 605 (1%)	-4%	8 059 088 (2%)	1 631 (3%)	-7%	164 002 (3%)
Global	**22 239 622 (100%)**	**-2%**	**370 572 213 (100%)**	**59 195 (100%)**	**9%**	**5 649 390 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 2: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

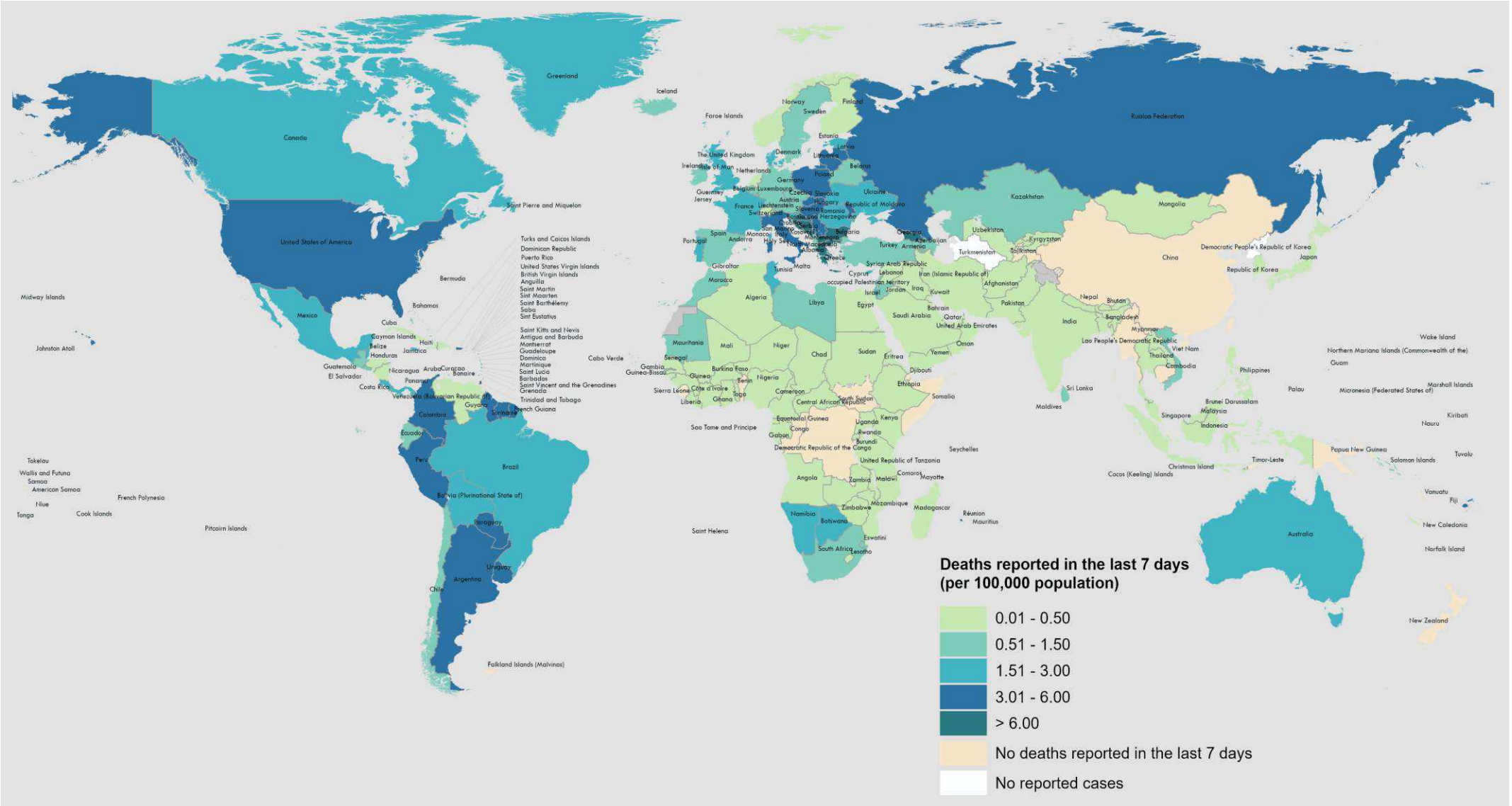
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 24 – 30 January 2022**



**See *Annex 2: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 24 – 30 January 2022**



Data Source: World Health Organization, United Nations Population Division (population prospect 2020), EuroStat
Map Production: WHO Health Emergencies Programme

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The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Data for Bonaire, Sint Eustatius and Saba have been disaggregated and displayed at the subnational level.

**See *Annex 2: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

The current global epidemiology of SARS-CoV-2 is characterized by the continued rapid global spread of the Omicron variant. All other variants, including VOCs (Alpha, Beta, Gamma and Delta) and VOIs (Lambda and Mu) continue to decline in all six WHO regions. Among the 433 223 sequences uploaded to GISAID with specimens collected in the last 30 days[i], 403 991 (93.3%) were Omicron, 29 004 (6.7%) were Delta, four (<0.1%) were Gamma, three (<0.1%) were Alpha, one (<0.1%) was Beta and two (<0.1%) comprised other circulating variants (VOIs Mu and Lambda). To note, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

The Omicron variant

Since the designation of B.1.1.529 as a VOC on 26 November 2021, several Omicron lineages have been identified. These include Pango lineages BA.1, BA.1.1, BA.2 and BA.3, which are all being monitored by WHO under the umbrella of 'Omicron'. The common origin of these lineages has not yet been elucidated and it is not clear to date how and where the Omicron parental variant or the descendent lineages originated and further evolved.

The Omicron variant-defining constellation of mutations fully overlaps with Pango lineage BA.1 (including lineage BA.1.1), and this accounts for 96.4% of sequences submitted to GISAID as of 31 January 2022. Most evidence we have to date about Omicron is therefore based on this Pango lineage. A relative increase in the BA.2 variant, which differs from BA.1 in some of the mutations, including in the spike protein, has been observed in multiple countries. BA.2-designated sequences have been submitted to GISAID from 57 countries to date, with the weekly proportion of BA.2 relative to other Omicron sequences rising to over 50% during the last six weeks in several countries. Investigations into the characteristics of BA.2, including transmissibility, immune escape properties and virulence, should be prioritized independently (and comparatively) to BA.1 (WHO Tracking SARS-CoV-2 variants website). It is important to consider the relative proportions of BA.1 and BA.2 sequences in the context of the case incidence when interpreting the data.

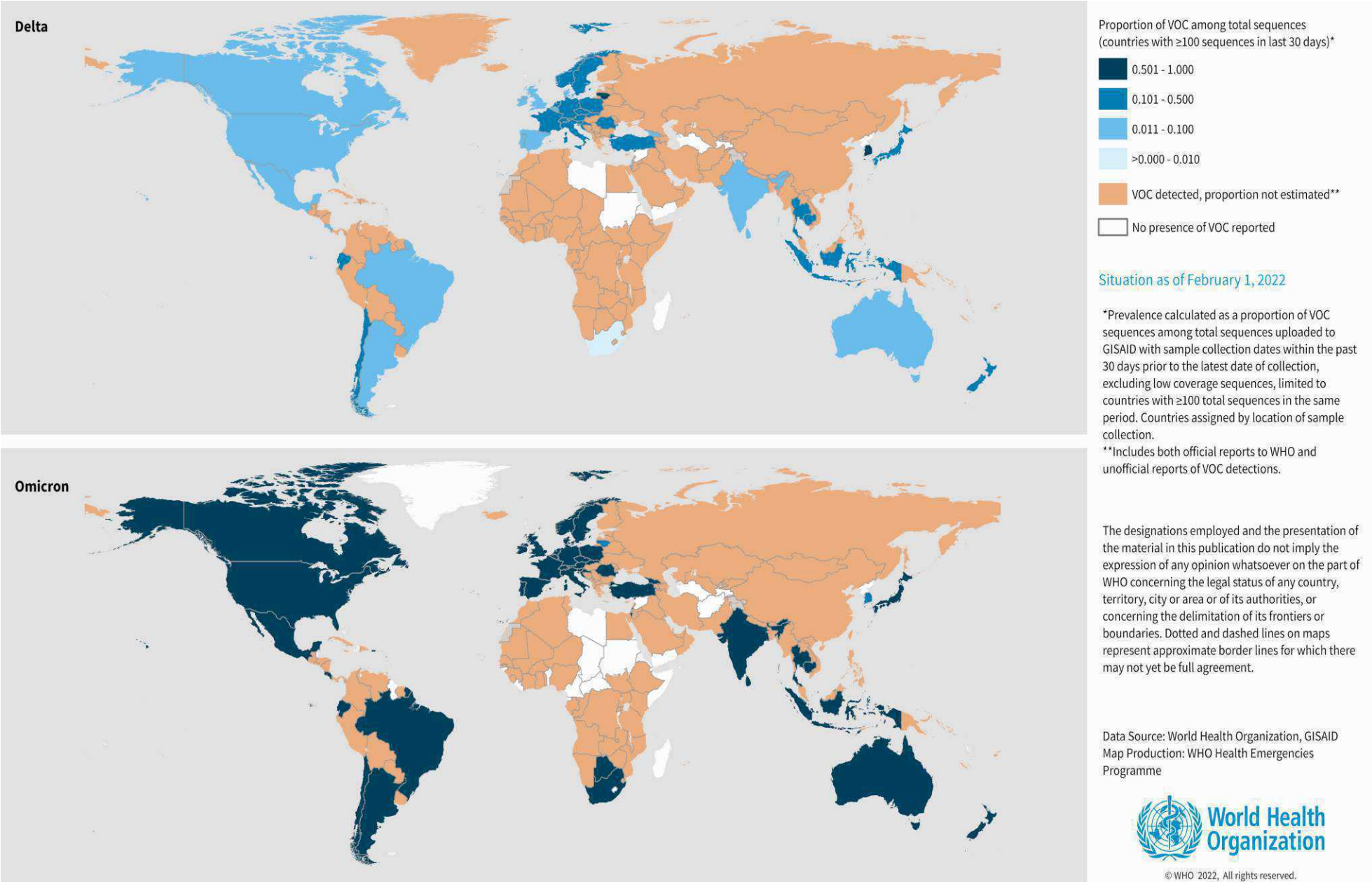
WHO continues to monitor circulating and emerging variants and to identify and address relevant knowledge gaps through the development of coordinated, multi-layered surveillance, preparedness, and response strategies for addressing COVID-19.

[i] Includes sequences submitted to GISAID with sample collected dates from 31 December 2021 to 29 January 2022 (last reported sample at the time of data extraction), excluding low coverage sequences)

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Figure 4: Prevalence of variants of concern (VOCs) Delta and Omicron in the last 30 days, data as of 1 February 2022



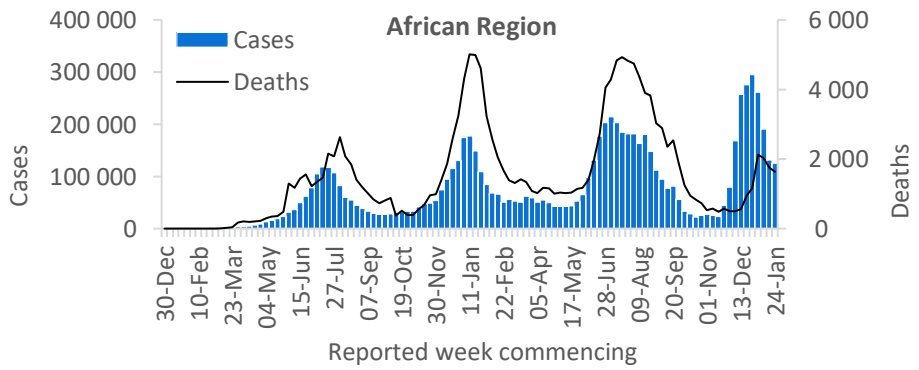
See also Annex 2 for reported VOC detections by country/territory/area

WHO regional overviews Epidemiological week 24 – 30 January 2022

African Region

The African Region reported over 125 000 new cases, similar to the number reported during the previous week. This follows on from a decreasing trend in new cases that has been observed for over a month. However, six countries (12%) reported increases of 20% or greater, with the highest increases reported from the Central African Republic (410 vs 190 new cases, a 116% increase), Lesotho (277 vs 165 new cases, a 68% increase) and Algeria. The highest numbers of new cases continued to be reported from Réunion (46 914 new cases; 5240.0 new cases per 100 000 population; a 49% increase), South Africa (22 202 new cases; 37.4 new cases per 100 000; similar to the previous week's figures), and Algeria (14 774 new cases; 33.7 new cases per 100 000; a 63% increase).

The number of new weekly deaths continued to decline in the Region with over 1600 new deaths reported, a 7% decrease as compared to the previous week. The highest numbers of new deaths were reported from South Africa (842 new deaths; 1.4 new deaths per 100 000 population; a 7% increase), Ethiopia (91 new deaths; <1 new death per 100 000; a 13% decrease), and Algeria (74 new deaths; <1 new death per 100 000; similar to the previous week's figures).

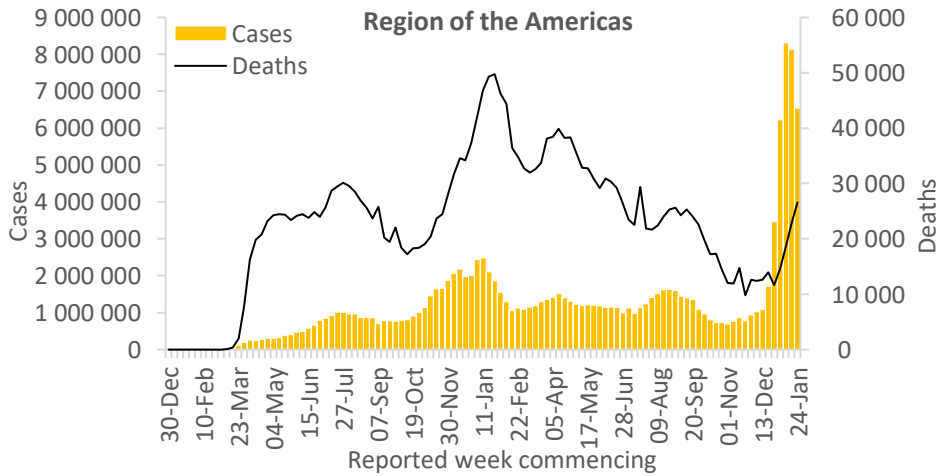


Updates from the African Region

Region of the Americas

Since mid-January 2022, the Region of the Americas has continued to report a decrease in the number of new cases, with over 6.5 million cases reported this week, a 20% decrease as compared to the previous week. Only four countries reported increases of 20% or greater including: the Falkland Islands (3 vs 1 new case, a 200% increase), Chile (157 937 vs 82 574 new cases, a 91% increase), El Salvador (6250 vs 3435 new cases, an 82% increase) and Brazil. The highest numbers of new cases were reported from the United States of America (3 279 226 new cases; 990.7 new cases per 100 000; a 34% decrease), Brazil (1 283 024 new cases; 603.6 new cases per 100 000; a 56% increase), and Argentina (619 108 new cases; 1369.8 new cases per 100 000; a 19% decrease).

Over 26 000 new weekly deaths were reported in the Region, corresponding to a 16% increase as compared to the previous week. The highest numbers of new deaths continued to be reported from the United States of America (13 558 new deaths; 4.1 new deaths per 100 000; a 5% decrease), Brazil (3321 new deaths; 1.6 new deaths per 100 000; an 88% increase), and Mexico (2066 new deaths; 1.6 new deaths per 100 000; a 67% increase).

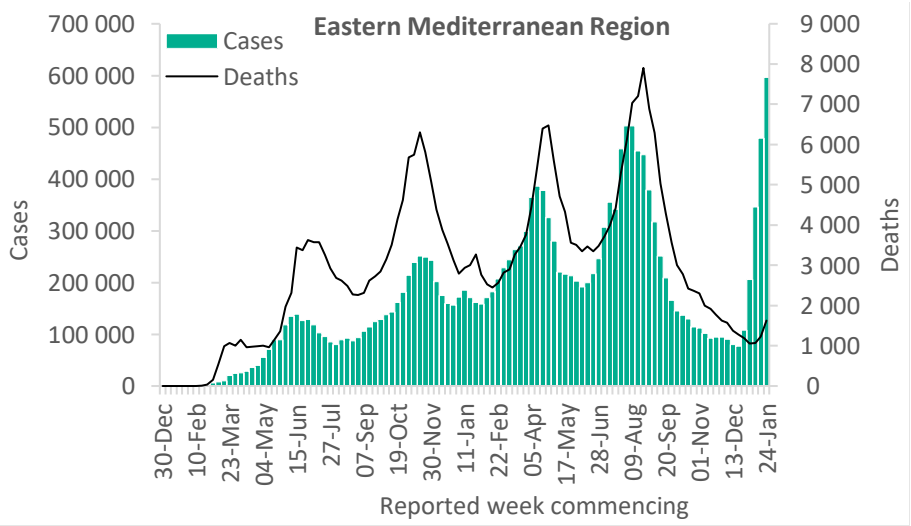


Updates from the Region of the Americas

Eastern Mediterranean Region

Since the end of December 2021, the Eastern Mediterranean Region reported a continued increase in new cases. During the last week, over 596 000 new cases were reported, a 24% increase as compared to the previous week. Over half of the countries (13/22, 59%) reported increases of 20% or greater, with the highest increases reported from the occupied Palestinian territory (33 080 vs 7293 new cases; 354% increase), the Islamic Republic of Iran and Libya (16 399 vs 6692 new cases; a 145% increase). The highest numbers of new cases were reported from the Islamic Republic of Iran (76 837 new cases; 91.5 new cases per 100 000; a 189% increase), Jordan (63 153 new cases; 619.0 new cases per 100 000; a 72% increase), and Tunisia (54 346 new cases; 459.8 new cases per 100 000; an 18% decrease).

Over 1600 new weekly deaths were reported in the Region, a 32% increase as compared to the previous week. The highest numbers of new deaths were reported from Tunisia (275 new deaths; 2.3 new deaths per 100 000; a 55% increase), Egypt (236 new deaths; <1 new death per 100 000; a 14% increase) and Morocco (215 new deaths; <1 new death per 100 000; a 43% increase).

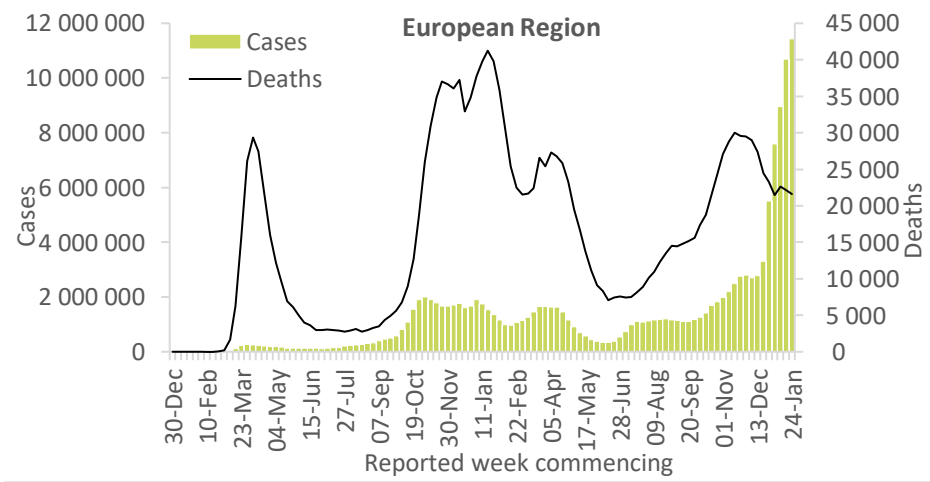


Updates from the Eastern Mediterranean Region

European Region

Since mid-December 2021, the number of new cases has continued to rise, with the Region reporting over 11.4 million new cases this week, a 7% increase as compared to the previous week. Twenty-three countries (38%) reported an increase greater than 20%, with the highest increases reported from Armenia (14 722 vs 4094 new cases; a 260% increase), Azerbaijan (19 307 vs 7116 new cases; a 171% increase), and Tajikistan (143 vs 59 new cases; a 142% increase). The highest numbers of new cases were reported from France (2 357 129 new cases; 3624.2 new cases per 100 000; similar to the previous week's figures), Germany (1 055 768 new cases; 1269.5 new cases per 100 000; a 48% increase), and Italy (1 040 184 new cases; 1744.1 new cases per 100 000; a 16% decrease).

The number of weekly deaths in the Region remained similar to that of the previous week with over 21 000 reported. The highest numbers of new deaths were reported from the Russian Federation (4616 new deaths; 3.2 new deaths per 100 000; similar to the previous week's figures), Italy (2618 new deaths; 4.4 new deaths per 100 000; a 7% increase), and France (1881 new deaths; 2.9 new deaths per 100 000; a 19% increase).

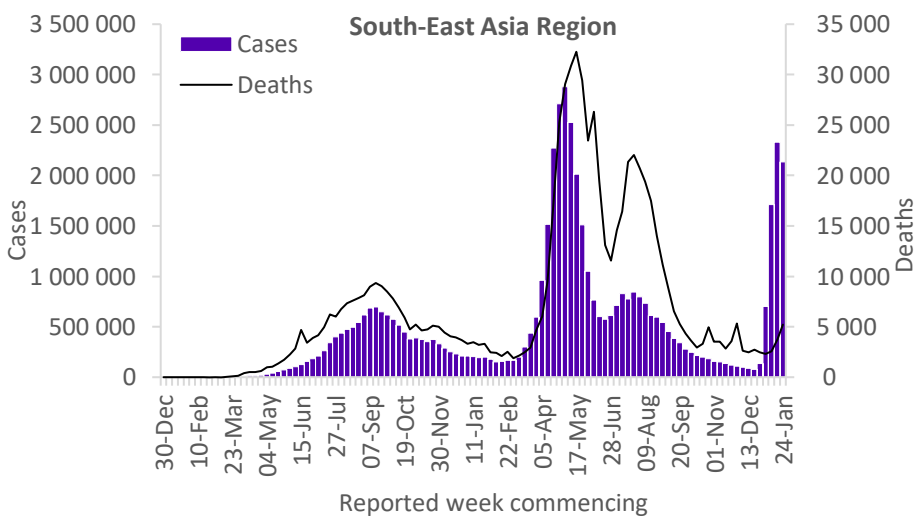


Updates from the European Region

South-East Asia Region

Following an increase in the number of new cases over the past month, the number of new cases in the South-East Asia Region decreased, with over 2.1 million new cases reported this week, an 8% decrease as compared to the previous week. However, seven out of ten countries in the region reported an increase greater than 20% in the number of new weekly cases, with the largest increases reported from Timor-Leste (69 vs 5 new cases; a 1280% increase), Indonesia and Bangladesh. The highest numbers of new cases were reported from India (1 855 258 new cases; 134.4 new cases per 100 000; a 12% decrease), Bangladesh (100 196 new cases; 60.8 new cases per 100 000; a 49% increase), and Indonesia (56 807 new cases; 20.8 new cases per 100 000; a 286% increase).

The number of new deaths in the Region increased by 41% as compared to the previous week, with over 5200 new deaths reported. The highest numbers of new deaths were reported from India (4682 new deaths; <1 new death per 100 000; a 40% increase), Bangladesh (140 new deaths; <1 new death per 100 000; a 77% increase), and Thailand (125 new deaths; <1 new death per 100 000; a 17% increase).

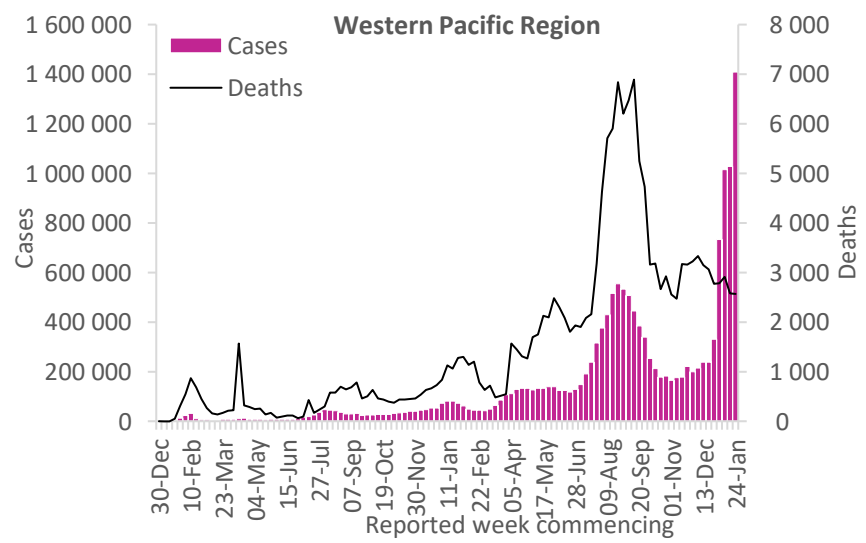


Updates from the South-East Asia Region

Western Pacific Region

The number of new cases in Western Pacific Region increased by 37% as compared to the previous week, with over 1.4 million new cases reported. Half of the countries in the Region (n=14) reported increases of over 20% in new cases, with the highest proportional increases reported from Papua New Guinea (339 vs 81 new cases; a 319% increase), Kiribati (142 vs 39 new cases; a 264% increase) and Palau (1021 vs 319, a 220% increase). The highest numbers of new cases continued to be reported from Australia (499 935 new cases; 1960.5 new cases per 100 000; a 65% increase), Japan (463 354 new cases; 366.4 new cases per 100 000; a 73% increase), and the Philippines (141 339 new cases; 129.0 new cases per 100 000; a 36% decrease).

The number of new weekly deaths in the Region remained similar to that of the previous week, with over 2500 new deaths reported. The highest numbers of new deaths were reported from Viet Nam (951 new deaths; 1.0 new death per 100 000; an 15% decrease), Australia (565 new deaths; 2.2 new deaths per 100 000; a 31% increase) and the Philippines (465 new deaths; <1 new death per 100 000; a 15% decrease).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 1 February, highlights include the following:

- Receiving 230 Oxygen Cylinders in Suriname, donated by Germany and the Region of the Americas
- Holding the first mentors training in the World Health Emergencies Balkan Hub, marking one year of COVID-19 vaccination in India
- Setting up country support teams to scale up COVID-19 vaccination in the WHO African Region
- Supporting Iraq with over 20 tons of medical supplies to enhance national response to COVID-19 health challenges in the Kurdistan region
- Receiving COVID-19 vaccines in the Lao People's Democratic Republic, donated by the United States of America through the COVAX Facility
- Strengthening occupational health and safety in Japan during the pandemic
- Hosting the first Regional team member training at the Emergency Medical Teams (EMT) Training Centre for Africa
- Updates on WHO's financing to support countries on COVID-19 response implementation to suppress transmission, reduce exposure, and protect the vulnerable and save lives
- Progress on a subset of global indicators that demonstrate country and global progress to end the acute phase of the pandemic

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice

Annexes

Annex 1. List of countries/territories/areas reporting variants of concern as of 01 February 2022

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Afghanistan	●	-	●	-	-
Albania	●	-	○	-	○
Algeria	●	-	●	-	●
Andorra	○	○	○	-	-
Angola	●	●	●	●	●
Anguilla	●	-	●	-	●
Antigua and Barbuda	●	●	●	●	●
Argentina	●	●	●	●	●
Armenia	●	-	●	-	●
Aruba	●	●	●	●	●
Australia	●	●	●	●	●
Austria	●	●	●	●	●
Azerbaijan	●	-	○	-	●
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	●
Bangladesh	●	●	●	○	●
Barbados	●	-	●	●	●
Belarus	●	-	○	-	○
Belgium	●	●	●	●	●
Belize	●	-	●	●	-
Benin	●	●	●	●	-
Bermuda	●	●	●	-	●
Bhutan	●	●	●	-	●
Bolivia (Plurinational State of)	●	-	●	●	●
Bonaire	●	-	●	●	●
Bosnia and Herzegovina	●	●	○	●	○
Botswana	○	●	●	-	●
Brazil	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
British Virgin Islands	●	-	●	●	●
Brunei Darussalam	●	●	●	-	●
Bulgaria	●	●	●	-	○
Burkina Faso	●	●	●	-	●
Burundi	●	●	●	-	-
Cabo Verde	●	●	●	-	●
Cambodia	●	●	●	-	●
Cameroon	●	●	●	●	-
Canada	●	●	●	●	●
Cayman Islands	●	●	●	●	●
Central African Republic	●	●	●	-	-
Chad	●	●	●	-	-
Chile	●	●	●	●	●
China	●	●	●	●	●
Colombia	●	-	●	●	●
Comoros	●	●	●	-	-
Congo	●	●	●	●	○
Costa Rica	●	●	●	●	●
Croatia	●	●	○	●	●
Cuba	●	●	●	-	●
Curaçao	●	●	●	●	●
Cyprus	●	●	○	-	●
Czechia	●	●	●	●	●
Côte d'Ivoire	●	●	○	●	○
Democratic Republic of the Congo	●	●	●	-	●
Denmark	●	●	●	●	●
Djibouti	●	●	●	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Dominica	●	-	●	-	-
Dominican Republic	●	-	●	●	●
Ecuador	●	-	●	●	●
Egypt	●	-	●	-	●
El Salvador	●	-	●	●	○
Equatorial Guinea	●	●	●	●	-
Estonia	●	●	○	○	●
Eswatini	●	●	●	-	●
Ethiopia	●	●	●	○	●*
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	-	●	-
Fiji	○	-	●	-	●
Finland	●	●	●	●	●
France	●	●	●	●	●
French Guiana	●	●	●	●	●
French Polynesia	●	●	●	●	●
Gabon	●	●	●	●	○
Gambia	●	●	●	●	○
Georgia	●	○	●	-	●
Germany	●	●	●	●	●
Ghana	●	●	●	●	●
Gibraltar	●	-	○	-	●
Greece	●	●	●	●	●
Greenland	-	-	●	-	-
Grenada	●	-	●	●	●
Guadeloupe	●	●	●	●	●
Guam	●	●	●	●	●
Guatemala	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Guernsey	-	-	-	-	●
Guinea	●	●	●	-	●
Guinea-Bissau	●	●	●	-	-
Guyana	-	-	●	●	-
Haiti	●	-	●	●	-
Honduras	●	-	●	●	●
Hungary	●	○	○	●	●
Iceland	●	●	●	●	●
India	●	●	●	●	●
Indonesia	●	●	●	-	●
Iran (Islamic Republic of)	●	●	●	-	●
Iraq	●	●	●	●	●
Ireland	●	●	●	●	●
Israel	●	●	●	●	●
Italy	●	●	●	●	●
Jamaica	●	-	●	-	●
Japan	●	●	●	●	●
Jordan	●	●	●	●	●
Kazakhstan	●	○	●	-	●
Kenya	●	●	●	●	●
Kiribati	-	-	-	-	●*
Kosovo[1]	●	○	○	-	●
Kuwait	●	●	●	-	●
Kyrgyzstan	●	●	●	-	●
Lao People's Democratic Republic	●	-	●	-	○
Latvia	●	●	○	●	●
Lebanon	●	-	●	-	●
Lesotho	●	●	●	-	-
Liberia	●	●	●	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	○	○	○

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Lithuania	●	●	○	●	●
Luxembourg	●	●	●	●	●
Madagascar	●	●	-	○	-
Malawi	●	●	●	-	●
Malaysia	●	●	●	-	●
Maldives	●	-	●	-	●
Mali	●	●	●	-	○
Malta	●	○	○	●	●
Martinique	●	●	●	●	●
Mauritania	●	●	●	-	●
Mauritius	●	●	●	-	●
Mayotte	●	●	○	-	●
Mexico	●	●	●	●	●
Monaco	●	●	●	-	-
Mongolia	●	-	●	-	○
Montenegro	●	-	○	○	○
Montserrat	●	-	●	●	●
Morocco	●	●	●	-	●
Mozambique	●	●	●	-	●
Myanmar	●	-	●	-	●
Namibia	●	●	●	●	●
Nepal	●	-	●	-	●
Netherlands	●	●	●	●	●
New Caledonia	●	-	●	-	●
New Zealand	●	●	●	●	●
Nicaragua	●	●	●	●	●*
Niger	○	-	●	-	●
Nigeria	●	●	●	-	●
North Macedonia	●	●	○	-	○
Northern Mariana Islands (Commonwealth of the)	○	-	●	-	-
Norway	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Occupied Palestinian Territory	●	●	●	-	●
Oman	●	●	●	-	●
Pakistan	●	●	●	●	●
Palau	-	-	○	-	-
Panama	●	●	●	●	●
Papua New Guinea	-	-	●	-	●
Paraguay	●	-	●	●	●
Peru	●	-	●	●	●
Philippines	●	●	●	●	●
Poland	●	○	●	●	●
Portugal	●	●	●	●	●
Puerto Rico	●	●	●	●	●
Qatar	●	●	●	-	●
Republic of Korea	●	●	●	●	●
Republic of Moldova	●	-	●	-	○
Romania	●	●	●	●	●
Russian Federation	●	●	●	○	●
Rwanda	●	●	●	-	●
Réunion	●	●	○	●	●
Saba	-	-	●	-	-
Saint Barthélemy	●	-	●	-	●
Saint Kitts and Nevis	-	-	●	-	○
Saint Lucia	●	-	●	-	-
Saint Martin	●	●	●	-	●
Saint Pierre and Miquelon	-	-	●	-	-
Saint Vincent and the Grenadines	-	-	●	●	●
Sao Tome and Principe	●	●	○	-	-
Saudi Arabia	●	●	●	-	●
Senegal	●	●	●	-	●
Serbia	●	-	●	○*	○
Seychelles	●	●	●	-	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Sierra Leone	●	●	●	-	●
Singapore	●	●	●	●	●
Sint Maarten	●	●	●	●	●
Slovakia	●	●	●	-	●
Slovenia	●	●	●	●	●
Solomon Islands	-	-	●	-	●
Somalia	●	●	●	-	-
South Africa	●	●	●	●	●
South Sudan	●	●	●	-	●
Spain	●	●	●	●	●
Sri Lanka	●	●	●	-	●
Sudan	●	●	-	●	-
Suriname	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Sweden	●	●	●	●	●
Switzerland	●	●	●	●	●
Thailand	●	●	●	●	●
Timor-Leste	●	-	●	-	●
Togo	●	●	●	●	●
Trinidad and Tobago	●	-	●	●	●
Tunisia	●	●	●	-	●
Turkey	●	●	●	●	●
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	●	-	●
Ukraine	●	○	○	-	●
United Arab Emirates	●	●	●	●	●
United Kingdom	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
United Republic of Tanzania	●	●	●	●	○
United States Virgin Islands	●	●	●	●	●
United States of America	●	●	●	●	●
Uruguay	●	●	●	●	●
Uzbekistan	●	●	○	-	●
Vanuatu	-	-	●	-	-
Venezuela (Bolivarian Republic of)	●	-	●	●	●
Viet Nam	●	●	●	-	●
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	●	-	●
Zimbabwe	●	●	●	-	●

**Newly reported*

*unofficial sources and will be reviewed as more information become available. **Includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes co untries, territories, and areas that have never reported the detection of a variant of concern. See also Annex 2: Data, table, and figure notes*

Annex 2. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

COVID-19 Weekly Epidemiological Update

Edition 76, published 25 January 2022

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews
- Summary of the Weekly Operational Update

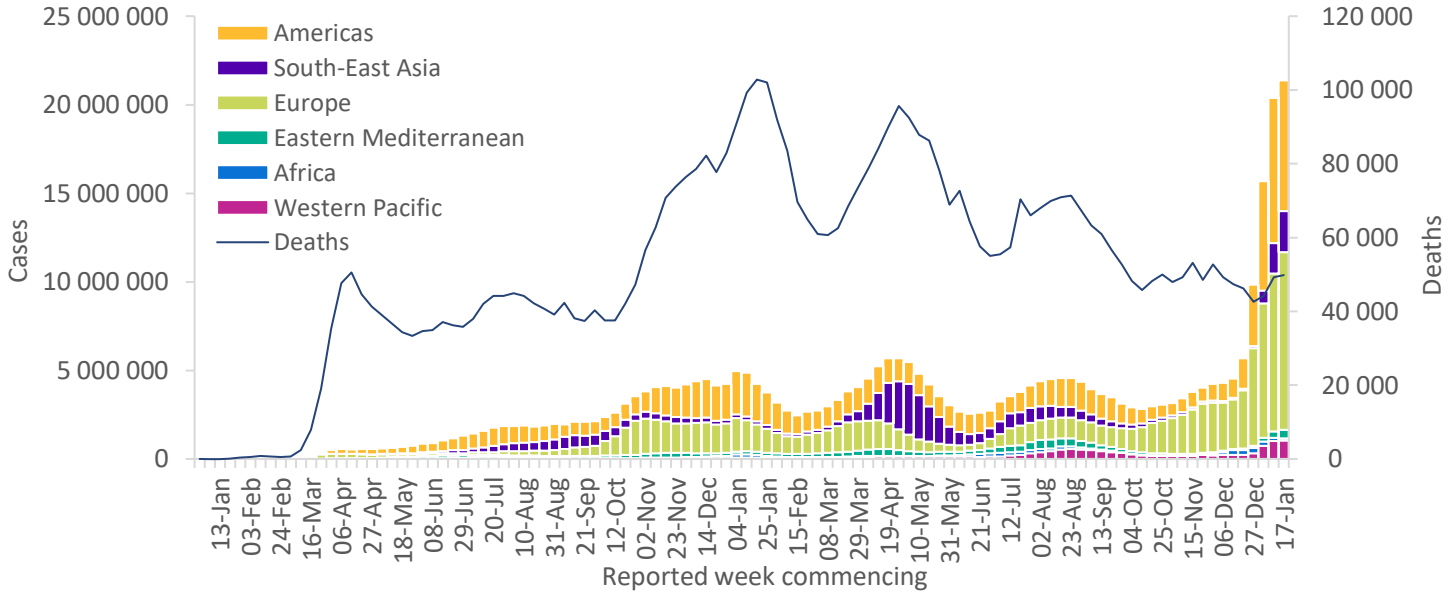
Global overview

Data as of 23 January 2022

Globally, the number of new COVID-19 cases increased by 5% in the past week (17-23 January 2022), while the number of new deaths remained similar to that reported during the previous week (Figure 1). Across the six WHO regions, over 21 million new cases were reported, representing the highest number of weekly cases recorded since the beginning of the pandemic. Nearly 50 000 new deaths were also reported. As of 23 January 2022, over 346 million confirmed cases and over 5.5 million deaths have been reported in total.

A slower increase in case incidence was observed at the global level, with only half of the regions reported an increase in the number of new weekly cases, as compared to five out of six regions in the previous week. The Eastern Mediterranean Region reported the largest increase in the number of new cases (39%), followed by the South-East Asia Region (36%) and the European Region (13%). The African Region reported the largest decrease in the number of new cases (31%), followed by the Region of the Americas (10%), while the number of new cases in the Western Pacific Region remained similar to that reported during the previous week. The number of new weekly deaths increased in the South-East Asia Region (44%), the Eastern Mediterranean Region (15%) and the Region of the Americas (7%), while the other Regions all reported declines in new weekly deaths.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 23 January 2022**



**See *Annex 2: Data, table, and figure notes*

At the country level, the highest numbers of new cases were reported from the United States of America (4 215 852 new cases; a 24% decrease), France (2 443 821 new cases; a 21% increase), India (2 115 100 new cases; a 33% increase), Italy (1 231 741 new cases; similar to the previous week), and Brazil (824 579 new cases; a 73% increase). The highest number of new deaths were reported from the United States of America (10 795 new deaths; a 17% decrease), the Russian Federation (4792 new deaths; a 7% decrease), India (3343 new deaths; a 47% increase), Italy (2440 new deaths; a 24% increase), and The United Kingdom (1888 new deaths; similar to the previous week's figures).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 23 January 2022**

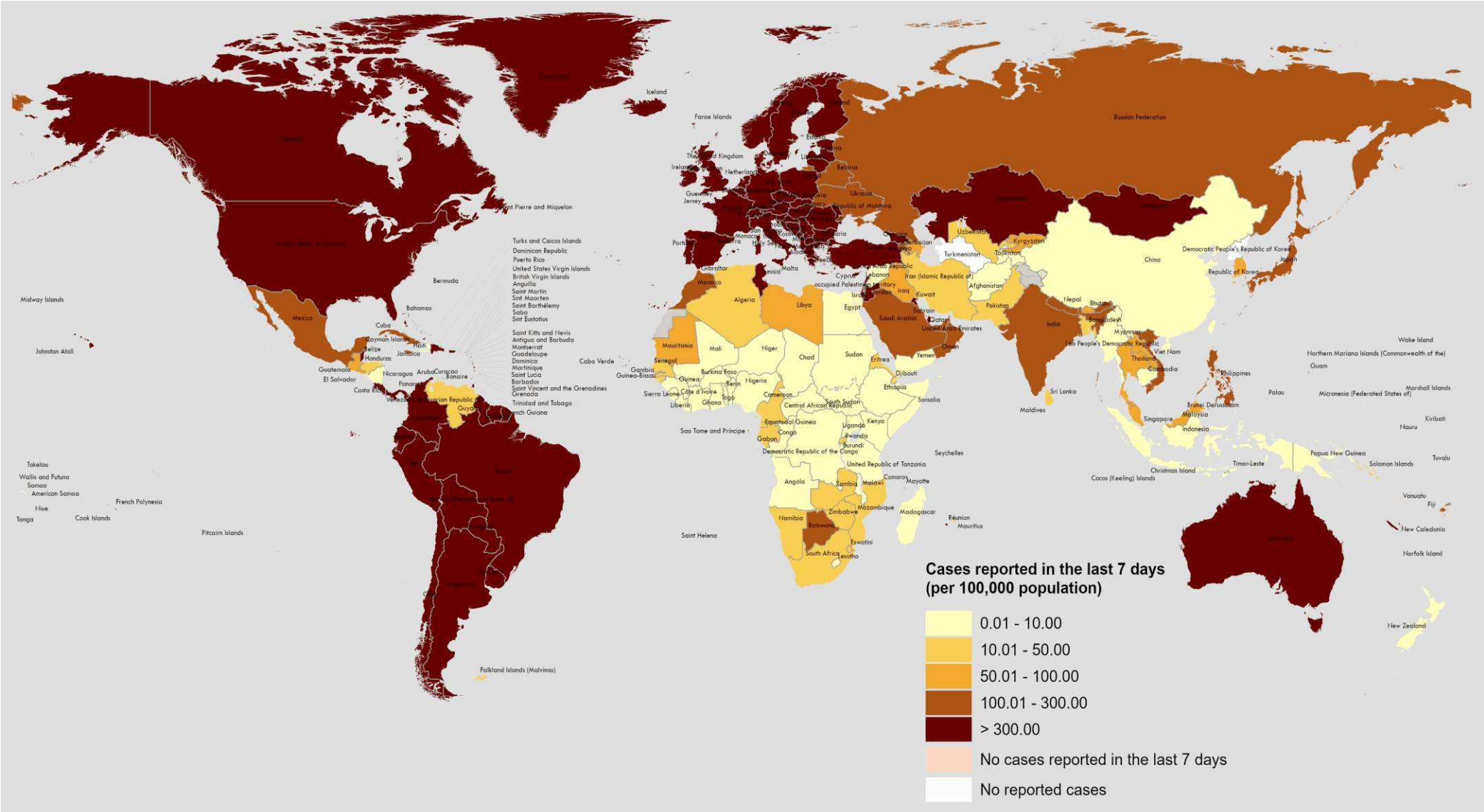
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	10 040 147 (47%)	13%	129 874 912 (37%)	21 259 (43%)	-5%	1 740 565 (31%)
Americas	7 356 674 (34%)	-10%	126 761 620 (37%)	19 357 (39%)	7%	2 466 600 (44%)
South-East Asia	2 327 997 (11%)	36%	49 773 607 (14%)	3 714 (7%)	44%	730 542 (13%)
Western Pacific	1 027 098 (5%)	1%	14 165 686 (4%)	2 576 (5%)	-12%	164 783 (3%)
Eastern Mediterranean	479 050 (2%)	39%	18 231 556 (5%)	1 232 (2%)	15%	319 500 (6%)
Africa	131 322 (1%)	-31%	7 933 483 (2%)	1 752 (4%)	-14%	162 371 (3%)
Global	**21 362 288 (100%)**	**5%**	**346 741 628 (100%)**	**49 890 (100%)**	**1%**	**5 584 374 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 2: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 17 January – 23 January 2022**



Data Source: World Health Organization, United Nations Population Division (population prospect 2020), EuroStat
Map Production: WHO Health Emergencies Programme

Not applicable

0 2 000 4 000 km

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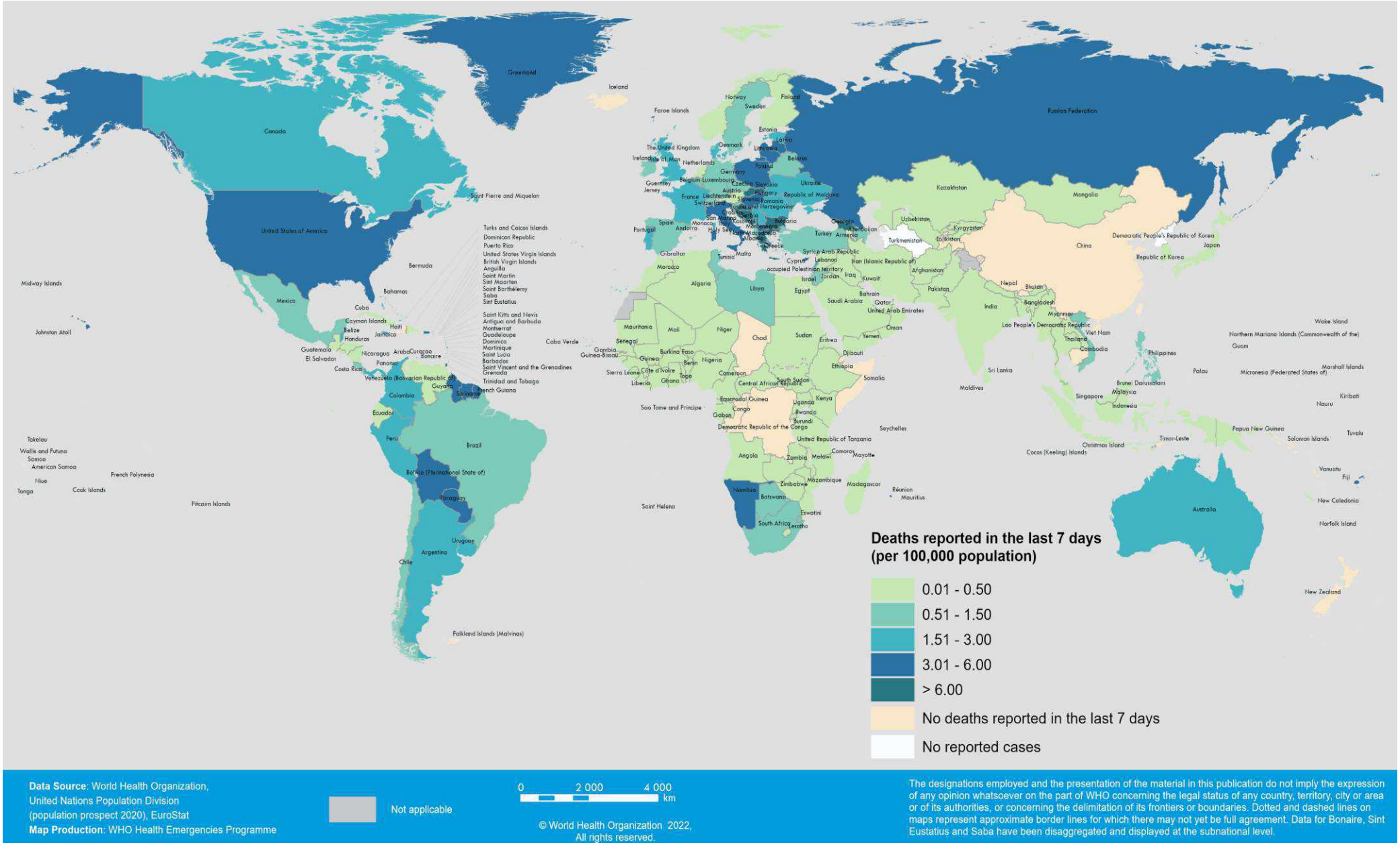
The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Data for Bonaire, Sint Eustatius and Saba have been disaggregated and displayed at the subnational level.

**See *Annex 2: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 17 January – 23 January 2022**



**See *Annex 2: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

The current global epidemiology of SARS-CoV-2 is characterized by the dominance of the Omicron variant on a global scale, continued decline in the prevalence of the Delta variant, and very low-level circulation of Alpha, Beta and Gamma variants. The Omicron variant includes Pango lineages B.1.1.529, BA.1, BA.2 and BA.3. BA.1 accounts for 98.8% of sequences submitted to GISAID as of 25 January 2022, although a number of countries have reported recent increases in the proportion of BA.2 sequences. All these variants are being monitored by WHO under the umbrella of 'Omicron'. Following the identification of travel-related cases of the Omicron variant, many countries are now reporting community transmission. Countries that experienced a rapid rise in Omicron cases in November and December 2021 have been or are beginning to see declines in cases.

Among the 372 680 sequences uploaded to GISAID with specimens collected in the last 30 days[i], 332 155 (89.1%) were Omicron, 39 804 (10.7%) were Delta, 28 (<0.1%) were Gamma, four (<0.1%) were Alpha and two (<0.1%) comprised other circulating variants (VOIs Mu and Lambda). To note, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

Differences in the characteristics of VOCs

Available evidence on the phenotypic impacts of VOCs is summarized in Table 2, as well as in previous editions of the COVID-19 Weekly Epidemiological Update. Since the last update on 11 January 2022, there are several new publications on the phenotypic characteristics of VOCs**,** including recent literature on Omicron. Some of the studies reported have not been peer-reviewed and the findings must therefore be interpreted with due consideration of this limitation.

Update on the Omicron VOC

This section provides a summary of the potential impact of the Omicron variant. Detailed information on this variant and related recommended priority actions for Member States can be found in the updated Technical Brief and Priority Actions for Member States that was published by WHO on 21 January 2022. Based on the currently available evidence, the overall risk related to the Omicron variant remains very high. Compared to other variants, Omicron has shown an increased ability to spread within the community, leading to a rapid increase in the numbers of new cases in multiple countries where it has replaced other variants, including Delta. Despite this, there appears to be a lower risk of severe disease and death following Omicron infection as compared to other variants. However, due to

[i] This includes sequences submitted to GISAID with sample collected dates from 25 December 2021 to 23 January 2022 (last reported sample at the time of data extraction), excluding low coverage sequences.

the very high numbers of cases, many countries have seen a significant increase in the incidence of hospitalization, putting pressure on healthcare systems.

Transmissibility

The Omicron variant has a significant growth advantage, a higher secondary attack rate and a higher observed reproduction number as compared to the Delta variant, and as a result, it is rapidly replacing the latter globally. It is thought that this transmission advantage is largely due to Omicron's ability to evade immunity following infection and/or vaccination. However, compared to the Delta variant, Omicron is able to more rapidly infect the tissues of upper respiratory tract rather than the lungs, which may also help the spread of this variant. Studies conducted in the United Kingdom and Denmark showed that household contacts of cases with the Omicron variant were more likely to be infected as compared to those who were contacts of cases with the Delta variant: the household secondary attack rate in the study conducted in the United Kingdom was 13.6% for the Omicron as compared to 10.1% for the Delta variant; and for the study conducted in Denmark, 31% for the Omicron as compared to 21% for the Delta variant.[1] Additionally, studies conducted in India and South Africa have reported a higher proportion of asymptomatic infection at the time of testing among individuals infected with Omicron compared to infection with Delta. The higher occurrence of asymptomatic presentation may result in a lower rate of detection, and thus may further contribute to transmission.[2]

Disease severity

Epidemiological trends continue to show a decoupling between case incidence, hospital admissions and deaths in most countries, when compared to epidemic waves due to previous variants. This is likely due to a combination of the lower intrinsic severity of the Omicron variant (including increased likelihood of replication in the upper respiratory tract rather than the lungs), and preservation of protection against severe disease following vaccination.

Several studies have evaluated the risk of hospitalization and severe disease with Omicron as compared to Delta. An analysis from the United Kingdom Health Security Agency with the Medical Research Council (MRC) Biostatistics Unit, the University of Cambridge, showed a 47% reduction in the risk of presentation to emergency care or hospital admission with Omicron compared to Delta (Hazard Ratio [HR] 0.53, 95%CI 0.50-0.57) and 66% reduction in the risk of admission from emergency departments (HR 0.33, 95%CI 0.3-0.37).[3] However, uncertainty remains about the severity and the impact on hospitalizations in populations with low vaccination coverage or prior exposure to SARS-CoV-2 infection.

Impact on immunity

The Omicron variant has an increased ability to evade immunity as compared to prior variants, causing re-infections in those who have had a previous infection and in those who have been vaccinated. Here we summarise the risk of re-infection as further details on vaccine effectiveness are given in the section on vaccines below. A study conducted in the United Kingdom found that, when compared to the Delta variant, the risk of reinfection with the Omicron variant was 5.4-fold higher.[4] In those who were unvaccinated, this risk was slightly higher at 6.4-fold and in those who were vaccinated, slightly lower at 5.0-fold. A separate study conducted in the United Kingdom found that those who had a lower viral load (higher Ct value) during their previous infection were at a higher risk of reinfection.[5]

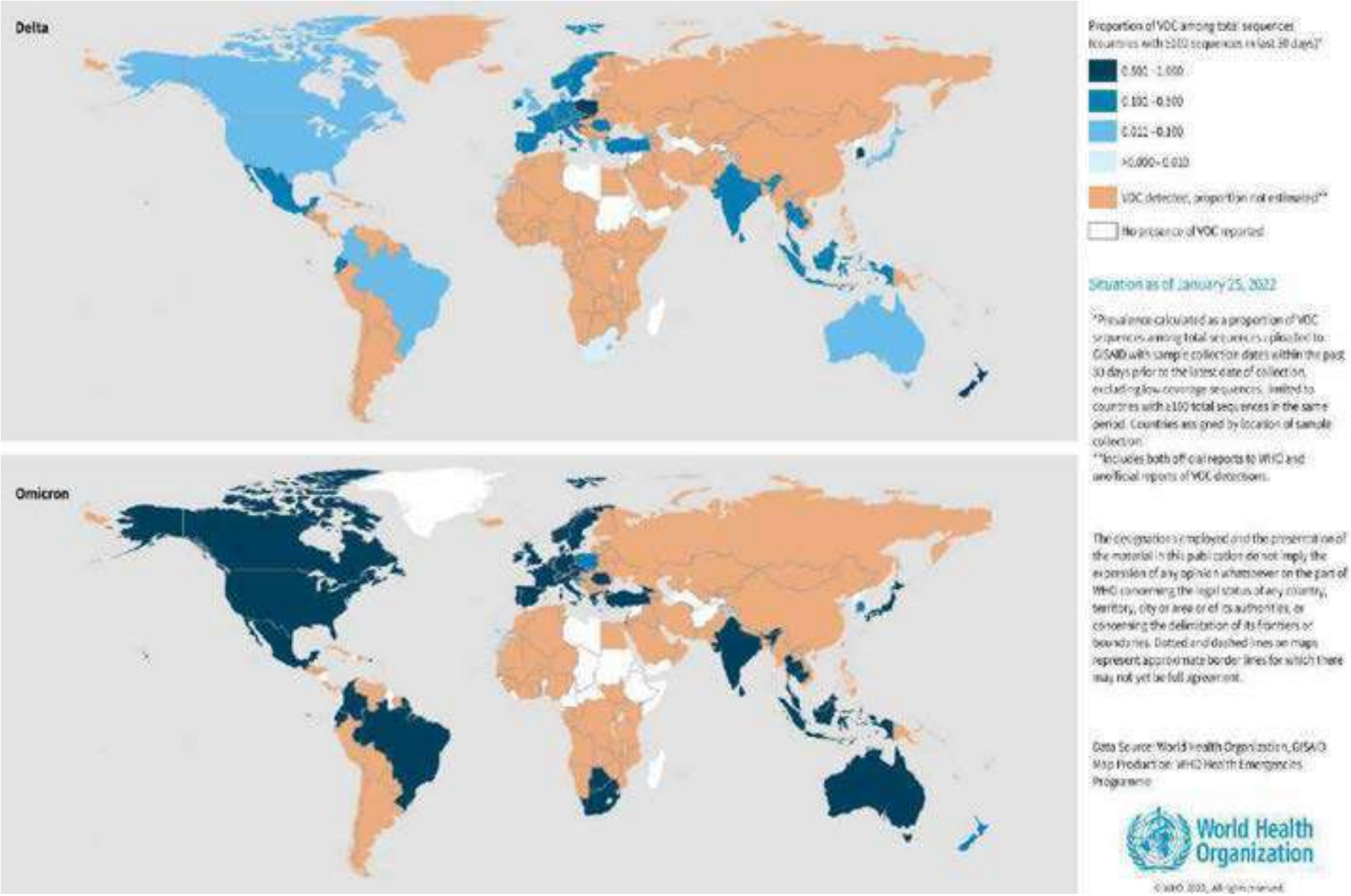
Impact on therapeutics

There is ongoing research to understand the impact of the Omicron variant on therapeutics and treatments. It is expected that corticosteroids and drugs which block the cytokine interleukin 6 (IL-6) will remain effective in those with severe disease. However, preliminary data from non-peer-reviewed publications suggest that some of the monoclonal antibodies may be less effective against the Omicron variant.

Impact on diagnostics and testing

WHO continues to assess the impact of Omicron on diagnostics; however, the diagnostic accuracy of routinely used PCR and the WHO emergency use listing (EUL) approved antigen-detection rapid diagnostic test assays does not appear to be significantly impacted by Omicron.

Figure 4: Prevalence of variants of concern (VOCs) Delta and Omicron in the last 30 days, data as of 25 January 2022



See also Annex 2 for reported VOC detections by country/territory/area

Table 2: Summary of phenotypic impacts* of variants of concern

WHO label	Alpha	Beta	Gamma	Delta	Omicron
Transmissibility	Increased transmissibility[6]	Increased transmissibility[7,8]	Increased transmissibility[8,9]	Increased transmissibility [8,10,11]	Increased transmissibility.[12–15]
Disease severity	Possible increased risk of hospitalization[16,17], possible increased risk of severe disease and death[18,19]	Possible increased risk of hospitalization[17], possible increased in-hospital mortality[20]	Possible increased risk of hospitalization[17], possible increased risk of severe disease[21]	Possible increased risk of hospitalization[22,23]	Reduced risk of hospitalization and severe disease [24–27]
Risk of reinfection	Neutralizing activity retained[28], risk of reinfection remains similar[29]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[30]	Moderate reduction in neutralizing activity reported[31]	Reduction in neutralizing activity reported[32–34]	Increased risk of reinfection [35,36]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF), no impact on overall result from multiple target RT-PCR; No impact on Ag RDTs observed[37]	No impact on RT-PCR or Ag RDTs observed[34]	None reported to date	No impact on RT-PCR or Ag RDTs observed[38]	PCR continues to detect Omicron. Impact on Ag-RDTs is under investigation: Results are mixed as to whether or not there may be decreased sensitivity to detect Omicron. [12,27,39–41]

**Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.*

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Table 3. Summary of vaccine performance against variants of concern (data as of 23 January 2022)

	WHO Emergency Use Listing (EUL) Qualified Vaccines[+]								Vaccines without WHO EUL[+]	
	AstraZeneca-Vaxzevria/SII - Covishield	Beijing CNBG-BBIBP-CorV	Bharat-Covaxin	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Novavax-Covavax	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Gamaleya-Sputnik V
Alpha, Beta, Gamma										
Summary of VE*	*(see update from 11 January 2022 for details of vaccine performance against Alpha, Beta, and Gamma variants of concern*									
Delta[9]										
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection									
- Severe disease[+]	↔$_{3}$	-	-	↓$_{1}$	↔$_{4}$	-	↔$_{7}$	-	-	-
- Symptomatic disease	↔to↓↓$_{6}$	-	↓$_{1}$	-	↔$_{2}$	-	↔ to ↓$_{5}$	-	-	-
- Infection	↔to ↓$_{4}$	-	-	↓↓↓$_{1}$	↔$_{5}$	-	↔ to ↓$_{5}$	-	-	-
Neutralization	↓$_{13}$	↓$_{2}$	↔ to ↓$_{3}$	↔ to ↓↓$_{9}$	↓$_{14}$	↓$_{1}$	↔ to ↓$_{39}$	↓to↓↓$_{8}$	↔ to ↓$_{2}$	↓to↓↓$_{3}$
Omicron										
Summary of VE*	Reduced protection against infection and symptomatic disease; possible reduced protection against severe disease									
- Severe disease[+]	-	-	-	-	-	-	↓↓/↓↓↓$_{2}$	-	-	-
- Symptomatic disease	↓↓↓$_{1}$	-	-	-	↓↓$_{1}$	-	↓↓↓$_{1}$	-	-	-
- Infection	-	-	-	-	↓↓↓$_{2}$	-	↓↓↓$_{2}$	-	-	-
Neutralization	↓↓↓$_{5}$	-	-	↓↓$_{2}$	↓↓↓$_{14}$	↓↓$_{1}$	↓↓↓$_{23}$	↓↓-↓↓↓$_{2}$	-	↓↓↓$_{1}$

VE refers to vaccine effectiveness and vaccine efficacy. *Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10% reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20% reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30% reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30% reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study. The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources Library. References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table. + Severe disease is defined differently across studies and may include outcomes such as hospitalization, critical disease, and other forms of 'severe' disease.

Table 3 summarizes the impact of the Delta and Omicron variants on product specific vaccine efficacy/effectiveness (VE) and quantifies the reduction in the VE in the setting of variants compared to non-VOC settings.

Omicron VOC

Since the 11 January update, three new studies have provided additional evidence of reduced vaccine effectiveness of mRNA vaccines against infection and symptomatic disease due to the Omicron variant.[1–3] These studies report decreased VE of two doses of mRNA vaccines against infection and symptomatic disease due to the Omicron variant compared to the Delta variant within the first few months of receipt of the second dose, with VE estimates decreasing more rapidly with increasing time from completion of the primary series.

A peer-reviewed study from the United States of America reported VE estimates against symptomatic disease of approximately 40% and 30% for Moderna-mRNA-1273 and Pfizer BioNTech-Comirnaty, respectively, one month following two doses of vaccination. However, by 6-7 months following the second dose, VE had declined to 0% for both vaccines.[42]

A second study of adults in the United States of America (not yet peer reviewed) provides new evidence of the VE of Pfizer BioNTech-Comirnaty against hospitalization due to the Omicron variant.[2] The vaccine was 70% effective at preventing hospitalization due to Omicron within the first 3 months of the second dose with no decrease in VE found at 6 months. This same study found a third dose of Pfizer BioNTech-Comirnaty increased VE against hospitalization due to Omicron to 89% (83-92%) which was sustained at 3-5 months. However, a VE against emergency department visits not leading to hospital admission decreased from 78% (95%CI 73-82%) immediately following the third dose to 48% (95%CI 14-69%) at 6 months or more. [42]

In addition to VE against hospitalization, the three studies also showed that a third dose of mRNA vaccine increased VE from 0% to 62-78% for infection and symptomatic disease in the first 3-5 months following a third dose.

Delta VOC

Five new studies (four pre-prints and on peer-reviewed study) provided further evidence of performance of two doses of vaccine against the Delta variant.[43–47] The VE of the Pfizer BioNtech-Comirnaty vaccine against infection and symptomatic disease within 1-3 months after receipt of the second dose ranged from 80-91% but decreased with increasing time to a VE of 53-79% at four or more months following the second dose. The VE against hospitalization for Pfizer BioNtech-Comirnaty was high (88-95%) after the second dose. However, one study showed a reduction in the VE against hospitalization to 74% (65-80%) at six or more months following the second dose.[43]

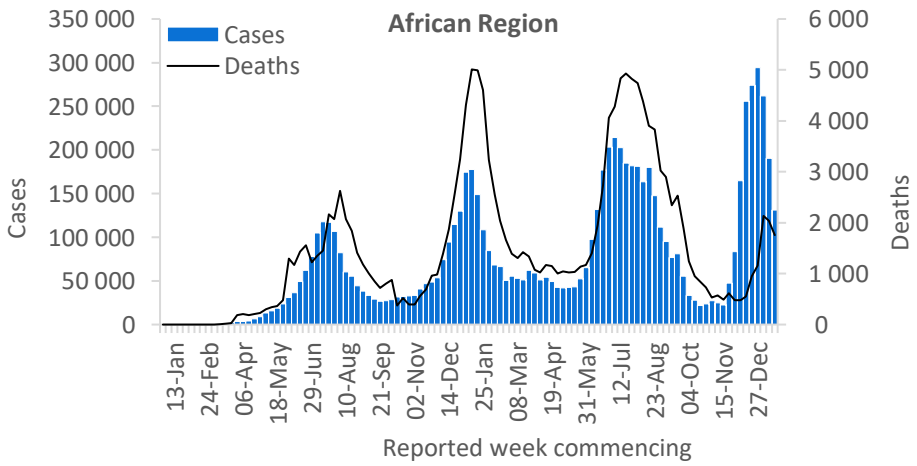
Five new studies (three pre-prints and two peer-reviewed studies) also provide further evidence of the vaccine performance of a third dose against infection, symptomatic disease, and hospitalization when the Delta variant was the predominant circulating variant.[42–44,48,49] The VE of three doses of mRNA vaccines against infection and symptomatic disease ranged from 77-96% across studies. [42–44,48,49] Two studies (both not yet peer-reviewed) evaluated VE of three doses of the Pfizer BioNTech-Comirnaty vaccine against hospitalization. The first study reported a relative VE (as compared to those receiving two doses, five or more months prior) of 89% (95%CI 87-91%).[48] The second study reported an absolute VE (as compared to those unvaccinated) of 95% (95%CI 91-97%) against hospitalization due to the Delta variant within three months of receipt of the third dose; however, VE at approximately 3-5 months decreased to 65% (16-85%).[43]

WHO regional overviews Epidemiological week 17 – 23 January 2022

African Region

The African Region reported a continued decline in case incidence in the past week with over 131 000 new cases reported, a 31% decrease. However, four countries (4/49; 8%) reported increases of 20% or greater: Algeria, Réunion, Burkina Faso (542 vs 425 new cases; 28% increase) and the United Republic of Tanzania (998 vs 831 new cases; 20% increase). The highest numbers of new cases were reported from Réunion (31 401 new cases; 3507.3 new cases per 100 000 population; a 93% increase), South Africa (22 795 new cases; 38.4 new cases per 100 000; a 35% decrease), and Algeria (9052 new cases; 20.6 new cases per 100 000; a 142% increase).

The number of new deaths also continued to decline in the Region with over 1700 new deaths reported, a 14% decrease compared to the previous week. The highest numbers of new deaths were reported from South Africa (785 new deaths; 1.3 new deaths per 100 000 population; a 13% decrease), Ethiopia (105 new deaths; <1 new death per 100 000; a 5% decrease), and Namibia (98 new deaths; 3.9 new deaths per 100 000; an 8% decrease).

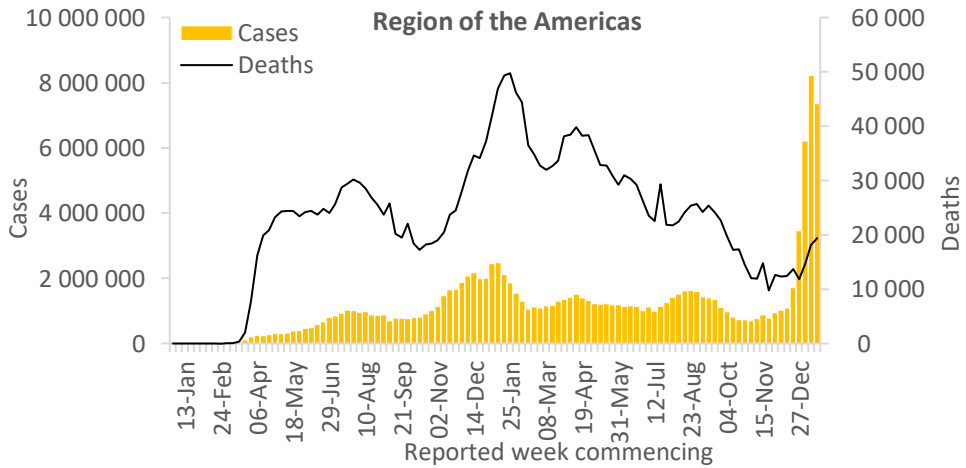


Updates from the African Region

Region of the Americas

Following four weeks of increases in the number of new cases, the Region of the Americas reported over 7.3 million new cases, a 10% decrease as compared to the previous week. However, nearly one- third of the countries in the Region reported increases of 20% or greater (18/56; 32%), with the highest increases reported from Dominica (754 vs 273 new cases; 176%), El Salvador (3435 vs 1343 new cases; 156%) and Venezuela (Bolivarian Republic of) (13033 vs 6003 new cases; 117%). The highest numbers of new cases were reported from the United States of America (4 215 852 new cases; 1273.7 new cases per 100 000; a 24% decrease), Brazil (824 579 new cases; 387.9 new cases per 100 000; a 73% increase), and Argentina (761 534 new cases; 1685.0 new cases per 100 000; similar to the figures of the previous week).

Over 19 000 new deaths were reported in the Region, corresponding to a 7% increase as compared to the previous week. The highest numbers of new deaths were reported from the United States of America (10 795 new deaths; 3.3 new deaths per 100 000; a 17% decrease), Brazil (1767 new deaths; <1 new death per 100 000; an 81% increase), and Mexico (1317 new deaths; 1.0 new deaths per 100 000; an 83% increase).

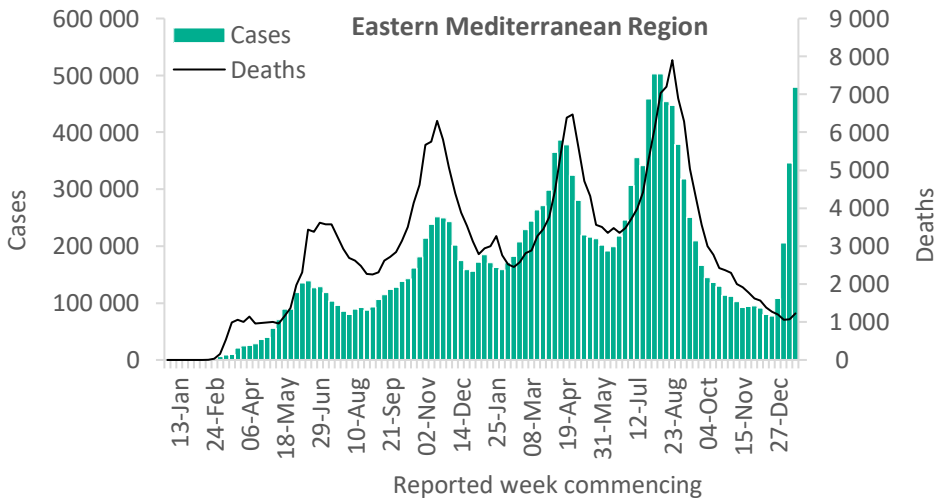


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported a continued increase in new cases this week, albeit at a lower rate when compared to the previous week; with over 479 000 new cases reported, a 39% increase. Half of the countries (13/22, 59%) reported increases of 20% or greater, with the highest increases reported from Iraq (38 623 vs 13 877 new cases; 178% increase), Afghanistan (870 vs 333 new cases; 161% increase) and the occupied Palestinian territory (7239 vs 3040 new cases; 140% increase). The highest numbers of new cases were reported from Tunisia (66 015 new cases; 558.6 new cases per 100 000; a 67% increase), Morocco (50 753 new cases; 137.5 new cases per 100 000; a 10% increase), and Lebanon (44 217 new cases; 647.8 new cases per 100 000; similar to the previous week's figures).

Over 1200 new deaths were reported in the Region, a 15% increase as compared to the previous week. The highest numbers of new deaths were reported from Egypt (207 new deaths; <1 new death per 100 000; a 12% increase), Tunisia (177 new deaths; 1.5 new deaths per 100 000; a 45% increase), and the Islamic Republic of Iran (158 new deaths; <1 new death per 100 000; a 20% decrease).

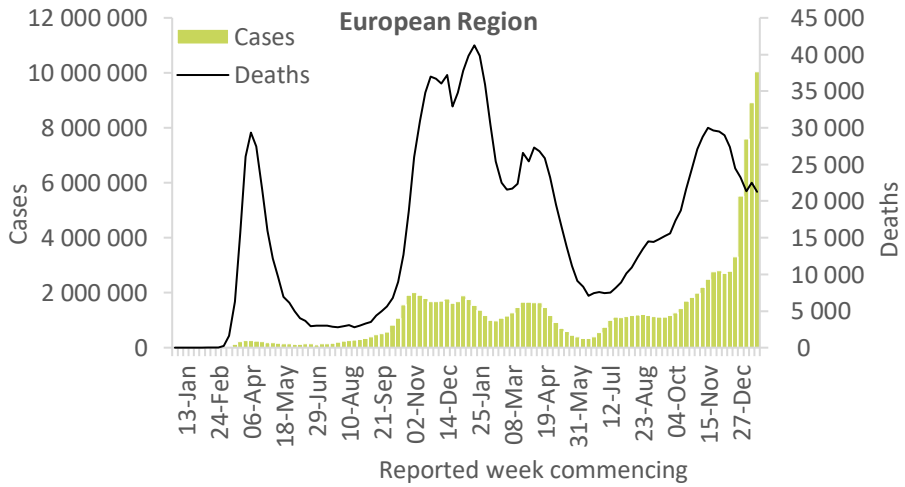


Updates from the Eastern Mediterranean Region

European Region

Since mid-December 2021, the number of new cases has continued to rise, with the Region reporting over 10 million new cases this week, a 13% increase as compared to the previous week. Thirty-four countries (55%) reported an increase greater than 20%, with the greatest increases reported from Kosovo[1] (13126 vs 2990 new cases; a 339% increase), the Republic of Moldova (19083 vs 8019 new cases; a 138% increase), and Armenia (4094 vs 1762 new cases; a 132% increase). The highest numbers of new cases were reported from France (2 443 821 new cases; 3757.4 new cases per 100 000; a 21% increase), Italy (1 231 741 new cases; 2065.2 new cases per 100 000; similar to the previous week's figures), and Germany (715 470 new cases; 860.3 new cases per 100 000; a 57% increase).

The number of weekly deaths in the Region decrease by 5%, with over 21 000 reported. The highest numbers of new deaths were reported from the Russian Federation (4792 new deaths; 3.3 new deaths per 100 000; a 7% decrease), Italy (2440 new deaths; 4.1 new deaths per 100 000; a 24% increase), and the United Kingdom (1888 new deaths; 2.8 new deaths per 100 000; similar to the previous week's figures).

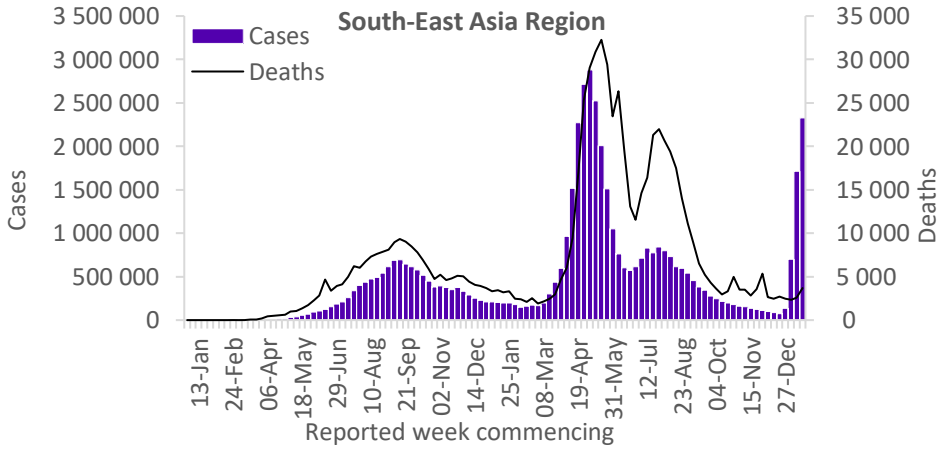


Updates from the European Region

South-East Asia Region

The number of new cases in the South-East Asia Region increased for the third consecutive week, with over 2.3 million new cases reported this week, a 36% increase as compared to the previous week; this represents a slower rise compared to last week when the increase was 145%. Six out of ten countries in the region reported an increase greater than 20% in the number of new weekly cases, with the largest increases reported from Bhutan (721 vs 147 new cases; a 390% increase), Bangladesh (67 425 vs 24 011; a 181% increase) and Indonesia (14729 vs 5454 new cases; a 170% increase). The highest numbers of new cases were reported from India (2 115 100 new cases; 153.3 new cases per 100 000; a 33% increase), Bangladesh (67 425 new cases; 40.9 new cases per 100 000; a 181% increase), and Nepal (56 656 new cases; 194.4 new cases per 100 000; a 168% increase).

The number of new deaths in the Region increased by 44% as compared to the previous week, with over 3700 new deaths reported. The highest numbers of new deaths were reported from India (3343 new deaths; <1 new death per 100 000; a 47% increase), Thailand (107 new deaths; <1 new death per 100 000; a 7% increase), and Sri Lanka (88 new deaths; <1 new death per 100 000; similar to the previous week's figures).

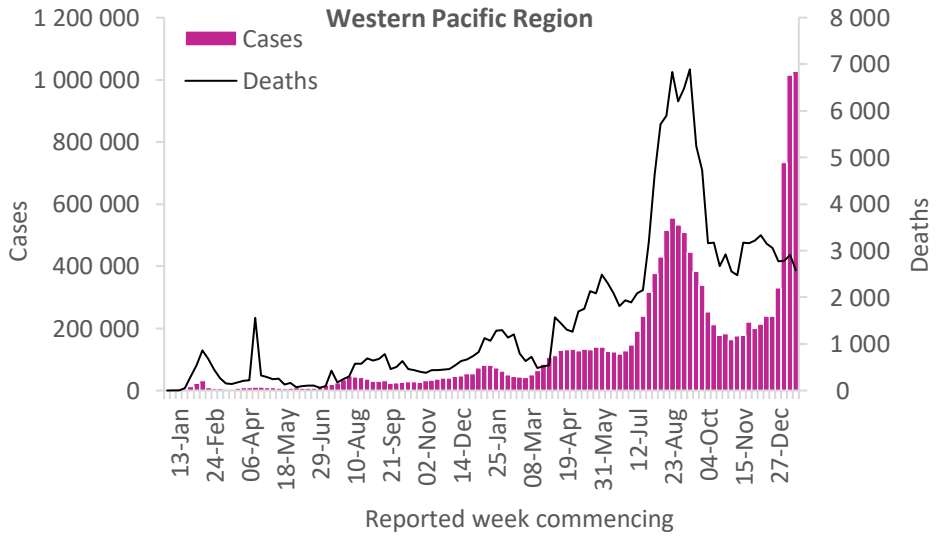


Updates from the South-East Asia Region

Western Pacific Region

The number of new cases in Western Pacific Region has stabilized, with over one million new cases reported, similar to the previous week's figures. However, ten countries in the Region (36%) reported increases of over 20% in new cases, with the highest proportional increases reported from Palau (319 vs 46 new cases; a 593% increase), New Caledonia (1659 vs 518 new cases; a 220% increase) and Singapore (19290 vs 6184, a 211% increase). The highest numbers of new cases were reported from Australia (302 608 new cases; 1186.7 new cases per 100 000; a 36% decrease), Japan (268 284 new cases; 212.1 new cases per 100 000; a 181% increase), and the Philippines (219 146 new cases; 200.0 new cases per 100 000; a 5% decrease).

The number of new weekly deaths in the Region declined by 12% as compared with the previous week, with over 2500 new deaths reported. The highest numbers of new deaths were reported from Viet Nam (1116 new deaths; <1 new death per 100 000; an 18% decrease), the Philippines (548 new deaths; <1 new death per 100 000; a 24% decrease), and Australia (430 new deaths; 1.7 new deaths per 100 000; a 49% increase).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 25 January, highlights include the following:

- Partnering to bolster COVID-19 Response in Jamaica
- Leading the development of a comprehensive training package on bioinformatics and molecular epidemiology for SARS-CoV-2 and other high threat pathogens in Turkey
- Concluding a first-of-its-kind workshop for journalists and Ministry of Health communications focal points on public health information sharing and verification in Iraq
- Strengthening health systems in Timor-Leste to respond to pandemic
- Marking two years of pandemic learning response on OpenWHO.org
- Conducting a Joint Operational Review (JOR) in Nigeria
- Updates on WHO's financing to support countries on COVID-19 response implementation to suppress transmission, reduce exposure, and protect the vulnerable and save lives
- Progress on a subset of global indicators that demonstrate country and global progress to end the acute phase of the pandemic

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice

Annexes

Annex 1. List of countries/territories/areas reporting variants of concern as of 25 January 2022

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Afghanistan	●	-	●	-	-
Albania	●	-	○	-	○
Algeria	●	-	●	-	●
Andorra	○	○	○	-	-
Angola	●	●	●	●	●
Anguilla	●	-	●	-	●
Antigua and Barbuda	●	●	●	●	●
Argentina	●	●	●	●	●
Armenia	●	-	●	-	●
Aruba	●	●	●	●	●
Australia	●	●	●	●	●
Austria	●	●	●	●	●
Azerbaijan	●	-	○	-	●
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	●
Bangladesh	●	●	●	○	●
Barbados	●	-	●	●	●
Belarus	●	-	○	-	○
Belgium	●	●	●	●	●
Belize	●	-	●	●	-
Benin	●	●	●	●	-
Bermuda	●	●	●	-	●
Bhutan	●	●	●	-	●
Bolivia (Plurinational State of)	●	-	●	●	●
Bonaire	●	-	●	●	●
Bosnia and Herzegovina	●	●	○	●	○
Botswana	○	●	●	-	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Brazil	●	●	●	●	●
British Virgin Islands	●	-	●	●	●
Brunei Darussalam	●	●	●	-	●
Bulgaria	●	●	●	-	○
Burkina Faso	●	●	●	-	●
Burundi	●	●	●	-	-
Cabo Verde	●	●	●	-	●
Cambodia	●	●	●	-	●
Cameroon	●	●	●	●	-
Canada	●	●	●	●	●
Cayman Islands	●	●	●	●	●
Central African Republic	●	●	●	-	-
Chad	●	●	●	-	-
Chile	●	●	●	●	●
China	●	●	●	●	●
Colombia	●	-	●	●	●
Comoros	●	●	●	-	-
Congo	●	●	●	●	○
Costa Rica	●	●	●	●	●
Croatia	●	●	○	●	●
Cuba	●	●	●	-	●
Curaçao	●	●	●	●	●
Cyprus	●	●	○	-	●
Czechia	●	●	●	●	●
Côte d'Ivoire	●	●	○	●	○
Democratic Republic of the Congo	●	●	●	-	●
Denmark	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Djibouti	●	●	●	-	-
Dominica	●	-	●	-	-
Dominican Republic	●	-	●	●	●
Ecuador	●	-	●	●	●
Egypt	●	-	●	-	●
El Salvador	●	-	●	●	○*
Equatorial Guinea	●	●	●	●	-
Estonia	●	●	○	○	●
Eswatini	●	●	●	-	●
Ethiopia	●	●	●	○	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	-	●	-
Fiji	○	-	●	-	●
Finland	●	●	●	●	●
France	●	●	●	●	●
French Guiana	●	●	●	●	●
French Polynesia	●	●	●	●	●
Gabon	●	●	●	●	○
Gambia	●	●	●	●	○
Georgia	●	○	●	-	●
Germany	●	●	●	●	●
Ghana	●	●	●	●	●
Gibraltar	●	-	○	-	●
Greece	●	●	●	●	●
Greenland	-	-	●	-	-
Grenada	●	-	●	●	●
Guadeloupe	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Guam	●	●	●	●	○*
Guatemala	●	●	●	●	●
Guernsey	-	-	-	-	●
Guinea	●	●	●	-	●
Guinea-Bissau	●	●	●	-	-
Guyana	-	-	●	●	-
Haiti	●	-	●	●	-
Honduras	●	-	●	●	○
Hungary	●	○	○	●	●
Iceland	●	●	●	●	●
India	●	●	●	●	●
Indonesia	●	●	●	-	●
Iran (Islamic Republic of)	●	●	●	-	●
Iraq	●	●	●	●	●
Ireland	●	●	●	●	●
Israel	●	●	●	●	●
Italy	●	●	●	●	●
Jamaica	●	-	●	-	●
Japan	●	●	●	●	●
Jordan	●	●	●	●	●
Kazakhstan	●	○	●	-	●
Kenya	●	●	●	●	●
Kosovo[1]	●	○	○	-	●
Kuwait	●	●	●	-	●
Kyrgyzstan	●	●	●	-	●
Lao People's Democratic Republic	●	-	●	-	○
Latvia	●	●	○	●	●
Lebanon	●	-	●	-	●
Lesotho	●	●	●	-	-
Liberia	●	●	●	-	-
Libya	●	●	-	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Liechtenstein	●	-	○	○	○
Lithuania	●	●	○	●	●
Luxembourg	●	●	●	●	●
Madagascar	●	●	-	○	-
Malawi	●	●	●	-	●
Malaysia	●	●	●	-	●
Maldives	●	-	●	-	●
Mali	●	●	●	-	○*
Malta	●	○	○	●	●
Martinique	●	●	●	●	●
Mauritania	●	●	●	-	●
Mauritius	●	●	●	-	●
Mayotte	●	●	○	-	●
Mexico	●	●	●	●	●
Monaco	●	●	●	-	-
Mongolia	●	-	●	-	○
Montenegro	●	-	○	○	○
Montserrat	●	-	●	●	○*
Morocco	●	●	●	-	●
Mozambique	●	●	●	-	●
Myanmar	●	-	●	-	●
Namibia	●	●	●	●	●
Nepal	●	-	●	-	●
Netherlands	●	●	●	●	●
New Caledonia	●	-	●	-	●
New Zealand	●	●	●	●	●
Nicaragua	●	●	●	●	-
Niger	○	-	●	-	●
Nigeria	●	●	●	-	●
North Macedonia	●	●	○	-	○
Northern Mariana Islands (Commonwealth of the)	○	-	●	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Norway	●	●	●	●	●
Occupied Palestinian Territory	●	●	●	-	●
Oman	●	●	●	-	●
Pakistan	●	●	●	●	●
Palau	-	-	○*	-	-
Panama	●	●	●	●	●
Papua New Guinea	-	-	●	-	●
Paraguay	●	-	●	●	●
Peru	●	-	●	●	●
Philippines	●	●	●	●	●
Poland	●	○	●	●	●
Portugal	●	●	●	●	●
Puerto Rico	●	●	●	●	●
Qatar	●	●	●	-	●
Republic of Korea	●	●	●	●	●
Republic of Moldova	●	-	●	-	○
Romania	●	●	●	●	●
Russian Federation	●	●	●	○	●
Rwanda	●	●	●	-	●
Réunion	●	●	○	●	●
Saba	-	-	●	-	-
Saint Barthélemy	●	-	●	-	●
Saint Kitts and Nevis	-	-	●	-	○
Saint Lucia	●	-	●	-	-
Saint Martin	●	●	●	-	●
Saint Pierre and Miquelon	-	-	●	-	-
Saint Vincent and the Grenadines	-	-	●	●	●
Sao Tome and Principe	●	●	○	-	-
Saudi Arabia	●	●	●	-	●
Senegal	●	●	●	-	●
Serbia	●	○*	●	-	○

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Seychelles	●	●	●	-	●
Sierra Leone	●	●	●	-	●
Singapore	●	●	●	●	●
Sint Maarten	●	●	●	●	●
Slovakia	●	●	●	-	●
Slovenia	●	●	●	●	●
Solomon Islands	-	-	●	-	●
Somalia	●	●	●	-	-
South Africa	●	●	●	●	●
South Sudan	●	●	●	-	●
Spain	●	●	●	●	●
Sri Lanka	●	●	●	-	●
Sudan	●	●	-	●	-
Suriname	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Sweden	●	●	●	●	●
Switzerland	●	●	●	●	●
Thailand	●	●	●	●	●
Timor-Leste	●	-	●	-	●*
Togo	●	●	●	●	●
Trinidad and Tobago	●	-	●	●	●
Tunisia	●	●	●	-	●
Turkey	●	●	●	●	●
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	●	-	●
Ukraine	●	○	○	-	●
United Arab Emirates	●	●	●	●	●
United Kingdom	●	●	●	●	●
United Republic of Tanzania	●	●	●	●	○

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
United States Virgin Islands	●	●	●	●	●*
United States of America	●	●	●	●	●
Uruguay	●	●	●	●	●
Uzbekistan	●	●	○	-	●
Vanuatu	-	-	●	-	-
Venezuela (Bolivarian Republic of)	●	-	●	●	●
Viet Nam	●	●	●	-	●
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	●	-	●
Zimbabwe	●	●	●	-	●

*this variant was received by WHO from unofficial sources and will be reviewed as more information become available. **Includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes co untries, territories, and areas that have never reported the detection of a variant of concern. See also Annex 2: Data, table, and figure notes*

Annex 2. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

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COVID-19 Weekly Epidemiological Update

Edition 75, published 18 January 2022

In this edition:

- Global overview
- Special focus: Update on WHO COVID-19 global rapid risk assessment
- Special focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews
- Summary of the Weekly Operational Update

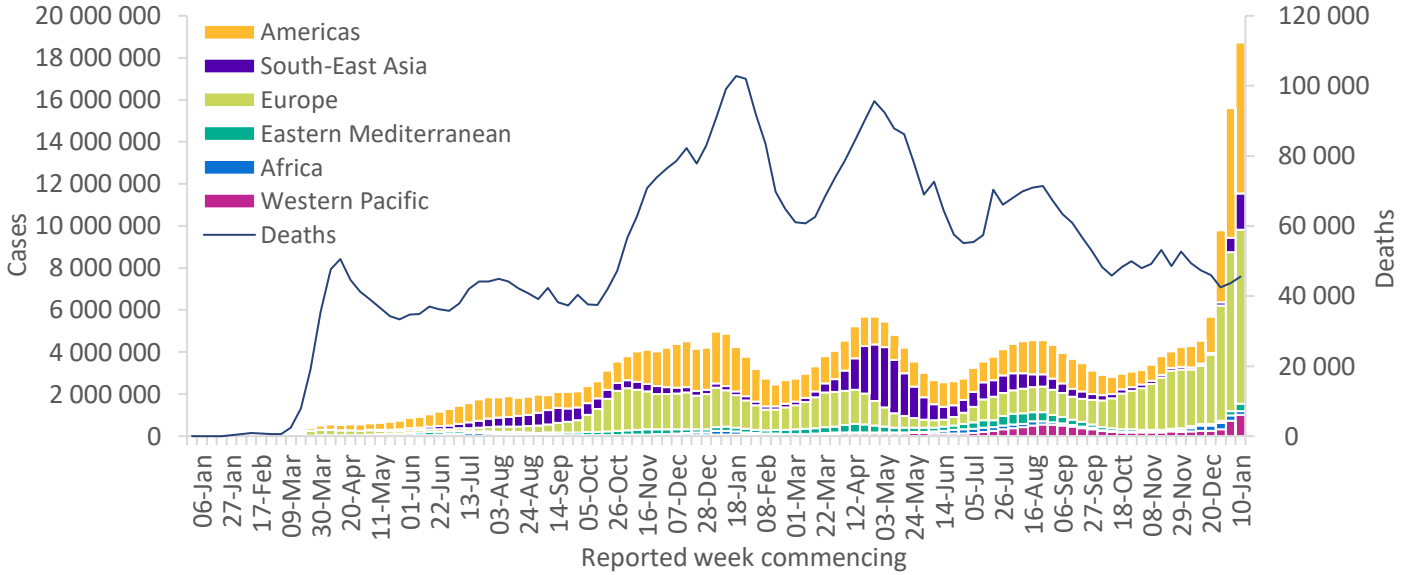
Global overview

Data as of 16 January 2022

Globally, the number of new COVID-19 cases increased in the past week (10-16 January 2022), while the number of new deaths remained similar to that reported during the previous week (Figure 1). Across the six WHO regions, over 18 million new cases were reported this week, a 20% increase, as compared to the previous week. Over 45 000 new deaths were also reported (Table 1). As of 16 January 2022, over 323 million confirmed cases and over 5.5 million deaths have been reported worldwide.

Despite a slowdown of the increase in case incidence at the global level, all regions reported an increase in the incidence of weekly cases with the exception of the African Region, which reported a 27% decrease. The South-East Asia Region reported the largest increase in new cases last week (145%), followed by the Eastern Mediterranean Region (68%), the Western Pacific Region (38%), the Region of the Americas (17%) and the European Region (10%). New weekly deaths increased in the South-East Asia Region (12%) and Region of the Americas (7%), while remaining similar to the number reported during the previous week in the other Regions.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 16 January 2022**



**See *Annex 2: Data, table, and figure notes*

At the country level, the highest numbers of new cases were reported from the United States of America (4 688 466 new cases; similar to previous week's figures), France (2 012 943 new cases; a 26% increase), India (1 594 160 new cases; a 150% increase), Italy (1 268 153 new cases; a 25% increase), and the United Kingdom (813 326 new cases; a 33% decrease).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 16 January 2022**

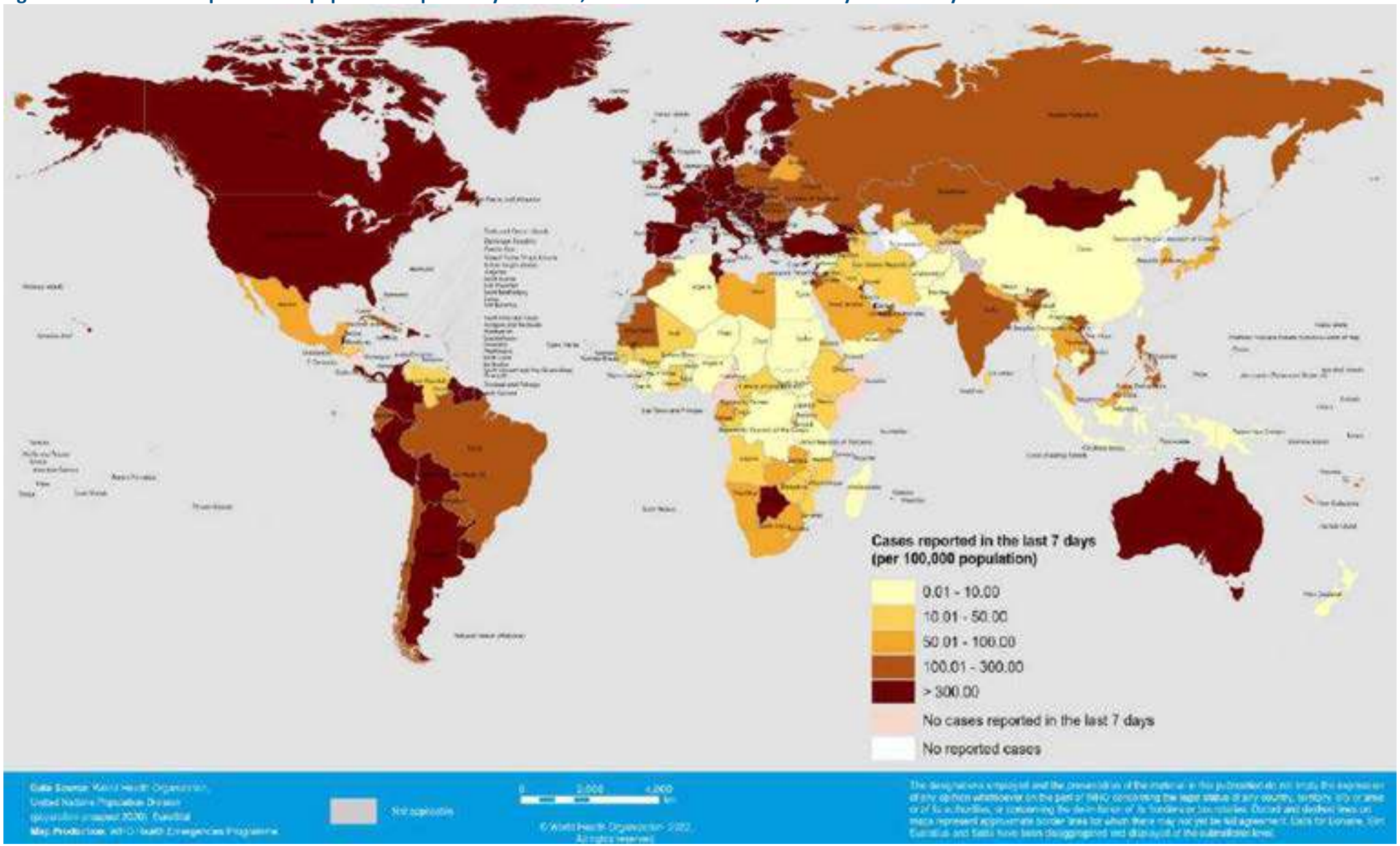
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	8 281 997 (44%)	10%	119 133 975 (37%)	21 785 (48%)	3%	1 718 338 (31%)
Americas	7 198 756 (38%)	17%	118 339 517 (37%)	15 160 (33%)	7%	2 443 421 (44%)
South-East Asia	1 711 154 (9%)	145%	47 445 610 (15%)	2 579 (6%)	12%	726 828 (13%)
Western Pacific	1 011 609 (5%)	38%	13 135 837 (4%)	2 910 (6%)	5%	162 206 (3%)
Eastern Mediterranean	345 680 (2%)	68%	17 752 506 (5%)	1 071 (2%)	1%	318 268 (6%)
Africa	190 440 (1%)	-27%	7 802 161 (2%)	2 038 (4%)	-4%	160 619 (3%)
Global	**18 739 636 (100%)**	**20%**	**323 610 370 (100%)**	**45 543 (100%)**	**4%**	**5 529 693 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 2: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

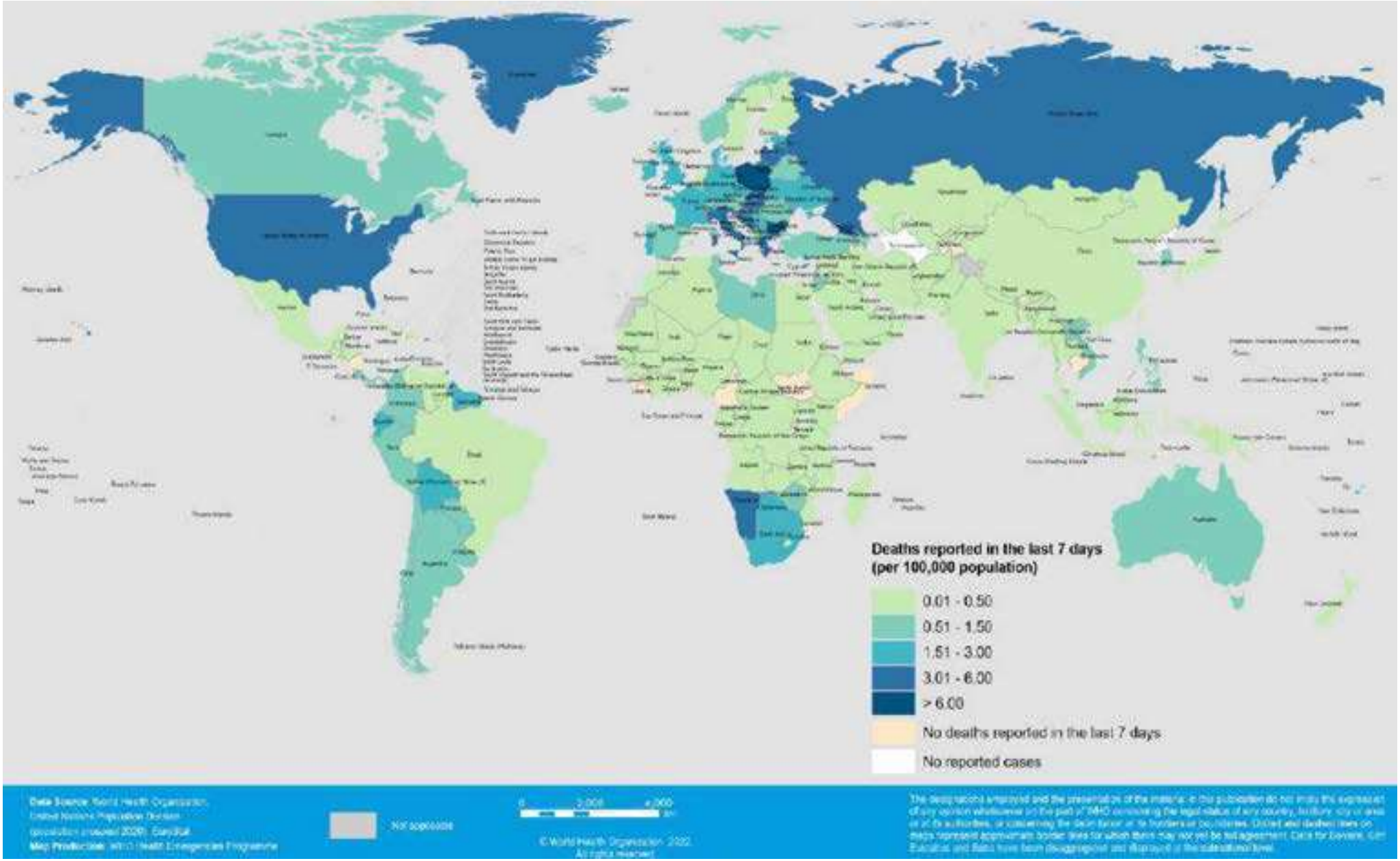
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 10 January – 16 January 2022**



**See *Annex 2: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 10 January – 16 January 2022**



**See *Annex 2: Data, table, and figure notes*

Special Focus: Update on WHO COVID-19 global rapid risk assessment

The COVID-19 pandemic continues to evolve, as does our understanding of the SARS-CoV-2 virus, and the response needed to control the spread and impact of the virus. In WHO's most recent global rapid risk assessment, conducted on 07 January 2022, the global public health risk was assessed as remaining very high.

Under the Emergency Response Framework, WHO undertakes risk assessments and situation analyses on a regular basis to inform our response to emerging situations. In addition, WHO periodically reviews the current risk status of ongoing public health events through an in-depth hazard, exposure and context assessment. This also includes a review of the vulnerabilities and capacities available to respond to the public health event and to investigate the current risk to human health, risks of ongoing global spread, and the risk of insufficient control capacities. Such assessments are used as an internal WHO decision-making tool, and to support independent deliberations, including but not limited to, meetings of the International Health Regulations (IHR 2005) Emergency Committee for the COVID-19 pandemic. To date, 13 global rapid risk assessments have been undertaken for COVID-19, and additional assessments have been conducted for specific events such as the emergence of SARS-CoV-2 variants. Here, we provide a synopsis of the most recent global rapid risk assessment for COVID-19 which covers the period from mid-October to the end of December 2021 and was finalised on 7 January 2022.

Since the last risk assessment, the incidence of COVID-19 has increased globally, initially driven predominantly by transmission of the Delta variant, particularly in the European Region. Subsequently, following the identification of the Omicron variant in South Africa, reported to WHO on 24 November 2021, there has been a sharp increase in the incidence of cases in the African Region. This has been followed by increases in the other WHO Regions in weeks 51 (20-26 December 2021) and 52 (27 December 2021 to 2 January 2022). In contrast, a global decline has been seen for COVID-19 mortality since a peak in August 2021. Nonetheless, a combination of the increased and rapid spread of the Omicron variant, increased population movements and social mixing during and after the end of year holiday period and challenges with ongoing adherence to public health and social measures (PHSM) are expected to lead to increased number of cases, hospitalizations and deaths in the coming weeks.

On 26 November, WHO designated Omicron as the fifth SARS-CoV-2 Variant of Concern (VOC) due to its large number of mutations, evidence indicative of a detrimental change in COVID-19 epidemiology and potential for increased risk of reinfection. The variant has since spread to countries in all six WHO regions, replacing the Delta variant in most countries for which data are available. As the capacity for sequencing variants varies among countries, genomic surveillance of SARS-CoV-2 continues to be strengthened globally to ensure representative and timely reporting on the evolution of the virus and the emergence of variants.

Early evidence of the phenotypic impacts of the Omicron variant suggests a substantial growth advantage compared to the Delta variant. This may be attributed to immune evasion, increased intrinsic transmissibility, efficient replication in the upper respiratory tract or a combination of these factors, resulting in a large proportion of the population becoming infected or reinfected, even in countries with high levels of population immunity from previous infection and/or vaccination. Despite early data that suggest that the severity of infection associated with the Omicron variant is lower than that of Delta, the very large number of cases, including amongst healthcare workers, has resulted in a substantial number of people requiring hospitalization, putting pressure on healthcare systems. Because of this, countries have been urged to develop mitigation plans to maintain essential health services which faced significant disruption during previous surges of COVID-19.

As of 29 December 2021, 8.6 billion doses of vaccine have been administered globally; 57% of the global population has received at least one dose and 47% have completed the primary vaccination series. The distribution of vaccines

remains unequal. As of 15 December, only 9% of those in low-income countries have received at least one dose, compared to 66% in high-income countries. Supply to low-income countries is expected to increase rapidly in 2022 through the COVAX and African Vaccine Acquisition Trust (AVAT), however, absorption remains a challenge with countries struggling to manage unpredictable deliveries with a short shelf-life. Additionally, vaccine hesitancy persists in a number of settings. Vaccines continue to protect against severe disease for both VOCs and non-VOCs, however, there is evidence of a reduction in vaccine effectiveness over time due to waning of the humoral immune response. WHO recommends an additional dose for those who are immunocompromised and did not respond sufficiently to initial doses in the primary series or who are no longer producing antibodies, and those aged 60 years and over who received primary vaccination with one of inactivated products (CoronaVac or the COVID-19 vaccine BIBP); however, more data are needed on the optimal timing, safety and dosage of booster doses. Individual countries need to balance decisions about their booster dose policy and local public health benefits against the need to support global equity in vaccine access.

There remain knowledge gaps in the phenotypic impact of identified and emerging variants (including the Omicron variant), the waning of the humoral immune response, and changes in the severity profile of VOCs, including amongst children and adolescents.

Additional resources

- Further information about the WHO risk assessment process
- Statement on the ninth meeting of the International Health Regulations (2005) Emergency Committee regarding the coronavirus disease (COVID-19) pandemic

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

The current global epidemiology of SARS-CoV-2 is characterized by the emergence and rapid spread of the Omicron variant on a global scale, continued decline in the prevalence of the Delta variant, and a very low level of circulation of the Alpha, Beta and Gamma variants. Following the identification of travel-related cases of the Omicron variant, many countries are now reporting community transmission. Countries that experienced a rapid rise in Omicron cases in November and December 2021 are beginning to see declines in cases. The Omicron variant includes Pango lineages B.1.1.529, BA.1, BA.2 and BA.3. BA.1 accounts for >99% of sequences submitted to GISAID as of 18 January 2022. All these variants are being monitored by WHO under the umbrella of 'Omicron'.

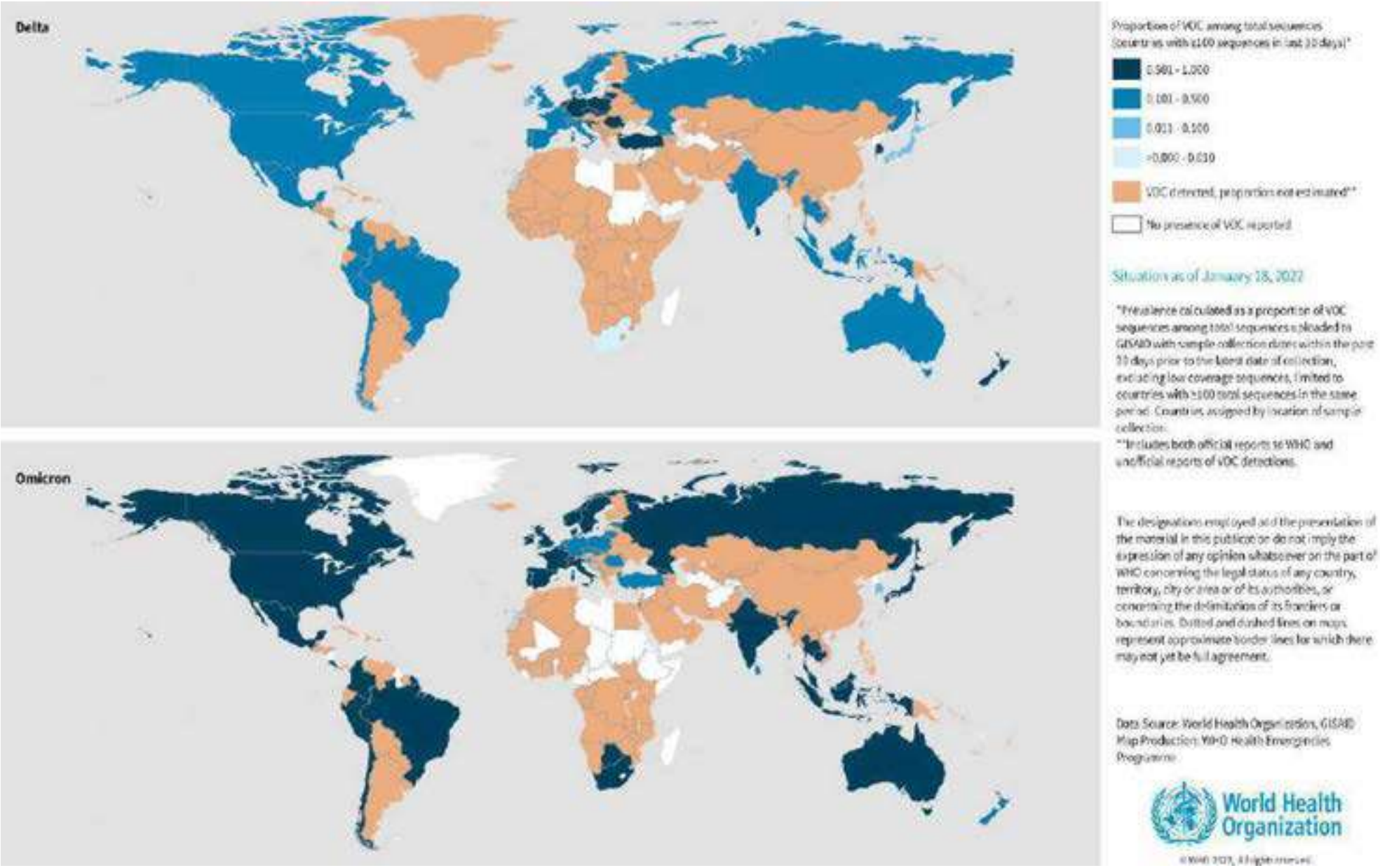
Among the 405 739 sequences uploaded to GISAID with specimens collected in the last 30 days[i], 291 600 sequences (71.9%) were Omicron, 113 652 (28%) were Delta, 47 (<0.1%) were Gamma, ten (<0.1%) were Alpha and three sequences (<0.1%) comprised other circulating variants (including VOIs Mu and Lambda). To note, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

Additional resources

- Detailed technical evidence on phenotypic impacts of the Omicron can be found in the Weekly Epidemiological Update and in the Technical briefing on Omicron SARS-CoV-2 variant published on 7 January 2022.
- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

[i] Includes sequences submitted to GISAID with sample collected dates from 16 December 2021 to 14 January 2022 (last reported sample at the time of data extraction), excluding low coverage sequences.

Figure 4: Prevalence of variants of concern (VOCs) Delta and Omicron in the last 30 days, data as of 18 January 2022



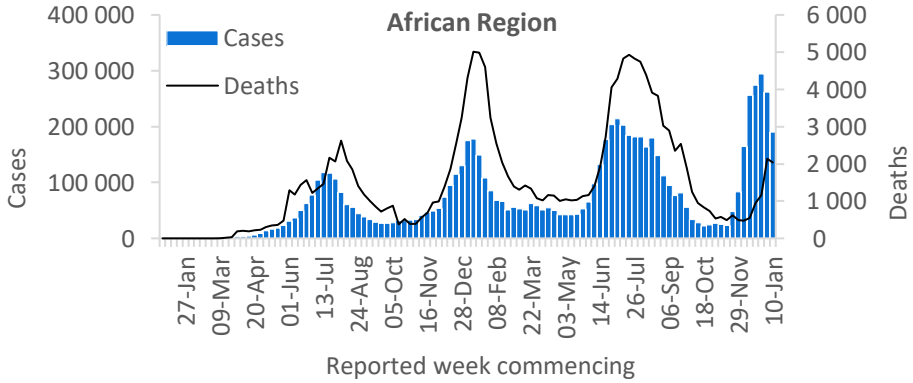
See also Annex 1 for reported VOC detections by country/territory/area

WHO regional overviews Epidemiological week 10 – 16 January 2022

African Region

The number of new cases in the Africa Region continues to decline following the most recent peak in December 2021, with over 190 000 new cases reported, a 27% decrease as compared to the previous week. While most countries in the region reported a decline in the number of new cases, nearly a third of the countries in the region (13/41; 32%) reported an increase of 10% or more as compared to the previous week. The largest proportional increase in cases was observed in Mayotte (9086 vs 2760 new cases, a 229% increase), Central African Republic (865 vs 291; 197%) and Eritrea (573 vs 277; 107%). The highest numbers of new cases were reported from South Africa (35 121 new cases; 59.2 new cases per 100 000 population; a 34% decrease), Réunion (16 256 new cases; 1815.7 new cases per 100 000; a 74% increase), and Zambia (13 452 new cases; 73.2 new cases per 100 000; a 43% decrease).

The number of new deaths reported in the Region was just over 2000, similar to the number reported during the previous week. The highest numbers of new deaths were reported from South Africa (907 new deaths; 1.5 new deaths per 100 000 population; a 23% decrease), Ethiopia (111 new deaths; <1 new death per 100 000; a 52% increase), and Namibia (106 new deaths; 4.2 new deaths per 100 000; a 63% increase).

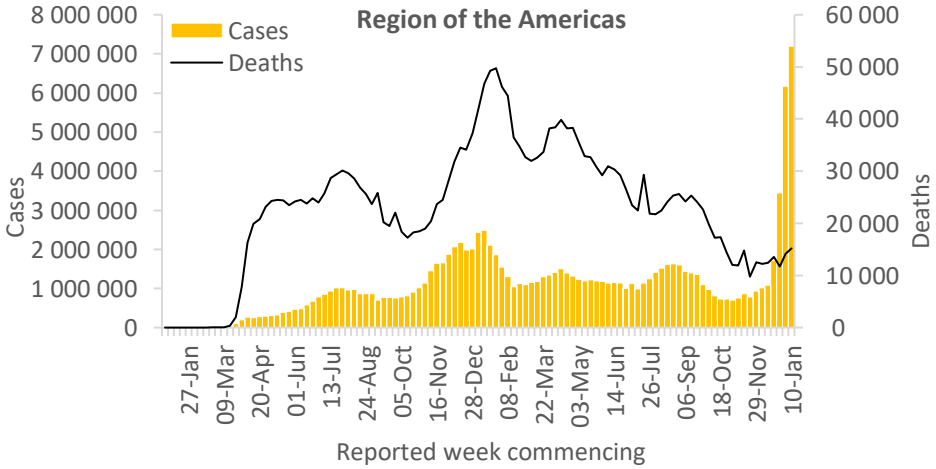


Updates from the African Region

Region of the Americas

The number of new cases in the Region of the Americas increased, albeit at a slower rate, in the past week, with just under 7.2 million new cases reported, a 17% increase as compared to the previous week. The majority of the countries in the Region reported increases of over 10% (39/56; 70%). The countries with the highest proportionate increases were Martinique (13 540 vs 1385; 638%) El Salvador (1343 vs 289; 365%) and Ecuador (42 992 vs 10 532; 308%). The highest numbers of new cases were reported from the United States of America (4 688 466 new cases; 1416.4 new cases per 100 000; similar to the previous week's figures), Argentina (797 136 new cases; 1763.7 new cases per 100 000; a 73% increase), and Brazil (476 981 new cases; 224.4 new cases per 100 000; a 193% increase).

The number of new deaths also increased in the past week, with over 15 000 new deaths, a 7% increase as compared to the number reported during the previous week. The highest numbers of new deaths were reported from the United States of America (10 412 new deaths; 3.1 new deaths per 100 000; a 5% decrease), Brazil (974 new deaths; <1 new death per 100 000; a 27% increase), and Canada (523 new deaths; 1.4 new deaths per 100 000; a 50% increase).

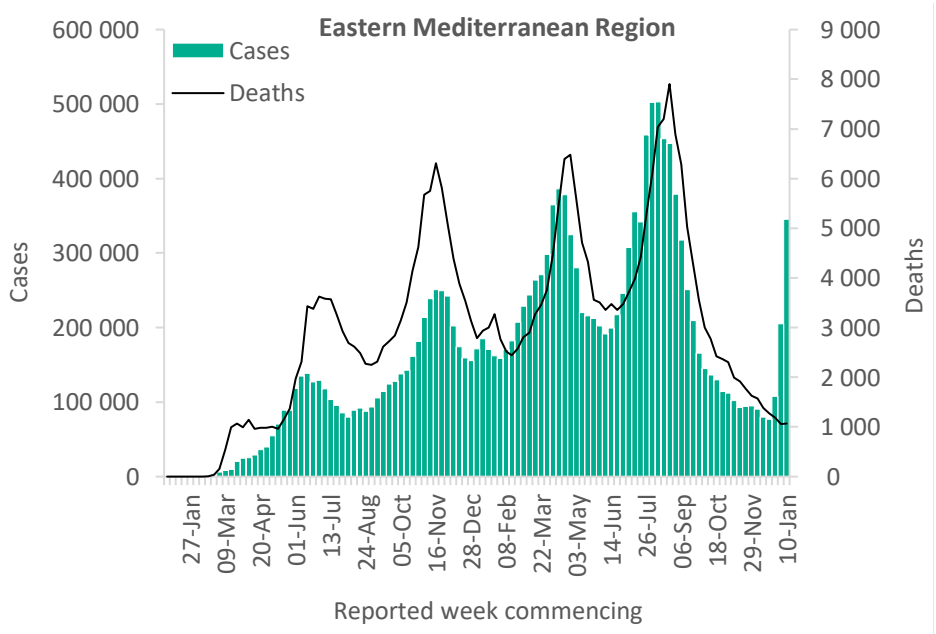


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region showed a substantial increase in new cases reported during this past week, with over 345 000 new cases, a 68% increase as compared to the previous week. All but two countries (Libya and Somalia) in the Region reported increases in the number of new cases in the past week. The highest numbers of new cases were reported from Morocco (46 104 new cases; 124.9 new cases per 100 000; a 45% increase), Lebanon (45 231 new cases; 662.7 new cases per 100 000; a 19% increase), and Tunisia (39 487 new cases; 334.1 new cases per 100 000; a 194% increase).

The number of new deaths remained similar to the number reported during the previous week, with just over 1000 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (197 new deaths; <1 new death per 100 000; a 5% decrease), Egypt (185 new deaths; <1 new death per 100 000; a 9% increase), and Tunisia (122 new deaths; 1.0 new deaths per 100 000; a 54% increase).

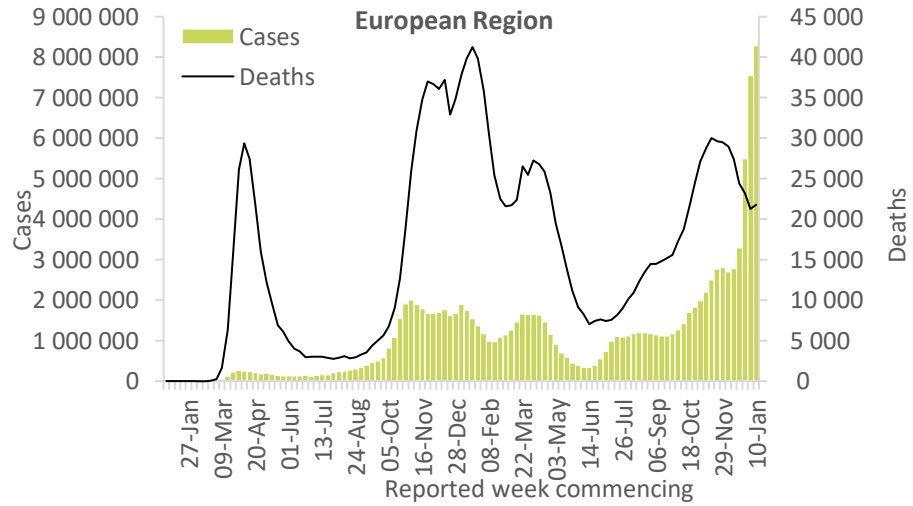


Updates from the Eastern Mediterranean Region

European Region

The number of new cases continued to increase this week in the European Region with over 8.2 million new cases reported, a 10% increase as compared to the previous week. Most of the countries in the Region (39/61; 64%) reported an increase greater than 10%, with the highest increases reported from Kazakhstan (54 927 vs 6672 new cases, a 723% increase), Uzbekistan (4744 vs 1223 new cases, a 287% increase) and Kosovo[1] (2990 vs 842 new cases, a 255% increase). The highest numbers of new cases were reported from France (2 012 943 new cases; 3095.0 new cases per 100 000; a 26% increase), Italy (1 268 153 new cases; 2126.3 new cases per 100 000; a 25% increase), and the United Kingdom (813 326 new cases; 1198.1 new cases per 100 000; a 33% decrease).

The number of weekly deaths was similar to the previous week, with over 21 000 new deaths reported. The highest numbers of new deaths were reported from the Russian Federation (5157 new deaths; 3.5 new deaths per 100 000; a 9% decrease), Poland (2563 new deaths; 6.8 new deaths per 100 000; a 19% increase), and Italy (1975 new deaths; 3.3 new deaths per 100 000; a 44% increase).

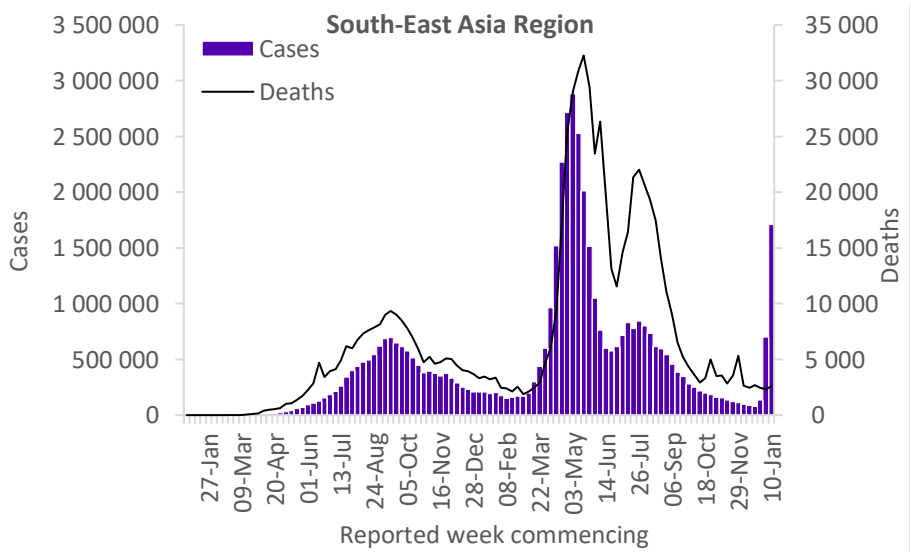


Updates from the European Region

South-East Asia Region

The number of new cases in the South-East Asia Region continues to increase, with over 1.7 million new cases reported, a 145% increase as compared to the previous week. All but one country (Timor-Leste; a 58% decrease) reported an increase in the number of new weekly cases, with the largest proportional increases observed in Nepal (21149 vs 3603 new cases, a 486% increase), Bangladesh (24011 vs 7234; a 231% increase) and the Maldives (5529 vs 2000, a 176% increase). The highest numbers of new cases were reported from India (1 594 160 new cases; 115.5 new cases per 100 000; a 150% increase), Thailand (54 935 new cases; 78.7 new cases per 100 000; a 37% increase), and Bangladesh (24 011 new cases; 14.6 new cases per 100 000; a 232% increase).

Over 2500 new weekly deaths were reported, a 12% increase as compared to the previous week. The highest numbers of new deaths were reported from India (2276 new deaths; <1 new death per 100 000; a 13% increase), Thailand (100 new deaths; <1 new death per 100 000; a 5% decrease), and Sri Lanka (92 new deaths; <1 new death per 100 000; an 8% decrease).

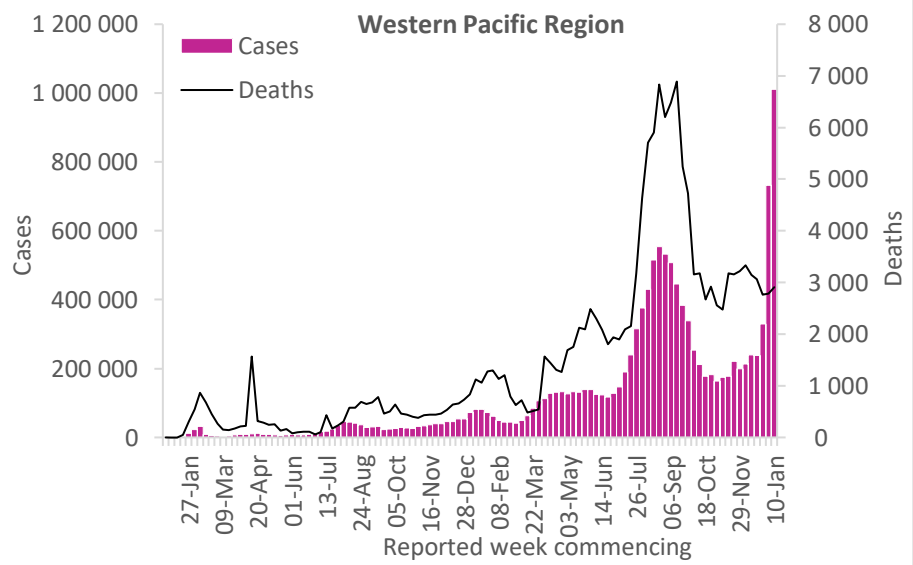


Updates from the South-East Asia Region

Western Pacific Region

The numbers of new weekly cases and deaths have continued to increase in the Western Pacific Region, with over one million new cases and over 2900 new deaths, increases of 38% and 5% increase respectively as compared to the previous week. Twelve countries in the Region (44%), reported increases of over 10% in new cases, with the highest increases reported from Palau (46 vs 5 new cases; an 820% increase), French Polynesia (475 vs 109 new cases; a 335% increase) and Japan (95498 vs 23168; a 312% increase). The highest numbers of new cases were reported from Australia (472 564 new cases; 1853.2 new cases per 100 000; a 12% increase), the Philippines (231 502 new cases; 211.3 new cases per 100 000; a 159% increase), and Viet Nam (131 468 new cases; 135.1 new cases per 100 000; similar to the previous week's figures).

The highest numbers of new deaths were reported from Viet Nam (1363 new deaths; 1.4 new deaths per 100 000; a 10% decrease), the Philippines (723 new deaths; <1 new death per 100 000; a 23% increase), and Australia (288 new deaths; 1.1 new deaths per 100 000; a 213% increase).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 18 January, highlights include the following:

- Supporting COVID-19 control measures in Islamic Republic of Iran with donation of new equipment
- Providing continued support to countries on the detection of Variants of Concern (VOC) in the European Region
- COVAX delivering its 1 billionth COVID-19 vaccine dose
- Providing lifesaving medical-grade oxygen to the Philippines to fight against new COVID-19 variants
- Supporting prevention measures and COVID-19 vaccination for migrants struggling during lockdown in Thailand
- Mitigating the COVID-19 outbreak through global data sharing: The WHO Global Clinical Platform for COVID-19 Call to action
- Updates on WHO's financing to support countries on COVID-19 response implementation to suppress transmission, reduce exposure, and protect the vulnerable and save lives
- Progress on a subset of global indicators that demonstrate country and global progress to end the acute phase of the pandemic

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice

Annexes

Annex 1. List of countries/territories/areas reporting variants of concern as of 18 January 2022

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Afghanistan	●	-	●	-	-
Albania	●	-	○	-	○
Algeria	●	-	●	-	●
Andorra	○	○	○	-	-
Angola	●	●	●	●	●
Anguilla	●	-	●	-	●*
Antigua and Barbuda	●	●	●	●	●
Argentina	●	●	●	●	●
Armenia	●	-	●	-	●
Aruba	●	●	●	●	●
Australia	●	●	●	●	●
Austria	●	●	●	●	●
Azerbaijan	●	-	○	-	●
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	●
Bangladesh	●	●	●	○	●
Barbados	●	-	●	●	●
Belarus	●	-	○	-	○
Belgium	●	●	●	●	●
Belize	●	-	●	●	-
Benin	●	●	●	●	-
Bermuda	●	●	●	-	●
Bhutan	●	●	●	-	●*
Bolivia (Plurinational State of)	●	-	●	●	○
Bonaire	●	-	●	●	●
Bosnia and Herzegovina	●	●	○	●	○
Botswana	○	●	●	-	●
Brazil	●	●	●	●	●
British Virgin Islands	●	-	●	●	○

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Brunei Darussalam	●	●	●	-	●
Bulgaria	●	●	●	-	○
Burkina Faso	●	●	●	-	●
Burundi	●	●	●	-	-
Cabo Verde	●	●	●	-	●
Cambodia	●	●	●	-	●
Cameroon	●	●	●	●	-
Canada	●	●	●	●	●
Cayman Islands	●	●	●	●	●
Central African Republic	●	●	●	-	-
Chad	●	●	●	-	-
Chile	●	●	●	●	●
China	●	●	●	●	●
Colombia	●	-	●	●	●
Comoros	●	●	●	-	-
Congo	●	●	●	●	○
Costa Rica	●	●	●	●	●
Croatia	●	●	○	●	●
Cuba	●	●	●	-	●
Curaçao	●	●	●	●	○
Cyprus	●	●	○	-	●
Czechia	●	●	●	●	●
Côte d'Ivoire	●	●	○	●	○
Democratic Republic of the Congo	●	●	●	-	●
Denmark	●	●	●	●	●
Djibouti	●	●	●	-	-
Dominica	●	-	●	-	-
Dominican Republic	●	-	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Ecuador	●	-	●	●	●
Egypt	●	-	●	-	●
El Salvador	●	-	●	●	-
Equatorial Guinea	●	●	●	●	-
Estonia	●	●	○	○	●
Eswatini	●	●	●	-	●
Ethiopia	●	●	●	○	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	-	●	-
Fiji	○	-	●	-	●
Finland	●	●	●	●	●
France	●	●	●	●	●
French Guiana	●	●	●	●	●
French Polynesia	●	●	●	●	●
Gabon	●	●	●	●	○
Gambia	●	●	●	●	○
Georgia	●	○	●	-	●
Germany	●	●	●	●	●
Ghana	●	●	●	●	●
Gibraltar	●	-	○	-	●
Greece	●	●	●	●	●
Greenland	-	-	●	-	-
Grenada	●	-	●	●	●
Guadeloupe	●	●	●	●	●
Guam	●	●	●	●	-
Guatemala	●	●	●	●	●
Guernsey	-	-	-	-	●
Guinea	●	●	●	-	●
Guinea-Bissau	●	●	●	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Guyana	-	-	●	●	-
Haiti	●	-	●	●	-
Honduras	●	-	●	●	○
Hungary	●	○	○	●	●
Iceland	●	●	●	●	●
India	●	●	●	●	●
Indonesia	●	●	●	-	●
Iran (Islamic Republic of)	●	●	●	-	●
Iraq	●	●	●	●	●
Ireland	●	●	●	●	●
Israel	●	●	●	●	●
Italy	●	●	●	●	●
Jamaica	●	-	●	-	●
Japan	●	●	●	●	●
Jordan	●	●	●	●	●
Kazakhstan	●	○	●	-	●
Kenya	●	●	●	●	●
Kosovo[1]	●	○	○	-	●
Kuwait	●	●	●	-	●
Kyrgyzstan	●	●	●	-	●*
Lao People's Democratic Republic	●	-	●	-	○
Latvia	●	●	○	●	●
Lebanon	●	-	●	-	●
Lesotho	●	●	●	-	-
Liberia	●	●	●	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	○	○	○
Lithuania	●	●	○	●	●
Luxembourg	●	●	●	●	●
Madagascar	●	●	-	○	-
Malawi	●	●	●	-	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Malaysia	●	●	●	-	●
Maldives	●	-	●	-	●
Mali	●	●	●	-	-
Malta	●	○	○	●	●
Martinique	●	●	●	●	●
Mauritania	●	●	●	-	●
Mauritius	●	●	●	-	●
Mayotte	●	●	○	-	●
Mexico	●	●	●	●	●
Monaco	●	●	●	-	-
Mongolia	●	-	●	-	○
Montenegro	●	-	○	○	○
Montserrat	●	-	●	●	-
Morocco	●	●	●	-	●
Mozambique	●	●	●	-	●
Myanmar	●	-	●	-	●
Namibia	●	●	●	●	●
Nepal	●	-	●	-	●
Netherlands	●	●	●	●	●
New Caledonia	●	-	●	-	●
New Zealand	●	●	●	●	●
Nicaragua	●	●	●	●	-
Niger	●	-	●	-	●
Nigeria	●	●	●	-	●
North Macedonia	●	●	○	-	○
Northern Mariana Islands (Commonwealth of the)	○	-	●	-	-
Norway	●	●	●	●	●
Occupied Palestinian Territory	●	●	●	-	●
Oman	●	●	●	-	●
Pakistan	●	●	●	●	●
Panama	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Papua New Guinea	-	-	●	-	●*
Paraguay	●	-	●	●	●
Peru	●	-	●	●	●
Philippines	●	●	●	●	●
Poland	●	○	●	●	●
Portugal	●	●	●	●	●
Puerto Rico	●	●	●	●	●
Qatar	●	●	●	-	●
Republic of Korea	●	●	●	●	●
Republic of Moldova	●	-	●	-	○
Romania	●	●	●	●	●
Russian Federation	●	●	●	○	●
Rwanda	●	●	●	-	●
Réunion	●	●	○	●	●
Saba	-	-	●	-	-
Saint Barthélemy	●	-	●	-	○
Saint Kitts and Nevis	-	-	●	-	○
Saint Lucia	●	-	●	-	-
Saint Martin	●	●	●	-	●
Saint Pierre and Miquelon	-	-	●	-	-
Saint Vincent and the Grenadines	-	-	●	●	●
Sao Tome and Principe	●	●	○	-	-
Saudi Arabia	●	●	●	-	●
Senegal	●	●	●	-	●
Serbia	●	-	●	-	○
Seychelles	●	●	●	-	●
Sierra Leone	●	●	●	-	●
Singapore	●	●	●	●	●
Sint Maarten	●	●	●	●	●
Slovakia	●	●	●	-	●
Slovenia	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Solomon Islands	-	-	●*	-	●
Somalia	●	●	●	-	-
South Africa	●	●	●	●	●
South Sudan	●	●	●	-	●
Spain	●	●	●	●	●
Sri Lanka	●	●	●	-	●
Sudan	●	●	-	●	-
Suriname	●	●	●	●	●*
Sweden	●	●	●	●	●
Switzerland	●	●	●	●	●
Thailand	●	●	●	●	●
Timor-Leste	●	-	●	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Togo	●	●	●	●	●
Trinidad and Tobago	●	-	●	●	●
Tunisia	●	●	●	-	●
Turkey	●	●	●	●	●
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	●	-	●
Ukraine	●	○	○	-	●
United Arab Emirates	●	●	●	●	●
United Kingdom	●	●	●	●	●
United Republic of Tanzania	●	●	●	●	○
United States Virgin Islands	●	●	●	●	-
United States of America	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Uruguay	●	●	●	●	●
Uzbekistan	●	●	○	-	●
Vanuatu	-	-	●	-	-
Venezuela (Bolivarian Republic of)	●	-	●	●	●
Viet Nam	●	●	●	-	●
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	●	-	●
Zimbabwe	●	●	●	-	●

*nformation for this variant was received by WHO from unofficial sources and will be reviewed as more information become available. **Includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern. See also Annex 2: Data, table, and figure notes*

Annex 2. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

COVID-19 Weekly Epidemiological Update

Edition 74, published 11 January 2022

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 variants of interest and variants of concern
- WHO regional overviews

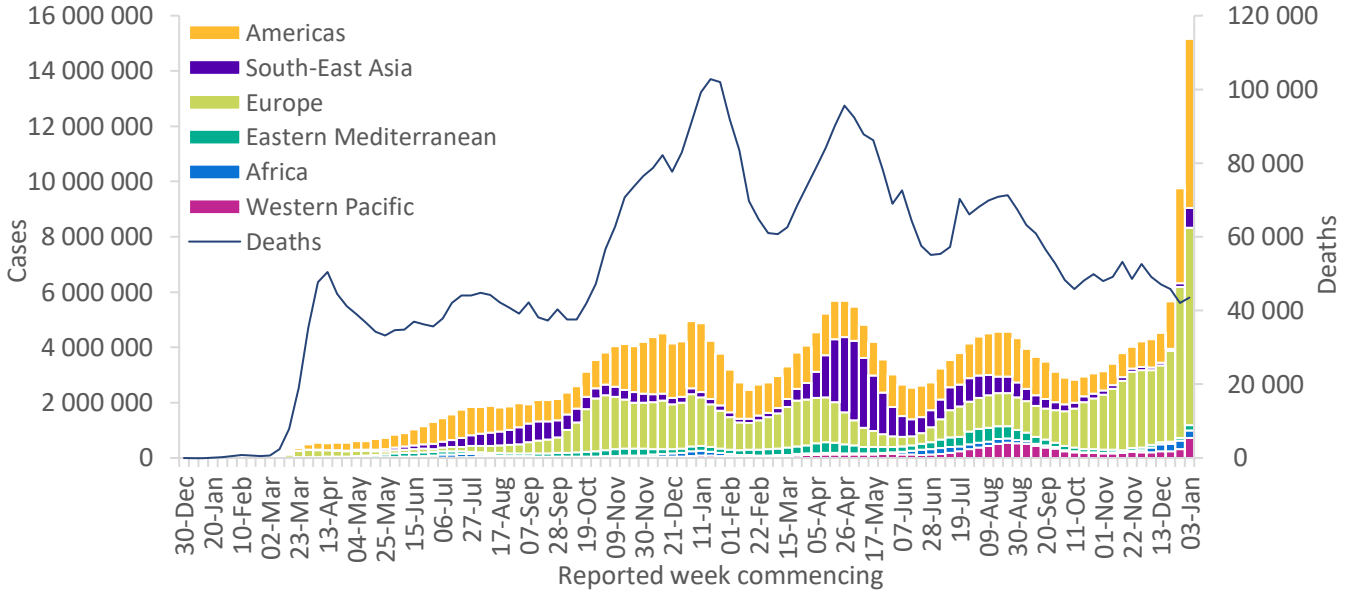
Global overview

Data as of 9 January 2022

Globally, the number of new cases increased markedly in the past week (3-9 January 2022), while the number of new deaths remained similar to that of the previous week. Across the six regions, over 15 million new cases were reported this past week, a 55% increase as compared to the previous week and over 43 000 new deaths were reported. As of 9 January, over 304 million confirmed cases and over 5.4 million deaths have been reported.

All regions reported an increase in the incidence of weekly cases with the exception of the African Region, which reported an 11% decrease. The South-East Asia region reported the largest increase in new cases last week (418%), followed by the Western Pacific Region (122%), the Eastern Mediterranean Region (86%), the Region of the Americas (78%) and the European Region (31%). New weekly deaths increased in the African Region (84%) and Region of the Americas (26%). The number of new deaths remained similar to that of the previous week in the Western Pacific Region, while a decrease was reported in the Eastern Mediterranean Region (11%), the European Region (10%) and in the South-East Asia Region (6%).

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 9 January 2022**



**See *Annex 3: Data, table, and figure notes*

The regions reporting the highest weekly case incidence per 100 000 population continue to be the European Region (765.8 new cases per 100 000 population) and the Region of the Americas (597.9 new cases per 100 000 population). Both regions also reported the highest weekly incidence in deaths of 2.2 and 1.4 per 100 000 population, respectively, while <1 new death per 100 000 was reported in all other regions.

The highest numbers of new cases were reported from the United States of America (4 610 359 new cases; a 73% increase), France (1 597 203 new cases; a 46% increase), the United Kingdom (1 217 258 new cases; a 10% increase), Italy (1 014 358 new cases; a 57% increase), and India (638 872 new cases; a 524% increase).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 9 January 2022**

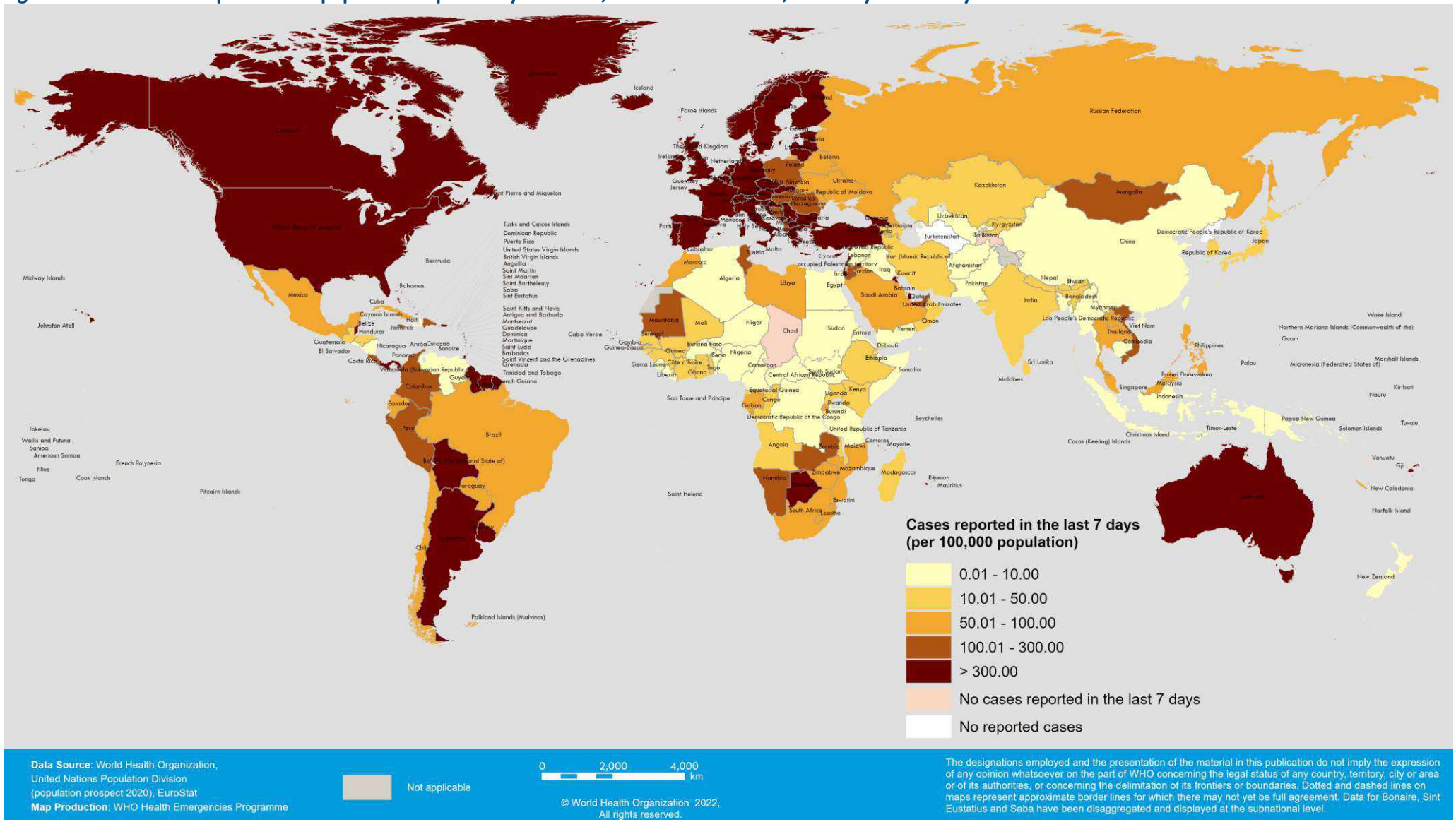
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	7 145 424 (47%)	31%	110 413 718 (36%)	20 696 (48%)	-10%	1 695 819 (31%)
Americas	6 115 409 (40%)	78%	111 063 942 (36%)	14 489 (33%)	26%	2 427 710 (44%)
Western Pacific	732 464 (5%)	122%	12 124 225 (4%)	2 781 (6%)	0%	159 296 (3%)
South-East Asia	699 635 (5%)	418%	45 734 456 (15%)	2 309 (5%)	-6%	724 249 (13%)
Africa	261 720 (2%)	-11%	7 611 721 (3%)	2 130 (5%)	84%	158 581 (3%)
Eastern Mediterranean	200 014 (1%)	86%	17 401 381 (6%)	1 056 (2%)	-11%	317 197 (6%)
Global	**15 154 666 (100%)**	**55%**	**304 350 207 (100%)**	**43 461 (100%)**	**3%**	**5 482 865 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 3: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

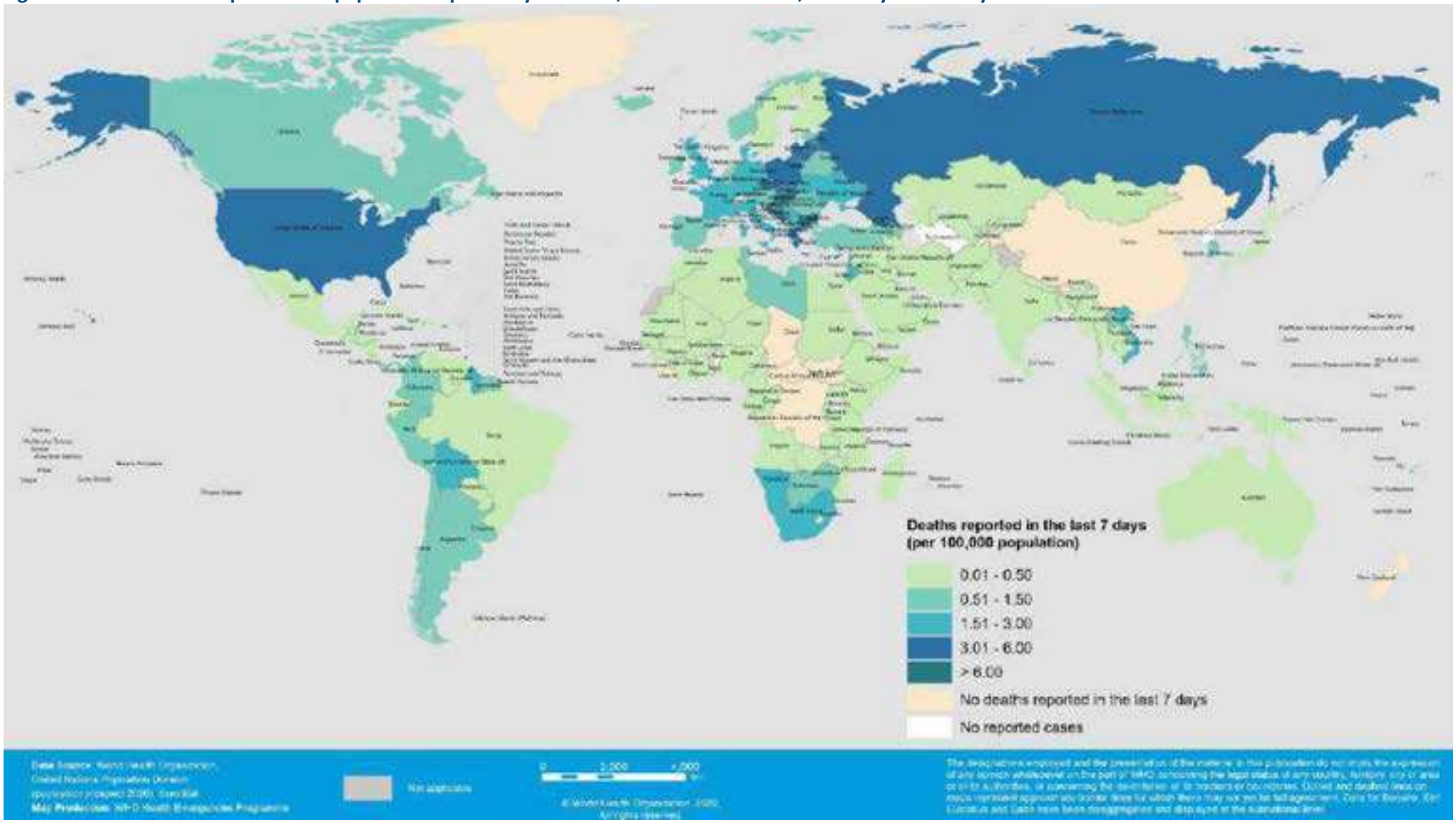
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 3 January – 9 January 2022**



**See *Annex 3: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 3 January – 9 January 2022**



**See *Annex 3: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

The current global epidemiology of SARS-CoV-2 is characterized by the emergence of Omicron variant, declining prevalence of the Delta variant, and very low level circulation of Alpha, Beta and Gamma variants. Following the identification of travel related Omicron cases, many countries are now reporting clusters as well as community transmission of this VOC. Among the 357 206 sequences uploaded to GISAID with specimens collected in the last 30 days[i], 208 870 sequences (58.5%) were Omicron, 147 887 (41.4%) were Delta, 12 (<0.1%) were Alpha, two (<0.1%) were Gamma, one (<0.1%) was Beta and six sequences (<0.1%) comprised other circulating variants (including VOIs Mu and Lambda).To note, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

Differences in the characteristics of VOCs

Available evidence on the phenotypic impacts of VOCs is summarized in Table 2, as well as in previous editions of the COVID-19 Weekly Epidemiological Update. Since the last update on 14 December 2021, there are several new publications on the phenotypic characteristics of VOCs**,** including recent literature on Omicron. Some of the studies reported have not been peer-reviewed and the findings must therefore be interpreted with due consideration of this limitation.

Update on Omicron VOC

The Omicron variant has a substantial growth advantage and is rapidly replacing other variants. This variant has been shown to have a shorter doubling time as compared to previous variants, with transmission occurring even amongst those vaccinated or with a history of prior SARS-CoV-2 infection; there is increasing evidence that this variant is able to evade immunity.[1–4] In Denmark, the first case of infection with the Omicron variant was detected on 22 November 2021, with community transmission established by late November 2021. A non-peer-reviewed preprint used Danish registers to estimate the household secondary attack rate (SAR) among Danish households during December 2021. The SAR was 31% versus 21% in households with the Omicron (total primary cases: 2225) and Delta variant (total primary cases: 9712), respectively, with the estimated SAR remaining higher for the Omicron than for the Delta variant across all groups.[3] Additionally, unvaccinated households had a 1.17 (95%CI: 0.99-1.38) times higher SAR when infected with the Omicron compared to Delta variant, while vaccinated individuals and individuals who had

[i] Includes sequences submitted to GISAID with sample collected dates from 12 December 2021 to 10 January 2022 (last reported sample at the time of data extraction), excluding low coverage sequences.

received a booster dose had 2.61 times (95%-CI: 2.34-2.90) and 3.66 times (95%-CI: 2.65-5.05) higher SAR respectively, providing evidence as to the ability of the Omicron variant to evade immunity (note that the absolute risk of infection remained lower in vaccinated individuals than unvaccinated individuals).

In terms of disease severity, there is growing evidence that the Omicron variant is less severe as compared to other variants.[5–8] A non-peer-reviewed preprint from Gauteng province, South Africa which documented the first rapid increases in case incidence due to the Omicron variant, compared the clinical severity of patients hospitalised with SARS-CoV-2 infection from 14 November until 11 December 2021 (a period during which Omicron became the dominant circulating variant) with periods when the Beta and Delta variants were the dominant variants (29 November to 26 December 2020 and 2 May to 29 May 2021, respectively).[9] Despite the higher number of cases during the 'Omicron-dominant' period, hospital admission rates were lower, with 4.9% of cases admitted as compared with 18.9% admitted during the 'Beta-dominant' period and 13.7% during the 'Delta-dominant' period. Similarly, fewer patients developed severe disease during the latter period (28.8%; 1,276/4,438) as compared to the Beta (60.1%; 4,672/7,774) and Delta (66.8%; 3,058/4,574) periods. In this study, severe disease was defined as one or more of the following: development of acute respiratory distress syndrome, supplemental oxygen or invasive mechanical ventilation, treatment in high care or the intensive care unit, or death. Additionally, patients admitted during the 'Omicron-dominant period' were 73% less likely to have severe disease than patients admitted during the 'Delta-dominant period' (Adjusted Odds Ratio 0.27, 95% CI 0.25-0.31).

A non-peer-reviewed retrospective cohort study from the United States of America, where the Omicron variant has been detected since December 2021, used propensity-score matching on demographic characteristics, co-morbidities, medications,, vaccination status and other socio-economic determinants of health to compare the 3-day risk (time window from the first day of SARS-CoV-2 infection identification to three days after infection) of adverse outcomes following infection with SARS-CoV-2.[8] The outcomes, visiting the emergency department (ED), hospitalization, ICU admission, and mechanical ventilation, were compared between the two cohorts. These cohorts included those infected with SARS-CoV-2 between 15 and 24 December 2021 when the Omicron variant was dominant, the 'Omicron cohort' (n=14 054) and those infected between 1 September and 15 December 2021 when the Delta variant was dominant (n=563 884), the 'Delta cohort'. Compared to the Delta cohort, the risk of an adverse outcome in the Omicron cohort was lower, including admission to ED (Risk Ratio [RR] 0.30, 95%CI 0.28-0.33); hospitalization (RR 0.44, 95%CI 0.38-0.52); ICU admission (RR 0.33, 95%CI 0.23-0.48) and mechanical ventilation (RR 0.16, 95%CI 0.08-0.32). Similarly, the risk of attending the ED or of hospitalization was lower amongst those under 5 years old in the Omicron as compared to Delta cohort (RR=0.19, 95%CI 0.14-0.25 and RR=0.36, 95%CI 0.19-0.68, respectively). These findings suggests that while the absolute number of cases and hospitalizations among children are currently increasing in the United States of America, the risk of hospitalization still remains lower compared to other age groups during the period when Omicron is circulating as compared to the period when the Delta variant was dominant.

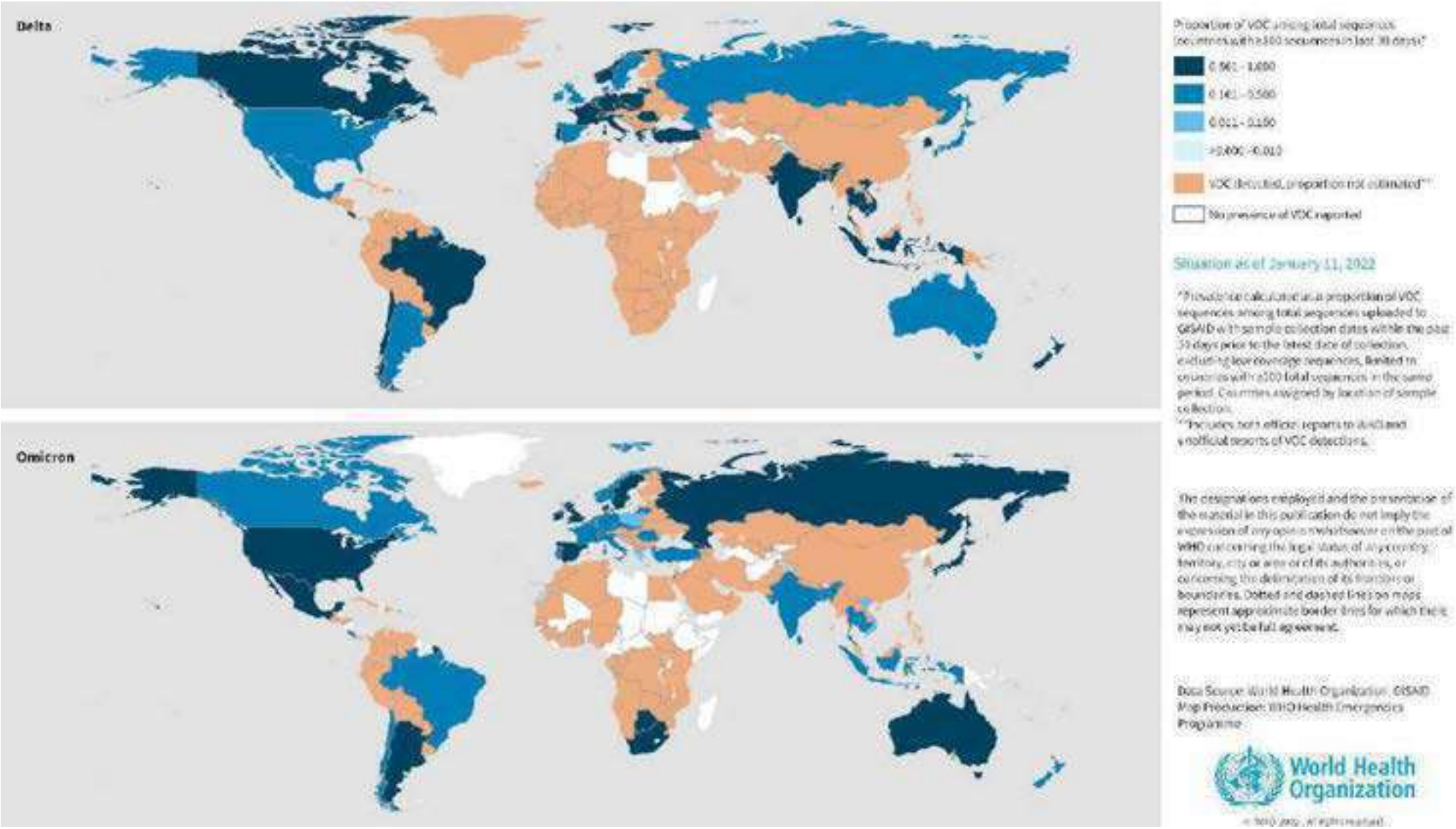
A small cohort study (not yet peer-reviewed) conducted in South Africa of 15 individuals showed that infection with the Omicron variant enhanced an individual's neutralizing antibody immune response against the Delta variant.[10] The study enrolled previously vaccinated and unvaccinated individuals who were infected with SARS-CoV-2 during the period when the Omicron variant was dominant(n=13). Participants were sampled at enrollment, which was a median of four days post-symptom onset and again at a median of 14 days post-enrollment. Two participants did not neutralize Omicron at either timepoint and were excluded from the analysis. Two of the remaining 13 participants did not have detectable SARS-CoV-2 at enrollment, indicating that infection was already cleared, and therefore, that these participants were sampled later post-infection. The blood from the participants was used to neutralize both Omicron and Delta variants at enrollment and a median of 14 days after enrollment. A 14.4-fold increase (95% CI 5.5-37.4) in the geometric mean titer (GMT) of the focus reduction neutralization test ($FRNT_{50}$) (20 to 285) was seen between enrollment and the later visit for the Omicron variant and a 4.4-fold increase (95%CI 2.1-9.2) in the GMT of the $FRNT_{50}$ for the Delta variant (80 to 354). This study provides early evidence on a small cohort

which suggests that there may be an increase in Delta variant neutralization in individuals infected with Omicron, which may result in decreased ability of Delta to re-infect those individuals.

A case-control test-negative study (not yet peer-reviewed) estimated the effectiveness of prior infection with SARS-CoV-2 in preventing reinfection with the Omicron and other variants in Qatar, with the hypothesis that protection against reinfection with Omicron was lower than for other variants.[11] Cases (those who were PCR-positive for SARS-CoV-2) and controls (those who were PCR-negative) were matched by sex, 10-year age group, nationality, and calendar time of the PCR test, to control for known differences in the risk of exposure to SARS-CoV-2 infection. Prevention against symptomatic reinfection was estimated at 90.2% (95% CI: 60.2-97.6) for the Alpha variant, 84.8% (95% CI: 74.5-91.0) for the Beta variant, 92.0% (95% CI: 87.9-94.7) for the Delta variant, and 56.0% (95% CI: 50.6-60.9) for the Omicron variant. Prevention against hospitalization or death due to reinfection was estimated at 69.4% (95% CI: -143.6-96.2) for the Alpha variant, 88.0% (95% CI: 50.7-97.1) for the Beta variant, 100% (95% CI: 43.3-99.8) for the Delta variant, and 87.8% (95% CI: 47.5-97.1) for the Omicron variant. This study suggested that protection afforded by prior infection in preventing symptomatic reinfection with Alpha, Beta, or Delta was robust; while such protection against reinfection with Omicron was lower, at nearly 60%. Prior-infection protection against hospitalization or death at reinfection remained robust regardless of variant.

These are all preliminary results which may not represent the overall phenotypic and clinical profile of the Omicron variant and will possibly change as more evidence becomes available in the coming weeks. As a result of this, the overall risk related to Omicron remains very high. More information on the Omicron variant can be found in the updated Technical Brief and Priority Actions for Member States dated 7 January 2022 by WHO.

Figure 4: Prevalence of variants of concern (VOCs) Delta and Omicron in the last 30 days, data as of 11 January 2022



See also Annex 2 for reported VOC detections by country/territory/area

Table 2: Summary of phenotypic impacts* of variants of concern

WHO label	Alpha	Beta	Gamma	Delta	Omicron
Transmissibility	Increased transmissibility[12]	Increased transmissibility[13,14]	Increased transmissibility[14,15]	Increased transmissibility [14,16,17]	Increased transmissibility.[1–4]
Disease severity	Possible increased risk of hospitalization[18,19], possible increased risk of severe disease and death[20,21]	Possible increased risk of hospitalization[19], possible increased in-hospital mortality[22]	Possible increased risk of hospitalization[19], possible increased risk of severe disease[23]	Possible increased risk of hospitalization[24,25]	Possible reduced risk of hospitalization and severe disease [5–8]
Risk of reinfection	Neutralizing activity retained[26], risk of reinfection remains similar[27]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[28]	Moderate reduction in neutralizing activity reported[29]	Reduction in neutralizing activity reported[30–32]	Increased risk of reinfection [11,33]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF), no impact on overall result from multiple target RT-PCR; No impact on Ag RDTs observed[34]	No impact on RT-PCR or Ag RDTs observed[32]	None reported to date	No impact on RT-PCR or Ag RDTs observed[35]	PCR continues to detect Omicron. Impact on Ag-RDTs is under investigation: Results are mixed as to whether or not there may be decreased sensitivity to detect Omicron. [1,8,36–38]

**Generalized findings as compared to previously/co-circulating variants. Based on emerging* evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.

Table 3 summarizes the impact of variants on product specific vaccine efficacy/effectiveness (VE) and quantifies the reduction in VE in the setting of variants compared to non-VOC settings. Here, we review studies assessing VE against Delta and Omicron variants of concern only. Since the 14 December update, we report on a total of 13 new studies that provided evidence of COVID-19 vaccine effectiveness against Delta and Omicron.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Table 3. Table 3. Summary of vaccine performance against variants of concern (data as of 8 January 2022)

	WHO Emergency Use Listing (EUL) Qualified Vaccines[+]							Vaccines without WHO EUL[+]		
	AstraZeneca-Vaxzevria/SII - Covishield	Beijing CNBG-BBIBP-CorV	Bharat-Covaxi	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Gamaleya-Sputnik V	Novavax-Covavax
Alpha[39,40]										
Summary of VE*	Protection retained against all outcomes									
- Severe disease	↔$_{2}$	-	-	-	↔$_{2}$	↔$_{6}$	-	-	-	-
- Symptomatic disease	↔to↓$_{5}$	-	-	-	↔$_{1}$	↔$_{4}$	-	-	-	↓$_{1}$
- Infection	↔to↓$_{4}$	-	-		↔$_{3}$	↔$_{3}$	-	-	-	-
Neutralization	↔to↓$_{9}$	↔$_{1}$	↔$_{2}$	↔$_{5}$	↔to↓$_{15}$	↔to↓$_{48}$	↔to↓↓$_{8}$	↔$_{2}$	↔to↓$_{3}$	↓$_{2}$
Beta[41–44]										
Summary of VE*	Protection retained against severe disease; reduced protection against symptomatic disease; limited evidence									
- Severe disease	-	-	-	↔$_{1}$	↔$_{1}$	↔$_{3}$	-	-	-	-
- Symptomatic disease	↔to↓↓↓$_{2}$	-	-	↔$_{1}$	↔$_{1}$	↔$_{2}$	-	-	-	↓↓↓$_{1}$
- Infection	-	-	-	-	↔$_{1}$	↓$_{1}$	-	-	-	-
Neutralization	↓to↓↓$_{11}$	↓$_{3}$	↓$_{2}$	↓to↓↓$_{9}$	↓to↓↓$_{26}$	↓to↓↓$_{57}$	↓to↓↓↓$_{7}$	↔to↓$_{3}$	↓to↓↓$_{4}$	↓↓to↓↓↓$_{2}$
Gamma										
Summary of VE*	Unclear impact; very limited evidence									
- Severe disease	↔$_{1}$	-	-	-	↔$_{1}$	↔$_{2}$	-	-	-	-
- Symptomatic disease	↔$_{1}$	-	-	-	↔$_{1}$	↔$_{1}$	-	-	-	-
- Infection	↔$_{1}$	-	-	-	↔$_{1}$	↔$_{1}$	↔$_{1}$	-	-	-
Neutralization	↔to↓$_{4}$	-	-	↔to↓$_{5}$	↓$_{10}$	↔to↓$_{28}$	↓$_{5}$	↔$_{1}$	↓t$_{1}$	↓$_{1}$
Delta[45]										
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection									
- Severe disease	↔$_{3}$	-	-	↓$_{1}$	↔$_{3}$	↔$_{6}$	-	-	-	-
- Symptomatic disease	↔to↓↓$_{6}$	-	↓$_{1}$	-	↔$_{2}$	↔to↓$_{5}$	-	-	-	-
- Infection	↔to↓$_{4}$	-	-	↓↓↓$_{1}$	↔$_{3}$	↔to↓$_{3}$	-	-	-	-
Neutralization	↓$_{13}$	↓$_{2}$	↔to↓$_{3}$	↔to↓↓$_{9}$	↔to↓$_{14}$	↔to↓$_{39}$	↓to↓↓↓$_{8}$	↔to↓$_{2}$	↓to↓↓$_{3}$	↓$_{1}$
Omicron										
Summary of VE*	Reduced protection against infection and symptomatic disease; possible reduced protection against severe disease; limited evidence									
- Severe disease	-	-	-	-	-	↓↓/↓↓↓$_{1}$	-	-	-	-
- Symptomatic disease	↓↓↓$_{1}$	-	-	-	↓↓$_{1}$	↓↓↓$_{1}$	-	-	-	-
- Infection	-	-	-	-	↓↓↓$_{1}$	↓↓↓$_{2}$	-	-	-	-
Neutralization	↓↓↓$_{3}$	-	-	↓↓$_{1}$	↓↓↓$_{12}$	↓↓↓$_{20}$	↓$_{1}$	-	↓↓↓$_{1}$	↓↓$_{1}$

VE refers to vaccine effectiveness and vaccine efficacy. *Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10% reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20% reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30% reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30% reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study. The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources Library. References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table.

Omicron VOC

Since the last update on 14 December, six studies have provided evidence of reduced vaccine effectiveness (VE) of COVID-19 vaccines against the Omicron variant. Four of these studies provide the first estimates of VE against severe disease associated with the Omicron variant.

A peer-reviewed test-negative case control study from South Africa analyzed 133 437 PCR test results among adults aged 18 years and older and found reduced VE of Pfizer BioNTech-Comirnaty against hospitalization ≥ 14 days after receipt of the second dose during the period 15 November– 7 December 2021 when Omicron was the dominant circulating variant.[46] VE against hospitalization during this period was 70% (95% CI: 62 to 76%) as compared to 93% (90-94%) during the period of 1 September to 31 October 2021 when Delta was the dominant variant in circulation.

A second test-negative study (not yet peer reviewed) assessed VE of a booster dose of Janssen-Ad26.COV2.S against hospitalization due to Omicron among healthcare workers in South Africa.[47] VE of two doses of Janssen-Ad26.COV2.S against hospitalization with Omicron 14-27 days post booster as compared to unvaccinated healthcare workers was 84% (67 to 92%), which was maintained 1-2 months after a booster.

A third test-negative case-control study from the United Kingdom (not yet peer reviewed) found a combined VE of either the Pfizer BioNTech-Comirnaty, Moderna-mRNA-1273 or AstraZeneca-Vaxzevria vaccines against hospitalization due to infection with the Omicron variant, of 72% (55 to 83%) 2-24 weeks after receipt of a second dose. This declined to 52% (21-71%) after 25 weeks following the second dose.[48] However, the contribution of each vaccine to the VE was unknown. A booster dose of mRNA vaccine increased VE against hospitalization ≥ 14 days after vaccination to 88% (78 to 93%).

A fourth test-negative case-control study from the United States of America (not yet peer-reviewed) assessed the effectiveness of Moderna-mRNA-1273 at preventing hospitalization due to Omicron and Delta among members aged 18 years and older of a large healthcare system during 16 to 23 December 2021.[49] Though numbers were too small to estimate the VE against hospitalization due to Omicron and adjusted for important confounders, the authors report an *unadjusted* VE of 16.5% (0-89.1%) for two doses and 100% (95% CI not available due to no cases in the vaccinated group) for three doses; adjusted VE of two doses against hospitalization due to Delta was 98.0% (87.2 to 99.7%). The maximum potential follow-up time from second and third dose was approximately 11 months and two months, respectively. This study also assessed VE of Moderna-mRNA-1273 against infection due to Omicron. Adjusted VE 14-90 days post second dose was 30.4% (5.0 to 49.0%) and fell to 0% by 6 months post second dose. Among immunocompetent persons who had received a third vaccine dose after 20 October 2021, VE against Omicron was 63.6% (57.4 to 61.5%) with a median follow-up time of 36 days. VE of three doses of Moderna-mRNA-1273 against Omicron infection was substantially lower when restricting to immunocompromised persons (VE: 11.5%, 95% CI: 0 to 66.5%). VE of two doses of the vaccine against infection due to Delta was substantially higher than that for Omicron, but also showed declined over time since second dose. VE at 14-90 days and 271-365 days among vaccinated was 82.8% (69.6 to 90.3%) and 52.9% (43.7 to 60.5%), respectively. VE of three doses against Delta infection for persons receiving their booster dose after 20 October 2021 was 95.7% (94.2 to 96.8%).

A fifth test-negative study (not yet peer reviewed) assessed VE of Pfizer BioNTech-Cominarty against infection due to Omicron and Delta among persons aged 18 years and older in Canada.[50] The findings showed that Pfizer BioNTech-Comirnaty was not effective at preventing infection with Omicron 7-59 days following receipt of the second dose (VE: -2%, 95% CI: -38% to 25%). VE against infection due to Omicron increased but remained low after ≥7 days of receiving the booster dose of Pfizer BioNTech-Comirnaty (37%, 95%: 18 to 51%). The same study found that VE against infection due to Delta remained high at 82% (79 to 85%) 7-59 days after the second dose of Pfizer BioNTech-

Comirnaty but declined to 66% (60 to 71%) by eight months post second dose. Receipt of a third dose of the vaccine increased VE against Delta to 93% ≥7 days after receiving the vaccine (91 to 94%).

While early VE estimates against the Omicron variant should be interpreted with caution due to potential biases, these preliminary results provide evidence of reduced overall effectiveness of vaccines against the Omicron variant, with greater declines in effectiveness with increasing time since vaccination, relative to Delta. These VE findings are consistent with findings from recent neutralization studies (see table 3). While a booster vaccination appears to improve VE against infection and hospitalization due to the Omicron variant, more data are needed to assess both the magnitude and duration of the protection.

Delta VOC

Several additional studies have assessed the effectiveness of COVID-19 vaccines against the Delta variant. A retrospective cohort study (not yet peer reviewed) conducted among a cohort of healthcare worker in South Africa during a period when the Delta variant was the dominant variant found the Janssen-Ad26.COV2.S vaccine to be 67% (62 to 71%) and 82% (74 to 89%) effective at preventing hospitalization and death, respectively, over a median follow-up time of 3.6 months.[51] Another retrospective study among adults in Scotland, the United Kingdom, during a Delta dominant period found the AstraZeneca-Vaxzevria vaccine to be 83.7% (79.7 to 87.0%) effective at preventing hospitalization or death 14-27 days after receipt of second dose, with VE decreasing to 53.6% (48.4 to 58.3%) approximately five months after.[52]

Five new studies assessed the ability of a booster dose of mRNA vaccines to prevent infection and disease due to the Delta variant. A retrospective cohort study from Singapore (not yet peer reviewed) found an increased vaccine effectiveness of three doses of Pfizer BioNTech-Comirnaty and Moderna-mRNA-1273 *relative to two doses* of each vaccine during a period when Delta was dominant.[53] The VE of three versus two doses of Pfizer BioNTech-Comirnaty against infection, symptomatic disease, and severe disease was 73% (71 to 74%), 72% (71 to 74%), and 95% (92 to 97%), respectively. A booster dose of Moderna-mRNA-1273 after Pfizer BioNTech-Comirnaty primary series resulted in higher VE estimates for infection (82%), symptomatic disease (82%) and severe disease (92%) compared to receiving a booster of Pfizer BioNTech-Comirnaty. The VE of three compared to two doses of Moderna-mRNA-1273 against infection and symptomatic disease was 86% (81 to 90%) and 85% (79 to 89%), with no estimate available for severe disease. The maximum potential follow-up time from receipt of booster dose for this study was six weeks.

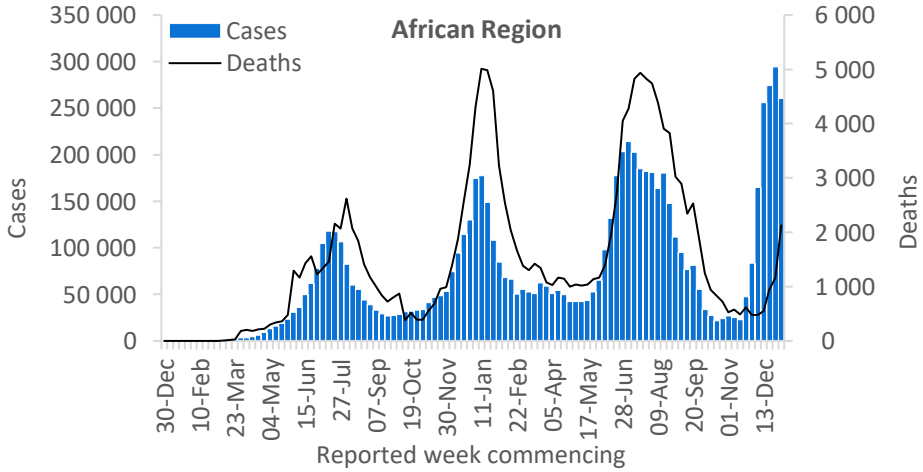
To date many studies have provided evidence of high VE against the Delta variant, especially against severe disease due to Delta, with VE decreasing over time among vaccinated people. These recent studies provide further evidence that booster vaccination may improve VE against Delta, although more data are needed to fully assess the duration of protection.[54–58]

WHO regional overviews Epidemiological week 3 – 9 January 2021

African Region

After showing a continuous increase in weekly cases for six weeks, the African Region reported an 11% decrease in weekly cases as compared to the previous week, with over 260 000 new cases reported this week. This decrease was mainly driven by decreases in new weekly cases reported by Mozambique (17 667 vs 26, 860 new cases) and South Africa (53 433 vs 60 142 new cases). However, one-third of countries (16/49), still reported increases of over 50%. The highest numbers of new cases were reported from South Africa (53 433 new cases; 90.1 new cases per 100 000 population; an 11% decrease), Zambia (23 628 new cases; 128.5 new cases per 100 000; a 10% decrease), and Ethiopia (18 999 new cases; 16.5 new cases per 100 000; a 34% decrease).

The number of new weekly deaths continues to increase in the Region, with over 2100 new deaths reported this week, an 84% increase as compared to the previous week. This increase is largely due to retrospective reporting of 500 deaths on 6 January, resulting in an increase in weekly deaths of 176%. The highest numbers of new deaths were reported from South Africa (1173 new deaths; two new deaths per 100 000 population; a 176% increase), Zimbabwe (131 new deaths; <1 new death per 100 000; a 1% decrease), and Madagascar (90 new deaths; <1 new death per 100 000; a 190% increase).

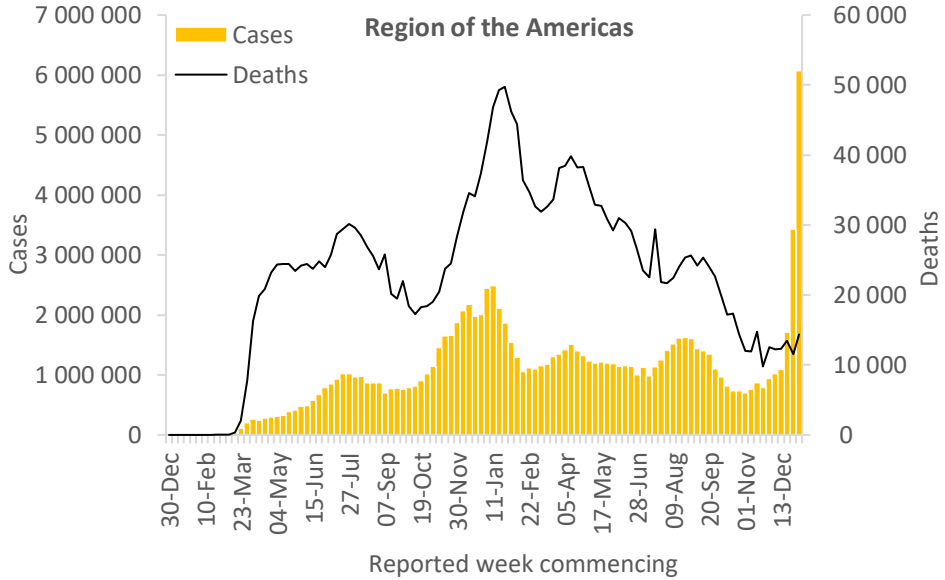


Updates from the African Region

Region of the Americas

The Region of the Americas has continued to report an increasing trend in weekly cases for over a month, with the highest number of weekly cases (over six million new cases) ever reported this week, a 78% increase as compared to the previous week. The Region also reported over 14 000 new deaths, a 25% increase as compared to the previous week. This increase in weekly cases and deaths is mainly driven by large increases in the United States of America with four additional countries (80%) reporting an increase of 50% or more compared to the previous week.

The highest numbers of new cases were reported from the United States of America (4 610 359 new cases; 1392.8 new cases per 100 000; a 73% increase), Argentina (461 408 new cases; 1020.9 new cases per 100 000; a 101% increase), and Canada (254 299 new cases; 673.8 new cases per 100 000; a 15% increase). The highest numbers of new deaths were reported from the United States of America (11 182 new deaths; 3.4 new deaths per 100 000; a 26% increase), Brazil (766 new deaths; <1 new death per 100 000; a 15% increase), and Mexico (560 new deaths; <1 new death per 100 000; a 28% increase).

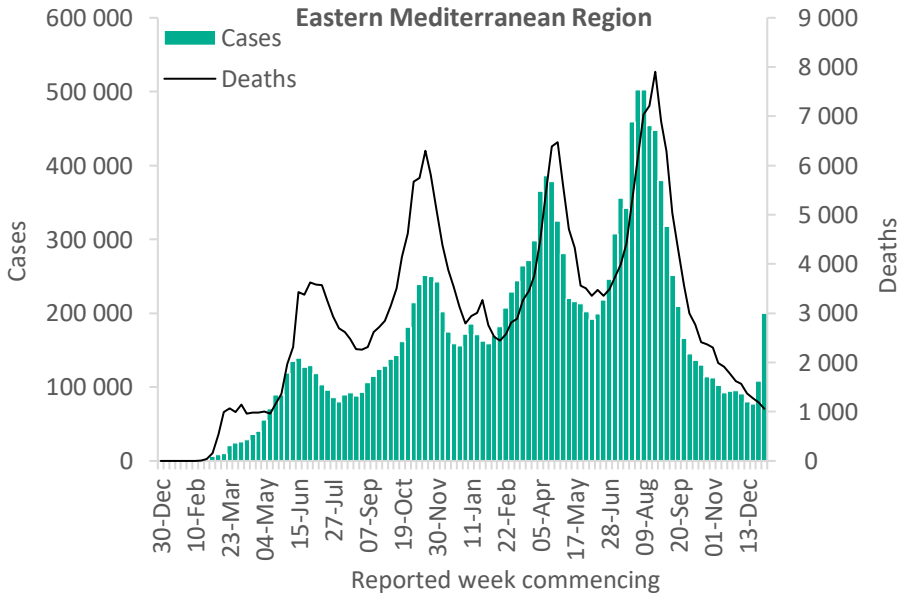


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 200 000 new cases and over 1000 new deaths, an 86% increase and an 11% decrease, respectively as compared to the previous week. This week, 35% of all new cases were reported from two countries including Lebanon (38,112 new cases) and Morocco (31,701 new cases). In the past week, 12 countries in the Region (57%) reported an increase of 50% or greater in the number of new cases, with Kuwait reporting the highest proportional increase in cases (2812 vs 13 197 new cases, a 369% increase). The highest numbers of new cases were reported from Lebanon (38 112 new cases; 558.4 new cases per 100 000; a 90% increase), Morocco (31 701 new cases; 85.9 new cases per 100 000; a 222% increase), and the United Arab Emirates (18 373 new cases; 185.8 new cases per 100 000; a 23% increase). These countries account for almost half (44%) of all new cases in the Region.

The highest numbers of new deaths were reported from the Islamic Republic of Iran (208 new deaths; <1 new death per 100 000; a 29% decrease), Jordan (172 new deaths; 1.7 new deaths per 100 000; a 28% decrease), and Egypt (170 new deaths; <1 new death per 100 000; a 14% decrease).

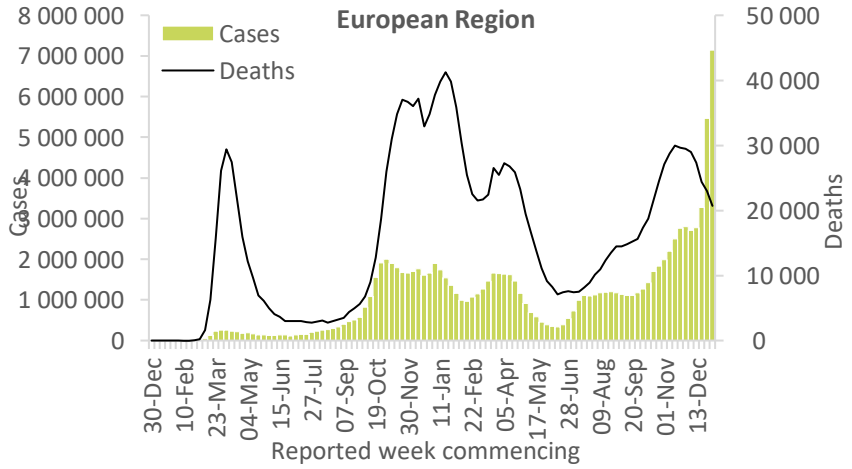


Updates from the Eastern Mediterranean Region

European Region

The number of new cases continued to increase this week in the European Region with over 7.1 million new cases reported, a 31% increase as compared to the previous week. However, the number of weekly deaths continued to decline with over 20 000 new deaths reported, a 10% decrease as compared to the previous week. In the past week, 27 countries in the Region (44%) reported an increase of 50% or greater in the number of new cases with the highest increases reported from Kosovo [1] (842 vs 204 new cases, a 313% increase), Greenland (1883 vs 475 new cases, a 296% increase) and Israel (100 353 vs 26 913 new cases, a 273% increase). The highest numbers of new cases were reported from France (1 600 121 new cases; 2460.2 new cases per 100 000; a 46% increase), the United Kingdom (1 217 258 new cases; 1793.1 new cases per 100 000; a 10% increase), and Italy (1 014 358 new cases; 1700.8 new cases per 100 000; a 57% increase).

The highest number of new deaths were reported from the Russian Federation (5645 new deaths; 3.9 new deaths per 100 000; a 10% decrease), Poland (2150 new deaths; 5.7 new deaths per 100 000; a 34% decrease), and Germany (1822 new deaths; 2.2 new deaths per 100 000; similar to the previous week's figures).

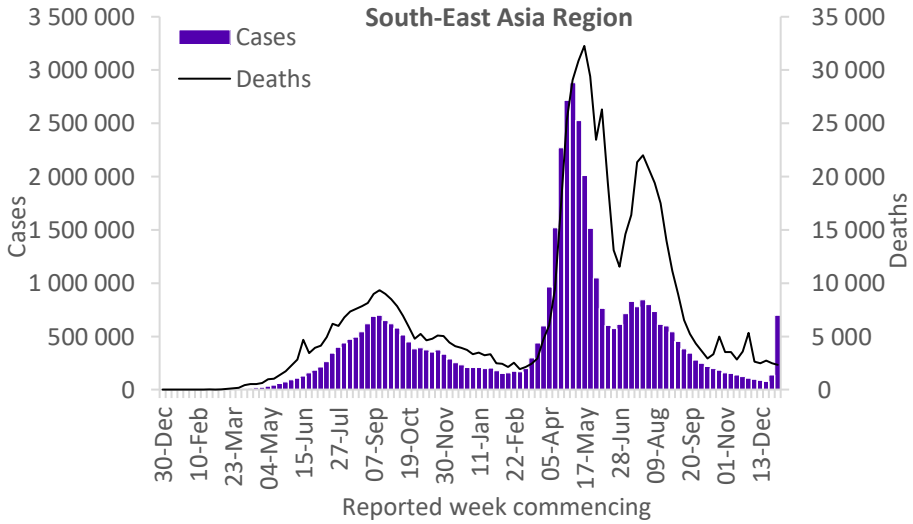


Updates from the European Region

South-East Asia Region

During the past week, the South-East Asia Region reported over 699 000 new cases, a 418% increase, an incidence not seen since mid-August 2021. Seven countries (78%) reported large increases, of over 50%, with the highest increases reported from India, Timor-Leste (six vs 17 new cases; a 183% increase) and Bangladesh.). The highest numbers of new cases were reported from India (638 872 new cases; 46.3 new cases per 100 000; a 524% increase), Thailand (39 992 new cases; 57.3 new cases per 100 000; a 104% increase), and Bangladesh (7234 new cases; 4.4 new cases per 100 000; a 125% increase).

The number of deaths however, declined in the past week with over 2300 new deaths reported, a 6% decrease as compared to the previous week. The highest numbers of new deaths were reported from India (2020 new deaths; <1 new death per 100 000; similar to the previous week's figures), Thailand (105 new deaths; <1 new death per 100 000; a 25% decrease), and Sri Lanka (100 new deaths; <1 new death per 100 000; a 26% decrease).

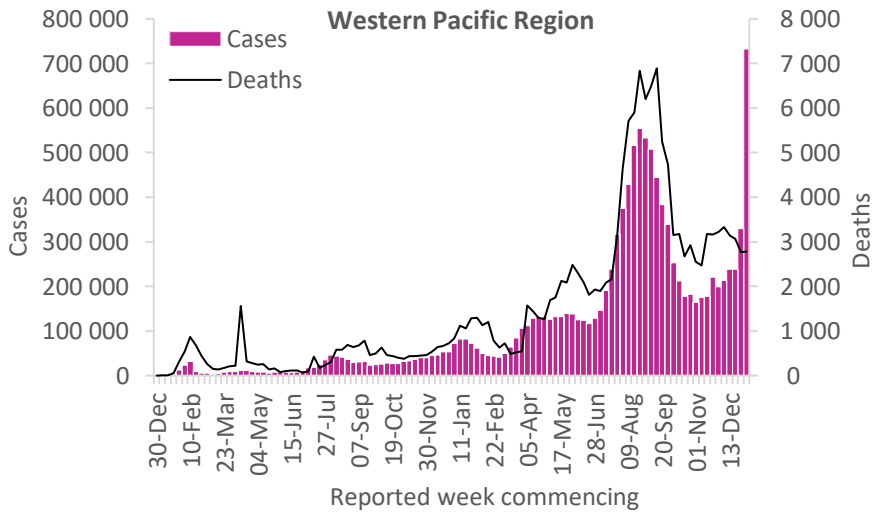


Updates from the South-East Asia Region

Western Pacific Region

The number of reported new cases in the Western Pacific Region more than doubled (122%) in the past week with over 732 000 new cases reported. Of the 27 countries in the Region, 10 (37%) reported an increase of over 50% in new cases this week with the highest increases reported from the Philippines, Japan (23 168 vs 2777 new cases, a 734% increase) and Guam (666 vs 92 new cases, a 624% increase). The highest numbers of new cases were reported from Australia (420 079 new cases; 1647.4 new cases per 100 000; a 204% increase), Viet Nam (130 302 new cases; 133.9 new cases per 100 000; a 19% increase), and the Philippines (89 409 new cases; 81.6 new cases per 100 000; an 880% increase).

Just over 2700 new deaths were reported this week, similar to the previous week's figures. The highest numbers of new deaths were reported from Viet Nam (1507 new deaths; 1.5 new deaths per 100 000; a 6% decrease), the Philippines (590 new deaths; <1 new death per 100 000; a 65% increase), and the Republic of Korea (343 new deaths; <1 new death per 100 000; a 24% decrease).



Updates from the Western Pacific Region

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice

Annexes

Annex 1. Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. Likewise, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection.
- Table 3 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than four months post final dose.
- Studies reporting VOC-specific VE estimates for full vaccination (≥7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca-Vaxzevria for infection (when a phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Neutralization studies that use samples collected >7 days and < 6 months after complete vaccination and that use an ancestral strain as the reference are included in the Table 3.

Annex 2. List of countries/territories/areas reporting variants of concern as of 11 January 2022

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Afghanistan	●	-	●	-	-
Albania	●	-	○	-	○*
Algeria	●	-	●	-	●
Andorra	○	○	○	-	-
Angola	●	●	●	●	●*
Anguilla	●	-	●	-	-
Antigua and Barbuda	●	●	●	●	●*
Argentina	●	●	●	●	●
Armenia	●	-	●	-	●*
Aruba	●	●	●	●	●
Australia	●	●	●	●	●
Austria	●	●	●	●	●
Azerbaijan	●	-	○	-	●*
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	●
Bangladesh	●	●	●	○	●
Barbados	●	-	●	●	●*
Belarus	●	-	○	-	○*
Belgium	●	●	●	●	●
Belize	●	-	●	●	-
Benin	●	●	●	●	-
Bermuda	●	●	●	-	●
Bhutan	●	●	●	-	-
Bolivia (Plurinational State of)	●	-	●	●	○*
Bonaire	●	-	●	●	●*
Bosnia and Herzegovina	●	●	○	●	○*
Botswana	○	●	●	-	●
Brazil	●	●	●	●	●
British Virgin Islands	●	-	●	●	○*

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Brunei Darussalam	●	●	●	-	●*
Bulgaria	●	●	●	-	○*
Burkina Faso	●	●*	●	-	●
Burundi	●	●	●	-	-
Cabo Verde	●	●*	●	-	●*
Cambodia	●	●	●	-	●
Cameroon	●	●	●	●	-
Canada	●	●	●	●	●
Cayman Islands	●	●	●	●	●
Central African Republic	●	●	●	-	-
Chad	●	●*	●*	-	-
Chile	●	●	●	●	●
China	●	●	●	●	●
Colombia	●	-	●	●	●
Comoros	●*	●	●	-	-
Congo	●	●	●	●	○*
Costa Rica	●	●	●	●	●
Croatia	●	●	○	●	●
Cuba	●	●	●	-	●
Curaçao	●	●	●	●	○*
Cyprus	●	●	○	-	●
Czechia	●	●	●	●	●
Côte d'Ivoire	●	●	○	●*	○*
Democratic Republic of the Congo	●	●	●	-	●
Denmark	●	●	●	●	●
Djibouti	●	●	●	-	-
Dominica	●	-	●	-	-
Dominican Republic	●	-	●	●	●*
Ecuador	●	-	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Egypt	●	-	●	-	●
El Salvador	●	-	●	●	-
Equatorial Guinea	●	●	●	●*	-
Estonia	●	●	○	○	●
Eswatini	●	●	●	-	●*
Ethiopia	●	●	●	○*	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	-	●	-
Fiji	○	-	●	-	●
Finland	●	●	●	●	●
France	●	●	●	●	●
French Guiana	●	●	●	●	●*
French Polynesia	●	●	●	●	●
Gabon	●	●	●	●*	○*
Gambia	●	●*	●	●*	○*
Georgia	●	○	●	-	●
Germany	●	●	●	●	●
Ghana	●	●	●	●	●
Gibraltar	●	-	○	-	●
Greece	●	●	●	●	●
Greenland	-	-	●	-	-
Grenada	●	-	●	●	●*
Guadeloupe	●	●	●	●	●
Guam	●	●	●	●	-
Guatemala	●	●	●	●	●*
Guernsey	-	-	-	-	●
Guinea	●	●	●	-	●*
Guinea-Bissau	●	●	●	-	-
Guyana	-	-	●	●	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Haiti	●	-	●	●	-
Honduras	●	-	●	●	○*
Hungary	●	○	○	●	●
Iceland	●	●	●	●	●
India	●	●	●	●	●
Indonesia	●	●	●	-	●
Iran (Islamic Republic of)	●	●	●	-	●
Iraq	●	●	●	●	●*
Ireland	●	●	●	●	●
Israel	●	●	●	●	●
Italy	●	●	●	●	●
Jamaica	●	-	●	-	●*
Japan	●	●	●	●	●
Jordan	●	●	●	●	●
Kazakhstan	●	○	●	-	○*
Kenya	●	●	●	●*	●
Kosovo[1]	●	○	○	-	●*
Kuwait	●	●	●	-	●
Kyrgyzstan	●	●	●	-	-
Lao People's Democratic Republic	●	-	●	-	○*
Latvia	●	●	○	●	●
Lebanon	●	-	●	-	●
Lesotho	●*	●	●	-	-
Liberia	●	●	●	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	○	○	○
Lithuania	●	●	○	●	●
Luxembourg	●	●	●	●	●
Madagascar	●	●	-	○*	-
Malawi	●	●	●	-	●
Malaysia	●	●	●	-	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Maldives	●	-	●	-	●
Mali	●	●*	●	-	-
Malta	●	○	○	●	●*
Martinique	●	●	●	●	●*
Mauritania	●	●	●	-	●*
Mauritius	●	●	●	-	●
Mayotte	●	●	○	-	●*
Mexico	●	●	●	●	●
Monaco	●	●	●	-	-
Mongolia	●	-	●	-	○
Montenegro	●	-	○	○	○
Montserrat	●	-	●	●	-
Morocco	●	●	●	-	●
Mozambique	●	●	●	-	●
Myanmar	●	-	●	-	●*
Namibia	●	●	●	●	●
Nepal	●	-	●	-	●
Netherlands	●	●	●	●	●
New Caledonia	●	-	●	-	●*
New Zealand	●	●	●	●	●
Nicaragua	●	●	●	●	-
Niger	●	-	●	-	●*
Nigeria	●	●	●	-	●
North Macedonia	●	●	○	-	○*
Northern Mariana Islands (Commonwealth of the)	○	-	●	-	-
Norway	●	●	●	●	●
Occupied Palestinian Territory	●	●	●	-	●
Oman	●	●	●	-	●
Pakistan	●	●	●	●	●
Panama	●	●	●	●	●
Papua New Guinea	-	-	●	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Paraguay	●	-	●	●	●*
Peru	●	-	●	●	●
Philippines	●	●	●	●	●
Poland	●	○	●	●	●
Portugal	●	●	●	●	●
Puerto Rico	●	●	●	●	●
Qatar	●	●	●	-	●
Republic of Korea	●	●	●	●	●
Republic of Moldova	●	-	●	-	○*
Romania	●	●	●	●	●
Russian Federation	●	●	●	○	●
Rwanda	●	●	●	-	●
Réunion	●	●	○	●	●
Saba	-	-	●	-	-
Saint Barthélemy	●	-	●	-	○*
Saint Kitts and Nevis	-	-	●	-	○*
Saint Lucia	●	-	●	-	-
Saint Martin	●	●	●	-	●
Saint Pierre and Miquelon	-	-	●	-	-
Saint Vincent and the Grenadines	-	-	●	●	●*
Sao Tome and Principe	●	●*	○	-	-
Saudi Arabia	●	●	●	-	●
Senegal	●	●	●	-	●
Serbia	●	-	●	-	○*
Seychelles	●	●	●	-	○*
Sierra Leone	●*	●	●	-	●
Singapore	●	●	●	●	●
Sint Maarten	●	●	●	●	●*
Slovakia	●	●	●	-	●
Slovenia	●	●	●	●	●
Solomon Islands	-	-	-	-	●*

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Somalia	●	●	●	-	-
South Africa	●	●	●	●	●
South Sudan	●	●	●	-	●*
Spain	●	●	●	●	●
Sri Lanka	●	●	●	-	●
Sudan	●	●	-	●	-
Suriname	●	●	●	●	-
Sweden	●	●	●	●	●
Switzerland	●	●	●	●	●
Thailand	●	●	●	●	●
Timor-Leste	●	-	●	-	-
Togo	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Trinidad and Tobago	●	-	●	●	●
Tunisia	●	●	●	-	●
Turkey	●	●	●	●	●
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	●	-	●
Ukraine	●	○	○	-	●
United Arab Emirates	●	●	●	●	●
United Kingdom	●	●	●	●	●
United Republic of Tanzania	●*	●	●*	●*	○*
United States Virgin Islands	●	●	●	●	-
United States of America	●	●	●	●	●
Uruguay	●	●	●	●	●*

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Uzbekistan	●	●	○	-	●*
Vanuatu	-	-	●	-	-
Venezuela (Bolivarian Republic of)	●	-	●	●	●*
Viet Nam	●	●	●	-	●*
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	●	-	●
Zimbabwe	●	●	●	-	●

*unofficial sources and will be reviewed as more information become available. **Includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern. See also Annex 2: Data, table, and figure notes*

Annex 3. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

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COVID-19 Weekly Epidemiological Update

Edition 73, published 6 January 2022

In this edition:

- Global overview
- WHO regional overviews

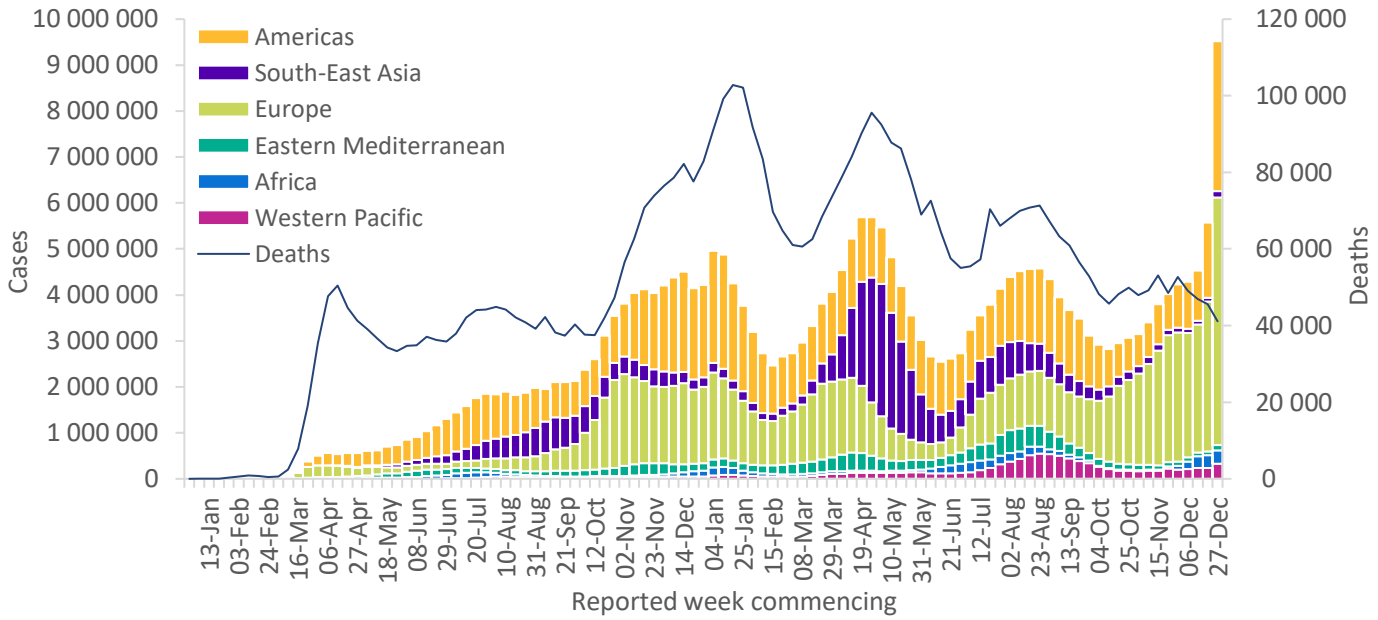
Global overview

Data as of 2 January 2022

During the week 27 December 2021 to 2 January 2022, following a gradual increase since October, the global number of new cases increased sharply by 71% as compared to the previous week (Table 1), while the number of new deaths decreased by 10%. This corresponds to just under 9.5 million new cases and over 41 000 new deaths reported during the last week. As of 2 January, a total of nearly 289 million cases and just over 5.4 million deaths have been reported globally (Figure 1).

All regions reported an increase in the incidence of weekly cases, with the Region of the Americas reporting the largest increase (100%), followed by the South-East Asia (78%), European (65%), Eastern Mediterranean (40%), Western Pacific (38%) and the African (7%) Regions. The African Region was the only region to report a weekly increase in the number of new deaths (22%). All other regions reported a decrease in the incidence of deaths, including the Americas (18%), Western Pacific (10%), South-East Asia (9%), Eastern Mediterranean (7%) and the European (6%) Regions.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 2 January 2022**



**See *Annex 1: Data, table, and figure notes*

The European Region continued to report the highest incidence of weekly cases (577.7 new cases per 100 000 population), followed by the Region of the Americas (319.0 new cases per 100 000 population). Both regions also reported the highest weekly incidence in deaths of 2.4 and 1.1 per 100 000 population, respectively, while all other regions reported <1 new death per 100 000.

The highest numbers of new cases were reported from the United States of America (2 556 690 new cases; 92% increase), the United Kingdom (1 104 316 new cases; 51% increase), France (1 093 162 new cases; 117% increase); Spain (649 832 new cases; 60% increase) and Italy (644 508 new cases; 150% increase).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 2 January 2022**

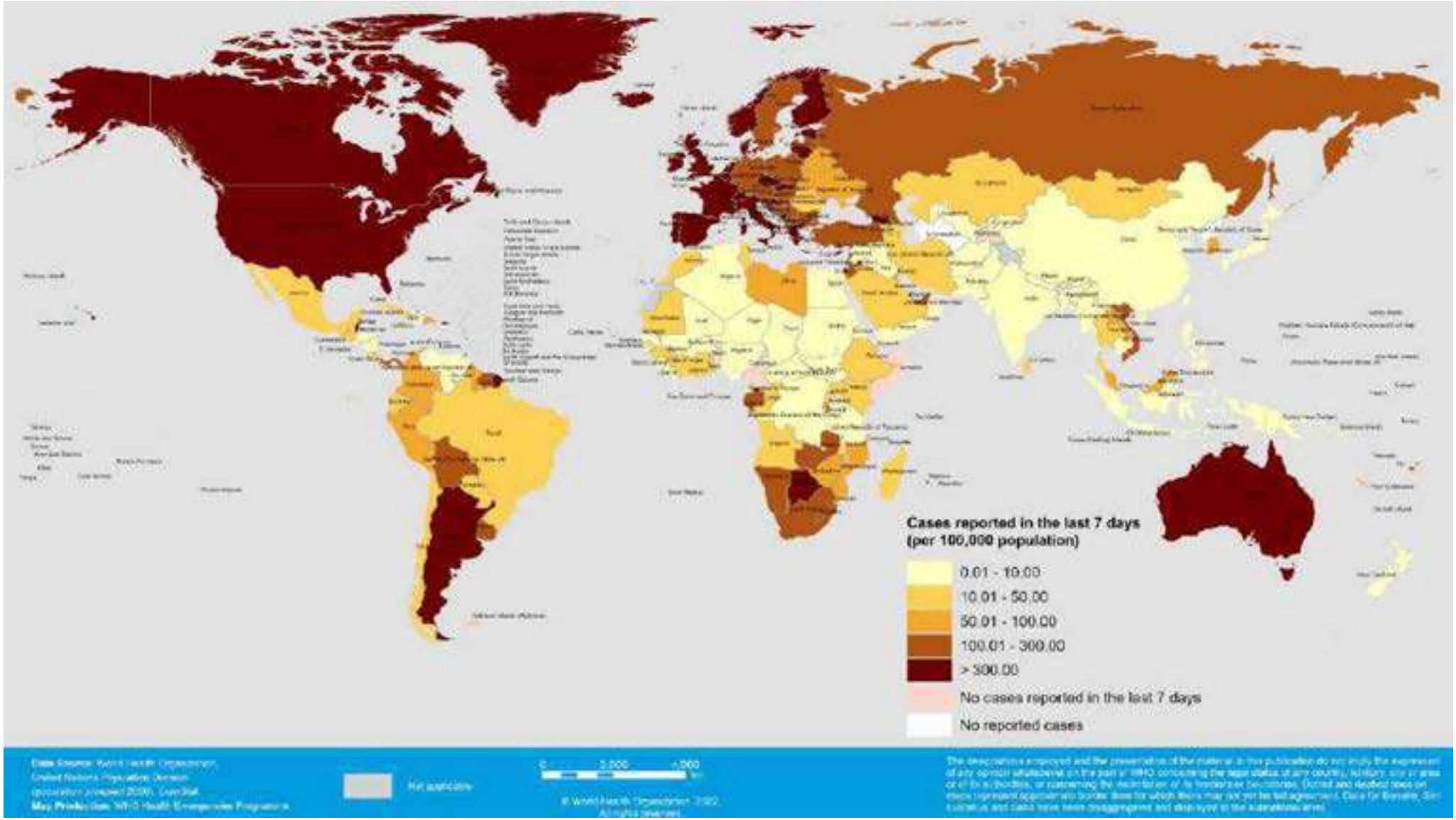
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	5 390 588 (57%)	65%	103 190 471 (36%)	22 817 (55%)	-6%	1 674 758 (31%)
Americas	3 263 069 (34%)	100%	104 698 449 (36%)	10 787 (26%)	-18%	2 411 818 (44%)
Western Pacific	329 598 (3%)	38%	11 391 761 (4%)	2 769 (7%)	-10%	156 515 (3%)
Africa	294 373 (3%)	7%	7 350 001 (3%)	1 159 (3%)	22%	156 451 (3%)
South-East Asia	135 147 (1%)	78%	45 034 821 (16%)	2 454 (6%)	-9%	721 940 (13%)
Eastern Mediterranean	107 713 (1%)	40%	17 201 367 (6%)	1 192 (3%)	-7%	316 141 (6%)
Global	**9 520 488 (100%)**	**71%**	**288 867 634 (100%)**	**41 178 (100%)**	**-10%**	**5 437 636 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

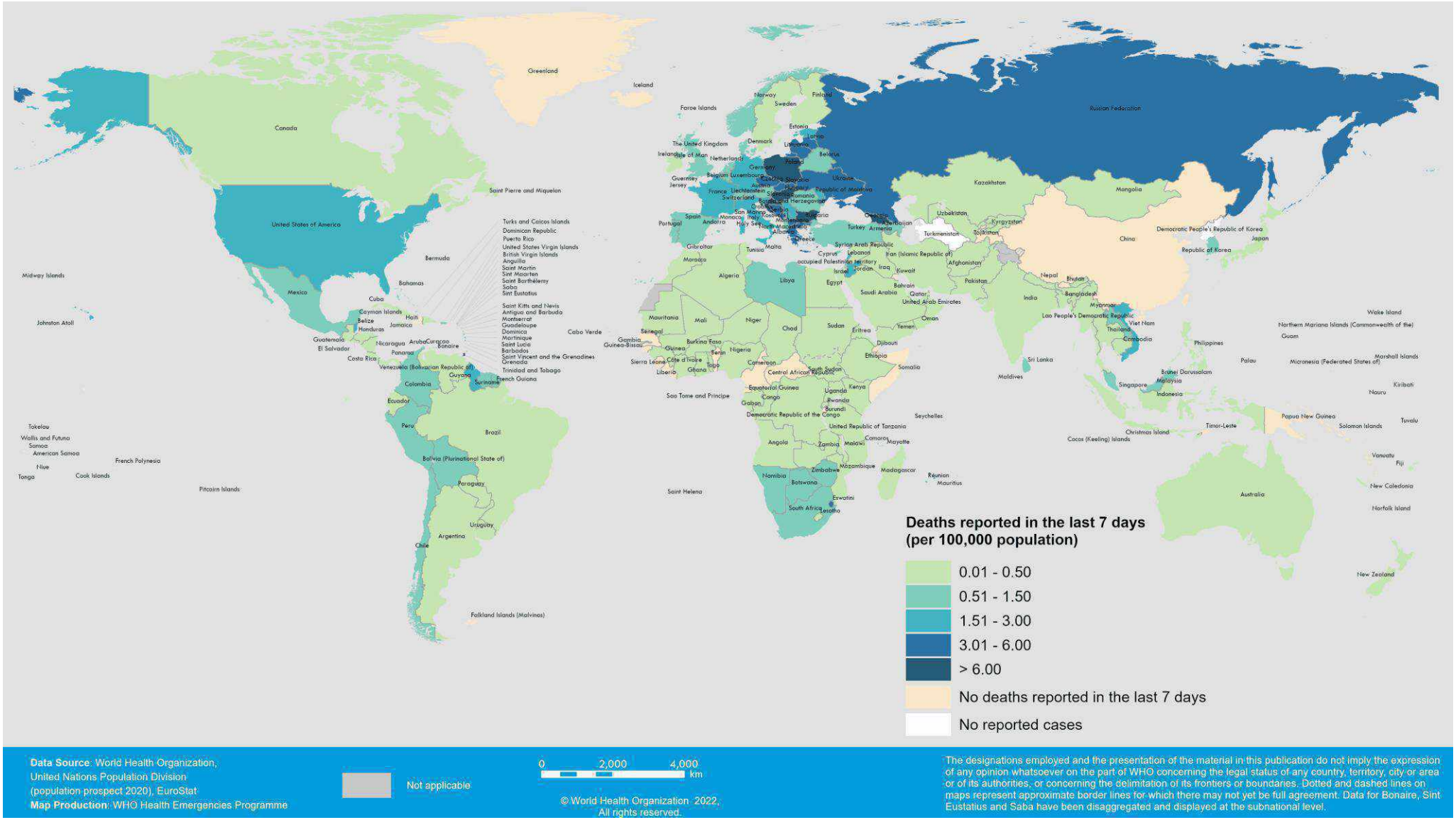
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 27 December 2021 - 2 January 2022**



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 27 December 2021 - 2 January 2022**



**See *Annex 1: Data, table, and figure notes*

Additional resources

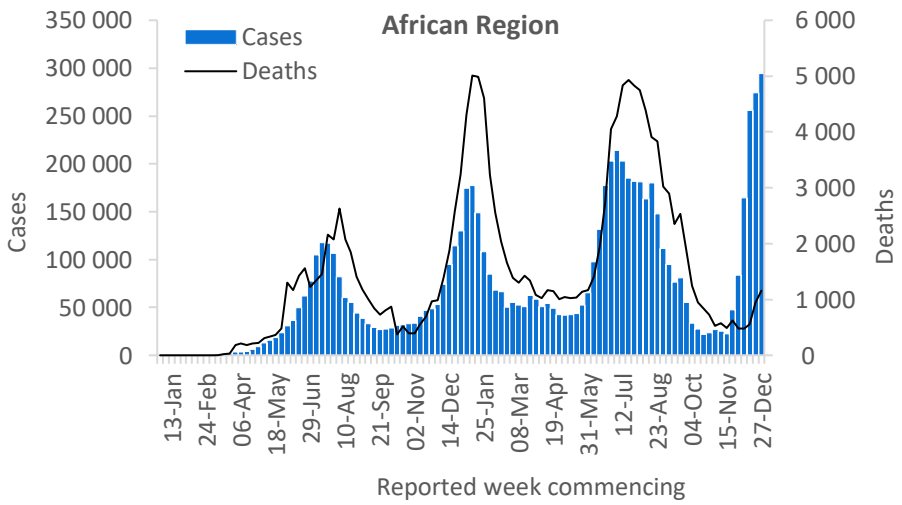
- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19

WHO regional overviews Epidemiological week 27 December 2021 – 2 January 2022

African Region

The African Region reported over 294 000 new cases, with a similar increase in incidence as the previous week (7%). Increases in case incidence of over 50% as compared to the previous week were observed in over half of countries (28/49; 57%) in the Region. The highest numbers of new cases were reported from South Africa (60 142 new cases; 101.4 new cases per 100 000 population; a 48% decrease), Ethiopia (28 590 new cases; 24.9 new cases per 100 000 population; a 43% increase) and Mozambique (26 860 new cases; 85.9 new cases per 100 000; a 298% increase).

The Region reported over 1100 new weekly deaths, a 22% increase as compared to the number reported during the previous week. The highest numbers of new deaths were reported from South Africa (425 new deaths; <1 new death per 100 000 population; similar to the previous week), Zimbabwe (132 new deaths; <1 new death per 100 000; a 28% increase) and Algeria (55 new deaths; <1 new death per 100 000; an 12% increase).

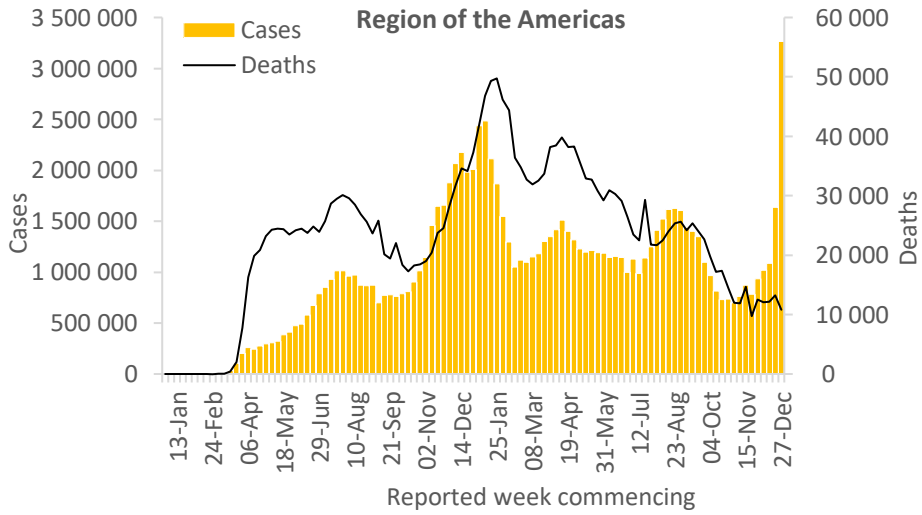


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 3.2 million new cases, an increase of 100%, as compared to the previous week. The trends are largely driven by the incidence of cases in the United States of America and over 70% of the countries (39/56) reported increases of over 50%. The highest numbers of new cases were reported from the United States of America (2 556 690 new cases; 772.4 new cases per 100 000; a 92% increase), Argentina (229 192; 507.1 new cases per 100 000; a 290% increase) and Canada (180 587 new cases; 478.5 new cases per 100 000; a 90% increase).

Over 10 000 new deaths were reported, a 18% decrease as compared to the number reported during the previous week. The highest numbers of new deaths were reported from the United States of America (8004 new deaths; 2.4 new deaths per 100 000; a 22% decrease), Brazil (664 new deaths; <1 new death per 100 000; a 16% decrease), and Mexico (646 new deaths; <1 new death per 100 000; a 31% increase).

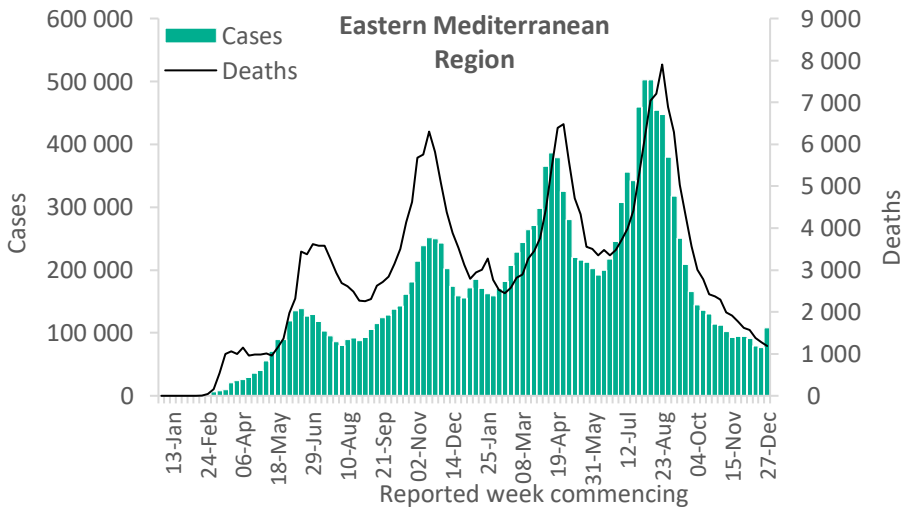


Updates from the Region of the Americas

Eastern Mediterranean Region

After reporting relatively stable number of weekly cases over the past two months, countries in the Eastern Mediterranean Region reported a 40% increase in the number of new weekly cases, with over 107 000 cases reported. Half of the countries (11/22) reported increases in cases of over 50%, with the highest increases reported from Morocco (9833 vs 2959 new cases, a 232% increase); Kuwait (2812 vs 888 new cases, a 217% increase) and Bahrain (3159 vs 1108 new cases, 185% increase). The highest numbers of new cases were reported from Lebanon (20 029 new cases; 293.4 new cases per 100 000; a 70% increase), the United Arab Emirates (14 963 new cases; 151.3 new cases per 100 000; a 164% increase) and Jordan (12 856 new cases; 126.0 new cases per 100 000; a 28% decrease).

The weekly incidence of deaths in the Region decreased by 7%, while the highest numbers of new deaths were reported from the Islamic Republic of Iran (291 new deaths; <1 new death per 100 000; an 8% decrease), Jordan (240 new deaths; 2.4 new deaths per 100 000; a 5% decrease) and Egypt (197 new deaths; <1 new death per 100 000; a 23% decrease).

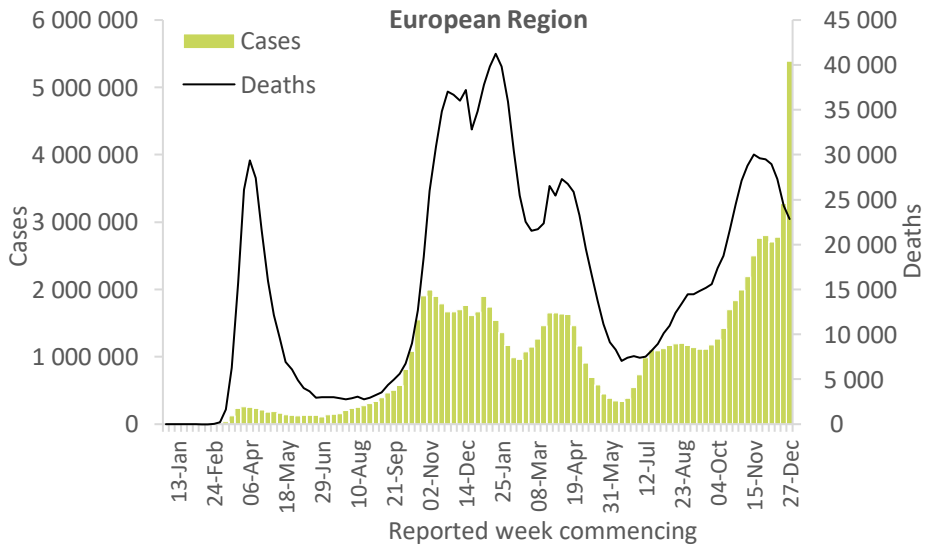


Updates from the Eastern Mediterranean Region

European Region

The European Region reported just under 5.4 million new cases, a 65% increase as compared to the previous week. The weekly incidence of deaths decreased by 6%, as compared to the previous week, with over 22 000 new deaths reported. Weekly increases in cases of over 50% were reported by 43% (26/61) of countries in the Region, with the highest increases reported from Montenegro (9093 vs 1299 new cases, a 353% increase), Greece (170 029 vs 39 594 new cases, a 329% increase) and Cyprus (19 311 vs 5135 new cases, a 276% increase). The highest numbers of new cases were reported from the United Kingdom (1 104 316 new cases; 1626.7 new cases per 100 000; a 51% increase), France (1 093 162 new cases; 1680.8 new cases per 100 000; a 117% increase) and Spain (649 832 new cases; 1372.9 new cases per 100 000; a 60% increase).

The highest numbers of new deaths continue to be reported from the Russian Federation (6300 new deaths; 4.3 new deaths per 100 000; a 10% decrease), Poland (3265 new deaths; 8.6 new deaths per 100 000; a 15% increase), and Germany (1791 new deaths; 2.2 new deaths per 100 000; a 16% decrease).

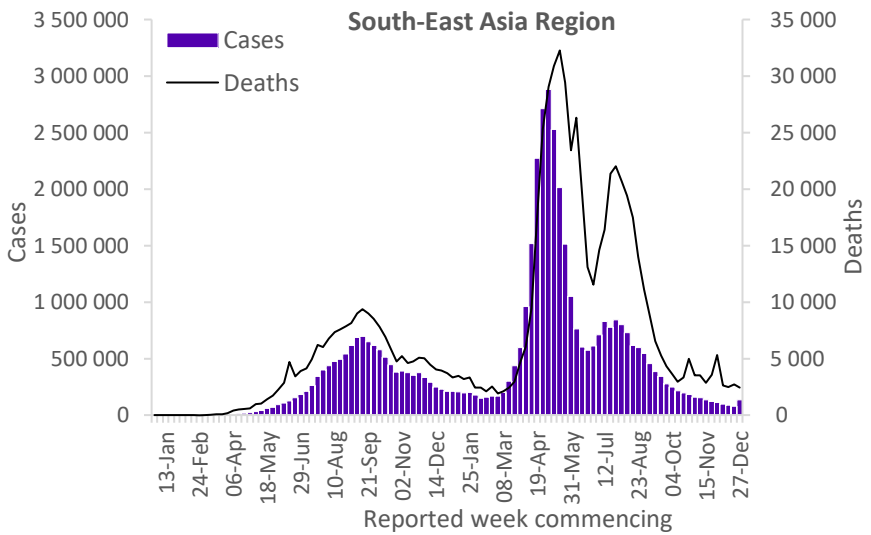


Updates from the European Region

South-East Asia Region

After a declining trend in the number of weekly cases since the end of July 2021, the South-East Asia Region reported an increase in case incidence of 78%, corresponding to over 135 000 new cases. However, the number of new weekly deaths decreased by 9%, with over 2400 new deaths reported. Half of the countries (5/10) reported weekly increases in the number of new cases of over 10%. After India, the highest increases in new cases were reported by Bangladesh (3213 vs 2170 new cases, a 48% increase) and the Maldives (1188 vs 907 new cases, a 31% increase). The highest numbers of new cases were reported from India (102 330 new cases; 7.4 new cases per 100 000; a 120% increase), Thailand (19 588 new cases; 28.1 new cases per 100 000; a 6% increase) and Sri Lanka (4286 new cases; 20,0 new cases per 100 000; an 8 increase).

The highest numbers of new deaths continued to be reported from India (2088 new deaths; <1 new death per 100 000; an 8% decrease), Thailand (140 new deaths; <1 new death per 100 000; a 31% decrease), and Sri Lanka (135 new deaths; <1 new death per 100 000; similar to the previous week).

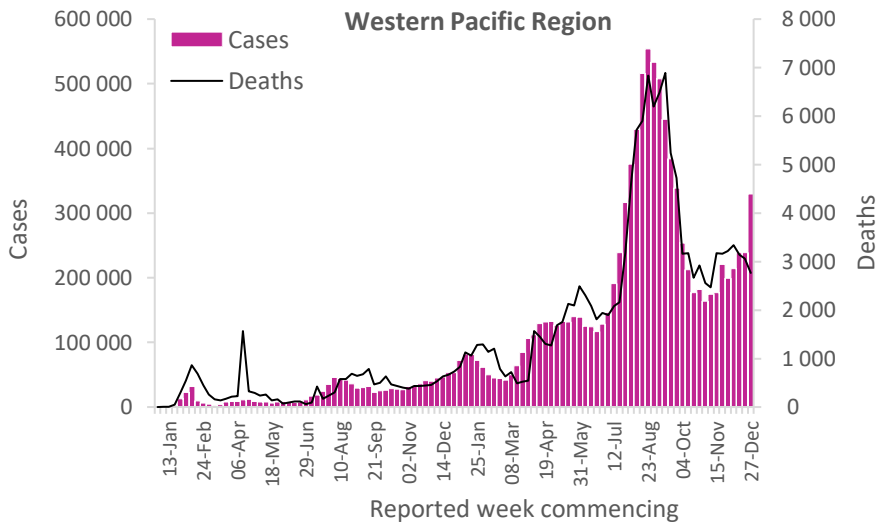


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported over 329 000 new cases, a 38% increase, as compared to the previous week. The incidence of deaths decreased by 10% as compared to the previous week, with over 2700 new weekly deaths reported. Nearly one-third of the countries in the Region (8/27, 30%) reported an increase in case incidence of over 50%, with the highest increases reported from the Philippines (9124 vs 833 new cases, a 995% increase), Fiji (1614 vs 192 new cases, a 741% increase) and Australia. The highest numbers of new cases were reported from Australia (138 240 new cases; 542.1 new cases per 100 000; a 203% decrease), Viet Nam (109 637 new cases; 112.6 new cases per 100 000, similar to the previous week), and the Republic of Korea (31 615 new cases; 61.7 new cases per 100 000; a 25% decrease).

The highest numbers of new deaths were reported from Viet Nam (1603 new deaths; 1.6 new deaths per 100 000; similar to the previous week), the Republic of Korea (449 new deaths; <1 new death per 100 000; a 14% decrease), and the Philippines (358 new deaths; <1 new death per 100 000; a 30% decrease).



Updates from the Western Pacific Region

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

COVID-19 Weekly Epidemiological Update

Edition 72, published 28 December 2021

In this edition:

- Global overview
- Brief Update on SARS-CoV-2 Omicron variant
- WHO regional overviews

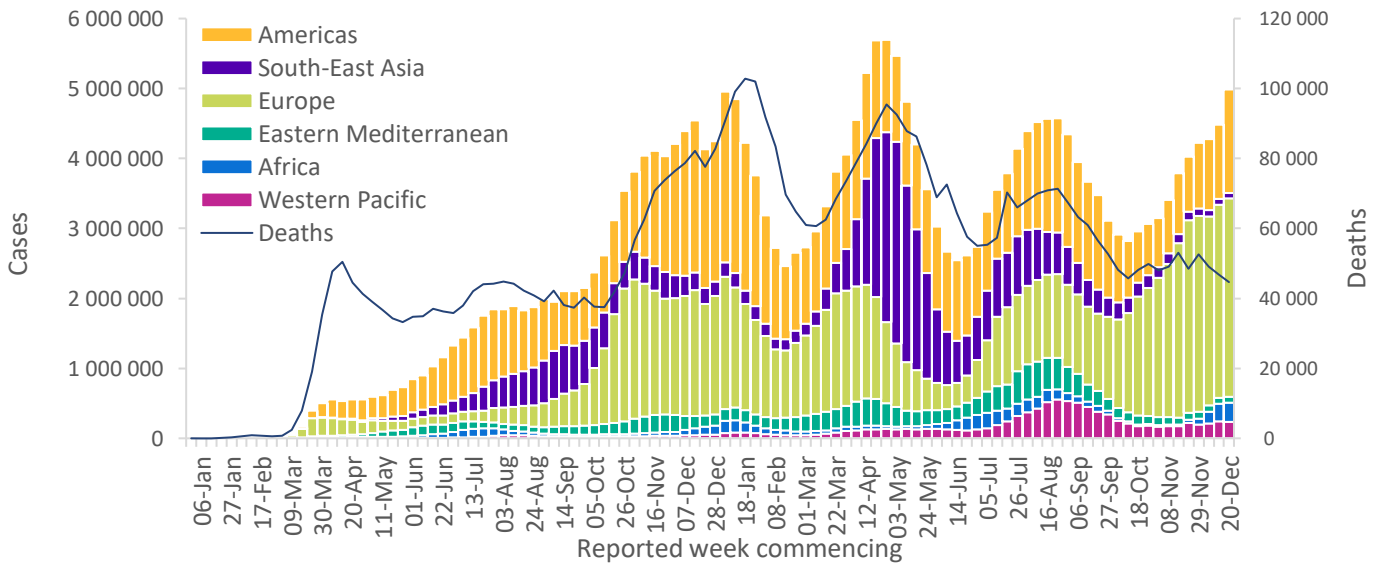
Global overview

Data as of 26 December 2021

During the week 20-26 December, following a gradual increase since October, the global number of new cases increased by 11% as compared to the previous week (Table 1); while the number of new deaths remained similar to the number reported during the previous week. This corresponds to just under 5 million new cases and over 44 000 new deaths. As of 26 December, over 278 million cases and just under 5.4 million deaths have been reported globally (Figure 1).

The Region of the Americas reported the largest increase in new cases in the last week (39%), followed by the African Region, which reported an increase of 7%. The South-East Asia Region continued to report a decrease in new cases as compared to the previous week (12%) while in the European, Eastern Mediterranean, and Western Pacific Regions, the number of new cases was similar to those reported during the previous week. The African Region reported the highest increase in the number of new deaths (72%), followed by the South-East Asia Region (9%) and the Region of the Americas (7%). The European and Eastern Mediterranean Region reported decreases of 12% and 7% respectively, in the incidence of deaths, while in the Western Pacific Region, the incidence was similar to the previous weeks.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 26 December 2021**



**See *Annex 1: Data, table, and figure notes*

The European Region continued to report the highest incidence of weekly cases (304.6 new cases per 100 000 population), followed by the Region of the Americas (144.4 new cases per 100 000 population). Both regions also reported the highest weekly incidence in deaths of 2.6 and 1.2 per 100 000 population, respectively, while all other regions reported <1 new death per 100 000.

The highest numbers of new cases were reported from the United States of America (1 185 653 new cases; 34% increase), the United Kingdom (611 864 new cases; 20% increase), France (504 642 new cases; 41% increase); Italy (257 579 new cases; 62% increase) and Germany (197 845 new cases; 30% decrease).

Please note, the next issue of the Weekly Epidemiological Update (to be published on 6 January) will be condensed versions covering only the global and regional epidemiology of COVID-19.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 26 December 2021**

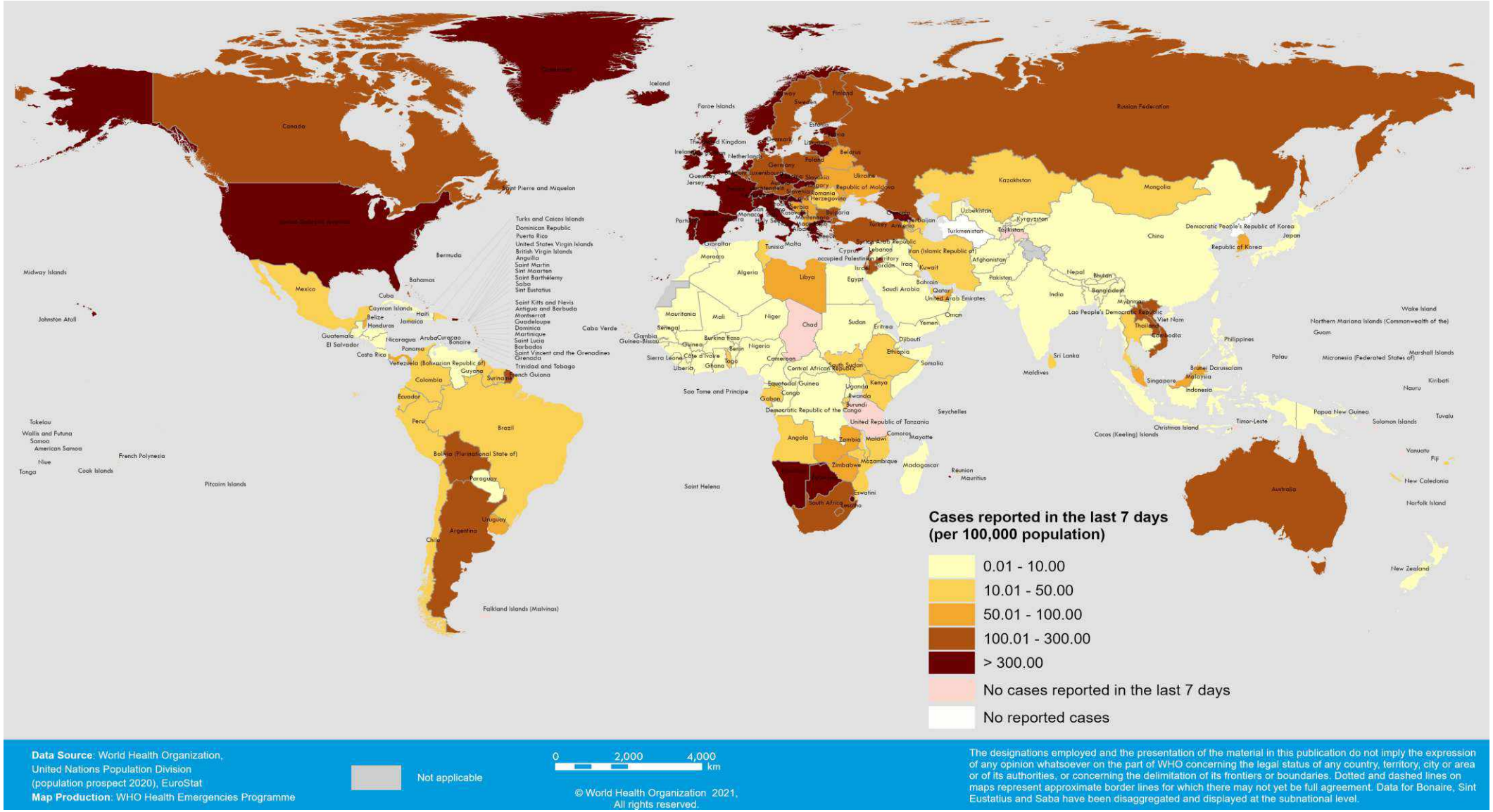
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	2 842 375 (57%)	3%	97 359 631 (35%)	23 900 (53%)	-12%	1 650 729 (31%)
Americas	1 476 724 (30%)	39%	101 243 155 (36%)	12 782 (29%)	7%	2 399 735 (44%)
Africa	274 342 (6%)	7%	7 055 628 (3%)	952 (2%)	72%	155 292 (3%)
Western Pacific	238 654 (5%)	0%	11 062 163 (4%)	3 063 (7%)	-3%	153 746 (3%)
Eastern Mediterranean	76 875 (2%)	-3%	17 093 469 (6%)	1 275 (3%)	-7%	314 949 (6%)
South-East Asia	76 123 (2%)	-12%	44 899 674 (16%)	2 708 (6%)	9%	719 486 (13%)
Global	**4 985 093 (100%)**	**11%**	**278 714 484 (100%)**	**44 680 (100%)**	**-4%**	**5 393 950 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 1: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

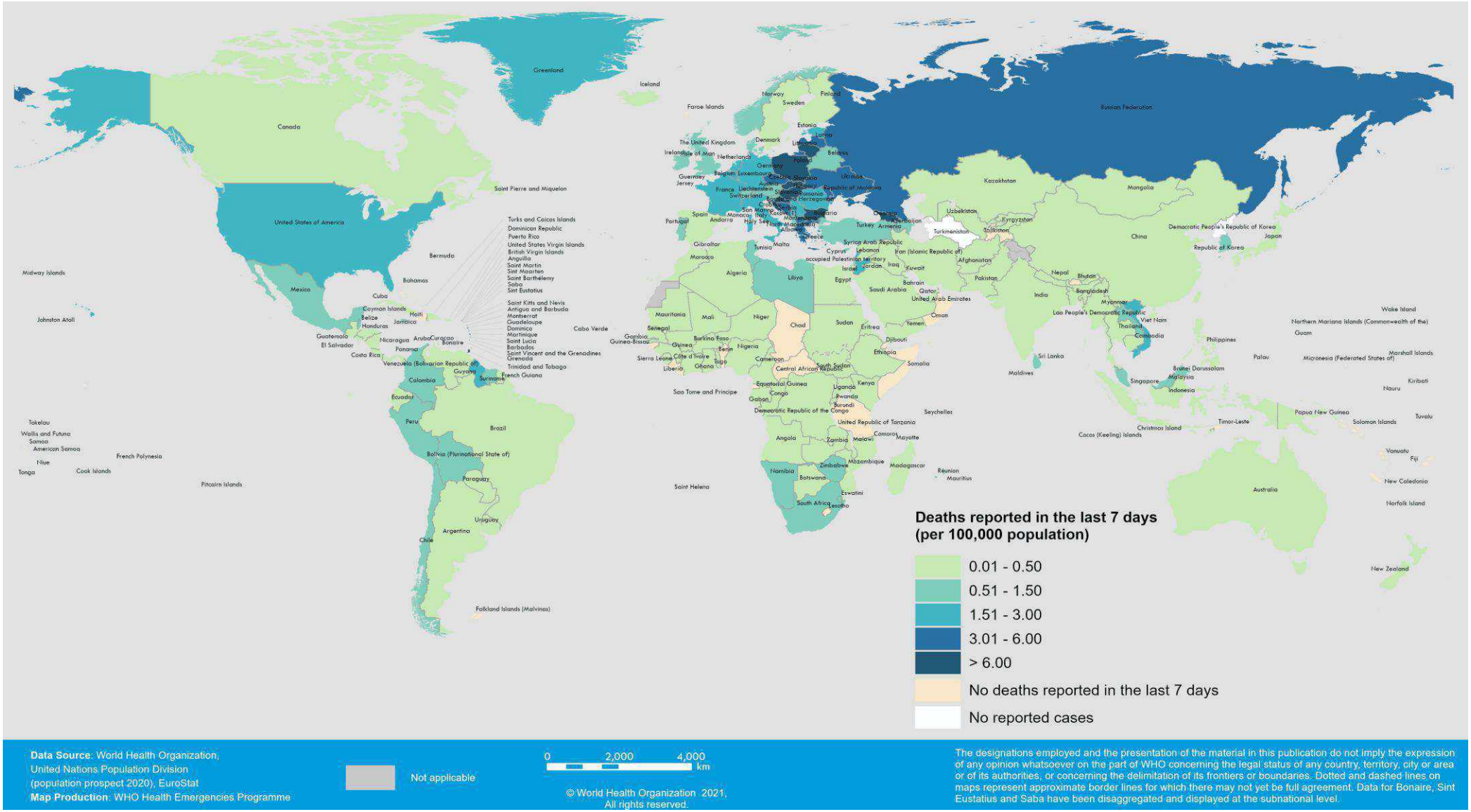
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 20 - 26 December 2021**



**See *Annex 1: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 20 - 26 December 2021**



**See *Annex 1: Data, table, and figure notes*

Brief Update on SARS-CoV-2 Omicron variant

The overall risk related to the new variant of concern Omicron remains very high. Consistent evidence shows that the Omicron variant has a growth advantage over the Delta variant with a doubling time of 2-3 days and rapid increases in the incidence of cases is seen in a number of countries, including those where the variant has become the dominant SARS-CoV-2 variant, such as the United Kingdom and the United States of America. However, a decline in the incidence of cases has now been observed in South Africa. The rapid growth rate is likely to be a combination of both immune evasion and intrinsic increased transmissibility of the Omicron variant. Early data from the United Kingdom, South Africa and Denmark suggests there is a reduced risk of hospitalization for the Omicron compared to the Delta variant, however, further data are needed to understand the clinical markers of severity including the use of oxygen, mechanical ventilation and death, and how severity may be impacted by vaccination and/or prior SARS-CoV-2 infection. It is also expected that corticosteroids and interleukin 6 receptor blockers will remain effective in the management of patients with severe disease, however, preliminary data suggest that monoclonal antibodies may be less able to neutralize the Omicron variant. Reassuringly, preliminary data suggests testing using either PCR or antigen-based rapid diagnostic tests (Ag-RDT) assays does not appear to be impacted by the Omicron variant. More information on this variant can be found in the updated Technical Brief and Priority Actions for Member States that was published on 23 December 2021 by WHO.

Additional resources

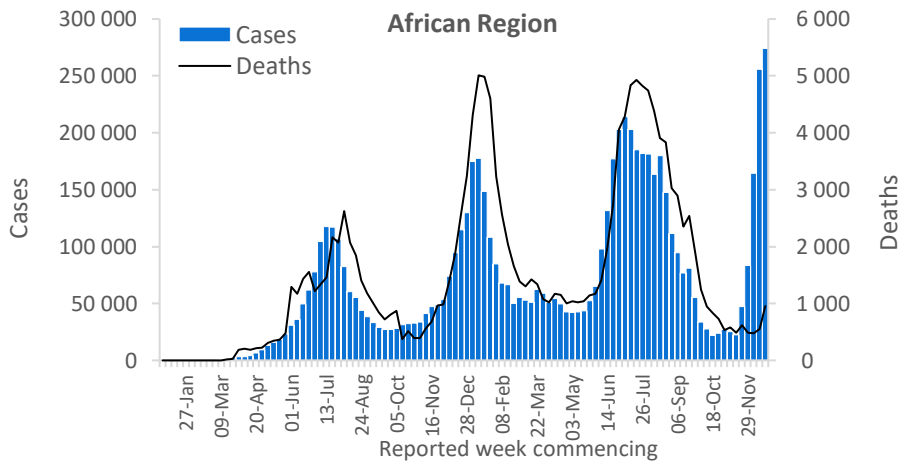
- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19

WHO regional overviews Epidemiological week 20 – 26 December 2021

African Region

The African Region reported over 274 000 new cases, however, the weekly increase in incidence was smaller (7%) as compared to the incidence of the previous week (53%). Increases in case incidence of over 50% were observed in nearly two-thirds (32/49; 65%) of countries in the Region. The highest numbers of new cases were reported from South Africa (115 328 new cases; 194.5 new cases per 100 000 population; a 29% decrease), Ethiopia (19 940 new cases; 17.3 new cases per 100 000 population; a 610% increase) and Kenya (19 023 new cases; 35.4 new cases per 100 000; a 207% increase).

The Region reported over 900 new weekly deaths, a 72% increase as compared to the number reported during the previous week. The highest numbers of new deaths were reported from South Africa (428 new deaths; <1 new death per 100 000 population; an 87% increase), Zimbabwe (103 new deaths; <1 new death per 100 000; a 119% increase) and the Democratic Republic of the Congo (79 new deaths; <1 new death per 100 000; an 888% increase).

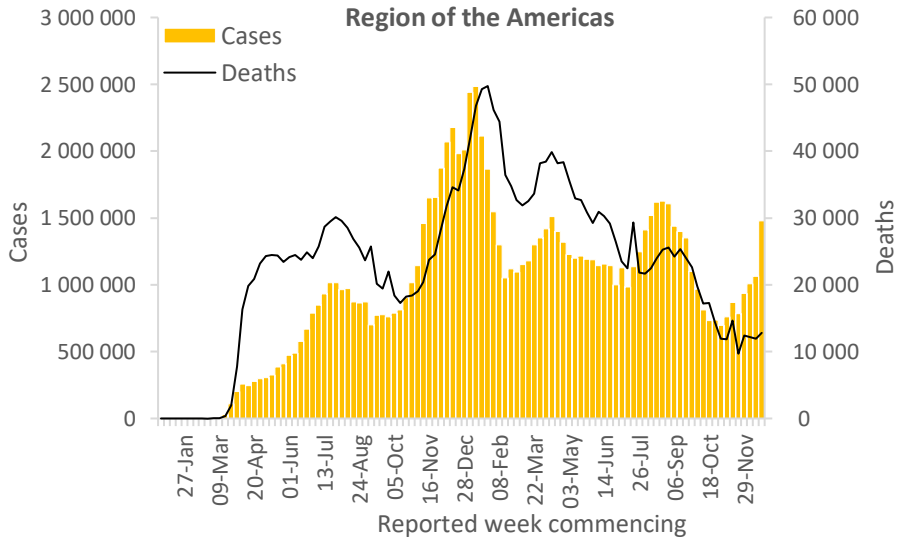


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 1.4 million new cases and over 12 000 new deaths, increases of 39% and 7% respectively, as compared to the previous week. Half of the countries (28/56) reported increases of over 10%, with the highest increases reported from Saint Kitts and Nevis (38 vs 3 new cases, an 1167% increase albeit small numbers); the United States Virgin Islands (367 vs 42 new cases, a 774% increase) and Puerto Rico (32 162 vs 3736 new cases, a 761% increase). However, the highest numbers of new cases continued to be reported from the United States of America (1 185 653 new cases; 358.2 new cases per 100 000; a 34% increase), Canada (78 847 new cases; 208.9 new cases per 100 000; a 101% increase), and Argentina (65 966 new cases; 146.0 new cases per 100 000; a 106% increase).

The highest numbers of new deaths were reported from the United States of America (9355 new deaths; 2.8 new deaths per 100 000; a 7% increase), Brazil (997 new deaths; <1 new death per 100 000; a 42% increase), and Mexico (797 new deaths; <1 new death per 100 000; a 41% increase).

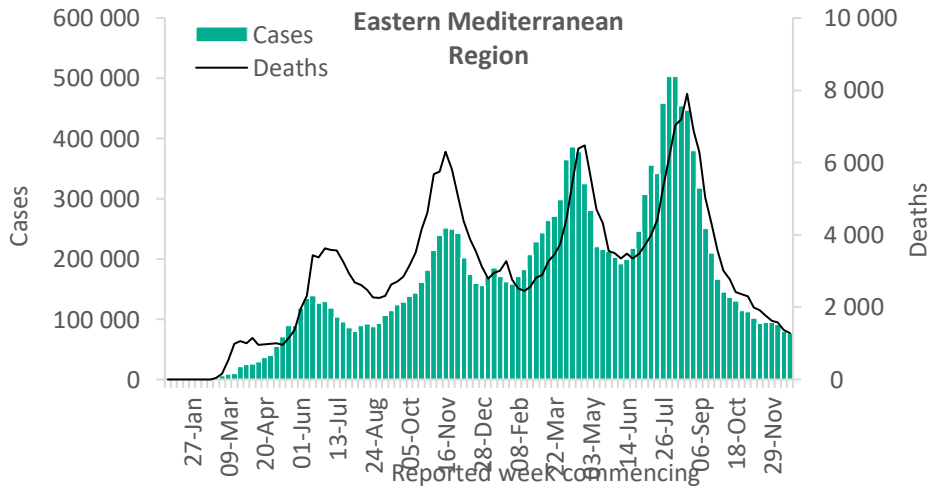


Updates from the Region of the Americas

Eastern Mediterranean Region

The weekly incidence of cases in the Eastern Mediterranean Region remained similar to the incidence reported during the previous week, with over 76 000 new cases reported. Half of the countries (11/22) reported increases in cases of over 10%, with the highest increases reported from the United Arab Emirates (5678 vs 1133 new cases, a 401% increase); Somalia (363 vs 95 new cases, a 282% increase) and Saudi Arabia (1668 vs 549 new cases, 204% increase). The highest numbers of new cases continued to be reported from Jordan (17 952 new cases; 267.9 new cases per 100 000; a 34% decrease), the Islamic Republic of Iran (13 894 new cases; 16.5 new cases per 100 000; a 16% decrease), and Lebanon (11 795 new cases; 172.8 new cases per 100 000; an 8% increase).

The weekly incidence of deaths in the Region decreased by 7%, while the highest numbers of new deaths continued to be reported from the Islamic Republic of Iran (315 new deaths; <1 new death per 100 000; a 15% decrease), Egypt (256 new deaths; <1 new death per 100 000; a 15% decrease), and Jordan (253 new deaths; 2.5 new deaths per 100 000; similar to the previous week).

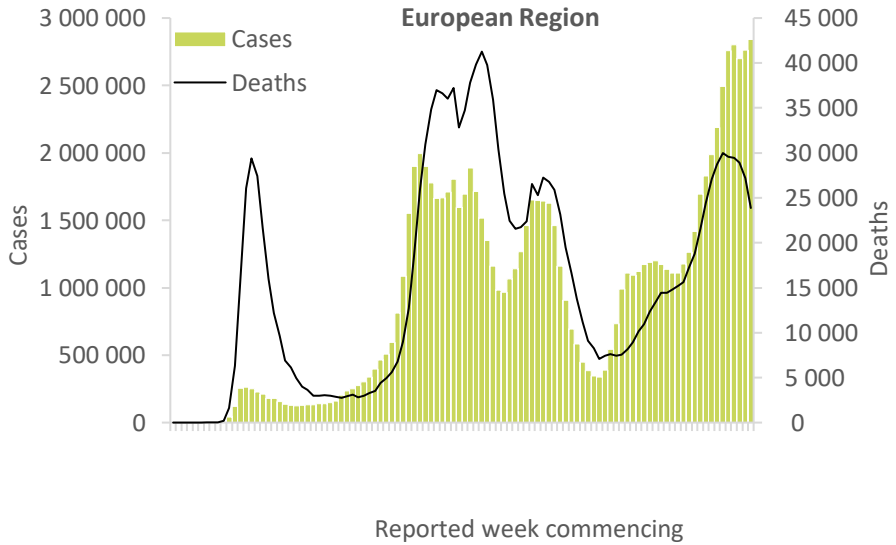


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 2.8 million new cases, similar to the number reported during the previous week. However, the weekly incidence of deaths decreased by 12%, with over 24 000 new deaths reported. Despite the stable trend, one third of countries (20/61) reported a weekly increase in cases of over 10%, with the highest increases reported from Malta (4107 vs 1103 new cases, an 272% increase), Israel (9076 vs 4886 new cases, an 86% increase) and Portugal (55 217 vs 30427 new cases, an 81% increase). The highest numbers of new cases were reported from the United Kingdom (611 864 new cases; 901.3 new cases per 100 000; a 20% increase), France (504 642 new cases; 775.9 new cases per 100 000; a 41% increase) and Italy (257 579 new cases; 431.9 new cases per 100 000; a 62% increase).

The highest numbers of new deaths continued to be reported from the Russian Federation (7015 new deaths; 4.8 new deaths per 100 000; a 9% decrease), Poland (2842 new deaths; 7.5 new deaths per 100 000; a 5% decrease), and Germany (2131 new deaths; 2.6 new deaths per 100 000; an 18% decrease).

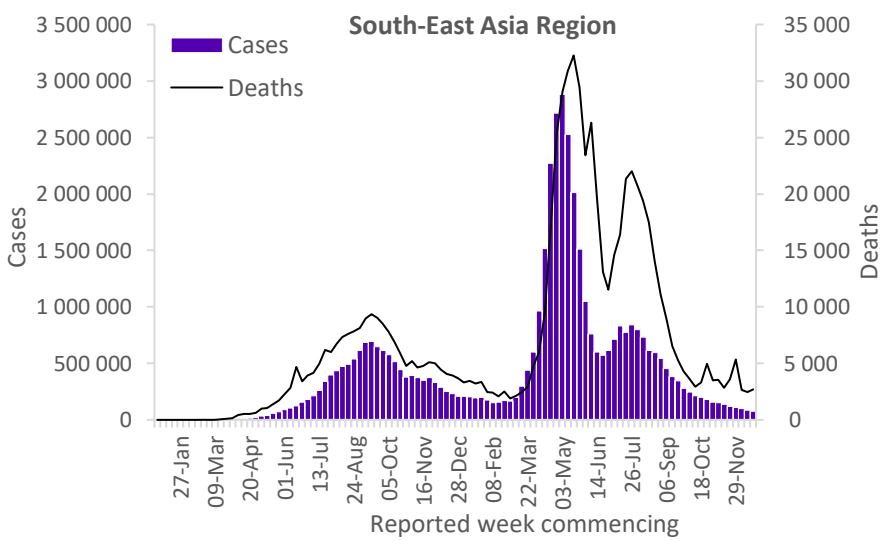


Updates from the European Region

South-East Asia Region

The declining trend in the number of weekly cases reported has continued in the South-East Asia Region, with over 76 000 new cases reported, a 12% decrease as compared to the number reported during the previous week. However, the number of new weekly deaths increased by 9%, with 2700 new deaths reported. Only two countries in the Region reported an increase in weekly cases: Bangladesh (2170 vs 310 new cases, a 23% increase) and the Maldives (907 vs 838 new cases, an 8% increase). However, the highest numbers of new cases continued to be reported from India (46 527 new cases; 3.4 new cases per 100 000; a 7% decrease), Thailand (18 442 new cases; 26.4 new cases per 100 000; a 19% decrease), and Sri Lanka (3964 new cases; 18.5 new cases per 100 000; a 42% decrease).

The highest numbers of new deaths also continued to be reported from India (2260 new deaths; <1 new death per 100 000; a 14% increase), Thailand (203 new deaths; <1 new death per 100 000; similar to the previous week), and Sri Lanka (132 new deaths; <1 new death per 100 000; similar to the previous week).

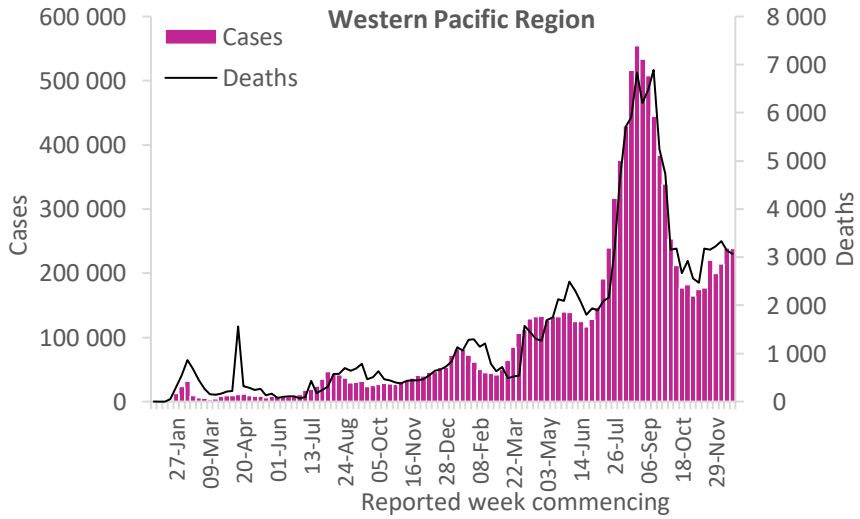


Updates from the South-East Asia Region

Western Pacific Region

The incidence of cases and deaths reported in the Western Pacific Region was similar to those reported during the previous week, with over 238 000 new cases and over 3000 new deaths reported. However, seven of the 27 countries in the region, reported an increase in case incidence of over 10%, with the highest increases reported from French Polynesia (40 vs 8 new cases, a 400% increase), Fiji (192 vs 39 new cases, a 392% increase) and Australia. The highest numbers of new cases were reported from Viet Nam (112 087 new cases; 115.2 new cases per 100 000; a 11% decrease), Australia (45 560 new cases; 178.7 new cases per 100 000, a 135% increase), and the Republic of Korea (42 367 new cases; 82.6 new cases per 100 000; an 11% decrease).

The highest numbers of new deaths were reported from Viet Nam (1656 new deaths; 1.7 new deaths per 100 000; similar to the previous week), the Republic of Korea (523 new deaths; 1.0 new death per 100 000; a 12% increase), and the Philippines (512 new deaths; <1 new death per 100 000; a 12% decrease).



Updates from the Western Pacific Region

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice

Annex 1. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 cases and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

COVID-19 Weekly Epidemiological Update

Edition 71, published 21 December 2021

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Summary of the Weekly Operational Update

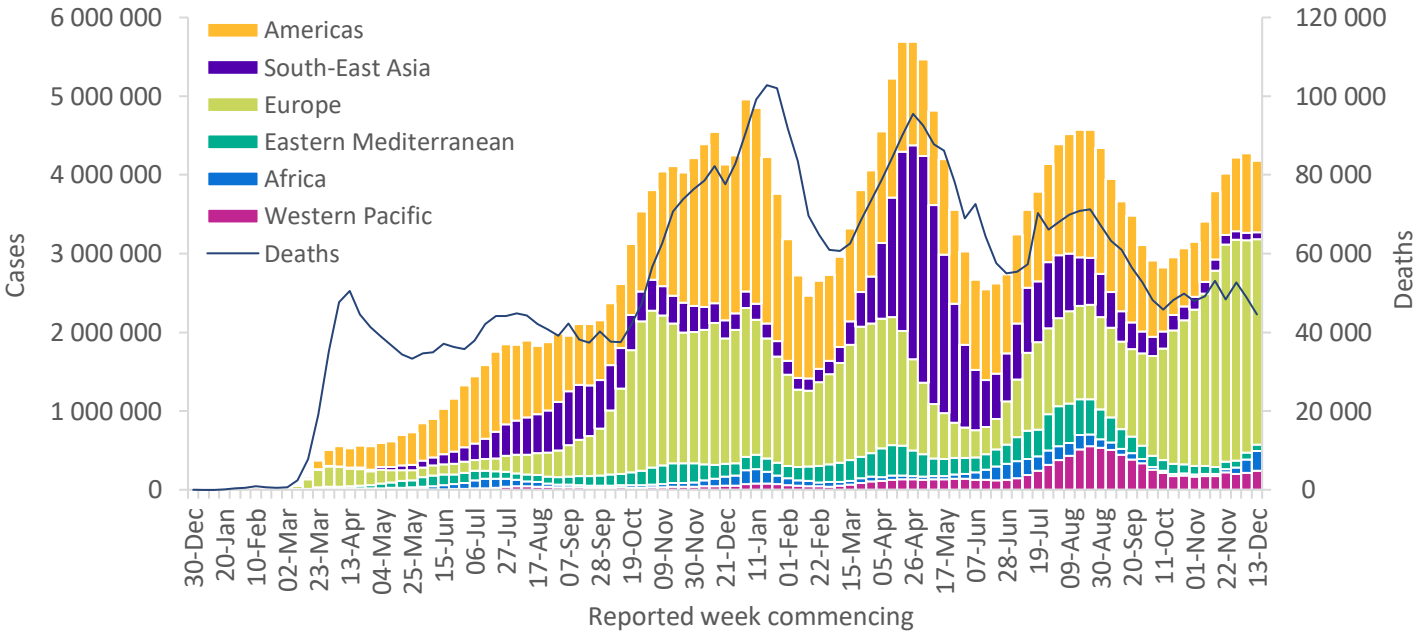
Global overview

Data as of 19 December 2021

During the week 13-19 December, the global number of new cases remained similar to those reported during the previous week (Table 1); however, the weekly incidence of deaths decreased by 9%. Nonetheless, this corresponds to over 4.1 million new cases and just under 45 000 new deaths. As of 19 December, over 273 million cases and over 5.3 million deaths have been reported globally (Figure 1).

The African Region continued to report the largest increase in new cases in the last week (53%), followed by the Western Pacific Region, which reported an increase of 12%. The South-East Asia and the Eastern Mediterranean regions both reported decreases of 12% and the Region of the Americas reported a 10% decrease. The number of new weekly cases reported by the European Region was similar to the numbers reported in the previous week. The African Region was the only region to report an increase in the number of new weekly deaths (15%). The Region of the Americas reported the largest decrease (15%), followed by the Eastern Mediterranean Region (12%), the European Region (7%) and the Western Pacific and South-East Asia Regions (both 6%).

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 19 December 2021**



**See *Annex 2: Data, table, and figure notes*

The European Region continued to report the highest incidence of weekly cases (279.9 new cases per 100 000 population), followed by the Region of the Americas (88.5 new cases per 100 000 population). Both regions also reported the highest weekly incidence in deaths of 2.9 and 1.0 per 100 000 population, respectively, while all other regions reported <1 new death per 100 000.

The highest numbers of new cases were reported from the United States of America (725 750 new cases; 12% decrease), the United Kingdom (507 984 new cases; 45% increase), France (358 175 new cases; 7% increase) and Germany (283 673 new cases; 19% decrease).

Please note, the next two issues of the Weekly Epidemiological Report (to be published on 28 December and 6 January) will be condensed versions covering only the global and regional epidemiology.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 19 December 2021**

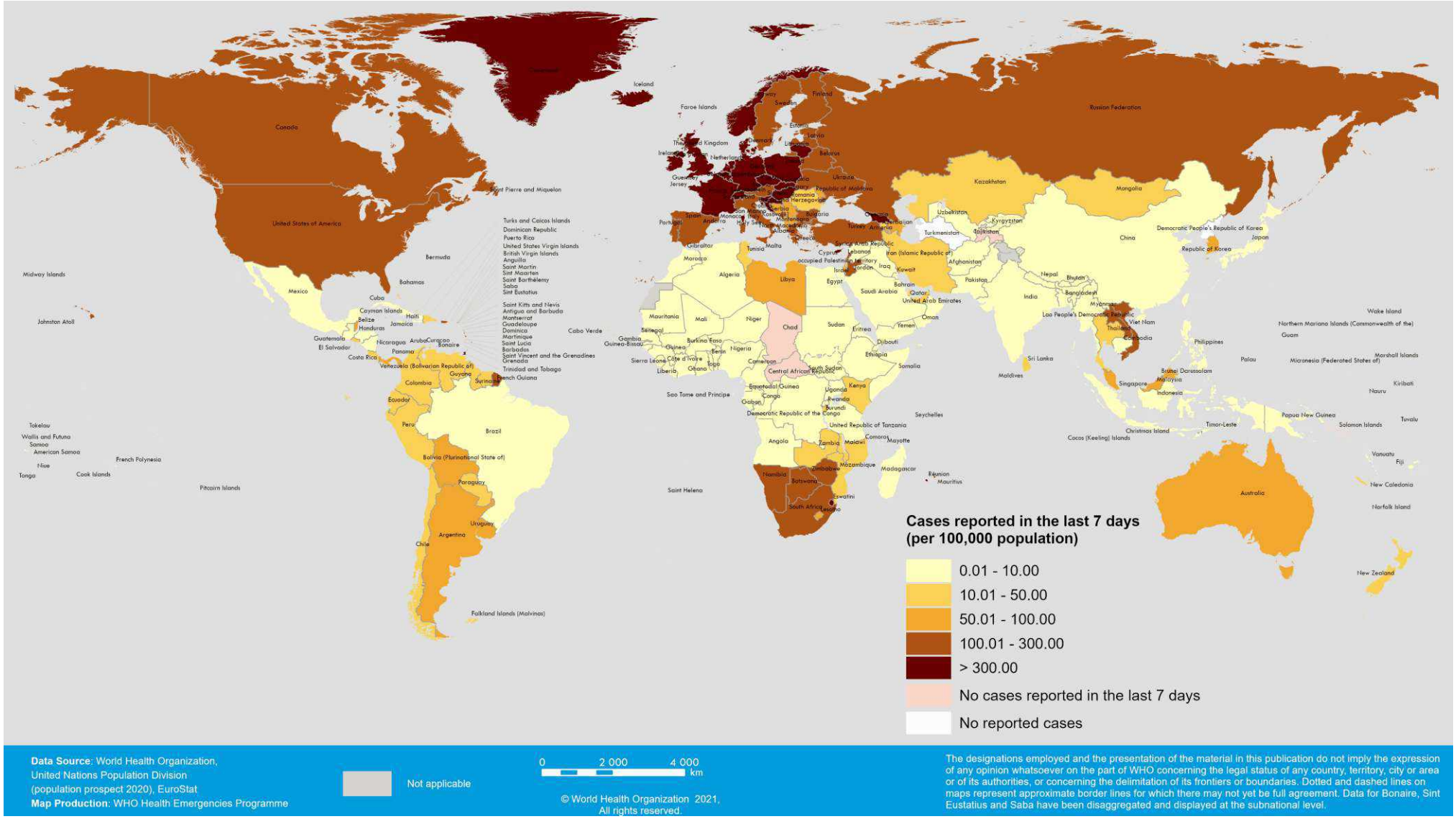
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	2 611 478 (63%)	-3%	94 345 936 (35%)	26 802 (60%)	-7%	1 626 294 (30%)
Americas	904 789 (22%)	-10%	99 606 828 (36%)	10 255 (23%)	-15%	2 384 550 (45%)
Africa	256 031 (6%)	53%	6 778 548 (2%)	564 (1%)	15%	154 330 (3%)
Western Pacific	239 159 (6%)	12%	10 823 510 (4%)	3 144 (7%)	-6%	150 683 (3%)
South-East Asia	86 545 (2%)	-12%	44 823 551 (16%)	2 475 (6%)	-6%	716 778 (13%)
Eastern Mediterranean	79 620 (2%)	-12%	17 016 594 (6%)	1 376 (3%)	-12%	313 674 (6%)
Global	**4 177 622 (100%)**	**-2%**	**273 395 731 (100%)**	**44 616 (100%)**	**-9%**	**5 346 322 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 2: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

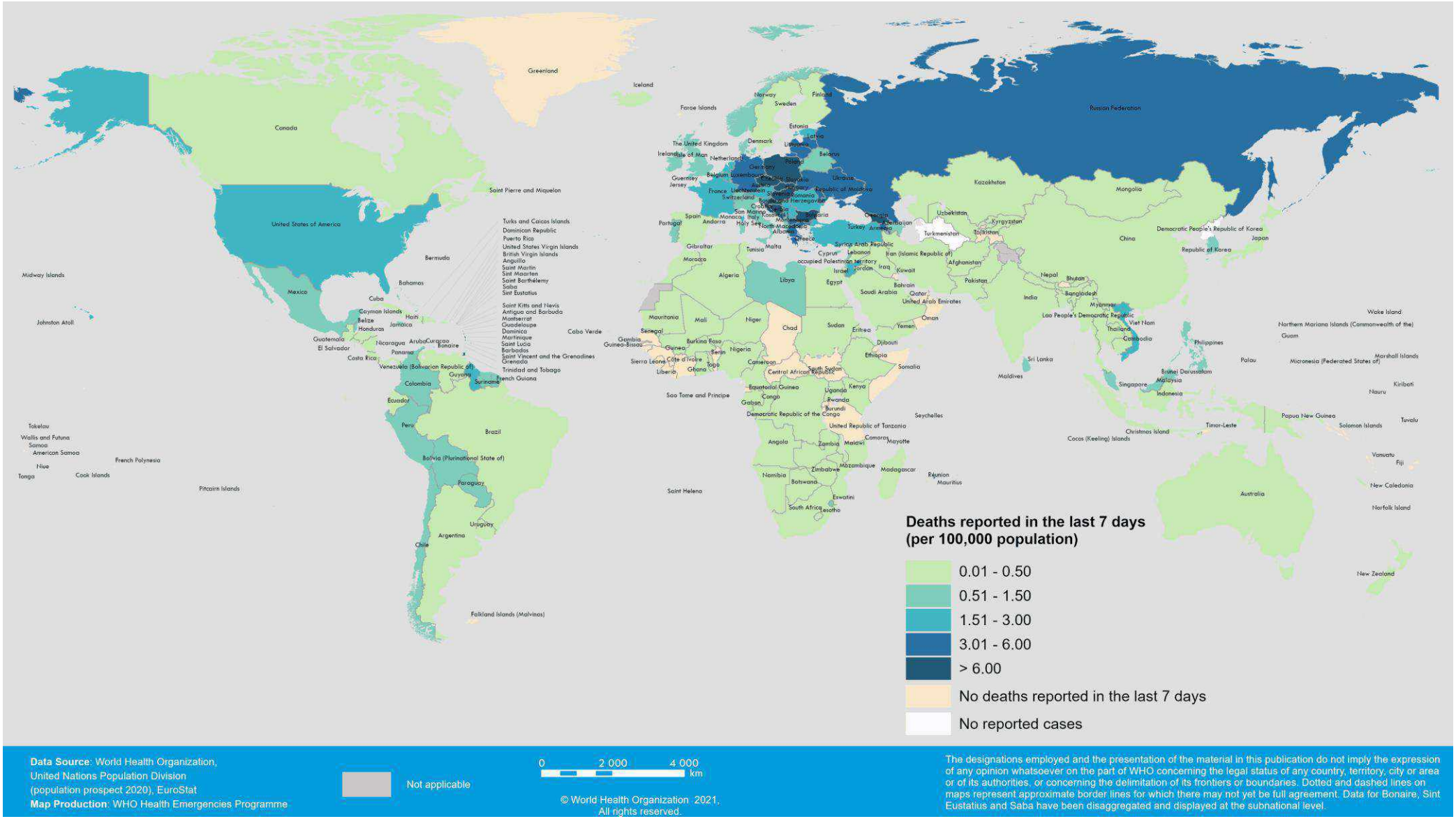
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 13 December - 19 December 2021**



**See *Annex 2: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 13 December - 19 December 2021**



**See *Annex 2: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied by national authorities to control disease spread. Potential variants of concern (VOCs), variants of interest (VOIs) or variants under monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

The current global epidemiology of SARS-CoV-2 is characterized by a predominance of the Delta variant, a declining trend in the proportion of Alpha, Beta and Gamma variants, which have been circulating at a very low prevalence for several weeks, and the emergence of Omicron variant (Figure 4; Annex 1). Following the classification of Omicron as a VOC, many countries have adopted targeted sequencing strategies to detect the variant. The change in sampling strategy, away from community-based surveillance sequencing, may result in biases in the proportions of variants being reported. Thus, the recent declines in the proportion of Delta variant reported by some countries may reflect changes in sampling strategy, rather than declines in the proportion of Delta variant cases among all COVID-19 cases.

While most of the Omicron cases identified in November 2021 were travel-related, community transmission with associated clusters has now been reported in several countries. Of 1 051 598 sequences[i], 1 009 253 (96%) were Delta, 16 988 (1.6%) were Omicron, 176 (<0.1%) were Gamma, 53 (<0.1%) were Alpha, 16 (<0.1%) were Beta and 188 (<0.1%) comprised other circulating variants (including VOIs Mu and Lambda). To note, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

Since the last update published on 14 December, additional countries across all six WHO Regions have reported confirmed cases of the Omicron variant. As of 21 December 2021 (2 pm CET), the Omicron variant has been confirmed in 106 countries.

Recent evidence indicates that Omicron variant has a growth advantage over the Delta variant and is spreading rapidly, even in countries with documented community transmission and high levels of population immunity. It remains uncertain to what extent the observed rapid growth rate can be attributed to immune evasion, intrinsic increased transmissibility, or a combination of both. There are still limited data on the clinical severity of Omicron. Hospitalizations in the UK and South Africa continue to rise, and given rapidly increasing case numbers, it is possible that healthcare systems may become overwhelmed. Preliminary data suggest that there is a reduction in neutralization of Omicron in those who have received a primary vaccination series or in those who have had prior SARS-CoV-2 infection, which may suggest a level of humoral immune evasion.

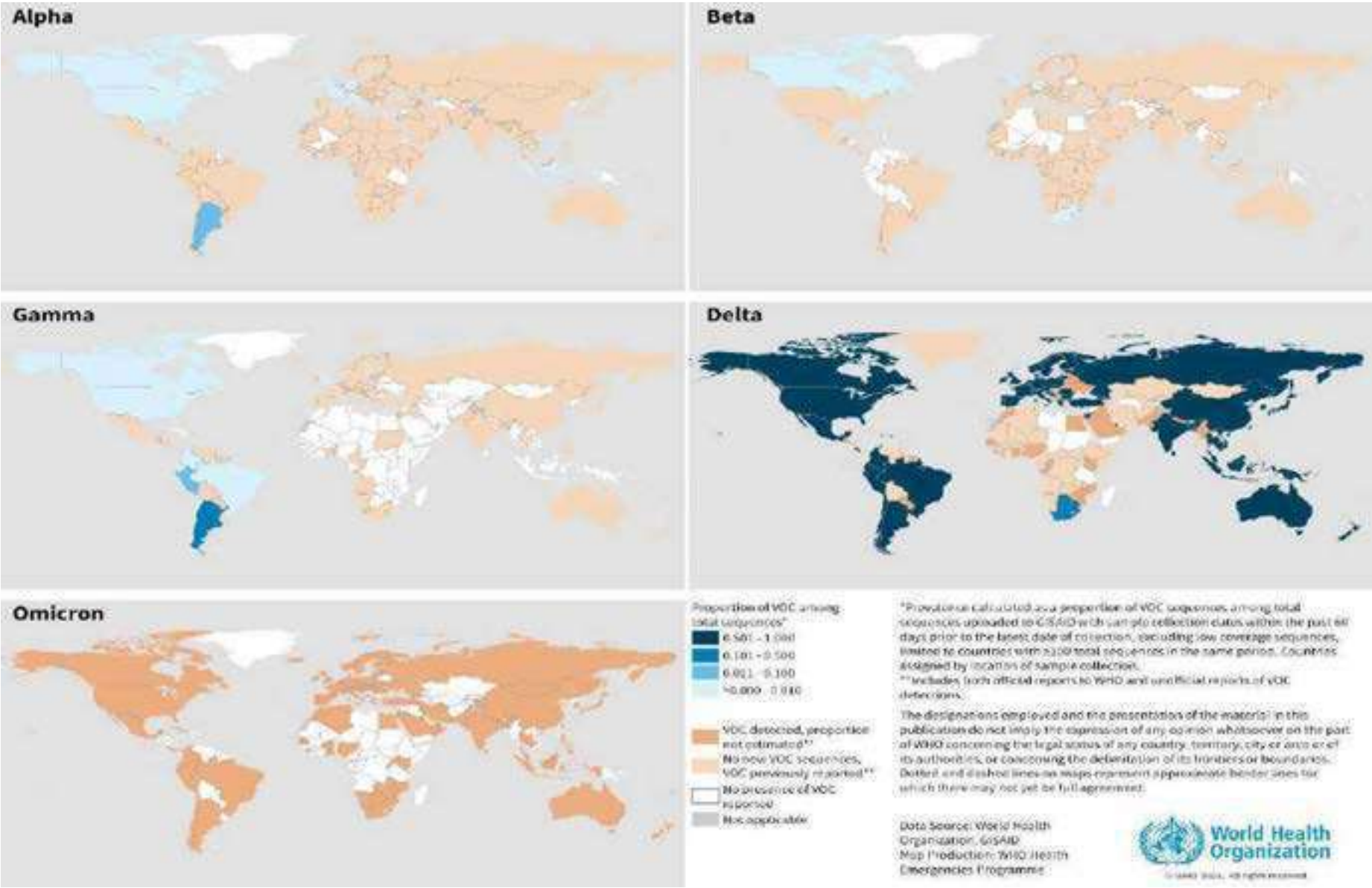
As a result of this, the overall risk related to the new variant of concern Omicron remains very high. More information on this variant can be found in the updated Technical Brief and Priority Actions for Member States that was published on 17 December 2021 by WHO.

[i] Includes sequences submitted to GISAID with sample collected dates from 20 October to 19 December 2021 (last reported sample at the time of data extraction), excluding low coverage sequences.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19

Figure 4: Presence and prevalence of variants of concern (VOCs) in the last 60 days and historic detections, data as of 21 December 2021



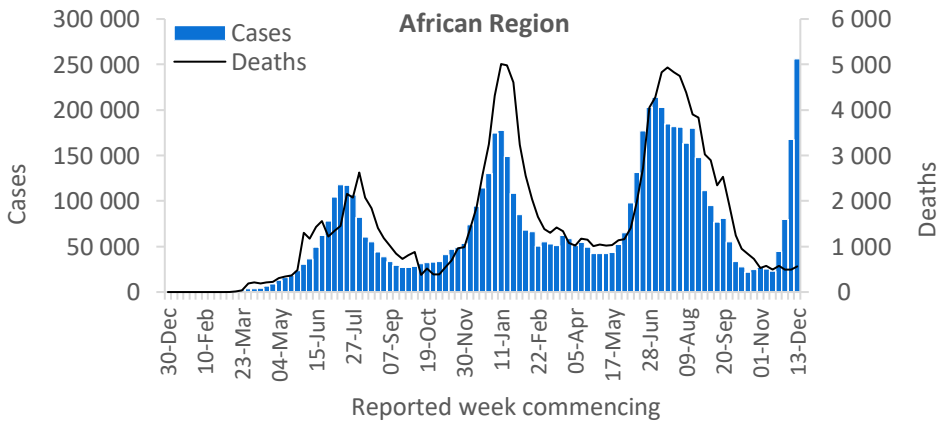
See also Annex 1 for reported VOC detections by country/territory/area and the verification status.

WHO regional overviews Epidemiological week 13 – 19 December 2021

African Region

The African Region continued to see an increase in the reported case incidence in the last month. Over 256 000 new cases were reported (an increase of 53%) as compared to the previous week, the highest number of weekly cases reported since the start of the pandemic. Increases in incidence of over 50% were observed in nearly half (23/49; 47%) of countries in the Region. The highest numbers of new cases continued to be reported from South Africa (162 987 new cases; 274.8 new cases per 100 000 population; a 50% increase) and Zimbabwe (26 671 new cases; 179.4 new cases per 100 000 population; similar to the previous week's number), with Eswatini now reporting the third highest incidence of cases (7540 new cases; 649.9 new cases per 100 000 population; a 57% increase).

The Region reported just under 500 new weekly deaths, similar to the number in the previous week. The highest numbers of new deaths were reported from South Africa (229 new deaths; <1 new death per 100 000 population; a 52% increase), Mauritius (60 new deaths; 4.7 new deaths per 100 000; a 35% decrease), and Zimbabwe (47 new deaths; <1 new death per 100 000; an 81% increase).

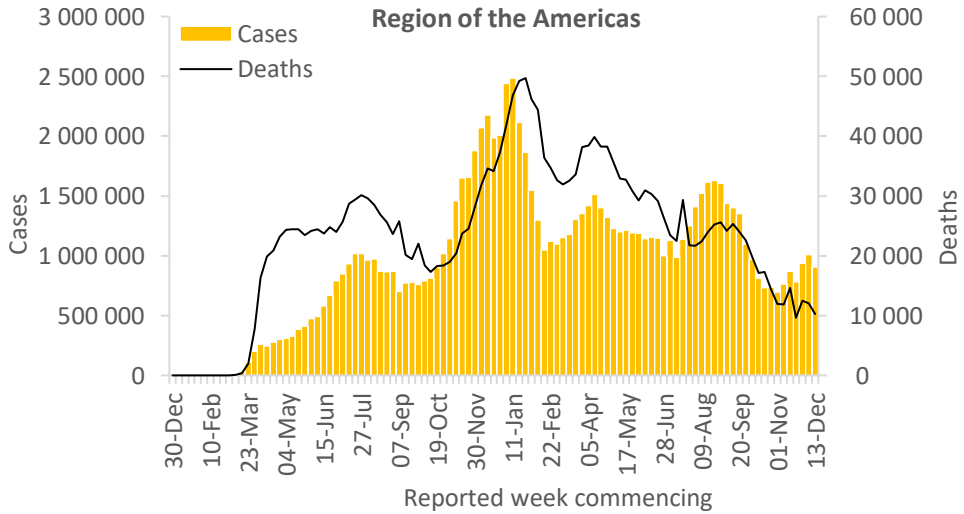


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 904 000 new cases and over 10 000 new deaths, decreases of 10% and 15% respectively as compared to the previous week. However, a quarter of the countries (14/56) reported increases of over 10%, with Puerto Rico reporting the highest increase (3736 new cases, a 425% increase). The highest numbers of new cases were reported from the United States of America (725 750 new cases; 219.3 new cases per 100 000; a 12% decrease), Canada (39 216 new cases; 103.9 new cases per 100 000; a 55% increase), and Argentina (32 013 new cases; 70.8 new cases per 100 000; a 91% increase).

The highest numbers of new deaths were reported from the United States of America (6723 new deaths; 2.0 new deaths per 100 000; a 20% decrease), Mexico (892 new deaths; <1 new death per 100 000; a 49% increase), and Brazil (704 new deaths; <1 new death per 100 000; a 45% decrease).

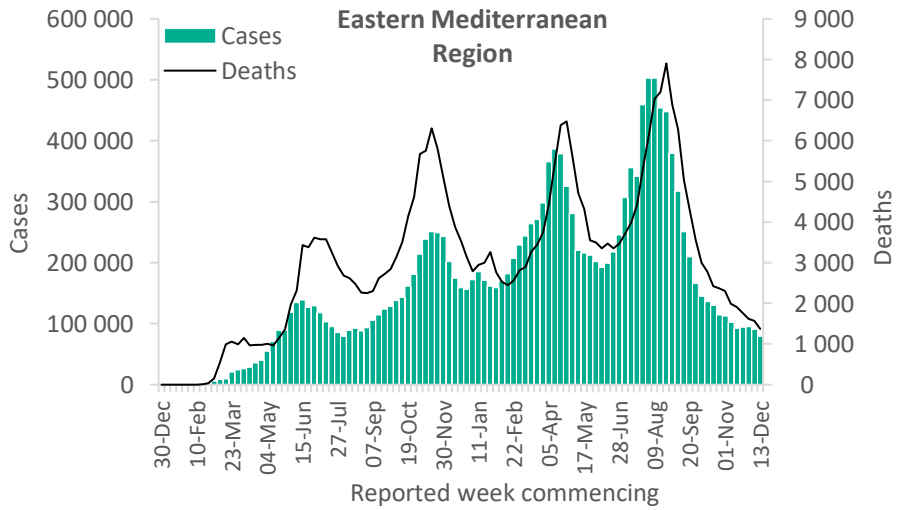


Updates from the Region of the Americas

Eastern Mediterranean Region

The weekly incidence of cases and deaths in the Eastern Mediterranean Region both decreased by 12%, with over 79 000 new cases and over 1300 new deaths reported. However, the percentage of countries reporting increases of over 10% rose from 13% to 45% (10/22 countries), with the highest increases reported from Somalia (95 vs 23 new cases, a 313% increase); the United Arab Emirates (1133 vs 441 new cases, a 157% increase) and Djibouti, although case numbers remain low (14 vs 6 new cases; a 133% increase). The highest numbers of new cases were reported from Jordan (27 333 new cases; 267.9 new cases per 100 000; an 21% decrease), the Islamic Republic of Iran (16 487 new cases; 19.6 new cases per 100 000; a 22% decrease), and Lebanon (10 949 new cases; 160.4 new cases per 100 000; a 3% decrease).

The highest numbers of new deaths continued to be reported from the Islamic Republic of Iran (372 new deaths; <1 new death per 100 000; a 31% decrease), Egypt (300 new deaths; <1 new death per 100 000; a 10% decrease), and Jordan (250 new deaths; 2.5 new deaths per 100 000; an 11% increase).

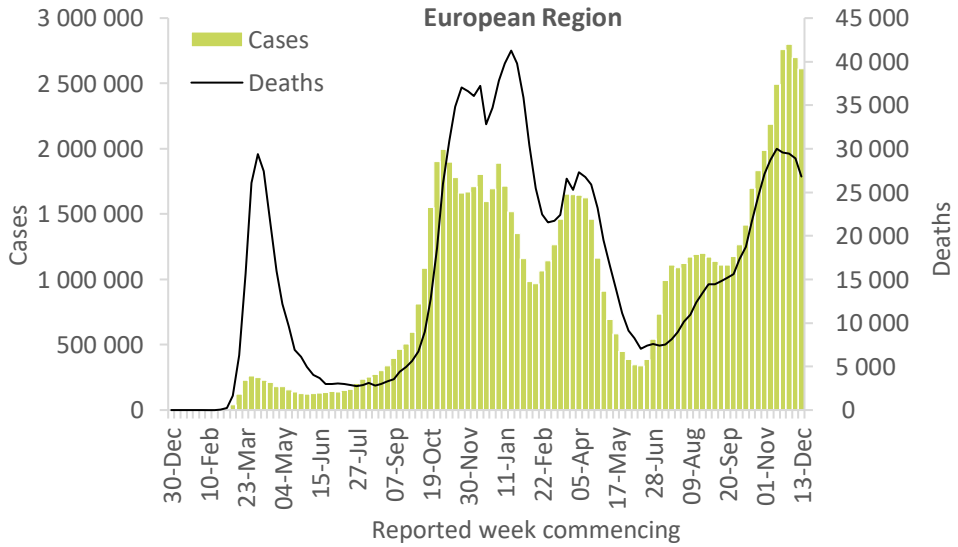


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 2.6 million new cases, similar to the previous week's number. However, the weekly incidence of deaths decreased by 7%, with over 26 000 new deaths reported. Despite the stable trend, 20% of countries (12/61) still reported an increase of over 10% in cases as compared to the previous week, with the highest increases reported from Malta (1103 vs 603 new cases, an 83% increase) and Gibraltar (270 vs 148 new cases, an 82% increase). The highest numbers of new cases were reported from the United Kingdom (507 984 new cases; 748.3 new cases per 100 000; a 45% increase), France (358 175 new cases; 550.7 new cases per 100 000; a 7% increase) and Germany (283 673 new cases; 341.1 new cases per 100 000; a 19% decrease).

The highest numbers of new deaths were reported from the Russian Federation (7720 new deaths; 5.3 new deaths per 100 000; a 6% decrease), Poland (3006 new deaths; 7.9 new deaths per 100 000; a 7% increase), and Germany (2595 new deaths; 3.1 new deaths per 100 000; similar to the previous week).

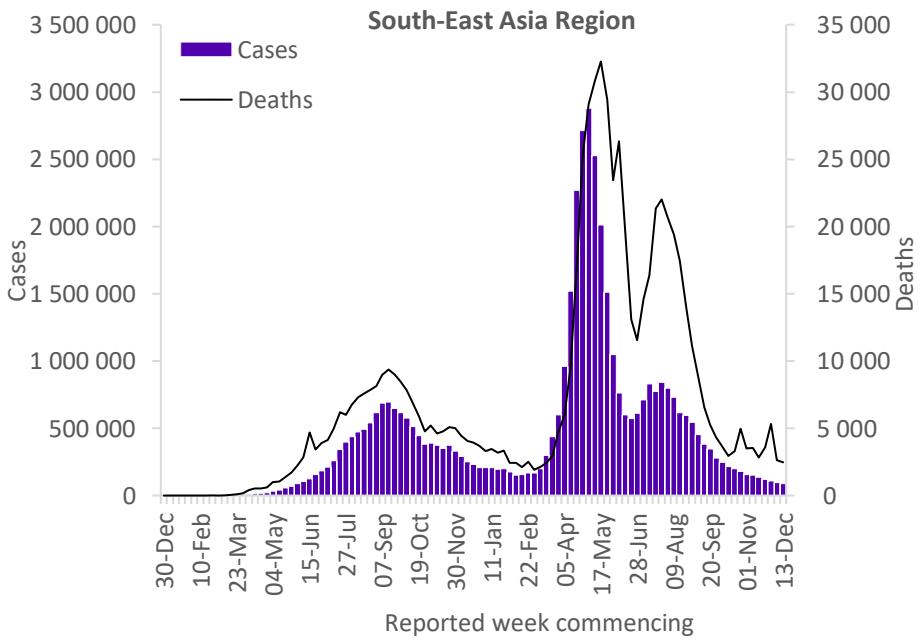


Updates from the European Region

South-East Asia Region

The declining trend in the number of weekly cases and deaths reported has continued in the South-East Asia Region. Over 86 000 new cases and over 2400 new deaths were reported, decreases of 12% and 6% , respectively as compared to the previous week. Only two countries reported an increase in weekly cases, Timor Leste (4 vs 1 new case, a 300% increase) and Sri Lanka. The highest numbers of new cases continued to be reported from India (49 765 new cases; 3.6 new cases per 100 000; a 13% decrease), Thailand (22 882 new cases; 32.8 new cases per 100 000; a 17% decrease), and Sri Lanka (6783 new cases; 31.7 new cases per 100 000; a 30% increase).

The highest numbers of new deaths also continued to be reported from India (1988 new deaths; <1 new death per 100 000; a 6% decrease), Thailand (206 new deaths; <1 new death per 100 000; a 9% decrease), and Sri Lanka (138 new deaths; <1 new death per 100 000; a 10% decrease).

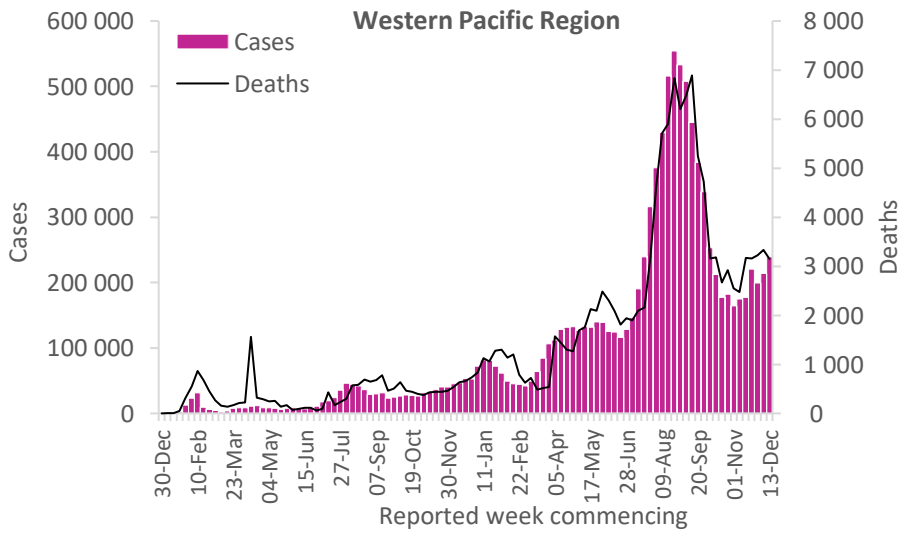


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region continues to see an increase in the incidence of cases with 239 000 new cases reported during the previous week (a 12% increase). Three of the 27 countries in the region, reported an increase in case incidence of over 10% including: Australia (19 415 vs 10 805 new cases, a 80% increase), Japan (1088 vs 861 new cases, a 26% increase) and Viet Nam. The highest numbers of new cases were reported from Viet Nam (125 955 new cases; 129.4 new cases per 100 000; a 22% increase), the Republic of Korea (47 825 new cases; 93.3 new cases per 100 000; an 8% increase), and Malaysia (27 698 new cases; 85.6 new cases per 100 000; an 18% decrease).

The incidence of deaths decreased by 6% as compared to the previous week, with over 3100 new deaths reported. The highest numbers of new deaths continued to be reported from Viet Nam (1740 new deaths; 1.8 new deaths per 100 000; a 12% increase), the Philippines (579 new deaths; <1 new death per 100 000; a 33% decrease), and the Republic of Korea (469 new deaths; <1 new death per 100 000; a 17% increase).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 21 December, highlights include the following:

- Implementing national studies on the real-world effectiveness of COVID-19 vaccines in Armenia
- Delivering critical equipment and supplies in the Western Pacific to Vanuatu and Fiji
- Boosting Sierra Leone's COVID-19 response and disease surveillance with laboratory commodities
- Bringing COVID-19 vaccination to the most vulnerable via the Global Health Cluster
- Supporting the global scale-up of infodemic management
- Strengthening genomic surveillance: WHO in collaboration with GISAID organizes training workshops for laboratory experts
- Conducting the first Universal Health and Preparedness Review (UHPR) Pilot: Bangui, Central African Republic
- Updates on WHO's financing to support countries on COVID-19 response implementation to suppress transmission, reduce exposure, and protect the vulnerable and save lives
- Progress on a subset of global indicators that demonstrate country and global progress to end the acute phase of the pandemic

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice

Annexes

Annex 1. List of countries/territories/areas reporting variants of concern as of 21 December 2021

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Afghanistan	●	-	●	-	-
Albania	●	-	○	-	-
Algeria	●	-	●	-	●*
Andorra	○	○	○	-	-
Angola	●	●	●	●	-
Anguilla	●	-	●	-	-
Antigua and Barbuda	●	●	●	●	-
Argentina	●	●	●	●	●
Armenia	●	-	●	-	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	●
Austria	●	●	●	●	●
Azerbaijan	●	-	○	-	-
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	●
Bangladesh	●	●	●	○	●
Barbados	●	-	●	●	-
Belarus	●	-	○	-	-
Belgium	●	●	●	●	●
Belize	●	-	●	●	-
Benin	●	●	●	●	-
Bermuda	●	●	●	-	●
Bhutan	●	●	●	-	-
Bolivia (Plurinational State of)	●	-	●	●	-
Bonaire	●	-	●	●	-
Bosnia and Herzegovina	●	●	○	●	-
Botswana	○	●	●	-	●
Brazil	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
British Virgin Islands	●	-	●	●	-
Brunei Darussalam	●	●	●	-	-
Bulgaria	●	●	●	-	-
Burkina Faso	●	-	●	-	●*
Burundi	●	●	●	-	-
Cabo Verde	●	-	●	-	-
Cambodia	●	●	●	-	●*
Cameroon	●	●	●	●	-
Canada	●	●	●	●	●
Cayman Islands	●	●	●	●	●*
Central African Republic	●	●	●	-	-
Chad	●	-	-	-	-
Chile	●	●	●	●	●
China	●	●	●	●	●
Colombia	●	-	●	●	○*
Comoros	-	●	●	-	-
Congo	●	●	●	●	-
Costa Rica	●	●	●	●	-
Croatia	●	●	○	●	●
Cuba	●	●	●	-	●
Curaçao	●	●	●	●	-
Cyprus	●	●	○	-	●
Czechia	●	●	●	●	●
Côte d'Ivoire	●	●	○	-	-
Democratic Republic of the Congo	●	●	●	-	-
Denmark	●	●	●	●	●
Djibouti	●	●	●	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Dominica	●	-	●	-	-
Dominican Republic	●	-	●	●	-
Ecuador	●	-	●	●	●*
Egypt	●	-	●	-	○*
El Salvador	●	-	●	●	-
Equatorial Guinea	●	●	●	-	-
Estonia	●	●	○	○	●
Eswatini	○	●	●	-	-
Ethiopia	●	●	●	-	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	-	●	-
Fiji	○	-	●	-	●
Finland	●	●	●	●	●
France	●	●	●	●	●
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	●*
Gabon	●	●	●	-	-
Gambia	●	-	●	-	-
Georgia	●	○	●	-	●*
Germany	●	●	●	●	●
Ghana	●	●	●	●	●
Gibraltar	●	-	○	-	●
Greece	●	●	●	●	●
Greenland	-	-	●	-	-
Grenada	●	-	●	●	-
Guadeloupe	●	●	●	●	●*
Guam	●	●	●	●	-
Guatemala	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Guernsey	-	-	-	-	●*
Guinea	●	●	●	-	-
Guinea-Bissau	●	●	●	-	-
Guyana	-	-	●	●	-
Haiti	●	-	●	●	-
Honduras	●	-	●	●	-
Hungary	●	○	○	●	●
Iceland	●	●	●	●	●
India	●	●	●	●	●
Indonesia	●	●	●	-	●*
Iran (Islamic Republic of)	●	●	●	-	●*
Iraq	●	●	●	●	-
Ireland	●	●	●	●	●
Israel	●	●	●	●	●
Italy	●	●	●	●	●
Jamaica	●	-	●	-	-
Japan	●	●	●	●	●
Jordan	●	●	●	●	●
Kazakhstan	●	○	●	-	-
Kenya	●	●	●	-	○*
Kosovo[1]	●	○	○	-	-
Kuwait	●	●	●	-	●
Kyrgyzstan	●	●	●	-	-
Lao People's Democratic Republic	●	-	●	-	-
Latvia	●	●	○	●	●
Lebanon	●	-	●	-	●
Lesotho	-	●	○	-	-
Liberia	●	●	●	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	○	○	○
Lithuania	●	●	○	●	●*

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Luxembourg	●	●	●	●	●
Madagascar	●	●	-	-	-
Malawi	●	●	●	-	●
Malaysia	●	●	●	-	●
Maldives	●	-	●	-	●
Mali	●*	-	●	-	-
Malta	●	○	○	●	-
Martinique	●	●	●	●	-
Mauritania	●	●	●	-	-
Mauritius	●	●	●	-	○
Mayotte	●	●	○	-	-
Mexico	●	●	●	●	●
Monaco	●	●	●	-	-
Mongolia	●	-	●	-	○*
Montenegro	●	-	○	○	○
Montserrat	●	-	●	●	-
Morocco	●	●	●	-	●*
Mozambique	●	●	●	-	●*
Myanmar	●	-	●	-	-
Namibia	●	●	●	●	●
Nepal	●	-	●	-	●
Netherlands	●	●	●	●	●
New Caledonia	●	-	●	-	-
New Zealand	●	●	●	●	●*
Nicaragua	●	●	●	●	-
Niger	●	-	●	-	-
Nigeria	●	●	●	-	●
North Macedonia	●	●	○	-	-
Northern Mariana Islands (Commonwealth of the)	○	-	●	-	-
Norway	●	●	●	●	●
Occupied Palestinian Territory	●	●	●	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Oman	●	●	●	-	●*
Pakistan	●	●	●	●	●
Panama	●	●	●	●	●*
Papua New Guinea	-	-	●	-	-
Paraguay	●	-	●	●	-
Peru	●	-	●	●	●*
Philippines	●	●	●	●	●*
Poland	●	○	●	●	●*
Portugal	●	●	●	●	●
Puerto Rico	●	●	●	●	●
Qatar	●	●	●	-	-
Republic of Korea	●	●	●	●	●
Republic of Moldova	●	-	●	-	-
Romania	●	●	●	●	●
Russian Federation	●	●	●	○	●
Rwanda	●	●	●	-	○*
Réunion	●	●	○	●	●
Saba	-	-	●	-	-
Saint Barthélemy	●	-	●	-	-
Saint Kitts and Nevis	-	-	●	-	-
Saint Lucia	●	-	●	-	-
Saint Martin	●	●	●	-	●*
Saint Pierre and Miquelon	-	-	●	-	-
Saint Vincent and the Grenadines	-	-	●	●	-
Sao Tome and Principe	●	-	○	-	-
Saudi Arabia	●	●	●	-	●
Senegal	●	●	●	-	●
Serbia	●	-	●	-	-
Seychelles	●	●	●	-	-
Sierra Leone	-	●	●	-	●
Singapore	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Sint Maarten	●	●	●	●	-
Slovakia	●	●	●	-	●
Slovenia	●	●	●	●	●*
Somalia	●	●	●	-	-
South Africa	●	●	●	○	●
South Sudan	●	●	●	-	-
Spain	●	●	●	●	●
Sri Lanka	●	●	●	-	●
Sudan	●	●	-	●	-
Suriname	●	●	●	●	-
Sweden	●	●	●	●	●
Switzerland	●	●	●	●	●
Thailand	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Timor-Leste	●	-	●	-	-
Togo	●	●	●	●	●*
Trinidad and Tobago	●	-	●	●	●
Tunisia	●	●	●	-	●
Turkey	●	●	●	●	○
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	●	-	●
Ukraine	●	○	○	-	●*
United Arab Emirates	●	●	●	●	●
United Kingdom	●	●	●	●	●
United Republic of Tanzania	-	●	-	-	-
United States Virgin Islands	●	●	●	●	-
United States of America	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Uruguay	●	●	●	●	-
Uzbekistan	●	●	○	-	-
Vanuatu	-	-	●	-	-
Venezuela (Bolivarian Republic of)	●	-	●	●	-
Viet Nam	●	●	●	-	-
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	●	-	●
Zimbabwe	●	●	●	-	●

*r this variant was received by WHO from unofficial sources and will be reviewed as more information become available. **Includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern. See also Annex 2: Data, table, and figure notes*

Annex 2. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

COVID-19 Weekly Epidemiological Update

Edition 70, published 14 December 2021

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Summary of the Weekly Operational Update

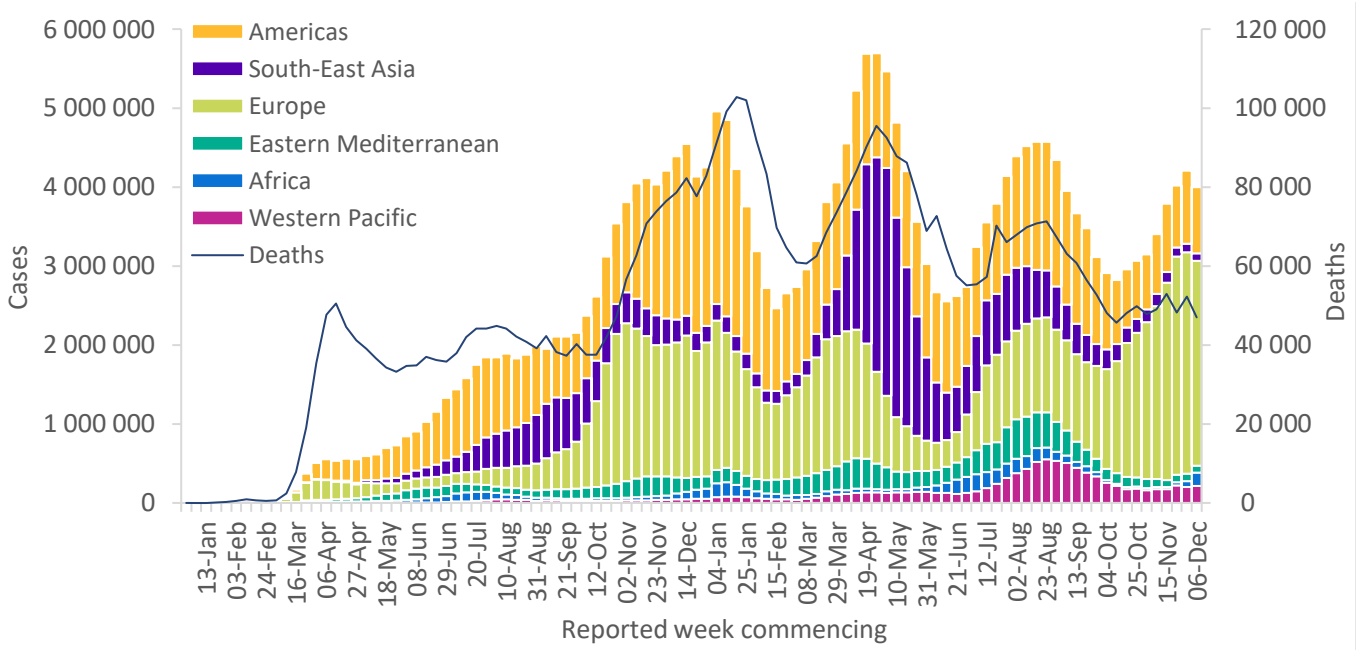
Global overview

Data as of 12 December 2021

Globally, the weekly incidence of both cases and deaths declined during the past week (6-12 December 2021), with decreases of 5% and 10% respectively, as compared to the previous week. Nonetheless, this still corresponded to over 4 million new confirmed cases and just under 47 000 new deaths. As of 12 December, nearly 269 million confirmed cases and nearly 5.3 million deaths have been reported globally.

The African Region reported the largest increase in new cases last week (111%) followed by and the Western Pacific Region which reported an increase of 7%. The Region of the Americas and South-East Asia Region both reported decreases of 10% and the European Region reported a 7% decrease. The number of new weekly cases reported by the Eastern Mediterranean Region was similar to the numbers reported in the previous week. New weekly deaths decreased by 50% in the South-East Asia Region (due to an artificial increase in deaths from batch reporting in the previous week) and 14% in the Region of the Americas, while the number of weekly deaths in all other regions remained similar to those reported in the previous week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 12 December 2021**



**See *Annex 3: Data, table, and figure notes*

The regions reporting the highest weekly case incidence per 100 000 population continue to be the European Region (277.9 new cases per 100 000 population) and the Region of the Americas (81.9 new cases per 100 000 population). Both regions also reported the highest weekly incidence in deaths of 3.0 and 1.0 per 100 000 population, respectively while <1 new death per 100 000 was reported in all other regions.

The highest numbers of new cases were reported from the United States of America (674 019 new cases; 9% decrease), Germany (351 738 new cases; 11% decrease), the United Kingdom (350 340 new cases; 13% increase), France (335 972 new cases; 19% increase), and the Russian Federation (215 283 new cases; 7% decrease).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 12 December 2021**

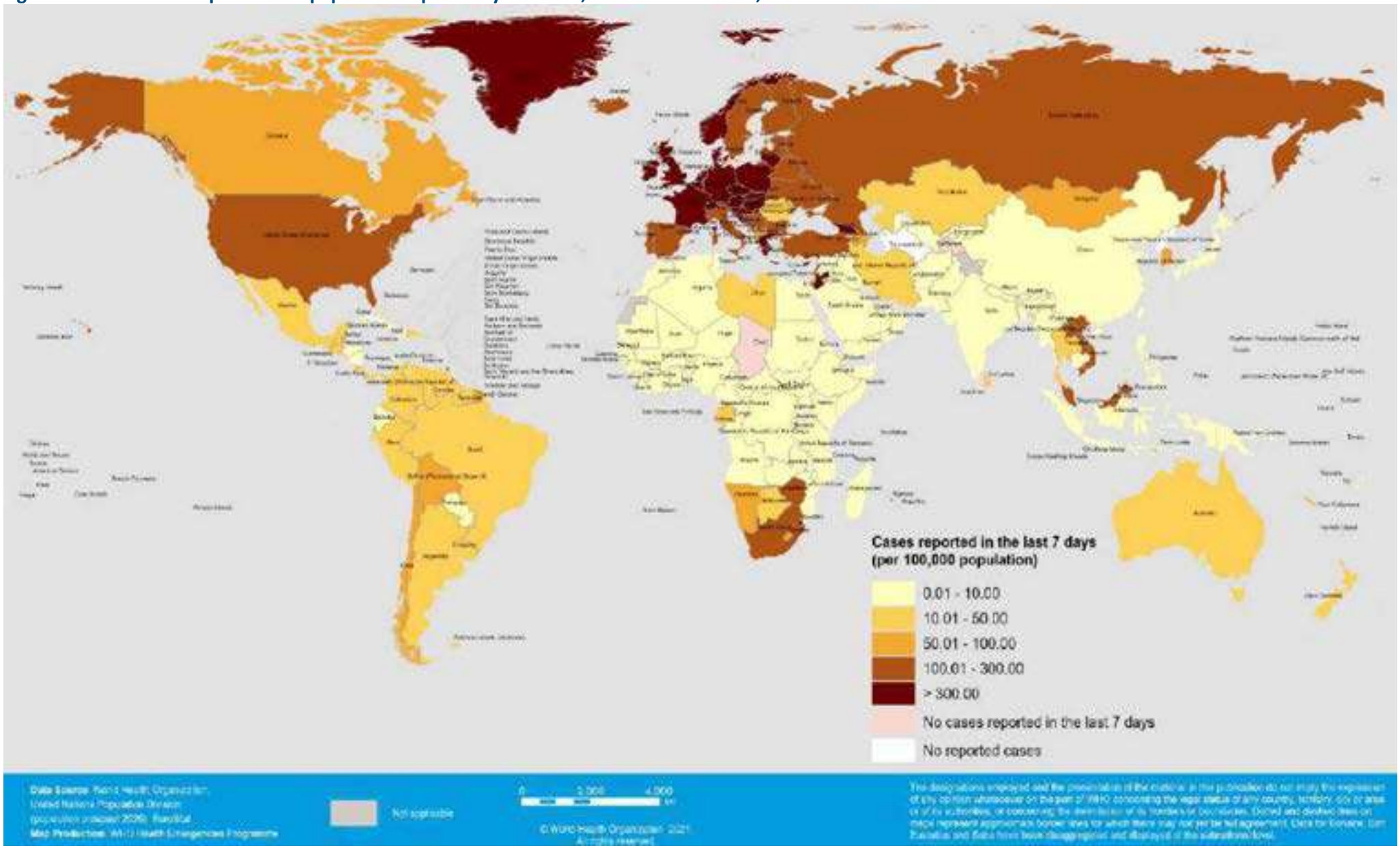
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	2 593 221 (65%)	-7%	91 631 852 (34%)	28 362 (60%)	-3%	1 598 688 (30%)
Americas	837 345 (21%)	-10%	98 521 311 (37%)	10 562 (22%)	-14%	2 371 246 (45%)
Western Pacific	213 915 (5%)	7%	10 584 344 (4%)	3 335 (7%)	4%	147 539 (3%)
Africa	167 682 (4%)	111%	6 522 517 (2%)	491 (1%)	-1%	153 766 (3%)
South-East Asia	98 021 (2%)	-10%	44 737 006 (17%)	2 643 (6%)	-50%	714 303 (13%)
Eastern Mediterranean	90 633 (2%)	-4%	16 936 781 (6%)	1 568 (3%)	-3%	312 295 (6%)
Global	**4 000 817 (100%)**	**-5%**	**268 934 575 (100%)**	**46 961 (100%)**	**-10%**	**5 297 850 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 3: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

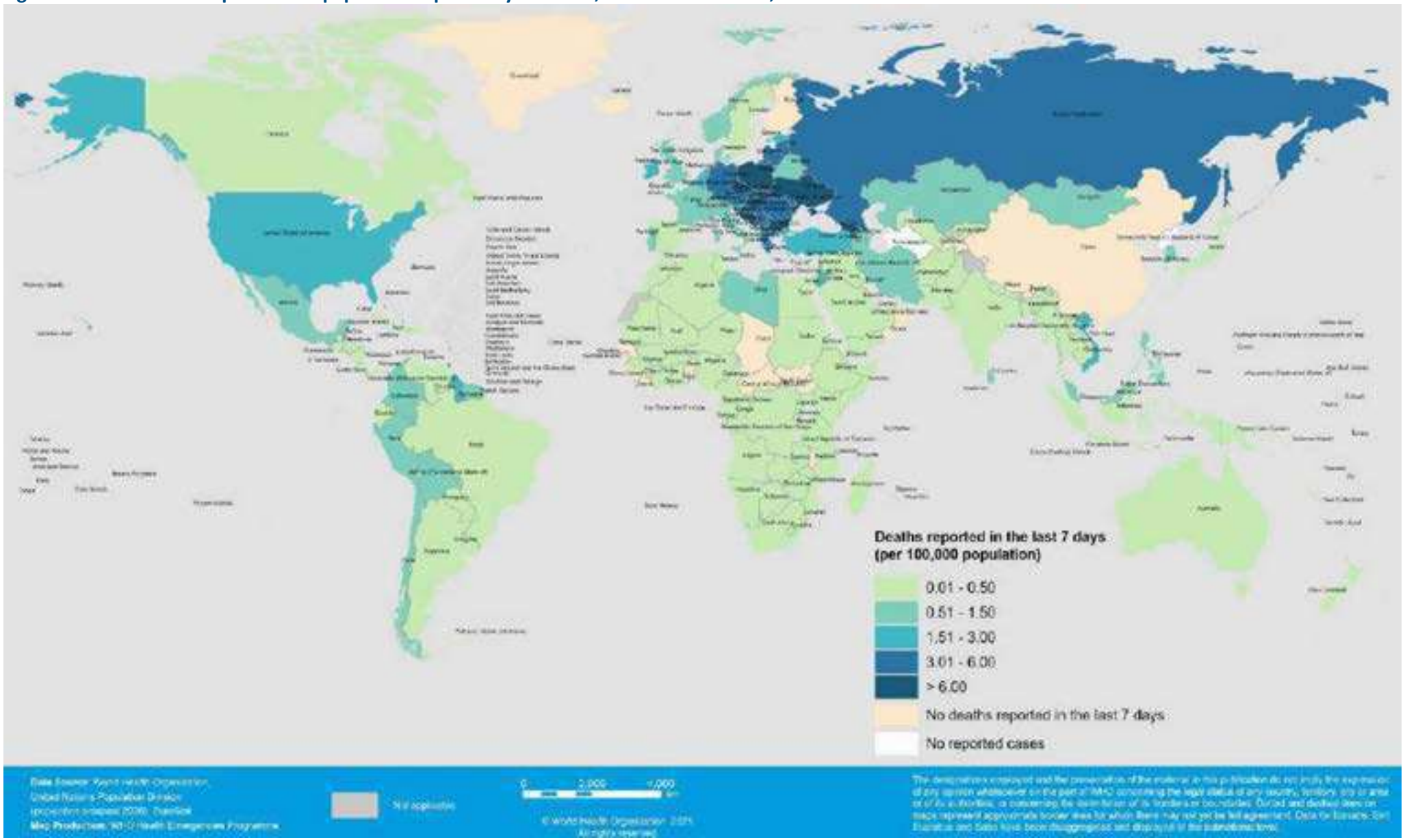
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 6 December - 12 December 2021**



**See *Annex 3: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 6 December - 12 December 2021**



**See *Annex 3: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied by national authorities to control disease spread. Potential Variants of Concern (VOCs), Variants of Interest (VOIs) or Variants Under Monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

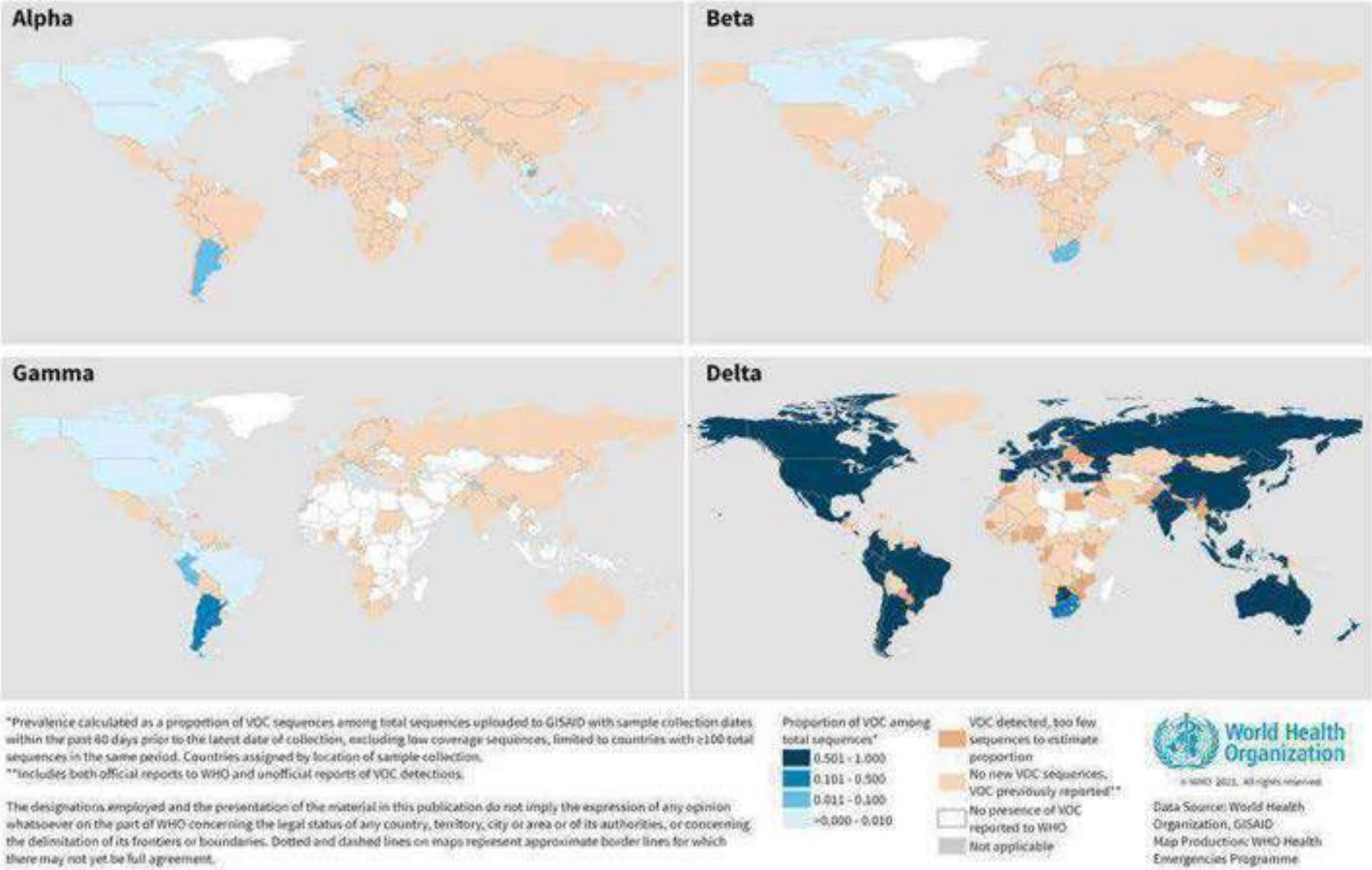
The current global epidemiology of SARS-CoV-2 is characterized by a predominance of the Delta variant, declining trend in the proportion of Alpha, Beta and Gamma, and the emergence of Omicron variant; however, regional and country-level variations continue to be observed (Figure 4 and 5; Annex 2). While most of the Omicron cases identified in November 2021 were travel-related, community transmission with associated clusters has now been reported in several countries. Of 879 779 sequences uploaded to GISAID with specimens collected in the last 60 days, 872 876 (99.2%) were Delta, 3 755 (0.4%) were Omicron, 206 (<0.1%) Alpha, 179 (<0.1%) Gamma, 16 (<0.1%) Beta, and <0.1% comprised other circulating variants (including VOIs Mu and Lambda). This week, for the first time since Delta was classified as a VOC in April 2021, the percentage of Delta sequences has declined in respect to other VOCs. However, this observation needs to be interpreted with caution as countries may perform targeted sequencing for Omicron and therefore upload fewer sequences on all other variants, including Delta.

To note, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

Additional resources

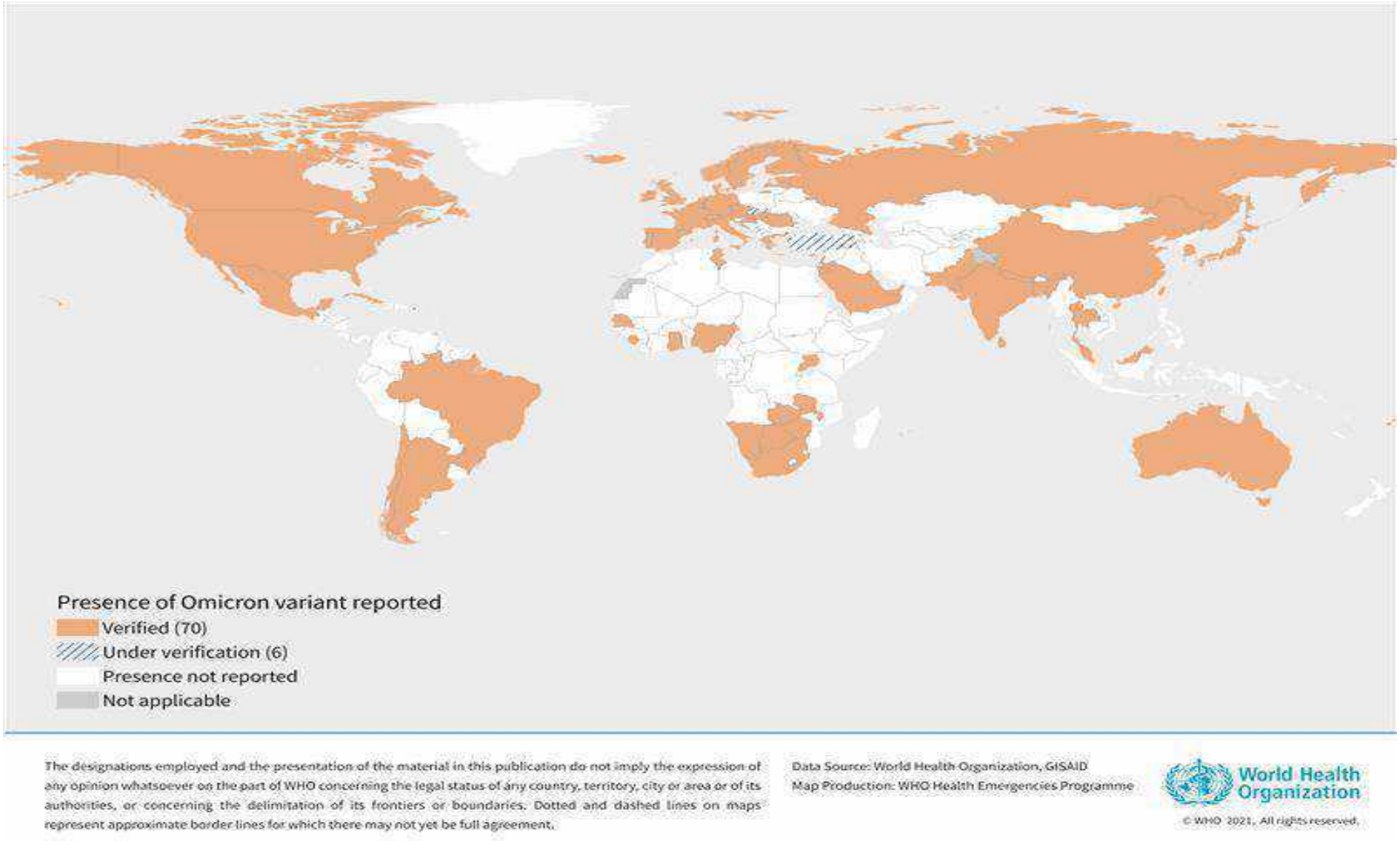
- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19

Figure 4: Prevalence of Variants of Concern (VOCs) Alpha, Beta, Gamma and Delta in the last 60 days and historic detections, data as of 14 December 2021



See also Annex 2 for reported VOC detections by country/territory/area

Figure 5. Presence of Variant of Concern (VOC) Omicron, data as of 14 December 2021 (4 pm CET)



Presence of the Omicron variant is based on information reported to WHO. It includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). See also Annex 2 for reported VOC detections by country/territory/area.

Update on Omicron VOC

Since the last update published on 7 December, additional countries across all six WHO Regions have reported confirmed cases of the Omicron variant. As of 14 December 2021 (2 pm CET), the Omicron variant has been confirmed in 76 countries.

Based on current limited evidence Omicron appears to have a growth advantage over Delta. It is spreading faster than the Delta variant in South Africa where Delta circulation was low, but also appears to be spreading more quickly than the Delta variant in countries where the incidence of Delta is high, such as in the United Kingdom.

The data on the clinical severity of Omicron remains limited. More information on case severity associated with Omicron is expected in the coming weeks due to the time lag between an increase in the incidence of cases and an increase in the incidence of severe cases, and deaths.

Preliminary evidence suggests that there may be a reduction in vaccine efficacy and effectiveness against infection and transmission associated with Omicron, as well as an increased risk of reinfection. More data are needed to better under the extent to which Omicron may evade vaccine and/or infection derived immunity and the extent to which current vaccines continue to protect against severe disease and death associated with Omicron.

Diagnostic accuracy of routinely used PCR and antigen-based rapid diagnostic test (Ag-RDT) assays does not appear to be impacted by Omicron, and therapeutic interventions for the management of patients with severe or critical COVID-19 associated with the Omicron variant are expected to remain effective

As a result of this, the overall risk related to the new variant of concern Omicron remains very high. More information on Omicron variant can be found in the updated Technical Brief and Priority Actions for Member States that was published on 10 December 2021 by WHO.

Phenotypic characteristics

Available evidence on the phenotypic impacts of VOCs is summarized in Table 2, as well as in previous editions of the COVID-19 Weekly Epidemiological Update. Since the last detailed update on 30 November, there are several new publications on the phenotypic characteristics of VOCs**,** including recent literature on Omicron. Reported studies might have not been formally peer-reviewed and findings must be interpreted in the light of this limitation.

A cohort analysis reported by UK Health Security Agency[1], estimated the odds of household transmission for Omicron variant index cases as compared with Delta variant index cases. The analysis included 72,761 index cases of Delta and 121 of Omicron in residential households with a specimen collection date between 15 and 28 November 2021. Household transmission was defined as an index (first) case followed by one or more laboratory confirmed SARS-CoV-2 cases at the same private dwelling within a 14-day period (minimum 7 days follow-up). Multivariable logistic regression model found the adjusted odds ratio for household transmission from an Omicron index case was 3.2 (95%CI 2.0-5.0, $p < 0.001$) compared to Delta index cases.

Reports describing Omicron cases among partially and fully vaccinated individuals have been recently released:

- The US CDC[2] reported the characteristics of the 43 investigated cases attributed to the Omicron variant. Twenty-five of them (58%) were in persons aged 18–39 years, and 14 (33%) persons reported international travel during

the 14 days preceding symptom onset or receipt of a positive test result. Thirty-four cases (79%) occurred in persons who completed the primary series of an FDA-authorized or approved COVID-19 vaccine ≥14 days before symptom onset or receipt of a positive SARS-CoV-2 test result, including 14 who had received an additional or booster dose; five of the 14 persons had received the additional dose <14 days before symptom onset. Six (14%) persons also had a documented previous SARS-CoV-2 infection. The most commonly reported symptoms were cough, fatigue, and congestion or runny nose. One vaccinated patient was hospitalized for 2 days, and no deaths among the 43 cases reported by US CDC have been reported to date. Case investigations have identified exposures associated with international and domestic travel, large public events, and household transmission.

- Preliminary findings published by the Norwegian Institute of Public Health (NIPH)[3], described the result of the investigation of an Omicron outbreak that occurred during a Christmas party. Of 111 participants at the Christmas party, 73% (80 people) were subsequently diagnosed with SARS-CoV-2. Of these, 17 were confirmed with the Omicron variant by sequencing as of 8 December 2021. Analysis of additional samples is ongoing. Over 70% of cases reported cough, lethargy, headache, sore throat and over half of them reported fever. No hospital admissions have been reported. According to NIPH, most of the cases (the report does not specify the number) were aged between 30 and 50 years and were vaccinated with two doses of an mRNA vaccine between May and November 2021.
- A report from South Africa[4] described seven cases of breakthrough infection with the Omicron variant among visitors who received three doses of SARS-CoV-2 vaccines. On arrival in South Africa during the first half of November, all cases provided a negative SARS-CoV-2 PCR test and a record of complete vaccination including the third dose. Six cases were fully vaccinated with Pfizer BioNTech-Comirnaty and five of them also received a third dose of the same vaccine in October or early November 2021. One person received a third dose of Moderna-mRNA-1273 at the beginning of October. The seventh subject received an initial dose of AstraZeneca-Vaxzevria, followed by two doses of Pfizer BioNTech-Comirnaty for completion of primary immunization and as a third dose. None of them had a previous history of a SARS-CoV-2 infection. The cases developed onset of mild respiratory symptoms from 30 November to 2 December 2021 while in Cape Town and samples were collected between 2 to 4 days after onset of symptoms. Genome sequencing confirmed 5 of the cases to be due to Omicron variant; in two cases sequencing failed but they are inferred to be Omicron, too, based on their very close epidemiological links to the others.

Preliminary evidence shows that sera obtained from vaccinated and previously infected individuals has lower neutralization activity on Omicron VOC than with any other circulating VOCs of SARS-CoV-2 and the ancestral strain:

- A study (not yet peer reviewed) conducted in South Africa[5], investigated whether the Omicron variant escapes antibody neutralization elicited by the Pfizer BioNTech-Comirnaty vaccine. Plasma samples from 12 participants fully vaccinated were tested. Six participants had a record of previous infection from the first SARS-CoV-2 wave in South Africa that was due to the ancestral SARS-Cov-2 strain. The other six participants had no previous record of SARS-CoV-2 infection nor detectable nucleocapsid antibodies indicative of previous infection. Overall, the geometric mean titer 50% focus reduction neutralization test (GMT FRNT50) was 1321 for the ancestral strain, indicating a very strong neutralization. However, the GMT FRNT50 for the Omicron variant was 32, a 41-fold reduction compared to the ancestral strain. Those participants who had a previous infection in addition to vaccination, had a higher GMT FRNT50, both versus Omicron variant and the ancestral strain.
- Another preprint study[6] analysed titers of neutralizing antibodies of sera from convalescent or vaccinated individuals against Omicron and compared them with titers against other VOCs (Alpha, Beta and Delta). Sera were selected from patients after an infection with Alpha (n=10), Beta (n=8) and Delta variants (n=7); from individuals

fully vaccinated with no previous SARS-CoV-2 infection (n=60) and fully vaccinated with previous SARS-CoV-2 infection (n=10). Sera from fully vaccinated individuals without previous SARS-CoV-2 infection neutralized the Omicron variant to a much lesser extent (not specified by authors) than any other VOCs analysed. Sera from fully vaccinated persons with previous SARS-CoV-2 infection, were able to neutralize Omicron variant, although to a lesser degree (not specified by authors) than the other VOCs.

- A study from Karolinska Institute[7] (not yet published) assessed neutralization activity against the Omicron variant. Two cohorts with laboratory confirmed SARS-CoV-2 in May 2020 and serum samples collected in November 2021, were included. Cohort 1 comprised serum samples with detectable neutralization against the ancestral SARS-CoV-2 strain from 17 anonymized blood donors. Cohort 2 comprised 17 serum samples from hospital workers with previous SARS-Cov-2 infection and that were fully vaccinated (the report does not specify with which vaccine) . Almost all serum samples evaluated, retained some neutralization activity against the Omicron variant. Fold-reduction in the neutralization of Omicron relative to the ancestral strain, ranged from 1 to 23, with quartiles of 2.5, 5.5, and 11, measured by lentiviral pseudotype neutralization assay. As compared with Delta, Omicron showed a further reduction in neutralization activity, but that was not significant.

If specific antibodies neutralizing activity seems to be reduced versus the Omicron VOC, preliminary studies suggest that CD8+ T-cell responses may still maintain capability to recognize the Omicron VOC. A study from United States[8] not yet published, examined SARS-CoV-2 CD8+ T-cell responses from 30 recovered COVID-19 convalescent patients, evaluating if the previously identified viral epitopes targeted by CD8+ T-cells in these individuals (n=52 distinct epitopes) are mutated in the newly described Omicron variant. Within this population, only one low-prevalence (found in 2/30 (7%) of participants) epitope restricted to two HLA alleles from the Spike protein was found to be mutated in Omicron and contains only a single amino acid change. These data suggest that individuals with existing anti-SARS-CoV-2 CD8+ T-cell responses should recognize the Omicron variant, and that SARS-CoV-2 has not evolved extensive T-cell escape mutations.

A retrospective cohort study[9] was conducted in the United States to evaluate the duration of immunity to the Delta variant following infection. Of the samples tested prior from 9 March-31 December 2020, 15.5% (50 327/ 325 157) individuals were positive for SARS-CoV-2. During the Delta dominant period, protection of prior SARS-CoV-2 infection (defined as 1 minus the ratio of the infection rate for those initially positive to those initially negative) against reinfection was 85.4% (95%CI 80.0-89.3%) however, was lower for asymptomatic compared to symptomatic infection (66.6% (95%CI 40.6-81.2%). From 30 August 2020 to 9 September 2021, prior infection provided an overall 85.7% (95%CI 82.2-88.5%) protection against reinfection and again, protection against asymptomatic infection was lower than for symptomatic infection (52.2% (95%CI 35.3-64.7%) and 92.0% (95%CI 89.1-94.2%, respectively). Additionally, long-term protection among those aged 65 years and over was lower than for those aged under 65 years (76.3% compared to 88.9%, $p<0.001$).

A study conducted in the Republic of Korea[10] evaluated the transmissibility of the Delta variant among household contacts. A total of 405 cases with a median age of 19 years (1-71 years) who were infected with the Delta variant between 22 June to 31 July from Daejeon metropolitan city were included the study, of whom 325 (80.2%) were symptomatic. From these cases, six local clusters (two or more confirmed infections) were identified, all of which were associated with indoor facilities with the largest related to a sports academy (n=249 cases) and the second largest, a karaoke centre (n=47 cases). It was also estimated that 80% of all local transmission was caused by 15% (95%CI 13-18%) of cases and from 258 infector-infectee transmission pairs, an estimated mean serial interval (the time between which the infector and infectee show symptoms) of 3.26 days (95% credible interval of 2.92-3.60 days) was calculated. A secondary attack rate of 63.4% (52/82 cases) was calculated based on data from 23 household

contacts in 32 homes. The study demonstrates the high transmissibility of the Delta variant in indoor settings and households. Contact tracing and isolation and the use of personal preventive measures during indoor activity remain imperative particularly given the potential for pre-symptomatic transmission.

Table 2: Summary of phenotypic impacts* of variants of concern

WHO label	Alpha	Beta	Gamma	Delta	Omicron
Transmissibility	Increased transmissibility[11]	Increased transmissibility[12,13]	Increased transmissibility[13,14]	Increased transmissibility [13,15,16]	No direct evidence for increased transmissibility.
Disease severity	Possible increased risk of hospitalization[17,18], possible increased risk of severe disease and death[19,20]	Possible increased risk of hospitalization[18], possible increased in-hospital mortality[21]	Possible increased risk of hospitalization[18], possible increased risk of severe disease[22]	Possible increased risk of hospitalization[23,24]	Not yet known. Clinical outcome data are under review.
Risk of reinfection	Neutralizing activity retained[25], risk of reinfection remains similar[26]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[27]	Moderate reduction in neutralizing activity reported[28]	Reduction in neutralizing activity reported[29–31]	Preliminary evidence suggests a possible increased risk of reinfection [32]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF), no impact on overall result from multiple target RT-PCR; No impact on Ag RDTs observed[33]	No impact on RT-PCR or Ag RDTs observed[31]	None reported to date	No impact on RT-PCR or Ag RDTs observed[34]	PCR continues to detect Omicron. Impact on Ag-RDTs is under investigation.

**Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.*

Table 3 summarizes the impact of variants on product specific vaccine efficacy/effectiveness (VE) and quantifies the reduction in VE in the setting of variants compared to non-VOC settings. Since the 30 November update, a total of 10 notable new studies have provided evidence of COVID-19 vaccine performance against the variants of concern.

As of December 12, seven recent studies have provided evidence of vaccine performance against the Omicron variant: 1 VE study and 6 neutralization studies. Note all studies are preliminary and more data are needed to confirm findings.

The first study of real-world VE against the Omicron variant (not yet peer-reviewed) provides preliminary evidence of reduced effectiveness of AstraZeneca-Vaxzevria and Pfizer BioNTech-Comirnaty against symptomatic disease due to Omicron.[35] No data on VE against severe disease was reported. [35]. This test-negative case-control study conducted in the United Kingdom found evidence that two doses of AstraZeneca-Vaxzevria was not effective at preventing symptomatic disease due to Omicron, at ≥15 weeks after the second dose. However, the authors note that early data for AstraZeneca-Vaxzevria are likely biased due to small numbers and because persons receiving two doses of the vaccine likely reflect an older population and those with more co-morbidities. VE of Pfizer BioNTech-Comirnaty against symptomatic disease was similar to Delta (88.0%, 95% CI: 65.9-95.8%) 2-9 weeks post complete vaccination, but then fell to 48.5% (24.3-65.0%) at 10-14 weeks post second dose (compared to VE of 77.7%, 95% CI: 76.3-79%, against Delta 10-14 weeks post vaccination). VE against symptomatic disease due to Omicron remained 34-37% from

15-to-25+ weeks post second dose, without evidence of further decrease. Two weeks after receiving a third dose of Pfizer BioNTech-Comirnaty, VE against symptomatic disease due to Omicron increased to 71.4% (41.8-86.0%) among those who had received a primary series of AstraZeneca-Vaxzevria and to 75.5% (95%CI: 56.1 to 86.3%) among those who had received a primary series of Pfizer BioNTech-Comirnaty; in contrast, VE of a third dose against symptomatic disease due to Delta was 93-94% when added to either primary series. While these results indicate reduced VE of AstraZeneca-Vaxzevria and Pfizer BioNTech-Comirnaty against Omicron, significant bias cannot be ruled out; differences in age and risk among early cases of Omicron among vaccinated versus unvaccinated persons, as well as the predominance of early Omicron cases among travelers and their close contacts, could explain some of the results. Moreover, due to the small number of Omicron cases detected to date, these early VE estimates are subject to significant uncertainty with wide confidence intervals.

Six studies (not yet peer reviewed) have assessed the ability of blood collected from vaccinated persons to neutralize the Omicron variant.

- One study found an average 41.3-fold reduction in neutralization capacity relative to the ancestral SARS-CoV-2 strain in 12 samples collected 10-39 days after complete vaccination with the Pfizer BioNTech-Comirnaty primary (two-dose) series.[5]
- A second study conducted by Pfizer, found a 25.8-fold reduction relative to the ancestral strain among approximately 20 samples collected 3 weeks after completion of the Pfizer BioNTech-Comirnaty primary series. The reduction was only 2.6-fold among samples collected from persons who had received a third dose of Pfizer BioNTech-Comirnaty one month prior to sample collection.[36]
- A third study found that neutralization capacity against Omicron was reduced by 33.5-fold relative to the ancestral strain in persons receiving 2 doses of Pfizer BioNTech-Comirnaty, while the majority of samples from persons receiving two doses of AstraZeneca-Vaxzevria, failed to neutralize the variant.[37]
- A fourth study found that blood collected from individuals who were previously vaccinated with 2 doses of mRNA vaccine 1.3 months prior showed a 127-fold reduction in capacity to neutralize Omicron relative to the ancestral strain; samples collected from persons vaccinated with Janssen-Ad26.COV 2.S 1 month prior failed to neutralize Omicron.[38]
- A fifth study found 20-fold, 11.4- fold, and 10-fold reductions in neutralization capacity *compared to Delta* for two doses of Moderna-mRNA-1273, for two doses of Pfizer BioNTech-Comirnaty, and for a single dose of AstraZeneca-Vaxzevria followed by second dose of Pfizer BioNTech-Comirnaty, respectively, among 14-19 samples collected from persons who had received their second dose 6-7 months prior.[39] Previous studies have found a median 3-fold reduction (IQR 2-4) of these vaccines against Delta relative to the ancestral strain. Adding a third dose of Pfizer BioNTech-Comirnaty to each of three primary vaccination series evaluated, an increase in neutralizing antibodies was observed relative to two doses, however, neutralization capacity against Omicron *relative to Delta* was still reduced by 23- to 37-fold.
- Finally, a sixth study found that blood collected from persons vaccinated with 2 doses of AstraZeneca-Vaxzevria, 2 doses of Moderna-mRNA-1273, 2 doses of Pfizer BioNTech-Comirnaty, or 1 dose of AstraZeneca-Vaxzevria followed by a second dose of Pfizer BioNTech-Comirnaty had reduced capacity to neutralize Omicron as *compared to Alpha, Beta, and Delta variants*; a much smaller reduction in neutralization capacity against Omicron was observed for blood collected from persons who had been previously infected and then vaccinated or previously vaccinated and then infected.[6] Of note, these neutralization studies used different assays, sera at variable times after vaccination, and most included sera from a small number of persons.

While methods vary across the studies, and neutralization is only one marker of vaccine performance, these preliminary laboratory results suggest that the effectiveness of COVID-19 vaccines against infection with the Omicron variant may be reduced.

Three studies assessed COVID-19 vaccine effectiveness in settings where Delta was the predominant circulating variant.

- The first test-negative case-control peer-reviewed study conducted at two medical centers in India found AstraZeneca-Vaxzevria to be 63.1% (51.5-72.1) effective at preventing SARS-CoV-2 infection 14 or more days post second dose, with a maximum follow-up time up to 10 weeks following the second dose.[40] Authors also report that persons infected with SARS-CoV-2, two doses of AstraZeneca-Vaxzevria was 81.5% (9.9-99.0%) effective at preventing progression to moderate-to-severe disease.
- A second peer-reviewed retrospective cohort study from Israel evaluated the effectiveness of a third dose of Pfizer BioNTech-Comirnaty in preventing death among persons 50 years and older who had completed the primary vaccination series at least 5 months prior.[41] The authors found that a third dose[41] had a relative VE of 90% (86-93%) effective at preventing death due to COVID-19, compared to those who had received only 2 doses; the rate of death in the third dose group was 0.16 per 100,000 person-years compared to 2.98 per 100,000 person years in persons with 2 doses only.
- A third retrospective cohort study from Israel (not yet peer reviewed), found the rate of SARS-CoV-2 infection to be 2.6 (2.4-2.7) time lower in persons having received a third dose of Pfizer BioNTech-Comirnaty in the previous two months relative to persons who had received their second dose in the prior two months.[42] The study also found evidence of decreasing VE of two doses of Pfizer BioNTech-Comirnaty over time, with a 4-fold increase in the rate of infection among those receiving a second dose 6-8 months prior compared to those who had received their second dose only 0-2 months earlier.

Table 3. Summary of primary series vaccine performance against variants of concern (data as of 12 December 2021)

	WHO Emergency Use Listing (EUL) Qualified Vaccines[+]								Vaccines without WHO EUL[+]		
	AstraZeneca-Vaxzevria/SII - Covishield	Beijing CNBG- BBIBP-CorV	Bharat-Covaxi	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Moderna-mRNA-1273/ Pfizer BioN BioNTech-Comirnaty	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Gamaleya-Sputnik V	Novavax-Covavax
Alpha[43,44]											
Summary of VE*	Protection retained against all outcomes										
- Severe disease	↔$_{2}$	-	-	-	↔$_{2}$	↔$_{1}$	↔$_{6}$	-	-	-	-
- Symptomatic disease	↔to↓$_{5}$	-	-	-	↔$_{1}$	↔$_{1}$	↔$_{4}$	-	-	-	↓$_{1}$
- Infection	↔to↓$_{4}$	-	-		↔$_{3}$	-	↔$_{3}$	-	-	-	-
Neutralization	↔to↓$_{8}$	↔$_{1}$	↔$_{2}$	↔$_{4}$	↔to↓$_{13}$	↔to↓$_{3}$	↔to↓$_{43}$	↔to↓↓$_{7}$	↔$_{2}$	↔to↓$_{4}$	↓$_{1}$
Beta[45–48]											
Summary of VE*	Protection retained against severe disease; reduced protection against symptomatic disease; limited evidence										
- Severe disease	-	-	-	↔$_{1}$	↔$_{1}$	-	↔$_{3}$	-	-	-	-
- Symptomatic disease	↔to↓↓↓$_{2}$	-	-	↔$_{1}$	↔$_{1}$	-	↔$_{2}$	-	-	-	↓↓↓$_{1}$
- Infection	-	-	-	-	↔$_{1}$	-	↓$_{1}$	-	-	-	-
Neutralization	↓to↓↓$_{8}$	↔to↓$_{2}$	↓$_{2}$	↓to↓↓$_{8}$	↓to↓↓$_{17}$	↓↓$_{3}$	↓to↓↓$_{43}$	↓to↓↓↓$_{6}$	↔to↓$_{3}$	↓↓to↓↓↓$_{5}$	↓↓↓$_{1}$
Gamma											
Summary of VE*	Unclear impact; very limited evidence										
- Severe disease	↔$_{1}$	-	-	-	↔$_{1}$	-	↔$_{2}$	-	-	-	-
- Symptomatic disease	↔$_{1}$	-	-	-	↔$_{1}$	-	↔$_{1}$	-	-	-	-
- Infection	↔$_{1}$	-	-	-	↔$_{1}$	-	↔$_{1}$	↔$_{1}$	-	-	-
Neutralization	↔to↓$_{3}$	-	-	↔to↓$_{4}$	↓$_{8}$	↔$_{1}$	↔to↓$_{26}$	↓$_{5}$	↔$_{1}$	↓to↓↓$_{3}$	-
Delta[49]											
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection; limited evidence										
- Severe disease	↔$_{3}$	-	-	-	↔$_{3}$	-	↔$_{6}$	-	-	-	-
- Symptomatic disease	↓to↓↓$_{5}$	-	↓$_{1}$	-	↔$_{1}$	-	↔to↓$_{4}$	-	-	-	-
- Infection	↔to↓$_{4}$	-	-	↓↓↓$_{1}$	↔$_{3}$	-	↔to↓$_{3}$	-	-	-	-
Neutralization	↓$_{10}$	-	↔to↓$_{3}$	↔to↓↓$_{8}$	↓$_{9}$	↓to↓↓$_{3}$	↔to↓$_{23}$	↓to↓↓↓$_{5}$	↔to↓$_{2}$	↓to↓↓$_{3}$	-
Omicron											
Summary of VE*	No evidence										
- Severe disease	-	-	-	-	-	-	-	-	-	-	-
- Symptomatic disease	-	-	-	-	-	-	↓↓↓$_{1}$	-	-	-	-
- Infection	-	-	-	-	-	-	-	-	-	-	-
Neutralization	↓↓↓$_{1}$	-	-	↓↓↓$_{1}$	-	↓↓↓$_{1}$	↓↓↓$_{3}$	-	-	-	-

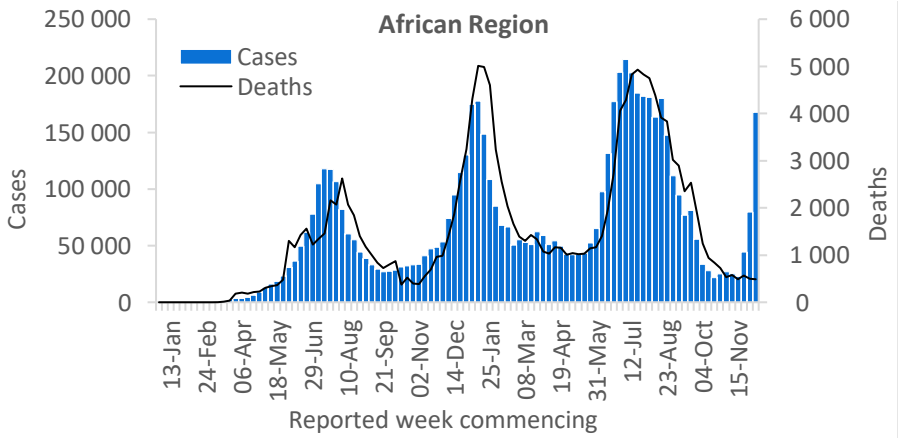
VE refers to vaccine effectiveness and vaccine efficacy. *Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10% reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20% reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30% reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30% reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study. The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources Library. References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table.

WHO regional overviews Epidemiological week 6 – 12 December 2021

African Region

The African Region reported over 167 000 new cases, an increase of 111% as compared to the previous week and the highest number of new weekly cases since early August 2021. Marked increases were observed in over two thirds (33/49; 67%) of countries in the Region with the majority (30/33; 91%) reporting increases of 25% or greater, as compared to the previous week. The highest numbers of new cases were reported from South Africa (109 053 new cases; 183.9 new cases per 100 000 population; a 76% increase), Zimbabwe (26 479 new cases; 178.2 new cases per 100 000; a 479% increase), and Mauritius (6415 new cases; 504.4 new cases per 100 000; a 775% increase).

The Region reported just under 500 new deaths, a number similar to the number reported in the previous week. The highest numbers of new deaths were reported from South Africa (151 new deaths; <1 new death per 100 000 population; a 13% decrease), Mauritius (92 new deaths; 7.2 new deaths per 100 000; a 27% decrease), and Algeria (41 new deaths; <1 new death per 100 000; a 7% decrease).

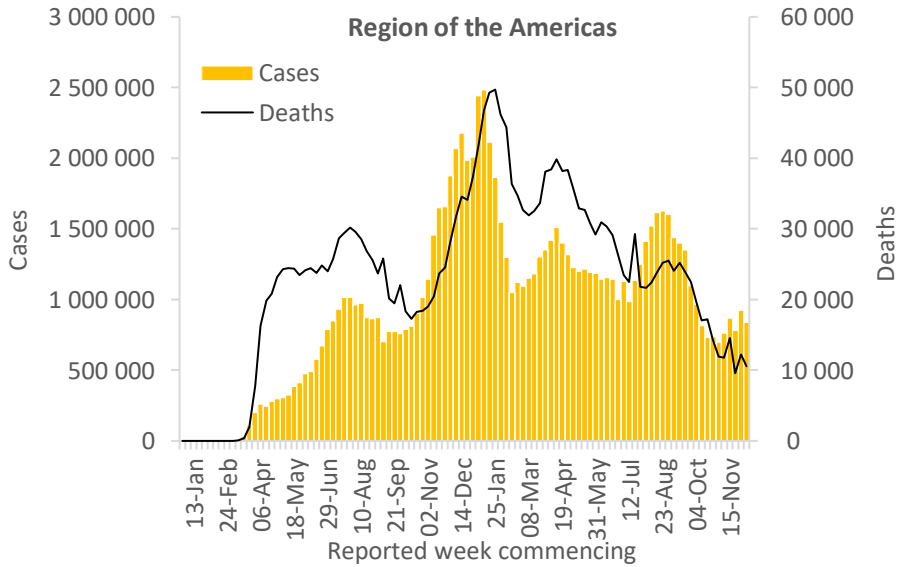


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 837 000 new cases and over 10 000 new deaths, decreases of 10% and 14% respectively as compared to the previous week. Nevertheless, 28% (15/56) of countries in the Region reported over 10% increases in cases, with the greatest observed in the Caribbean islands of Saint Barthélemy (350%; from 2 cases to 9 cases), Turks and Caicos Islands (285%) and Saint Martin (111%). The highest numbers of new cases were reported from the United States of America (674 019 new cases; 203.6 new cases per 100 000; a 9% decrease), Brazil (38 372 new cases; 18.1 new cases per 100 000; a 38% decrease), and Canada (25 332 new cases; 67.1 new cases per 100 000; a 25% increase).

The highest numbers of new deaths were reported from the United States of America (6909 new deaths; 2.1 new deaths per 100 000; a 16% decrease), Mexico (1122 new deaths; <1 new death per 100 000; an 85% increase), and Brazil (851 new deaths; <1 new death per 100 000; a 41% decrease).

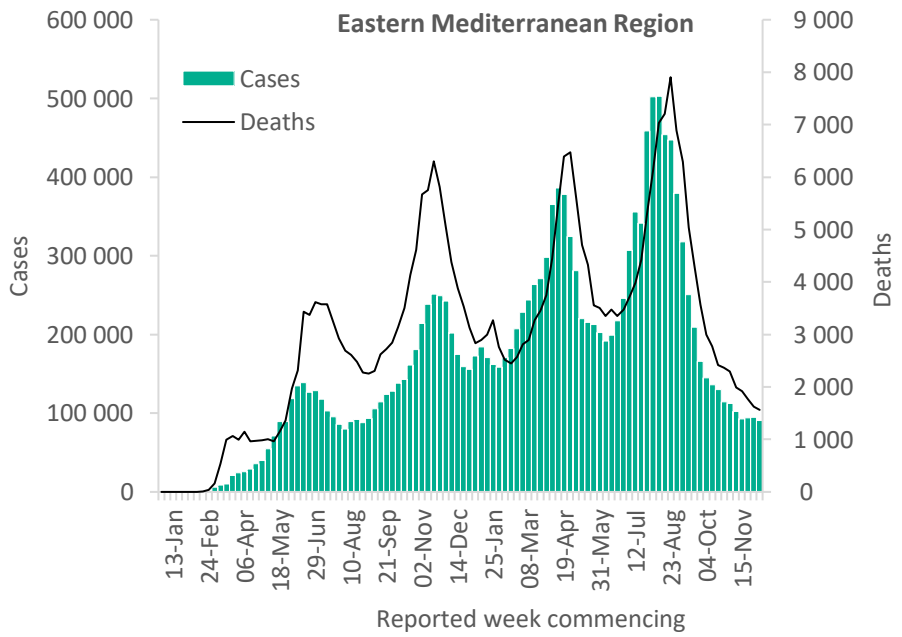


Updates from the Region of the Americas

Eastern Mediterranean Region

The weekly incidence of cases and deaths in the Eastern Mediterranean Region remained stable this week, with over 90 000 new cases and over 1500 new deaths reported. However, three countries (3/22, 13%) in the Region reported an increase of over 10% in weekly incidence of cases. The highest numbers of new cases were reported from Jordan (34 735 new cases; 340.4 new cases per 100 000; an 8% increase), the Islamic Republic of Iran (21 168 new cases; 25.2 new cases per 100 000; a 19% decrease), and Lebanon (11 341 new cases; 166.2 new cases per 100 000; a 9% increase).

The highest numbers of new deaths continued to be reported from the Islamic Republic of Iran (537 new deaths; <1 new death per 100 000; a 7% decrease), Egypt (333 new deaths; <1 new death per 100 000; a 12% decrease), and Jordan (226 new deaths; 2.2 new deaths per 100 000; a 13% increase).

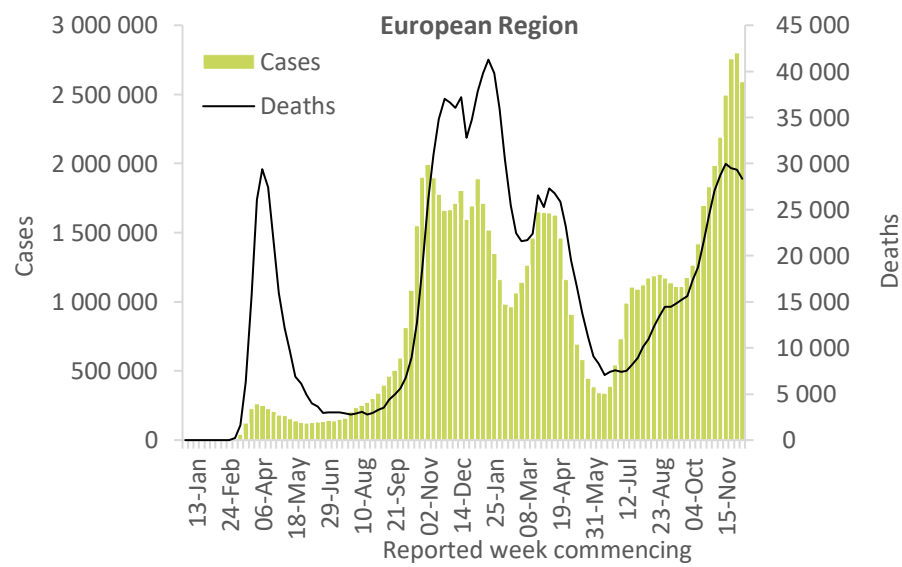


Updates from the Eastern Mediterranean Region

European Region

The European Region reported just under 2.6 million new cases, a 7% decrease as compared to the previous week and a decline since early September. The number of new deaths reported this week was just over 28 000, remaining similar to the number reported in the previous week. Despite the declining trend, a small proportion (10/61; 6%) of countries still reported over a 10% increase in cases as compared to the previous week. The highest numbers of new cases were reported from Germany (351 738 new cases; 422.9 new cases per 100 000; an 11% decrease), the United Kingdom (350 340 new cases; 516.1 new cases per 100 000; a 13% increase), and France (335 972 new cases; 516.6 new cases per 100 000; a 19% increase).

The highest numbers of new deaths were reported from the Russian Federation (8205 new deaths; 5.6 new deaths per 100 000; a similar number to that of the previous week), Poland (2804 new deaths; 7.4 new deaths per 100 000; a 6% increase), and Ukraine (2747 new deaths; 6.3 new deaths per 100 000; a 13% decrease).

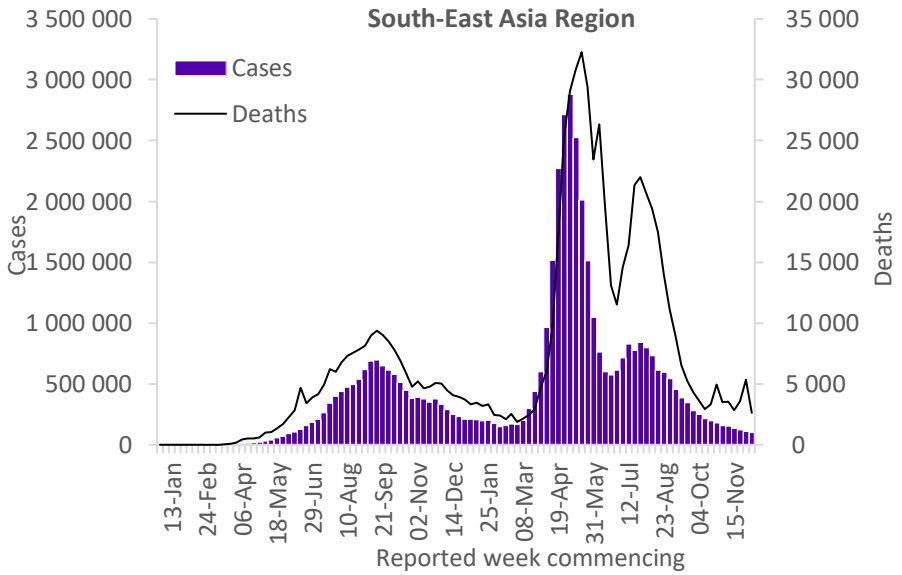


Updates from the European Region

South-East Asia Region

The declining trend in reported new weekly cases and deaths continued this week in the South-East Asia Region. Over 98 000 new cases and over 2600 new deaths were reported, amounting to a 10% and 50% decrease respectively as compared to the previous week. Only two countries reported an increase in weekly cases, Bangladesh (from 1659 to 1882, a 13% increase) and Bhutan (from 1 to 8; a 700% increase). The highest numbers of new cases were reported from India (57 255 new cases; 4.1 new cases per 100 000; a 6% decrease), Thailand (27 405 new cases; 39.3 new cases per 100 000; a 20% decrease), and Sri Lanka (5220 new cases; 24.4 new cases per 100 000; similar to the number reported in the previous week).

The highest numbers of new deaths were reported from India (2108 new deaths; <1 new death per 100 000; a 56% decrease), Thailand (227 new deaths; <1 new death per 100 000; similar to the number reported in the previous week), and Sri Lanka (153 new deaths; <1 new death per 100 000; similar to the number reported in the previous week).

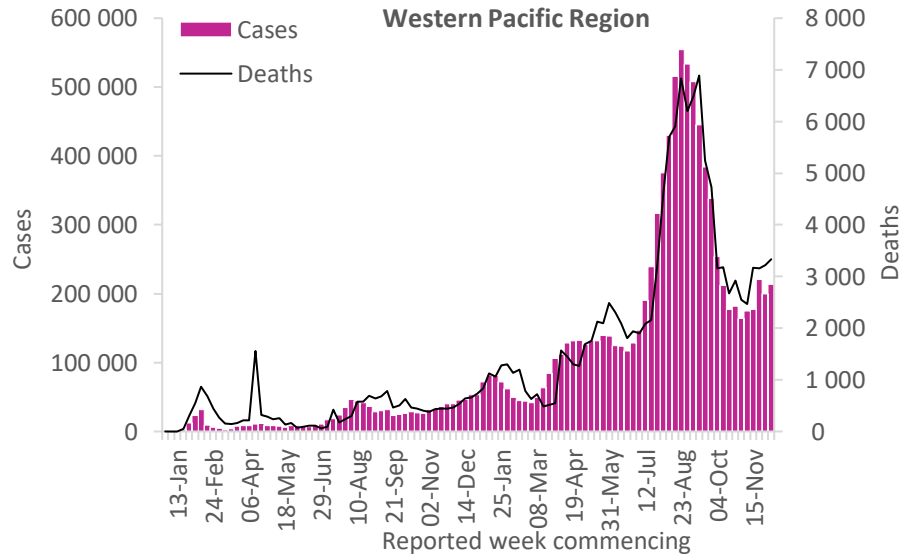


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported 214 000 new cases, a 7% increase as compared to the previous week. Four of the 27 countries in the region, reported an increase in case incidence of over 10%, Northern Mariana Islands (62%), Republic of Korea (37%), Lao People's Democratic Republic (17%) and Japan (12%). The highest numbers of new cases were reported from Viet Nam (103 635 new cases; 106.5 new cases per 100 000; a 6% increase), Republic of Korea (44 238 new cases; 86.3 new cases per 100 000; a 38% increase), and Malaysia (33 675 new cases; 104.0 new cases per 100 000; similar to the number reported in the previous week).

The Region reported over 3300 new deaths, a number similar to that of the previous week. The highest numbers of new deaths were reported from Viet Nam (1550 new deaths; 1.6 new deaths per 100 000; a 13% increase), the Philippines (866 new deaths; <1 new death per 100 000; a 16% decrease), and Republic of Korea (401 new deaths; <1 new death per 100 000; a 32% increase).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 13 December, highlights include the following:

- WHO provides testing kits to Uganda for screening the COVID-19 Omicron variant of concern
- COVID-19 Contact Tracing Communication in Honduras
- WHO/Europe laboratory system strengthening mission to Kazakhstan
- UN agencies support intensive COVID-19 vaccination drive in the Philippines
- Emergency Medical Teams (EMT) in the Pacific: Strengthening national capacity for health emergency response
- Updates on WHO's financing to support countries on COVID-19 response implementation to suppress transmission, reduce exposure, and protect the vulnerable and save lives
- Progress on a subset of global indicators that demonstrate country and global progress to end the acute phase of the pandemic

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice

Annexes

Annex 1. Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. Likewise, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection.
- Table 3 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than 4 months post final dose.
- Studies reporting VOC-specific VE estimates for full vaccination (≥7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca-Vaxzevria for infection (when a phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Neutralization studies that use samples collected >7 days and < 6 months after complete vaccination and that use an ancestral strain as the reference are included in Table 3.

Annex 2. List of countries/territories/areas reporting variants of concern as of 14 December 2021

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Afghanistan	●	-	●	-	-
Albania	●	-	○	-	-
Algeria	●	-	●	-	-
Andorra	○	○	○	-	-
Angola	●	●	●	●	-
Anguilla	●	-	●	-	-
Antigua and Barbuda	●	●	●	●	-
Argentina	●	●	●	●	●
Armenia	●	-	●	-	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	●
Austria	●	●	●	●	●
Azerbaijan	●	-	○	-	-
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	●*
Bangladesh	●	●	●	○	●*
Barbados	●	-	●	●	-
Belarus	●	-	○	-	-
Belgium	●	●	●	●	●
Belize	●	-	●	●	-
Benin	●	●	●	●	-
Bermuda	●	●	●	-	●*
Bhutan	●	●	●	-	-
Bolivia (Plurinational State of)	●	-	●	●	-
Bonaire	●	-	●	●	-
Bosnia and Herzegovina	●	●	○	●	-
Botswana	○	●	●	-	●
Brazil	●	●	●	●	●
British Virgin Islands	●	-	●	●	-
Brunei Darussalam	●	●	●	-	-
Bulgaria	●	●	●	-	-
Burkina Faso	●	-	●	-	-
Burundi	●	●	●	-	-
Cabo Verde	●	-	●	-	-
Cambodia	●	●	●	-	-
Cameroon	●	●	●	●	-
Canada	●	●	●	●	●
Cayman Islands	●	●	●	●	-
Central African Republic	●	●	●	-	-
Chad	●	-	-	-	-
Chile	●	●	●	●	●
China	●	●	●	●	●
Colombia	●	-	●	●	-
Comoros	-	●	●	-	-
Congo	●	●	●	●	-
Costa Rica	●	●	●	●	-
Croatia	●	●	○	●	●
Cuba	●	●	●	-	●*
Curaçao	●	●	●	●	-
Cyprus	●	●	○	-	●*
Czechia	●	●	●	●	●
Côte d'Ivoire	●	●	○	-	-
Democratic Republic of the Congo	●	●	●	-	-
Denmark	●	●	●	●	●
Djibouti	●	●	●	-	-
Dominica	●	-	●	-	-
Dominican Republic	●	-	●	●	-
Ecuador	●	-	●	●	-
Egypt	●	-	●	-	-
El Salvador	●	-	●	●	-
Equatorial Guinea	●	●	●	-	-
Estonia	●	●	○	○	●
Eswatini	○	●	●	-	-
Ethiopia	●	●	●	-	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	-	●	-
Fiji	○	-	●	-	●
Finland	●	●	●	●	●
France	●	●	●	●	●
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	●	●	-	-
Gambia	●	-	●	-	-
Georgia	●	○	●	-	-
Germany	●	●	●	●	●
Ghana	●	●	●	●	●
Gibraltar	●	-	○	-	●*
Greece	●	●	●	●	●
Greenland	-	-	●	-	-
Grenada	●	-	●	●	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	●	-
Guinea	●	●	●	-	-
Guinea-Bissau	●	●	●	-	-
Guyana	-	-	●	●	-
Haiti	●	-	●	●	-
Honduras	●	-	●	●	-
Hungary	●	○	○	●	●*
Iceland	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
India	●	●	●	●	●
Indonesia	●	●	●	-	-
Iran (Islamic Republic of)	●	●	●	-	-
Iraq	●	●	●	●	-
Ireland	●	●	●	●	●
Israel	●	●	●	●	●
Italy	●	●	●	●	●
Jamaica	●	-	●	-	-
Japan	●	●	●	●	●
Jordan	●	●	●	●	●*
Kazakhstan	●	○	●	-	-
Kenya	●	●	●	-	-
Kosovo[1]	●	○	○	-	-
Kuwait	●	●	●	-	●*
Kyrgyzstan	●	●	●	-	-
Lao People's Democratic Republic	●	-	●	-	-
Latvia	●	●	○	●	●
Lebanon	●	-	●	-	●*
Lesotho	-	●	○	-	-
Liberia	●	●	●	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	○	○	○*
Lithuania	●	●	○	●	-
Luxembourg	●	●	●	●	●
Madagascar	●	●	-	-	-
Malawi	●	●	●	-	●*
Malaysia	●	●	●	-	●
Maldives	●	-	●	-	●
Mali	-	-	●	-	-
Malta	●	○	○	●	-
Martinique	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Mauritania	●	●	●	-	-
Mauritius	●	●	●	-	○*
Mayotte	●	●	○	-	-
Mexico	●	●	●	●	●
Monaco	●	●	●	-	-
Mongolia	●	-	●	-	-
Montenegro	●	-	○	○	○
Montserrat	●	-	●	●	-
Morocco	●	●	●	-	-
Mozambique	●	●	●	-	-
Myanmar	●	-	●	-	-
Namibia	●	●	●	●	●
Nepal	●	-	●	-	●
Netherlands	●	●	●	●	●
New Caledonia	●	-	●	-	-
New Zealand	●	●	●	●	-
Nicaragua	●	●	●	●	-
Niger	●	-	●	-	-
Nigeria	●	●	●	-	●
North Macedonia	●	●	○	-	-
Northern Mariana Islands (Commonwealth of the)	○	-	●	-	-
Norway	●	●	●	●	●
Occupied Palestinian Territory	●	●	●	-	-
Oman	●	●	●	-	-
Pakistan	●	●	●	●	●*
Panama	●	●	●	●	-
Papua New Guinea	-	-	●	-	-
Paraguay	●	-	●	●	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Portugal	●	●	●	●	●
Puerto Rico	●	●	●	●	○*
Qatar	●	●	●	-	-
Republic of Korea	●	●	●	●	●
Republic of Moldova	●	-	●	-	-
Romania	●	●	●	●	●
Russian Federation	●	●	●	○	●
Rwanda	●	●	●	-	-
Réunion	●	●	○	●	●
Saba	-	-	●	-	-
Saint Barthélemy	●	-	●	-	-
Saint Kitts and Nevis	-	-	●	-	-
Saint Lucia	●	-	●	-	-
Saint Martin	●	●	●	-	-
Saint Pierre and Miquelon	-	-	●	-	-
Saint Vincent and the Grenadines	-	-	●	●	-
Sao Tome and Principe	●	-	○	-	-
Saudi Arabia	●	●	●	-	●
Senegal	●	●	●	-	●
Serbia	●	-	●	-	-
Seychelles	●	●	●	-	-
Sierra Leone	-	●	●	-	●*
Singapore	●	●	●	●	●
Sint Maarten	●	●	●	●	-
Slovakia	●	●	●	-	○*
Slovenia	●	●	●	●	-
Somalia	●	●	●	-	-
South Africa	●	●	●	○	●
South Sudan	●	●	●	-	-
Spain	●	●	●	●	●
Sri Lanka	●	●	●	-	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Sudan	●	●	-	●	-
Suriname	●	●	●	●	-
Sweden	●	●	●	●	●
Switzerland	●	●	●	●	●
Thailand	●	●	●	●	●
Timor-Leste	●	-	●	-	-
Togo	●	●	●	●	-
Trinidad and Tobago	●	-	●	●	●*
Tunisia	●	●	●	-	●
Turkey	●	●	●	●	○*

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	●	-	●
Ukraine	●	○	○	-	-
United Arab Emirates	●	●	●	●	●
United Kingdom	●	●	●	●	●
United Republic of Tanzania	-	●	-	-	-
United States Virgin Islands	●	●	●	●	-
United States of America	●	●	●	●	●
Uruguay	●	●	●	●	-
Uzbekistan	●	●	○	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Vanuatu	-	-	●	-	-
Venezuela (Bolivarian Republic of)	●	-	●	●	-
Viet Nam	●	●	●	-	-
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	●	-	●
Zimbabwe	●	●	●	-	●

*unofficial sources and will be reviewed as more information become available. **Includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern. See also Annex 2: Data, table, and figure notes*

Annex 3. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

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COVID-19 Weekly Epidemiological Update

Edition 69, published 7 December 2021

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- Update on Variant of Concern Omicron
- WHO regional overviews
- Summary of the Weekly Operational Update

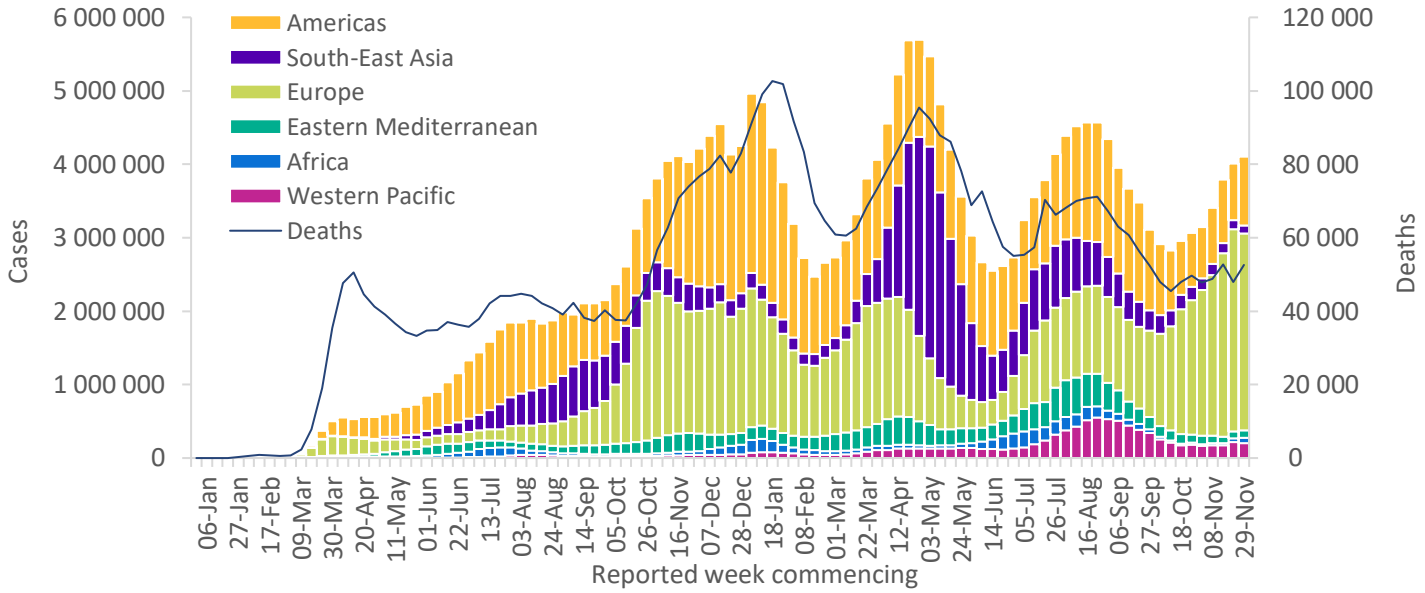
Global overview

Data as of 5 December 2021

Globally, weekly case incidence plateaued this week (29 November - 5 December 2021), with over 4 million confirmed new cases reported, similar to the number reported in the previous week's figures. However, new weekly deaths increased by 10% as compared to the previous week, with over 52 500 new deaths reported. As of 5 December, nearly 265 million confirmed cases and over 5.2 million deaths have been reported globally.

The African Region and the Region of the Americas reported increases in new weekly cases of 79% and 21%, respectively, while the Western Pacific and South-East Asia regions both reported decreases of 10%. The number of new weekly cases reported by the European and Eastern Mediterranean regions were similar to the numbers reported in the previous week. New weekly deaths increased by 49% in the South-East Asia Region and 38% in the Region of the Americas, while the weekly deaths decreased in the African and Eastern Mediterranean Regions by 13% and 8%, respectively. The number of new deaths were similar to those reported in the previous week in both the European and the Western Pacific regions.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 5 December 2021**



**See *Annex 2: Data, table, and figure notes*

The regions reporting the highest weekly case incidence per 100 000 population continue to be the European Region (288.0 new cases per 100 000 population) and the Region of the Americas (91.4 new cases per 100 000 population). Both regions also reported the highest weekly incidence in deaths of 3.1 and 1.3 per 100 000 population, respectively while <1 new death per 100 000 was reported in all other regions.

The highest numbers of new cases were reported from the United States of America (752 394 new cases; a 30% increase), Germany (396 429 new cases; similar to the previous week's figures), the United Kingdom (310 696 new cases; similar to the previous week's figures), France (283 500 new cases; a 49% increase) and the Russian Federation (231 240 new cases; similar to the previous week's figures).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 5 December 2021**

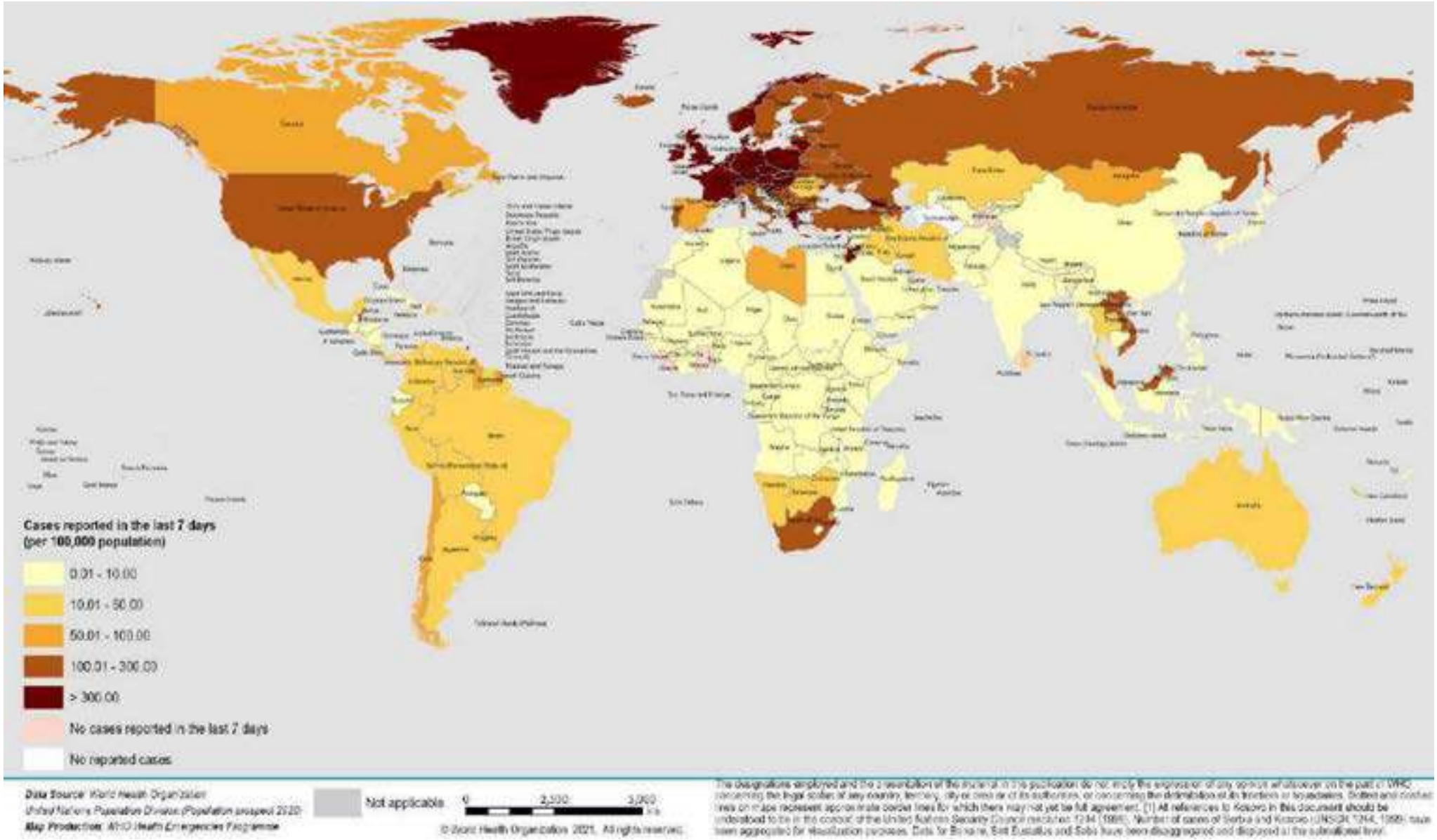
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	2 687 257 (65%)	-3%	88 925 399 (34%)	28 990 (55%)	-2%	1 569 599 (30%)
Americas	935 062 (23%)	21%	97 679 255 (37%)	12 987 (25%)	38%	2 360 315 (45%)
Western Pacific	199 495 (5%)	-10%	10 370 429 (4%)	3 220 (6%)	2%	144 204 (3%)
South-East Asia	109 044 (3%)	-10%	44 638 985 (17%)	5 324 (10%)	49%	711 660 (14%)
Eastern Mediterranean	94 724 (2%)	0%	16 846 148 (6%)	1 622 (3%)	-8%	310 727 (6%)
Africa	79 491 (2%)	79%	6 354 835 (2%)	498 (1%)	-13%	153 275 (3%)
Global	**4 105 073 (100%)**	**2%**	**264 815 815 (100%)**	**52 641 (100%)**	**10%**	**5 249 793 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 2: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

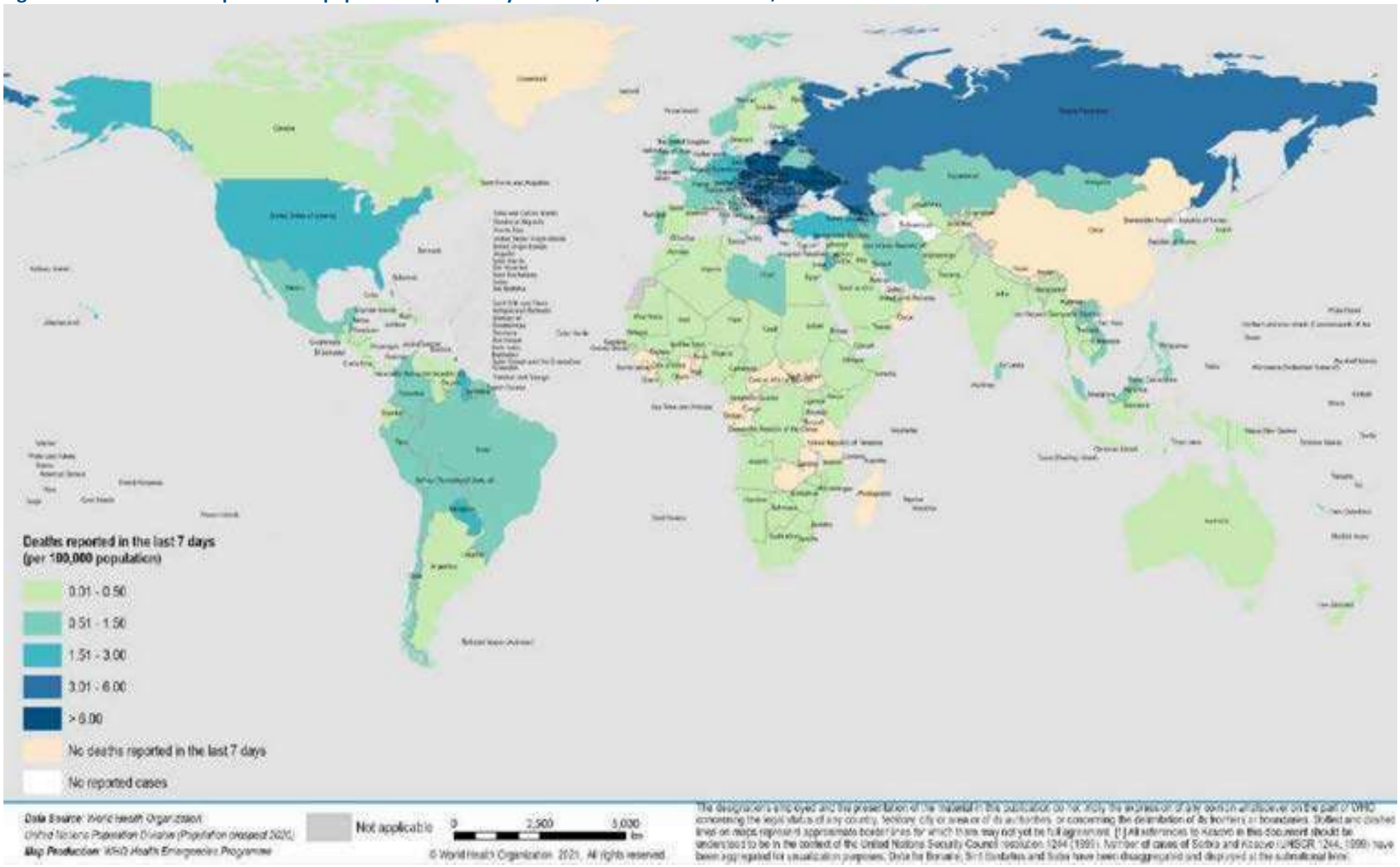
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 29 November - 5 December 2021**



**See *Annex 2: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 29 November - 5 December 2021**



**See *Annex 2: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied by national authorities to control disease spread. Potential Variants of Concern (VOCs), Variants of Interest (VOIs) or Variants Under Monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

The current global epidemiology of SARS-CoV-2 is characterized by a predominance of the Delta variant, declining trend in the proportion of Alpha, Beta and Gamma, and the emergence of Omicron which was designated as a Variant of Concern on 26 November (Figures 4 and 5). At present, Omicron cases have been reported in 57 countries across all WHO regions. While most of the cases identified in these countries are currently travel-related, this may change as more information becomes available. Of 899 935 sequences uploaded to GISAID with specimens collected in the last 60 days[i], 897 886 (99.8%) were Delta, 713 (0.1%) were Omicron, 286 (<0.1%) Gamma, 154 (<0.1%) Alpha, 64 (<0.1%) Beta, and <0.1% comprised other circulating variants (including VOIs Mu and Lambda).

Sub-regional and country-level variation continues to be observed; most notably within some South American countries, where the progression of the Delta variant has been more gradual, and other variants (e.g., Gamma, Lambda, Mu) still contribute a large proportion of reported sequences.

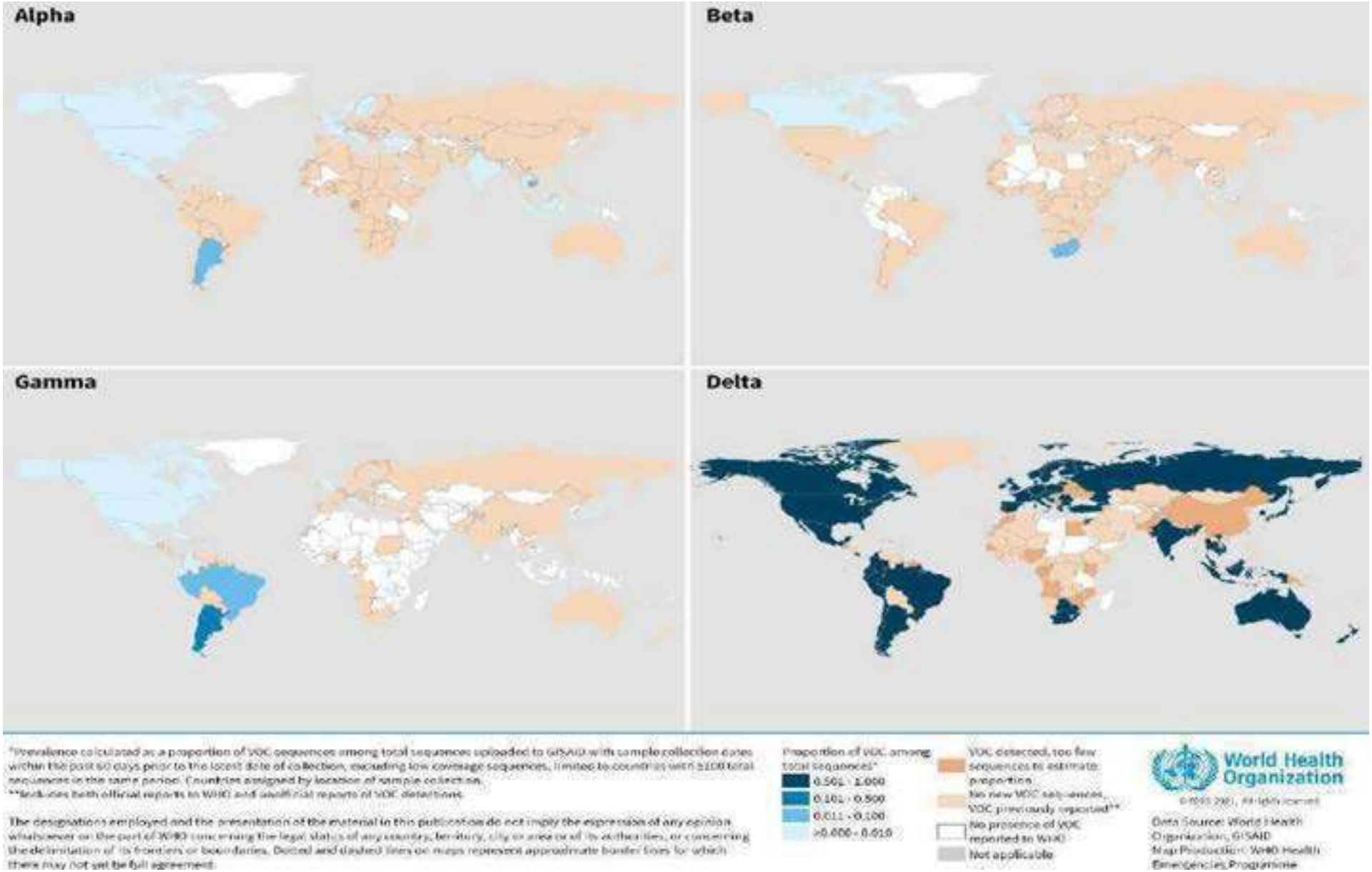
To note, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19

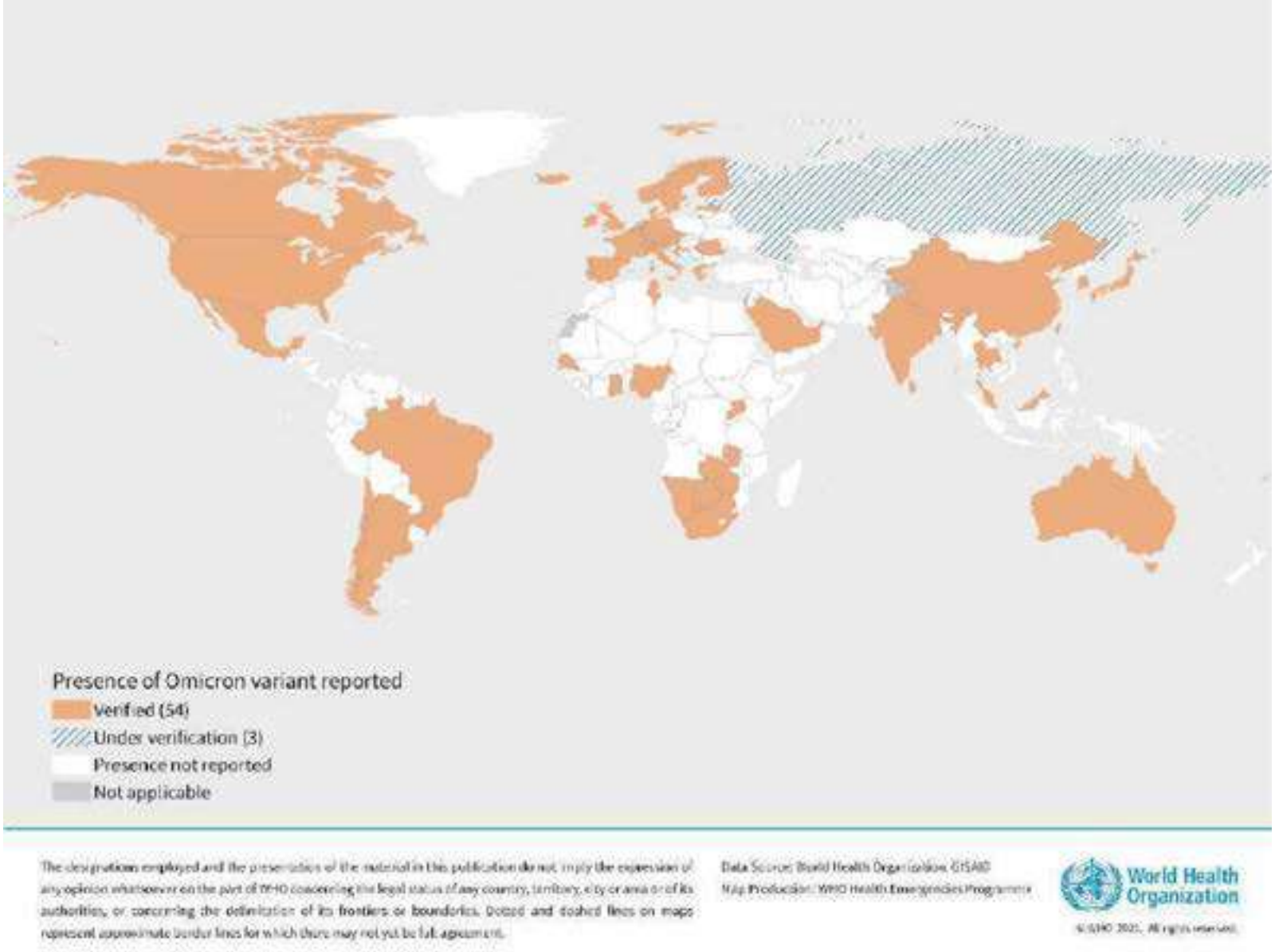
[i] Includes sequences submitted to GISAID with sample collected dates from 3 October to 2 December 2021 (last reported sample at the time of data extraction), excluding low coverage sequences.

Figure 4. Prevalence of Variants of Concern (VOCs) Alpha, Beta, Gamma and Delta in the last 60 days and historic detections, data as of 7 December 2021



Prevalence data based on sequences reported to GISAID, excluding low coverage sequences. See also Annex 1 for reported VOC detections by country/territory/area

Figure 5. Presence of Variant of Concern (VOC) Omicron, data as of 7 December 2021 (4 pm CET)



Presence of the Omicron variant is based on information reported to WHO. It includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). See also Annex 1 for reported VOC detections by country/territory/area.

Update on Variant of Concern Omicron

Background

Omicron is the fifth SARS-CoV-2 variant to be designated as a Variant of Concern (VOC) by WHO, following the designation of the Alpha, Beta, Gamma and Delta variants. The first known laboratory-confirmed case of Omicron was identified from a specimen collected on 9 November 2021 in South Africa, with the variant (Pango nomenclature B.1.1.529) first reported to WHO on 24 November. In consultation with the Technical Advisory Group on Virus Evolution (TAG-VE), WHO designated B.1.1.529 as a VOC on 26 November in view of the potential for enhanced transmissibility and/or a degree of immune escape, given the number of mutations (26-32) in the spike protein, as well as concerning initial epidemiological reports from South Africa, including signals of increased risk of reinfection. Here, we present an update on the current situation in terms of the epidemiology and transmissibility, clinical severity, risk of reinfection and the potential impact on diagnostics, vaccines and therapeutics.

As more data are analysed and understood about the potential implications that Omicron may have on the epidemiology, transmissibility, clinical severity, prevention and treatment of SARS-CoV-2 infection, our understanding of this variant will continue to evolve, and we will issue updates as further evidence becomes available.

Epidemiology

In South Africa, where Omicron was first reported, the case incidence of COVID-19 has continued to rise since the second week of November, with 62 021 new cases reported between 29 November and 5 December, a 111% increase compared to the previous week. An increase in the test positivity rate (TPR) has also been seen from 1.2% the week beginning the 7 November, to 22.4% the week beginning the 2 December.[1] An initial increase in incidence in Gauteng province in mid-November was thought in part, to be due to a cluster of cases among students at a university.[2] Very large increases in the weekly incidence of cases have also been seen in some countries neighbouring South Africa including: Eswatini (1990%); Zimbabwe (1361%); Mozambique (1207%), Namibia (681%) and Lesotho (219%). These other countries have very low vaccination coverage ranging from 12.1% of the total population fully vaccinated in Namibia to 26.7% in Lesotho. In South Africa 25.2% of the total population is fully vaccinated. While drivers of these increases remain unknown, it is plausible that spread of Omicron in combination with enhanced testing following the declaration of a VOC, play a role, together with the relaxation of public health and social measures (PHSMs) and sub-optimal immunization coverage.

Among countries in other regions reporting increasing spread of the Omicron variant, hundreds of cases of this variant have now been reported from countries in other regions.[3] Since the last update published on 30 November, additional countries across all six WHO Regions have reported confirmed cases of the Omicron variant. As of 7 December 2021, the Omicron variant has been confirmed in 57 countries. However, given the predominant circulation of the Delta variant in many countries, particularly in countries in the European Region and in the United States of America, it is too early to draw any conclusions about the impact of Omicron will have on the global epidemiology of COVID-19.

Transmissibility

While there seems to be evidence that the Omicron variant may have a growth advantage over other circulating variants it is unknown whether this will translate into increased transmissibility. Based on several assumptions about

the growth advantage, timing of introduction in the European Region, and population mixing and public health and social measures (PHSM) implementation, the European Centre for Disease Prevention and Control,[4] forecasted that if 1% of SARS-CoV-2 infections are due to the Omicron variant, it will become dominant in Europe, comprising >50% of the new infections, by 1 January 2022, with a growth advantage of >120%; and by 1 March 2022 with a growth advantage of >30%.

Ongoing and planned epidemiological studies, including detailed cluster investigations, contact-tracing and household transmission studies, coupled with neutralization studies from people previously vaccinated or infected and studies of vaccine effectiveness will help improve our understanding of the interplay between increased transmissibility and immune escape as drivers of increased transmission.

Clinical severity

Currently only limited data are available, making it challenging to assess any changes in disease severity with the Omicron variant. As of 6 December, all of the 212 confirmed cases identified in 18 European Union countries for which there was information available on severity were asymptomatic or mild.[3] While South Africa saw an 82% increase in hospital admissions due to COVID-19 (from 502 to 912) during the week 28 November – 4 December 2021, it is not yet known the proportion of these with the Omicron variant.[5] Even if the severity is equal or potentially even lower than for Delta variant, it is expected that hospitalizations will increase if more people become infected and that there will be a time lag between an increase in the incidence of cases and an increase in the incidence of deaths. Further information is needed to fully understand the clinical picture of those infected with the Omicron variant and WHO encourages countries to contribute to the collection and sharing of hospitalized patient data through the WHO COVID-19 Clinical Data Platform.

Risk of reinfection

Preliminary analysis suggests that the mutations present in the Omicron variant may reduce neutralising activity of antibodies resulting in reduced protection from natural immunity. This may explain why the variant seems to be spreading rapidly in a highly immune population such as South Africa, in which current vaccination coverage in adults is about 35%, but in which seroprevalence levels are estimated to be as high as 60-80% due to past infections, according to recent epidemiological studies and modelling.[6]

A modelling study (pre-print) based on data from nearly three million individuals in South Africa with a laboratory confirmed infection at least 90 days prior found an increase in the risk of re-infection during November 2021 compared to time periods earlier in the pandemic (estimated relative hazard ratio for reinfection versus primary infection of 2.39 (95%CI 1.88-3.11 from 1 – 27 November 2021 compared to wave 1 (June – September 2020), corresponding with the emergence of the Omicron variant. This information provides an initial assessment of the risk of re-infection however, further studies are needed to confirm this, including the ability of the Omicron variant to infect or re-infect those who have been vaccinated, as well as to determine the severity of these breakthrough or re-infections.[7]

Impact on diagnostics

SARS-CoV-2 infection can be diagnosed using either molecular tests (NAAT, PCR) or antigen-detection assays. Interim guidance on diagnostic testing for SARS-CoV-2 can be found here and on the use of antigen-detection tests can be found here. PCR tests that include multiple gene targets are unlikely to be affected and should continue to be used

to detect SARS-CoV-2 infection, including the Omicron variant. This has been confirmed by statements issued by suppliers as well as the US FDA, based on sequence analysis.
The majority of Omicron variant sequences reported include a 69-70 deletion mutation in the Spike protein. There are some public sequences lacking this mutation and, at the present time, it is unclear if this reflects true sequence diversity or is a sequencing artifact. Presence of the 69-70 deletion causes dropout of some S-gene targets in PCR assays, such as the TaqPath COVID-19 Combo Kit and TaqPath COVID-19 CE-IVD RT-PCR Kit (Thermo Fisher Scientific). This S-gene target failure (SGTF) can be used as a marker suggestive of Omicron. However, confirmation should be performed by sequencing the sample, as this deletion is found in other VOCs (e.g., Alpha and subsets of Gamma and Delta) currently circulating at low levels globally, but possibly circulating at higher levels locally.

All four WHO emergency use listing (EUL) approved antigen-detection rapid diagnostic tests (Ag-RDTs), listed here, target the Nucleocapsid protein of SARS-COV-2.The vast majority of Omicron sequences reported to date include the G204R and R203K mutations in the Nucleocapsid protein, which are present in many other variants currently in circulation. This has not been reported to affect the accuracy of Ag-RDTs to detect SARS-CoV-2. In addition, the majority of Omicron sequences contain a 3 amino acid deletion at positions 31-33 and the P13L mutation in the Nucleocapsid protein. The specific impact of these mutations on the performance of Ag RDTs is currently unclear.

Official statements from several Ag-RDT suppliers, including two with EUL-approved assays, indicate that based on sequence analysis, the performance of their tests is not impacted by the Omicron variant. Preliminary laboratory evidence is emerging that independently confirms that Ag-RDTs can accurately diagnose infection with the Omicron variant. To date, there have been no reported misdiagnoses (false negative results) for any WHO EUL approved diagnostic product in relation to Omicron.

Impact on vaccines

There is a need for more data to assess whether the mutations present on the Omicron variant may result in reduced protection from vaccine derived immunity and data on vaccine effectiveness, including the use of additional vaccination doses. WHO will continue to work with partners to monitor and evaluate these data once they become available. Vaccine effectiveness studies are vital to understand how vaccines protect against infection, symptomatic and severe disease, and death. WHO guidance on best practices to conduct these types of studies can be found on our website.

Impact on treatments

WHO continues to work with researchers to understand the effectiveness of treatments against the Omicron variant; however, Interleukin-6 Receptor Blockers and corticosteroids are expected to continue to be effective in the management of patients with severe disease.

Conclusions

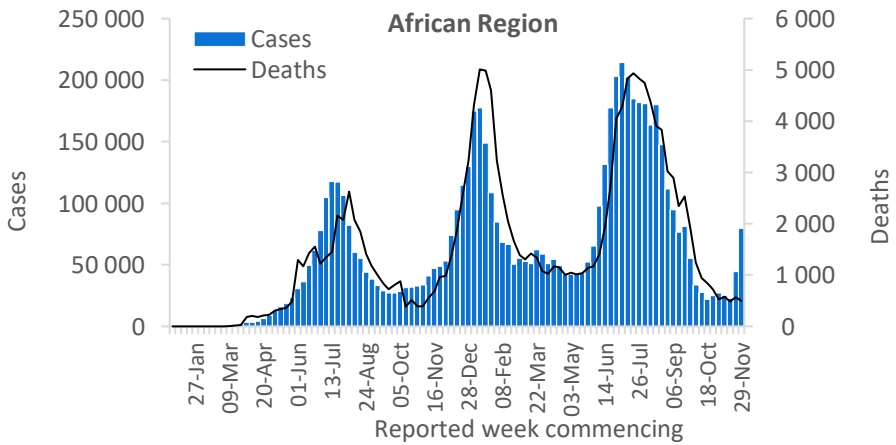
Whilst many questions about the Omicron variant remain unanswered, more information will continue to emerge in the coming weeks, with the TAG-VE and other groups reviewing and analysing data as it becomes available. It is important to continue to accelerate access to vaccines globally and for countries to continue to enhance surveillance, reporting initial cases or clusters to WHO and share genome sequences on publicly available databases such as GISAID. We recommend the public continue to prevent the spread of SARS-CoV-2 by improving ventilation of indoor spaces, wearing well-fitted masks, avoiding crowded spaces, practising hand hygiene and keeping an appropriate physical distance from others.

WHO regional overviews Epidemiological week 29 November – 5 December 2021

African Region

The case incidence in the African Region continues to increase with over 79 000 new cases reported during the week of 29 November to 5 December, a 79% increase. However, weekly deaths have continued to decrease, with just under 500 new deaths reported in the past week, a 13% decrease. Twenty-one of the 49 countries in the region (43%) reported an increase of >10% in new cases as compared to the previous week, with the highest numbers of new cases reported from South Africa (62 021 new cases; 104.6 new cases per 100 000; a 111% increase), Zimbabwe (4572 new cases; 30.8 new cases per 100 000; a 1361% increase) and Réunion (2140 new cases; 239.0 new cases per 100 000; a 14% increase). However, proportionally, very large increases in the incidence of cases were also seen in Eswatini (1900%), Mozambique (1207%) and Namibia (681%).

Six of the 49 countries in the Region reported an increase of over 10% in the number of new weekly deaths, with the highest numbers of new deaths reported from South Africa (174 new deaths; <1 new death per 100 000; a 21% decrease), Mauritius (126 new deaths; 9.9 new deaths per 100 000; an 31% increase), and Ethiopia (58 new deaths; <1 new death per 100 000; a 9% decrease).

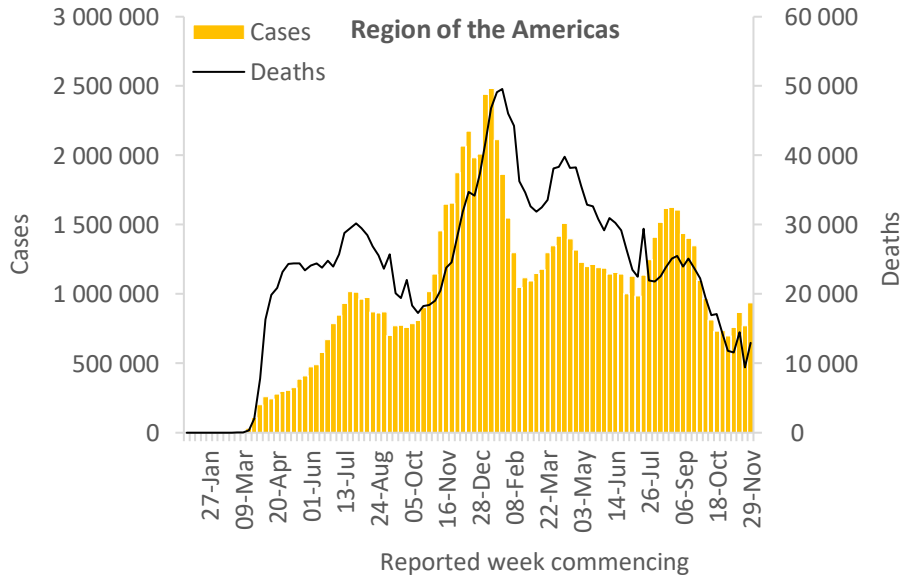


Updates from the African Region

Region of the Americas

The Region of the Americas reported a 21% increase in case incidence in the past week, with over 935 000 new cases reported. This trend is largely driven by the increase in the incidence of cases reported in the United States of America (752 394 new cases; 227.3 new cases per 100 000; a 30% increase). Twenty-seven percent (15/56) of countries in the region reported increases of over 10%. In addition to the United States of America, countries reporting the highest numbers of cases included Brazil (61 779 new cases; 29.1 new cases per 100 000; similar to the previous week's figures) and Canada (20 188 new cases; 53.5 new cases per 100 000; similar to the previous week's figures).

The incidence of deaths also increased with just under 13 000 new deaths reported, a 38% increase compared to the previous week. The highest numbers of new deaths were reported from the United States of America (8527 new deaths; 2.6 new deaths per 100 000; a 56% increase), Brazil (1443 new deaths; <1 new death per 100 000; a 9% decrease) and Mexico (1002 new deaths; <1 new death per 100 000; a 55% increase).

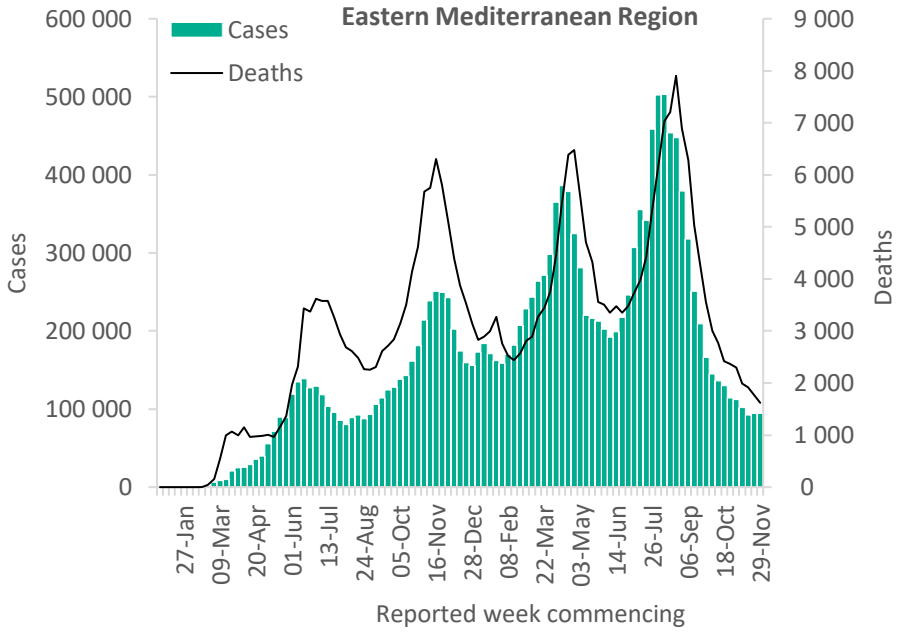


Updates from the Region of the Americas

Eastern Mediterranean Region

The weekly incidence of cases in the Eastern Mediterranean Region remained stable with over 94 000 new cases reported. The weekly incidence of deaths decreased by 8%, with over 1600 reported. However, nearly half (10/22) of countries in the region reported a >10% increase in weekly incidence of cases. Most cases continued to be reported from three countries: Jordan (32 108 new cases; 314.7 new cases per 100 000; a 15% increase), the Islamic Republic of Iran (26 255 new cases; 31.3 new cases per 100 000; an 18% decrease), and Lebanon (10 406 new cases; 152.5 new cases per 100 000; an 11% increase).

The highest numbers of new deaths continued to be reported from the Islamic Republic of Iran (575 new deaths; <1 new death per 100 000; an 18% decrease), Egypt (377 new deaths; <1 new death per 100 000; a 13% decrease), and Jordan (200 new deaths; 2.0 new deaths per 100 000; a 19% increase).

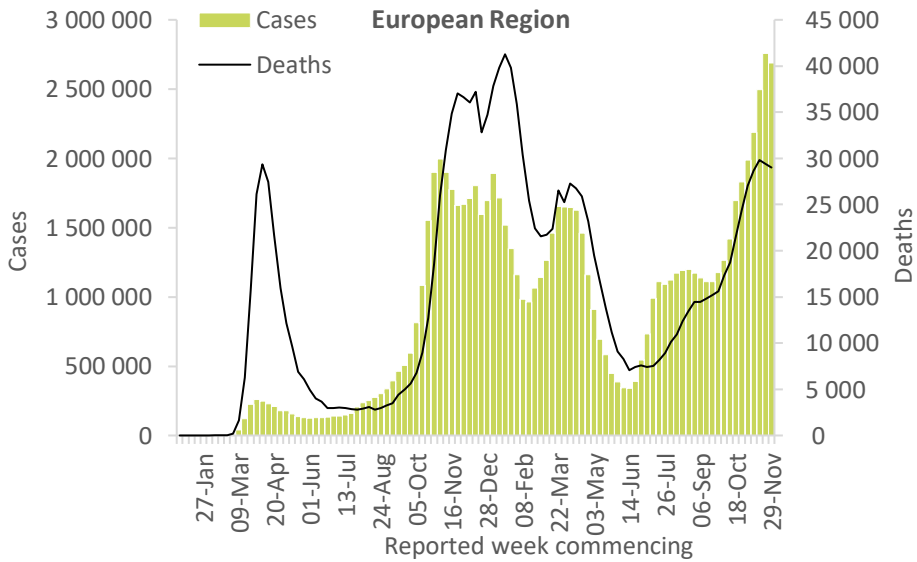


Updates from the Eastern Mediterranean Region

European Region

Following an increase in the incidence of cases from mid-October, the weekly number of new cases in the European Region plateaued this week with just over 2.6 million new cases reported. The incidence in deaths also remained stable compared to the previous week, with over 29 000 new deaths reported. Fewer countries (11/61, 18%) reported an increase in new weekly cases of over 10% compared to the previous week. Germany and the United Kingdom continue to report the highest number of new cases with 396 429 new cases (476.7 new cases per 100 000; similar to the previous week's figures) and 310 696 new cases (457.7 new cases per 100 000; similar to the previous week's figures), respectively, with France reporting the third highest number of new cases (283 500 new cases; 435.9 new cases per 100 000; a 49% increase).

The highest numbers of new deaths continued to be reported from the Russian Federation (8523 new deaths; 5.8 new deaths per 100 000; similar to the previous week's figures); Ukraine (3163 new deaths; 7.2 new deaths per 100 000; an 18% decrease) and Poland (2636 new deaths; 6.9 new deaths per 100 000; a 19% increase).

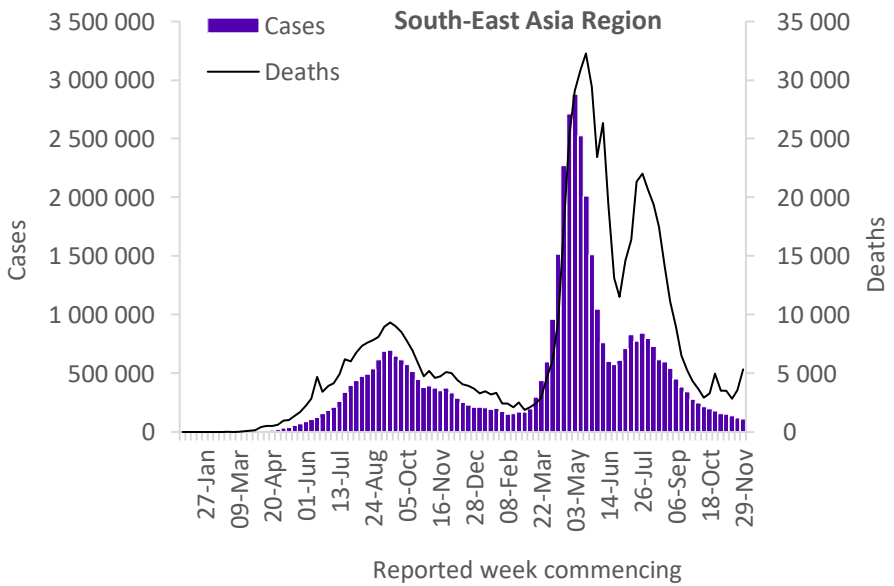


Updates from the European Region

South-East Asia Region

Since July 2021, the incidence of cases in the South-East Asia Region has continued to decline with over 109 000 new cases reported this week, a 10% decrease as compared to the previous week. Only one country reported an increase of over 10%, Timor- Leste (6 new cases; <1 case per 100 000; a 100% increase). The highest number of new cases continued to be reported from India (60 732 new cases; 4.4 new cases per 100 000; similar to the previous week's figures), Thailand (34 428 new cases; 49.3 new cases per 100 000; an 18% decrease) and Sri Lanka (5162 new cases; 24.1 new cases per 100 000; a 12% decrease).

The number of new weekly deaths however, increased by 49% as compared to the previous week, with over 5300 new deaths reported this week, the majority being reported from India (4772 new deaths; <1 new death per 100 000; a 65% increase). While Thailand and Sri Lanka reported the second and third highest number of deaths this past week, both countries reported a decline (237 new deaths; <1 new death per 100 000; a 26% decrease, and 156 new deaths; <1 new death per 100 000; a 12% decrease, respectively).

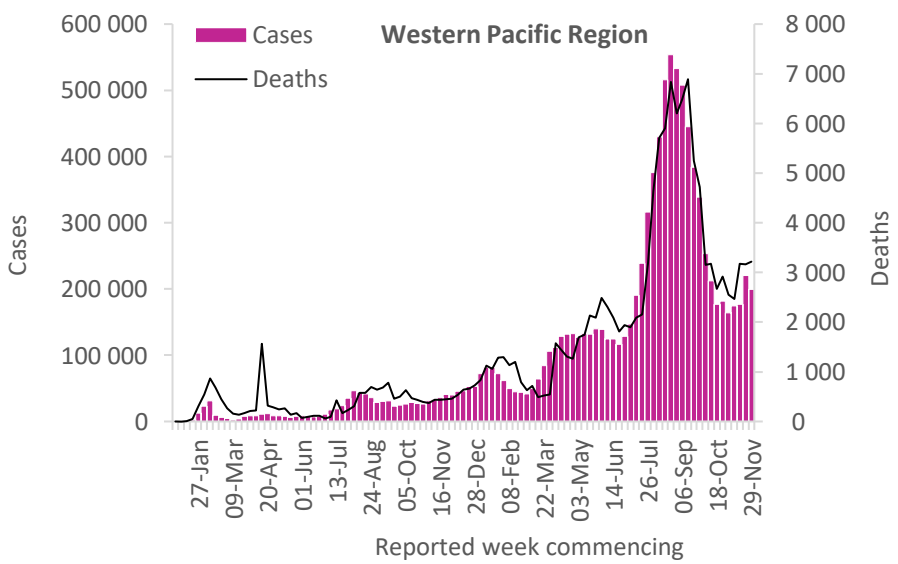


Updates from the South-East Asia Region

Western Pacific Region

Following an increase in the weekly case incidence in the Western Pacific Region from early November, in the past week a 10% decrease was seen with just under 200 000 new cases reported. However, five of the 27 countries in the region reported an increase in case incidence of >10%, including French Polynesia (3976%), China (147%), the Northern Mariana Islands (75%), the Republic of Korea (26%) and Fiji (20%). The highest number of new cases continued to be reported from Viet Nam (97 374 new cases; 100.0 new cases per 100 000; a 14% decrease), Malaysia (34 897 new cases; 107.8 new cases per 100 000; an 8% decrease) and the Republic of Korea (32 142 new cases; 62.7 new cases per 100 000; a 26% increase).

The region reported over 3200 new deaths this week, similar to the previous week's figures. Two of the three countries reporting the highest numbers of new deaths showed an increasing trend: Viet Nam (1369 new deaths; 1.4 new deaths per 100 000; a 36% increase) and the Republic of Korea (304 new deaths; <1 new death per 100 000; an 11% increase), while the Philippines reported a decrease (1025 new deaths; <1 new death per 100 000; a 21% decrease).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 7 December, highlights include the following:

- Kenya increases uptake and equity for COVID-19 vaccinations
- Supporting Omicron variant detection and COVID-19 response in southern Africa
- New oxygen production stations to be constructed in Yemen
- "Data for action": WHO/Europe pilots enhanced Emergency Response Information Management System (ERIMS) with Azerbaijan
- Home-based care for COVID-19 patients begins with community engagement in Lao People's Democratic Republic
- Progress on a subset of indicators from the SPRP 2021 Monitoring and Evaluation Framework
- Updates on WHO's financing to support countries in SPRP 2021 implementation and provision of critical supplies

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations, and communities

Annexes

Annex 1. List of countries/territories/areas reporting variants of concern as of 7 December 2021

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Afghanistan	●	-	●	-	-
Albania	●	-	○	-	-
Algeria	●	-	●	-	-
Andorra	○	○	○	-	-
Angola	●	●	●	●	-
Anguilla	●	-	●	-	-
Antigua and Barbuda	●	●	●	●	-
Argentina	●	●	●	●	●*
Armenia	●	-	●	-	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	●*
Austria	●	●	●	●	●*
Azerbaijan	●	-	○	-	-
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	-
Bangladesh	●	●	●	○	-
Barbados	●	-	●	●	-
Belarus	●	-	○	-	-
Belgium	●	●	●	●	●*
Belize	●	-	●	●	-
Benin	●	●	●	●	-
Bermuda	●	●	●	-	-
Bhutan	●	●	●	-	-
Bolivia (Plurinational State of)	●	-	●	●	-
Bonaire	●	-	●	●	-
Bosnia and Herzegovina	●	●	○	●	-
Botswana	○	●	●	-	●*
Brazil	●	●	●	●	●*

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
British Virgin Islands	●	-	●	●	-
Brunei Darussalam	●	●	●	-	-
Bulgaria	●	●	●	-	-
Burkina Faso	●	-	●	-	-
Burundi	●	●	●	-	-
Cabo Verde	●	-	●	-	-
Cambodia	●	●	●	-	-
Cameroon	●	●	●	●*	-
Canada	●	●	●	●	●*
Cayman Islands	●	●	●	●	-
Central African Republic	●	●	●	-	-
Chad	●	-	-	-	-
Chile	●	●	●	●	●*
China	●	●	●	●	●*
Colombia	●	-	●	●	-
Comoros	-	●	●	-	-
Congo	●	●	●	●	-
Costa Rica	●	●	●	●	-
Croatia	●	●	○	●	●*
Cuba	●	●	●	-	-
Curaçao	●	●	●	●	-
Cyprus	●	●	○	-	-
Czechia	●	●	●	●	●*
Côte d'Ivoire	●	●	○	-	-
Democratic Republic of the Congo	●	●	●	-	-
Denmark	●	●	●	●	●*
Djibouti	●	●	●*	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Dominica	●	-	●	-	-
Dominican Republic	●	-	●	●	-
Ecuador	●	-	●	●	-
Egypt	●	-	●	-	-
El Salvador	●	-	●	●	-
Equatorial Guinea	●	●	●	-	-
Estonia	●	●	○	○	○*
Eswatini	○	●	●	-	-
Ethiopia	●	●	●	-	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	-	●	-
Fiji	○	-	●	-	●*
Finland	●	●	●	●	●*
France	●	●	●	●	●*
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	●	●	-	-
Gambia	●	-	●	-	-
Georgia	●	○	●	-	-
Germany	●	●	●	●	●*
Ghana	●	●	●	●	●*
Gibraltar	●	-	○	-	-
Greece	●	●	●	●	●*
Greenland	-	-	●	-	-
Grenada	●	-	●	●	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Guinea	●	●	●	-	-
Guinea-Bissau	●	●	●	-	-
Guyana	-	-	●	●	-
Haiti	●	-	●	●	-
Honduras	●	-	●	●	-
Hungary	●	○	○	●	-
Iceland	●	●	●	●	●*
India	●	●	●	●	●*
Indonesia	●	●	●	-	-
Iran (Islamic Republic of)	●	●	●	-	-
Iraq	●	●	●	●	-
Ireland	●	●	●	●	●*
Israel	●	●	●	●	●*
Italy	●	●	●	●	●*
Jamaica	●	-	●	-	-
Japan	●	●	●	●	●*
Jordan	●	●	●	●	-
Kazakhstan	●	○	●	-	-
Kenya	●	●	●	-	-
Kosovo[1]	●	○	○	-	-
Kuwait	●	●	●	-	-
Kyrgyzstan	●	●	●	-	-
Lao People's Democratic Republic	●	-	●	-	-
Latvia	●	●	○	●	●*
Lebanon	●	-	●	-	-
Lesotho	-	●	○	-	-
Liberia	●	●	●	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	○	○	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Lithuania	●	●	○	●	-
Luxembourg	●	●	●	●	●*
Madagascar	●	●	-	-	-
Malawi	●	●	●	-	-
Malaysia	●	●	●	-	●*
Maldives	●	-	●	-	●*
Mali	-	-	●	-	-
Malta	●	○	○	●	-
Martinique	●	●	●	●	-
Mauritania	●	●	●	-	-
Mauritius	●	●	●	-	-
Mayotte	●	●	○	-	-
Mexico	●	●	●	●	●*
Monaco	●	●	●	-	-
Mongolia	●	-	●	-	-
Montenegro	●	-	○	○	○*
Montserrat	●	-	●	●	-
Morocco	●	●	●	-	-
Mozambique	●	●	●	-	-
Myanmar	●	-	●	-	-
Namibia	●	●	●	●	●*
Nepal	●	-	●	-	●*
Netherlands	●	●	●	●	●*
New Caledonia	●	-	●	-	-
New Zealand	●	●	●	●	-
Nicaragua	●	●	●	●	-
Niger	●	-	●	-	-
Nigeria	●	●	●	-	●*
North Macedonia	●	●	○	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Northern Mariana Islands (Commonwealth of the)	○	-	●	-	-
Norway	●	●	●	●	●*
Occupied Palestinian Territory	●	●	●	-	-
Oman	●	●	●	-	-
Pakistan	●	●	●	●	-
Panama	●	●	●	●	-
Papua New Guinea	-	-	●	-	-
Paraguay	●	-	●	●	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	●*
Puerto Rico	●	●	●	●	-
Qatar	●	●	●	-	-
Republic of Korea	●	●	●	●	●*
Republic of Moldova	●	-	●	-	-
Romania	●	●	●	●	●*
Russian Federation	●	●	●	○	○*
Rwanda	●	●	●	-	-
Réunion	●	●	○	●	●*
Saba	-	-	●	-	-
Saint Barthélemy	●	-	●	-	-
Saint Kitts and Nevis	-	-	●	-	-
Saint Lucia	●	-	●	-	-
Saint Martin	●	●	●	-	-
Saint Pierre and Miquelon	-	-	●	-	-
Saint Vincent and the Grenadines	-	-	●	●	-
Sao Tome and Principe	●	-	○	-	-
Saudi Arabia	●	●	●	-	●*

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Senegal	●	●	●	-	●*
Serbia	●	-	●	-	-
Seychelles	●	●	●	-	-
Sierra Leone	-	●	●	-	-
Singapore	●	●	●	●	●*
Sint Maarten	●	●	●	●	-
Slovakia	●	●	●	-	-
Slovenia	●	●	●	●	-
Somalia	●	●	●	-	-
South Africa	●	●	●	○	●*
South Sudan	●	●	●	-	-
Spain	●	●	●	●	●*
Sri Lanka	●	●	●	-	●*
Sudan	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Suriname	●	●	●	●	-
Sweden	●	●	●	●	●*
Switzerland	●	●	●	●	●*
Thailand	●	●	●	●	●*
Timor-Leste	●	-	●	-	-
Togo	●	●	●	●	-
Trinidad and Tobago	●	-	●	●	-
Tunisia	●	●	●	-	●*
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	●	-	●*
Ukraine	●	○	○	-	-
United Arab Emirates	●	●	●	●	●*
United Kingdom	●	●	●	●	●*

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
United Republic of Tanzania	-	●	-	-	-
United States Virgin Islands	●	●	●	●	-
United States of America	●	●	●	●	●*
Uruguay	●	●	●	●	-
Uzbekistan	●	●	○	-	-
Vanuatu	-	-	●	-	-
Venezuela (Bolivarian Republic of)	●	-	●	●	-
Viet Nam	●	●	●	-	-
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	●	-	●*
Zimbabwe	●	●	●	-	●*

*iant was received by WHO from unofficial sources and will be reviewed as more information become available. **Includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern. See also Annex 2: Data, table, and figure notes*

Annex 2. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

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COVID-19 Weekly Epidemiological Update

Edition 68, published 30 November 2021

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Summary of the Weekly Operational Update

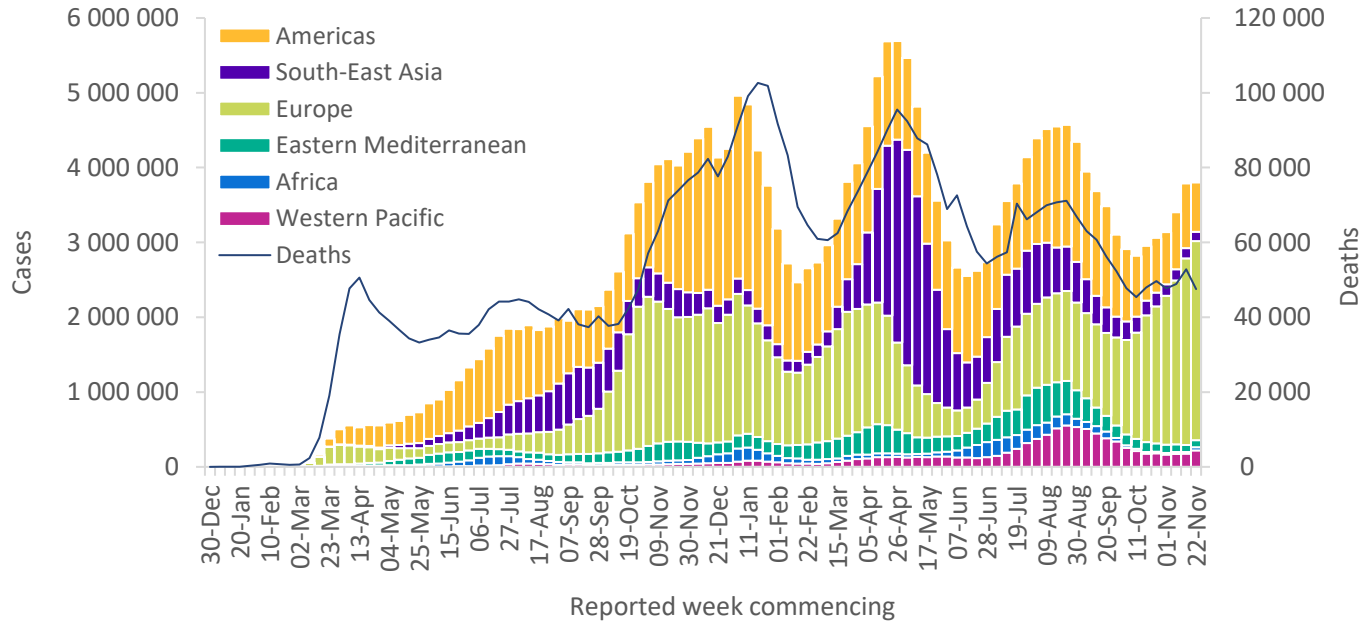
Global overview

Data as of 28 November 2021

Globally, weekly case incidence plateaued this week (22-28 November 2021), with nearly 3.8 million confirmed new cases reported, similar to the previous week's figures. However, new weekly deaths decreased by 10% in the past seven days as compared to the previous week, with over 47 500 new deaths reported. As of 28 November, over 260 million confirmed cases and nearly 5.2 million deaths have been reported globally.

The African, Western Pacific and European Regions reported increases in new weekly cases of 93%, 24% and 7%, respectively, while the Regions of the Americas and South-East Asia reported decreases of 24% and 11%, respectively. To note, the increase in the African Region was largely due to batch reporting of antigen tests by South Africa last week, therefore the trends should be interpreted with caution. The incidence in cases in the Eastern Mediterranean Region was stable with figures similar to the previous week. New weekly deaths decreased by 36% and 8% in the Regions of the Americas and the Eastern Mediterranean, respectively, and increased by 26% and 7% in the South-East Asia and African Regions, respectively. The number of new deaths were similar to the numbers reported in the previous week in both the European and Western Pacific Regions.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 28 November 2021**



**See *Annex 3: Data, table, and figure notes*

The regions reporting the highest weekly case incidence per 100 000 population continue to be the European Region (285.2 new cases per 100 000 population) and the Region of the Americas (64.5 new cases per 100 000 population). The European Region also reported the highest weekly incidence in deaths of 3.1 per 100 000 population while <1 new death per 100 000 was reported in all other regions.

The highest numbers of new cases were reported from the United States of America (464 800 new cases; a 31% decrease), Germany (406 754 new cases; a 22% increase), the United Kingdom (304 374 new cases; an 8% increase), the Russian Federation (239 215 new cases; an 8% decrease) and France (190 402 new cases; a 62% increase).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 28 November 2021**

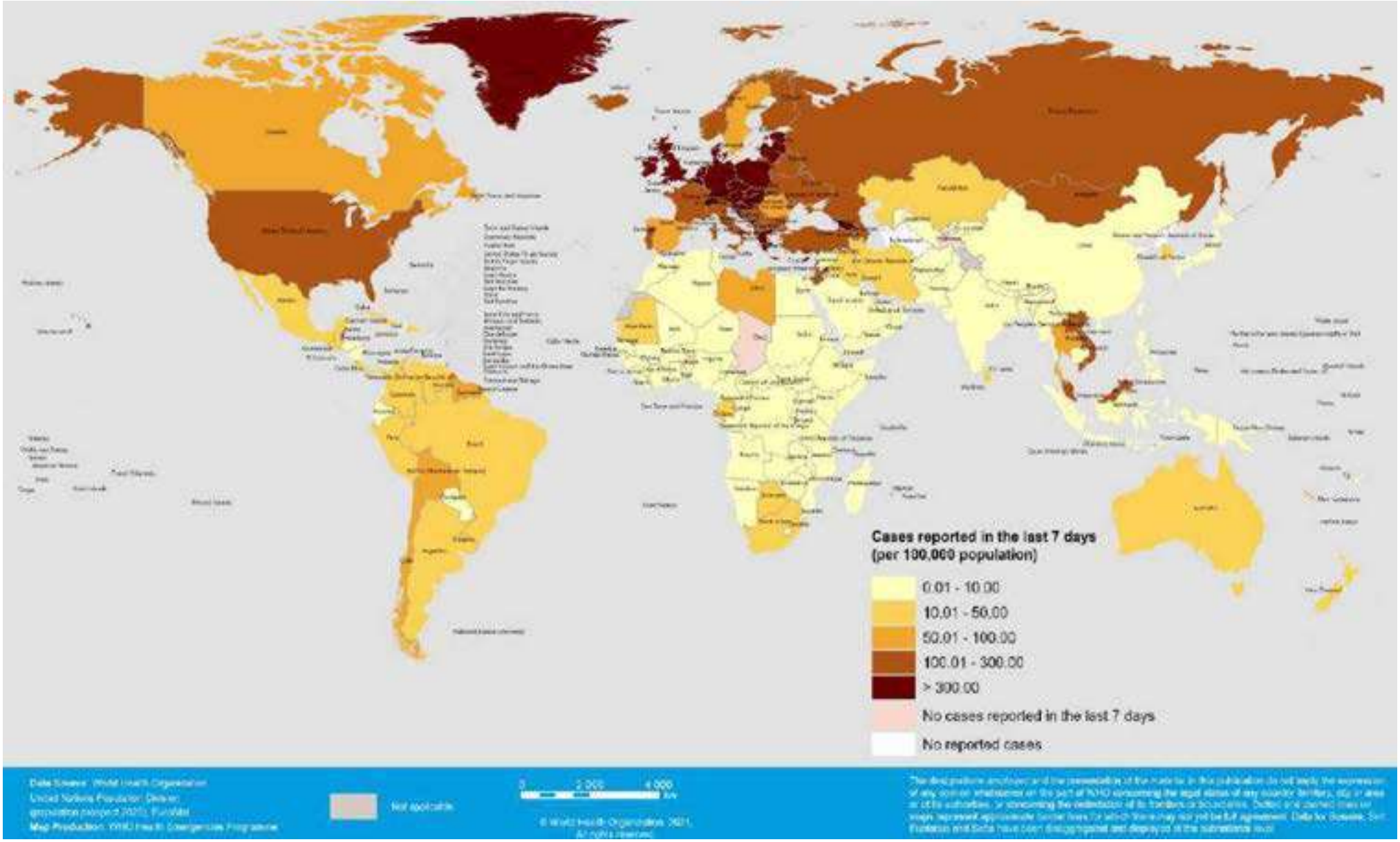
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	2 660 956 (70%)	7%	86 151 591 (33%)	29 096 (61%)	-2%	1 540 178 (30%)
Americas	659 605 (17%)	-24%	96 627 452 (37%)	9 397 (20%)	-36%	2 346 007 (45%)
Western Pacific	220 501 (6%)	24%	10 170 912 (4%)	3 160 (7%)	0%	140 984 (3%)
South-East Asia	120 704 (3%)	-11%	44 529 941 (17%)	3 574 (8%)	26%	706 336 (14%)
Eastern Mediterranean	94 382 (2%)	2%	16 751 411 (6%)	1 772 (4%)	-8%	309 105 (6%)
Africa	43 730 (1%)	93%	6 261 502 (2%)	525 (1%)	7%	152 731 (3%)
Global	**3 799 878 (100%)**	**0%**	**260 493 573 (100%)**	**47 524 (100%)**	**-10%**	**5 195 354 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
***See Annex 3: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

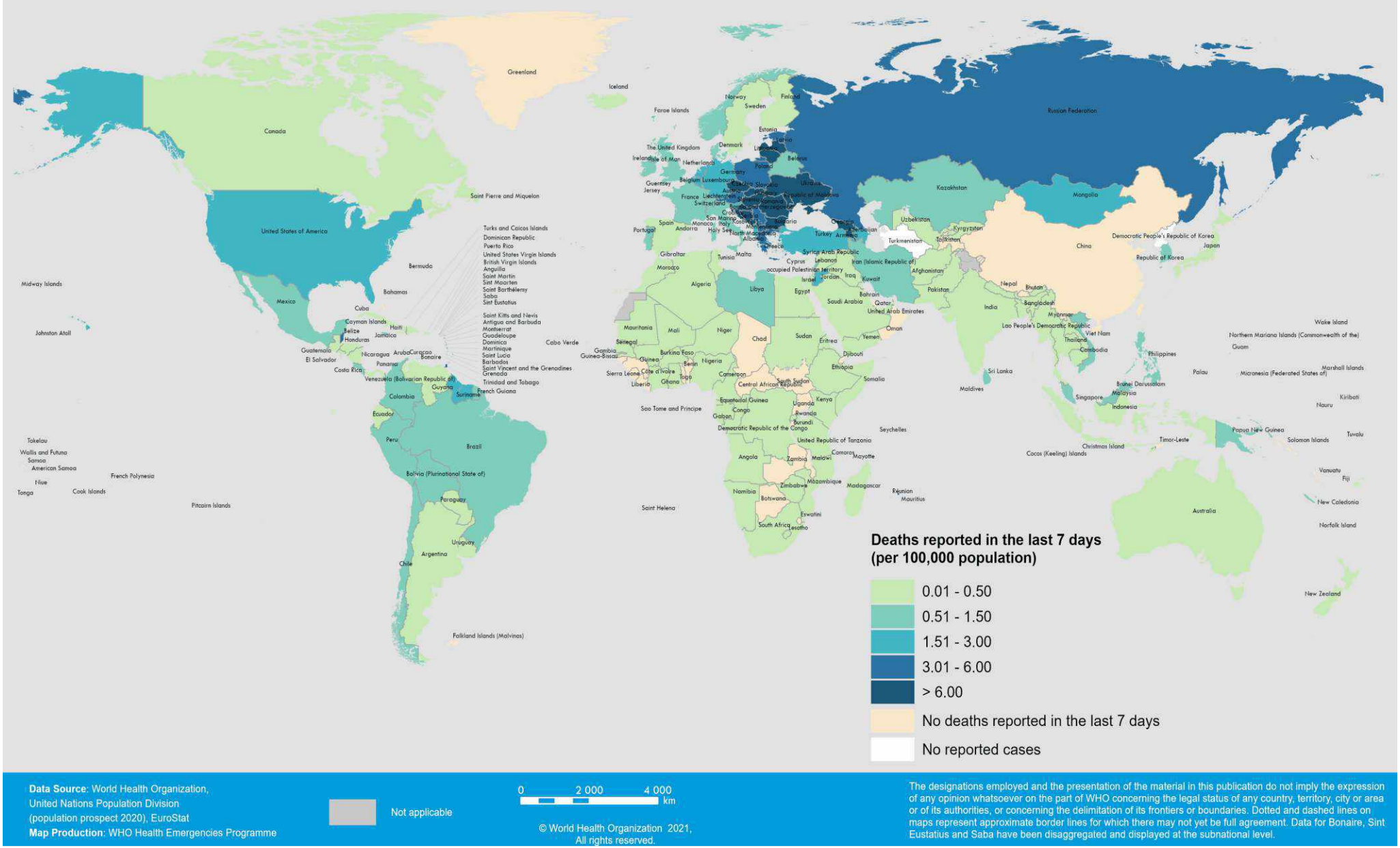
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 22-28 November 2021**



**See *Annex 3: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 22-28 November 2021**



**See *Annex 3: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied by national authorities to control disease spread. Potential Variants of Concern (VOCs), Variants of Interest (VOIs) or Variants Under Monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

VOC Omicron (B.1.1.529)

On 26 November 2021, the Technical Advisory Group on SARS-CoV-2 Virus Evolution (TAG-VE) advised WHO that the B.1.1.529 variant should be designated as a VOC. It has been given the name Omicron. The decision to designate it as a VOC was based on the evidence presented to the TAG-VE that Omicron has several mutations (including 26-32 in the spike protein) which may enhance its transmissibility and/or enable some degree of immune escape. The B.1.1.529 variant was first reported to WHO on 24 November 2021 from South Africa, while the first known laboratory-confirmed case was identified from a specimen collected on 9 November 2021.

On 28 November 2021, WHO published a technical brief with priority actions for Member States. Cases of Omicron have already been identified in a number of countries, with a high likelihood of further spread. There is preliminary evidence suggesting that Omicron may have potential immune escape and/or possibly higher transmissibility, as compared to previous VOCs, that could lead to further surges. As a result of this, the overall global risk related to the new VOC Omicron in the context of the COVID-19 pandemic is very high. The evidence for this assessment contains considerable uncertainty and will be updated as more information becomes available.

Based on available evidence, a list of priority actions for Member States has been recommended including:

- Enhance surveillance and sequencing activities to understand the extent of circulation of SARS-CoV-2 variants, including Omicron.
- Submit complete genome sequences and associated metadata to a publicly available database, such as GISAID.
- Where applicable, use the S gene target failure (SGTF) on certain Polymerase Chain Reaction (PCR) tests as a marker for Omicron infection.
- Report initial cases/clusters of Omicron infections to WHO through the International Health Regulations (2005) mechanism; thereafter, report the relative prevalence of Omicron amongst sequenced samples and/or, where available, the number of SGTF out of the number of samples tested.
- Continue to report evidence-based information on other circulating variants by authorities in a regular, timely and transparent manner.
- Accelerate the coverage of COVID-19 vaccination as rapidly as possible, particularly amongst those who are unvaccinated or partially vaccinated and are in a population at high priority for vaccination.
- Use a risk-based approach to adjust international travel measures in a timely manner, and report to WHO the application of time-limited measures affecting international travel and trade.

- Reduce transmission of SARS-CoV-2 via the use of well-fitted masks, physical distancing, hand hygiene, adequate ventilation of indoor spaces, and avoiding crowded spaces.
- Allow public health and social measures to be adjusted efficiently, depending on the local transmission scenario.
- Prepare and ensure essential health services can be maintained including the necessary health care resources, when demand on health care services is high.

At the present time, WHO is coordinating with a large number of researchers around the world to better understand Omicron. Studies currently or soon to be underway include assessments of transmissibility, clinical presentation including severity, risk of reinfection, and the performance of vaccines, diagnostic tests, and therapeutics against this variant.

Geographic spread and prevalence of VOCs

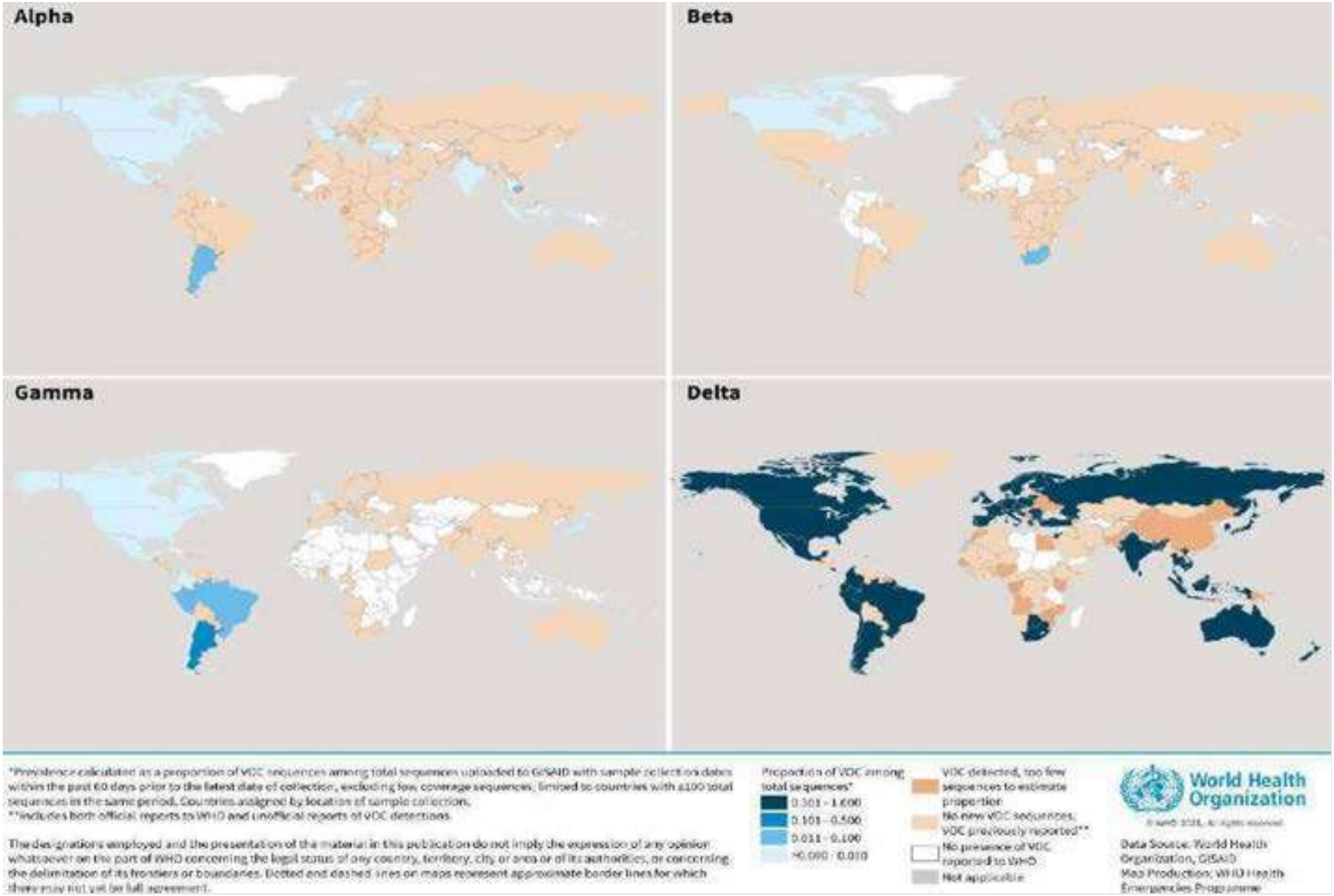
The current global epidemiology of SARS-CoV-2 is characterized by a predominance of the Delta variant, with the prevalence of other variants continuing to decline among genomic sequences submitted to publicly available datasets or detections reported to WHO (Figure 4, Annex 2). Delta has outcompeted other variants, including other VOCs, in most countries. Omicron, which was only identified recently, has been reported in a limited number of countries so far (Figure 5). At present, there is evidence of spread to several countries in four WHO regions. While most of the cases identified in these countries are travel-related, this may change as more information becomes available. Of 839 119 sequences uploaded to GISAID with specimens collected in the last 60 days[i], 837 253 (99.8%) were Delta, 314 (<0.1%) Gamma, 160 (<0.1%) Alpha, 159 (<0.1%) Omicron, 14 (<0.1%) Beta, and <0.1% comprised other circulating variants (including VOIs Mu and Lambda).

Sub-regional and country-level variation continues to be observed; most notably within some South American countries, where the progression of the Delta variant has been more gradual, and other variants (e.g., Gamma, Lambda, Mu) still contribute a large proportion of reported sequences. South Africa, where Omicron was first detected, has experienced a recent sharp increase in the number of cases in multiple provinces, coinciding with the detection of the Omicron variant.

To note, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

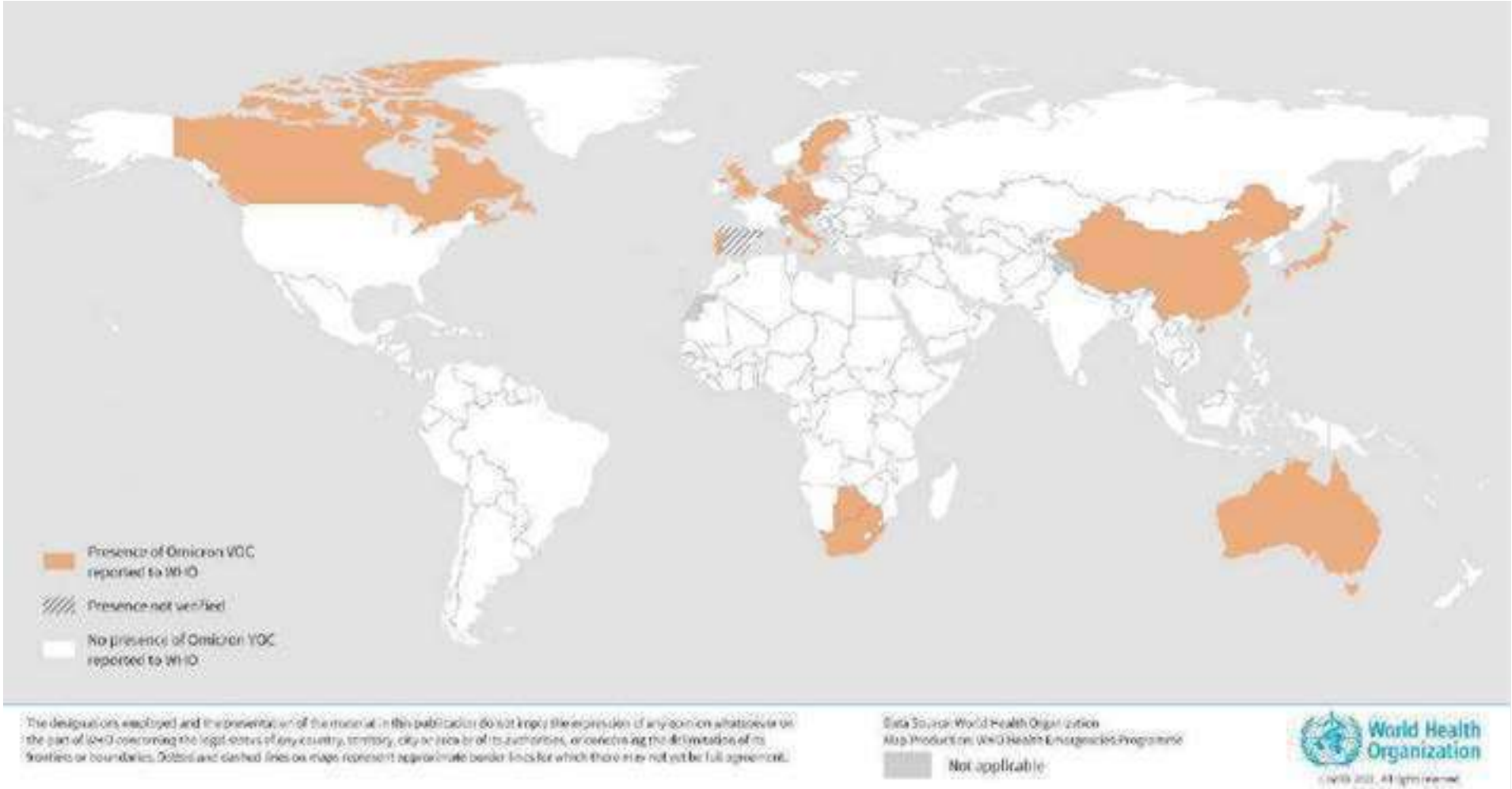
[i] Includes sequences submitted to GISAID with sample collected dates from 29 September to 28 November 2021 (last reported sample at the time of data extraction), excluding low coverage sequences.

Figure 4. Prevalence of Variants of Concern (VOCs) Alpha, Beta, Gamma and Delta in the last 60 days and historic detections, data as of 30 November 2021



Prevalence data based on sequences reported to GISAID, excluding low coverage sequences. See also Annex 2 for reported VOC detections by country/territory/area

Figure 5. Presence of Variant of Concern (VOC) Omicron, data as of 30 November 2021 (4 pm CET)



Presence of Omicron variant is based on information reported to WHO. It includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). See also Annex 2 for reported VOC detections by country/territory/area.

Phenotypic characteristics

Available evidence on the phenotypic impacts of VOCs is summarized in Table 2, as well as in previous editions of the COVID-19 Weekly Epidemiological Update. Since the last detailed update on 16 November, there are several new publications on the phenotypic characteristics of VOCs**.**

A retrospective cohort study (not yet peer-reviewed)[1] was conducted in the city of Belo Horizonte, Brazil to evaluate the impact of the Gamma variant on hospital admissions and mortality. The Gamma variant became the dominant variant in the country from January 2021 following its emergence in Amazonas state in December 2020. The socio-demographics varied widely across the country and prior to the arrival of the Gamma variant; mortality was less likely among those admitted to hospitals in the city as compared to those admitted to hospitals in rural areas. A total of 42 443 patients who tested positive for SARS-CoV-2 by RT-PCR between 13 March 2020 and 9 September 2021 were included in the study. Using multivariable logistic regression analysis adjusting for covariates such as gender, ethnicity, age, socioeconomic status, comorbidities and severity of symptoms, the in-hospital mortality between periods was compared, there was no difference when comparing the first period, 13 March 2020 – 18 October 2020, to the second period, 19 October 2020 – 14 February 2021, (OR=1.08, 95%CI 0.98-1.19, p=0.117). However, in-hospital mortality was higher during the third period 15 February 2021 – 9 September 2021 (OR=1.95, 95%CI=1.79-2.11, p<0.001) as compared to the first. This suggests that mortality was higher during periods of transmission of the Gamma variant however, it is unknown whether this is due to a more pathogenic effect of the virus or as a result of the increased pressure on the healthcare system.

A peer-reviewed retrospective study conducted in Israel[2] between February 2020 and October 2021 examined the trends in COVID-19 incidence, morbidity and mortality. A fourth surge in case incidence across the country, reported in Israel from June to September 2021, was driven by the Delta variant and characterized by the county's highest rate of infection, with over 11 000 cases per day; the number of severe hospitalizations due to COVID-19 during the fourth period was lower as compared to those reported during the previous three surges (e.g., maximum 8 per 100 000 population in the fourth surge vs. maximum 16 per 100 000 population during the second surge). During the fourth surge, higher death rates were reported among people who were not fully vaccinated as compared to those who were fully vaccinated (0.1 deaths per 100 000 population in fully vaccinated individuals vs. over 0.7 deaths per 100 000 population in partially vaccinated individuals). Most public health and social measures were lifted in April and May 2021, which may have contributed to higher transmission during the fourth surge. Authors inferred that reduced hospitalizations and mortality in the fourth surge compared to the previous waves likely reflect higher vaccine coverage.

A study (not yet peer-reviewed) to assess markers of viral shedding, was conducted by the United States Centers for Disease Control and Prevention (US CDC)[3], among 95 prisoners with different vaccination status (82% fully vaccinated, 16% unvaccinated and 2% partially vaccinated), during an outbreak of the Delta variant in a federal prison (18 July-9 August 2021). A small number of participants (3% of fully vaccinated and 12% of not fully vaccinated), had a documented prior SARS-CoV-2 infection. Among individuals with no known history of infection, there was no difference in the median duration of RT-PCR positivity between those fully vaccinated and not fully vaccinated (13 days; p=0.50). The median duration of illness among those with a known history of prior infection regardless of their vaccination status was shorter, 10 days, but with no evidence of a difference as compared to those without previous infection (p=0.12). No difference was found in the median duration of RT-PCR positivity by type of vaccine received (13 days; p=0.39). Similarly, there was no difference in the duration of viral culture positivity between those fully and not fully vaccinated (median of 5 days for both groups). Finally, there was no evidence of a difference in Ct value by vaccination status, type of vaccine, time since vaccination or known prior infection (p>0.0026, the Bonferroni-corrected α threshold).

A published study conducted by the US CDC[4], compared the odds of having laboratory-confirmed COVID-19 between unvaccinated adult patients (≥18 years) with a previous SARS-CoV-2 infection occurring 90–179 days prior to hospitalization, and patients who were fully vaccinated with an mRNA COVID-19 vaccine 90–179 days before hospitalization with no previous documented SARS-CoV-2 infection. Patients were included in the study if they had been tested at least twice: once associated with a COVID-19-like illness hospitalization during the study period (1 January– 2 September 2021) and at least once earlier (between February 1, 2020, and ≥14 days prior to the current admission). Among the 201 269 hospitalized with a COVID-19-like illness, 7348 met the study inclusion criteria of whom 1020 were previously infected and unvaccinated, and 6328, fully vaccinated and previously uninfected. In a multivariable logistic regression, the adjusted odds of laboratory confirmed COVID-19 was 5.49 times higher (95%CI 2.75-10.99) among those who were unvaccinated with previous infection compared to those who were fully vaccinated with no previous infection. These findings suggest that vaccine-induced immunity provides greater protection than infection-induced immunity against laboratory-confirmed COVID-19.

Table 2: Summary of phenotypic impacts* of Variants of Concern

WHO label	Alpha	Beta	Gamma	Delta	Omicron
Transmissibility	Increased transmissibility[5]	Increased transmissibility[6,7]	Increased transmissibility[7,8]	Increased transmissibility [7,9,10]	No direct evidence for increased transmissibility.
Disease severity	Possible increased risk of hospitalization[11,12], possible increased risk of severe disease and death[13,14]	Possible increased risk of hospitalization[12], possible increased in-hospital mortality[15]	Possible increased risk of hospitalization[12], possible increased risk of severe disease[16]	Possible increased risk of hospitalization[17,18]	Not yet known. Clinical outcome data are under review.
Risk of reinfection	Neutralizing activity retained[19], risk of reinfection remains similar[20]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[21]	Moderate reduction in neutralizing activity reported[22]	Reduction in neutralizing activity reported[23–25]	Preliminary evidence suggests a possible increased risk of reinfection [26]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF), no impact on overall result from multiple target RT-PCR; No impact on Ag RDTs observed[27]	No impact on RT-PCR or Ag RDTs observed[25]	None reported to date	No impact on RT-PCR or Ag RDTs observed[28]	PCR continues to detect Omicron. Impact on Ag-RDTs is under investigation.

**Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.*

Table 3 summarizes the impact of variants on product specific vaccine efficacy/effectiveness (VE) and quantifies the reduction in VE in the setting of variants compared to non-VOC settings. As of the writing of this update, no studies of neutralization or vaccine performance against Omicron are available. Since the 16 November update, six notable new studies have provided evidence of COVID-19 vaccine performance against the other Variants of Concern.

A peer-reviewed, test-negative case-control study from India evaluated the effectiveness of Bharat-Covaxin, an inactivated whole-virion vaccine, in preventing symptomatic disease among employees of a tertiary care hospital in New Delhi from 15 April 2021 to 15 May 2021, when Delta was the dominant circulating variant.[29] The VE of one and two doses of the vaccine at preventing symptomatic disease 14 or more days after vaccination was -1% (95% CI: -51-33%, not statistically significant) and 50% (33-62%), respectively. When excluding persons who had been previously infected with SARS-CoV-2, the VE of two doses of the vaccine was 47% (29-61%) against symptomatic disease among this population with high exposure, with a median follow-up time of 50 days from receipt of the second dose.

A second test-negative case-control study (not yet peer-reviewed) assessed the effectiveness of Sinovac-CoronaVac among 19 838 pregnant women 18-49 years of age in Brazil from 15 March 2021 to 3 October 2021.[30] Gamma was the predominant circulating variant during most of this period, while Delta became the predominant circulating variant during the last 1-2 months of the study. The effectiveness of one and two doses of the vaccine at preventing symptomatic disease 14 or more days after vaccination was 5% (-18.2%-23.7%, not statistically significant) and 41% (27.0-52.2%), respectively. The VE of one and two doses against progression to severe disease (defined as dyspnea or respiratory discomfort, persistent pressure or pain in the chest, oxygen saturation less than 95% on room air, cyanosis of the lips or face) or COVID-19 hospitalization or death, among pregnant women infected with SARS-CoV-2, was 67.7% (20.0-87.0) and 85.4% (59.4-94.8%), respectively. The maximum possible follow-up time post final dose was approximately 28 weeks.

A third retrospective cohort study (not yet peer-reviewed) from the United Arab Emirates assessed the VE of the Beijing CNBG- BBIBP-CorV vaccine against hospitalization and death among residents of Abu Dhabi from September 2020 to April 2021. During the study period, there was initially a high prevalence of non-VOCs, followed by a period of Alpha predominance, then a period of Beta predominance at the very end.[31] Authors note that Alpha and Beta variants comprised the majority of cases over the study period, although the study did not present variant-specific VE estimates. A single dose of Beijing CNBG- BBIBP-CorV vaccine was not effective at preventing hospitalization (VE: -35%, 95% CI: -45 to -26%) and showed low VE against death 14 or more days after vaccination (VE: 12%, 95% CI: -95%-61%, not statistically significant). However, two doses of the vaccine had VE against hospitalization and death of 74% (72-76%) and 96% (69-99%) 14 or more days following immunization. The maximum possible follow-up time post final dose was approximately 33.5 weeks.

A fourth, peer-reviewed retrospective cohort study from Singapore evaluated the combined VE of Moderna-mRNA-1273 and Pfizer BioNTech-Comirnaty vaccines at preventing infection, symptomatic disease, and severe disease among 1204 household contacts of 301 confirmed Delta index cases.[32] Two doses of either vaccine was 61.6% (95% CI: 37.5-80.4%), 67.9% (41.3-87.8%), and 100% (no CI available due to no events among vaccinated persons) effective at preventing infection, symptomatic disease, and severe disease, respectively, 15 or more days following receipt of the second dose. Lower VE estimates for infection and symptomatic disease than in other studies likely reflect the high exposure risk among household contacts of cases. In addition, after adjusting for age, gender, and vaccination status of household contacts, vaccinated index cases were less likely to infect household contacts compared to unvaccinated contacts, though this finding was not statistically significant (VE against transmission: 27%, 95% CI: -40-62%).

A fifth prospective cohort study from the United Kingdom (not yet peer-reviewed) evaluated the VE of AstraZeneca-Vaxzevria and Pfizer BioNTech-Comirnaty against transmission of SARS-CoV-2 infection to household contacts of Alpha index cases and Delta index cases, separately.[33] After adjusting for age and vaccination status of contacts, two doses of AstraZeneca-Vaxzevria or Pfizer BioNTech-Comirnaty vaccines were 35% (95% CI:-26%-74%, not statistically significant) and 57% (5-85%) effective at preventing transmission to household contacts of Alpha index cases, respectively, and 42% (14-69) and 31% (-3-61%, not statistically significant) effective at preventing transmission to household contacts of Delta index cases, respectively.

Finally, a test-negative case-control study from the United Kingdom (not yet peer-reviewed) assessed the VE of a third dose of Pfizer BioNTech-Comirnaty in addition to the primary series of either two doses of AstraZeneca-Vaxzevria or two doses of Pfizer BioNTech-Comirnaty among persons 50 years and older during a period when Delta was the dominant variant.[34] Compared to persons receiving two doses of AstraZeneca-Vaxzevria 140 or more days prior to testing with no booster, the relative VE of two doses of AstraZeneca-Vaxzevria plus an additional dose of Pfizer BioNTech-Comirnaty was 87.4% (84.9-89.4%) against symptomatic disease 14 or more days after the additional dose. The relative VE against symptomatic disease of a third dose of Pfizer BioNTech-Comirnaty following a primary series of Pfizer BioNTech-Comirnaty compared to two doses of Pfizer BioNTech-Comirnaty only was 84.4% (82.8%-85.8%). Using the unvaccinated group as the comparator, the absolute VE of a third dose of Pfizer BioNTech-Comirnaty following a primary series of AstraZeneca-Vaxzevria was 93.1% (91.7-94.3%); the absolute VE of three doses of Pfizer BioNTech-Comirnaty was 94.0% (93.4-94.6%).

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Table 3. Summary of vaccine performance against Variants of Concern, data as of 25 November 2021

	WHO Emergency Use Listing (EUL) Qualified Vaccines								Vaccines without WHO EUL		
	AstraZeneca-Vaxzevria/SII - Covishield	Beijing CNBG-BBIBP-CorV	Bharat-Covaxin	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Moderna-mRNA-1273/ Pfizer BioNTech-Comirnaty	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Gamaleya-Sputnik V	Novavax-Covavax
Alpha[35,36]											
Summary of VE*	Protection retained against all outcomes										
- Severe disease	↔$_{2}$	-	-	-	↔$_{2}$	↔$_{1}$	↔$_{6}$	-	-	-	-
- Symptomatic disease	↔to↓$_{5}$	-	-	-	↔$_{1}$	↔$_{1}$	↔$_{4}$	-	-	-	↓$_{1}$
- Infection	↔to↓$_{4}$	-	-		↔$_{3}$	-	↔$_{3}$	-	-	-	-
Neutralization	↔to↓$_{8}$	↔$_{1}$	↔$_{2}$	↔$_{4}$	↔to↓$_{13}$	↔to↓$_{2}$	↔to↓$_{42}$	↔to↓↓$_{6}$	↔$_{2}$	↔to↓$_{4}$	↓$_{1}$
Beta[37–40]											
Summary of VE*	Protection retained against severe disease; reduced protection against symptomatic disease; limited evidence										
- Severe disease	-	-	-	↔$_{1}$	↔$_{1}$	-	↔$_{3}$	-	-	-	-
- Symptomatic disease	↔to↓↓↓$_{2}$	-	-	↔$_{1}$	↔$_{1}$	-	↔$_{2}$	-	-	-	↓↓↓$_{1}$
- Infection	-	-	-	-	↔$_{1}$	-	↓$_{1}$	-	-	-	-
Neutralization	↓to↓↓$_{8}$	↔to↓$_{2}$	↓$_{2}$	↓to↓↓$_{8}$	↓to↓↓$_{17}$	↓↓to↓↓↓$_{2}$	↓to↓↓$_{42}$	↓to↓↓↓$_{6}$	↔to↓$_{3}$	↓↓to↓↓↓$_{5}$	↓↓↓$_{1}$
Gamma											
Summary of VE*	Unclear impact; very limited evidence										
- Severe disease	↔$_{1}$	-	-	-	↔$_{1}$	-	↔$_{2}$	-	-	-	-
- Symptomatic disease	↔$_{1}$	-	-	-	↔$_{1}$	-	↔$_{1}$	-	-	-	-
- Infection	↔$_{1}$	-	-	-	↔$_{1}$	-	↔$_{1}$	↔$_{1}$	-	-	-
Neutralization	↔to↓$_{3}$	-	-	↔to↓$_{4}$	↓$_{8}$	-	↔to↓$_{26}$	↔to↓$_{4}$	↔$_{1}$	↓to↓↓$_{3}$	-
Delta[41]											
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection; limited evidence										
- Severe disease	↔$_{3}$	-	-	-	↔$_{3}$	-	↔$_{6}$	-	-	-	-
- Symptomatic disease	↓to↓↓$_{5}$	-	↓$_{1}$	-	↔$_{1}$	-	↔to↓$_{4}$	-	-	-	-
- Infection	↔to↓$_{4}$	-	-	↓↓↓$_{1}$	↔$_{3}$	-	↔to↓$_{3}$	-	-	-	-
Neutralization	↓$_{9}$	-	↔to↓$_{3}$	↔to↓↓$_{8}$	↓$_{9}$	↓to↓↓$_{2}$	↔to↓$_{21}$	↓to↓↓↓$_{4}$	↔to↓$_{2}$	↓to↓↓$_{3}$	-
Omicron											

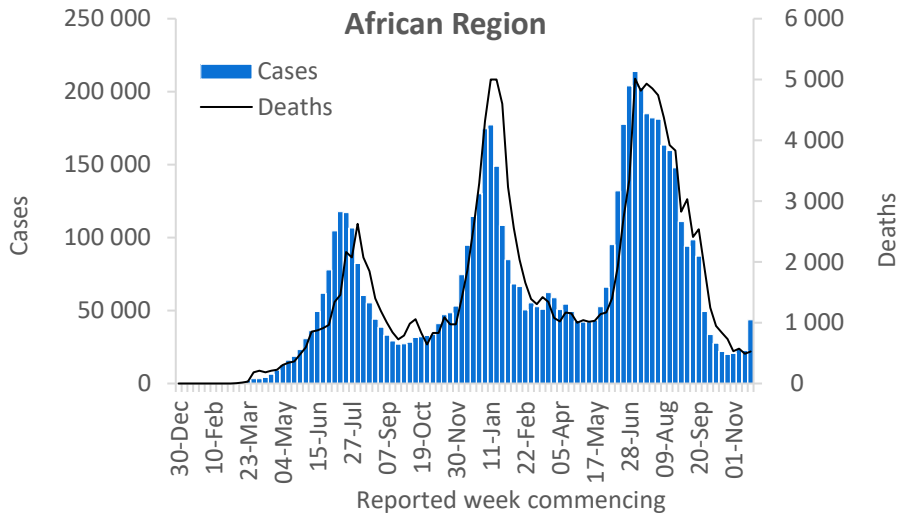
VE refers to vaccine effectiveness and vaccine efficacy. *Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10% reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20% reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30% reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30% reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study. The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources Library . References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table. Information for the Omicron variant will be included in upcoming issues as data becomes available.

WHO regional overviews Epidemiological week 22-28 November 2021

African Region

Following a declining trend since late June 2021, the case incidence in the African Region increased by 93%, with over 43 000 new cases reported during the week of 22-28 November. To note, 43% of the new cases were from a batch reporting of antigen tests from South Africa in the last week. Twenty-one of the 49 countries in the region (43%) reported an increase of >10% in new cases as compared to the previous week, with the highest numbers of new cases reported from South Africa (29 373 new cases; 49.5 new cases per 100 000 population; an 740% increase), Mauritius (3474 new cases; 273.2 new cases per 100 000; a 63% decrease) and Réunion (1875 new cases; 209.4 new cases per 100 000; a 43% increase).

Eleven of the 49 countries reported an increase of over 10% in the number of new weekly deaths with the highest numbers of new deaths reported from South Africa (219 new deaths; <1 new death per 100 000 population; a 128% increase), Ethiopia (64 new deaths; <1 new death per 100 000; an 8% increase), and Mauritius (50 new deaths; 3.9 new deaths per 100 000; a 52% decrease).

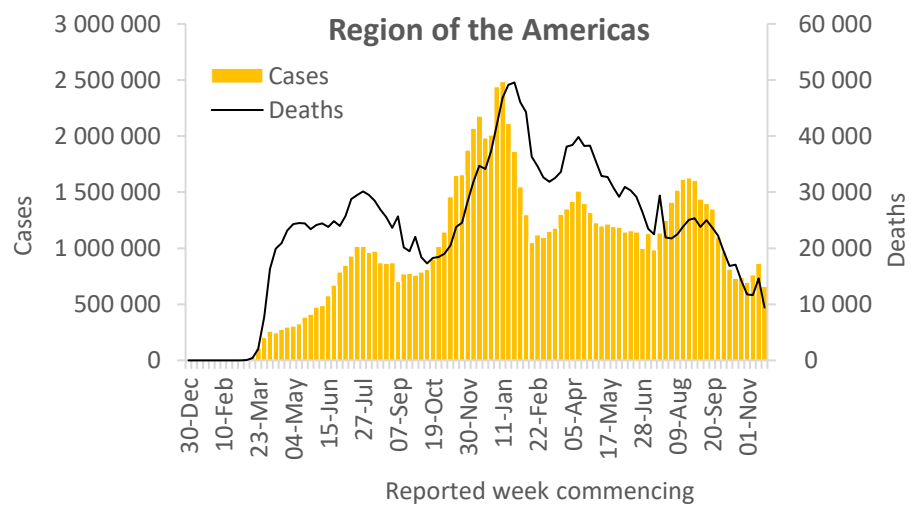


Updates from the African Region

Region of the Americas

The Region of the Americas reported a 24% decline in case incidence in the last week, with over 659 000 new cases reported. This trend is largely driven by the 31% decrease in the incidence of cases in the United States of America despite the country continuing to report the highest number of cases (464 800 new cases; 140.4 new cases per 100 000) in the region. It is important to note that the public holiday in the United States of America which took place at the end of last week may have impacted testing and reporting. Twenty-seven percent (15/56) of countries in the region reported increases of over 10%. In addition to the United States of America, countries reporting the highest numbers of cases included Brazil (64 313 new cases; 30.3 new cases per 100 000; similar to the previous week's figures) and Canada (19 737 new cases; 52.3 new cases per 100 000; a 16% increase).

The incidence of deaths also declined with just under 9400 new deaths reported, a 36% decrease compared to the previous week. Despite having the highest number of deaths in the Region, the United States of America and Brazil saw reductions in the number of new deaths (5003 new deaths; 1.5 new deaths per 100 000; a 52% decrease and 1587 new deaths; <1 new death per 100 000; a 16% decrease, respectively), as compared to the numbers reported in the previous week.

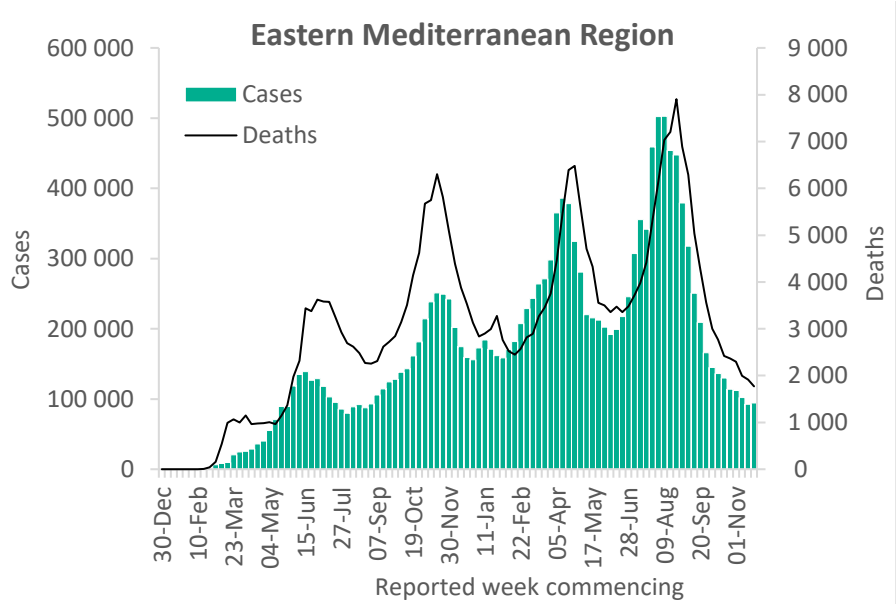


Updates from the Region of the Americas

Eastern Mediterranean Region

The weekly incidence of cases in the Eastern Mediterranean Region remained stable with over 94 000 reported (similar to the previous week's figures). The number of weekly deaths decreased by 8%, with just over 1700 reported. However, nearly one-third (7/22) of countries in the region reported >10% increase in weekly incidence, the highest including Sudan (143%), Tunisia (80%) and Lebanon (69%). The highest numbers of new cases were reported from the Islamic Republic of Iran which contributed to just over a third of the cases in the region (32 003 new cases; 38.1 new cases per 100 000; a 23% decrease), followed by Jordan (28 023 new cases; 274.7 new cases per 100 000; a 30% increase), and Lebanon (9401 new cases; 137.7 new cases per 100 000; a 69% increase).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (697 new deaths; <1 new death per 100 000; a 14% decrease), Egypt (433 new deaths; <1 new death per 100 000; similar to the previous week's figures), and Jordan (168 new deaths; 1.6 new deaths per 100 000; a 27% increase).

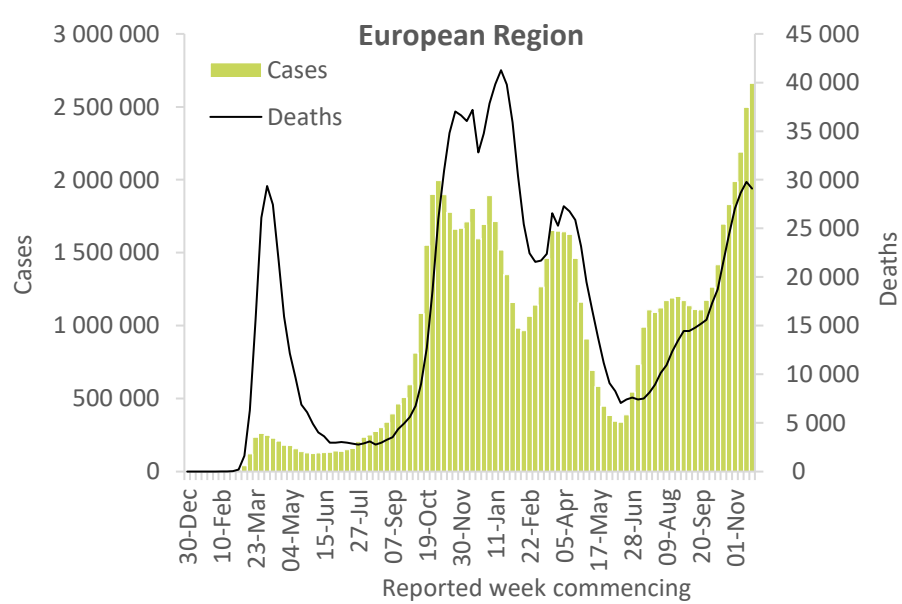


Updates from the Eastern Mediterranean Region

European Region

The European Region has continued to report an increase in cases since early-October 2021, with over 2.6 million new cases reported this week (a 7% increase as compared to the previous week). The incidence in deaths has remained stable compared to the previous week, with over 29 000 new deaths reported. Thirty-eight percent of countries in the region (23/61) reported an increase in new weekly cases of over 10%. Just over a third of all new cases continue to be reported from three countries: Germany (406 754 new cases; 489.1 new cases per 100 000; a 22% increase), the United Kingdom (304 374 new cases; 448.4 new cases per 100 000; an 8% increase), and the Russian Federation (239 215 new cases; 163.9 new cases per 100 000; an 8% decrease).

The highest numbers of new deaths were reported from the Russian Federation (8660 new deaths; 5.9 new deaths per 100 000; similar to the previous week's figures); Ukraine (3845 new deaths; 8.8 new deaths per 100 000; a 16% decrease) and Poland (2214 new deaths; 5.8 new deaths per 100 000; a 13% increase).

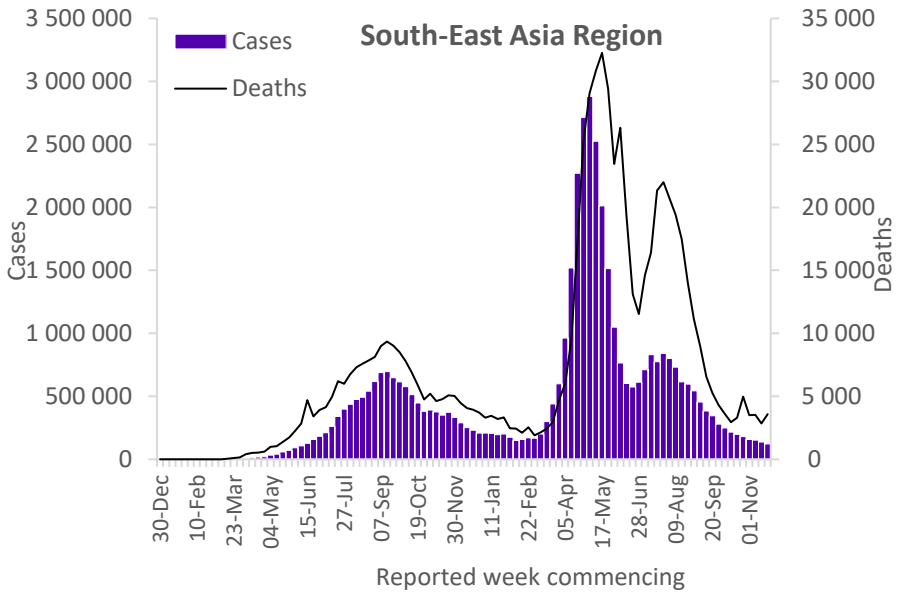


Updates from the European Region

South-East Asia Region

Since July 2021, the incidence of cases in the South-East Asia Region has continued to decline with 120 000 new cases reported this week, an 11% decrease as compared to the previous week. However, three countries reported an increase of over 10% including Sri Lanka (16%), Bhutan (14%) and Bangladesh (7%). Sri Lanka also reported the third highest number of new cases (5894 new cases; 27.5 new cases per 100 000; a 16% increase), after India (62 110 new cases; 4.5 new cases per 100 000; a 15% decrease) and Thailand (42 232 new cases; 60.5 new cases per 100 000; a 9% decrease).

The number of weekly deaths increased by 26% as compared to the previous week, with over 3500 new deaths reported this week. Three countries reported an increase of >10% including Nepal (27 new deaths; <1 new death per 100 000; a 42% increase); India (2892 new deaths; <1 new death per 100 000; a 36% increase) and Sri Lanka (178 new deaths; <1 new death per 100 000; a 35% increase). Thailand reported the second highest number of deaths after India but the number of deaths declined (320 new deaths; <1 new death per 100 000; a 9% decrease) as compared to the previous week.

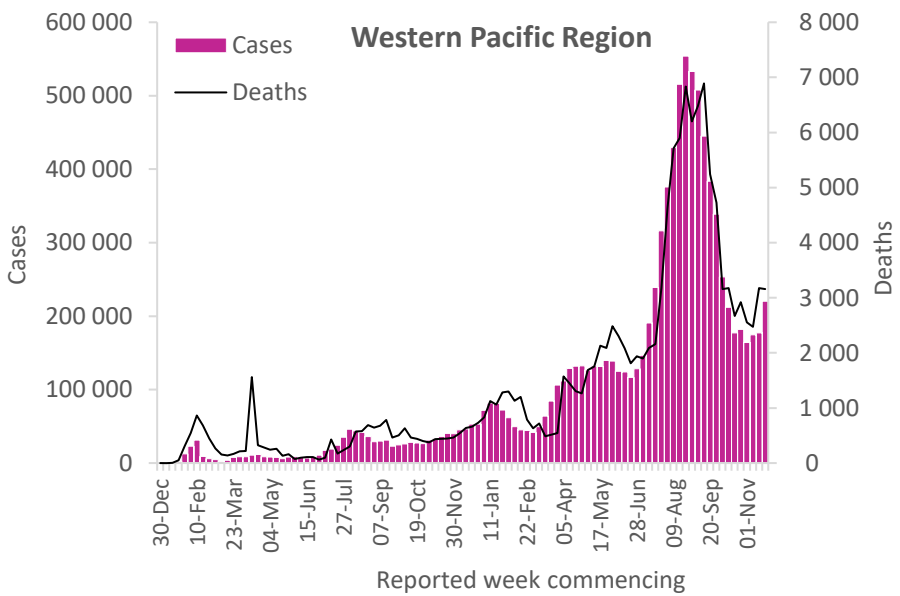


Updates from the South-East Asia Region

Western Pacific Region

Following a relatively stable trend over the past month, the weekly case incidence in the Western Pacific Region increased by 24% this week with over 220 000 new cases reported. Six of the 27 countries in the region reported an increase in case incidence of >10%, including the Northern Mariana Islands (222%), Viet Nam (70%), Brunei Darussalam (40%), the Republic of Korea (28%), Australia (15%) and Lao People's Democratic Republic (13%). The highest number of new cases continued to be reported from Viet Nam (112 779 new cases; 115.9 new cases per 100 000; a 70% increase), Malaysia (37 830 new cases; 116.9 new cases per 100 000; a 7% decrease) and the Republic of Korea (25 466 new cases; 49.7 new cases per 100 000; a 28% increase).

The region reported over 3100 new deaths this week, similar to the previous week's figures. The highest numbers of new deaths continued to be reported from the Philippines (1302 new deaths; 1.2 new death per 100 000; a 20% decrease), Viet Nam (1007 new deaths; 1.0 new deaths per 100 000; a 51% increase), and Malaysia (302 new deaths; <1 new death per 100 000; a 13% decrease).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 30 November, highlights include the following:

- Ethiopia launches a nationwide COVID-19 vaccination campaign
- Training for Indigenous youth leaders to promote COVID-19 messaging in Colombia
- Addressing the urgent COVID-19 and broader health needs of vulnerable populations in Belarus through a WHO support mission
- Maintaining essential health services during COVID-19 in Afghanistan
- Progress on a subset of indicators from the SPRP 2021 Monitoring and Evaluation Framework
- Updates on WHO's financing to support countries in SPRP 2021 implementation and provision of critical supplies

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations, and communities

Annexes

Annex 1. Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. Likewise, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection.
- Table 3 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than 4 months post final dose.
- Studies reporting VOC-specific VE estimates for full vaccination (≥7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca-Vaxzevria for infection (when a phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.

Annex 2. List of countries/territories/areas reporting Variants of Concern as of 30 November 2021

	Alpha	Beta	Delta	Gamma	Omicron
Afghanistan	●	-	●	-	-
Albania	●	-	○	-	-
Algeria	●	-	●	-	-
Andorra	○	○	○	-	-
Angola	●	●	●	●	-
Anguilla	●	-	●	-	-
Antigua and Barbuda	●	●	●	●	-
Argentina	●	●	●	●	-
Armenia	●	-	●	-	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	●*
Austria	●	●	●	●	●*
Azerbaijan	●	-	○	-	-
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	-
Bangladesh	●	●	●	○	-
Barbados	●	-	●	●	-
Belarus	●	-	○	-	-
Belgium	●	●	●	●	●*
Belize	●	-	●	●	-
Benin	●	●	●	●	-
Bermuda	●	●	●	-	-
Bhutan	●	●	●	-	-
Bolivia (Plurinational State of)	●	-	●	●	-
Bonaire	●	-	●	●	-
Bosnia and Herzegovina	●	●	○	●	-
Botswana	○	●	●	-	●*
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	●	-
Brunei Darussalam	●	●	●	-	-
Bulgaria	●	●	●	-	-
Burkina Faso	●	-	●	-	-

	Alpha	Beta	Delta	Gamma	Omicron
Burundi	●	●	●	-	-
Cabo Verde	●	-	●	-	-
Cambodia	●	●	●	-	-
Cameroon	●	●	●	●*	-
Canada	●	●	●	●	●*
Cayman Islands	●	●	●	●	-
Central African Republic	●	●	●	-	-
Chad	●	-	-	-	-
Chile	●	●	●	●	-
China	●	●	●	●	●*
Colombia	●	-	●	●	-
Comoros	-	●	●	-	-
Congo	●	●	●	●	-
Costa Rica	●	●	●	●	-
Croatia	●	●	○	●	-
Cuba	●	●	●	-	-
Curaçao	●	●	●	●	-
Cyprus	●	●	○	-	-
Czechia	●	●	●	●	●*
Côte d'Ivoire	●	●	○	-	-
Democratic Republic of the Congo	●	●	●	-	-
Denmark	●	●	●	●	●*
Djibouti	●	●	●*	-	-
Dominica	●	-	●	-	-
Dominican Republic	●	-	●	●	-
Ecuador	●	-	●	●	-
Egypt	●	-	●	-	-
El Salvador	●	-	●	●	-
Equatorial Guinea	●	●	●	-	-
Estonia	●	●	○	○	-
Eswatini	○	●	●	-	-

	Alpha	Beta	Delta	Gamma	Omicron
Ethiopia	●	●	●	-	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	-	●	-
Fiji	○	-	●	-	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	●	●	-	-
Gambia	●	-	●	-	-
Georgia	●	○	●	-	-
Germany	●	●	●	●	●*
Ghana	●	●	●	●	-
Gibraltar	●	-	○	-	-
Greece	●	●	●	●	-
Greenland	-	-	●	-	-
Grenada	●	-	●	●	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	●	-
Guinea	●	●	●	-	-
Guinea-Bissau	●	●	●	-	-
Guyana	-	-	●	●	-
Haiti	●	-	●	●	-
Honduras	●	-	●	●	-
Hungary	●	○	○	●	-
Iceland	●	●	●	●	-
India	●	●	●	●	-
Indonesia	●	●	●	-	-
Iran (Islamic Republic of)	●	●	●	-	-
Iraq	●	●	●	●	-
Ireland	●	●	●	●	-

	Alpha	Beta	Delta	Gamma	Omicron
Israel	●	●	●	●	●*
Italy	●	●	●	●	●*
Jamaica	●	-	●	-	-
Japan	●	●	●	●	●*
Jordan	●	●	●	●	-
Kazakhstan	●	○	●	-	-
Kenya	●	●	●	-	-
Kosovo[1]	●	○	○	-	-
Kuwait	●	●	●	-	-
Kyrgyzstan	●	●	●	-	-
Lao People's Democratic Republic	●	-	●	-	-
Latvia	●	●	○	●	-
Lebanon	●	-	●	-	-
Lesotho	-	●	○	-	-
Liberia	●	●	●	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	○	○	-
Lithuania	●	●	○	●	-
Luxembourg	●	●	●	●	-
Madagascar	●	●	-	-	-
Malawi	●	●	●	-	-
Malaysia	●	●	●	-	-
Maldives	●	-	●	-	-
Mali	-	-	●	-	-
Malta	●	○	○	●	-
Martinique	●	●	●	●	-
Mauritania	●	●	●	-	-
Mauritius	●	●	●	-	-
Mayotte	●	●	○	-	-
Mexico	●	●	●	●	-
Monaco	●	●	●	-	-
Mongolia	●	-	●	-	-
Montenegro	●	-	○	○	-

	Alpha	Beta	Delta	Gamma	Omicron
Montserrat	●	-	●	●	-
Morocco	●	●	●	-	-
Mozambique	●	●	●	-	-
Myanmar	●	-	●	-	-
Namibia	●	●	●	●	-
Nepal	●	-	●	-	-
Netherlands	●	●	●	●	●*
New Caledonia	●	-	●	-	-
New Zealand	●	●	●	●	-
Nicaragua	●	●	●	●	-
Niger	●	-	●	-	-
Nigeria	●	●	●	-	-
North Macedonia	●	●	○	-	-
Northern Mariana Islands (Commonwealth of the)	○	-	●	-	-
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	●	-	-
Oman	●	●	●	-	-
Pakistan	●	●	●	●	-
Panama	●	●	●	●	-
Papua New Guinea	-	-	●	-	-
Paraguay	●	-	●	●	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	●*
Puerto Rico	●	●	●	●	-
Qatar	●	●	●	-	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	●	-	●	-	-
Romania	●	●	●	●	-
Russian Federation	●	●	●	○	-
Rwanda	●	●	●	-	-
Réunion	●	●	○	●	○*

	Alpha	Beta	Delta	Gamma	Omicron
Saba	-	-	●	-	-
Saint Barthélemy	●	-	●	-	-
Saint Kitts and Nevis	-	-	●	-	-
Saint Lucia	●	-	●	-	-
Saint Martin	●	●	●	-	-
Saint Pierre and Miquelon	-	-	●	-	-
Saint Vincent and the Grenadines	-	-	●	●	-
Sao Tome and Principe	●	-	○	-	-
Saudi Arabia	●	●	●	-	-
Senegal	●	●	●	-	-
Serbia	●	-	●	-	-
Seychelles	●	●	●	-	-
Sierra Leone	-	●	●	-	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	●	●	-
Slovakia	●	●	●	-	-
Slovenia	●	●	●	●	-
Somalia	●	●	●	-	-
South Africa	●	●	●	○	●*
South Sudan	●	●	●	-	-
Spain	●	●	●	●	○*
Sri Lanka	●	●	●	-	-
Sudan	●	●	-	●	-
Suriname	●	●	●	●	-
Sweden	●	●	●	●	●*
Switzerland	●	●	●	●	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	●	-	-
Togo	●	●	●	●	-
Trinidad and Tobago	●	-	●	●	-
Tunisia	●	●	●	-	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	●	-

	Alpha	Beta	Delta	Gamma	Omicron
Uganda	●	●	●	-	-
Ukraine	●	○	○	-	-
United Arab Emirates	●	●	●	●	-
United Kingdom	●	●	●	●	●*
United Republic of Tanzania	-	●	-	-	-
United States Virgin Islands	●	●	●	●	-

	Alpha	Beta	Delta	Gamma	Omicron
United States of America	●	●	●	●	-
Uruguay	●	●	●	●	-
Uzbekistan	●	●	○	-	-
Vanuatu	-	-	●	-	-
Venezuela (Bolivarian Republic of)	●	-	●	●	-

	Alpha	Beta	Delta	Gamma	Omicron
Viet Nam	●	●	●	-	-
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	●	-	-
Zimbabwe	●	●	●	-	-

**Newly reported in this update. indicates that information for this variant was received by WHO from official sources. indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available. **Includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern. See also Annex 3: Data, table, and figure notes*

Annex 3. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

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COVID-19 Weekly Epidemiological Update

Edition 67, published 23 November 2021

In this edition:

- Global overview
- Special focus: Points of entry, international travel and transport in the context of the COVID-19 pandemic
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Summary of the Weekly Operational Update

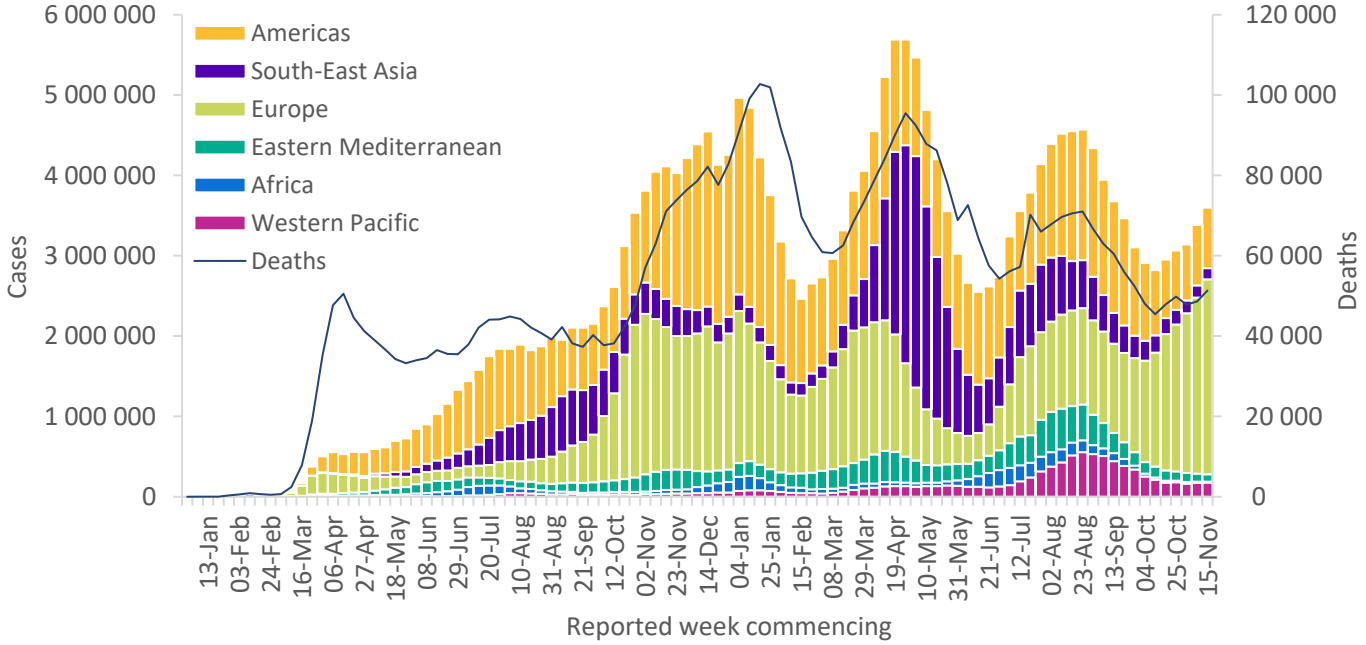
Global overview

Data as of 21 November 2021

Globally, weekly case incidence has continued to increase for more than one month, with just under 3.6 million confirmed new cases reported during the week of 15-21 November 2021, a 6% increase as compared to the previous week. Similarly, new weekly deaths increased by 6% in the past seven days as compared to the previous week, with over 51 000 new deaths reported. As of 21 November, over 256 million confirmed cases and over 5.1 million deaths have been reported globally.

The European Region reported an 11% increase in new weekly cases, while the South-East Asia and the Eastern Mediterranean Regions reported decreases of 11% and 9% respectively; the other regions reported similar weekly case incidences as compared to the previous week. While the Western Pacific Region and the Region of the Americas reported relatively stable case incidence, both regions reported large increases in new weekly deaths, 29% and 19% respectively. In contrast, the African and the South-East Asia Regions reported a decrease in new weekly deaths, while the other regions reported a similar trend as compared to the previous week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 21 November 2021**



**See *Annex 2: Data, table, and figure notes*

The regions reporting the highest weekly case incidence per 100 000 population continue to be the European Region (260.2 new cases per 100 000 population) and the Region of the Americas (73.6 new cases per 100 000 population); these regions also reported the highest weekly incidence in deaths, of 3.2 and 1.3 per 100 000 population, respectively.

The highest numbers of new cases were reported from the United States of America (558 538 new cases; similar to the previous week's figures), Germany (333 473 new cases; a 31% increase), the United Kingdom (281 063 new cases; an 11% increase), the Russian Federation (260 484 new cases; similar to the previous week's figures) and Turkey (163 835 new cases; a 9% decrease).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 21 November 2021**

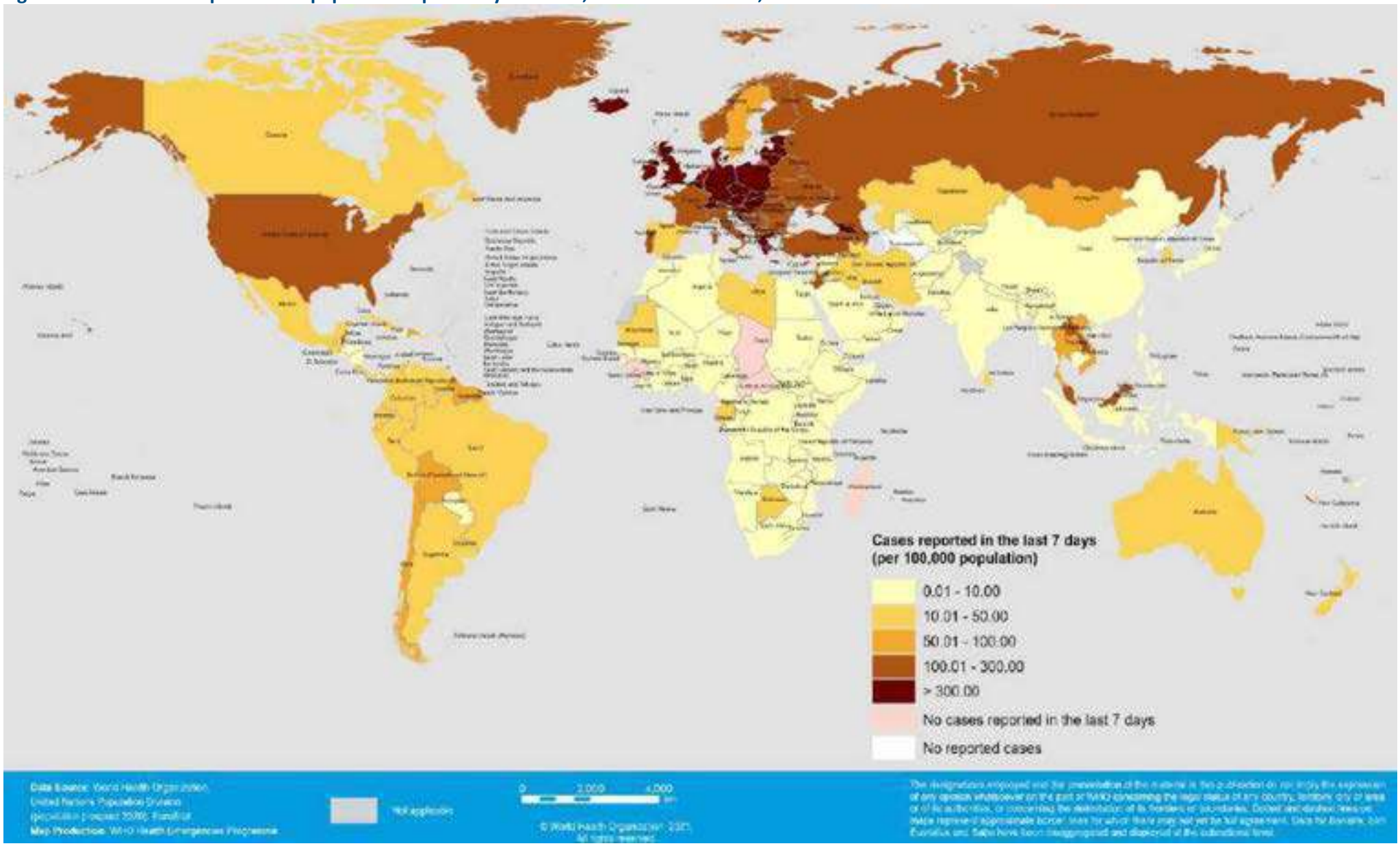
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	2 427 657 (67%)	11%	83 419 825 (33%)	29 465 (57%)	3%	1 510 654 (29%)
Americas	753 140 (21%)	0%	95 847 458 (37%)	13 603 (26%)	19%	2 334 373 (45%)
Western Pacific	174 797 (5%)	0%	9 947 215 (4%)	3 161 (6%)	29%	137 793 (3%)
South-East Asia	136 120 (4%)	-11%	44 409 237 (17%)	2 842 (6%)	-19%	702 762 (14%)
Eastern Mediterranean	92 520 (3%)	-9%	16 657 029 (6%)	1 917 (4%)	-4%	307 333 (6%)
Africa	13 164 (0%)	-4%	6 198 494 (2%)	385 (1%)	-30%	152 074 (3%)
Global	**3 597 398 (100%)**	**6%**	**256 480 022 (100%)**	**51 373 (100%)**	**6%**	**5 145 002 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
***See Annex 2: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

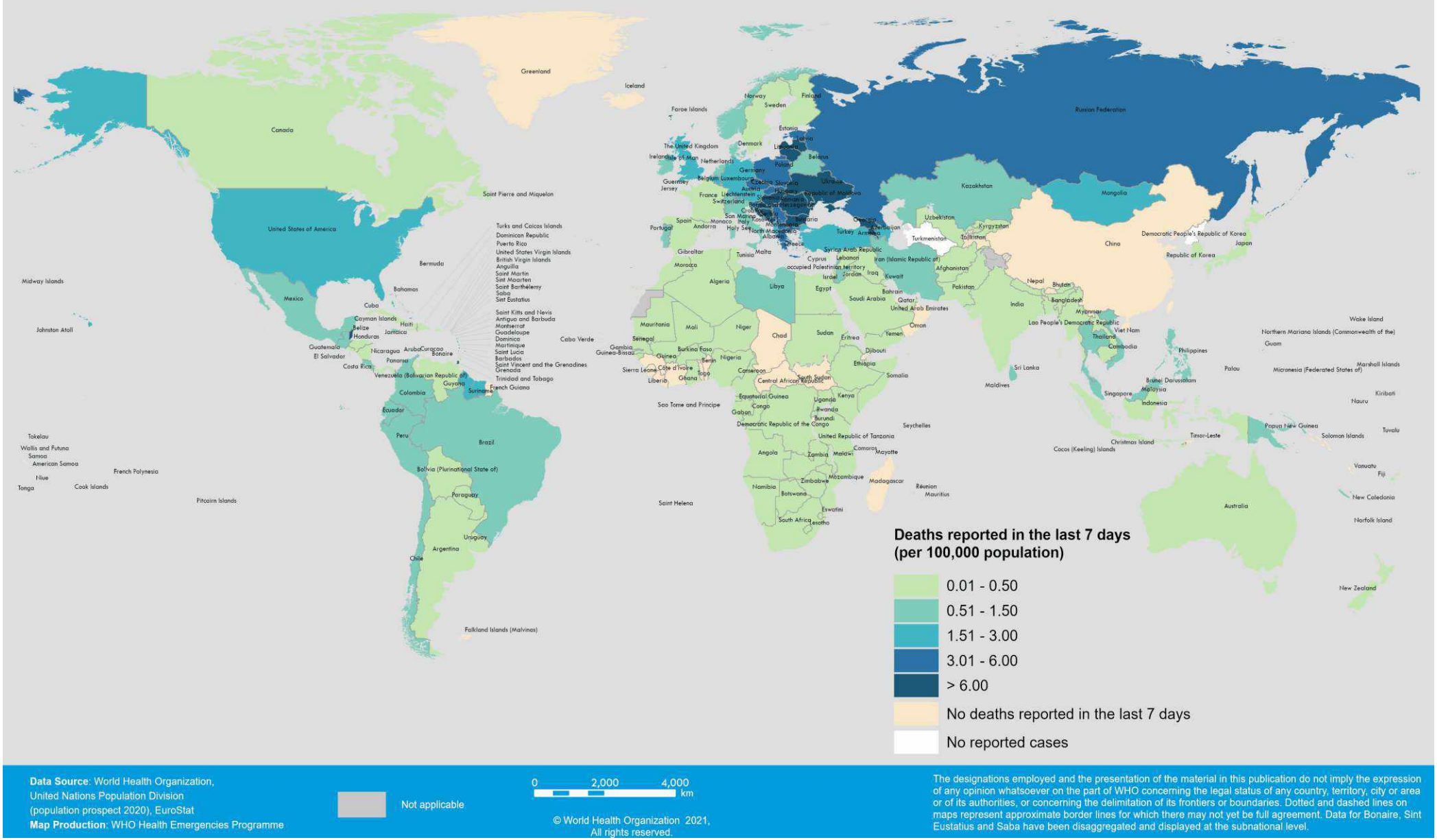
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 15-21 November 2021**



**See *Annex 2: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 15-21 November 2021**



**See *Annex 2: Data, table, and figure notes*

Special Focus: Points of entry, international travel and transport in the context of the COVID-19 pandemic

Since the characterization of the COVID-19 outbreak as a pandemic in March 2020, international travel and transport, as well as related sectors such as tourism, have been substantially impacted. For example, the United Nations World Tourism Organization (UNWTO) estimates that around 100 million jobs directly related to tourism are at risk as a result of the impact of the pandemic on the sector. According to the International Civil Aviation Organization (ICAO)'s latest economic impact analysis, despite a moderate increase in domestic passenger air travel in 2021 (up to 17% more passengers) as compared to 2020, it is estimated that there will still be up to 73% fewer international passengers in 2021 as compared to 2019. This decrease in travel translates to approximately USD 250-252 billion loss of gross operating revenues from international passenger air travel in 2021[1] with ongoing losses predicted to occur in 2022, particularly in the international air travel industry.[2]

The pandemic also continues to have severe repercussions for the maritime sector, seafarers in particular, many of whom continue to be denied access to medical care in ports, remain stranded on ships unable to be repatriated at the end of their contract, and encounter substantial challenges to receive COVID-19 vaccines or meet the vaccine-related entry requirements of different countries.[3] WHO recommends that in establishing policies on essential travel, governments should consider situations such as emergencies and humanitarian actions (e.g., emergency medical flights and medical evacuations); travel of essential personnel including emergency responders, providers of public health technical support, and critical personnel in the transport and security sectors (e.g., seafarers); and cargo transport for essential supplies such as food, medicines and fuel. Such considerations would help mitigate the current challenges faced by these particular areas so far in the pandemic.

Overview of travel-related health measures

Under the International Health Regulations (IHR) (2005), a State Party implementing strengthened health measures on the basis of a risk to public health that significantly interferes with international traffic, shall share that information with WHO and provide the public health rationale and relevant scientific information for it. Since 6 February 2020, WHO, through its Regional Offices, has collected and shared information on strengthened health measures for 194 out of 196 State Parties on a weekly basis, publishing more than 82 updates on the Event Information Site (EIS), which is the secured platform through which WHO shares information with national focal points and other stakeholders.

Since the beginning of 2021, countries have gradually reopened their borders for international travel: at least 74 countries accept incoming travelers who present either proof of COVID-19 vaccination, a negative PCR test within a given timeframe, or proof of previous SARS-CoV-2 infection. Additionally, 121 countries require proof of a negative PCR or a rapid antigen test before departure regardless of the vaccination status, while 93 countries perform testing upon arrival and 131 countries require isolation or quarantine of some or all travelers. The cost of these measures is generally charged to the traveler, which is counter to the recommendations issued by the Director-General following the ninth meeting of the IHR Emergency Committee on 26 October 2021, given that this may be economically restrictive for many.

While at least 53 countries have recently reduced the duration of quarantine or testing requirements for vaccinated travelers, 22 countries require vaccination for entry, with limited exceptions for nationals or travelers with proof of previous SARS-CoV-2 infection. Vaccination-based entry requirements do not align with Article 42 of the IHR (2005), which advises that measures must be applied in a non-discriminatory manner, as nearly half of the global population have yet to receive one dose of vaccine.[4] This point was further emphasized by the Director-General during the ninth meeting of the IHR Emergency Committee, which recommended that countries recognize all vaccines that have

received WHO Emergency Use Listing and all vaccine schedules as per SAGE recommendations, including in the context of international travel.

Currently, at least 85 countries are performing regular risk assessments to inform the public health measures taken for international travel, frequently updating and publishing a list of countries at higher risk to which they apply more restrictive quarantine and additional testing measures. Twenty-nine countries still have entry bans for travelers arriving from certain countries affected by SARS-CoV-2 variants of concern despite the dominance of the Delta variant globally.

Latest WHO travel-related guidance

In July 2021, WHO updated its international travel risk-based interim guidance (first issued in December 2020) and published two documents on policy and technical considerations for implementing a risk-based approach to international travel in the context of COVID-19. This guidance aims to support countries in implementing and calibrating their international travel-related measures, adapted to their specific epidemiological, health system and socioeconomic context, to ensure they are proportionate to the public health risk.

Key changes in the updated documents include the following:

- The inclusion of SARS-CoV-2 variants of concern (VOCs) and variants of interest (VOIs) in the risk assessment, and the application of a precautionary approach in the presence of scientific uncertainties.
- The extension of the temporary recommendation issued by the Director-General not to require proof of COVID-19 vaccination as the only pathway to allow entry to or exit from a country, in accordance with the advice of the IHR Emergency Committee.
- Considerations for the application of individualized approaches to calibrate travel-related quarantine and/or testing requirements for travelers who are fully vaccinated or have proof of previous SARS-CoV-2 infection.
- Reiteration that adherence to personal protective measures such as mask use and physical distancing should continue to be respected by all international travelers, both while onboard conveyances and at points of entry and exit.
- Updated body of evidence on the effectiveness and impact of risk mitigation measures applied in the context of international travel during the COVID-19 pandemic.

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied by national authorities to control disease spread. Potential Variants of Concern (VOCs), Variants of Interest (VOIs) or Variants Under Monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

The current global epidemiology of SARS-CoV-2 is characterized by a predominance of the Delta variant, with the prevalence of other variants continuing to decline among genomic sequences submitted to publicly available datasets or detections reported to WHO (Figure 4, Annex 1). Delta has outcompeted other variants, including other VOCs, in most countries.

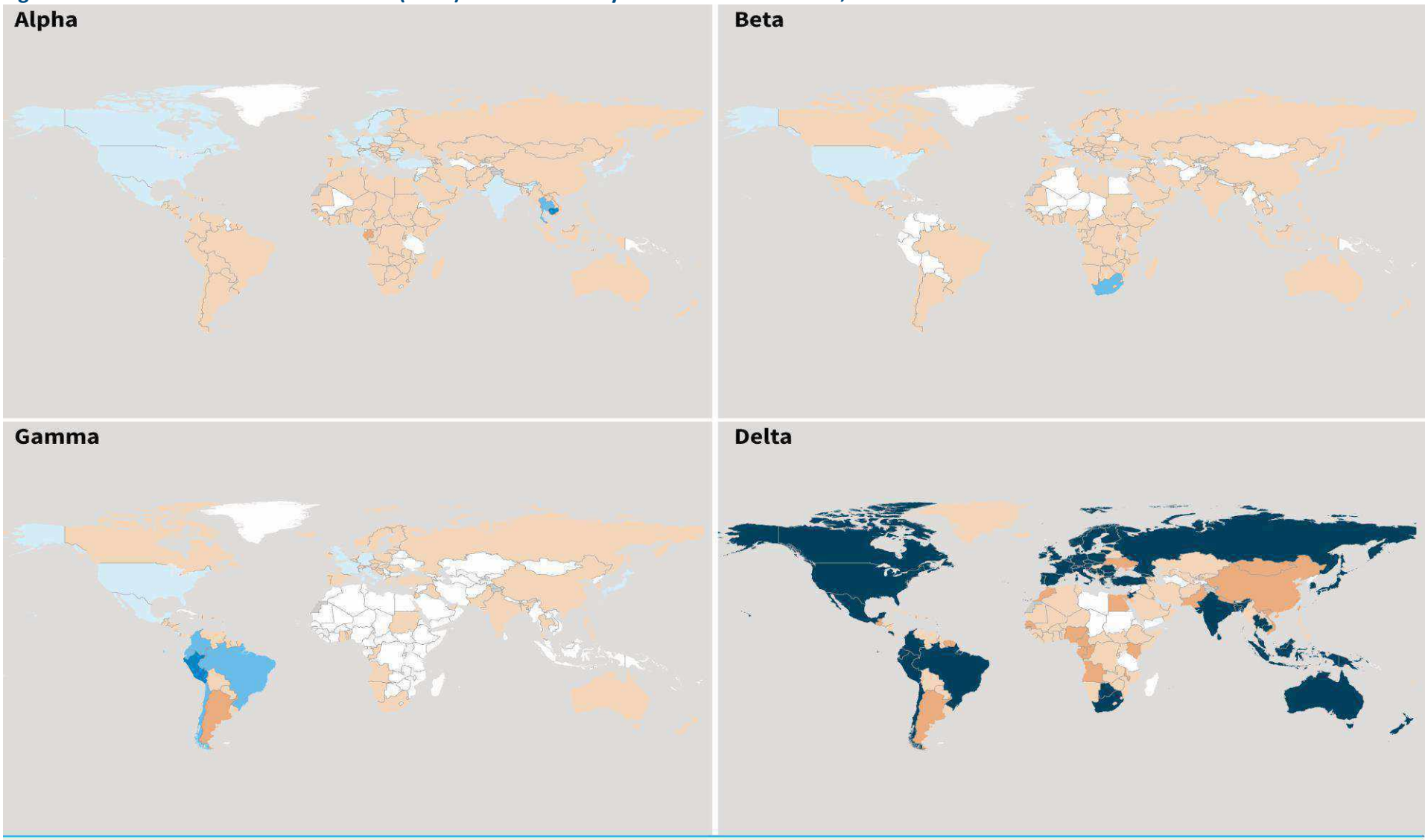
Of 845 087 sequences uploaded to GISAID with specimens collected in the last 60 days[1], 842 992 (99.8%) were Delta, 519 (0.1%) Gamma, 212 (<0.1%) Alpha, 16 (<0.1%) Beta, and 0.1% comprised other circulating variants (including VOIs Mu and Lambda). Sub-regional and country-level variation continues to be observed; most notably within some South American countries, where the progression of the Delta variant has been more gradual, and other variants (e.g., Gamma, Lambda, Mu) still contribute a large proportion of reported sequences. Moreover, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

[1] Includes sequences submitted to GISAID with sample collected dates from 20 September to 19 November 2021 (last reported sample at the time of data extraction), excluding low coverage sequences.

Figure 4. Prevalence of Variants of Concern (VOCs) in the last 60 days and historic detections, data as of 23 November 2021



*Prevalence calculated as a proportion of VOC sequences among total sequences uploaded to GISAID with sample collection dates within the past 60 days prior to the latest date of collection, excluding low coverage sequences, limited to countries with ≥100 total sequences in the same period. Countries assigned by location of sample collection.
**Includes both official reports to WHO and unofficial reports of VOC detections.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Proportion of VOC among total sequences*
- 0.501 - 1.000
- 0.101 - 0.500
- 0.011 - 0.100
- >0.000 - 0.010

- VOC detected, too few sequences to estimate proportion
- No new VOC sequences, VOC previously reported**
- No presence of VOC reported to WHO
- Not applicable

World Health Organization

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Data Source: World Health Organization, GISAID
Map Production: WHO Health Emergencies Programme

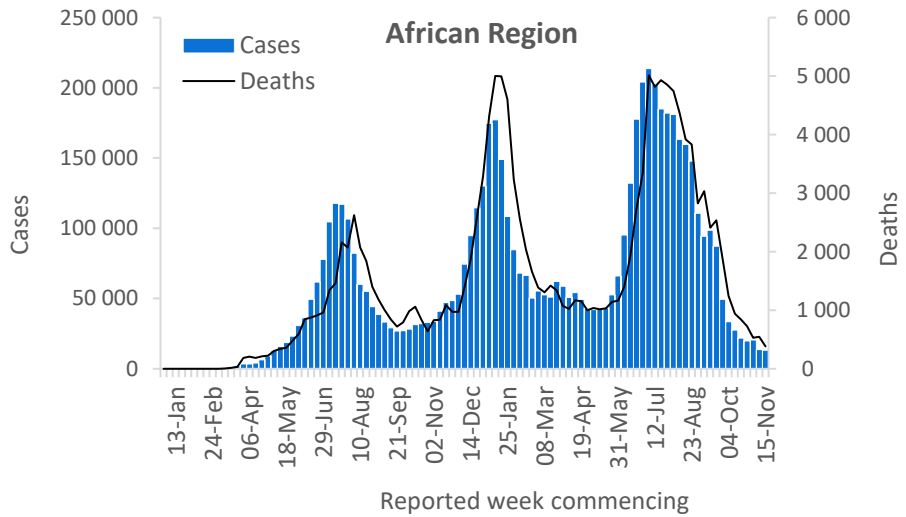
Prevalence data based on sequences reported to GISAID, excluding low coverage sequences. See also Annex 1 for reported VOC detections by country/territory/area

WHO regional overviews Epidemiological week 15-21 November 2021

African Region

Following a decline since late June 2021, the case incidence in the African Region appears to have stabilized in the past two weeks, with over 13 000 new cases reported during the week of 15-21 November. However, 14 of the 49 countries in the Region (29%) reported an increase of >10% in new cases as compared to the previous week, with the highest numbers of new cases reported from South Africa (3498 new cases; 5.9 new cases per 100 000 population; an 82% increase), Ethiopia (1408 new cases; 1.2 new cases per 100 000; an 11% decrease), and Réunion (1308 new cases; 146.1 new cases per 100 000; a 77% increase).

The Region reported the largest decline (30%) in new weekly deaths, with 385 new deaths reported this week. The majority of countries reported a decrease in weekly deaths; however, an increasing trend was observed in nine countries, with the highest numbers of new deaths reported from South Africa (96 new deaths; <1 new death per 100 000 population; a 39% decrease), Ethiopia (59 new deaths; <1 new death per 100 000; a 28% decrease), and Algeria (38 new deaths; <1 new death per 100 000; a 6% increase).

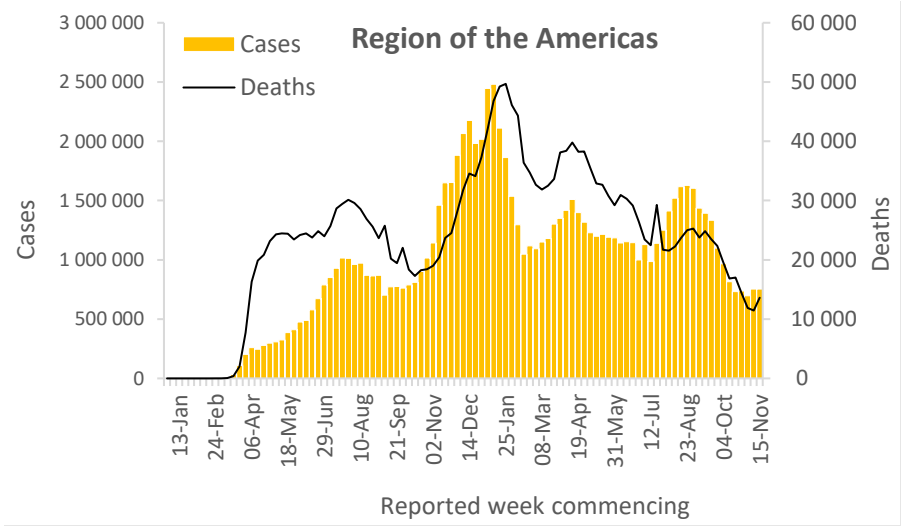


Updates from the African Region

Region of the Americas

The case incidence rate in the Region of the Americas has been relatively stable over the past two weeks, with over 753 000 new cases reported this week. Thirty percent (17/56) of countries reported an increase of over 10% in the number of new cases in the past week. The highest numbers of new cases were reported from the United States of America (558 538 new cases; 168.7 new cases per 100 000; similar to the previous week's figures), Brazil (64 121 new cases; 30.2 new cases per 100 000; a 16% decrease), and Canada (17 085 new cases; 45.3 new cases per 100 000; similar to the previous week's figures).

Following a steady decrease since mid-September 2021, the Region reported a 19% increase in the incidence of deaths this week, with over 13 000 new deaths. Twenty-one percent (12/56) of the countries reported an increase of over 10%, with Ecuador reporting the largest proportionate increase (13 100%), followed by Mexico (50%) and Bahamas (50%). The highest numbers were reported from the United States of America (8906 new deaths; 2.7 new deaths per 100 000; a 20% increase), Brazil (1879 new deaths; <1 new death per 100 000; a 31% increase), and Mexico (1015 new deaths; <1 new death per 100 000; a 50% increase).

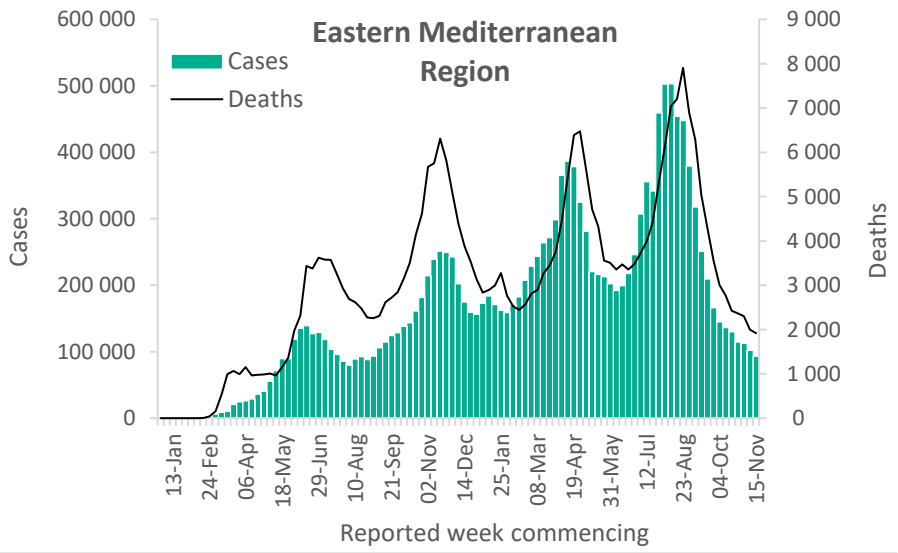


Updates from the Region of the Americas

Eastern Mediterranean Region

Case and death incidence rates in the Eastern Mediterranean Region have continued to decline since mid-July 2021, with over 92 000 new cases and over 1900 new deaths reported, a 9% decrease in cases and a similar number of deaths, as compared to the previous week. Out of the 22 countries in the Region, five, including Djibouti (50%), Afghanistan (49%), Oman (39%), Jordan (35%) and Sudan (34%), reported an increase of over 10% in new cases, in the past week. The highest numbers of new cases were reported from the Islamic Republic of Iran which contributed to nearly half of the cases in the Region (41 523 new cases; 49.4 new cases per 100 000; a 19% decrease), followed by Jordan (21 599 new cases; 211.7 new cases per 100 000; a 35% increase), and Egypt (6487 new cases; 6.3 new cases per 100 000; similar to the previous week's figures).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (810 new deaths; 1.0 new deaths per 100 000; a 7% decrease), Egypt (437 new deaths; <1 new death per 100 000; similar to the previous week's figures), and Iraq (159 new deaths; <1 new death per 100 000; similar to the previous week's figures).

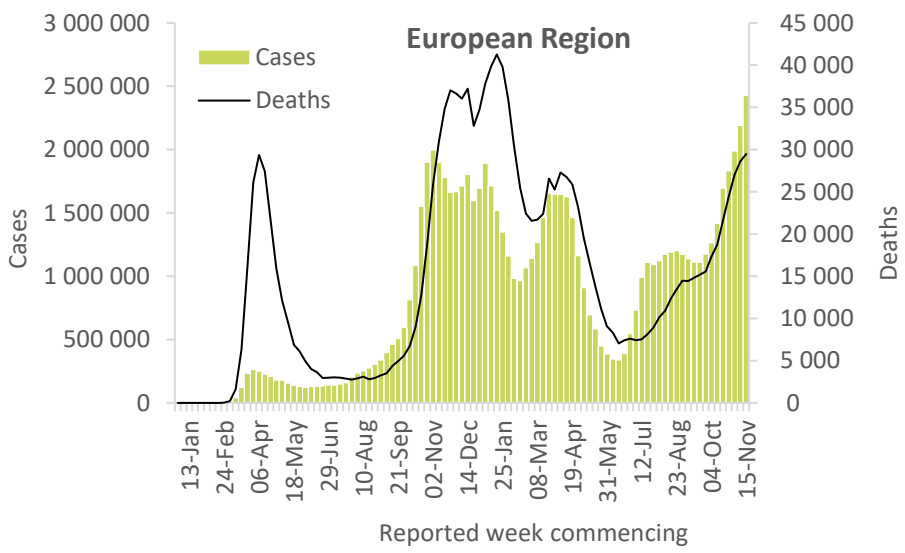


Updates from the Eastern Mediterranean Region

European Region

The European Region has continued to show an increase in both cases and deaths since early-October 2021, with over 2.4 million new cases reported (an increase of 11% compared to the previous week) and over 29 000 new deaths reported (similar to previous week's figures). Nearly 40% of countries in the Region (24/61) reported an increase in new cases of over 10%. Just over a third of all new cases are from three countries: Germany (333 473 new cases; 401.0 new cases per 100 000; a 31% increase), the United Kingdom (281 063 new cases; 414.0 new cases per 100 000; an 11% increase), and the Russian Federation (260 484 new cases; 178.5 new cases per 100 000; similar to the previous week's figures).

A quarter of countries in the Region reported an increase in new deaths of more than 10% in the past week, with the greatest change seen in the Faroe Islands (a 150% increase), Denmark (an 88% increase), and Poland (a 76% increase). The countries reporting the highest numbers of new deaths included the Russian Federation (8709 new deaths; 6.0 new deaths per 100 000; similar to the previous week's figures), Ukraine (4567 new deaths; 10.4 new deaths per 100 000; similar to the previous week's figures) and Romania (2002 new deaths; 10.4 new deaths per 100 000; a 15% decrease).

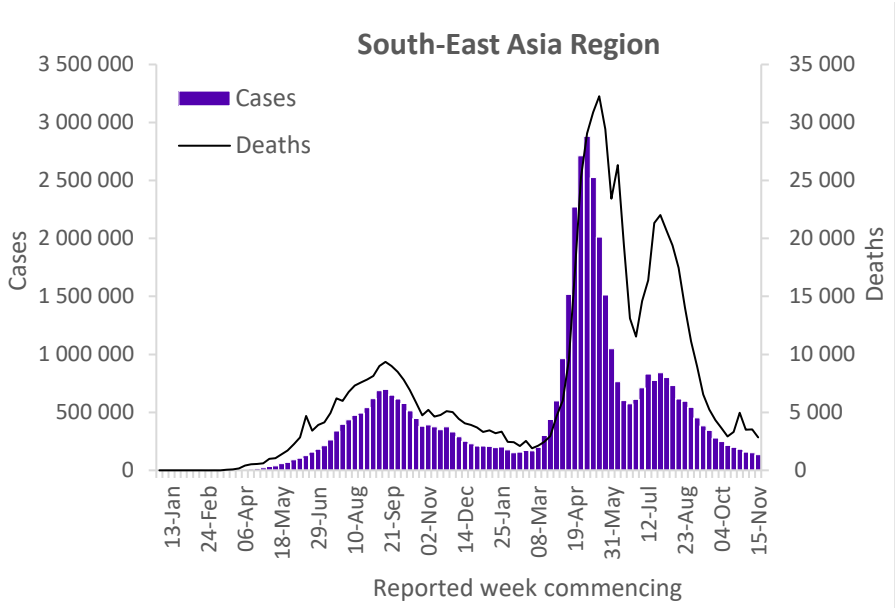


Updates from the European Region

South-East Asia Region

Since July 2021, the incidence of cases and deaths in the South-East Asia Region continues to decline with 136 000 new cases and 2800 new deaths, decreases of 11% and 19% respectively, as compared to the previous week. Only one country, Bhutan, reported an increase of over 10% in new cases in the past week (7 new cases; <1 new case per 100 000; a 250% increase), whilst the highest numbers of new cases were reported from India (73 106 new cases; 5.3 new cases per 100 000; an 11% decrease), Thailand (46 171 new cases; 66.1 new cases per 100 000; an 8% decrease), and Sri Lanka (5084 new cases; 23.7 new cases per 100 000; a 19% decrease).

The highest numbers of new deaths were reported from India (2132 new deaths; <1 new death per 100 000; a 22% decrease), Thailand (351 new deaths; <1 new death per 100 000; an 8 % decrease), and Sri Lanka (132 new deaths; <1 new death per 100 000; similar to the previous week's figures).

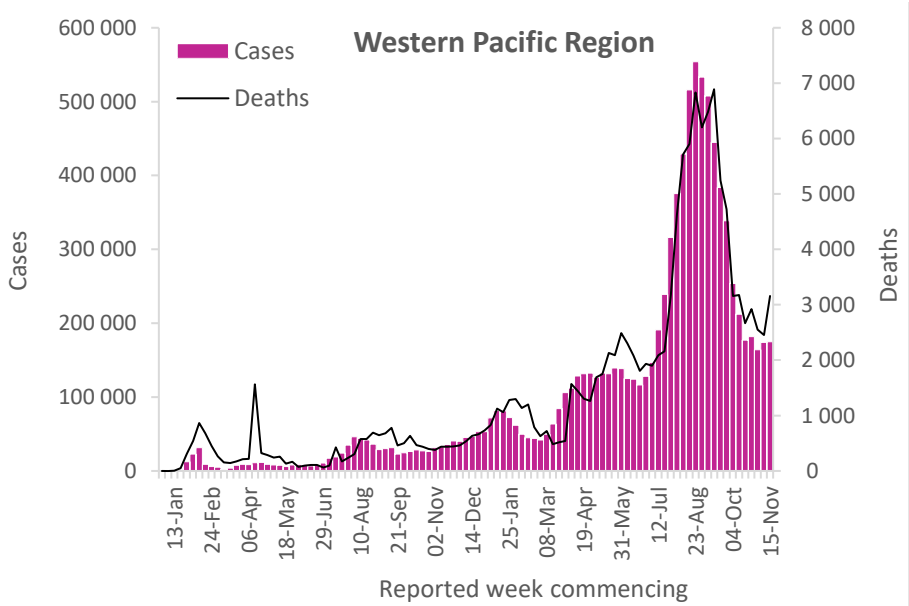


Updates from the South-East Asia Region

Western Pacific Region

The weekly incidence in cases has been relatively stable over the past one month, with approximately 175 000 new cases reported this week. However, six countries, including the Northern Mariana Islands, Republic of Korea, Papua New Guinea, New Caledonia, Viet Nam and Lao People's Democratic Republic reported an increase of over 10%. The highest number of new cases were reported from Viet Nam (66 279 new cases; 68.1 new cases per 100 000; a 16% increase), Malaysia (40 600 new cases; 125.4 new cases per 100 000; similar to the previous week's figures) and Republic of Korea (19 965 new cases; 38.9 new cases per 100 000; a 29% increase).

The Region reported over 3100 new deaths this week, a 29% increase compared to the previous week. The highest numbers of new deaths were reported from the Philippines (1631 new deaths; 1.5 new death per 100 000; an 58% increase), Viet Nam (667 new deaths; <1 new death per 100 000; a 22% increase), and Malaysia (347 new deaths; 1.1 new deaths per 100 000; a 7% decrease).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 23 November, highlights include the following:

- Building capacity to create vaccine demand among health care and frontline community workers in Syria
- WHO Europe supports Serbia's public health laboratory financing system
- The Ministry of Health collaborates with district authorities to reduce COVID-19 transmission and mortality in Vientiane Capital, Lao People's Democratic Republic
- Building capacity of frontline health care workforce on latest COVID-19 clinical management practices in the Eastern Mediterranean Region
- Leadership in Emergencies: Building competencies for effective leadership in all-hazards emergency response
- COVID-19 Intra-Action Review (IAR) Training in Muscat, Oman
- Progress on a subset of indicators from the SPRP 2021 Monitoring and Evaluation Framework
- Updates on WHO's financing to support countries in SPRP 2021 implementation and provision of critical supplies

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations, and communities

Annex 1. List of countries/territories/areas reporting variants of concern as of 23 November 2021

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Afghanistan	●	-	-	●
Albania	●	-	-	○
Algeria	●	-	-	●
Andorra	○	○	-	○
Angola	●	●	●	●
Anguilla	●	-	-	●
Antigua and Barbuda	●	●	●	●
Argentina	●	●	●	●
Armenia	●	-	-	●
Aruba	●	●	●	●
Australia	●	●	●	●
Austria	●	●	●	●
Azerbaijan	●	-	-	○
Bahamas	●	-	●	●
Bahrain	●	●	●	●
Bangladesh	●	●	○	●
Barbados	●	-	●	●
Belarus	●	-	-	○
Belgium	●	●	●	●
Belize	●	-	●	●
Benin	●	●	●	●
Bermuda	●	●	-	●
Bhutan	●	●	-	●
Bolivia (Plurinational State of)	●	-	●	●
Bonaire	●	-	●	●
Bosnia and Herzegovina	●	●	●	○
Botswana	○	●	-	●
Brazil	●	●	●	●
British Virgin Islands	●	-	●	●
Brunei Darussalam	●	●	-	●
Bulgaria	●	●	-	●
Burkina Faso	●	-	-	●
Burundi	●	●	-	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Cabo Verde	●	-	-	●
Cambodia	●	●	-	●
Cameroon	●	●	-	●
Canada	●	●	●	●
Cayman Islands	●	●	●	●
Central African Republic	●	●	-	●
Chad	●	-	-	-
Chile	●	●	●	●
China	●	●	●	●
Colombia	●	-	●	●
Comoros	-	●	-	-
Congo	●	○	●	●
Costa Rica	●	●	●	●
Croatia	●	●	●	○
Cuba	●	●	-	●
Curaçao	●	●	●	●
Cyprus	●	●	-	○
Czechia	●	●	●	●
Côte d'Ivoire	●	●	-	○
Democratic Republic of the Congo	●	●	-	●
Denmark	●	●	●	●
Djibouti	●	●	-	-
Dominica	●	-	-	●
Dominican Republic	●	-	●	●
Ecuador	●	-	●	●
Egypt	●	-	-	●
El Salvador	●	-	●	●
Equatorial Guinea	●	●	-	○
Estonia	●	●	○	○
Eswatini	○	●	-	●
Ethiopia	●	-	-	●
Falkland Islands (Malvinas)	●	●	-	-
Faroe Islands	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Fiji	○	-	-	●
Finland	●	●	●	●
France	●	●	●	●
French Guiana	●	●	●	●
French Polynesia	●	●	●	●
Gabon	●	●	-	●
Gambia	●	-	-	●
Georgia	●	○	-	●
Germany	●	●	●	●
Ghana	●	●	●	●
Gibraltar	●	-	-	○
Greece	●	●	●	●
Greenland	-	-	-	●
Grenada	●	-	-	●
Guadeloupe	●	●	●	●
Guam	●	●	●	●
Guatemala	●	●	●	●
Guinea	●	●	-	●
Guinea-Bissau	●	●	-	●
Guyana	-	-	●	●
Haiti	●	-	●	●
Honduras	●	-	●	●
Hungary	●	○	●	○
Iceland	●	●	●	●
India	●	●	●	●
Indonesia	●	●	-	●
Iran (Islamic Republic of)	●	●	-	●
Iraq	●	●	●	●
Ireland	●	●	●	●
Israel	●	●	●	●
Italy	●	●	●	●
Jamaica	●	-	-	●
Japan	●	●	●	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Jordan	●	●	●	●
Kazakhstan	●	○	-	●
Kenya	●	●	-	●
Kosovo[1]	●	○	-	○
Kuwait	●	●	-	●
Kyrgyzstan	●	●	-	●
Lao People's Democratic Republic	●	-	-	●
Latvia	●	●	●	○
Lebanon	●	-	-	●
Lesotho	-	●	-	○
Liberia	●	●	-	●
Libya	●	●	-	-
Liechtenstein	●	-	○	○
Lithuania	●	●	●	○
Luxembourg	●	●	●	●
Madagascar	●	●	-	-
Malawi	●	●	-	●
Malaysia	●	●	-	●
Maldives	●	-	-	●
Mali	-	-	-	●
Malta	●	○	●	○
Martinique	●	●	●	●
Mauritania	●	●	-	●
Mauritius	●	●	-	●
Mayotte	●	●	-	○
Mexico	●	●	●	●
Monaco	●	●	-	●
Mongolia	●	-	-	●
Montenegro	●	-	○	○
Montserrat	●	-	●	●
Morocco	●	●	-	●
Mozambique	●	●	-	●
Myanmar	●	-	-	●
Namibia	●	●	○	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Nepal	●	-	-	●
Netherlands	●	●	●	●
New Caledonia	●	-	-	●
New Zealand	●	●	○	●
Nicaragua	●	●	●	●
Niger	●	-	-	-
Nigeria	●	●	-	●
North Macedonia	●	●	-	○
Northern Mariana Islands (Commonwealth of the)	○	-	-	●
Norway	●	●	●	●
Occupied Palestinian Territory	●	●	-	●
Oman	●	●	-	●
Pakistan	●	●	●	●
Panama	●	●	●	●
Papua New Guinea	-	-	-	●
Paraguay	●	-	●	●
Peru	●	-	●	●
Philippines	●	●	●	●
Poland	●	○	●	●
Portugal	●	●	●	●
Puerto Rico	●	●	●	●
Qatar	●	●	-	●
Republic of Korea	●	●	●	●
Republic of Moldova	●	-	-	●
Romania	●	●	●	●
Russian Federation	●	●	○	●
Rwanda	●	●	-	●
Réunion	●	●	●	○
Saba	-	-	-	●
Saint Barthélemy	●	-	-	●
Saint Kitts and Nevis	-	-	-	●
Saint Lucia	●	-	-	●
Saint Martin	●	●	-	●
Saint Pierre and Miquelon	-	-	-	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Saint Vincent and the Grenadines	-	-	●	●
Sao Tome and Principe	●	-	-	○
Saudi Arabia	●	●	-	●
Senegal	●	●	-	●
Serbia	●	-	-	●
Seychelles	●	●	-	●
Sierra Leone	-	●	-	●
Singapore	●	●	●	●
Sint Maarten	●	●	●	●
Slovakia	●	●	-	●
Slovenia	●	●	●	●
Somalia	●	●	-	-
South Africa	●	●	○	●
South Sudan	●	●	-	●
Spain	●	●	●	●
Sri Lanka	●	●	-	●
Sudan	●	●	●	-
Suriname	●	●	●	●
Sweden	●	●	●	●
Switzerland	●	●	●	●
Thailand	●	●	●	●
Timor-Leste	●	-	-	●
Togo	●	●	●	●
Trinidad and Tobago	●	-	●	●
Tunisia	●	●	-	●
Turkey	●	●	●	●
Turks and Caicos Islands	●	-	●	●
Uganda	●	●	-	●
Ukraine	●	○	-	○
United Arab Emirates	●	●	●	●
United Kingdom	●	●	●	●
United Republic of Tanzania	-	●	-	-
United States Virgin Islands	●	●	●	●
United States of America	●	●	●	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Uruguay	●	●	●	●
Uzbekistan	●	●	-	○
Venezuela (Bolivarian Republic of)	●	-	●	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Viet Nam	●	●	-	●
Wallis and Futuna	●	-	-	-
Yemen	●	●	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Zambia	●	●	-	●
Zimbabwe	●	●	-	●

**Newly reported in this update. indicates that information for this variant was received by WHO from official sources. indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available. **Includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern. See also Annex 2: Data, table, and figure notes*

Annex 2. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

References

1. Economic Impacts of COVID-19 on Civil Aviation. ICAO. https://www.icao.int/sustainability/Pages/Economic-Impacts-of-COVID-19.aspx [Accessed 17 November 2021].
2. Losses Reduce but Challenges Continue – Cumulative $201 Billion Losses for 2020-2022. IATA. https://www.iata.org/en/pressroom/2021-releases/2021-10-04-01/ [Accessed 18 November 2021].
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4. Coronavirus (COVID-19) Vaccinations. Our World in Data. https://ourworldindata.org/covid-vaccinations [Accessed 18 November 2021].

COVID-19 Weekly Epidemiological Update

Edition 66, published 16 November 2021

In this edition:

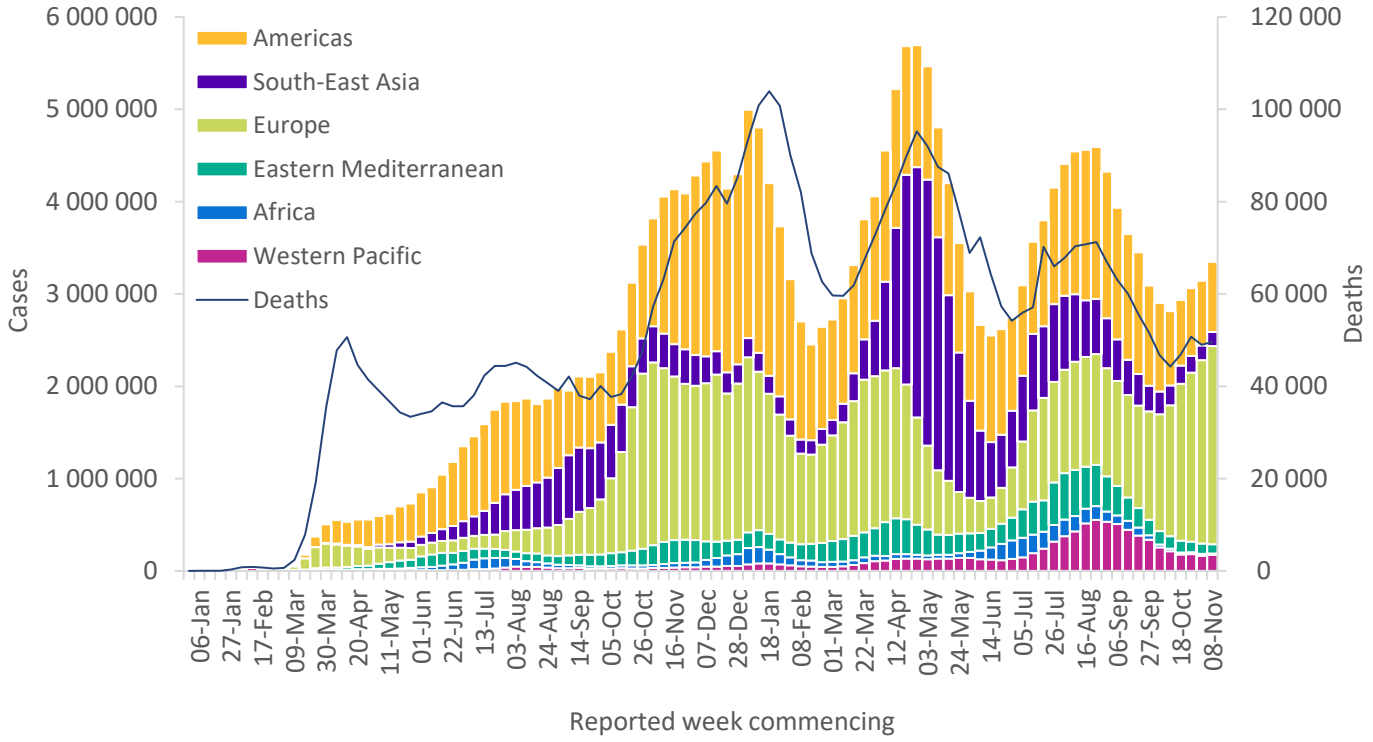
- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Summary of the Weekly Operational Update

Global overview

Data as of 14 November 2021

During the week 8 to 14 November 2021, the increasing trend in new global weekly cases continued, with over 3.3 million new cases reported – a 6% increase as compared to the previous week (Figure 1). The Region of the Americas, the European and the Western Pacific Regions all reported increases in new weekly cases as compared to the previous week, while the other regions reported stable or declining trends (Table 1). Similarly, the European Region reported a 5% increase in new deaths, while the other regions reported stable or declining trends. Globally, just under 50 000 new deaths were reported, similar to the previous week's figures. As of 14 November, over 252 million confirmed cases and over 5 million deaths have been reported.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 14 November 2021**



**See *Annex 3: Data, table, and figure notes*

The regions reporting the highest weekly case incidence per 100 000 population were the European Region (230 new cases per 100 000 population) and the Region of the Americas (74.2 new cases per 100 000 population); these same two regions reported the highest weekly incidence in deaths, of 3.0 and 1.3 per 100 000 population, respectively.

The highest numbers of new cases were reported from the United States of America (550 684 new cases; 8% increase), the Russian Federation (275 579 new cases; similar to the previous week's figures), Germany (254 436 new cases; 50% increase), the United Kingdom (252 905 new cases; similar to the previous week's figures), and Turkey (180 167 new cases; 9% decrease).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 14 November 2021**

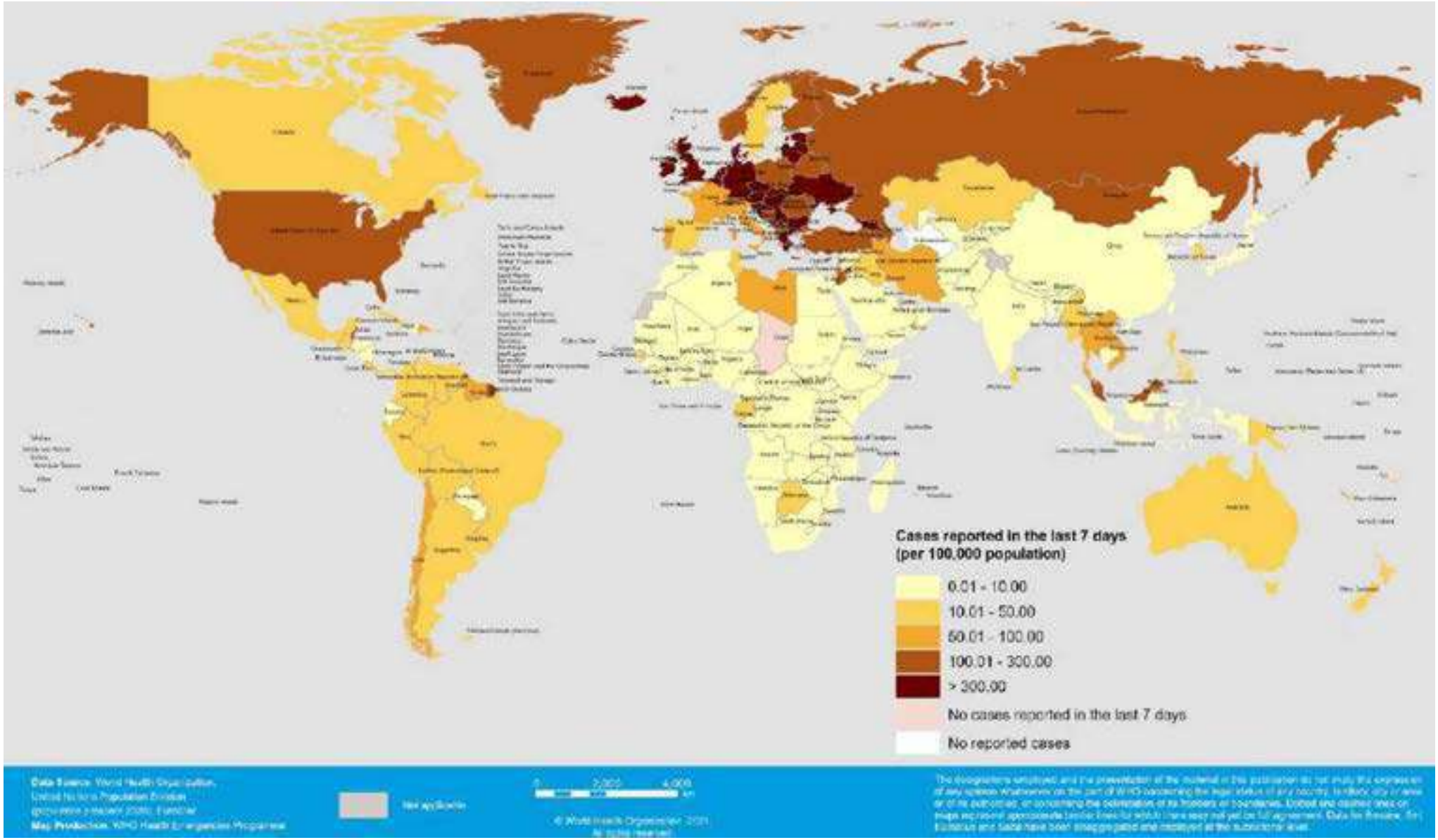
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	2 145 966 (64%)	8%	80 941 615 (32%)	28 304 (57%)	5%	1 480 768 (29%)
Americas	758 669 (23%)	8%	95 089 154 (38%)	12 791 (26%)	-3%	2 320 358 (46%)
Western Pacific	173 930 (5%)	6%	9 772 383 (4%)	2 437 (5%)	-5%	134 617 (3%)
South-East Asia	152 535 (5%)	-3%	44 273 117 (18%)	3 530 (7%)	1%	699 920 (14%)
Eastern Mediterranean	101 743 (3%)	-9%	16 564 274 (7%)	1 974 (4%)	-14%	305 396 (6%)
Africa	13 674 (0%)	-33%	6 185 290 (2%)	548 (1%)	3%	151 689 (3%)
Global	**3 346 517 (100%)**	**6%**	**252 826 597 (100%)**	**49 584 (100%)**	**1%**	**5 092 761 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
***See Annex 3: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

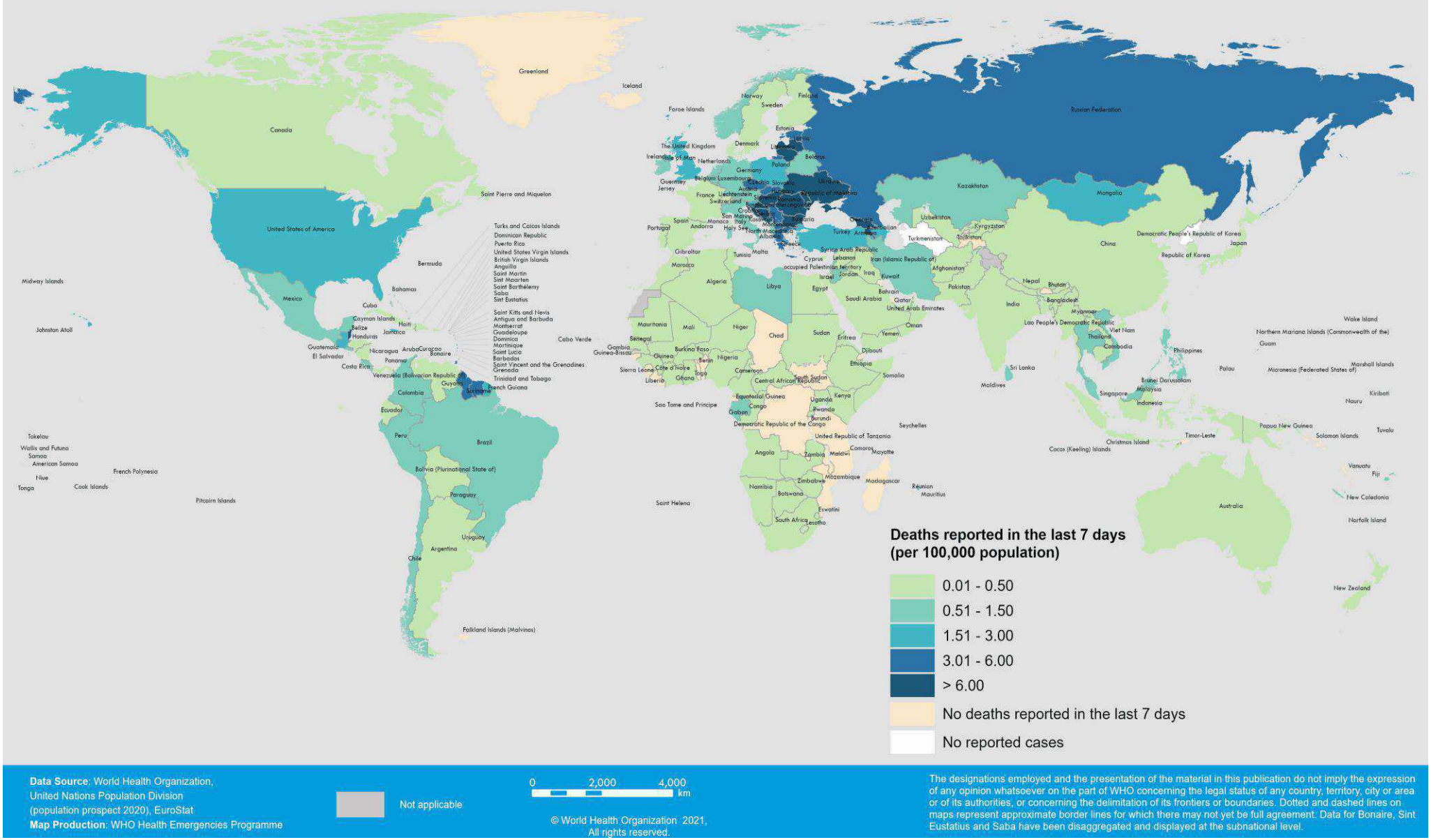
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 8-14 November 2021**



**See *Annex 3: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 8-14 November 2021**



**See *Annex 3: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied by national authorities to control disease spread. Potential Variants of Concern (VOCs), Variants of Interest (VOIs) or Variants Under Monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

The current global genetic epidemiology of SARS-CoV-2 is characterized by a predominance of the Delta variant, with the declining prevalence of other variants among sequences submitted to publicly available datasets or detections reported to WHO (Figure 4, Annex 2). Delta has outcompeted other variants, including other VOCs, in most countries. Of 799 645 sequences uploaded to GISAID with specimens collected in the last 60 days[i], 797 174 (99.7%) were Delta, 791 (0.1%) Gamma, 313 (<0.1%) Alpha, 15 (<0.1%) Beta, and 0.1% comprised other circulating variants (including VOIs Mu and Lambda). Sub-regional and country-level variation continues to be observed; most notably within some South American countries, where the progression of the Delta variant has been more gradual, and other variants (e.g., Gamma, Lambda, Mu) still contribute a large proportion of reported sequences. Moreover, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

Phenotypic characteristics

Available evidence on the phenotypic impacts of VOCs is summarized in Table 2, as well as in previous editions of the COVID-19 Weekly Epidemiological Update. Since the last detailed update on 2 November, there are several new publications on the phenotypic characteristics of VOCs**.**

Results from a retrospective cohort study[1] of patients admitted to a referral hospital in Cape Town, South Africa, were published in a preprint on 4 November 2021. The study compares outcomes between two time periods: 26 March and 10 July 2020 (wave 1) and 15 November 2020 to 15 January 2021 (wave 2). A total of 1182 patients aged 18 years and over were included in the study: 571 during the first wave, and 611 during the second wave. Despite the reported higher numbers of cases and deaths during the second wave, there was no difference in the mortality risk [adjusted odds ratio (aOR) of 0.97, 95% confidence interval (CI) of 0.55-1.7, p=0.9]. Whole-genome sequencing performed on samples from the second wave, found that 97% (113/117) of those tested were identified as the Beta variant. It is possible that the increased use of corticosteroids (92.6% in the second wave as compared to 13.7% in the first), which was found to be associated with lower odds of mortality (aOR=0.4, 95%CI 0.28-0.84, p=0.01), and intensified anticoagulation (93.5% in the second as compared to 62.7% in the first) improved survival.

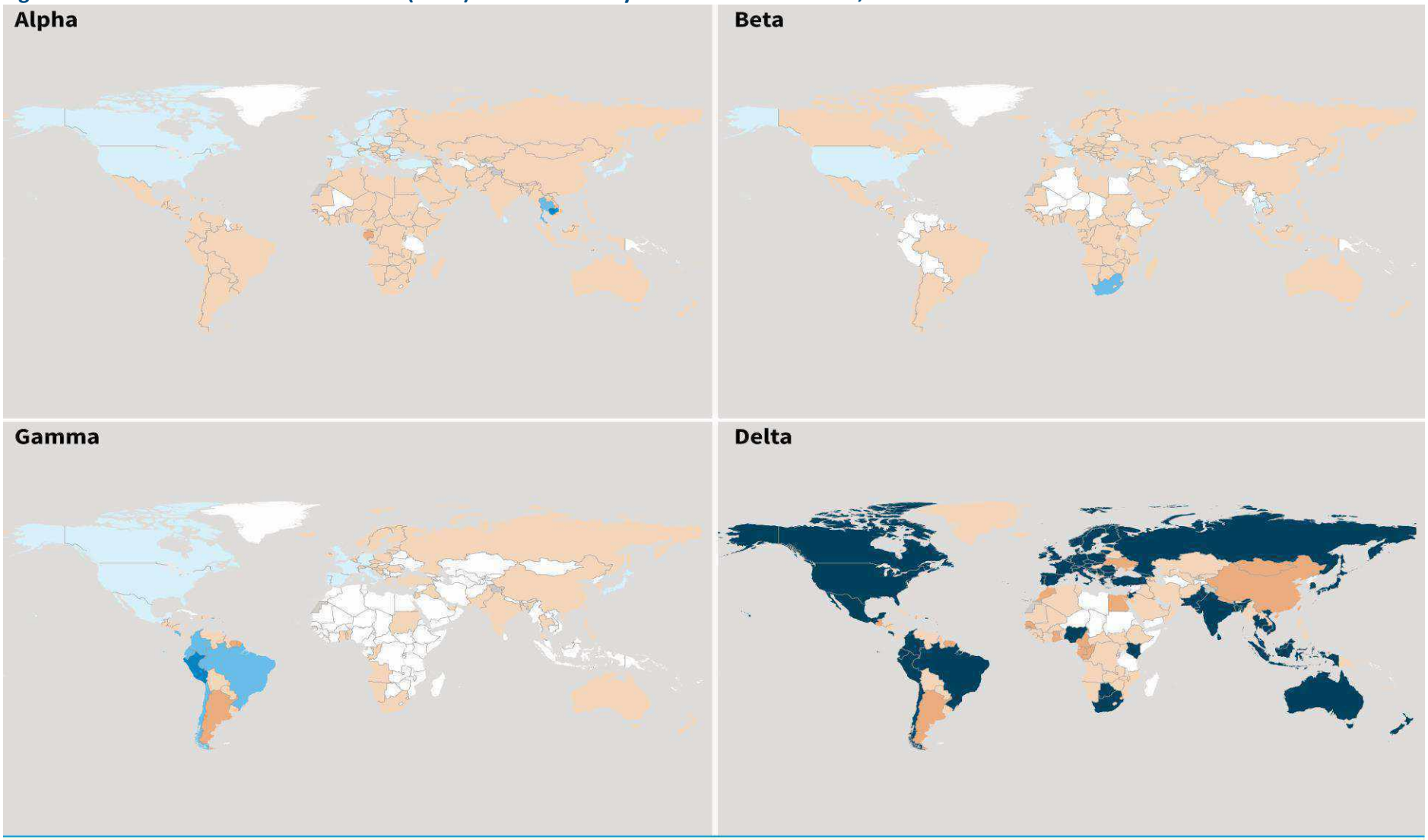
A pre-print study,[2] conducted in the United States of America during a period when Delta variant prevalence was above 95%, evaluated whether vaccine-induced immune responses reduce the amount of nasal viral RNA or the infectious virus titers as compared to the responses in infected, but unvaccinated persons. Authors compared RT-PCR cycle threshold (Ct) data from 699 test-positive anterior nasal swab specimens from fully vaccinated (n=310) or unvaccinated (n=389) COVID-19 cases. Fully vaccinated was defined as having received a second mRNA vaccine dose or single adenovirus vector vaccine dose ≥ 2 weeks prior to testing positive. Low Ct values (<25) were observed in

[i] Includes sequences submitted to GISAID with sample collected dates from 13 September to 12 November 2021 (last reported sample at the time of data extraction), excluding low coverage sequences.

212 of 310 fully vaccinated (68%) and 246 of 389 (63%) unvaccinated individuals, regardless of symptoms at the time of testing. Plaque assays were performed on an additional set of 48 samples with Ct <25, finding no difference in infectious virus titer between vaccinated and unvaccinated groups (p=0.40). Combined with other studies,[3,4] these data indicate that vaccinated as well as unvaccinated individuals infected with the Delta variant may be able to transmit the virus, although other studies suggest this transmission by immunized individuals may be relatively inefficient, as vaccination accelerates viral clearance.[5]

Preliminary analysis reported in a technical briefing by the United Kingdom Health Security Agency using surveillance data from the United Kingdom[6] between 1 August to 5 October 2021 suggests that estimated growth rates remain slightly higher for the Delta sub-lineage AY.4.2 than for other Delta lineages (parental Delta and Delta sub-lineages other than AY.4.2) and that the secondary attack rate for household contacts of cases with AY.4.2 may be slightly higher than for contacts of Delta cases (12.2% (95% CI: 11.8% - 12.7%) vs. 11.2% (95% CI: 11.1% - 11.3%). In non-household settings, the secondary attack rate was higher for AY.4.2 as compared to Delta cases, but this difference was not significant.[7] Initial analyses did not show strong evidence of a difference in risk of hospitalization or death between AY.4.2 and Delta (parental and sub-lineages other than AY.4.2). It is important to note that these analyses did not adjust for crucial factors that can influence outcomes such as age and vaccination status and should be interpreted with caution.

Figure 4. Prevalence of Variants of Concern (VOCs) in the last 60 days and historic detections, data as of 16 November 2021



*Prevalence calculated as a proportion of VOC sequences among total sequences uploaded to GISAID with sample collection dates within the past 60 days prior to the latest date of collection, excluding low coverage sequences, limited to countries with ≥100 total sequences in the same period. Countries assigned by location of sample collection.
**Includes both official reports to WHO and unofficial reports of VOC detections.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Proportion of VOC among total sequences*
- 0.501 - 1.000
- 0.101 - 0.500
- 0.011 - 0.100
- >0.000 - 0.010

- VOC detected, too few sequences to estimate proportion
- No new VOC sequences, VOC previously reported**
- No presence of VOC reported to WHO
- Not applicable

World Health Organization

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Data Source: World Health Organization, GISAID
Map Production: WHO Health Emergencies Programme

Prevalence data based on sequences reported to GISAID, excluding low coverage sequences. See also Annex 2 for reported VOC detections by country/territory/area

Table 2: Summary of phenotypic impacts* of Variants of Concern

WHO label	Alpha	Beta	Gamma	Delta
Transmissibility	Increased transmissibility[8]	Increased transmissibility[9,10]	Increased transmissibility[10,11]	Increased transmissibility [6,10,12,13]
Disease severity	Possible increased risk of hospitalization[14,15], possible increased risk of severe disease and death[16,17]	Possible increased risk of hospitalization[15], possible increased in-hospital mortality[18]	Possible increased risk of hospitalization[15], possible increased risk of severe disease[19]	Possible increased risk of hospitalization[20,21]
Risk of reinfection	Neutralizing activity retained[22], risk of reinfection remains similar[23]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[24]	Moderate reduction in neutralizing activity reported[25]	Reduction in neutralizing activity reported[26–28]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF), no impact on overall result from multiple target RT-PCR; No impact on Ag RDTs observed[29]	No impact on RT-PCR or Ag RDTs observed[28]	None reported to date	No impact on RT-PCR or Ag RDTs observed[30]

**Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.*

Table 3 summarizes the impact of variants on product-specific vaccine efficacy/effectiveness (VE) and quantifies the reduction in VE in the setting of variants compared to non-VOC settings. Since the 2 November update, five notable new studies have provided evidence of COVID-19 vaccine performance against variants of concern.

A peer-reviewed large retrospective cohort study from Scotland evaluated the effectiveness of AstraZeneca-Vaxzevria and Pfizer BioNTech-Comirnaty vaccines at preventing death among 98 066 persons who were aged 18 years and older and who tested positive for infection with the Delta variant.[31] VE against death among those infected with Delta was 91% (95% CI: 86-94%) for AstraZeneca-Vaxzevria and 90% (83-94%) for Pfizer BioNTech-Comirnaty. The maximum possible follow-up time post-second dose for this study was approximately 25 weeks.

A second test-negative case-control study from the United States of America, peer-reviewed, found the Pfizer BioNTech-Comirnaty vaccine to be 90% (89-91%) effective at preventing hospitalization ≥ 14 days post-second dose among immunocompetent adults aged 18 years and older, and 79% (74-83%) effective at preventing hospitalization among immunocompromised adults (individuals with an impaired immune system).[32] The maximum potential follow-up time post full vaccination was approximately 33 weeks for this study. The median interval from time of second dose to hospital admission was 89-90 days for both vaccines for both immunocompetent and immunocompromised adults.

A retrospective cohort study from Finland (not yet peer-reviewed) assessed the effectiveness of AstraZeneca-Vaxzevria, two doses of mRNA, and heterologous AstraZeneca-Vaxzevria/mRNA vaccination at preventing infection and hospitalization among healthcare workers with increasing time since vaccination.[33] VE of two doses of mRNA vaccine against SARS-CoV-2 infection declined from 85% (81-88%) 14-90 days after the second dose to 56% (46-65%) after 6 months. VE of AstraZeneca-Vaxzevria against infection declined from 88% (71-95%) 14-90 days after the second dose to 62% (-177-95%) 91-180 days post second dose. VE of heterologous AstraZeneca-Vaxzevria/mRNA vaccination declined from 80% (72-86%) 14-90 days post second dose to 63% (33-80%) 91-180 days post second dose (no estimates were available for 6+ months for these regimens). VE against hospitalization remained high (>95%) for mRNA vaccination and heterologous AstraZeneca/mRNA vaccination through 180 days post second dose; VE against

hospitalization for homologous AstraZeneca-Vaxzevria decreased from 100% (-∞, 100) 14-90 days post second dose to 81% (9-96%) 91-180 days post second dose.

Finally, a peer-reviewed, large retrospective study from Israel assessed the effectiveness of the third dose of Pfizer BioNTech-Comirnaty vaccine compared to those who had received two doses of the same vaccine 5 or more months prior to the analysis.[34] A third dose of the Pfizer BioNTech-Comirnaty vaccine was 88% (87-90%), 91% (89-92%), 92 (82-97%), and 81% (59-97%) more effective at preventing infection, symptomatic disease, severe disease, and death, seven or more days after the booster dose.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Table 3. Summary of vaccine performance against Variants of Concern

	WHO Emergency Use Listing (EUL) Qualified Vaccines							Vaccines without WHO EUL[+]			
	AstraZeneca-Vaxzevria/SII - Covishield	Beijing CNBG-BBIBP-CorV	Bharat-Covaxi	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Moderna-mRNA-1273/ Pfizer BioN BioNTech-Comirnaty	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Gamaleya-Sputnik V	Novavax-Covavax
Alpha[35,36]											
Summary of VE*	Protection retained against all outcomes										
- Severe disease	↔$_{2}$	-	-	-	↔$_{2}$	↔$_{1}$	↔$_{6}$	-	-	-	-
- Symptomatic disease	↔to↓$_{5}$	-	-	-	↔$_{1}$	↔$_{1}$	↔$_{4}$	-	-	-	↓$_{1}$
- Infection	↔to↓$_{4}$	-	-		↔$_{3}$	-	↔$_{3}$	-	-	-	-
Neutralization	↔to↓$_{8}$	↔$_{1}$	↔$_{2}$	↔$_{4}$	↔to↓$_{12}$	↔to↓$_{2}$	↔to↓$_{40}$	↔to↓↓$_{6}$	↔$_{2}$	↔to↓$_{4}$	↓$_{1}$
Beta[37–40]											
Summary of VE*	Protection retained against severe disease; reduced protection against symptomatic disease; limited evidence										
- Severe disease	-	-	-	↔$_{1}$	↔$_{1}$	-	↔$_{3}$	-	-	-	-
- Symptomatic disease	↔to↓↓↓$_{2}$	-	-	↔$_{1}$	↔$_{1}$	-	↔$_{2}$	-	-	-	↓↓↓$_{1}$
- Infection	-	-	-	-	↔$_{1}$	-	↓$_{1}$	-	-	-	-
Neutralization	↓to↓↓$_{8}$	↔to↓$_{2}$	↓$_{2}$	↓to↓↓$_{8}$	↓to↓↓$_{16}$	↓↓to↓↓↓$_{2}$	↓to↓↓$_{41}$	↓to↓↓↓$_{6}$	↔to↓$_{3}$	↓↓to↓↓↓$_{5}$	↓↓↓$_{1}$
Gamma											
Summary of VE*	Unclear impact; very limited evidence										
- Severe disease	↔$_{1}$	-	-	-	↔$_{1}$	-	↔$_{2}$	-	-	-	-
- Symptomatic disease	↔$_{1}$	-	-	-	↔$_{1}$	-	↔$_{1}$	-	-	-	-
- Infection	↔$_{1}$	-	-	-	↔$_{1}$	-	↔$_{1}$	↔$_{1}$	-	-	-
Neutralization	↔to↓$_{3}$	-	-	↔to↓$_{4}$	↓$_{8}$	-	↔to↓$_{24}$	↔to↓$_{4}$	↔$_{1}$	↓to↓↓$_{3}$	-
Delta[41]											
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection; limited evidence										
- Severe disease	↔$_{3}$	-	-	-	↔$_{3}$	-	↔$_{6}$	-	-	-	-
- Symptomatic disease	↓to↓↓$_{5}$	-	↓$_{1}$	-	↔$_{1}$	-	↔to↓$_{4}$	-	-	-	-
- Infection	↔to↓$_{4}$	-	-	↓↓↓$_{1}$	↔$_{3}$	-	↔to↓$_{3}$	-	-	-	-
Neutralization	↓$_{9}$	-	↔to↓$_{3}$	↔to↓↓$_{8}$	↓$_{7}$	↓to↓↓$_{2}$	↔to↓$_{19}$	↓to↓↓↓$_{4}$	↔to↓$_{2}$	-	-

VE refers to vaccine effectiveness and vaccine efficacy;

[+]As of submission of this update

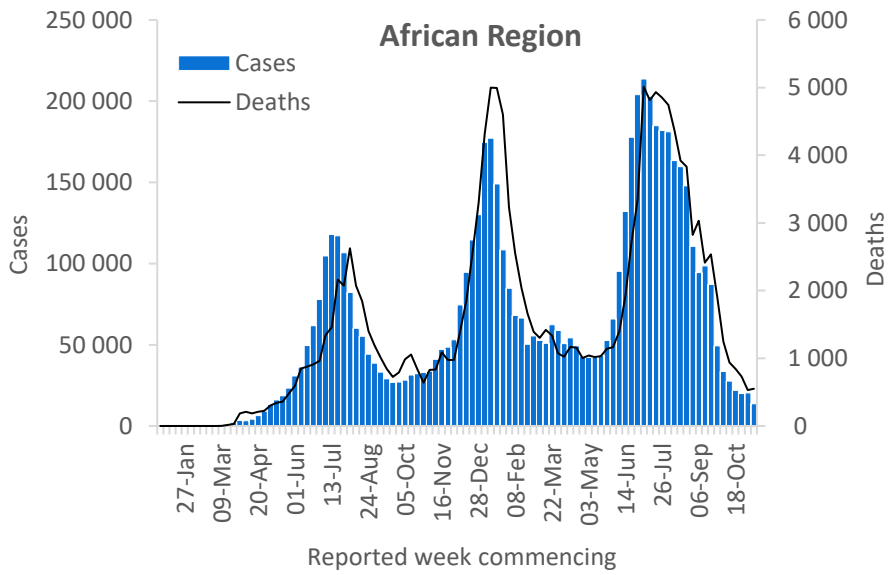
*Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10% reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20% reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30% reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30% reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in the study. The number of studies is shown as subscripts: VE and neutralization studies informing this table can be found on the VIEW-hub Resource Library. References indicated by superscripts next to VOC label are VE from randomized controlled trials (RCTs) informing this table.

WHO regional overviews Epidemiological week 8-14 November 2021

African Region

The case incidence rates in the African Region have continued to decline since July, with a 33% decrease reported as compared to the previous week. However, 31% (15/49) of the countries in the region reported an increase of >10% in new cases as compared to the previous week. Over 500 new deaths were reported this week, similar to the previous week's figures. The highest numbers of new cases were reported from South Africa (1926 new cases; 3.2 new cases per 100 000 population; similar to the previous week), Ethiopia (1584 new cases; 1.4 new cases per 100 000; a 25% decrease), and Cameroon (1371 new cases; 5.2 new cases per 100 000; a 26% decrease).

The highest numbers of new deaths were reported from South Africa (157 new deaths; <1 new death per 100 000 population; similar to the previous week's figures), Ethiopia (82 new deaths; <1 new death per 100 000; similar to the previous week's figures), and Nigeria (55 new deaths; <1 new death per 100 000; a 450% increase).

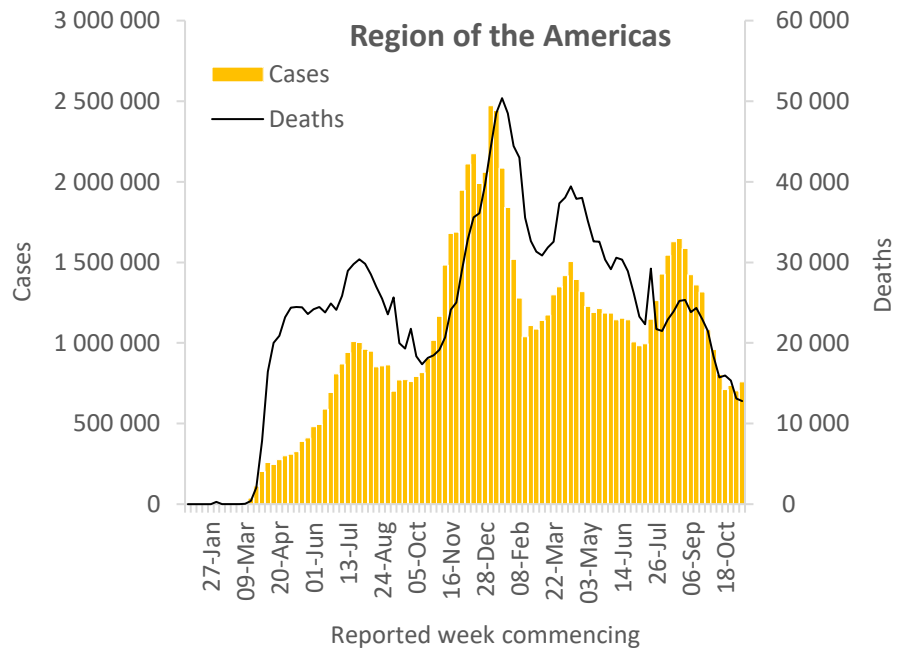


Updates from the African Region

Region of the Americas

The trend in cases in the Region of the Americas increased slightly with over 758 000 new cases reported, an 8% increase as compared to the previous week. Over 12 000 new deaths were reported, a number similar to that of the previous week. Thirty-two percent (19/59) of countries reported an increase of >10% in the number of new cases in the past week. The highest numbers of new cases were reported from the United States of America (550 684 new cases; 166.4 new cases per 100 000; an 8% increase), Brazil (76 738 new cases; 36.1 new cases per 100 000; an 11% increase), and Mexico (19 831 new cases; 15.4 new cases per 100 000; similar to the previous week's figures).

The highest numbers of new deaths were reported from the United States of America (7993 new deaths; 2.4 new deaths per 100 000; a 15% decrease), Mexico (1458 new deaths; 1.1 new deaths per 100 000; similar to the previous week), and Brazil (1431 new deaths; <1 new death per 100 000; a 10% decrease).

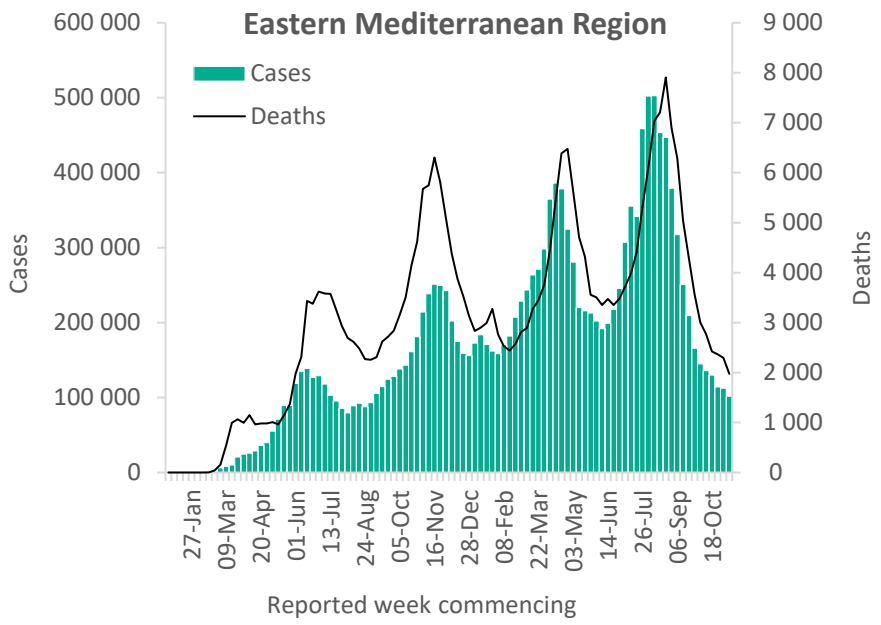


Updates from the Region of the Americas

Eastern Mediterranean Region

Case and death incidence rates in the Eastern Mediterranean Region have continued to decline since mid-July, with over 101 000 new cases and over 1900 new deaths reported, a 9% and 14% decrease, respectively as compared to the previous week. Out of the 22 countries in the Region, five reported an increase of over 10% in new cases, in the past week. The highest numbers of new cases were reported from the Islamic Republic of Iran that contributed to half of the cases in the Region (51 315 new cases; 61.1 new cases per 100 000; a 20% decrease), followed by Jordan (15 964 new cases; 156.5 new cases per 100 000; a 24% increase), and Iraq (6449 new cases; 16.0 new cases per 100 000; a 17% decrease).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (869 new deaths; 1.0 new deaths per 100 000; a 17% decrease), Egypt (424 new deaths; <1 new death per 100 000; similar to the previous week's figures), and Iraq (164 new deaths; <1 new death per 100 000; a 9% decrease).

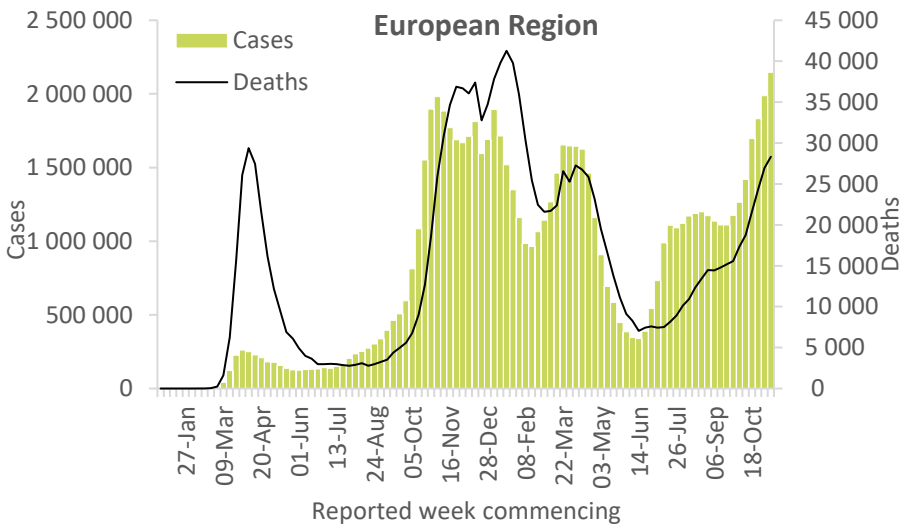


Updates from the Eastern Mediterranean Region

European Region

The European Region has continued to show an increasing trend in both cases and deaths, with over 2.1 million new cases and over 28 000 new deaths reported, increases of 8% and 5%, respectively as compared to the previous week. Nearly half (46%) of the countries which were widely distributed across the Region reported increases of over 10% in new cases in the past week, including Germany which reported the second-highest number of new cases in the past week and a 50% increase in cases as compared to the week before (254 436 new cases; 305.9 new cases per 100 000; a 50% increase). The other countries reporting the highest numbers of new cases were the Russian Federation (275 579 new cases; 188.8 new cases per 100 000; similar to the previous week's figures), and the United Kingdom (252 905 new cases; 372.5 new cases per 100 000; similar to the previous week's figures).

An increase of over 10% in deaths in the past week was seen in 38% of the countries with the greatest change seen in Norway (a 67% increase), Slovakia (a 58% increase), and Croatia (a 55% increase). The countries reporting the highest numbers of new deaths included the Russian Federation (8572 new deaths; 5.9 new deaths per 100 000; similar to the previous week's figures) and Ukraine (4621 new deaths; 10.6 new deaths per 100 000; a 6% increase).

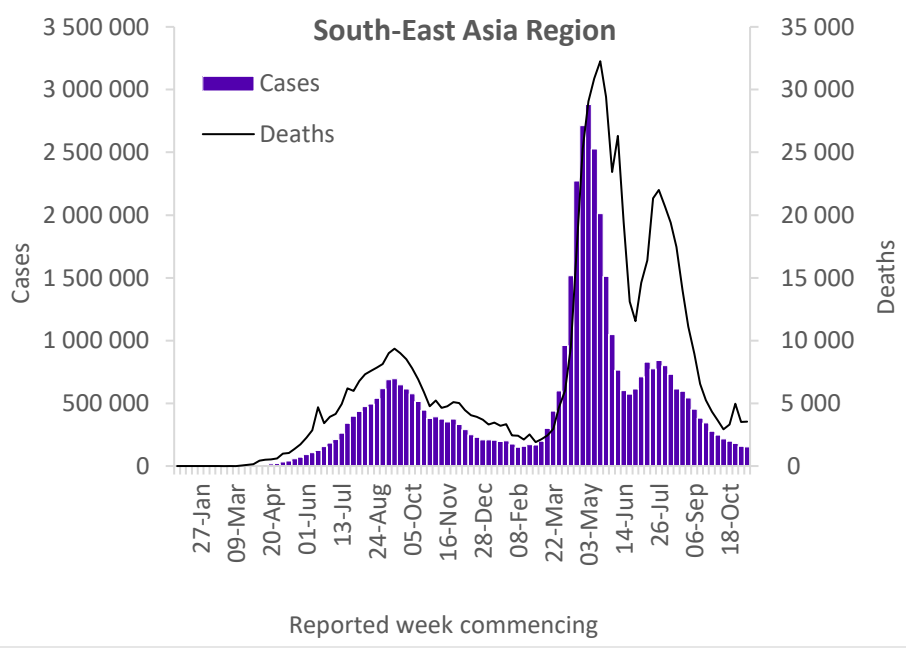


Updates from the European Region

South-East Asia Region

Following a declining trend since July, the incidence of cases and deaths in the South-East Asia Region has begun to plateau with over 152 000 new cases and over 3500 new deaths, similar numbers as compared to the previous week. Three of the ten countries in the region, reported increases of over 10% in new cases in the past week, while the highest numbers of new cases were reported from India (81 771 new cases; 5.9 new cases per 100 000; similar to the previous week's figures), Thailand (50 411 new cases; 72.2 new cases per 100 000; a 10% decrease), and Myanmar (6446 new cases; 11.8 new cases per 100 000; similar to the previous week's figures).

The highest numbers of new deaths were reported from India (2739 new deaths; <1 new death per 100 000; similar to the previous week's figures), Thailand (372 new deaths; <1 new death per 100 000; a 19% decrease), and Sri Lanka (139 new deaths; <1 new death per 100 000; a 23% increase).

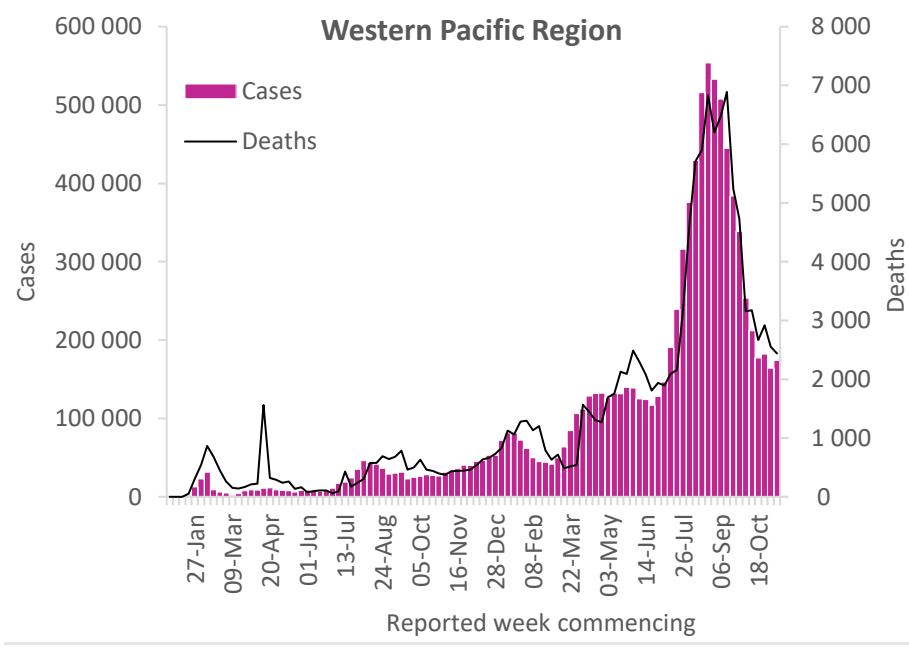


Updates from the South-East Asia Region

Western Pacific Region

During the past several weeks, the incidences of cases and deaths have been relatively stable with just under 174 000 new cases and over 2400 new deaths reported over this past week, a 6% increase and a 5% decrease, respectively as compared to the previous week. However, five of the 27 countries in the Region (19%) reported an increase this week as compared with the previous week, with the greatest changes reported in Fiji (a 42% increase), Viet Nam (a 26% increase), and New Zealand (a 20% increase). Viet Nam also reported the highest number of new cases (57 308; 58.9 new cases per 100 000).

The highest numbers of new deaths were reported from the Philippines (1033 new deaths; <1 new death per 100 000; an 14% decrease), Viet Nam (548 new deaths; <1 new death per 100 000; a 25% increase), and Malaysia (375 new deaths; 1.2 new deaths per 100 000; similar to the previous week's figures).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 15 November, highlights include the following:

- Delivering 6.6 tonnes of emergency medical kits to Sierra Leone following a fire disaster
- COVID-19 Intra-Action Review (IAR) in North Macedonia
- Launching nationwide vaccination campaign to scale up immunity against COVID-19 in Iraq
- Saving young lives through essential health services in Kenya
- Using social and behavioural data to fight COVID-19
- Progress on a subset of indicators from the SPRP 2021 Monitoring and Evaluation Framework
- Updates on WHO's financing to support countries in SPRP 2021 implementation and provision of critical supplies.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations, and communities

Annexes

Annex 1. Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. In addition, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection, as is the case for AstraZeneca-Vaxzevria.
- Table 3 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than 4 months post final dose.
- Studies reporting VOC-specific VE estimates for full vaccination (≥7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine the level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from the same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca-Vaxzevria for infection (when a phase 3 estimate of VE against infection due to non-VOC is available and used as a comparator). In some instances, a study may be included for severe disease or infection outcomes even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.

Annex 2. List of countries/territories/areas reporting variants of concern as of 16 November 2021

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Afghanistan	●	-	-	●
Albania	●	-	-	○
Algeria	●	-	-	●
Andorra	○	○	-	○
Angola	●	●	●	●
Anguilla	●	-	-	●
Antigua and Barbuda	●	●	●	●
Argentina	●	●	●	●
Armenia	●	-	-	●
Aruba	●	●	●	●
Australia	●	●	●	●
Austria	●	●	●	●
Azerbaijan	●	-	-	○
Bahamas	●	-	●	●
Bahrain	●	●	●	●
Bangladesh	●	●	○	●
Barbados	●	-	●	●
Belarus	●	-	-	○
Belgium	●	●	●	●
Belize	●	-	●	●
Benin	●	●	●	●
Bermuda	●	●	-	●
Bhutan	●	●	-	●
Bolivia (Plurinational State of)	●	-	●	●
Bonaire	●	-	●	●
Bosnia and Herzegovina	●	●	●	○
Botswana	○	●	-	●
Brazil	●	●	●	●
British Virgin Islands	●	-	●	●
Brunei Darussalam	●	●	-	●
Bulgaria	●	●	-	●
Burkina Faso	●	-	-	●
Burundi	●	●	-	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Cabo Verde	●	-	-	●
Cambodia	●	●	-	●
Cameroon	●	●	-	●
Canada	●	●	●	●
Cayman Islands	●	●	●	●
Central African Republic	●	●	-	●
Chad	●	-	-	-
Chile	●	●	●	●
China	●	●	●	●
Colombia	●	-	●	●
Comoros	-	●	-	-
Congo	●	○	●	●
Costa Rica	●	●	●	●
Croatia	●	●	●	○
Cuba	●	●	-	●
Curaçao	●	●	●	●
Cyprus	●	●	-	○
Czechia	●	●	●	●
Côte d'Ivoire	●	●	-	○
Democratic Republic of the Congo	●	●	-	●
Denmark	●	●	●	●
Djibouti	●	●	-	-
Dominica	●	-	-	●
Dominican Republic	●	-	●	●
Ecuador	●	-	●	●
Egypt	●	-	-	●
El Salvador	●	-	●	●
Equatorial Guinea	●	●	-	○
Estonia	●	●	○	○
Eswatini	○	●	-	●
Ethiopia	●	-	-	●
Falkland Islands (Malvinas)	●	●	-	-
Faroe Islands	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Fiji	○	-	-	●
Finland	●	●	●	●
France	●	●	●	●
French Guiana	●	●	●	●
French Polynesia	●	●	●	●
Gabon	●	●	-	●
Gambia	●	-	-	●
Georgia	●	○	-	●
Germany	●	●	●	●
Ghana	●	●	●	●
Gibraltar	●	-	-	○
Greece	●	●	●	●
Greenland	-	-	-	●*
Grenada	●	-	-	●
Guadeloupe	●	●	●	●
Guam	●	●	●	●
Guatemala	●	●	●	●
Guinea	●	●	-	●
Guinea-Bissau	●	●	-	●
Guyana	-	-	●	●
Haiti	●	-	●	●
Honduras	●	-	●	●
Hungary	●	○	●	○
Iceland	●	●	●	●
India	●	●	●	●
Indonesia	●	●	-	●
Iran (Islamic Republic of)	●	●	-	●
Iraq	●	●	●	●
Ireland	●	●	●	●
Israel	●	●	●	●
Italy	●	●	●	●
Jamaica	●	-	-	●
Japan	●	●	●	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Jordan	●	●	●	●
Kazakhstan	●	○	-	●
Kenya	●	●	-	●
Kosovo[1]	●	○	-	○
Kuwait	●	●	-	●
Kyrgyzstan	●	●	-	●
Lao People's Democratic Republic	●	-	-	●
Latvia	●	●	●	○
Lebanon	●	-	-	●
Lesotho	-	●	-	○
Liberia	●	●	-	●
Libya	●	●	-	-
Liechtenstein	●	-	○	○
Lithuania	●	●	●	○
Luxembourg	●	●	●	●
Madagascar	●	●	-	-
Malawi	●	●	-	●
Malaysia	●	●	-	●
Maldives	●	-	-	●
Mali	-	-	-	●
Malta	●	○	●	○
Martinique	●	●	●	●
Mauritania	●	●	-	●
Mauritius	●	●	-	●
Mayotte	●	●	-	○
Mexico	●	●	●	●
Monaco	●	●	-	●
Mongolia	●	-	-	●
Montenegro	●	-	○	○
Montserrat	●	-	●	●
Morocco	●	●	-	●
Mozambique	●	●	-	●
Myanmar	●	-	-	●
Namibia	●	●	○	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Nepal	●	-	-	●
Netherlands	●	●	●	●
New Caledonia	●	-	-	●
New Zealand	●	●	○	●
Nicaragua	●	●	●	●
Niger	●	-	-	-
Nigeria	●	●	-	●
North Macedonia	●	●	-	○
Northern Mariana Islands (Commonwealth of the)	○	-	-	●
Norway	●	●	●	●
Occupied Palestinian Territory	●	●	-	●
Oman	●	●	-	●
Pakistan	●	●	●	●
Panama	●	●	●	●
Papua New Guinea	-	-	-	●
Paraguay	●	-	●	●
Peru	●	-	●	●
Philippines	●	●	●	●
Poland	●	○	●	●
Portugal	●	●	●	●
Puerto Rico	●	●	●	●
Qatar	●	●	-	●
Republic of Korea	●	●	●	●
Republic of Moldova	●	-	-	●
Romania	●	●	●	●
Russian Federation	●	●	○	●
Rwanda	●	●	-	●
Réunion	●	●	●	○
Saba	-	-	-	●
Saint Barthélemy	●	-	-	●
Saint Kitts and Nevis	-	-	-	●
Saint Lucia	●	-	-	●
Saint Martin	●	●	-	●
Saint Pierre and Miquelon	-	-	-	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Saint Vincent and the Grenadines	-	-	●	●
Sao Tome and Principe	●	-	-	○
Saudi Arabia	●	●	-	●
Senegal	●	●	-	●
Serbia	●	-	-	●
Seychelles	●	●	-	●
Sierra Leone	-	●	-	●
Singapore	●	●	●	●
Sint Maarten	●	●	●	●
Slovakia	●	●	-	●
Slovenia	●	●	●	●
Somalia	●	●	-	-
South Africa	●	●	○	●
South Sudan	●	●	-	●
Spain	●	●	●	●
Sri Lanka	●	●	-	●
Sudan	●	●	●	-
Suriname	●	●	●	●
Sweden	●	●	●	●
Switzerland	●	●	●	●
Thailand	●	●	●	●
Timor-Leste	●	-	-	●
Togo	●	●	●	●
Trinidad and Tobago	●	-	●	●
Tunisia	●	●	-	●
Turkey	●	●	●	●
Turks and Caicos Islands	●	-	●	●
Uganda	●	●	-	●
Ukraine	●	○	-	○
United Arab Emirates	●	●	●	●
United Kingdom	●	●	●	●
United Republic of Tanzania	-	●	-	-
United States Virgin Islands	●	●	●	●
United States of America	●	●	●	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Uruguay	●	●	●	●
Uzbekistan	●	●	-	○
Venezuela (Bolivarian Republic of)	●	-	●	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Viet Nam	●	●	-	●
Wallis and Futuna	●	-	-	-
Yemen	●	●	-	-
Zambia	●	●	-	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Zimbabwe	●	●	-	●

**Newly reported in this update. indicates that information for this variant was received by WHO from official sources. indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available. **Includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern. See also Annex 3: Data, table, and figure notes*

Annex 3. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at the global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

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COVID-19 Weekly Epidemiological Update

Edition 65, published 9 November 2021

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Summary of the Weekly Operational Update

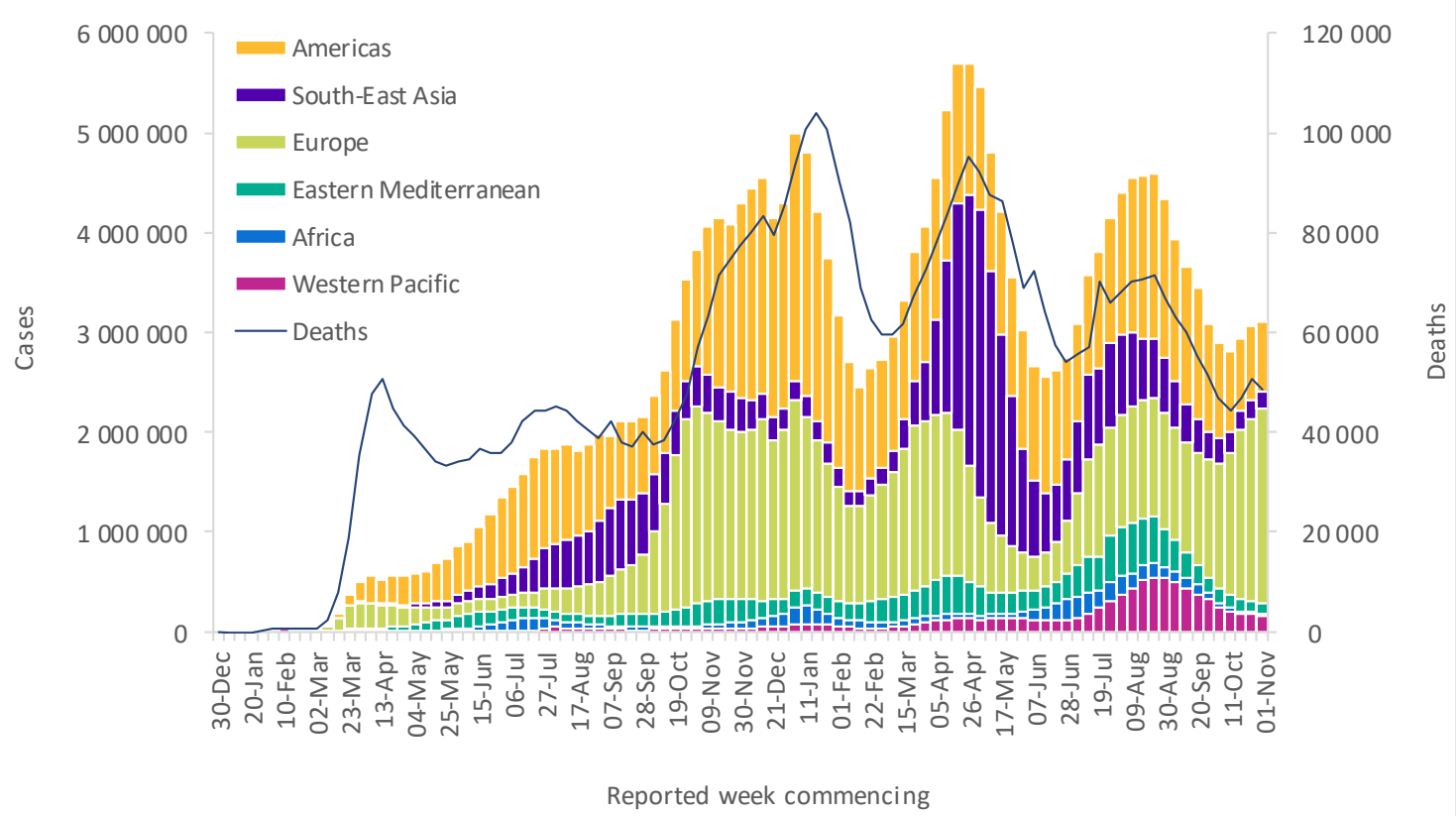
Global overview

Data as of 7 November 2021

During the week 1 to 7 November 2021, a slight upward trend (1% increase) in new weekly cases was observed, with just over 3.1 million new cases reported (Figure 1). The WHO European Region reported a 7% increase in new weekly cases as compared to the previous week, while other regions reported declines or stable trends (Table 1). Similarly, the European Region reported a 10% increase in new deaths, while other regions reported declining trends. Globally, over 48 000 new deaths were reported, a 4% decrease from the previous week.

As of 7 November, over 249 million confirmed cases and over 5 million deaths have been reported.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 7 November 2021**



**See *Annex 2: Data, table, and figure notes*

The regions reporting the highest weekly case incidence rates per 100 000 population were the European Region (208.9 new cases per 100 000 population) and the Region of the Americas (68.6 new cases per 100 000

population); the same two regions reported the highest weekly incidence in deaths, of 2.9 and 1.3 per 100 000 population, respectively.

The highest numbers of new cases were reported from the United States of America (510 968 new cases; 3% decrease), the Russian Federation (281 305 new cases; 3% increase), the United Kingdom (252 104 new cases; 12% decrease), Turkey (197 335 new cases; 8% increase), and Germany (169 483 new cases; 29% increase).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 7 November 2021**

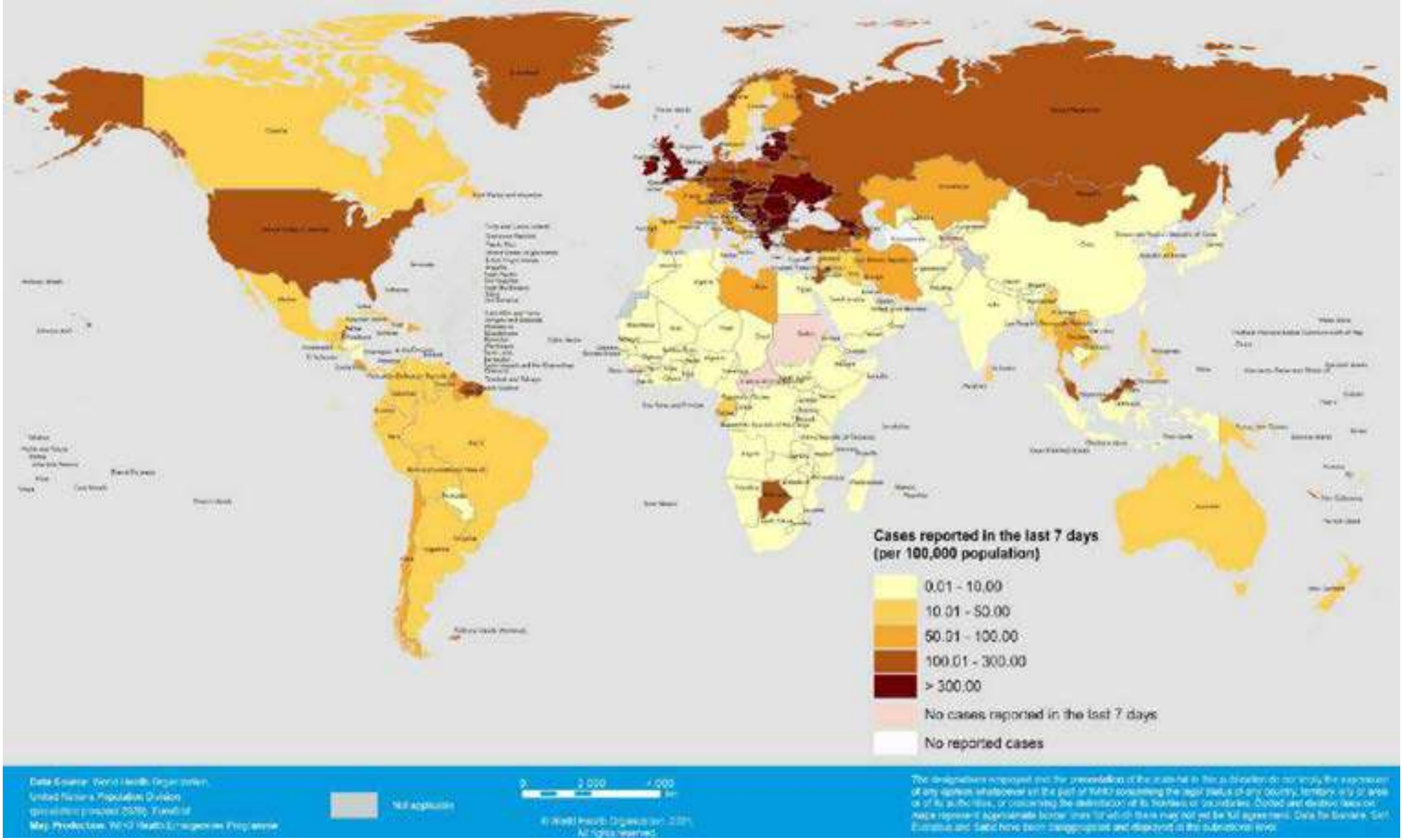
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	1 949 419 (63%)	7%	78 757 071 (32%)	26 726 (55%)	10%	1 452 069 (29%)
Americas	701 791 (23%)	-5%	94 330 064 (38%)	13 106 (27%)	-14%	2 307 543 (46%)
Western Pacific	162 037 (5%)	-9%	9 583 381 (4%)	2 553 (5%)	-13%	132 180 (3%)
South-East Asia	157 450 (5%)	-13%	44 120 582 (18%)	3 511 (7%)	-29%	696 390 (14%)
Eastern Mediterranean	112 033 (4%)	-2%	16 462 085 (7%)	2 277 (5%)	-2%	303 354 (6%)
Africa	20 456 (1%)	3%	6 171 616 (2%)	530 (1%)	-27%	151 141 (3%)
Global	**3 103 186 (100%)**	**1%**	**249 425 563 (100%)**	**48 703 (100%)**	**-4%**	**5 042 690 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
***See Annex 2: Data, table, and figure notes*

For the latest data and other updates on COVID-19, please see:

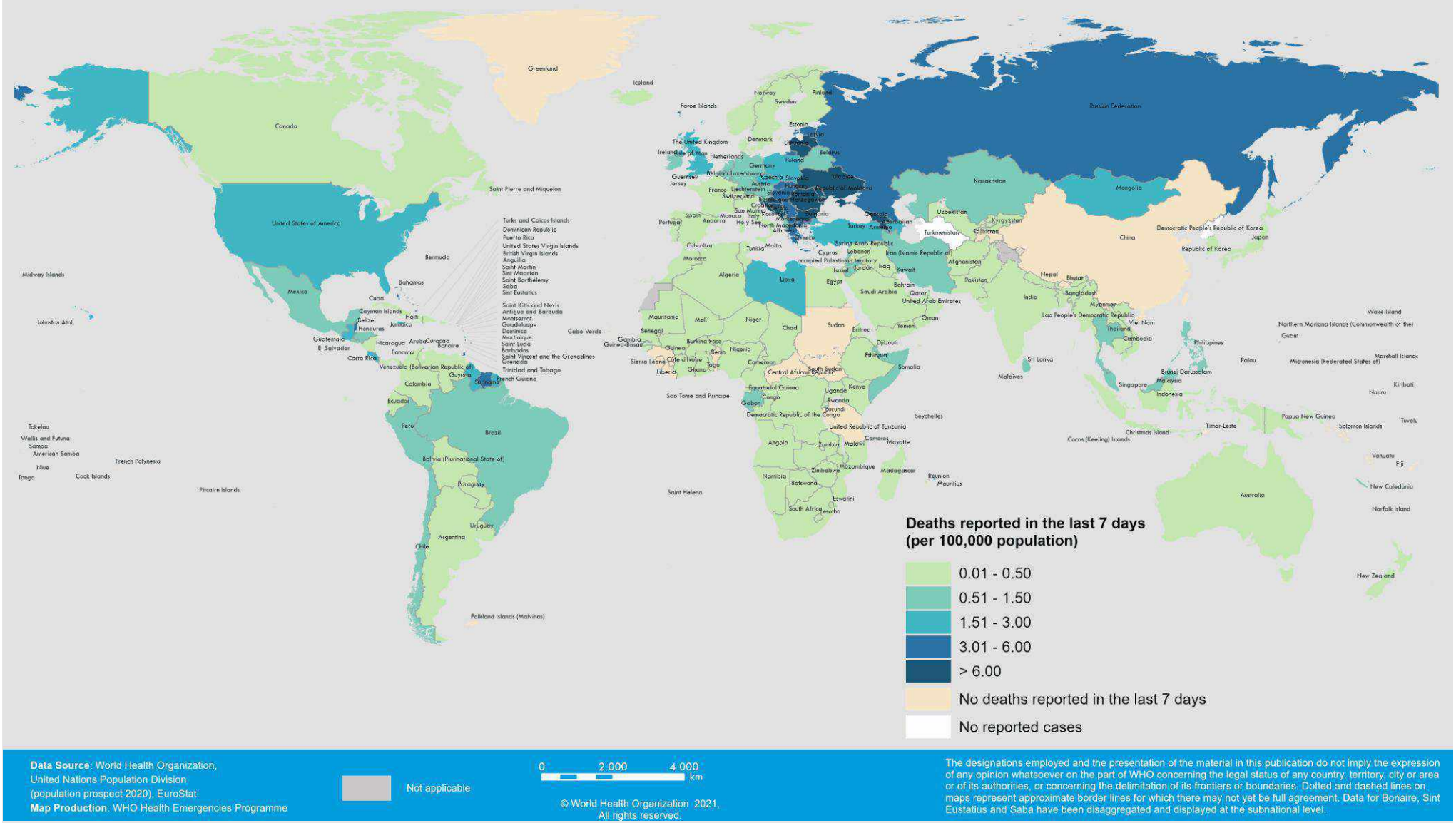
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 1-7 November 2021**



**See *Annex 2: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 1-7 November 2021**



**See *Annex 2: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied by national authorities to control disease spread. Potential Variants of Concern (VOCs), Variants of Interest (VOIs) or Variants Under Monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants.

On 9 November 2021, a list of formerly monitored variants was included on the WHO Tracking SARS-CoV-2 variants website. This comprises former VOCs/VOIs/VUMs, including their lineages, that have been found to no longer be circulating at levels of global public health significance; had been circulating for a long time without major impacts on the overall epidemiological situation; or, scientific evidence demonstrated that the variant is not associated with concerning properties. In addition to three previously reclassified variants, 10 VUMs were recently reclassified to this category based on diminishing numbers of detections and epidemiological risks. These variant classifications will be revisited if new evidence of epidemiological or phenotypic impacts becomes available.

Geographic spread and prevalence of VOCs

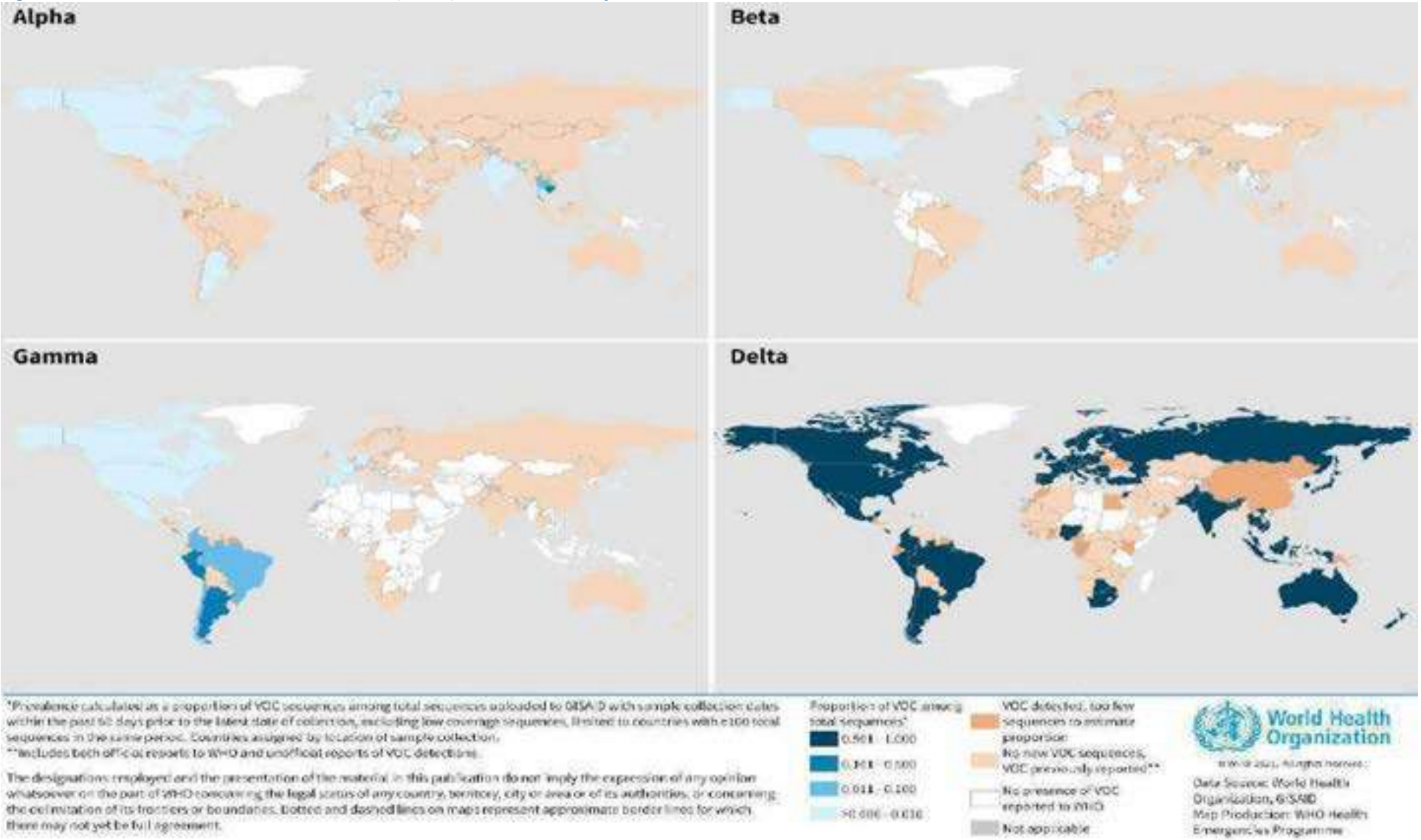
The current global genetic epidemiology of SARS-CoV-2 is characterized by a predominance of the Delta variant, with declining prevalence of other variants among sequences submitted to publicly available datasets or detections reported to WHO (Figure 4, Annex 1). Delta has outcompeted other variants, including other VOCs, in most countries. Of 814 165 sequences uploaded to GISAID with specimens collected in the last 60 days[1], 810 946 (99.6%) were Delta, 1163 (0.1%) Gamma, 400 (<0.1%) Alpha, 23 (<0.1%) Beta, and 0.2% comprised other circulating variants (including VOIs Mu and Lambda). Sub-regional and country-level variation continues to be observed; most notably within some South American countries, where the progression of the Delta variant has been more gradual, and other variants (e.g., Gamma, Lambda, Mu) still contribute a large proportion of reported sequences. Moreover, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19

[1] Includes sequences submitted to GISAID with sample collected dates from 4 September to 3 November 2021 (last reported sample at the time of data extraction), excluding low coverage sequences.

Figure 4. Prevalence of Variants of Concern (VOCs) in the last 60 days and historic detections, data as of 9 November 2021



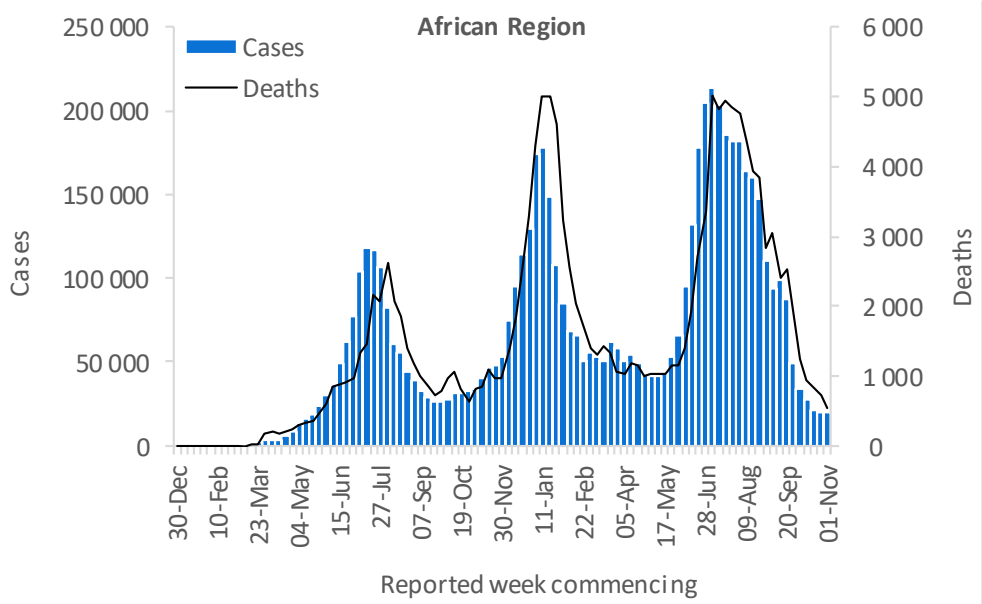
Prevalence data based on sequences reported to GISAID, excluding low coverage sequences. See also Annex 1 for reported VOC detections by country/territory/area

WHO regional overviews Epidemiological week 1-7 November 2021

African Region

After a decreasing trend since July 2021, case incidence rates in the African Region have begun to plateau, with over 20 000 new cases reported this week. Over 500 new deaths were reported, a 27% decrease as compared to the previous week. However, substantial increases (>15%) in new cases were reported in a third of the countries in the region (15/49; 31%). The highest numbers of new cases were reported from Botswana (6341 new cases; 269.6 new cases per 100 000 population; a 279% increase; largely due to batch reporting), Ethiopia (2102 new cases; 1.8 new cases per 100 000; a 37% decrease), and South Africa (1865 new cases; 3.1 new cases per 100 000; a 27% decrease).

The highest numbers of new deaths were reported from South Africa (156 new deaths; <1 new death per 100 000 population; a 37% decrease), Ethiopia (80 new deaths; <1 new death per 100 000; a 32% decrease), and Cameroon (45 new deaths; <1 new death per 100 000; a 48% decrease).

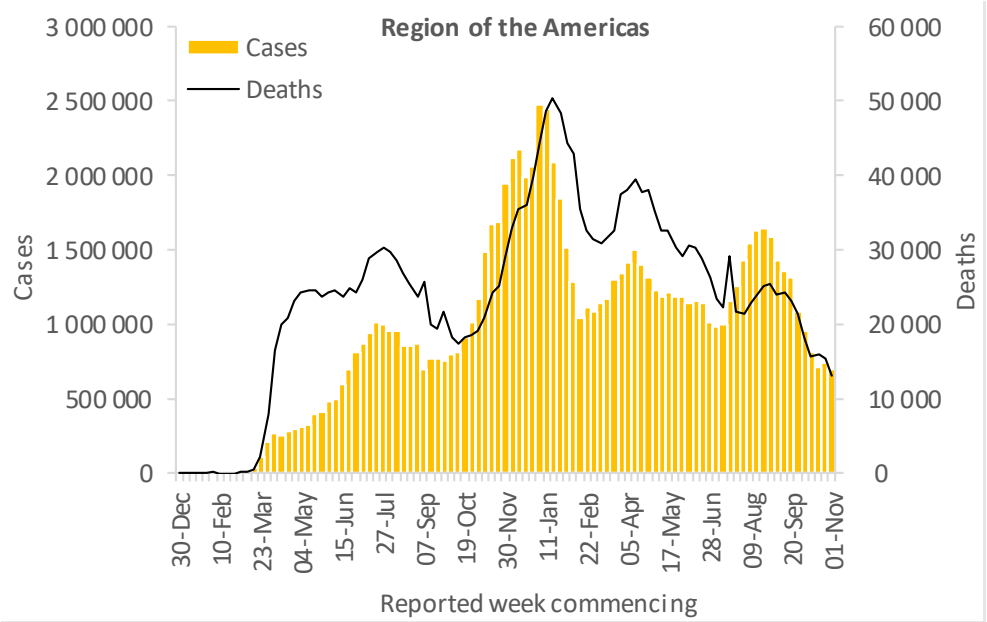


Updates from the African Region

Region of the Americas

The overall declining trend continued this week in the Region of the Americas, with over 701 000 new cases and over 13 000 new deaths reported, decreases of 5% and 14% respectively as compared to the previous week. Despite this, 9% (5/59) of countries reported an increase in the number of new cases in the past week. The highest numbers of new cases were reported from the United States of America (510 968 new cases; 154.4 new cases per 100 000; a 3% decrease), Brazil (69 057 new cases; 32.5 new cases per 100 000; a 15% decrease), and Mexico (19 543 new cases; 15.2 new cases per 100 000; a 4% increase).

The highest numbers of new deaths were reported from the United States of America (8101 new deaths; 2.4 new deaths per 100 000; a 15% decrease), Brazil (1598 new deaths; <1 new death per 100 000; a 31% decrease), and Mexico (1463 new deaths; 1.1 new deaths per 100 000; a 5% decrease).

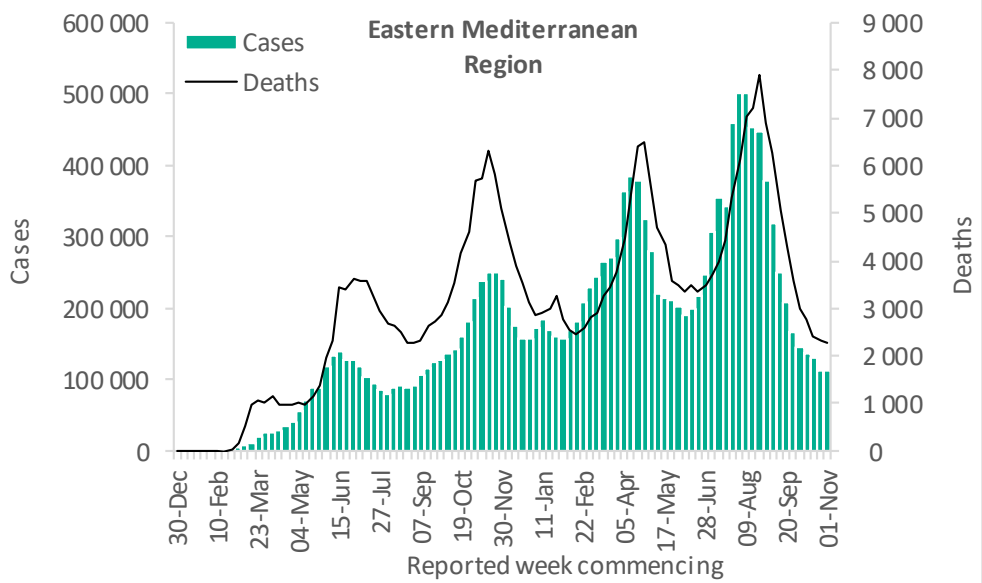


Updates from the Region of the Americas

Eastern Mediterranean Region

After a decreasing trend since mid-August 2021, case and death incidence rates in the Eastern Mediterranean Region have begun to plateau, with over 112 000 new cases and over 2200 new deaths reported. Out of the 22 countries in the Region, four reported an increase of over 10% in new cases, in the past week. The highest numbers of new cases were reported from the Islamic Republic of Iran that contributed to half of cases in the Region (64 049 new cases; 76.3 new cases per 100 000; similar to previous week), followed by Jordan (12 889 new cases; 126.3 new cases per 100 000; a 17% increase), and Iraq (7737 new cases; 19.2 new cases per 100 000; a 16% decrease).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (1047 new deaths; 1.2 new deaths per 100 000; similar to previous week), Egypt (419 new deaths; <1 new death per 100 000; a 20% increase), and Iraq (181 new deaths; <1 new death per 100 000; a 10% decrease).

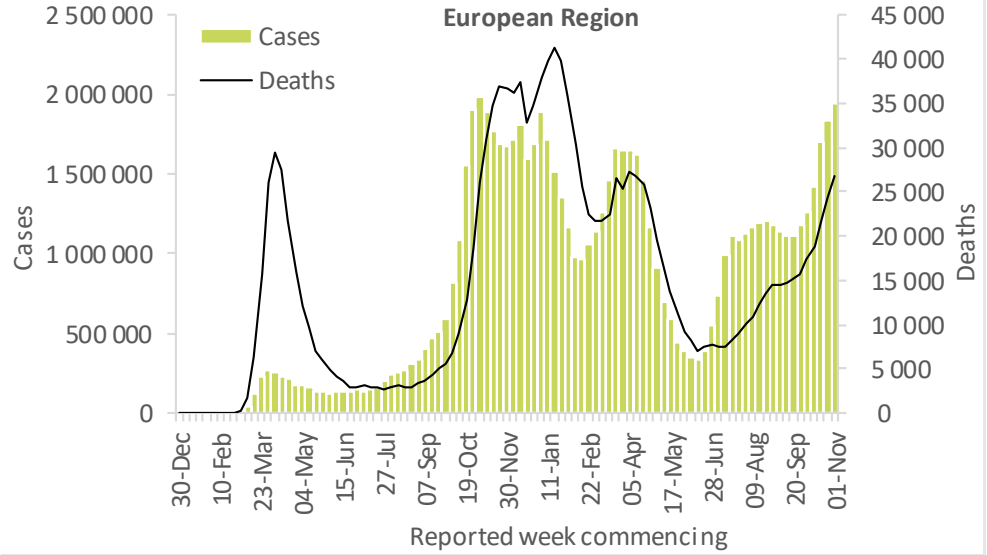


Updates from the Eastern Mediterranean Region

European Region

The European Region has continued to show an increasing trend in both cases and deaths, with over 1.9 million new cases and over 26 000 new deaths reported, increases of a 7% and a 10% increase respectively as compared to the previous week. Out of the 61 countries in the Region, 26 (42%) reported increases of 10% or more in cases in the past week. The highest numbers of new cases were reported from Russian Federation (281 305 new cases; 192.8 new cases per 100 000; a 3% increase), The United Kingdom (252 104 new cases; 371.4 new cases per 100 000; a 12% decrease), and Turkey (197 335 new cases; 234.0 new cases per 100 000; an 8% increase).

The highest numbers of new deaths were reported from the Russian Federation (8276 new deaths; 5.7 new deaths per 100 000; similar to the previous week's figures), Ukraine (4355 new deaths; 10.0 new deaths per 100 000; a 13% increase), and Romania (3158 new deaths; 16.3 new deaths per 100 000; similar to the previous week's figures).

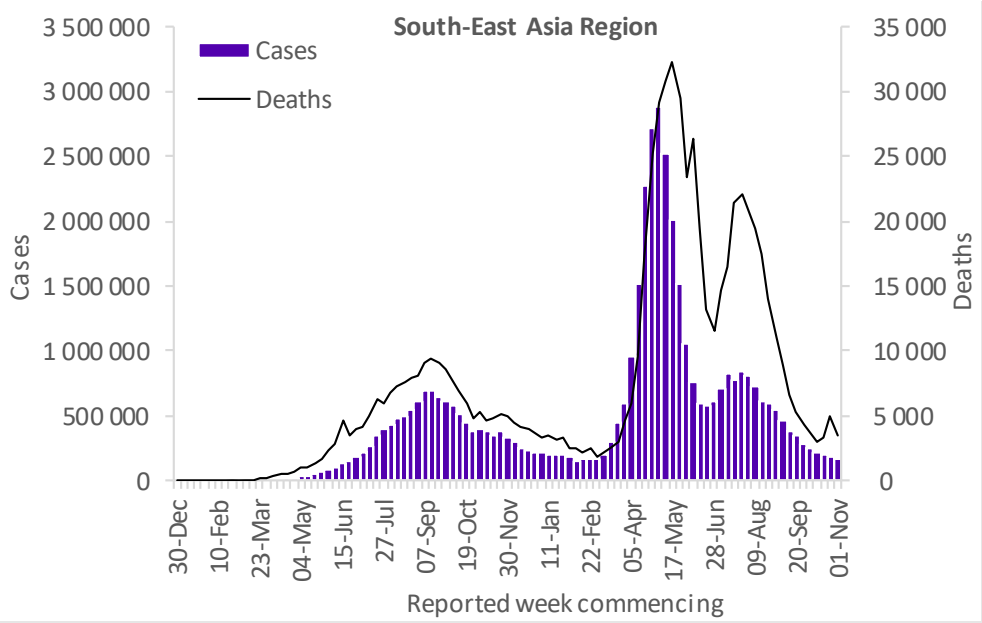


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 157 000 new cases and over 3500 new deaths, a 13% and a 29% decrease respectively as compared to the previous week. This declining trend has been observed in the Region for over three months, notwithstanding a spike in deaths observed during the week 25-31 October which was largely due to a backlog in the reporting of deaths from an area in India. The highest numbers of new cases were reported from India (82 236 new cases; 6.0 new cases per 100 000; a 16% decrease), Thailand (55 975 new cases; 80.2 new cases per 100 000; a 9% decrease), and Myanmar (6743 new cases; 12.4 new cases per 100 000; a 16% increase).

The highest numbers of new deaths were reported from India (2605 new deaths; <1 new death per 100 000; a 33% decrease), Thailand (459 new deaths; <1 new death per 100 000; a 2% increase), and Indonesia (140 new deaths; <1 new death per 100 000; a 30% decrease).

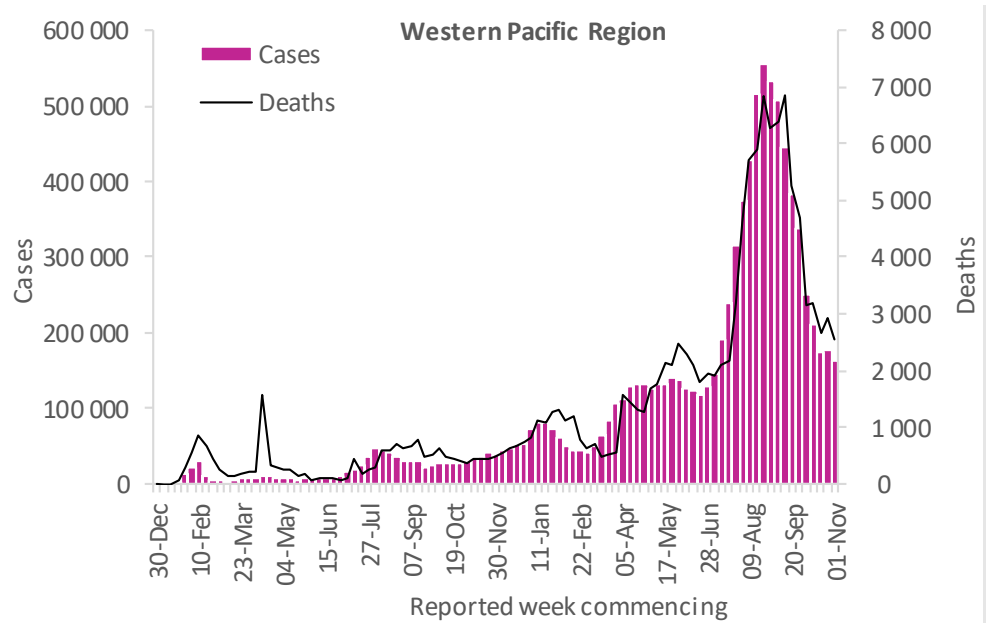


Updates from the South-East Asia Region

Western Pacific Region

Decreasing trends observed in Western Pacific Region continued this week, with over 162 000 new cases and over 2500 new deaths reported, decreases of 9% and 13% respectively as compared to the previous week. However, seven countries in the Region (25%) reported an increase this week as compared with the previous week. The highest numbers of new cases were reported from Viet Nam (45 435 new cases; 46.7 new cases per 100 000; a 48% increase), Malaysia (35 303 new cases; 109.1 new cases per 100 000; a 13% decrease), and Singapore (20 569 new cases; 351.6 new cases per 100 000; a 21% decrease).

The highest numbers of new deaths were reported from the Philippines (1195 new deaths; 1.1 new deaths per 100 000; an 18% decrease), Viet Nam (440 new deaths; <1 new death per 100 000; a 7% increase), and Malaysia (380 new deaths; 1.2 new deaths per 100 000; a 27% decrease).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 8 November, highlights include the following:

- WHO/Europe increases support to Romania during a critical phase of its COVID-19 response
- Belize receives twenty patient monitors as part of the India-UN Development Partnership Fund
- Partnering to support the COVID-19 response and resilience of Sri Lanka's primary health care system
- Returning migrant workers receive medical care and support in Lao People's Democratic Republic
- Emergency Medical Team (EMT) support to Mauritania
- WHO, faith partners and national governments collaborate for COVID-19 responses
- An offline intervention from WHO's Civil Society Organization (CSO) Initiative in the Philippines
- Progress on a subset of indicators from the SPRP 2021 Monitoring and Evaluation Framework
- Updates on WHO's financing to support countries in SPRP 2021 implementation and provision of critical supplies.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations, and communities

Annex 1. List of countries/territories/areas reporting variants of concern as of 9 November 2021

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Afghanistan	●	-	-	●
Albania	●	-	-	○
Algeria	●	-	-	●
Andorra	○	○	-	○
Angola	●	●	●	●
Anguilla	●	-	-	●
Antigua and Barbuda	●	●	●	●
Argentina	●	●	●	●
Armenia	●	-	-	●
Aruba	●	●	●	●
Australia	●	●	●	●
Austria	●	●	●	●
Azerbaijan	●	-	-	○
Bahamas	●	-	●	●
Bahrain	●	●	●	●
Bangladesh	●	●	○	●
Barbados	●	-	●	●
Belarus	●	-	-	○
Belgium	●	●	●	●
Belize	●	-	●	●
Benin	●	●	●	●
Bermuda	●	●	-	●
Bhutan	●	●	-	●
Bolivia (Plurinational State of)	●	-	●	●*
Bonaire	●	-	●	●
Bosnia and Herzegovina	●	●	●	○
Botswana	○	●	-	●
Brazil	●	●	●	●
British Virgin Islands	●	-	●	●
Brunei Darussalam	●	●	-	●
Bulgaria	●	●	-	●
Burkina Faso	●	-	-	●
Burundi	●	●	-	●
Cabo Verde	●	-	-	●
Cambodia	●	●	-	●
Cameroon	●	●	-	●
Canada	●	●	●	●
Cayman Islands	●	●	●	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Central African Republic	●	●	-	●
Chad	●	-	-	-
Chile	●	●	●	●
China	●	●	●	●
Colombia	●	-	●	●
Comoros	-	●	-	-
Congo	●	○	●	●
Costa Rica	●	●	●	●
Croatia	●	●	●	○
Cuba	●	●	-	●
Curaçao	●	●	●	●
Cyprus	●	●	-	○
Czechia	●	●	●	●
Côte d'Ivoire	●	●	-	○
Democratic Republic of the Congo	●	●	-	●
Denmark	●	●	●	●
Djibouti	●	●	-	-
Dominica	●	-	-	●
Dominican Republic	●	-	●	●
Ecuador	●	-	●	●
Egypt	●	-	-	●
El Salvador	●	-	●	●
Equatorial Guinea	●	●	-	○
Estonia	●	●	○	○
Eswatini	○	●	-	●
Ethiopia	●	-	-	●
Falkland Islands (Malvinas)	●	●	-	-
Faroe Islands	●	-	●	-
Fiji	○	-	-	●
Finland	●	●	●	●
France	●	●	●	●
French Guiana	●	●	●	●
French Polynesia	●	●	●	●
Gabon	●	●	-	●
Gambia	●	-	-	●
Georgia	●	○	-	●
Germany	●	●	●	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Ghana	●	●	●	●
Gibraltar	●	-	-	○
Greece	●	●	●	●
Grenada	●	-	-	●
Guadeloupe	●	●	●	●
Guam	●	●	●	●
Guatemala	●	●	●	●
Guinea	●	●	-	●
Guinea-Bissau	●	●	-	●
Guyana	-	-	●	●
Haiti	●	-	●	●
Honduras	●	-	●	●
Hungary	●	○	●	○
Iceland	●	●	●	●
India	●	●	●	●
Indonesia	●	●	-	●
Iran (Islamic Republic of)	●	●	-	●
Iraq	●	●	-	●
Ireland	●	●	●	●
Israel	●	●	●	●
Italy	●	●	●	●
Jamaica	●	-	-	●
Japan	●	●	●	●
Jordan	●	●	●	●
Kazakhstan	●	○	-	●
Kenya	●	●	-	●
Kosovo[1]	●	○	-	○
Kuwait	●	●	-	●
Kyrgyzstan	●	●	-	●
Lao People's Democratic Republic	●	-	-	●
Latvia	●	●	●	○
Lebanon	●	-	-	●
Lesotho	-	●	-	○
Liberia	●	●	-	●
Libya	●	●	-	-
Liechtenstein	●	-	○*	○
Lithuania	●	●	●	○

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Luxembourg	●	●	●	●
Madagascar	●	●	-	-
Malawi	●	●	-	●
Malaysia	●	●	-	●
Maldives	●	-	-	●
Mali	-	-	-	●
Malta	●	○	●	○
Martinique	●	●	●	●
Mauritania	●	●	-	●
Mauritius	●	●	-	●
Mayotte	●	●	-	○
Mexico	●	●	●	●
Monaco	●	●	-	●
Mongolia	●	-	-	●
Montenegro	●	-	○	○
Montserrat	●	-	●	●
Morocco	●	●	-	●
Mozambique	●	●	-	●
Myanmar	●	-	-	●
Namibia	●	●	○*	●
Nepal	●	-	-	●
Netherlands	●	●	●	●
New Caledonia	●	-	-	●
New Zealand	●	●	○	●
Niger	●	-	-	-
Nigeria	●	●	-	●
North Macedonia	●	●	-	○
Northern Mariana Islands (Commonwealth of the)	○	-	-	●
Norway	●	●	●	●
Occupied Palestinian Territory	●	●	-	●
Oman	●	●	-	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Pakistan	●	●	●	●
Panama	●	●	●	●
Papua New Guinea	-	-	-	●
Paraguay	●	-	●	●
Peru	●	-	●	●
Philippines	●	●	●	●
Poland	●	○	●	●
Portugal	●	●	●	●
Puerto Rico	●	●	●	●
Qatar	●	●	-	●
Republic of Korea	●	●	●	●
Republic of Moldova	●	-	-	●
Romania	●	●	●	●
Russian Federation	●	●	○	●
Rwanda	●	●	-	●
Réunion	●	●	●	○
Saba	-	-	-	●
Saint Barthélemy	●	-	-	●
Saint Kitts and Nevis	-	-	-	●
Saint Lucia	●	-	-	●
Saint Martin	●	●	-	●
Saint Pierre and Miquelon	-	-	-	●
Saint Vincent and the Grenadines	-	-	●	●
Sao Tome and Principe	●	-	-	○
Saudi Arabia	●	●	-	●
Senegal	●	●	-	●
Serbia	●	-	-	●
Seychelles	●	●	-	●
Sierra Leone	-	●	-	●
Singapore	●	●	●	●
Sint Maarten	●	●	●	●
Slovakia	●	●	-	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Slovenia	●	●	●	●
Somalia	●	●	-	-
South Africa	●	●	○	●
South Sudan	●	●	-	●
Spain	●	●	●	●
Sri Lanka	●	●	-	●
Sudan	●	●	●	-
Suriname	●	●	●	●
Sweden	●	●	●	●
Switzerland	●	●	●	●
Thailand	●	●	●	●
Timor-Leste	●	-	-	●
Togo	●	●	●	●
Trinidad and Tobago	●	-	●	●
Tunisia	●	●	-	●
Turkey	●	●	●	●
Turks and Caicos Islands	●	-	●	●
Uganda	●	●	-	●
Ukraine	●	○	-	○
United Arab Emirates	●	●	●	●
United Kingdom	●	●	●	●
United Republic of Tanzania	-	●	-	-
United States Virgin Islands	●	●	○	●
United States of America	●	●	●	●
Uruguay	●	●	●	●
Uzbekistan	●	●	-	○
Venezuela (Bolivarian Republic of)	●	-	●	●
Viet Nam	●	●	-	●
Wallis and Futuna	●	-	-	-
Yemen	●	●	-	-
Zambia	●	●	-	●
Zimbabwe	●	●	-	●

**Newly reported in this update. indicates that information for this variant was received by WHO from official sources. indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available. **Includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern. See also Annex 3: Data, table, and figure notes.*

Annex 2. Data, table, and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the countries of interest, time period, and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories, and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

COVID-19 Weekly Epidemiological Update

Edition 64, published 2 November 2021

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews

Global overview

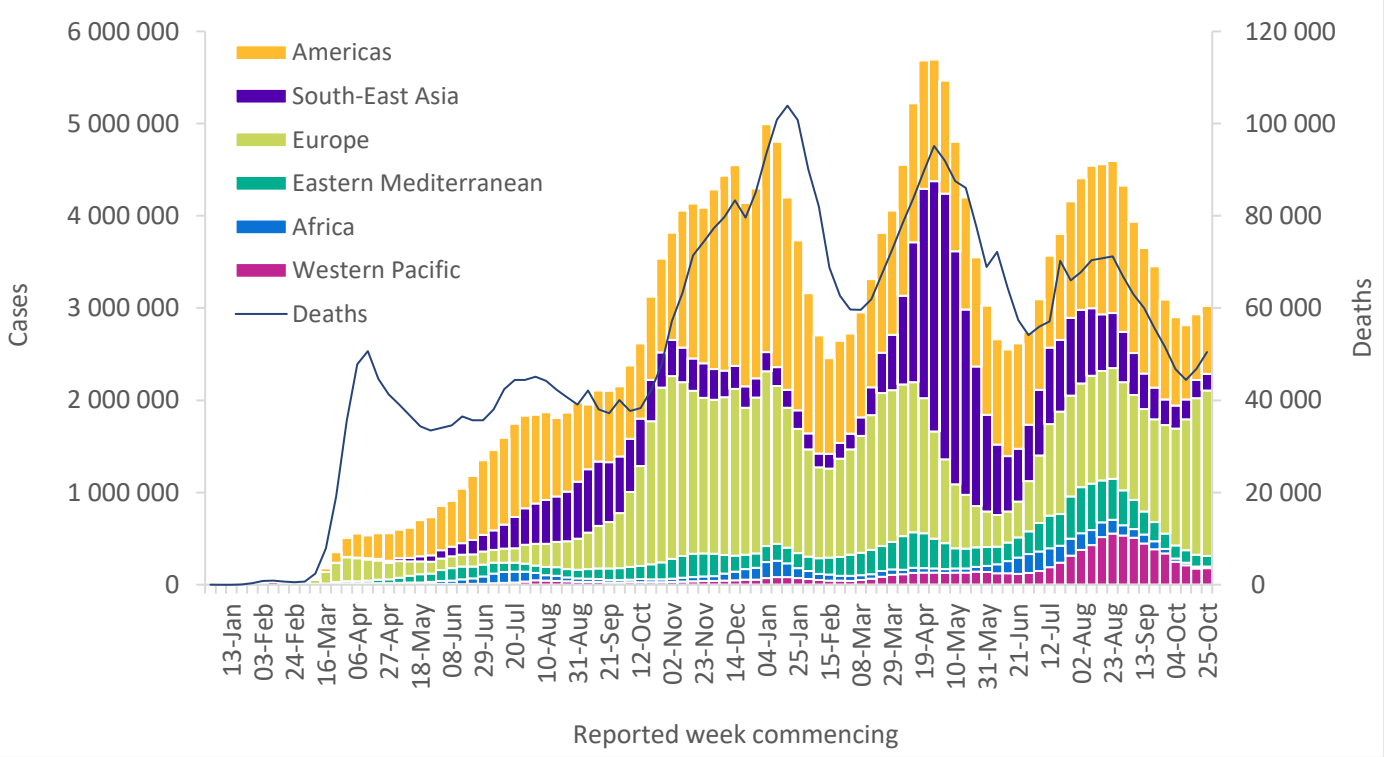
Data as of 31 October 2021

During the week 25 to 31 October 2021, a slight upward trend (3% increase) in new weekly cases was observed, with just over 3 million new cases reported (Figure 1). Apart from the WHO European Region, which reported a 6% increase in new weekly cases as compared to the previous week, other regions reported declines or stable trends (Table 1). The largest decreases were reported from the Eastern Mediterranean Region (12%), followed by the South-East Asia and African Regions (both 9%).

New weekly deaths increased by 8% as compared with the previous week, with over 50 000 new fatalities. The observed rise in new weekly deaths has been mainly driven by the South-East Asia Region, which reported the largest increase (50%), followed by the European Region (12%) and the Western Pacific Region (10%).

As of 31 October, over 246 million confirmed cases and nearly 5 million deaths have been reported.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 31 October 2021**



**See *Annex 3: Data, table and figure notes*

The regions reporting the highest weekly case incidence rates per 100 000 population were the European Region (192.3 new cases per 100 000 population) and the Region of the Americas (71.8 new cases per 100 000 population); the same two regions reported the highest weekly incidence in deaths, of 2.6 and 1.5 per 100 000 population, respectively.

The highest numbers of new cases were reported from the United States of America (528 455 new cases; 7% increase), the United Kingdom (285 028 new cases; 14% decrease), the Russian Federation (272 147 new cases; 9% increase), Turkey (182 027 new cases; 8% decrease), and Ukraine (152 897 new cases; 14% increase).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 31 October 2021**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	1 794 518 (59%)	6%	76 784 507 (31%)	24 243 (48%)	12%	1 425 509 (29%)
Americas	734 610 (24%)	3%	93 626 813 (38%)	15 283 (30%)	-4%	2 294 397 (46%)
South-East Asia	180 759 (6%)	-9%	43 963 132 (18%)	4 966 (10%)	50%	692 879 (14%)
Western Pacific	178 088 (6%)	2%	9 421 344 (4%)	2 936 (6%)	10%	129 627 (3%)
Eastern Mediterranean	113 790 (4%)	-12%	16 350 052 (7%)	2 320 (5%)	-4%	301 077 (6%)
Africa	19 869 (1%)	-9%	6 151 145 (2%)	729 (1%)	-13%	150 611 (3%)
Global	**3 021 634 (100%)**	**3%**	**246 297 757 (100%)**	**50 477 (100%)**	**8%**	**4 994 113 (100%)**

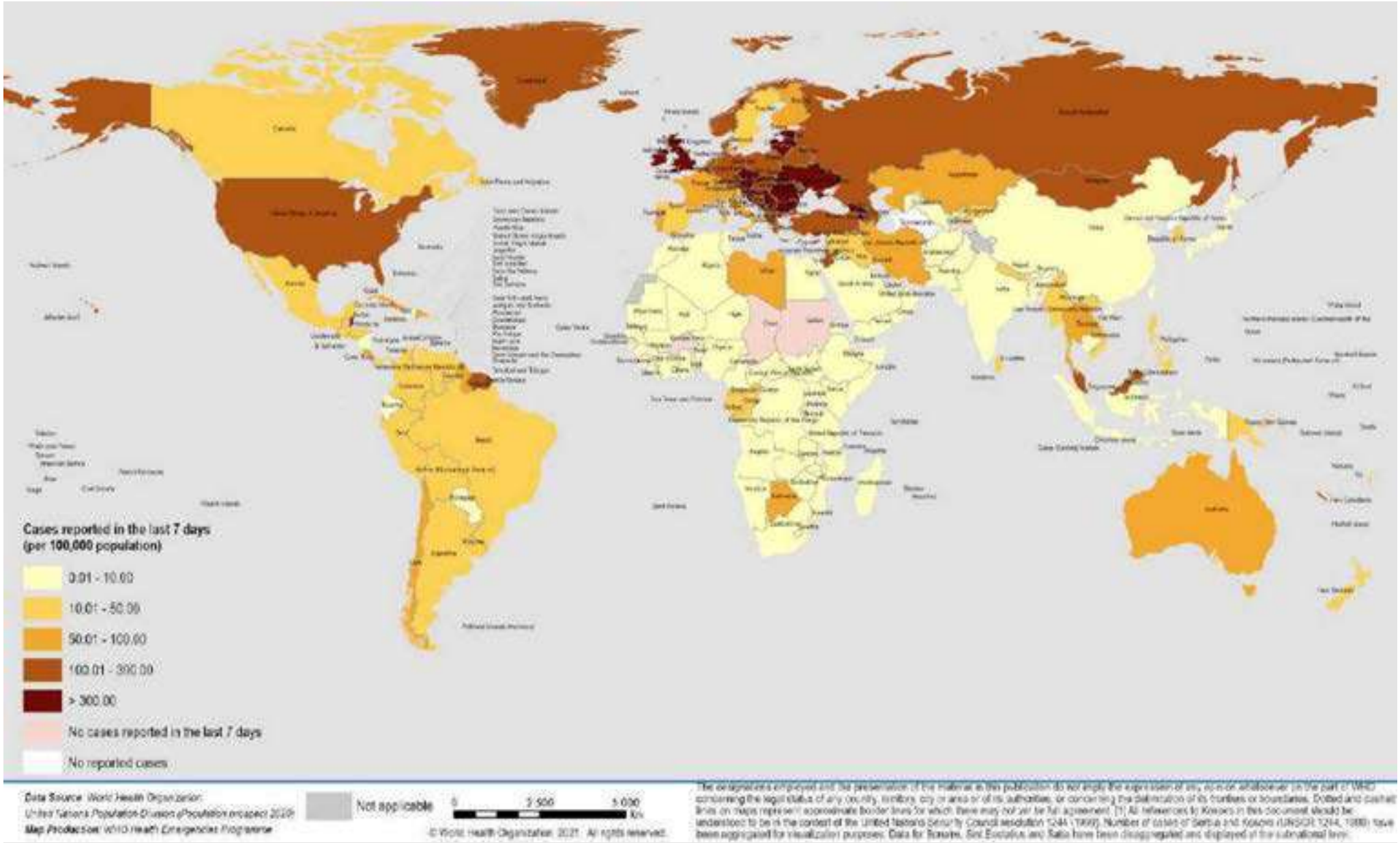
**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*

See *Annex 3: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

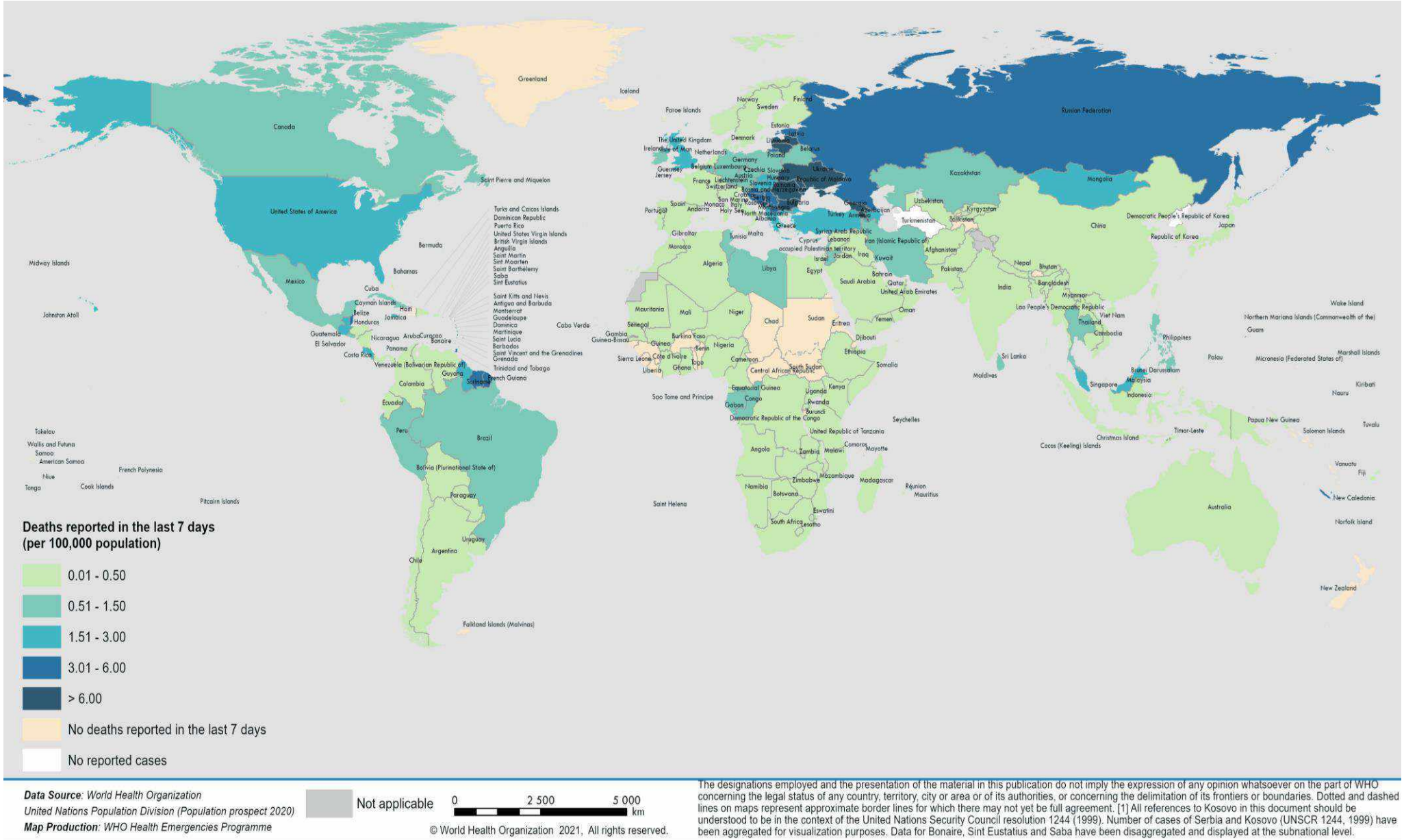
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 25-31 October 2021**



**See *Annex 3: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 25-31 October 2021**



***Data Source**: World Health Organization*
United Nations Population Division (Population prospect 2020)
***Map Production**: WHO Health Emergencies Programme*

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**See *Annex 3: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. As evidence becomes available, classification for VOIs or VOCs will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and other Variants Under Monitoring, are available on the WHO Tracking SARS-Cov-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants.

Geographic spread and prevalence of VOCs

The current global genetic epidemiology of SARS-CoV-2 is characterized by a predominance of the Delta variant, with declining prevalence of other variants among sequences submitted to publicly available datasets or detections reported to WHO (Figure 4, Annex 2). Delta has outcompeted other variants, including other VOCs, in most countries. Of 842 510 sequences uploaded to GISAID with specimens collected in the last 60 days[a], 838 398 (99.5%) were Delta, 1545 (0.2%) Gamma, 584 (0.1%) Alpha, 43 (<0.1%) Beta, and 0.2% comprised other circulating variants (including VOIs Mu and Lambda). Sub-regional and country-level variation continues to be observed; most notably within some South American countries, where the progression of the Delta variant has been more gradual, and other variants (e.g., Gamma, Lambda, Mu) still contribute a large proportion of reported sequences. Moreover, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities, sampling strategies between countries and delays in reporting.

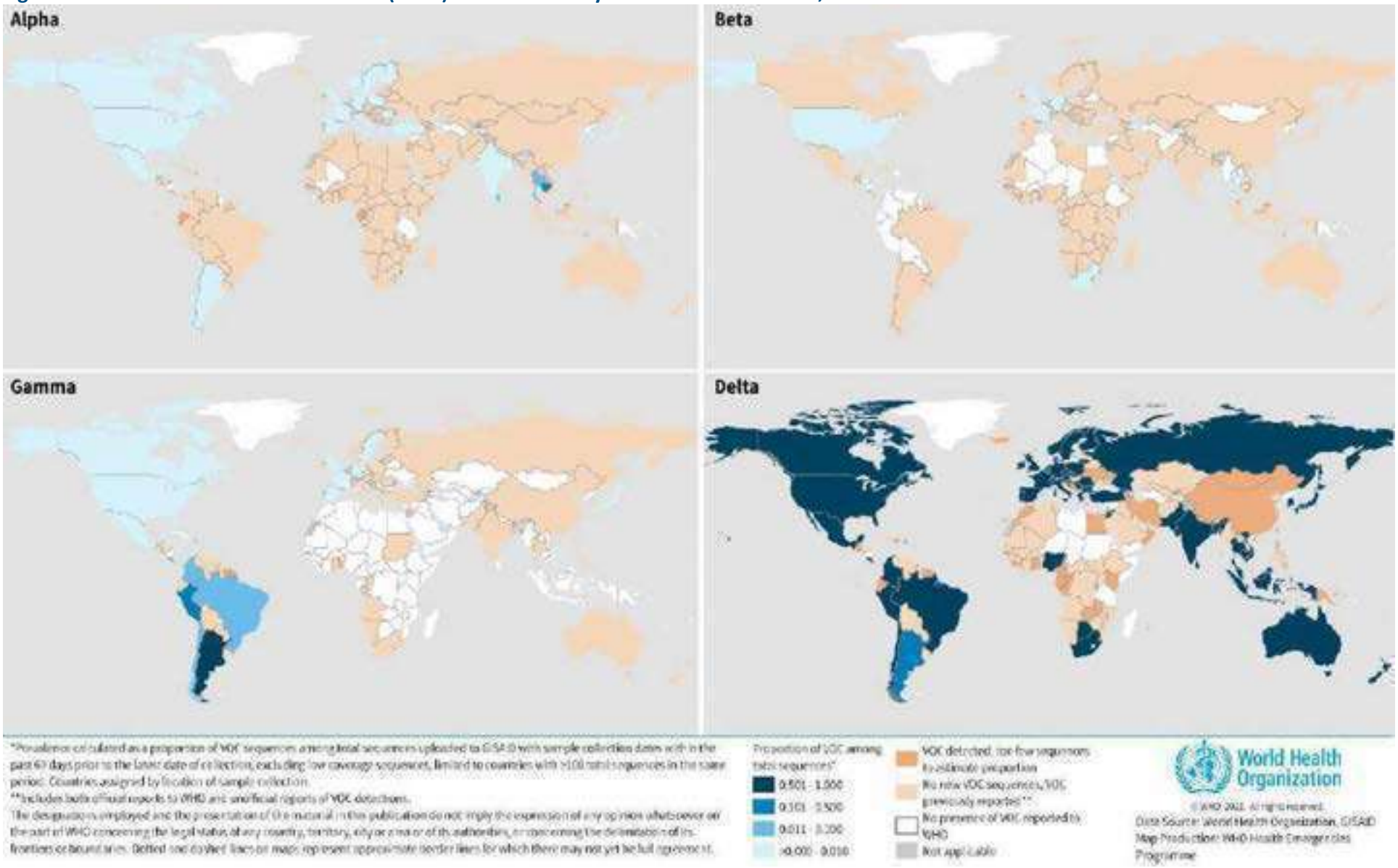
Phenotypic characteristics

Available evidence on the phenotypic impacts of VOCs is summarized in Table 2, as well as in previous editions of the COVID-19 Weekly Epidemiological Update. Since the last detailed update on 19 October, there are several new publications on the phenotypic characteristics of VOCs**.**

A retrospective cohort study (peer-reviewed publication) conducted in Canada assessed the virulence of VOCs compared with non-VOC SARS-CoV-2 variants, as measured by risk of hospitalization, intensive care unit (ICU) admission and death.[1] The study population included 212 326 cases tested between 7 February 2021 and 25 June 2021. Compared with non-VOC variants, the pooled adjusted odds ratio associated with Alpha, Beta and Gamma variants was 1.52 (95% CI 1.42-1.63) for hospitalization, 1.89 (1.67-2.17) for ICU admission and 1.51 (1.30-1.78) for death. Increased risk with the Delta variant was more pronounced at 2.08 (1.78-2.40) for hospitalization, 3.35 (2.60-4.31) for ICU admission and 2.33 (1.54-3.31) for death, compared with non-VOC variants. In an additional analysis that excluded non-VOC cases, there was a significantly increased risk with Delta as compared with the pooled risk of Alpha, Beta and Gamma for hospitalization (adjusted OR 1.45, 95% CI 1.27–1.64), ICU admission (aOR 2.01, 1.60–2.47) and death (aOR 1.69, 1.16–2.35). Authors underlined that the study population infected with VOCs was, on average, younger and less likely to have comorbid conditions than non-VOC cases, but nonetheless had higher risks of hospitalization, ICU admission and deaths.

[a] Includes sequences submitted to GISAID with sample collected dates from 30 August to 29 October 2021 (last reported sample at the time of data extraction), excluding low coverage sequences.

Figure 4. Prevalence of Variants of Concern (VOCs) in the last 60 days and historic detections, data as of 2 November 2021



Prevalence data based on sequences reported to GISAID, excluding low coverage sequences. See also Annex 2 for reported VOC detections by country/territory/area.

A peer-reviewed matched case-control study conducted in the United Kingdom estimated the odds of household transmission (≥2 cases within 14 days) for Delta variant index cases as compared with Alpha cases.[2] The study provides supporting evidence of increased transmissibility of the Delta variant, suggesting that it is more strongly associated with onward transmission within household settings as compared to the Alpha variant. During the study, cases were identified using national surveillance data between March and June 2021, matching controls based on geographical location of residence, time period of testing and property type. In total, 5976 index cases from clusters in households were sequenced and matched to 11 952 sporadic index cases (single case within a household). Of these, 43% (n=2586) of cases in household clusters were confirmed Delta variant cases as compared to 40% (n= 4824) of sporadic cases. A 70% increase in the odds (aOR 1.70, 95% CI 1.48-1.95, p <0.001) of household transmission was observed for infection with the Delta variant as compared to the Alpha variant, after adjusting for the index cases' vaccination status, sex, ethnicity, index of multiple deprivation, age group and number of household contacts.

Table 2: Summary of phenotypic impacts* of Variants of Concern

WHO label	Alpha	Beta	Gamma	Delta
Transmissibility	Increased transmissibility[3]	Increased transmissibility[4,5]	Increased transmissibility[5,6]	Increased transmissibility [5,7,8]
Disease severity	Possible increased risk of hospitalization[9,10], possible increased risk of severe disease and death[11,12]	Possible increased risk of hospitalization[10], possible increased in-hospital mortality[13]	Possible increased risk of hospitalization[10], possible increased risk of severe disease[14]	Possible increased risk of hospitalization[15,16]
Risk of reinfection	Neutralizing activity retained[17], risk of reinfection remains similar[18]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[19]	Moderate reduction in neutralizing activity reported[20]	Reduction in neutralizing activity reported[21–23]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF), no impact on overall result from multiple target RT-PCR; No impact on Ag RDTs observed[24]	No impact on RT-PCR or Ag RDTs observed[23]	None reported to date	No impact on RT-PCR or Ag RDTs observed[25]

**Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision. Ag RDT = antigen-based rapid diagnostic test.*

Table 3 summarises the impact of variants on product specific vaccine efficacy/effectiveness (VE) and quantifies the reduction in VE in the setting of variants compared to non-VOC settings. Since the 19 October update, five notable new studies have provided evidence of COVID-19 vaccine performance against VOCs and VOIs.

A large test-negative case-control study from Canada (not yet peer-reviewed) evaluated the effectiveness of three vaccines, including heterologous regimens, at preventing infections and hospitalizations due to Alpha, Gamma, and Delta variants for residents 18 years and older in British Columbia and Quebec provinces.[26] For brevity, results are presented here for British Columbia, as the results from Quebec were similar, except where indicated. VE results are presented for fully vaccinated individuals. VE against infection due to Alpha was 74% (95% CI: 29-90%) for AstraZeneca-Vaxzevria, 95% (85-98%) for Moderna-mRNA-1273, 96% (93-98%) for Pfizer BioNTech-Comirnaty, 74% (29-90%) for heterologous regimes of AstraZeneca-Vaxzevria followed by an mRNA vaccine, and 96% (93-98%) for heterologous mRNA vaccinations. VE against infection due to Gamma was >90% for all vaccines, including both heterologous regimens. Pfizer BioNTech-Comirnaty effectiveness against hospitalization due to Alpha and Gamma was 96% (83-99%) and 95% (83-99%), respectively. VE against infection due to Delta was greater than 90% for all vaccines/regimens, except for homologous AstraZeneca vaccination (VE 70%, 66-73%). All vaccines/regimens showed >90% VE against hospitalization due to Delta after ≥14 days following a second dose.

To assess waning effectiveness, the same study measured VE against Delta infections and hospitalizations at different time intervals following complete vaccination. VE of both homologous mRNA vaccine regimens against infection peaked above 90% at 2-3 weeks after a second dose, and declined to 80% at 6 months. VE of heterologous mRNA vaccination against infection also peaked 97% (92-99%) at 2-3 weeks, and declined to 88% (82-91%) at 4 months. Similarly, VE of two AstraZeneca-Vaxzevria doses against infection peaked at 77% at 2-3 weeks, declining to 65% at 4+ months. All vaccines/regimens maintained high VE against hospitalization: Pfizer BioNTech-Comirnaty was 98% (91-99%) effective at 7+ months. Moderna-mRNA-1273 was 95% effective up to 4 months, declining slightly to 84% (63-93%) at 5 months; though data at this final time point was less robust and results from Quebec show a corresponding VE of >90% at 4+ months. AstraZeneca-Vaxzevria was 92% (81-97%) effective at 4+ months. Finally, VE for heterologous mRNA vaccination maintained a high VE of 98% (85-100%) at 4 months. The findings above underscore the continued effectiveness of the vaccines against severe disease associated with the Delta variant.

Two recent peer-reviewed studies from the United States of America assessed VE during periods of high Delta circulation. The first, a test-negative case-control study found that two doses of Pfizer BioNTech-Comirnaty was 93% (83%–97%) effective against hospitalization among children aged <18 years, with a maximum follow-up time of 14 weeks.[27] The second, a retrospective cohort study conducted during an outbreak of Delta among incarcerated men, found VE of two doses of Moderna-mRNA-1273 against infection and symptomatic disease to be 56.6% (42.0-67.5%) and 84.2% (56.4-94.3%), respectively, with a maximum follow-up time of ~27 weeks.[28] Of note, force of infection in closed facilities outbreaks is likely greater, and may lead to lower VE estimates than in the general population.

A fourth study (not yet peer-reviewed) used a test-negative case-control design to assess the effectiveness of Janssen-Ad26.COV2.S among adults in Brazil during a period when Gamma was predominant.[29] Janssen-Ad26.COV2.S was found to be 50.9% (35.5-63.0%), 72.9% (35.1-91.1%), and 90.5% (31.5-99.6%) effective in preventing symptomatic COVID-19, hospitalization, and death, respectively, 28 days or more following immunisation, with a maximum follow-up time of ~10 weeks.

Finally, a national population-based cohort study from Colombia (not yet peer reviewed) evaluated VE against hospitalization and death among persons 60 years and older during a period when the Mu variant was predominant.[30] AstraZeneca-Vaxzevria, Janssen-Ad26.COV2.S, Pfizer BioNTech-Comirnaty, and Sinovac-CoronaVac were 75.4% (48.2-88.3%), 80% (19.9-95.0%), 90.3% (87.1-92.7%), and 67.2% (63.7-70.4%) effective at preventing hospitalization, respectively. The same vaccines were 96.3% (88.4-98.8%), 75.0% (0.0-93.8%), 98.5% (97.8-98.9%), and 77.1% (75.5-78.6%) effective at preventing death, respectively. Maximum possible follow-up time since complete vaccination ranged from 4-11 weeks depending on the vaccine.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Table 3. Summary of vaccine performance against Variants of Concern

	WHO Emergency Use Listing (EUL) Qualified Vaccines							Vaccines without current WHO EUL			
	AstraZeneca-Vaxzevria/SII - Covishield	Beijing CNBG-BBIBP-CorV	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Moderna-mRNA-1273/ Pfizer BioN BioNTech-Comirnaty	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Bharat-Covaxin	Gamaleya-Sputnik V	Novavax-Covavax
Alpha[31,32]											
Summary of VE	Protection retained against all outcomes										
- Severe disease	↔$_{2}$	-	-	↔$_{2}$	↔$_{1}$	↔$_{6}$	-	-	-	-	-
- Symptomatic disease	↔to↓$_{5}$	-	-	↔$_{1}$	↔$_{1}$	↔$_{4}$	-	-	-	-	↓$_{1}$
- Infection	↔to↓$_{4}$	-		↔$_{3}$	-	↔$_{3}$	-	-	-	-	-
Neutralization	↔to↓$_{7}$	↔$_{1}$	↔$_{4}$	↔to↓$_{13}$	↔to↓$_{2}$	↔to↓$_{40}$	↔to↓↓$_{6}$	↔$_{2}$	↔$_{2}$	↔$_{3}$	↓$_{1}$
Beta[33–36]											
Summary of VE	Protection retained against severe disease; reduced protection against symptomatic disease; limited evidence										
- Severe disease	-	-	↔$_{1}$	↔$_{1}$	-	↔$_{3}$	-	-	-	-	-
- Symptomatic disease	↔to↓↓↓$_{2}$	-	↔$_{1}$	↔$_{1}$	-	↔$_{2}$	-	-	-	-	↓↓↓$_{1}$
- Infection	-	-	-	↔$_{1}$	-	↓$_{1}$	-	-	-	-	-
Neutralization	↓to↓↓$_{7}$	↔to↓$_{2}$	↓to↓↓$_{6}$	↓to↓↓$_{17}$	↓↓to↓↓↓$_{2}$	↓to↓↓$_{41}$	↓to↓↓↓$_{6}$	↔to↓$_{3}$	↓$_{2}$	↓to↓↓$_{4}$	↓↓↓$_{1}$
Gamma											
Summary of VE	Unclear impact; very limited evidence										
- Severe disease	↔$_{1}$	-	-	↔$_{1}$	-	↔$_{2}$	-	-	-	-	-
- Symptomatic disease	↔$_{1}$	-	-	↔$_{1}$	-	↔$_{1}$	-	-	-	-	-
- Infection	↔$_{1}$	-	-	↔$_{1}$	-	↔$_{1}$	↔$_{1}$	-	-	-	-
Neutralization	↔to↓$_{3}$	-	↓$_{3}$	↓$_{9}$	-	↔to↓$_{25}$	↔to↓$_{4}$	↔$_{1}$	-	↓$_{2}$	-
Delta[37]											
Summary of VE	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection; limited evidence										
- Severe disease	↔$_{3}$	-	-	↔$_{3}$	-	↔$_{6}$	-	-	-	-	-
- Symptomatic disease	↓to↓↓$_{5}$	-	-	↔$_{1}$	-	↔to↓$_{4}$	-	-	↓$_{1}$	-	-
- Infection	↔to↓$_{4}$	-	↓↓↓$_{1}$	↔$_{3}$	-	↔to↓$_{3}$	-	-	-	-	-
Neutralization	↓$_{7}$	-	↔to↓↓$_{5}$	↓$_{8}$	↓to↓↓$_{2}$	↔to↓$_{20}$	↓to↓↓↓$_{4}$	↔to↓$_{2}$	↔to↓$_{3}$	↓$_{2}$	-

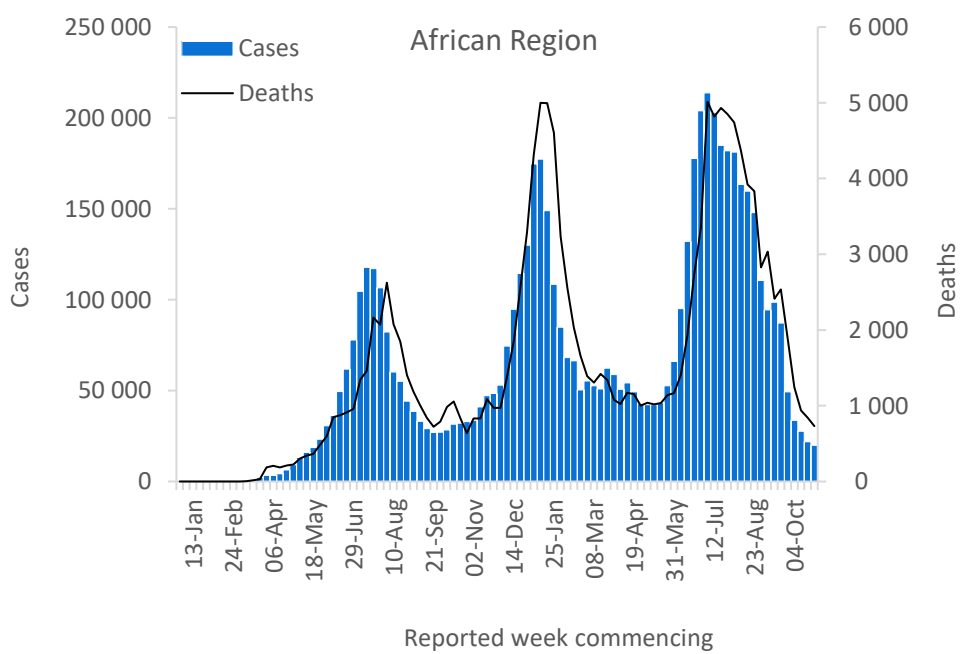
"VE" refers to vaccine effectiveness or vaccine efficacy. **"Summary of VE":** indicates the general conclusions but only for the vaccines evaluated against the specific variants. **Arrows** generalize the magnitude of reduction in VE or neutralization: "↔" <10% reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20% reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30% reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30% reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study. **Subscripts** denote the number of studies informing this table, which may be found on the VIEW-hub Resource Library. **Superscripts** donate article references from randomized controlled trials (RCTs) informing this table.

WHO regional overviews Epidemiological week 25-31 October 2021

African Region

Declining trends observed in the Region since mid-July continued this week with over 19 000 new cases and over 700 new deaths reported, decreases of 9% and 13%, respectively, as compared to the previous week. Nevertheless, 17/49 countries (34%) reported increases of over 10% as compared with the previous week, with the largest increases observed in Rwanda (100%), Comoros (94%) and Eritrea (68%). The highest numbers of new cases were reported from Ethiopia (3313 new cases; 2.9 new cases per 100 000 population; a 14% increase), South Africa (2554 new cases; 4.3 new cases per 100 000; a 19% decrease), and Cameroon (2210 new cases; 8.3 new cases per 100 000; a 17% increase).

The highest numbers of new deaths were reported from South Africa (249 new deaths; <1 new death per 100 000 population; a 24% decrease), Ethiopia (118 new deaths; <1 new death per 100 000; a 13% decrease), and Cameroon (86 new deaths; <1 new death per 100 000; a 72% increase).

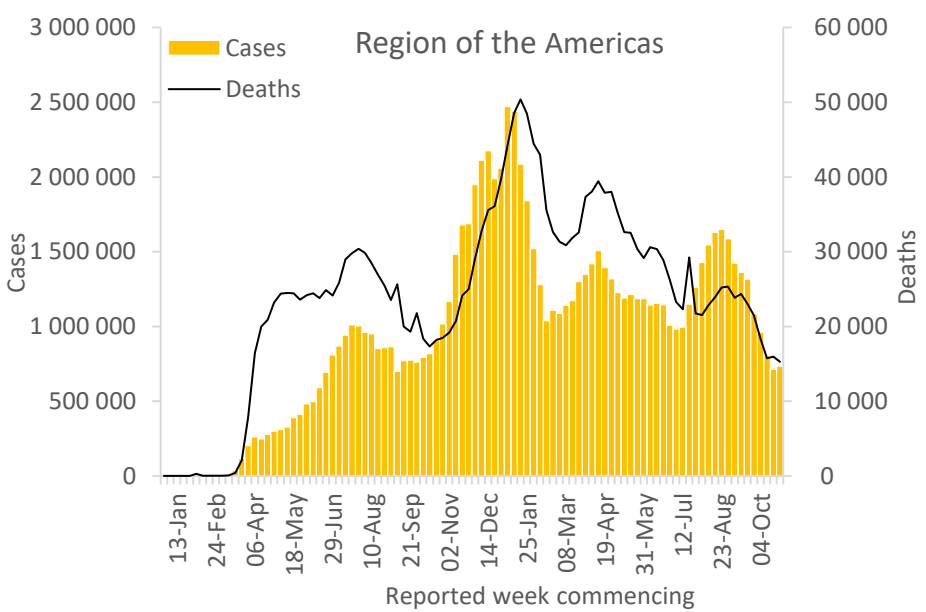


Updates from the African Region

Region of the Americas

Declining trends in the Region of the Americas have slowed, with over 734 000 new cases (similar to the previous week) and over 15 000 new deaths (similar to the previous week) reported. Eleven countries in the Region (19%) reported increases in new cases in the past week, with the largest increases observed in the Cayman Islands (145%), Uruguay (38%) and Puerto Rico (21%). The highest numbers of new cases were reported from the United States of America (528 455 new cases; 159.7 new cases per 100 000; a 7% increase), Brazil (81 558 new cases; 38.4 new cases per 100 000; similar to the figures of the previous week), and Mexico (18 880 new cases; 14.6 new cases per 100 000; a 6% decrease).

The highest numbers of new deaths were reported from the United States of America (9550 new deaths; 2.9 new deaths per 100 000; a 6% decrease), Brazil (2323 new deaths; 1.1 new deaths per 100 000; a 6% decrease), and Mexico (1539 new deaths; 1.2 new deaths per 100 000; a 40% increase).

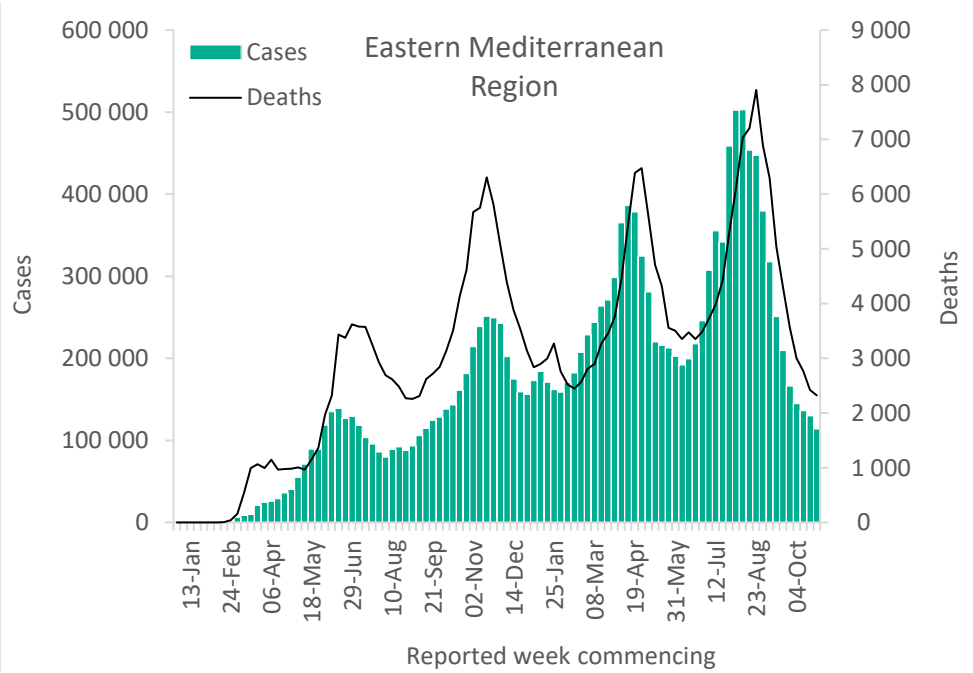


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 113 000 new cases, a 12% increase; and over 2300 new deaths, similar to the numbers reported in the previous week. The number of new weekly cases has decreased week on week for almost two months. The highest numbers of new cases were reported from the Islamic Republic of Iran (64 541 new cases; 76.8 new cases per 100 000; an 18% decrease), Jordan (11 060 new cases; 108.4 new cases per 100 000; a 15% increase), and Iraq (9175 new cases; 22.8 new cases per 100 000; a 19% decrease). This week, five of 22 countries in the Region reported increases of over 10% in weekly case incidence.

The highest numbers of new deaths were reported from the Islamic Republic of Iran (1074 new deaths; 1.3 new deaths per 100 000; a 9% decrease), Egypt (350 new deaths; <1 new deaths per 100 000; an 11% increase), and Iraq (201 new deaths; <1 new deaths per 100 000; similar to the numbers of the previous week).

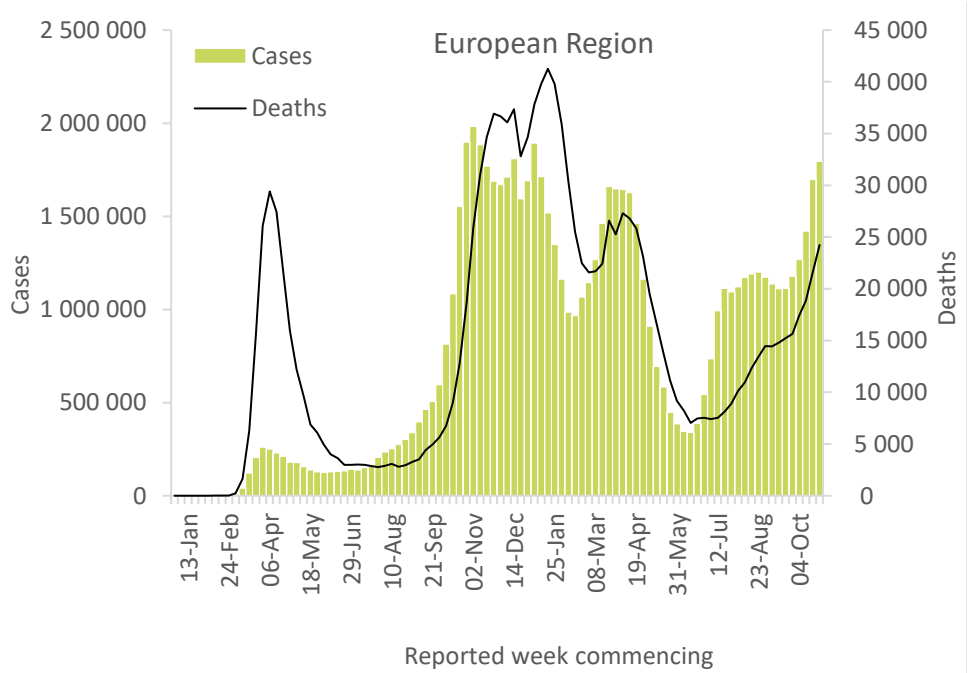


Updates from the Eastern Mediterranean Region

European Region

The European Region has continued to report an increasing trend, with nearly 1.8 million new cases and 24 000 new deaths reported this week, a 6% increase and 12% increase, respectively, as compared to the previous week; reaching regional case rates similar to those reported in December 2020. Out of the 61 countries in the Region, 25 (41%) reported increases in cases in the past week. The highest numbers of new cases were reported from the United Kingdom (285 028 new cases; 419.9 new cases per 100 000; a 14% decrease), the Russian Federation (272 147 new cases; 186.5 new cases per 100 000; a 9% increase), and Turkey (182 027 new cases; 215.8 new cases per 100 000; an 8% decrease).

The highest numbers of new deaths were reported from the Russian Federation (7938 new deaths; 5.4 new deaths per 100 000; a 9% increase), Ukraine (3857 new deaths; 8.8 new deaths per 100 000; a 19% increase), and Romania (3072 new deaths; 15.9 new deaths per 100 000; a 6% increase).

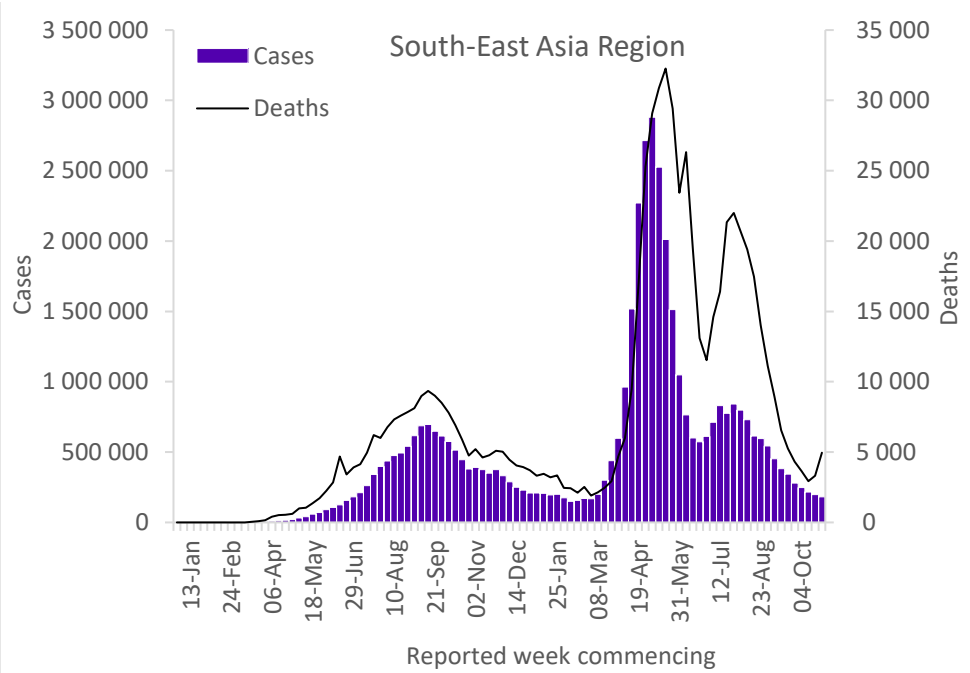


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 180 000 new cases and over 4900 new deaths, a 9% decrease and a 50% increase, respectively, as compared to the previous week. While weekly case incidence has continued to decrease week on week for over three months, weekly death incidence increased for the second consecutive week. The highest numbers of new cases were reported from India (97 832 new cases; 7.1 new cases per 100 000; a 9% decrease), Thailand (61 542 new cases; 88.2 new cases per 100 000; an 8% decrease), and Myanmar (5810 new cases; 10.7 new cases per 100 000; a 9% decrease).

The highest numbers of new deaths were reported from India (3917 new deaths; 0.3 new deaths per 100 000; an 83% increase), Thailand (450 new deaths; 0.6 new deaths per 100 000; a 7% decrease), and Indonesia (200 new deaths; 0.1 new deaths per 100 000; a 21% decrease). The number of deaths in India accounted for 79% of new weekly deaths in the Region.

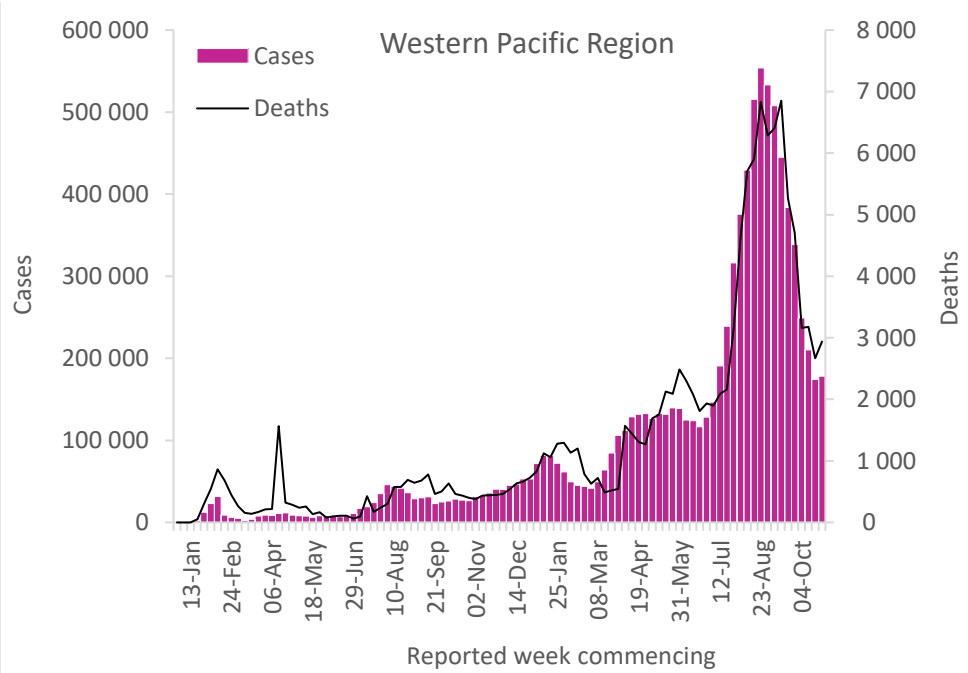


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported over 178 000 new cases, similar to numbers of the previous week, and over 2900 new deaths, a 10% increase as compared to the previous week. The highest numbers of new cases were reported from Malaysia (40 613 new cases; 125.5 new cases per 100 000; similar to the previous week), the Philippines (32 222 new cases; 29.4 new cases per 100 000; a 16% decrease), and Viet Nam (30 708 new cases; 31.5 new cases per 100 000; a 28% increase). These three countries comprised 58% of new weekly cases reported in the Region.

The highest numbers of new deaths were reported from the Philippines (1459 new deaths; 1.3 new deaths per 100 000; a 45% increase), Malaysia (522 new deaths; 1.6 new deaths per 100 000; a 5% increase), and Viet Nam (410 new deaths; 0.4 new deaths per 100 000; a 16% decrease). These three countries comprised 81% of new weekly deaths reported in the Region.



Updates from the Western Pacific Region

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Annexes

Annex 1. Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. In addition, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection, as is the case for AstraZeneca-Vaxzevria.
- Table 3 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than 4 months post final dose.
- Studies reporting VOC-specific VE estimates for full vaccination (≥7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca-Vaxzevria for infection (when a phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.

Annex 2. List of countries/territories/areas reporting variants of concern as of 2 November 2021

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Afghanistan	●	-	-	●
Albania	●	-	-	○
Algeria	●	-	-	●
Andorra	○	○	-	○
Angola	●	●	●	●
Anguilla	●	-	-	●
Antigua and Barbuda	●	●	●	●
Argentina	●	●	●	●
Armenia	●	-	-	●
Aruba	●	●	●	●
Australia	●	●	●	●
Austria	●	●	●	●
Azerbaijan	●	-	-	○
Bahamas	●	-	●	●
Bahrain	●	●	●	●
Bangladesh	●	●	○	●
Barbados	●	-	●	●
Belarus	●	-	-	○
Belgium	●	●	●	●
Belize	●	-	●	●
Benin	●	●	●	●
Bermuda	●	●	-	●
Bhutan	●	●	-	●
Bolivia (Plurinational State of)	●	-	●	●*
Bonaire	●	-	●	●
Bosnia and Herzegovina	●	●	●	○
Botswana	○	●	-	●
Brazil	●	●	●	●
British Virgin Islands	●	-	●	●
Brunei Darussalam	●	●	-	●
Bulgaria	●	●	-	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Burkina Faso	●	-	-	●
Burundi	●	●	-	●
Cabo Verde	●	-	-	●
Cambodia	●	●	-	●
Cameroon	●	●	-	●
Canada	●	●	●	●
Cayman Islands	●	●	●	●
Central African Republic	●	●	-	●
Chad	●	-	-	-
Chile	●	●	●	●
China	●	●	●	●
Colombia	●	-	●	●
Comoros	-	●	-	-
Congo	●	○	●	●
Costa Rica	●	●	●	●
Croatia	●	●	●	○
Cuba	●	●	-	●
Curaçao	●	●	●	●
Cyprus	●	●	-	○
Czechia	●	●	●	●
Côte d'Ivoire	●	●	-	○
Democratic Republic of the Congo	●	●	-	●
Denmark	●	●	●	●
Djibouti	●	●	-	-
Dominica	●	-	-	●
Dominican Republic	●	-	●	●
Ecuador	●	-	●	●
Egypt	●	-	-	●
El Salvador	●	-	●	●
Equatorial Guinea	●	●	-	○
Estonia	●	●	○	○

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Eswatini	○	●	-	●
Ethiopia	●	-	-	●
Falkland Islands (Malvinas)	●	●	-	-
Faroe Islands	●	-	●	-
Fiji	○	-	-	●
Finland	●	●	●	●
France	●	●	●	●
French Guiana	●	●	●	●
French Polynesia	●	●	●	●
Gabon	●	●	-	●
Gambia	●	-	-	●
Georgia	●	○	-	●
Germany	●	●	●	●
Ghana	●	●	●	●
Gibraltar	●	-	-	○
Greece	●	●	●	●
Grenada	●	-	-	●
Guadeloupe	●	●	●	●
Guam	●	●	●	●
Guatemala	●	●	●	●
Guinea	●	●	-	●
Guinea-Bissau	●	●	-	●
Guyana	-	-	●	●
Haiti	●	-	●	●
Honduras	●	-	●	●
Hungary	●	○	●	○
Iceland	●	●	●	●
India	●	●	●	●
Indonesia	●	●	-	●
Iran (Islamic Republic of)	●	●	-	●
Iraq	●	●	-	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Ireland	●	●	●	●
Israel	●	●	●	●
Italy	●	●	●	●
Jamaica	●	-	-	●
Japan	●	●	●	●
Jordan	●	●	●	●
Kazakhstan	●	○	-	●
Kenya	●	●	-	●
Kosovo[1]	●	○	-	○
Kuwait	●	●	-	●
Kyrgyzstan	●	●	-	●
Lao People's Democratic Republic	●	-	-	●
Latvia	●	●	●	○
Lebanon	●	-	-	●
Lesotho	-	●	-	○
Liberia	●	●	-	●
Libya	●	●	-	-
Liechtenstein	●	-	○*	○
Lithuania	●	●	●	○
Luxembourg	●	●	●	●
Madagascar	●	●	-	-
Malawi	●	●	-	●
Malaysia	●	●	-	●
Maldives	●	-	-	●
Mali	-	-	-	●
Malta	●	○	●	○
Martinique	●	●	●	●
Mauritania	●	●	-	●
Mauritius	●	●	-	●
Mayotte	●	●	-	○
Mexico	●	●	●	●
Monaco	●	●	-	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Mongolia	●	-	-	●
Montenegro	●	-	○	○
Montserrat	●	-	●	●
Morocco	●	●	-	●
Mozambique	●	●	-	●
Myanmar	●	-	-	●
Namibia	●	●	○*	●
Nepal	●	-	-	●
Netherlands	●	●	●	●
New Caledonia	●	-	-	●
New Zealand	●	●	○	●
Niger	●	-	-	-
Nigeria	●	●	-	●
North Macedonia	●	●	-	○
Northern Mariana Islands (Commonwealth of the)	○	-	-	●
Norway	●	●	●	●
Occupied Palestinian Territory	●	●	-	●
Oman	●	●	-	●
Pakistan	●	●	●	●
Panama	●	●	●	●
Papua New Guinea	-	-	-	●
Paraguay	●	-	●	●
Peru	●	-	●	●
Philippines	●	●	●	●
Poland	●	○	●	●
Portugal	●	●	●	●
Puerto Rico	●	●	●	●
Qatar	●	●	-	●
Republic of Korea	●	●	●	●
Republic of Moldova	●	-	-	●
Romania	●	●	●	●
Russian Federation	●	●	○	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Rwanda	●	●	-	●
Réunion	●	●	●	○
Saba	-	-	-	●
Saint Barthélemy	●	-	-	●
Saint Kitts and Nevis	-	-	-	●
Saint Lucia	●	-	-	●
Saint Martin	●	●	-	●
Saint Pierre and Miquelon	-	-	-	●
Saint Vincent and the Grenadines	-	-	●	●
Sao Tome and Principe	●	-	-	○
Saudi Arabia	●	●	-	●
Senegal	●	●	-	●
Serbia	●	-	-	●
Seychelles	●	●	-	●
Sierra Leone	-	●	-	●
Singapore	●	●	●	●
Sint Maarten	●	●	●	●
Slovakia	●	●	-	●
Slovenia	●	●	●	●
Somalia	●	●	-	-
South Africa	●	●	○	●
South Sudan	●	●	-	●
Spain	●	●	●	●
Sri Lanka	●	●	-	●
Sudan	●	●	●	-
Suriname	●	●	●	●
Sweden	●	●	●	●
Switzerland	●	●	●	●
Thailand	●	●	●	●
Timor-Leste	●	-	-	●
Togo	●	●	●	●
Trinidad and Tobago	●	-	●	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Tunisia	●	●	-	●
Turkey	●	●	●	●
Turks and Caicos Islands	●	-	●	●
Uganda	●	●	-	●
Ukraine	●	○	-	○
United Arab Emirates	●	●	●	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
United Kingdom	●	●	●	●
United Republic of Tanzania	-	●	-	-
United States Virgin Islands	●	●	○	●
United States of America	●	●	●	●
Uruguay	●	●	●	●
Uzbekistan	●	●	-	○
Venezuela (Bolivarian Republic of)	●	-	●	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Viet Nam	●	●	-	●
Wallis and Futuna	●	-	-	-
Yemen	●	●	-	-
Zambia	●	●	-	●
Zimbabwe	●	●	-	●

**Newly reported in this update.*

indicates that information for this variant was received by WHO from official sources.

indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available.

***Includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern.*

See also Annex 3: Data, table and figure notes

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidences, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

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COVID-19 Weekly Epidemiological Update

Edition 63, published 26 October 2021

In this edition:

- Global overview
- Special focus: Update on WHO COVID-19 global rapid risk assessment
- Special Focus: Update on age and sex distribution from WHO COVID-19 global surveillance
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Summary of the Weekly Operational Update

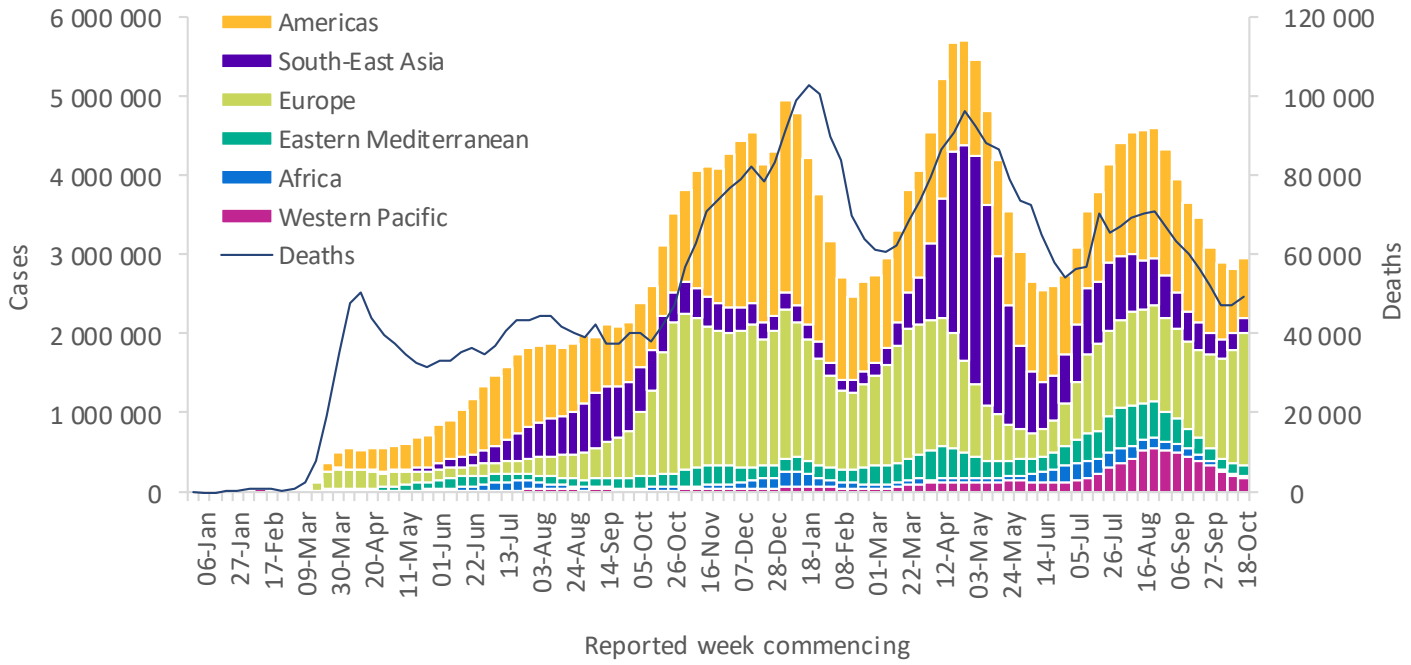
Global overview

During the week of 18 to 24 October 2021, the global number of new cases increased slightly (4%) compared to that of the previous week, with just over 2.9 million new cases (Figure 1). The European Region accounted for more than half (57%) of global new weekly cases and was the only region which reported an increase (Table 1). Other regions reported declines in the number of new cases. The largest decrease in new cases was again reported from the African Region (21%), followed by the Western Pacific Region (17%).

The number of new deaths also increased slightly by 5% during the past week, with over 49 000 new deaths reported. Increases were reported in the European (14%) and South-East Asia (13%) regions; whereas the largest declines were observed in the Western Pacific (16%), Eastern Mediterranean (13%) and the African (11%) regions.

As of 24 October, over 243 million confirmed cases and over 4.9 million deaths have been reported since the start of the pandemic.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 24 October 2021**



**See *Annex 2: Data, table and figure notes*

The regions reporting the highest weekly case incidence rates per 100 000 population were the European Region (179.1 new cases per 100 000 population) and the Region of the Americas (72.9 new cases per 100 000 population); the same two regions reported the highest weekly incidence in deaths, of 2.3 and 1.8 per 100 000 population, respectively.

The highest numbers of new cases were reported from the United States of America (512 956 new cases; 12% decrease), the United Kingdom (330 465 new cases; 16% increase), the Russian Federation (248 956 new cases; 15% increase), Turkey (196 850 new cases; 8% decrease) and Ukraine (134 235 new cases; 43% increase).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 24 October 2021**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	1 671 245 (57%)	18%	74 963 293 (31%)	21 475 (43%)	14%	1 400 894 (28%)
Americas	745 287 (25%)	-9%	92 891 596 (38%)	18 684 (38%)	1%	2 279 034 (46%)
South-East Asia	197 673 (7%)	-8%	43 782 373 (18%)	3 309 (7%)	13%	687 913 (14%)
Western Pacific	174 271 (6%)	-17%	9 243 232 (4%)	2 684 (5%)	-16%	126 708 (3%)
Eastern Mediterranean	129 949 (4%)	-5%	16 236 262 (7%)	2 420 (5%)	-13%	298 757 (6%)
Africa	21 911 (1%)	-21%	6 131 276 (3%)	841 (2%)	-11%	149 882 (3%)
Global	**2 940 336 (100%)**	**4%**	**243 248 796 (100%)**	**49 413 (100%)**	**5%**	**4 943 201 (100%)**

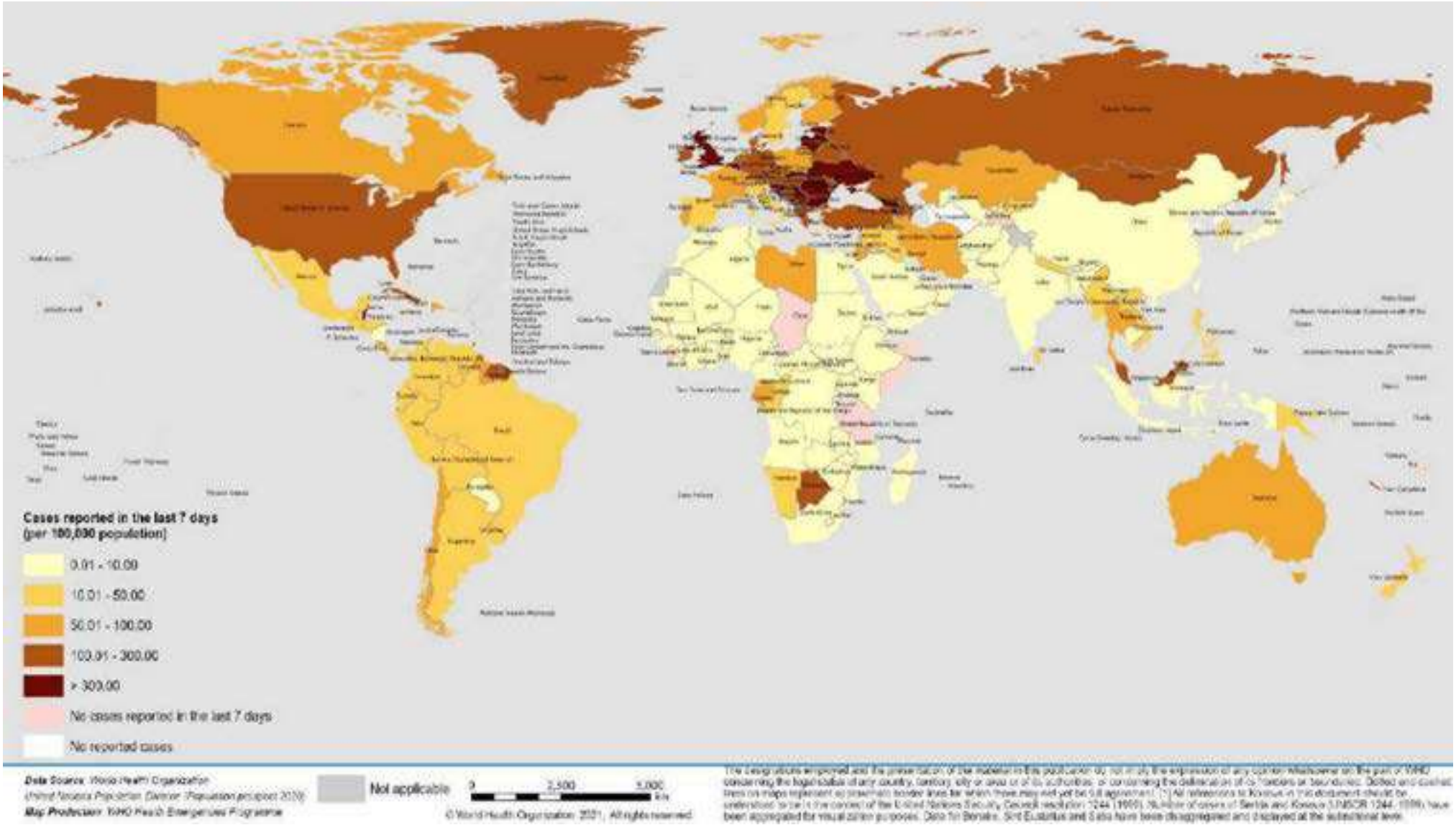
**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
***See Annex 2: Data, table and figure notes*

On 22 October, the ninth meeting of the Emergency Committee was convened by the WHO Director-General under the International Health Regulations (2005) (IHR) regarding the COVID-19 pandemic. The Director-General determined that the COVID-19 pandemic continues to constitute a Public Health Emergency of International Concern (PHEIC). He accepted the advice of the Committee and issued the Committee's advice to States Parties as Temporary Recommendations under the IHR. See the statement summarising the meeting proceedings and Temporary Recommendations to State Parties for further information.

For the latest data and other updates on COVID-19, please see:

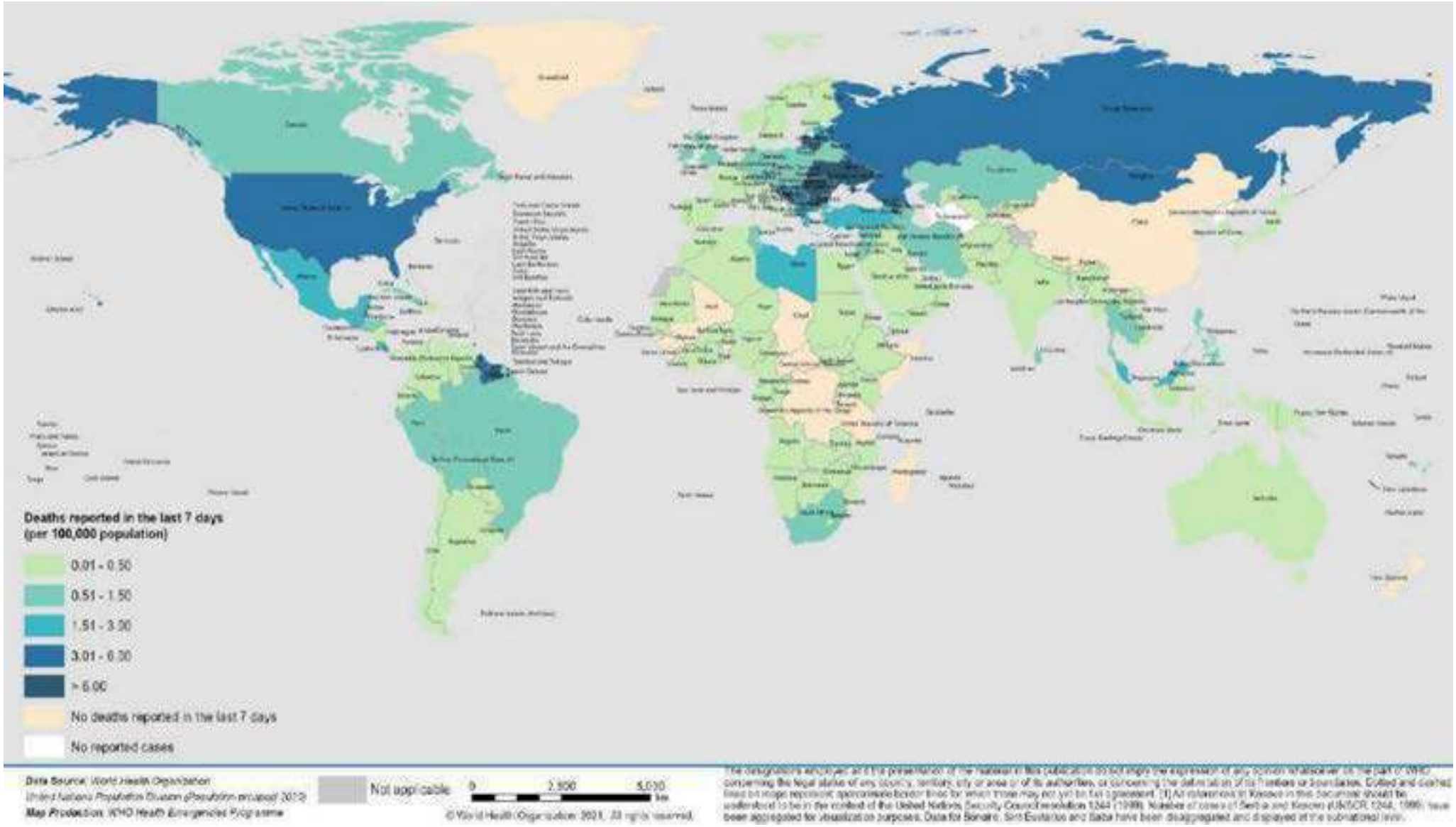
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 18-24 October 2021**



**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 18-24 October 2021**



**See *Annex 2: Data, table and figure notes*

Special Focus: Update on WHO COVID-19 global rapid risk assessment

The COVID-19 pandemic continues to evolve, as does our understanding of the SARS-CoV-2 virus, and the response needed to control the spread and impact of the virus. In WHO's most recent rapid risk assessment, conducted on 18 October 2021, the global public health risk remains very high.

Under the Emergency Response Framework, WHO undertakes risk assessments and situation analyses on a regular basis to inform our response to emerging situations. In addition, WHO periodically reviews the current risk status of public health events through an in-depth hazard, exposure and context assessment. This also includes a review of the vulnerabilities and capacities available to respond to the public health event and to investigate the current risk to human health, risks of ongoing spread globally, and risk of insufficient control capacities. Such assessments are used as an internal WHO decision-making tool, and to support independent deliberations, including but not limited to meetings of the International Health Regulations (IHR 2005) Emergency Committee regarding the COVID-19 pandemic. To date, 12 global rapid risk assessments have been undertaken for COVID-19, and additional assessments have been conducted for specific events such as the emergence of SARS-CoV-2 variants. Here, we provide a synopsis of the most recent in-depth global rapid risk assessment for COVID-19.

While COVID-19 case and death incidence has been decreasing in five out of the six WHO regions (except for the European Region) over a prolonged period, it remains high overall, and numerous countries are experiencing an increase in cases, hospitalizations, and deaths. These increases are due to multiple factors, including high prevalence of variants with increased transmissibility; easing of and/or poor adherence to public health and social measures (PHSM) coupled with increased social mixing and resumption of non-essential travel; reopening of schools; and continued susceptibility of a large proportion of the population due to limited vaccine access and coverage.

The rapid spread of the highly transmissible Delta variant has continued to drive sharp resurgences in the three months since the last risk assessment in many countries across all six WHO regions. In almost all countries in which Delta has been reported, it has replaced all other variants including other Variants of Concern (VOCs), quickly becoming the dominant circulating variant. These resurgences have come as many countries face considerable pressure to ease PHSM due to the prolonged duration of the pandemic and the impact of restrictions on societies and economies, SARS-CoV-2 evolution and epidemiology, including the impact of known and emerging variants, and may lead to additional challenges in outbreak containment, particularly as many countries move towards further reopening. Easing PHSM without robust surveillance and testing infrastructure, coupled with an increase in the number of regional and global mass gathering events, may increase the risk of new outbreaks and the emergence of additional VOCs. Additionally, as a proportion of all cases, an increase in the number of cases among those aged 0-24 year has been reported, particularly in the European and Western Pacific regions. This trend could be due to older age groups being more likely to be vaccinated, increased social mixing in younger age groups and in-person learning increasing the exposure potential among 0-24-year-olds. In addition, the reopening of schools has been accompanied by increased testing of this age group. However, overall rates of infection and severe disease remain relatively low among children and young adults.

While more than 6 billion COVID-19 vaccines doses have been administered, as of 18 October, less than half (47%) of the world's population have received at least one dose of vaccine. Nearly two-thirds of vaccines administered have been in ten high-income countries, while only 35% have been in low-income or lower-middle-income countries, highlighting ongoing vaccine inequities. The administration of additional/booster doses beyond those recommended by the Strategic Advisory Group of Experts on Immunization (SAGE) in a number of high-income countries further constrains the global vaccine supply and exacerbates the inequalities in vaccine distribution.

Despite improvements in the global supply chain, some countries continue to experience shortages and lack of access to testing, vaccines, medical oxygen, personal protective equipment, and other supplies that are essential to the pandemic response. These shortages place additional pressure on already strained health systems in many countries, which directly impacts the delivery of essential health services globally, including in well-resourced countries. Insufficient funding for the global response is an additional challenge; WHO faces a US$ 900 million gap in its funding goal, approximately half of the target set in the COVID-19 Strategic Preparedness and Response Plan (SPRP) 2021.

Knowledge gaps remain, including the phenotypic impact of identified and emerging variants, details on waning immunity, and further characterization of the post-COVID-19 condition. In addition, further investigations are required to determine whether there are any changes in the severity profile those infected with VOCs, including children and adolescents.

Additional resources

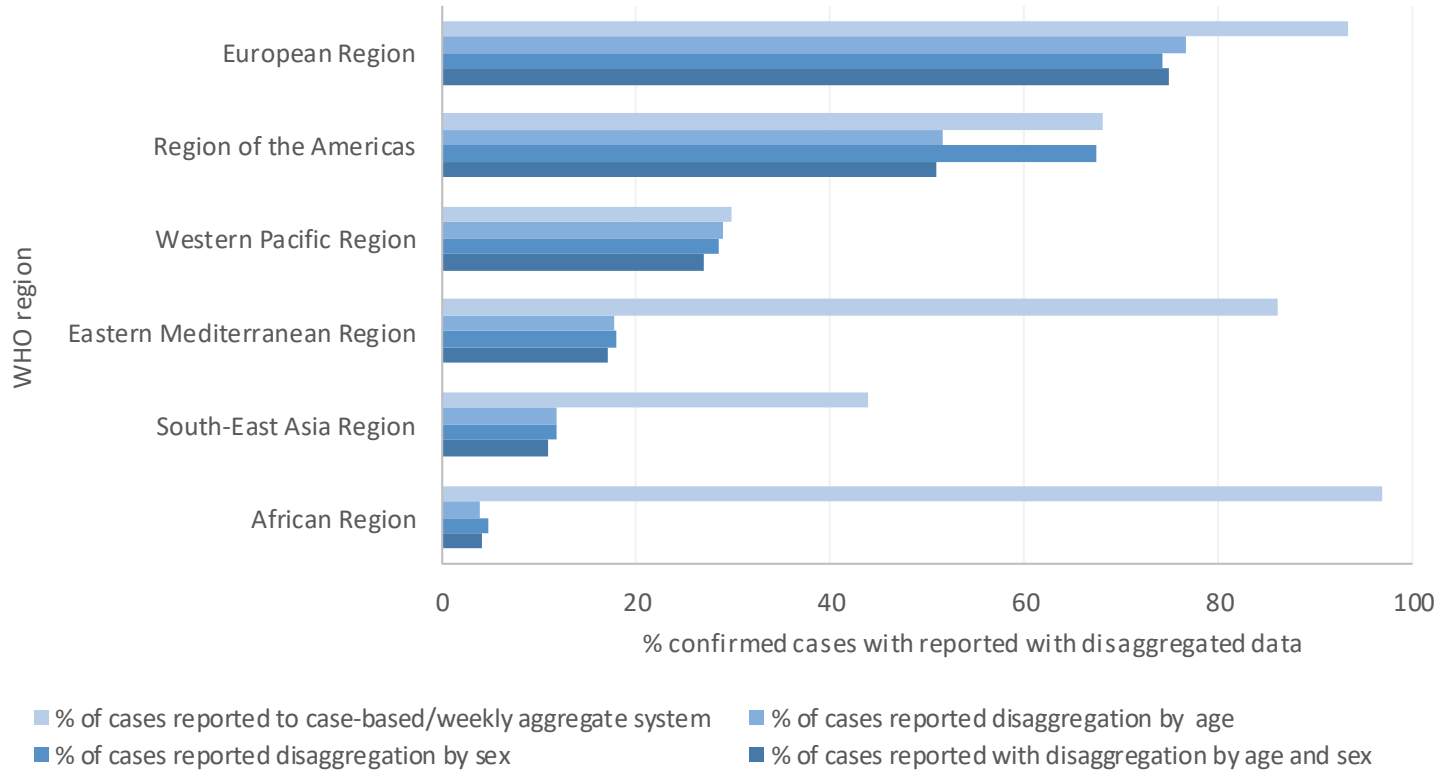
- Further information about the WHO risk assessment process
- Statement on the ninth meeting of the International Health Regulations (2005) Emergency Committee regarding the coronavirus disease (COVID-19) pandemic

Special Focus: Update on age and sex distribution from WHO COVID-19 global surveillance

WHO has been supporting global COVID-19 epidemiological surveillance since January 2020. In addition to the daily count of confirmed cases and deaths, WHO requested Member States to report a minimal set of information via a case-based reporting system, using a case reporting form (CRF) or via the weekly aggregated reporting system. Weekly aggregate surveillance data include the number of cases and deaths disaggregated by age groups and sex, health care workers status, the number of hospitalizations, recoveries, and tests performed.

As of 12 October 2021, over 20 months since the beginning of the pandemic, a total of 184 countries, territories and areas have shared detailed information on 167 million COVID-19 cases, representing over 70% of reported cases, globally. The completeness of these data varies by region (Figure 4), and among income categories, with data being less complete for lower-income countries. Regarding information on COVID-19 mortality, 184 countries reported 1 934 548 deaths to this case-based reporting system, representing less than 40% of the number of deaths reported globally.

Figure 4. Data completeness by WHO region, data as of 12 October 2021 (n=237 973 361)



Distribution by age and sex

Data on sex was reported for 122 921 974 cases, representing 52% of global cases. Of these, 51% (n=62 191 734) were female. However, males accounted for a larger proportion of deaths, 58% (n=1 201 236). These ratios vary by region, for example, in the Eastern Mediterranean and African regions, there is a greater proportion of males in both cases and in deaths.

Age was reported from a total of 99 067 915 cases, representing 40% of global cases (Figure 5). Since the beginning of July 2021, an increase in the proportion of cases among those aged 0-24 years began to has been observed (Figure 6), especially in the European and Western Pacific regions. This is likely due in part to the prioritization of older age groups for vaccination in most countries. Additionally, resumption of in-person schooling, together with the implementation of strengthened testing strategies among children and young people, may also have contributed to the observed increase in reported cases among those aged 0-24 years. However, overall rates of infection and disease remain low among children and young adults.

Figure 5: Distribution by age of confirmed COVID-19 cases per week, COVID-19 WHO surveillance, January 2020 to 12 October 2021 (n=99 067 915)

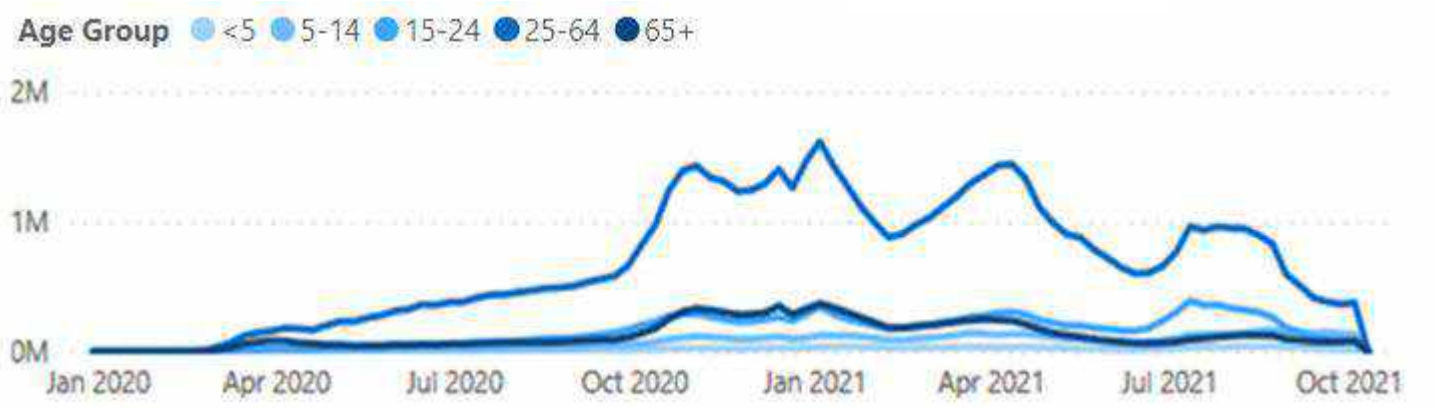
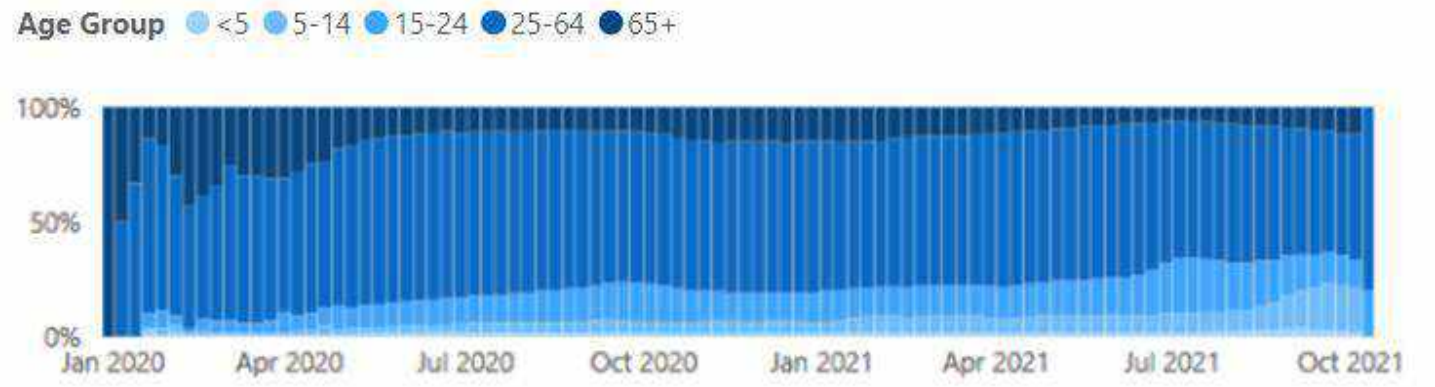


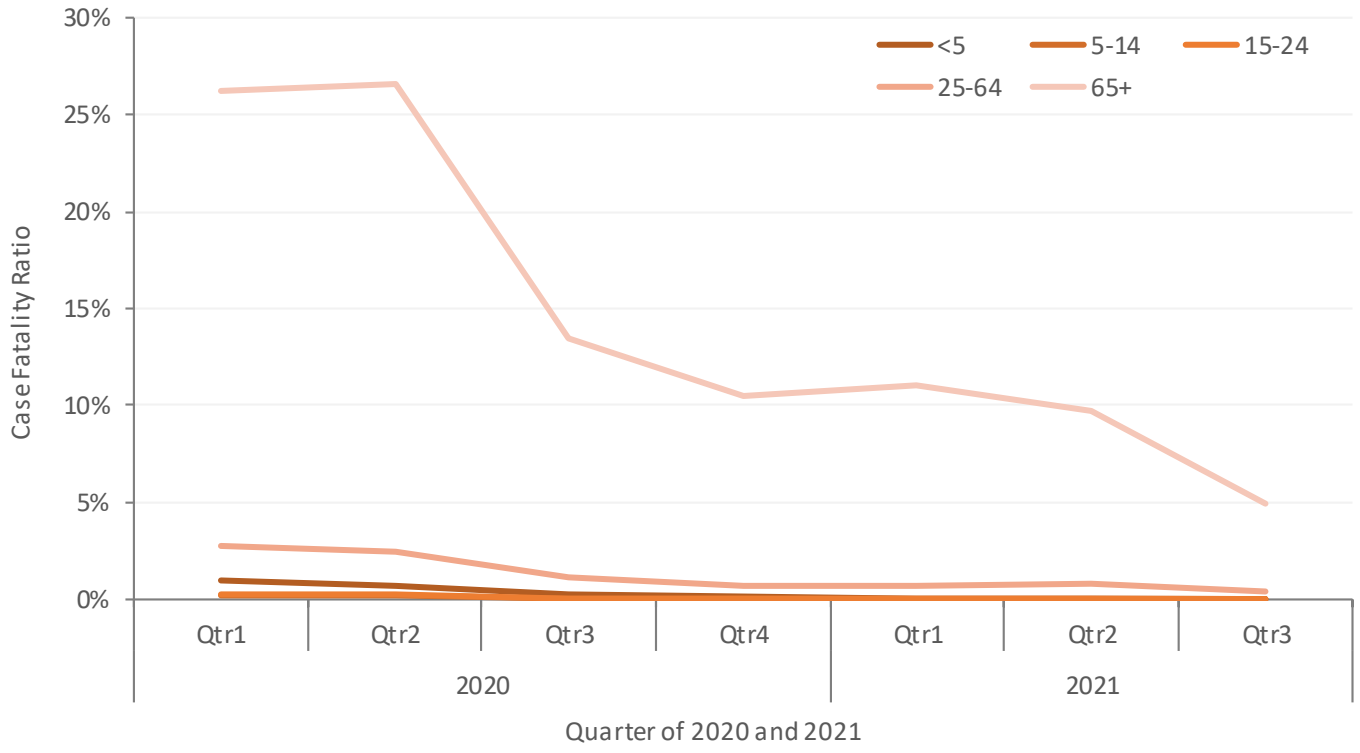
Figure 6: Proportion by age of confirmed COVID-19 cases per week, COVID-19 WHO surveillance, January 2020 to 12 October 2021 (n=99 067 915)



Trends in age-specific case fatality ratios (CFR)

Figure 7 shows CFRs by age-group and year-quarter. Among those aged under 64 years, the CFR has remained below 2.5% throughout the pandemic. Since the second quarter of 2020 (April-September), the CFR substantially decreased among those aged 65 years and over, declining from 26% in the second quarter of 2020, to 5% in the third quarter of 2021, likely as result of the implementation of targeted COVID-19 preventive measures including but not limited to vaccination in this age group as well as the improvements in clinical care over time.

Figure 7. COVID-19 Case fatality ratio (CFR) by age group and quarter, 2020 to 2021 Quater 3, as of 12 October 2021



Conclusions and recommendations

Data submitted to the WHO has highlighted differences in the proportion of COVID-19 cases by age groups and sex, including a recent surge of cases in younger age groups (0-24 years-old), although these proportions are not evenly distributed worldwide. The CFR in people over 65 years has dropped to below 5% recently, which may be due to several factors including, but not limited to, non-pharmaceutical interventions, improved clinical understanding and management of COVID-19, and the impact of vaccination.

Despite the great effort in COVID-19 surveillance being made by Member States, there is still room for improvement. The completeness of surveillance data is still low and varies regionally and among income categories, with lower-income countries reporting less complete data. WHO recommends ongoing surveillance for COVID-19 in order to understand the incidence and mortality among different age groups, which populations are at higher risk for severe disease and death, and potential epidemiological changes over time.

Additional resources

- WHO COVID-19 Detailed Surveillance Data Dashboard
- Global surveillance of COVID-19: WHO process for weekly reporting aggregated data
- WHO COVID-19 Detailed Surveillance Data Dashboard
- Public health surveillance for COVID-19: interim guidance

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. As evidence becomes available, classification for VOIs or VOCs will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification and the current lists of VOCs, VOIs and other Variants Under Monitoring are available on the WHO Tracking SARS-Cov-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants.

As these risks evolve, WHO will continue to update lists of global VOIs and VOCs to support setting priorities for surveillance and research, and ultimately guide response strategies (for more information, please see the Tracking SARS-CoV-2 variants website). The prevalence of different variants is being monitored in light of other co-circulating variants, such as Delta. The global distribution should nonetheless be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, and delays in reporting.

Geographic spread and prevalence of VOCs

The current global genetic epidemiology is characterized by a predominance of Delta variant, with declining prevalence of other variants among SARS-CoV-2 sequences submitted to publicly available datasets or reported to WHO (Figure 5, Annex 1). Delta has outcompeted other variants, including other VOCs, in most countries. However, sub-regional and country-level variation continues to be observed; most notably within some South American countries, where the progression of the Delta variant has been more gradual, and other variants (e.g. Gamma, Mu) still contribute a a large proportion of sequences.

Global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities, sampling strategies between countries and delays in reporting. Current efforts are underway to strengthen genomic surveillance in several regions and countries to enhance coverage of sequencing and detection of variants globally.

Lineage AY.4.2

With ongoing spread and evolution of SARS-CoV-2, new branches of the COVID-19 evolutionary tree continue to be defined, including within the Delta VOC. The characterization of Pango lineages and Nextstrain clades, together with other genomic systems and tools, assists researchers and public health agencies worldwide to track the evolution of SARS-CoV-2. Nextstrain has recently identified two additional subclades of Delta that have grown in frequency globally, and therefore currently divides the Delta variant into 3 clades: 21A, 21I, 21J. As per the latest Pango nomenclature, which is more fine-scaled, 67 lineages have been designated within Delta. Each of the three Nextstrain clades (21A, 21I and 21J) correspond to multiple Pango AY lineages. New lineages are regularly assigned as new sequencing data becomes available and processed to define epidemiologically relevant phylogenetic clusters, e.g. an introduction into a district geographic area with evidence of onward transmission.[1] Past sequences and associated metadata are also retrospectively updated, which should be taken into account when interpreting GISAID data. WHO, in collaboration with the SARS-CoV-2 Virus Evolution Working Group, continues to monitor and assess SARS-CoV-2 variants, including the AY lineages within Delta VOC.

AY.4.2 is a newly designated Pango lineage within Delta VOC, which has three additional mutations, including two in the spike protein: A222V and Y145H. An increase in AY.4.2 sequence submissions has been observed since July 2021, and as of 25 October, over 26 000 AY.4.2 sequences have been uploaded to GISAID from 42 countries. The majority (93%) of these sequences were reported from the United Kingdom, where a gradual increase in the proportional contribution of AY.4.2 has been observed; accounting for an estimated 5.9% of overall Delta cases reported in the week beginning 3 October 2021.[2] Epidemiological and laboratory studies are ongoing to assess if AY.4.2 confers any additional phenotypic impacts (e.g. a change in transmissibility or a decrease in the ability of antibodies to block the virus).

Additional resources

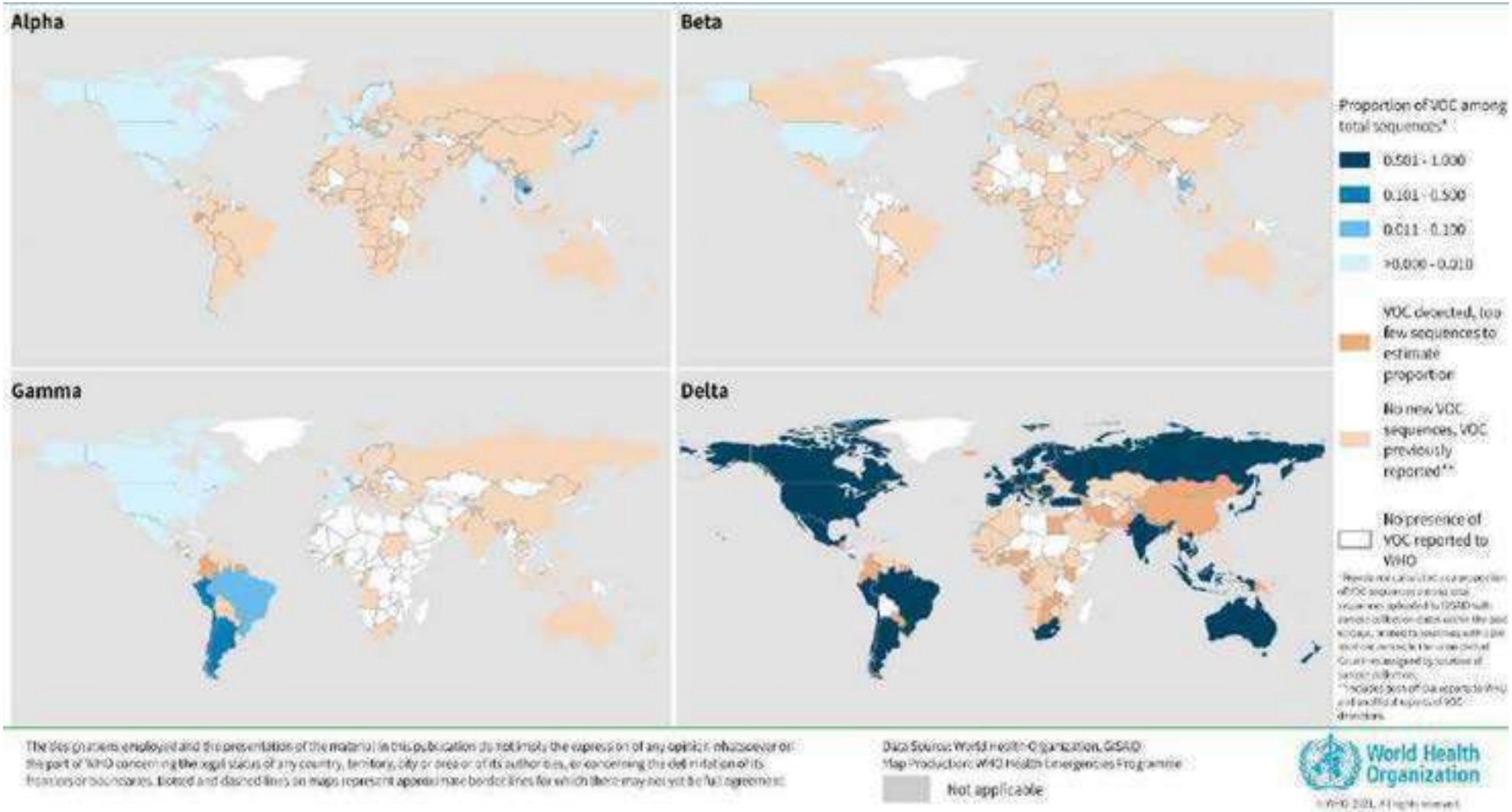
- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19

References

1. Rambaut A, Holmes EC, O'Toole Á, et al. A dynamic nomenclature proposal for SARS-CoV-2 lineages to assist genomic epidemiology. *Nature Microbiology*. 2020;5(11):1403-1407. doi:10.1038/s41564-020-0770-5

2. Public Health England. *SARS-CoV-2 Variants of Concern and Variants under Investigation in England-Technical Briefing 26*.; 2021. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1028113/Technical_Briefing_26.pdf

Figure 5: Prevalence of Variants of Concern (VOCs) in the last 60 days and historic detections, data as of 26 October 2021

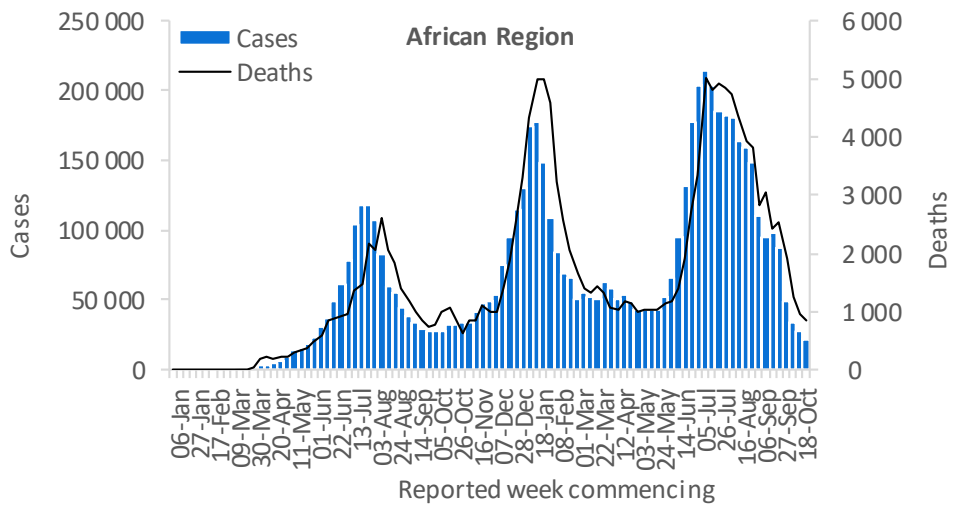


WHO regional overviews Epidemiological week 18-24 October 2021

African Region

The declining trend observed in the African Region since mid-July continued this week with over 22 000 new cases and over 800 new deaths reported, a decrease of 21% and 11% respectively as compared to the previous week. While this is reassuring, ten out of the 49 countries (20%) in the Region reported increases in new weekly cases as compared with the previous week, with the greatest increase observed in Réunion (578%), Botswana (116%), and Gambia (100%). The highest numbers of new cases were reported from South Africa (3153 new cases; 5.3 new cases per 100 000 population; a 33% decrease), Botswana (3063 new cases; 130.3 new cases per 100000; a 116% increase), and Ethiopia (2908 new cases; 2.5 new cases per 100 000; a 38% decrease).

The highest numbers of new deaths were reported from South Africa (327 new deaths; <1 new death per 100 000 population; an 11% increase), Ethiopia (136 new deaths; <1 new death per 100 000; a 45% decrease), and Nigeria (52 new deaths; <1 new death per 100 000; a 12% decrease).

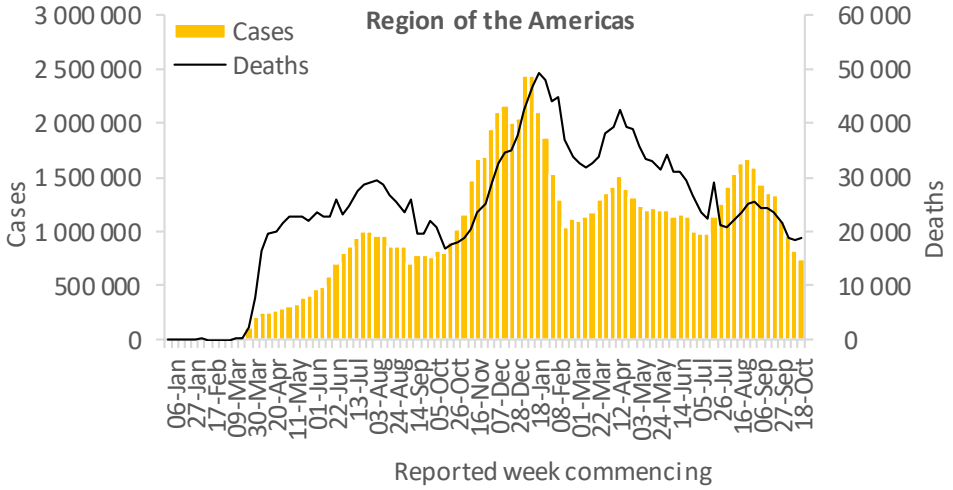


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 745 000 new cases this week, a 9% decline as compared to the previous week and a continuation of the declining trend in the region observed since the end of August 2021. Nevertheles,s 25% of countries (14/56) reported an increase in new cases this week as compared to the previous week, with the largest increases observed in Dominica (166%), Cayman Islands (156%) and Paraguay (136%). The highest numbers of new cases were reported from the United States of America (512 956 new cases; 155.0 new cases per 100 000; a 12% decrease), Brazil (84 367 new cases; 39.7 new cases per 100 000; a 10% increase), and Mexico (32 940 new cases; 25.5 new cases per 100 000; a 7% decrease).

Deaths remain stable as compared with the previous week, with the highest numbers of new deaths reported from the United States of America (11 604 new deaths; 3.5 new deaths per 100 000; similar to the number reported last week), Brazil (2470 new deaths; 1.2 new deaths per 100 000; a 10% increase), and Mexico (2324 new deaths; 1.8 new deaths per 100 000; similar to the number reported last week).

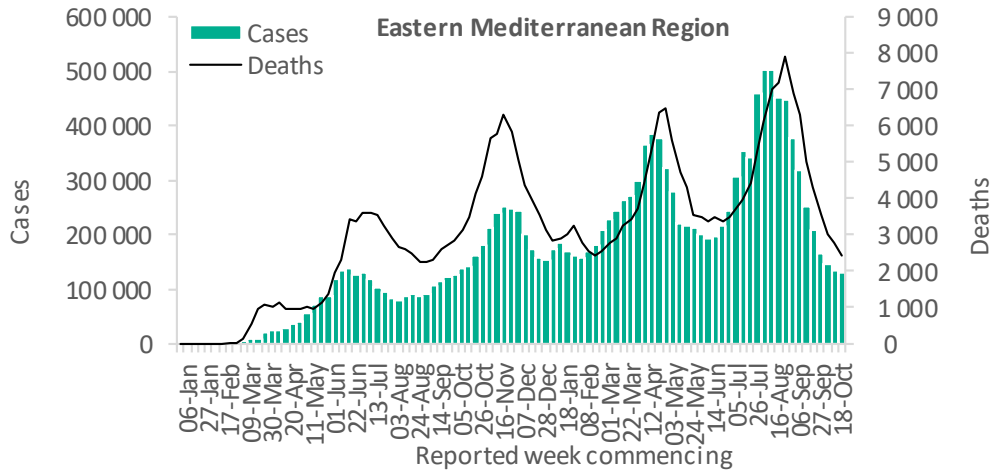


Updates from the Region of the Americas

Eastern Mediterranean Region

The number of cases and deaths continued to decline this week in the Eastern Mediterranean Region, with just under 130 000 new cases and over 2400 new deaths reported, a 5% and a 13% decrease respectively as compared to the previous week. This declining trend in both cases and deaths has been observed since late July 2021. In the past week, just under one third of the countries (6/22; 27%) in the region reported an increase in new cases and the highest increases were observed in Sudan (57%) and the Syrian Arab Republic (26%). The highest numbers of new cases were reported from the Islamic Republic of Iran (78 251 new cases; 93.2 new cases per 100 000; similar to the number reported in the previous week), Iraq (11 290 new cases; 28.1 new cases per 100 000; similar to the number reported in the previous week), and Jordan (9641 new cases; 94.5 new cases per 100 000; a 25% increase).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (1176 new deaths; 1.4 new deaths per 100 000; a 22% decrease), Egypt (316 new deaths; <1 new death per 100 000; an 18% increase), and Iraq (199 new deaths; <1 new death per 100 000; similar to the number reported in the previous week).

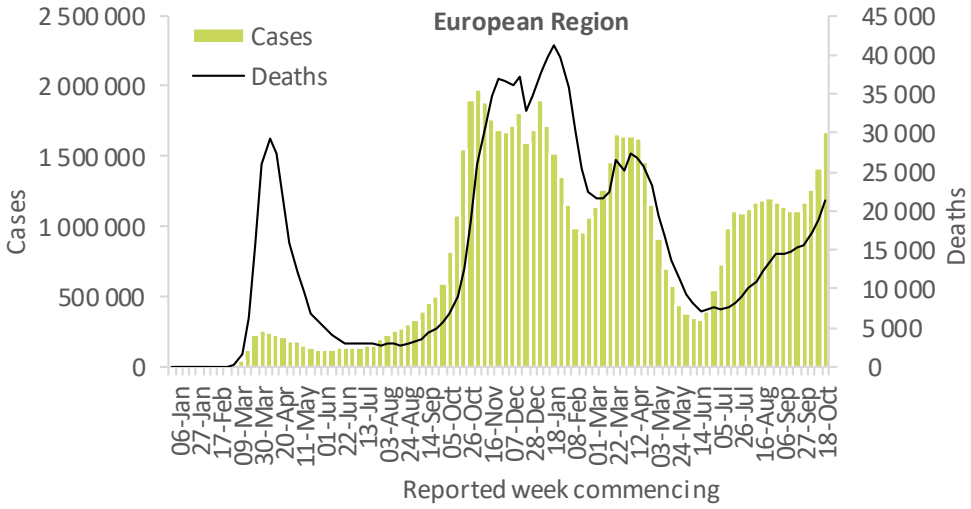


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 1.6 million new cases and over 21 000 new deaths, an 18% and a 14% increase respectively compared to the previous week. The trend observed since the end of September continued this week with an increasing number of new cases and deaths reported in the Region . More than half (42/61; 69%) of the countries in the European Region reported an increase in cases in the past week. The highest numbers of new cases were reported from the United Kingdom (330 465 new cases; 486.8 new cases per 100 000; a 16% increase), the Russian Federation (248 956 new cases; 170.6 new cases per 100 000; a 15% increase), and Turkey (196 850 new cases; 233.4 new cases per 100 000; an 8% decrease).

The highest numbers of new deaths were reported from the Russian Federation (7288 new deaths; 5.0 new deaths per 100 000; a 6% increase), Ukraine (3239 new deaths; 7.4 new deaths per 100 000; a 51% increase), and Romania (2889 new deaths; 14.9 new deaths per 100 000; a 22% increase).

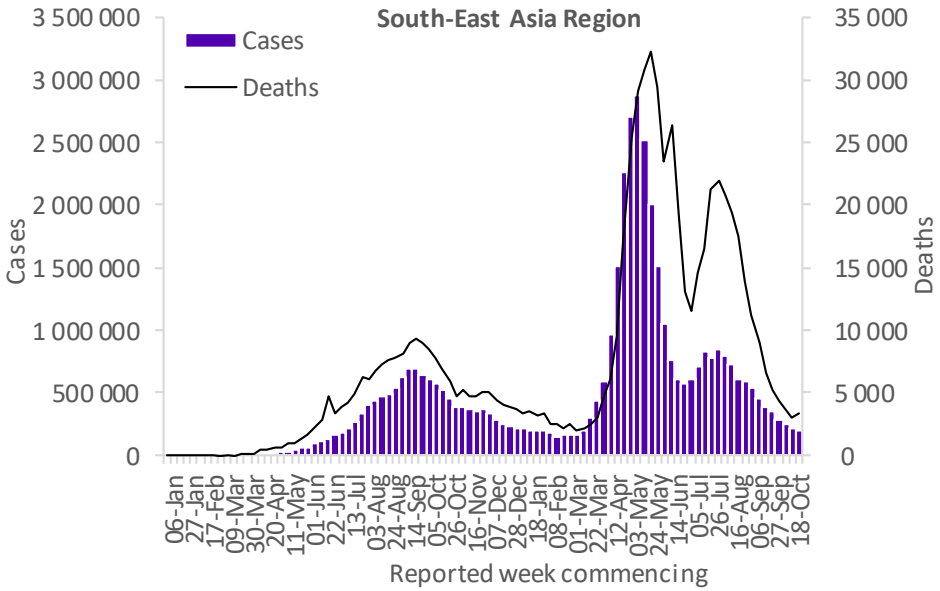


Updates from the European Region

South-East Asia Region

Since the end of July 2021, new weekly cases continue to decline in the Region , with 197 000 new cases reported this week, an 8% decrease as compared with the previous week. All the countries reported a decreasing trend except for Maldives (23% increase), Timor-Leste (37% increase) and Nepal (42% increase). The highest numbers of new cases were reported from India (107 749 new cases; 7.8 new cases per 100 000; a 6% decrease), Thailand (66 781 new cases; 95.7 new cases per 100 000; an 8% decrease), and Myanmar (6410 new cases; 11.8 new cases per 100 000; a 30% decrease).

On the other hand, new weekly deaths increased by 13% this week as compared with the previous week, largely driven increases in India (40% increase) and Nepal (21% increase). The highest numbers of new deaths were reported from India (2145 new deaths; <1 new death per 100 000; a 40% increase), Thailand (482 new deaths; <1 new death per 100 000; a 17% decrease), and Indonesia (253 new deaths; <1 new death per 100 000; a 16% decrease).

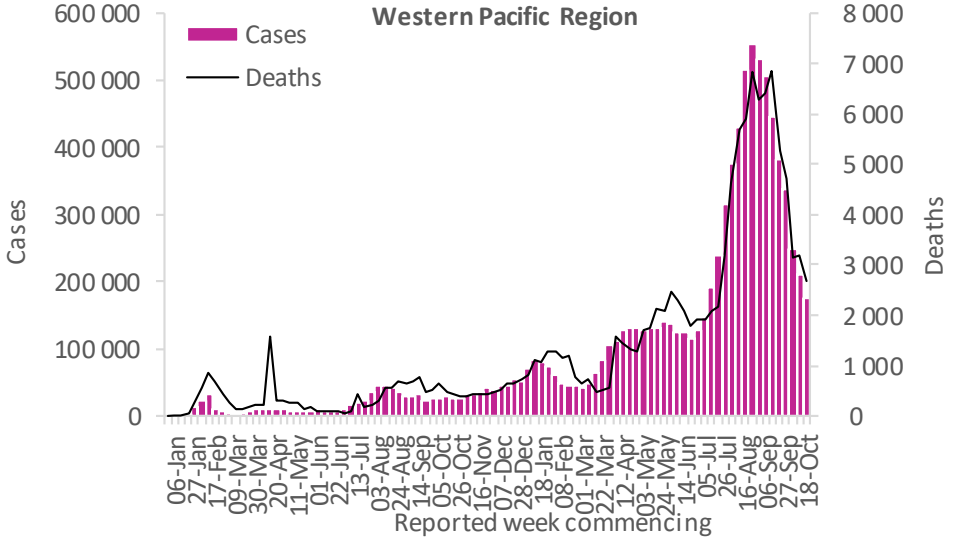


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported over 174 000 new cases and over 2600 new deaths, a 17% and a 16% decrease respectively, as compared to the previous week. Despite the ongoing declining trends in the Region, of the countries reporting cases (19/26; 73%), more than a quarter (5/19; 26%) still reported increases in new cases in the past week. The highest numbers of new cases were reported from Malaysia (41 508 new cases; 128.2 new cases per 100 000; a 21% decrease), the Philippines (38 189 new cases; 34.8 new cases per 100 000; a 35% decrease), and Singapore (24 141 new cases; 412.6 new cases per 100 000; a 15% increase).

The highest numbers of new deaths were reported from the Philippines (1005 new deaths; <1 new death per 100 000; a 7% decrease), Malaysia (496 new deaths; 1.5 new deaths per 100 000; a 16% decrease), and Viet Nam (489 new deaths; <1 new death per 100 000; a 29% decrease).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 25 October, highlights include the following:

- Rapid Response Mobile Laboratory (RRML/GOARN) initiative strengthens international RRML deployment capabilities
- PAHO and US Centers for Disease Control and Prevention Partner to Bolster COVID-19 Response in Jamaica
- Leveraging polio campaign to integrate COVID-19 vaccination in Nigeria
- HealthBuddy+ in Bulgaria: innovative COVID-19 chatbot supports mental health during the pandemic
- Online courses support rollout of Go.Data outbreak investigation tool
- Progress on a subset of indicators from the SPRP 2021 Monitoring and Evaluation Framework
- Updates on WHO's financing to support countries in SPRP 2021 implementation and provision of critical supplies.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Annex 1. List of countries/territories/areas reporting variants of concern as of 26 Oct 2021**

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Afghanistan	●	-	-	●
Albania	●	-	-	○
Algeria	●	-	-	●
Andorra	○	○	-	○
Angola	●	●	●	●
Anguilla	●	-	-	●
Antigua and Barbuda	●	●	●	●
Argentina	●	●	●	●
Armenia	●	-	-	●
Aruba	●	●	●	●
Australia	●	●	●	●
Austria	●	●	●	●
Azerbaijan	●	-	-	○
Bahamas	●	-	●	●
Bahrain	●	●	●	●
Bangladesh	●	●	○	●
Barbados	●	-	●	●
Belarus	●	-	-	○
Belgium	●	●	●	●
Belize	●	-	●	●
Benin	●	●	●	●
Bermuda	●	●	-	●
Bhutan	●	●	-	●
Bolivia (Plurinational State of)	●	-	●	-
Bonaire	●	-	●	●
Bosnia and Herzegovina	●	●	●	○
Botswana	○	●	-	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Brazil	●	●	●	●
British Virgin Islands	●	-	●	●
Brunei Darussalam	●	●	-	●
Bulgaria	●	●	-	●
Burkina Faso	●	-	-	●
Burundi	●	●	-	●
Cabo Verde	●	-	-	●
Cambodia	●	●	-	●
Cameroon	●	●	-	●
Canada	●	●	●	●
Cayman Islands	●	●	●	●
Central African Republic	●	●	-	●
Chad	●	-	-	-
Chile	●	●	●	●
China	●	●	●	○
Colombia	●	-	●	●
Comoros	-	●	-	-
Congo	●	○	●	●
Costa Rica	●	●	●	●
Croatia	●	●	●	○
Cuba	●	●	-	●
Curaçao	●	●	●	●
Cyprus	●	●	-	○
Czechia	●	●	●	●
Côte d'Ivoire	●	●	-	○
Democratic Republic of the Congo	●	●	-	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Denmark	●	●	●	●
Djibouti	●	●	-	-
Dominica	●	-	-	●
Dominican Republic	●	-	●	●
Ecuador	●	-	●	●
Egypt	●	-	-	●
El Salvador	●	-	●	●
Equatorial Guinea	●	●	-	○
Estonia	●	●	○	○
Eswatini	○	●	-	●
Ethiopia	●	-	-	●
Falkland Islands (Malvinas)	●	●	-	-
Faroe Islands	●	-	●	-
Fiji	○	-	-	●
Finland	●	●	●	●
France	●	●	●	●
French Guiana	●	●	●	●
French Polynesia	●	●	●	●
Gabon	●	●	-	●
Gambia	●	-	-	●
Georgia	●	○	-	●
Germany	●	●	●	●
Ghana	●	●	●	●
Gibraltar	●	-	-	○
Greece	●	●	●	●
Grenada	●	-	-	●
Guadeloupe	●	●	●	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Guam	●	●	●	●
Guatemala	●	●	●	●
Guinea	●	●	-	●
Guinea-Bissau	●	●	-	●
Guyana	-	-	●	●
Haiti	●	-	●	●
Honduras	●	-	●	●
Hungary	●	○	●	○
Iceland	●	●	●	●
India	●	●	●	●
Indonesia	●	●	○	●
Iran (Islamic Republic of)	●	●	-	●
Iraq	●	●	-	●
Ireland	●	●	●	●
Israel	●	●	●	●
Italy	●	●	●	●
Jamaica	●	-	-	●
Japan	●	●	●	●
Jordan	●	●	●	●
Kazakhstan	●	○	-	●
Kenya	●	●	-	●
Kosovo[1]	●	○	-	○
Kuwait	●	●	-	●
Kyrgyzstan	●	●	-	●
Lao People's Democratic Republic	●	-	-	●
Latvia	●	●	●	○
Lebanon	●	-	-	●
Lesotho	-	●	-	○
Liberia	●	●	-	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Libya	●	●	-	-
Liechtenstein	●	-	-	○
Lithuania	●	●	●	○
Luxembourg	●	●	●	●
Madagascar	●	●	-	-
Malawi	●	●	-	●
Malaysia	●	●	-	●
Maldives	●	-	-	●
Mali	-	-	-	●
Malta	●	○	●	○
Martinique	●	●	●	●
Mauritania	●	●	-	●
Mauritius	●	●	-	●
Mayotte	●	●	-	○
Mexico	●	●	●	●
Monaco	●	●	-	●
Mongolia	●	-	-	●
Montenegro	●	-	○	○
Montserrat	●	-	●	●
Morocco	●	●	-	●
Mozambique	●	●	-	●
Myanmar	●	-	-	●
Namibia	●	●	-	●
Nepal	●	-	-	●
Netherlands	●	●	●	●
New Caledonia	●	-	-	●
New Zealand	●	●	○	●
Niger	●	-	-	-
Nigeria	●	●	-	●
North Macedonia	●	●	-	○

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Northern Mariana Islands (Commonwealth of the)	○	-	-	●
Norway	●	●	●	●
Occupied Palestinian Territory	●	●	-	●
Oman	●	●	-	●
Pakistan	●	●	●	●
Panama	●	●	●	●
Papua New Guinea	-	-	-	●
Paraguay	●	-	●	●
Peru	●	-	●	●
Philippines	●	●	●	●
Poland	●	○	●	●
Portugal	●	●	●	●
Puerto Rico	●	●	●	●
Qatar	●	●	-	●
Republic of Korea	●	●	●	●
Republic of Moldova	●	-	-	●
Romania	●	●	●	●
Russian Federation	●	●	○	●
Rwanda	●	●	-	●
Réunion	●	●	●	○
Saba	-	-	-	●
Saint Barthélemy	●	-	-	●
Saint Kitts and Nevis	-	-	-	●
Saint Lucia	●	-	-	●
Saint Martin	●	●	-	●
Saint Pierre and Miquelon	-	-	-	●
Saint Vincent and the Grenadines	-	-	●	●
Sao Tome and Principe	●	-	-	○

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Saudi Arabia	●	●	-	●
Senegal	●	●	-	●
Serbia	●	-	-	●
Seychelles	●	●	-	●
Sierra Leone	-	●	-	●
Singapore	●	●	●	●
Sint Maarten	●	●	●	●
Slovakia	●	●	-	●
Slovenia	●	●	●	●
Somalia	●	●	-	-
South Africa	●	●	○	●
South Sudan	●	●	-	●
Spain	●	●	●	●
Sri Lanka	●	●	-	●
Sudan	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Suriname	●	●	●	●
Sweden	●	●	●	●
Switzerland	●	●	●	●
Thailand	●	●	●	●
Timor-Leste	●	-	-	●
Togo	●	●	●	●
Trinidad and Tobago	●	-	●	●
Tunisia	●	●	-	●
Turkey	●	●	●	●
Turks and Caicos Islands	●	-	●	●
Uganda	●	●	-	●
Ukraine	●	○	-	○
United Arab Emirates	●	●	●	●
United Kingdom	●	●	●	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
United Republic of Tanzania	-	●	-	-
United States Virgin Islands	●	●	○	●
United States of America	●	●	●	●
Uruguay	●	●	●	●
Uzbekistan	●	●	-	○
Venezuela (Bolivarian Republic of)	●	-	●	●
Viet Nam	●	●	-	●
Wallis and Futuna	●	-	-	-
Yemen	●	●	-	-
Zambia	●	●	-	●
Zimbabwe	●	●	-	●

**Newly reported in this update.*

indicates that information for this variant was received by WHO from official sources.

indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available.

***Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern.*

See also Annex 2: Data, table and figure notes

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

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A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

COVID-19 Weekly Epidemiological Update

Edition 62, published 19 October 2021

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Summary of the Weekly Operational Update

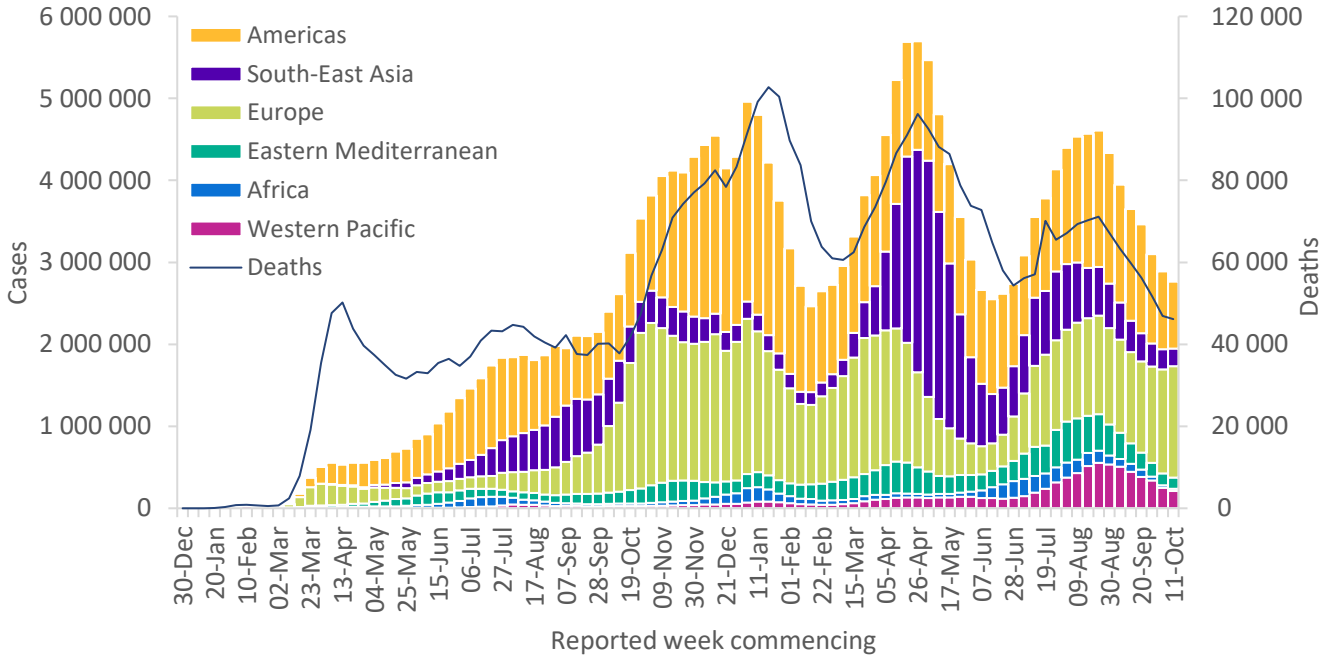
Global overview

Data as of 17 October 2021

With just over 2.7 million new cases and over 46 000 new deaths reported during the week of 11 to 17 October 2021, the global number of new cases and deaths remained similar to that of the previous week (Figure 1). Apart from the European Region, which reported a 7% increase in the number of new weekly cases when as compared to the previous week, all the other regions reported declines in new weekly cases (Table 1). The largest decrease in new weekly cases was reported from the African Region (18%), followed by the Western Pacific Region (16%). The cumulative number of confirmed cases reported globally is now over 240 million and the cumulative number of deaths is just under 4.9 million.

The African Region also reported the largest decline in weekly deaths (25%) followed by the South-East Asia and Eastern Mediterranean Regions with 19% and 8% declines, respectively. All other regions reported new deaths in numbers similar to those of the previous week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 17 October 2021**



**See *Annex 3: Data, table and figure notes*

The regions reporting the highest weekly case incidence rates per 100 000 population were the European Region (145.6 new cases per 100 000 population) and the Region of the Americas (79.9 new cases per 100 000 population); the same two regions reported the highest weekly incidence in deaths, of 1.9 and 1.8 per 100 000 population, respectively.

The highest numbers of new cases were reported from the United States of America (582 707 new cases; 11% decrease), the United Kingdom (283 756 new cases; 14% increase), the Russian Federation (217 322 new cases; 15% increase), Turkey (213 981 new cases; similar to the number reported in the previous week) and India (114 244 new cases; 18% decrease).

Globally, three additional countries, territories or areas (hereafter countries) reported cases with VOCs in the past week. As of 19 October, cases of Alpha variant have been reported from 196 countries (one new country added), Beta variant from 145 countries (no new country added), Gamma variant from 99 countries, and Delta variant from 193 countries (two new countries added) across all six WHO regions.

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 17 October 2021**

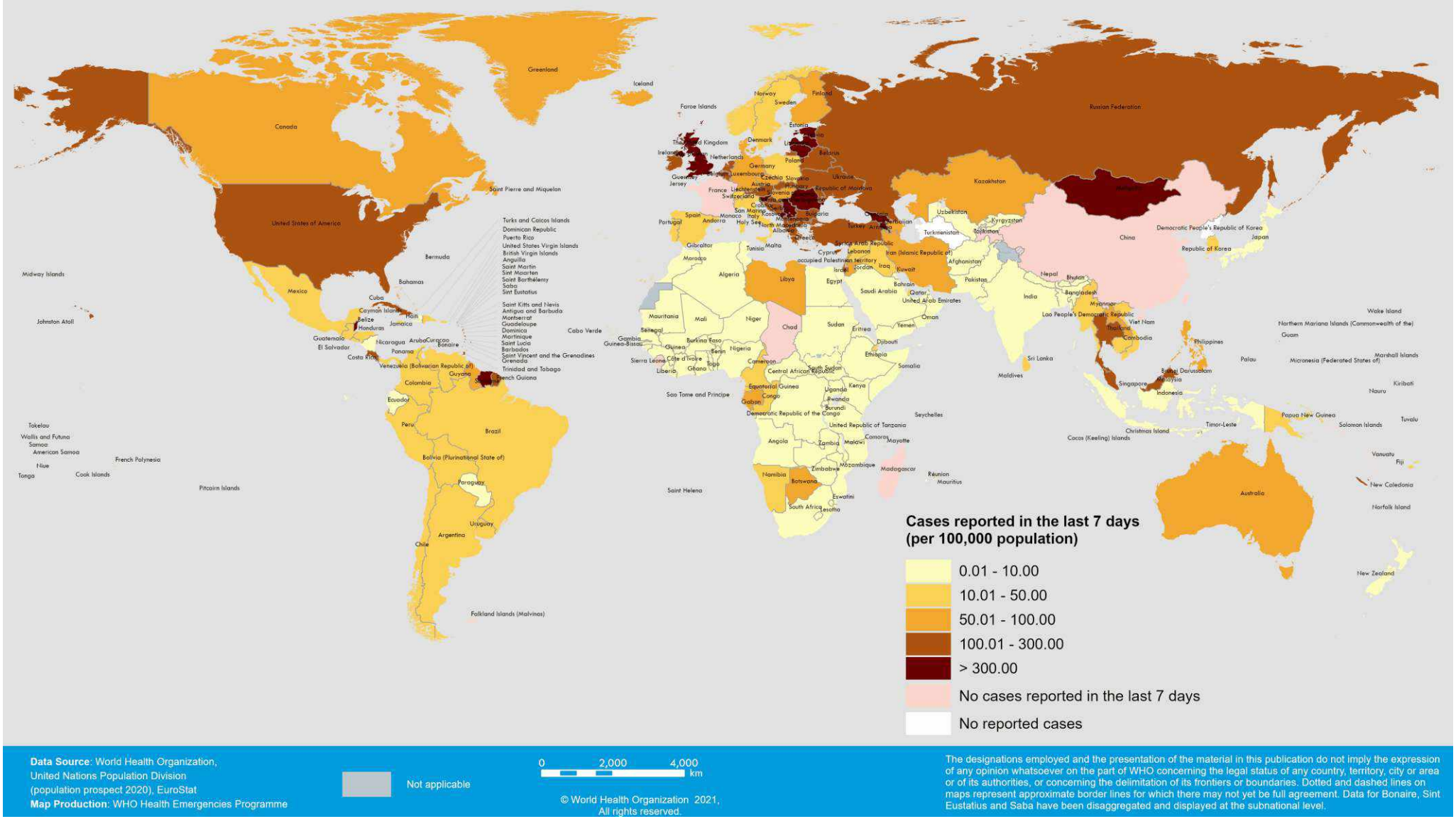
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Africa	27 606 (1%)	-18%	6 109 365 (3%)	940 (2%)	-25%	149 041 (3%)
Americas	816 860 (30%)	-14%	92 142 897 (38%)	18 322 (40%)	-1%	2 260 259 (46%)
Eastern Mediterranean	136 074 (5%)	-6%	16 106 313 (7%)	2 769 (6%)	-8%	296 337 (6%)
Europe	1 358 284 (49%)	7%	73 226 218 (30%)	17 998 (39%)	4%	1 378 412 (28%)
South-East Asia	214 984 (8%)	-13%	43 584 700 (18%)	2 933 (6%)	-19%	684 604 (14%)
Western Pacific	210 149 (8%)	-16%	9 068 961 (4%)	3 178 (7%)	1%	124 024 (3%)
Global	**2 763 957 (100%)**	**-4%**	**240 239 218 (100%)**	**46 140 (100%)**	**-2%**	**4 892 690 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
***See Annex 3: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

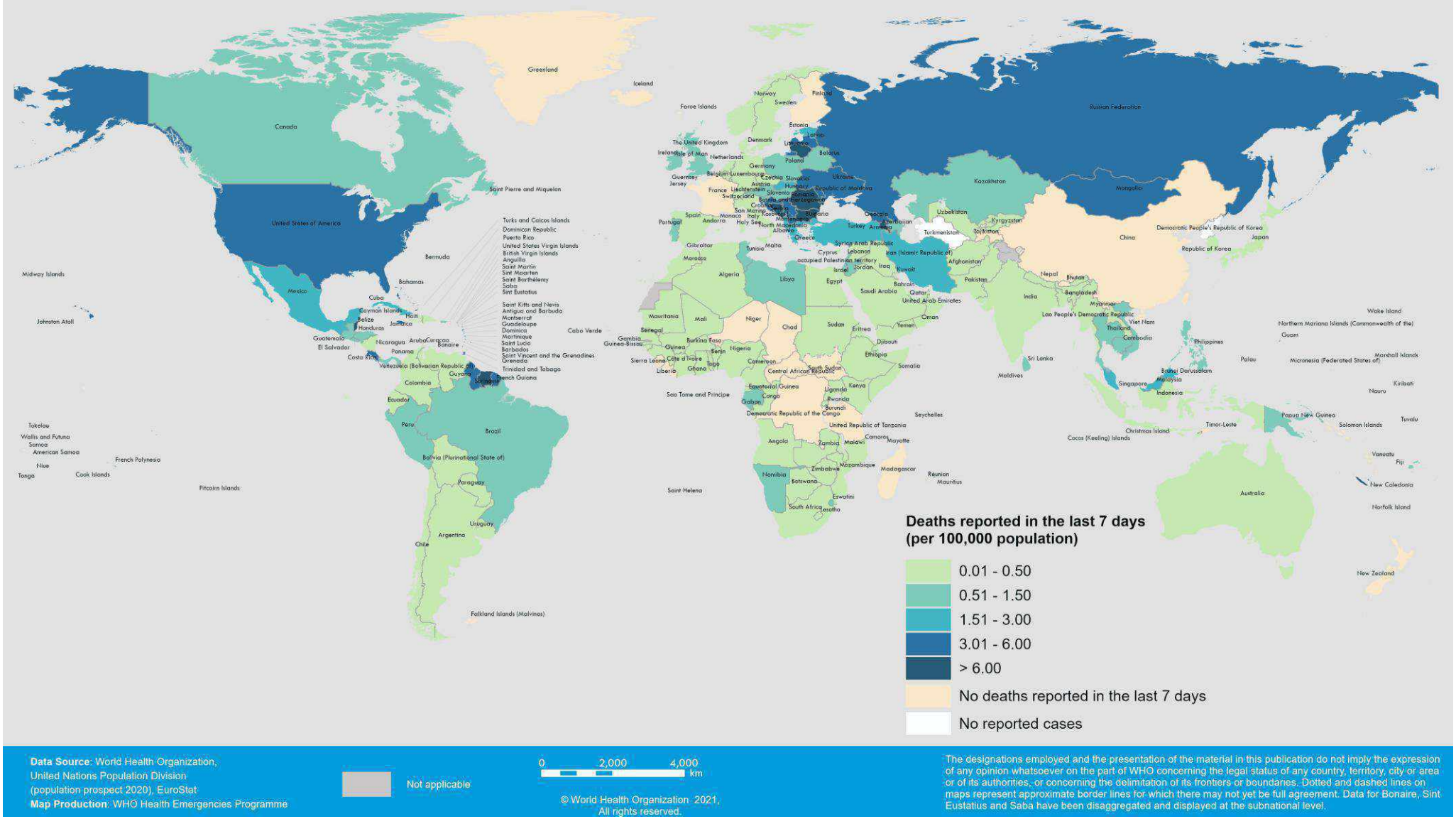
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 11-17 October 2021**



**See *Annex 3: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 11-17 October 2021**



**See *Annex 3: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. As evidence becomes available, classification for VOIs or VOCs will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification and the current lists of VOCs, VOIs and other Variants Under Monitoring (VUMs) are available on the WHO Tracking SARS-Cov-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants.

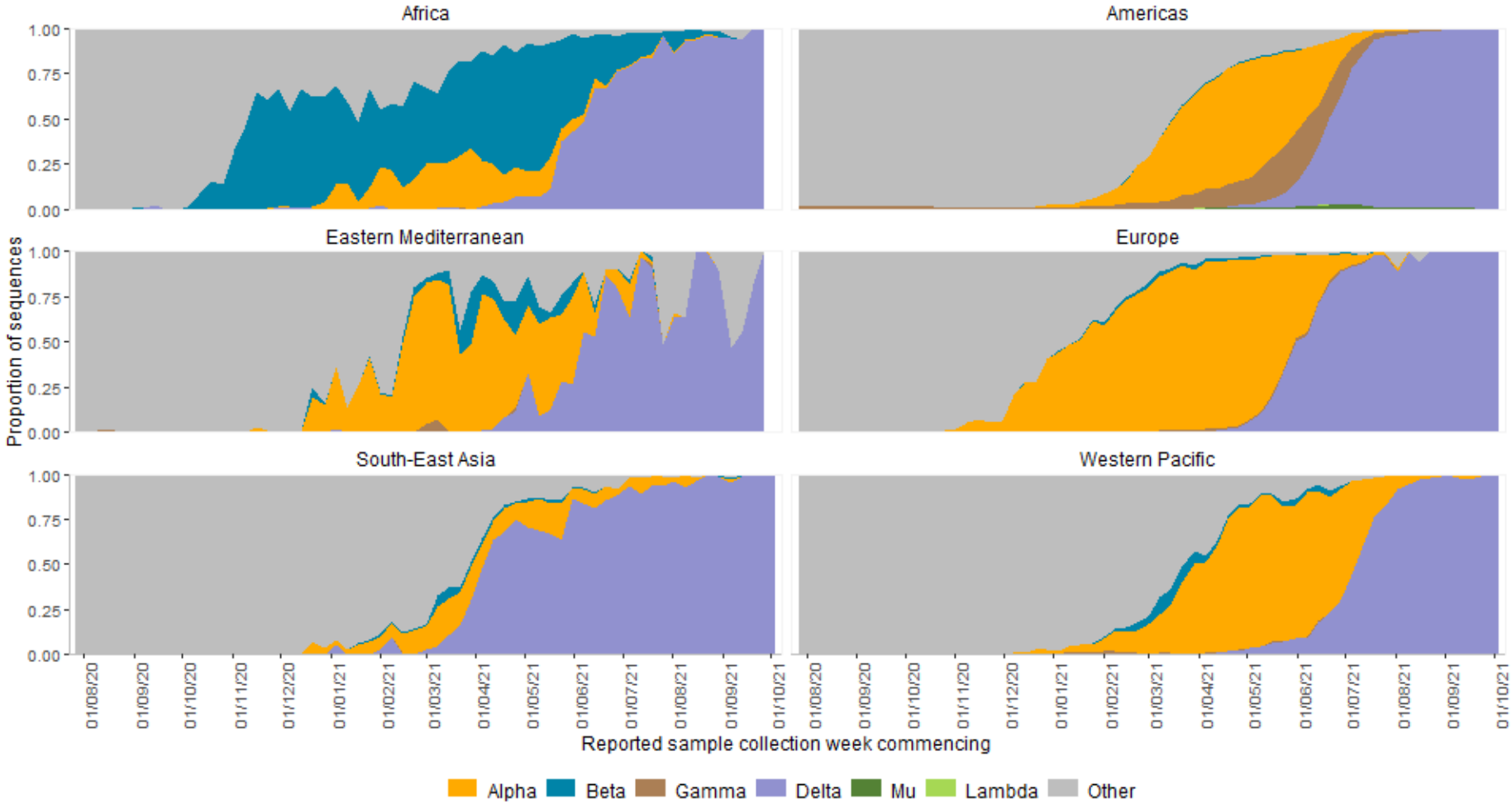
Geographic spread and prevalence of VOCs

The current global genetic epidemiology is characterized by a predominance of Delta variant, with declining prevalence of other variants among SARS-CoV-2 sequences submitted to publicly available datasets (Figure 4). Given its higher transmissibility, Delta has outcompeted other variants, including other VOCs, in many countries. Important sub-regional and country-level variation, nevertheless, continues to be observed; most notably within some South American countries, where the progression of the Delta variant has been more gradual than that observed in other regions, and other variants (e.g. Gamma, Mu) still contribute a large proportion of sequences samples.

To better reflect recent changes and the current geographic distribution of VOCs at a global level, we present here a revised set of global maps overlaying recent estimates of VOC prevalence, with data previously presented on detection of VOC reported officially or unofficially to WHO (Figure 5). Country-specific prevalence estimates were calculated as a proportion of total SARS-CoV-2 sequences uploaded to GISAID with a specimen collection date within the past 60 days, summarised into three groups to illustrate locations where the prevalence of VOCs is currently: dominant (>50% prevalence), moderate (11-50% prevalence) or low (≤10%). To ensure robustness of estimates, proportion estimates were limited to countries with 100 or more sequences uploaded during the reporting period. For countries with fewer than 100 sequences submitted, data on the detection or absence of submitted VOCs sequences, as well as previous reports of VOC detection are shown, and are detailed in Annex 2. Overall, these maps further highlight that in recent months, Delta is the most prevalent variant with widespread global circulation. Other VOCs and other variants are still circulating in some countries, however, largely at low levels.

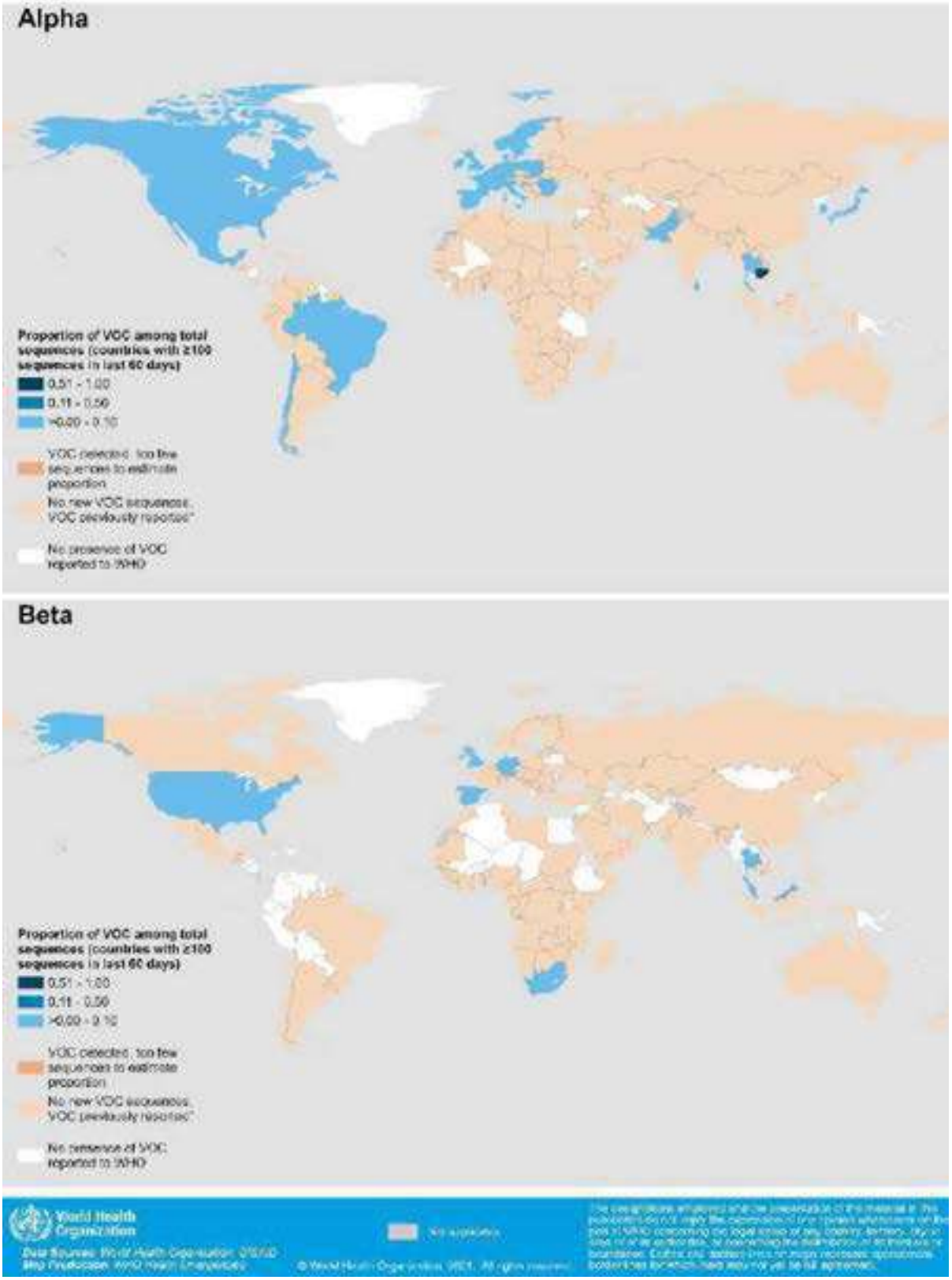
Global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities, sampling strategies between countries and delays in reporting. Current efforts are underway to strengthen genomic surveillance for SARS-CoV-2, including variants, in several regions and countries to enhance coverage of sequencing and detection of variants globally.

Figure 4: Proportion of current global VOC or VOI sequences reported among total sequences submitted over time by WHO Region, 1 August 2020 – 15 October 2021*

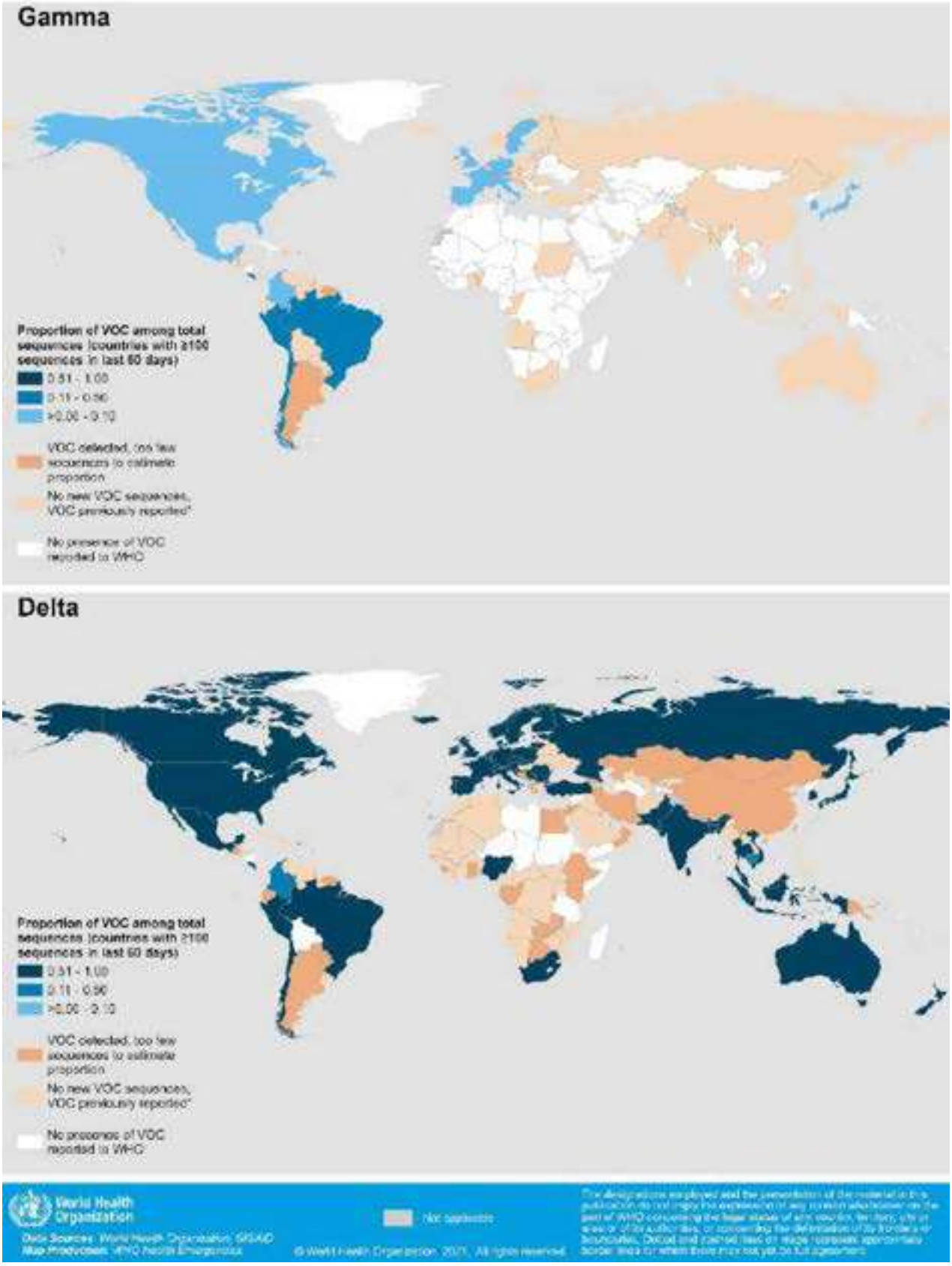


Data source: GISAID Initiative

Figure 5. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta and proportions of circulating VOCs, as of 19 October 2021



**Includes both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. See Annex 2 for further details. **Prevalence estimates were calculated as a proportion of total sequence uploaded to GISAID with sample collection dates with the 60 day reporting period, limiting to countries with 100 or more total sequences uploaded during this period. Sequences were assigned to countries based upon the reported location of sampling; VOC sequences from travellers submitted by other countries were not included.*



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Phenotypic characteristics

Available evidence on the phenotypic impacts of VOCs is summarized in Table 2, as well as in previous editions of the COVID-19 Weekly Epidemiological Updates. Since the last detailed update on 5 October, there are several new publications on the phenotypic characteristics of VOCs.

A prospective study, not yet peer reviewed, assessed the illness profiles (symptom prevalence, duration and burden), hospital presentation, and presence of long (≥28 days) illness among 1400 symptomatic school-aged children in two groups (younger children aged 5–11 years and older children aged 12–17 years) who tested positive for SARS-CoV-2. The study was conducted in the United Kingdom at a time when either Alpha (28 December 2020 to 6 May 2021) or Delta (26 May to 8 July 2021) were the predominant circulating SARS-CoV-2 variant.[1] Findings from the study suggested that disease in school-aged children due to Delta variant resembles illness due to the Alpha variant, with short duration and similar symptom burden. Median illness duration was short with either variant: 5 days (IQR 2–9.75) with Alpha, and 5 days (IQR 2-9) with Delta. The median symptom burden (number of symptoms) over the entire period of illness (28 days) was slightly greater among children infected with Delta compared to Alpha infection (in younger children, 3 (IQR 2–5) with Alpha, 4 (IQR 2–7) with Delta; in older children 5 (IQR 3–8) with Alpha and 6 (IQR 3–9) with Delta infection. The seven most prevalent symptoms were common to both variants and included headache, fatigue, fever, dysosmia (disordered smell perception), sneezing, rhinorrhoea, and sore throat; suggesting no meaningful clinical differences in the disease presentation with either variant. Only a small number of children infected with either variant presented to the hospital, and the presence of long (≥28 days) illness was reported to be low.

Findings in another pre-print study conducted in Indonesia[2], among adults, evaluated the impact of Delta variant versus non-Delta variant infections on the outcomes of COVID-19 patients. The study included 69 cases with confirmed isolation of the Delta variant compared with 92 cases of non-Delta variant. Analysis of associated individual variables showed no significant differences in hospitalization or mortality between patients with Delta and non-Delta variant infections (p=0.80 and 0.29, respectively). Additionally, multivariate analysis suggested that age ≥65 years (OR 11.5; 95% CI 1.3-102.6; P=0.028), obesity (OR 16.6; 95% CI 2.5-107.1; p=0.003), diabetes (OR 5.5; 95% CI 1.3-23.7; p=0.021), and hypertension OR 5.8; 95% CI 1.02-32.8; p=0.047), were prognostic factors for mortality in both groups. Conversely, no prognostic factors were found to be associated with the hospitalization of COVID-19 patients.

A peer-reviewed retrospective study[3] conducted in Ireland, analysed the effect of SARS-CoV-2 infection during pregnancy, and the impact of Alpha variant on neonatal clinical outcomes. The study included all liveborn neonates from mothers who tested positive for SAR-CoV-2 at any time during pregnancy and up to 24 hours post-partum. This included 133 neonates who were delivered between 1 March 2020 and 1 March 2021, of which 66 (49.6%) were born following maternal SARS-CoV-2 infection after 1 January 2021, corresponding to a time when Alpha was the dominant variant in circulation in Ireland. The findings suggested no increase in the incidence of preterm birth or neonatal intensive care unit admission when compared with 5-year, pre-pandemic hospital data. Maternal infection before and after Alpha variant circulation or maternal symptom status also did not influence neonatal outcomes. While this is a reassuring initial finding, further studies to evaluate the impact of VOC infections during pregnancy, particularly the Delta variant, are required.

Table 2: Summary of phenotypic impacts* of Variants of Concern

WHO label	Alpha	Beta	Gamma	Delta
Transmissibility	Increased transmissibility[4]	Increased transmissibility[5,6]	Increased transmissibility[6,7]	Increased transmissibility [6,8,9]
Disease severity	Possible increased risk of hospitalization[10,11], possible increased risk of severe disease and death[12,13]	Possible increased risk of hospitalization[11], possible increased in-hospital mortality[14]	Possible increased risk of hospitalization[11], possible increased risk of severe disease[15]	Possible increased risk of hospitalization[16,17]
Risk of reinfection	Neutralizing activity retained[18], risk of reinfection remains similar[19]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[20]	Moderate reduction in neutralizing activity reported[21]	Reduction in neutralizing activity reported[22–24]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF), no impact on overall result from multiple target RT-PCR; No impact on Ag RDTs observed[25]	No impact on RT-PCR or Ag RDTs observed[24]	None reported to date	No impact on RT-PCR or Ag RDTs[26] observed

**Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.*

Table 3 presents the impact of variants on product specific vaccine efficacy/effectiveness (VE) and quantifies the reduction in VE in the setting of variants compared to VE in non-VOC settings. Of note, reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. In addition, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection, as is the case for AstraZeneca-Vaxzevria.

Table 3. Summary of vaccine performance against Variants of Concern

	WHO Emergency Use Listing (EUL) Qualified Vaccines							Vaccines without WHO EUL[+]			
	AstraZeneca-Vaxzevria/SII - Covishield	Beijing CNBG-BBIBP-CorV	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Moderna-mRNA-1273/ Pfizer BioN BioNTech-Comirnaty	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Bharat-Covaxin	Gamaleya-Sputnik V	Novavax-Covavax
Alpha[27,28]											
Summary of VE*	Protection retained against all outcomes										
- Severe disease	↔$_{2}$	-	-	↔$_{2}$	↔$_{1}$	↔$_{5}$	-	-	-	-	-
- Symptomatic disease	↔to↓$_{5}$	-	-	↔$_{1}$	↔$_{1}$	↔$_{4}$	-	-	-	-	↓$_{1}$
- Infection	↔to↓$_{3}$	-		↔$_{2}$	-	↔$_{2}$	-	-	-	-	-
Neutralization	↔to↓$_{7}$	↔$_{1}$	↔$_{4}$	↔to↓$_{12}$	↓$_{1}$	↔to↓$_{39}$	↔to↓↓$_{6}$	↔$_{2}$	↔$_{2}$	↔$_{3}$	↓$_{1}$
Beta[29–32]											
Summary of VE*	Protection retained against severe disease; reduced protection against symptomatic disease; limited evidence										
- Severe disease	-	-	↔$_{1}$	↔$_{1}$	-	↔$_{3}$	-	-	-	-	-
- Symptomatic disease	↔to↓↓↓$_{2}$	-	↔$_{1}$	↔$_{1}$	-	↔$_{2}$	-	-	-	-	↓↓↓$_{1}$
- Infection	-	-	-	↔$_{1}$	-	↓$_{1}$	-	-	-	-	-
Neutralization	↓to↓↓$_{7}$	↔to↓$_{2}$	↓to↓↓$_{6}$	↓to↓↓$_{14}$	↓↓↓$_{1}$	↓to↓↓$_{40}$	↓to↓↓↓$_{6}$	↔to↓$_{3}$	↓$_{2}$	↓to↓↓$_{3}$	↓↓↓$_{1}$
Gamma											
Summary of VE*	Unclear impact; very limited evidence										
- Severe disease	↔$_{1}$	-	-	↔$_{1}$	-	↔$_{1}$	-	-	-	-	-
- Symptomatic disease	↔$_{1}$	-	-	↔$_{1}$	-	↔$_{1}$	-	-	-	-	-
- Infection	-	-	-	-	-	-	↔$_{1}$	-	-	-	-
Neutralization	↔to↓$_{3}$	-	↓$_{3}$	↓$_{7}$	-	↔to↓$_{23}$	↔to↓$_{4}$	↔$_{1}$	-	↓$_{2}$	-
Delta[33]											
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection; limited evidence										
- Severe disease	↔$_{3}$	-	-	↔$_{2}$	-	↔$_{5}$	-	-	-	-	-
- Symptomatic disease	↓to↓↓$_{5}$	-	-	↔$_{1}$	-	↔to↓$_{4}$	-	-	↓$_{1}$	-	-
- Infection	↔to↓$_{3}$	-	↓↓↓$_{1}$	↔$_{2}$	-	↓$_{2}$	-	-	-	-	-
Neutralization	↓$_{7}$	-	↔to↓↓$_{5}$	↓$_{5}$	↓↓$_{1}$	↔to↓$_{17}$	↓to↓↓↓$_{4}$	↔to↓$_{2}$	↔to↓$_{3}$	↓$_{2}$	-

VE refers to vaccine effectiveness and vaccine efficacy

[+]As of submission of this update

*Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant

Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10% reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20% reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30% reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30% reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used.

"Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study.

The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources page (https://view-hub.org/resources). For individual vaccine effectiveness studies, see 'COVID-19 Vaccine Effectiveness Results Summary', reference numbers noted with a '#'. For a list of all neutralization studies, see 'COVID-19 Vaccine Neutralization Studies Table'.

References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table and are included in the Annex-1.

Since the 5 October update, four notable new studies have provided evidence of COVID-19 vaccine performance after full vaccination against Variants of Concern.

A test-negative case control study from the United States of America (not yet peer reviewed) evaluated the effectiveness of Moderna-mRNA-1273 against SARS-CoV-2 infection among members (4.6 million) of a large healthcare system in Southern California aged 18 years and older[34]. A total of 8, 153 cases were included in the study and 5 controls were matched to each case. Vaccination with Moderna-mRNA-1273 was found to be highly effective at preventing SARS-CoV-2 infection due to Delta 14-60 days post second dose (VE: 94.1%, 95% CI: 60.5-96.3), but declined to 80.0% (95% CI: 70.2-86.6%) at 151-180 days post second dose. VE against infection due to non-Delta variants showed a similar pattern with a VE against infection 14-60 days post second dose of 98.6% (97.3-99.3%) which reduced to 88.7% (73.2-95.2%) at 121-150 days .[34] VE against hospitalization due to Delta over the entire study period (≥ 14 days post second dose) was 97.6% (92.8-99.2%). VE estimates against infection over the entire study period (≥ 14 days post second dose) were 98.4% (96.9-99.1%), 95.5% (90.9-97.8%), and 90.4% (73.9-96.5%) for Alpha, Gamma, and Mu variants, respectively.

A second study from Canada (not yet peer-reviewed) provided updated results from a previous version of the pre-print.[35] The study evaluated VE of Pfizer BioNTech-Comirnaty, Moderna-mRNA-1273, and AstraZeneca-Vaxzevria vaccines against symptomatic disease and against hospitalization or death due to Alpha, Beta, Gamma, and Delta VOCs. All vaccines were highly effective at preventing both symptomatic disease as well as hospitalization or death 14 or more days post final vaccination (two doses). VE against symptomatic disease was ≥ 86% for each vaccine and against each VOC. VE against hospitalization or death was ≥ 92% for each vaccine against each VOC. These estimates include a follow-up time post full vaccination of up to 28 weeks, 25 weeks, and 3 weeks for Pfizer BioNTech-Comirnaty, Moderna-mRNA-1273, and AstraZeneca-Vaxzevria vaccines, respectively. Of note, VE of AstraZeneca-Vaxzevria against hospitalization or death due to Beta was not reported; several VE estimates were approximated to be 100% but could not be reliably assessed due to no cases in the vaccinated group.

A third peer-reviewed study from Spain, assessed the effectiveness of Pfizer BioNTech-Comirnaty, Moderna-mRNA-1273, AstraZeneca-Vaxzevria and Janssen-Ad26.COV 2.S vaccines in preventing SARS-CoV-2 infection due to Alpha and Delta variants based on the vaccine status of close contacts of index cases[36]. Moderna-mRNA-1273, Janssen-Ad26.COV 2.S Pfizer BioNTech-Comirnaty, and AstraZeneca-Vaxzevria were found to be 86% (56-95%), 77% (27-93%), 71% (61-78%), and 38% (-42-73%) effective at preventing infection among close contacts due to Alpha 14 or more days post final dose, respectively, with follow-up time since complete vaccination up to 28, 23, 31 and 16 weeks for each of the vaccines, respectively. VE against infection due to Delta was similar to Alpha for the mRNA vaccines [67% (59-74%) for Pfizer BioNTech-Comirnaty, 77% (63-85%) for Moderna-mRNA-1273]. However, VE against Delta infection was lower for Janssen-Ad26.COV2.S at 42% (18-59%) than that against Alpha, although with very wide confidence intervals for both VE estimates. The VE of AstraZeneca-Vaxzevria against Delta was 55% (39-67%); comparison to that of Alpha is hindered due to the very small numbers with Alpha infection. This study also evaluated the VE of one dose of AstraZeneca-Vaxzevria followed by a second dose of Pfizer BioNTech-Comirnaty vaccine against infection due to Delta. VE of this heterologous regimen against Delta infection 14 or more days post second dose was 86% (45-97%), with a follow-up time up to 21 weeks post full vaccination. The lower VE estimates from this study compared to estimates from other studies can possibly be explained by the fact that close contacts of index cases face frequent exposure and are, therefore, at higher risk of becoming infected even if vaccinated.

A fourth study from Israel (not yet peer reviewed) evaluated the effectiveness of a booster dose of Pfizer BioNTech-Comirnaty at preventing infection, severe disease, and death compared to two doses of the same vaccine during a time when Delta was the predominant variant[37]. Protection against confirmed infection was lower among individuals receiving a third booster dose relative to those who received two doses of the vaccines 5 or more months prior by a factor of 8.8-17.6 depending on age group. The rate of severe disease among individuals 60 years and older was 18.7-fold (95% CI 15.7-22.4) lower in the group who received a booster dose, as compared to the group who did not receive a booster dose, and among individuals 40-59 years old, was 22-fold (95% CI 10.3-47) lower . Among persons 60 years and older, the rate of death was lower in the group who received a booster dose by a factor of 14.7 (9.4-23.1) compared to the group who did not receive a booster dose. Follow up time post-booster ranged from 3.5 weeks for individuals 16-29 years to 8 weeks for persons 60 years and older.

WHO, with support of the Strategic Advisory Group of Experts (SAGE) on Immunization and its COVID-19 Vaccines Working Group, continues to review the emerging evidence on the need for and timing of a booster dose for the currently available COVID-19 vaccines which have received Emergency Use Listing (EUL). As concluded in the Interim Statement released 4 October 2021, introducing booster doses should be firmly evidence-driven and targeted to the population groups in greatest need. The rationale for implementing booster doses should be guided by evidence on waning vaccine effectiveness, in particular a decline in protection against severe disease in the general population and in high-risk populations, or due to a circulating VOC. To date, the evidence remains limited and still inconclusive on any widespread need for booster doses following a primary vaccination series. In the context of ongoing global vaccine supply constraints, broad-based administration of booster doses risks exacerbating inequities in vaccine access by driving up demand and diverting supply while priority populations in some countries, or in subnational settings, have not yet received a primary vaccination series. Focus remains on urgently increasing global vaccination coverage with the primary series driven by the objective to protect against severe disease.

Additional resources

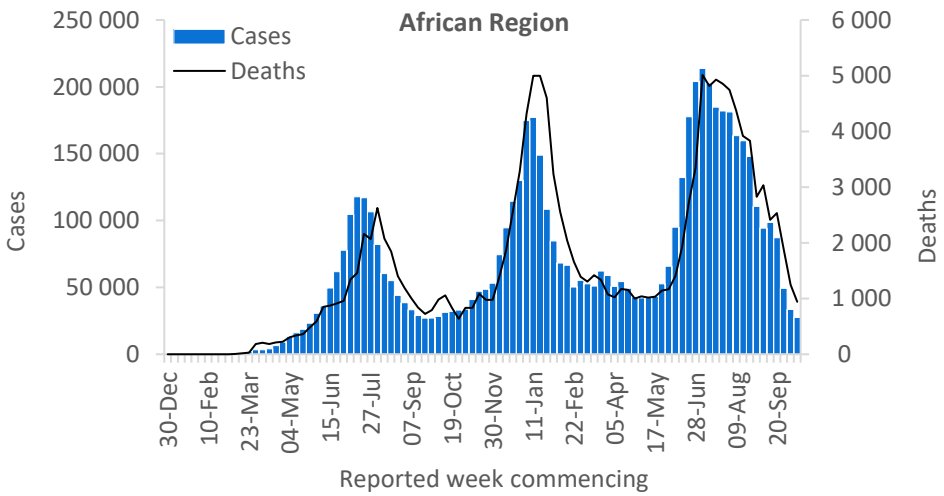
- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

WHO regional overviews Epidemiological week 11-17 October 2021

African Region

The declining trend observed in the African Region since mid-July continued this week with over 27 000 new cases and over 900 new deaths reported, decreases of an 18% and a 25% decrease respectively as compared to the previous week. While this is reassuring, 13/49 countries (28%) in the Region reported increases of over 15% in the number of reported cases the past week. One third of the new weekly cases in the Region was reported by two countries: Ethiopia and South Africa. The highest numbers of new cases were reported from Ethiopia (4706 new cases; 4.1 new cases per 100 000 population; a 22% decrease), South Africa (4682 new cases; 7.9 new cases per 100 000; a 20% decrease), and Cameroon (3003 new cases; 11.3 new cases per 100 000; similar to previous week).

The highest numbers of new deaths were reported from South Africa (295 new deaths; <1 new death per 100 000 population; a 45% decrease), Ethiopia (247 new deaths; <1 new death per 100 000; a 10% decrease), and Nigeria (59 new deaths; <1 new death per 100 000; a 181% increase).

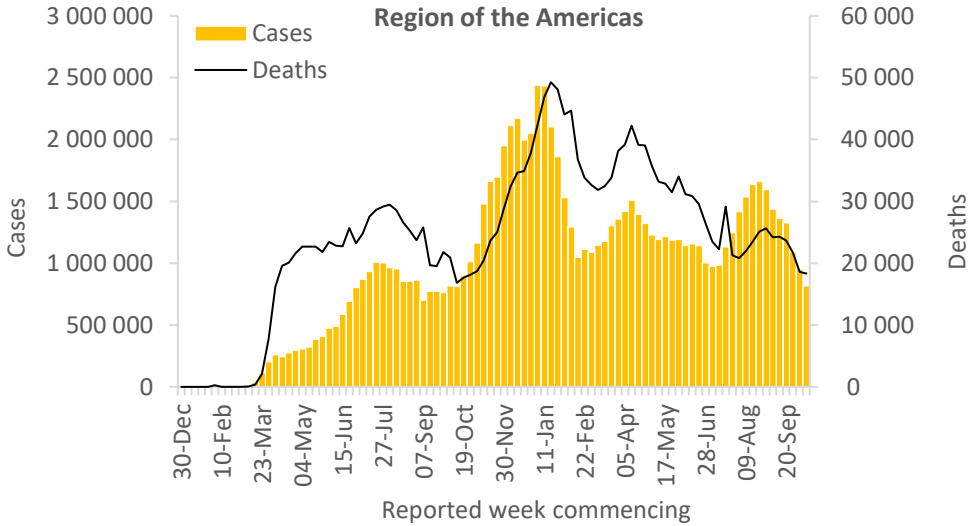


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 816 000 new cases this week a 14% decline as compared to the previous week and a continuation of the declining trend in the region witnessed since the end of August. A small proportion (9/56; 16%) of the countries in the Region of the Americas reported increases in new cases in the past week. Just over 18 000 new deaths were reported this week, a similar incidence as compared to the previous week. The highest numbers of new cases were reported from the United States of America (582 707 new cases; 176.0 new cases per 100 000; an 11% decrease), Brazil (76 746 new cases; 36.1 new cases per 100 000; a 27% decrease), and Mexico (35 468 new cases; 27.5 new cases per 100 000; a 17% decrease).

The highest numbers of new deaths were reported from the United States of America (11 158 new deaths; 3.4 new deaths per 100 000; a 23% increase), Mexico (2398 new deaths; 1.9 new deaths per 100 000; a 34% decrease), and Brazil (2244 new deaths; 1.1 new deaths per 100 000; a 30% decrease).

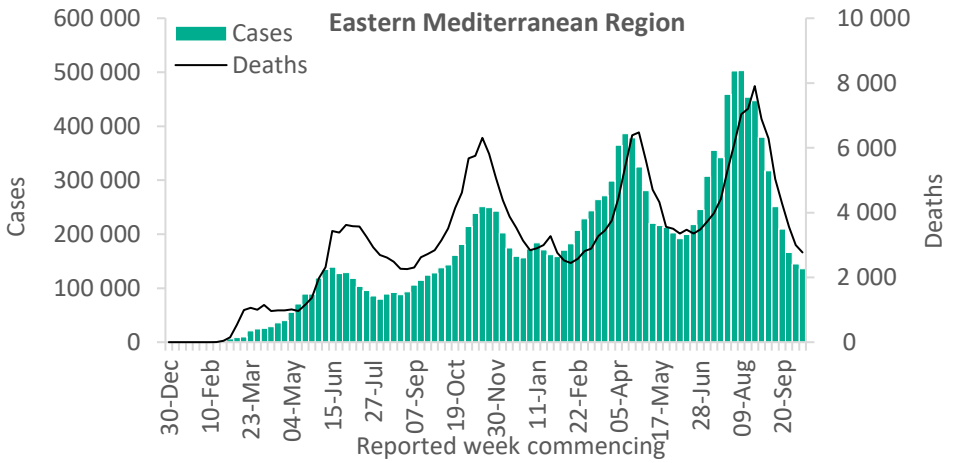


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 136 000 new cases and over 2700 new deaths, a 6% and an 8% decrease respectively as compared to the previous week. This follows the decline observed since mid-August 2021. While most of the countries (15/22; 68%) reported a decrease in new weekly cases, Sudan and Afghanistan reported the largest increase as compared to the previous week (22% and 34%, respectively). The highest numbers of new cases were reported from the Islamic Republic of Iran (81 785 new cases; 97.4 new cases per 100 000; similar numbers as those reported last week), Iraq (11 628 new cases; 28.9 new cases per 100 000; a 22% decrease), and Jordan (7718 new cases; 75.6 new cases per 100 000; an 8% increase).

The majority of the countries (17/22; 77%) in the Region reported a decline in new weekly deaths last week as compared to the previous week, with the exception of Afghanistan and Libya that reported an increase of 89% and 11%, respectively. The highest numbers of new deaths were reported from the Islamic Republic of Iran (1506 new deaths; 1.8 new deaths per 100 000; similar numbers as those reported last week), Egypt (268 new deaths; <1 new death per 100 000; similar numbers as those reported last week), and Iraq (201 new deaths; <1 new death per 100 000; similar numbers as those reported last week's).

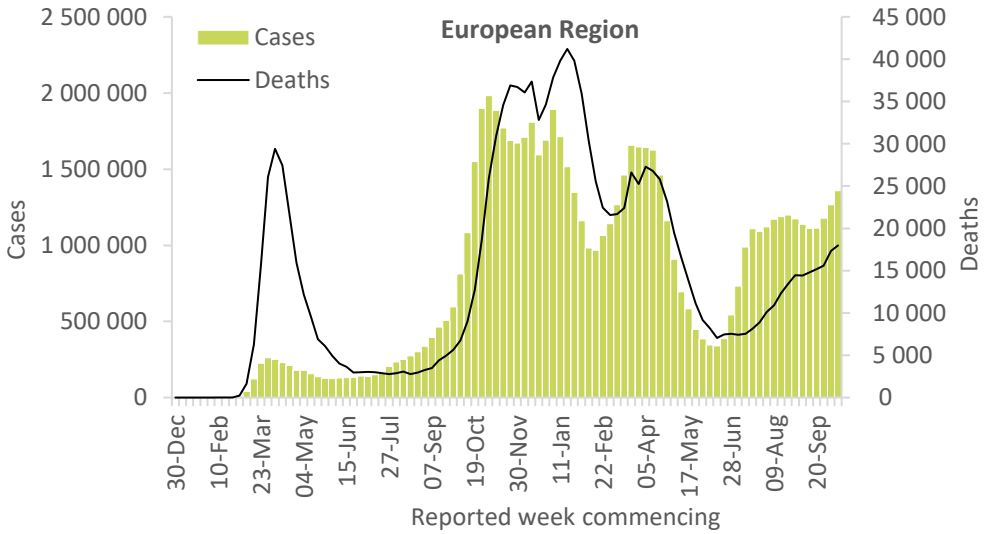


Updates from the Eastern Mediterranean Region

European Region

For the third consecutive week the European Region has shown an increase in new weekly COVID-19 cases, with over 1.3 million new cases reported during this week, a 7% increase as compared with the previous week. Over half of the countries in the Region (35/61; 57%) showed an increase in the number of new weekly cases. The highest numbers of new cases were reported from the United Kingdom (283 756 new cases; 418.0 new cases per 100 000; a 14% increase), the Russian Federation (217 322 new cases; 148.9 new cases per 100 000; a 15% increase), and Turkey (213 981 new cases; 253.7 new cases per 100 000; similar to last week's figures).

Over 18 000 new deaths have been reported in the Region; a similar rate to that of the previous week (4%). The largest increase in deaths has been observed in Luxembourg (200%), Denmark (83%) and Slovakia (82%). The highest numbers of new deaths were reported from the Russian Federation (6897 new deaths; 4.7 new deaths per 100 000; a 6% increase), Romania (2360 new deaths; 12.2 new deaths per 100 000; a 27% increase), and Ukraine (2140 new deaths; 4.9 new deaths per 100 000; a 25% increase).

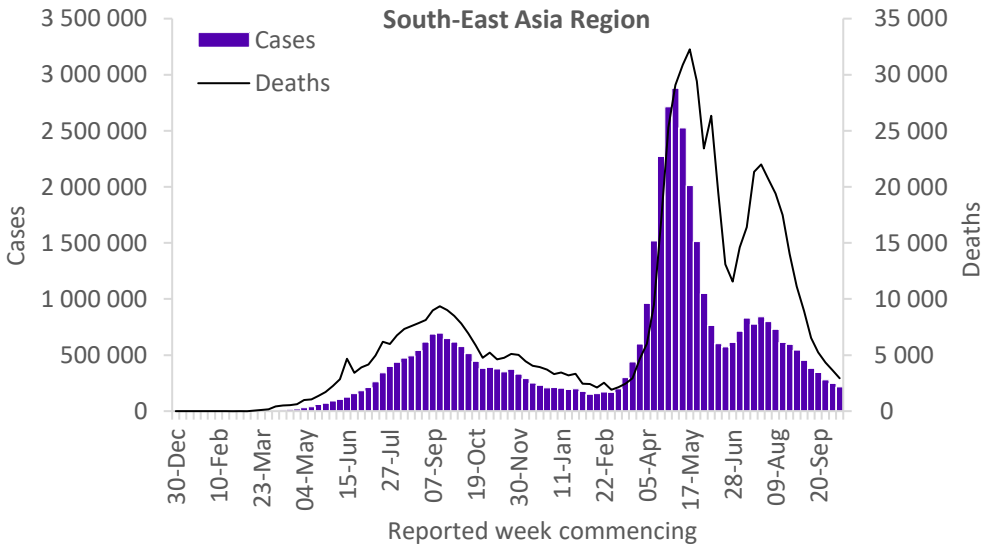


Updates from the European Region

South-East Asia Region

Declining trends continued in the South-East Asia Region, with just under 215 000 new cases and over 2900 new deaths reported, decreases of 13% and 19% respectively as compared to the previous week. All countries in the Region reported a decline in new cases and deaths this week, apart from Thailand that reported a similar number of cases as compared to the previous week. The highest numbers of new cases were reported from India (114 244 new cases; 8.3 new cases per 100 000; an 18% decrease), Thailand (72 817 new cases; 104.3 new cases per 100 000; a similar number as those reported last week), and Myanmar (9202 new cases; 16.9 new cases per 100 000; a 10% decrease).

The highest numbers of new deaths were reported from India (1535 new deaths; <1 new death per 100 000; a 13% decrease), Thailand (582 new deaths; <1 new death per 100 000; a 14% decrease), and Indonesia (301 new deaths; <1 new death per 100 000; a 37% decrease).

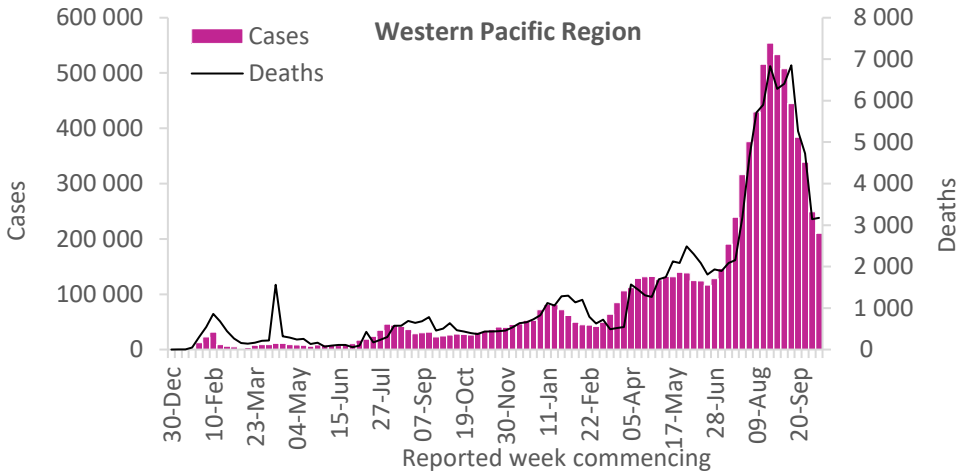


Updates from the South-East Asia Region

Western Pacific Region

Declining trends continued in the Western Pacific Region, with over 201 000 new cases reported this week, a 16% decrease as compared to the previous week. Most of the countries (19/26; 73%) reported a decrease in new weekly cases this week. The highest numbers of new cases were reported from the Philippines (59 052 new cases; 53.9 new cases per 100 000; a 20% decrease), Malaysia (52 321 new cases; 161.7 new cases per 100 000; an 18% decrease), and Viet Nam (24 726 new cases; 25.4 new cases per 100 000; a 25% decrease).

The weekly number of deaths also continue to decline, with over 3100 new deaths reported this week, a 16% decrease as compared to the previous week. Nevertheless, 13% (8/26 countries) reported an increase in new deaths this week as compared to the previous week, with Papua New Guinea reporting a 481% increase. The highest numbers of new deaths were reported from the Philippines (1075 new deaths; 1.0 new deaths per 100 000; a 27% increase), Viet Nam (689 new deaths; <1 new death per 100 000; an 18% decrease), and Malaysia (593 new deaths; 1.8 new deaths per 100 000; a 15% decrease).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 18 October, highlights include:

- Ongoing COVID-19 vaccine rollout in Ghana
- COVID-19 response at mental health care facilities in Azerbaijan
- Two-day vaccination campaign to boost coverage in Samoa
- IT equipment and supplies for vaccine safety surveillance in Belize
- A review of the COVID-19 response in Somalia
- Six in seven COVID-19 infections go undetected in Africa: initiative to enhance community screening
- Progress on a subset of indicators from the SPRP 2021 Monitoring and Evaluation Framework
- Updates on WHO's financing to support countries in SPRP 2021 implementation and provision of critical supplies.

Annex

Annex 1. Additional notes on VOC impacts on vaccines

- Studies reporting VOC-specific vaccine efficacy or effectiveness (VE) estimates for full vaccination (≥ 7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 randomised RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates for these outcomes, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca Vaxzevria for infection (when a phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Table 3 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than 4 months post final dose.

Annex 2. List of countries/territories/areas reporting variants of concern as of 19 Oct 2021

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Afghanistan	●	-	-	●	-
Albania	●	-	-	○	-
Algeria	●	-	-	●	-
Andorra	○	○	-	○	-
Angola	●	●	●	●	-
Anguilla	●	-	-	●	-
Antigua and Barbuda	●	●	●	●	-
Argentina	●	●	●	●	-
Armenia	●	-	-	●	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	○	-
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	-
Bangladesh	●	●	○	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	●	●	-
Benin	●	●	●	●	-
Bermuda	●	●	-	●	-
Bhutan	●	●	-	●	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	●	●	-
Bosnia and Herzegovina	●	●	●	○	-
Botswana	○	●	-	●	-
Brazil	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
British Virgin Islands	●	-	●	●	-
Brunei Darussalam	●	●	-	●	-
Bulgaria	●	●	-	●	-
Burkina Faso	●	-	-	●	-
Burundi	●	●	-	●	-
Cabo Verde	●	-	-	●	-
Cambodia	●	●	-	●	-
Cameroon	●	●	-	●	-
Canada	●	●	●	●	-
Cayman Islands	●	●	●	●	-
Central African Republic	●	●	-	●	-
Chad	●	-	-	-	-
Chile	●	●	●	●	-
China	●	●	●	○	-
Colombia	●	-	●	●	-
Comoros	-	●	-	-	-
Congo	●	○	●	●	-
Costa Rica	●	●	●	●	-
Croatia	●	●	●	○	-
Cuba	●	●	-	●	-
Curaçao	●	●	●	●	●
Cyprus	●	●	-	○	-
Czechia	●	●	●	●	-
Côte d'Ivoire	●	●	-	○	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Dominica	●	-	-	●	-
Dominican Republic	●	-	●	●	-
Ecuador	●	-	●	●	-
Egypt	●	-	-	●	-
El Salvador	●	-	●	●	-
Equatorial Guinea	●	●	-	○*	-
Estonia	●	●	○	○	-
Eswatini	○	●	-	●	-
Ethiopia	●	-	-	●	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	○*	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	●	-	●	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-
Germany	●	●	●	●	-
Ghana	●	●	●	●	-
Gibraltar	●	-	-	○	-
Greece	●	●	●	●	-
Grenada	●	-	-	●	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Guinea	●	●	-	●	-
Guinea-Bissau	●	●	-	●	-
Guyana	-	-	●	●	-
Haiti	●	-	●	●	-
Honduras	●	-	●	●	-
Hungary	●	○	●	○	-
Iceland	●	●	●	●	-
India	●	●	●	●	-
Indonesia	●	●	○	●	-
Iran (Islamic Republic of)	●	●	-	●	-
Iraq	●	●	-	●	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	●	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	●	○	-	●	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	○	-
Kuwait	●	●	-	●	-
Kyrgyzstan	●	●	-	●	-
Lao People's Democratic Republic	●	-	-	●	-
Latvia	●	●	●	○	-
Lebanon	●	-	-	●	-
Lesotho	-	●	-	○	-
Liberia	●	●	-	●	-
Libya	●	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Liechtenstein	●	-	-	○	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-
Madagascar	●	●	-	-	-
Malawi	●	●	-	●	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Mali	-	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	●	●	-	●	-
Mayotte	●	●	-	○*	-
Mexico	●	●	●	●	-
Monaco	●	●	-	●	-
Mongolia	●	-	-	●	-
Montenegro	●	-	○	○	-
Montserrat	●	-	●	●	-
Morocco	●	●	-	●	-
Mozambique	●	●	-	●	-
Myanmar	●	-	-	●	-
Namibia	●	●	-	●	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	●	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	●	-	●	-
North Macedonia	●	●	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Northern Mariana Islands (Commonwealth of the)	○	-	-	●	-
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●	-
Oman	●	●	-	●	-
Pakistan	●	●	●	●	-
Panama	●	●	●	●	●
Papua New Guinea	-	-	-	●	-
Paraguay	●	-	●	●	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	●	-	-	●	-
Romania	●	●	●	●	-
Russian Federation	●	●	○	●	-
Rwanda	●	●	-	●	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	●	-
Saint Kitts and Nevis	-	-	-	●	-
Saint Lucia	●	-	-	●	-
Saint Martin	●	●	-	●	-
Saint Pierre and Miquelon	-	-	-	●	-
Saint Vincent and the Grenadines	-	-	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Sao Tome and Principe	●	-	-	○	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	●	-
Serbia	●	-	-	●	-
Seychelles	●	●	-	●	-
Sierra Leone	-	●	-	●	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	●	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	●	-	-	-
South Africa	●	●	○	●	-
South Sudan	●	●	-	●	-
Spain	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Sri Lanka	●	●	-	●	-
Sudan	●	●	●	-	-
Suriname	●	●	●	●	-
Sweden	●	●	●	●	-
Switzerland	●	●	●	●	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	●	-
Togo	●	●	●	●	-
Trinidad and Tobago	●	-	●	●	-
Tunisia	●	●	-	●	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	-	●	-
Ukraine	●	○	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
United Arab Emirates	●	●	●	●	-
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-
United States Virgin Islands	●	●	-	●	-
United States of America	●	●	●	●	-
Uruguay	●	●	●	●	-
Uzbekistan	●	●	-	○	-
Venezuela (Bolivarian Republic of)	●	-	●	●	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	-	●	-
Zimbabwe	●	●	-	●	-

**Newly reported in this update.*

indicates that information for this variant was received by WHO from official sources.

indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available.

***Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community).*

Excludes countries, territories, and areas that have never reported the detection of a variant of concern.

-Kindly note that Delta has been discarded for Syrian Arab Republic upon verification.

See also Annex 3: Data, table and figure notes

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

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COVID-19 Weekly Epidemiological Update

Edition 61, published 13 October 2021

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Summary of the Weekly Operational Update

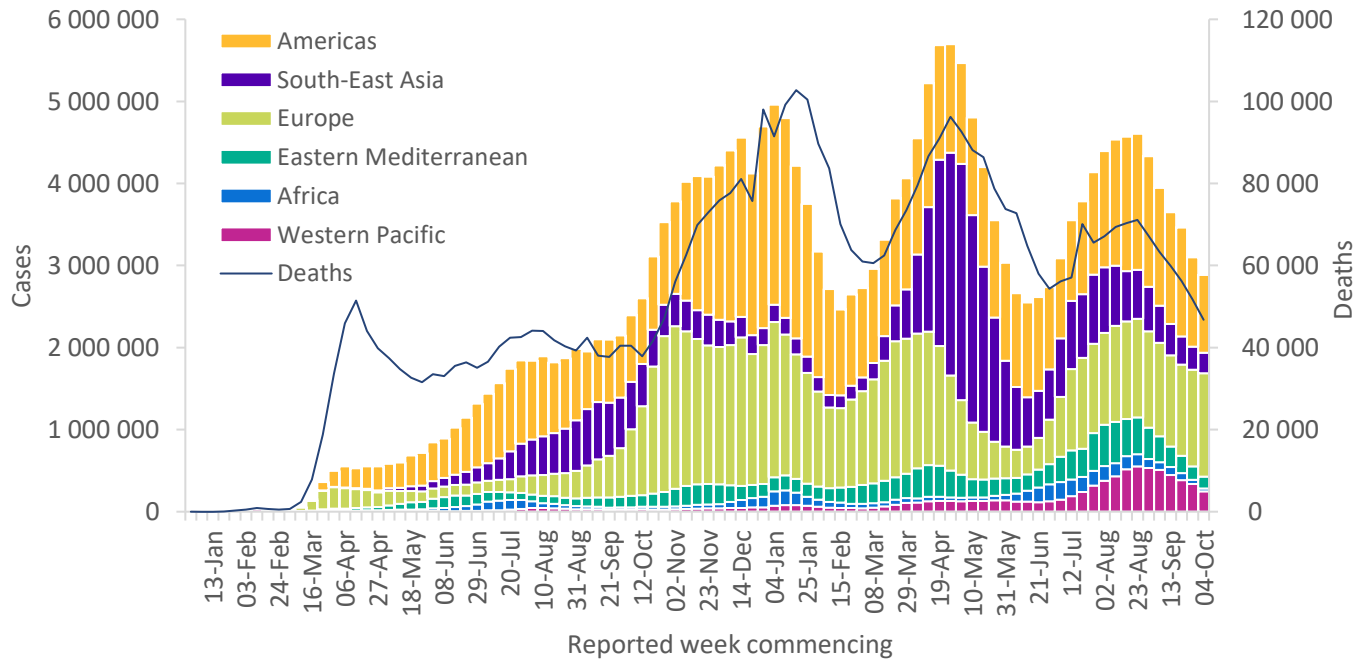
Global overview

Data as of 10 October 2021

Globally, the numbers of weekly COVID-19 cases and deaths have continued to decline since late August (Figure 1). Over 2.8 million new cases and over 46 000 new deaths were reported during the week of 4 to 10 October 2021, representing decreases of 7% and 10% respectively, as compared to the previous week (Table 1). Apart from the European Region, which reported a 7% increase in the number of new weekly cases as compared to the previous week, all the other regions reported declines in new weekly cases. The largest decrease in new weekly cases was reported from the African Region (32%), followed by the Western Pacific Region (26%). The cumulative number of confirmed cases reported globally is now over 237 million and the cumulative number of deaths is over 4.8 million.

The number of new weekly deaths reported showed a large (>10%) decline for all regions except for the European Region, which reported an 11% increase as compared to the previous week. The largest decline in weekly deaths was reported from the Western Pacific and the African Regions, with both showing declines of 34% as compared to the previous week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 10 October 2021**



**See *Annex 2: Data, table and figure notes*

The regions reporting the highest weekly case incidence rates per 100 000 population were the European Region (135.1 new cases per 100 000 population) and the Region of the Americas (92.8 new cases per 100 000 population), and the same two regions reported the highest weekly incidence in deaths, with both reporting 1.8 per 100 000 population.

The highest numbers of new cases were reported from the United States of America (653 837 new cases; 12% decrease), the United Kingdom (249 699 new cases; similar to the number reported in the previous week), Turkey (205 266 new cases; similar to the number reported in the previous week), the Russian Federation (188 829 new cases; 14% increase), and India (139 572 new cases; 13% decrease).

Globally, no new countries, territories or areas (hereafter countries) reported cases with VOCs in the past week. As of 12 October, cases of Alpha variant have been reported from 195 countries, Beta variant from 145 countries, Gamma variant from 99 countries, and Delta variant from 191 countries across all six WHO regions.

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 10 October 2021**

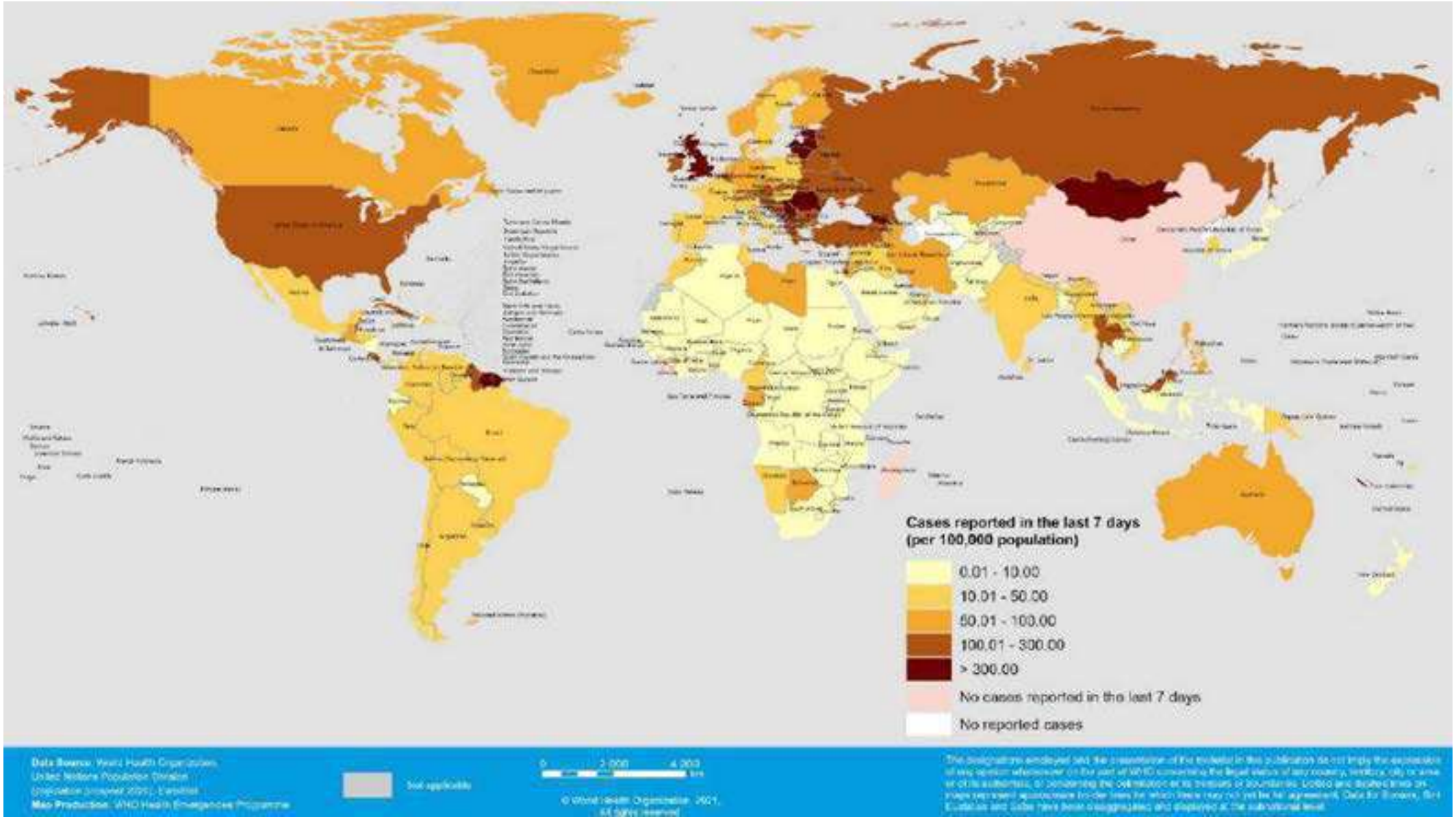
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	949 371 (33%)	-13%	91 325 885 (38%)	18 565 (40%)	-14%	2 241 923 (46%)
Europe	1 260 455 (44%)	7%	71 863 813 (30%)	17 198 (37%)	11%	1 360 102 (28%)
South-East Asia	247 814 (9%)	-11%	43 369 716 (18%)	3 636 (8%)	-16%	681 671 (14%)
Eastern Mediterranean	144 710 (5%)	-13%	15 970 239 (7%)	3 002 (6%)	-16%	293 568 (6%)
Western Pacific	249 098 (9%)	-26%	8 858 812 (4%)	3 141 (7%)	-34%	120 846 (2%)
Africa	33 563 (1%)	-32%	6 081 759 (3%)	1 247 (3%)	-34%	148 101 (3%)
Global	**2 885 011 (100%)**	**-7%**	**237 470 988 (100%)**	**46 789 (100%)**	**-10%**	**4 846 224 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
***See Annex 2: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 4-10 October 2021**



**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 4 -10 October 2021**

**See *Annex 2: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. As evidence becomes available, classification for VOIs or VOCs will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology (see criteria for variant classification here). National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

As these risks evolve, WHO will continue to update lists of global VOIs and VOCs to support setting priorities for surveillance and research, and ultimately guide response strategies (for more information, please see the Tracking SARS-CoV-2 variants website). The prevalence of different variants is being monitored in light of other co-circulating variants, such as Delta.

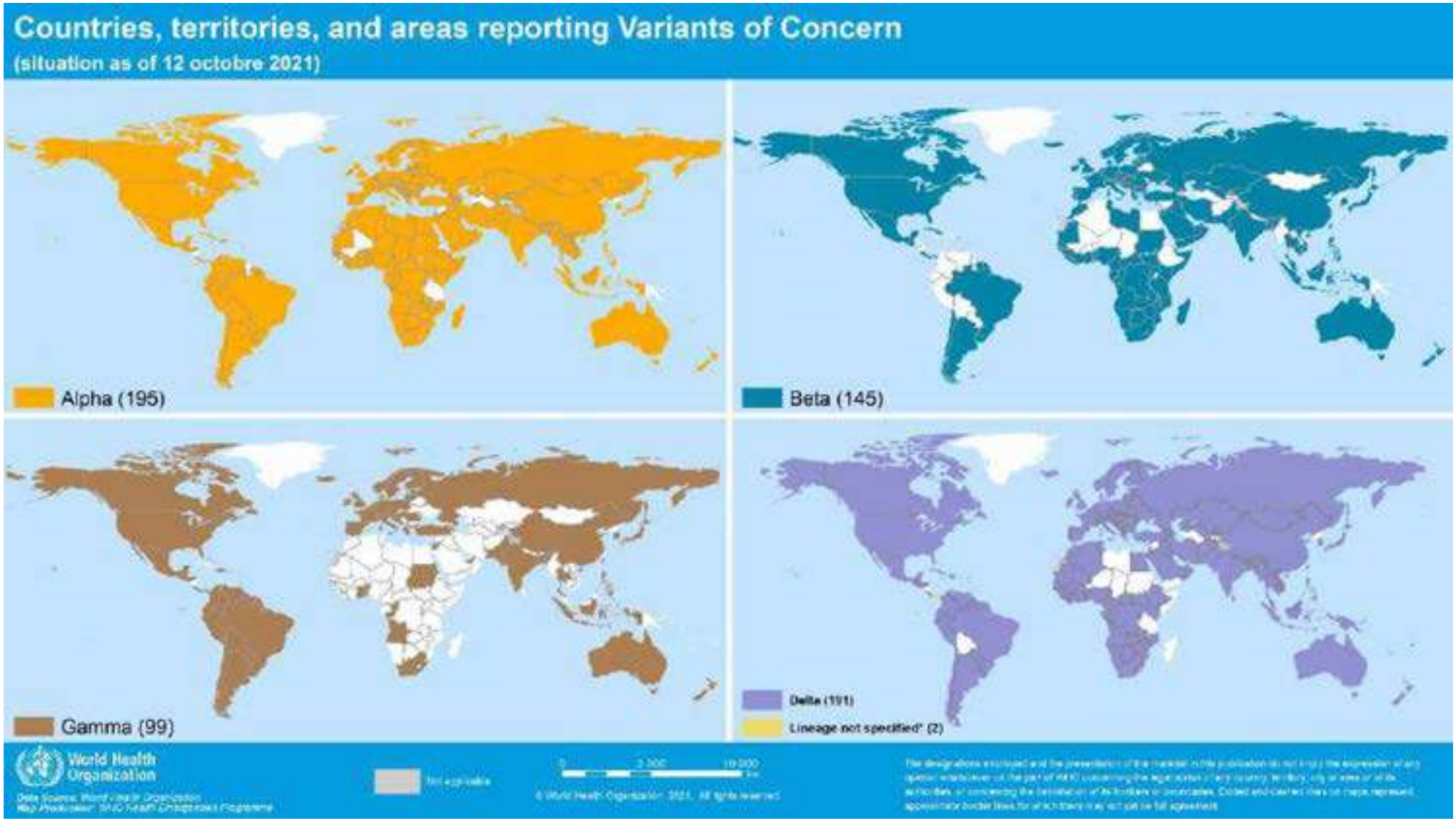
Globally, no new countries reported cases with VOCs in the past week (Figure 4, Annex 1). The current global epidemiology can be characterized by a predominance of the Delta variant, with declining prevalence of other VOCs among SARS-CoV-2 sequences reported to publicly available datasets. The global distribution should nonetheless be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities, sampling strategies between countries and delays in reporting.

The inequitable access to vaccines increases the risk of emergence of new and even more threatening variants. As countries gradually resume non-essential international travel, the introduction of risk mitigation measures aiming to reduce travel-associated exportation, importation and onward transmission of SARS-CoV-2 should be based on thorough risk assessments conducted systematically and routinely.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Figure 4. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 12 October 2021**



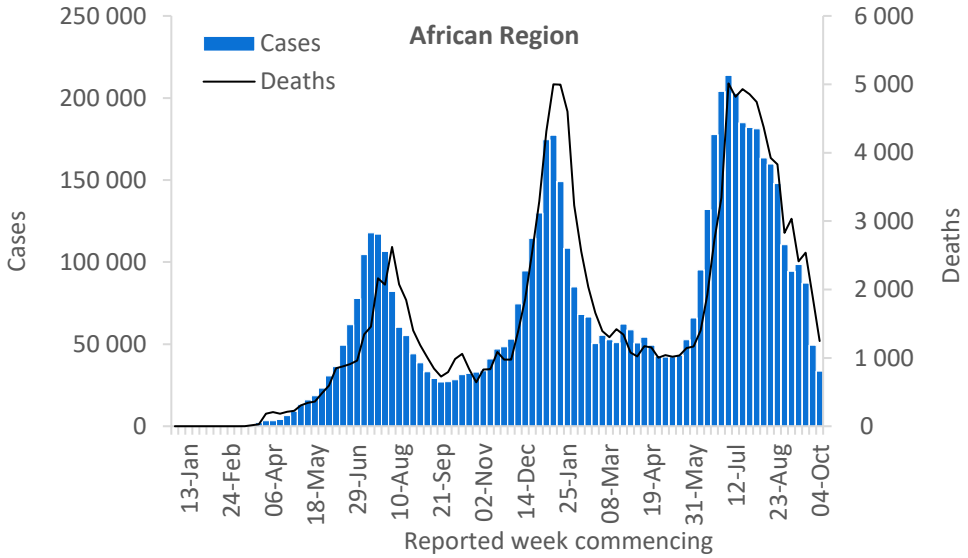
**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details*

WHO regional overviews Epidemiological week 4-10 October 2021

African Region

Since mid-July, the African Region has shown a constant decline in the number of COVID-19 cases and deaths, with over 33 000 new cases and over 1200 new deaths reported last week, a 32% and a 34% decrease respectively as compared to the previous week. While the majority of countries (35/49; 71%) reported a decrease in new weekly cases, seven countries reported an increase, with Chad (by 54%) reporting the greatest increase. The highest numbers of new cases were reported from Ethiopia (6061 new cases; 5.3 new cases per 100 000; a 15% decrease), South Africa (5884 new cases; 9.9 new cases per 100 000; a 39% decrease), and Cameroon (3096 new cases; 11.7 new cases per 100 000; a 55% decrease).

Concerning new weekly deaths, 75% of countries in the Region reported a decline whereas there was a marked increase observed in Senegal (by 125%) and Mali (by 100%). The highest numbers of new deaths were reported from South Africa (539 new deaths; <1 new death per 100 000; a 28% decrease), Ethiopia (275 new deaths; <1 new death per 100 000; a 10% decrease), and Cameroon (58 new deaths; <1 new death per 100 000; a 36% decrease).

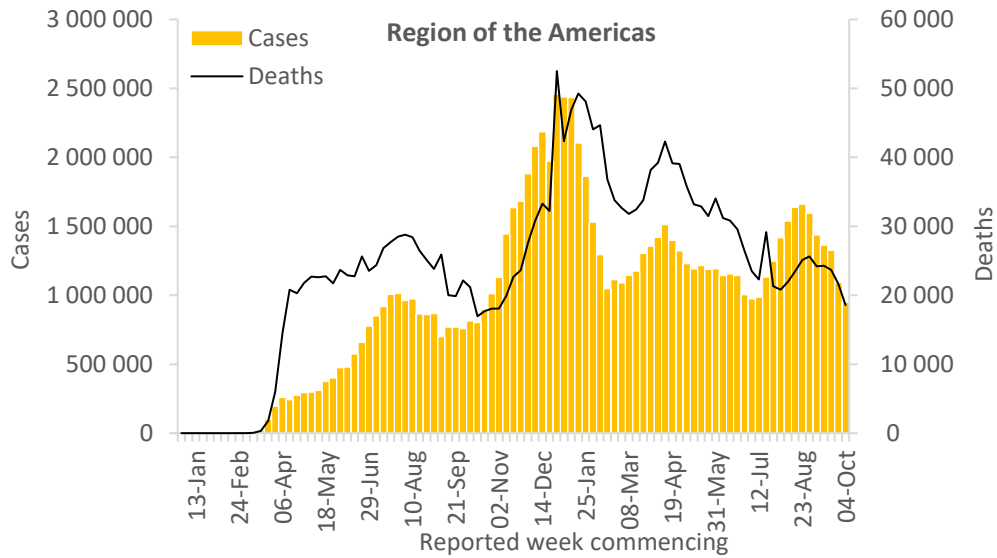


Updates from the African Region

Region of the Americas

Since the end of August, the Region of the Americas has been reporting a declining trend in COVID-19 cases, with over 949 000 new cases reported this week, a 13% decrease as compared to previous week. Despite the declining trend in cases, 30% (17 out of 56 countries) reported an increase, with Montserrat (absolute numbers remain low), Saint Kitts and Nevis, and Saint Martin reporting the highest increase. The highest numbers of new cases were reported from the United States of America (653 837 new cases; 197.5 new cases per 100 000; a 12% decrease), Brazil (105 079 new cases; 49.4 new cases per 100 000; an 11% decrease), and Mexico (42 781 new cases; 33.2 new cases per 100 000; a 19% decrease).

For new weekly deaths, over 18 000 new deaths were reported this week, a 14% decrease compared to the previous week. The highest numbers of new deaths were reported from the United States of America (9080 new deaths; 2.7 new deaths per 100 000; a 21% decrease), Mexico (3632 new deaths; 2.8 new deaths per 100 000; an 11% increase), and Brazil (3200 new deaths; 1.5 new deaths per 100 000; a 10% decrease).

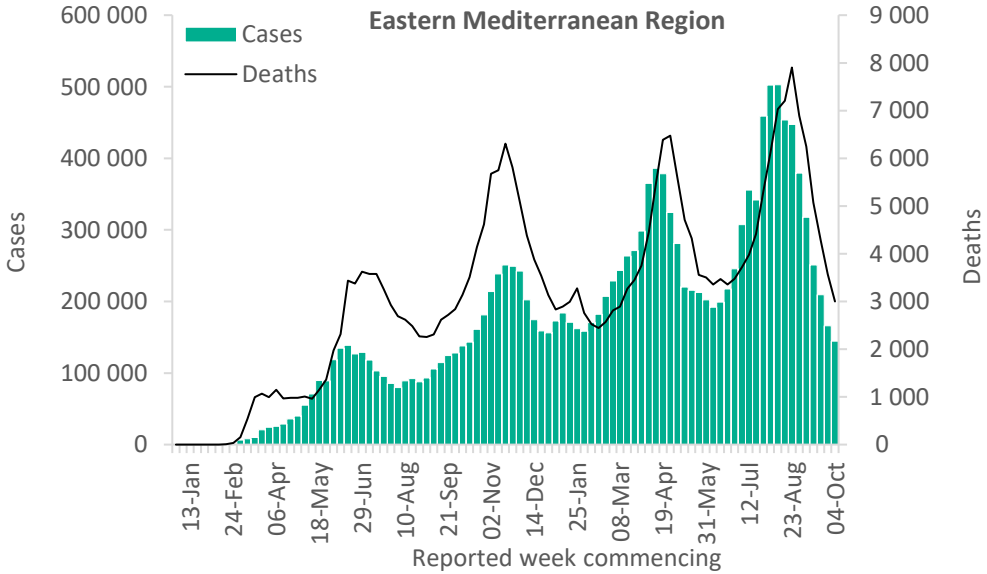


Updates from the Region of the Americas

Eastern Mediterranean Region

During this week, the Eastern Mediterranean Region reported over 144 000 new cases and over 3000 new deaths, a 13% and a 16% decrease respectively as compared to the previous week; this follows the decline observed since mid- August 2021. While most of the countries (16/22; 73%) reported a decrease in new weekly cases, with the greatest decrease reported from Tunisia, Sudan and Somalia reported large increases in case incidence as compared to the previous week. The highest numbers of new cases were reported from the Islamic Republic of Iran (79 934 new cases; 95.2 new cases per 100 000; a 13% decrease), Iraq (14 882 new cases; 37.0 new cases per 100 000; similar figures as last week), and Pakistan (8986 new cases; 4.1 new cases per 100 000; a 21% decrease).

While most countries (14/22; 64%) in the Region reported a decline in new weekly deaths last week as compared to the previous week, Libya, Somalia and Sudan reported an increase. The highest numbers of new deaths were reported from the Islamic Republic of Iran (1490 new deaths; 1.8 new deaths per 100 000; an 18% decrease), Egypt (259 new deaths; <1 new death per 100 000; similar figures as last week), and Pakistan (256 new deaths; <1 new death per 100 000; a 17% decrease).

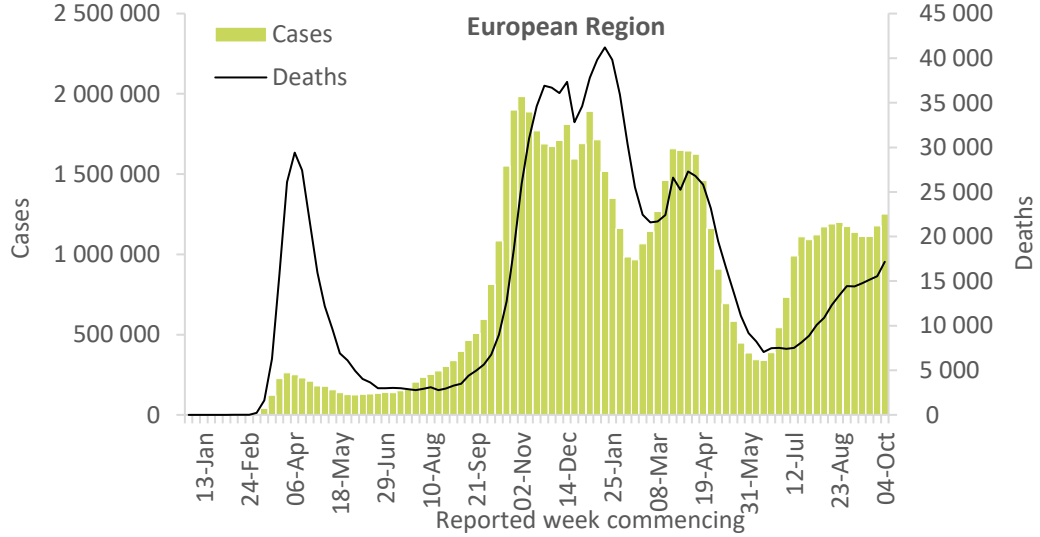


Updates from the Eastern Mediterranean Region

European Region

Following a plateau in new weekly COVID-19 cases since mid-July, the Region reported a 7% increase compared to the previous week, with over 1.2 million new cases reported this week. Forty-six percent (28/61) of the countries showed an increase in the number of new weekly cases. The highest numbers of new cases were reported from the United Kingdom (249 699 new cases; 367.8 new cases per 100 000; similar to last week's figures), Turkey (205 266 new cases; 243.4 new cases per 100 000; similar to last week's figures), and the Russian Federation (188 829 new cases; 129.4 new cases per 100 000; a 14% increase).

During this week, over 17 000 new deaths have been reported in the Region, an 11% increase as compared to the previous week; continuing a steady increase observed since the end of June. Several countries in Eastern Europe including Czechia, Estonia, Hungary, Kyrgyzstan, Romania and Ukraine reported the greatest increase in new weekly deaths. Overall, the highest numbers of new deaths were reported from the Russian Federation (6497 new deaths; 4.5 new deaths per 100 000; an 8% increase), Romania (1854 new deaths; 9.6 new deaths per 100 000; a 54% increase), and Ukraine (1718 new deaths; 3.9 new deaths per 100 000; a 50% increase).

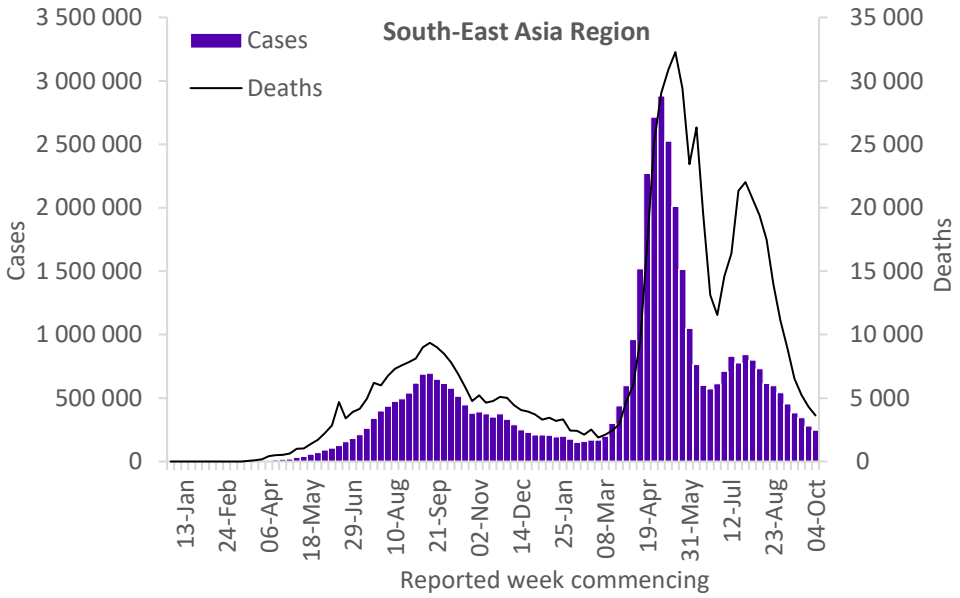


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 247 000 new cases and over 3600 new deaths, an 11% and a 16% decrease, respectively as compared to the previous week. All countries reported a decrease in weekly new cases and weekly new deaths this week, with the greatest decrease reported from Timor-Leste. Overall, cases and deaths have continued to decline since early August. The highest numbers of new cases were reported from India (139 572 new cases; 10.1 new cases per 100 000; a 13% decrease), Thailand (73 452 new cases; 105.2 new cases per 100 000; similar to last week's figures), and Myanmar (10 188 new cases; 18.7 new cases per 100 000; similar to last week's figures).

The highest numbers of new deaths were reported from India (1772 new deaths; <1 new death per 100 000; a 7% decrease), Thailand (677 new deaths; <1 new deaths per 100 000; a 9% decrease), and Indonesia (478 new deaths; <1 new death per 100 000; a 32% decrease).

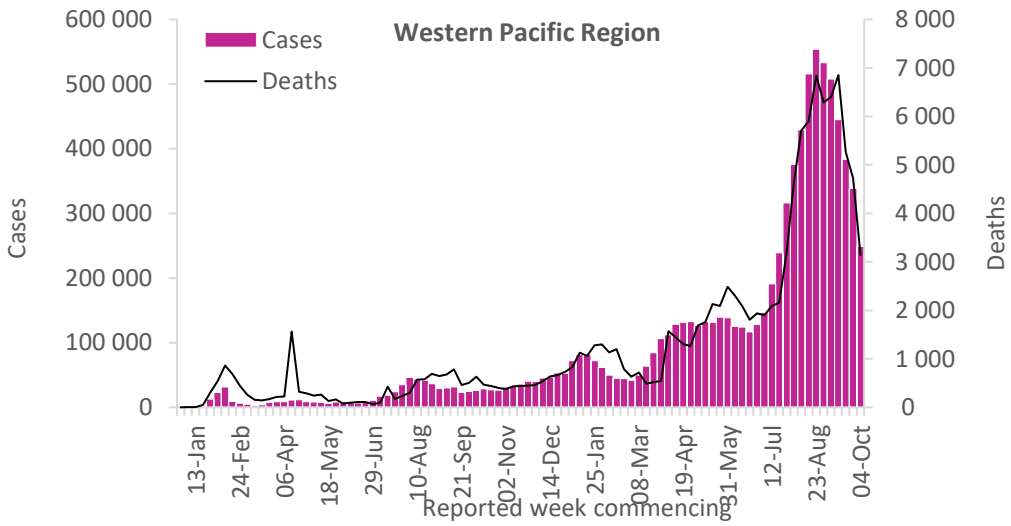


Updates from the South-East Asia Region

Western Pacific Region

Since late August, COVID-19 cases have continued to show a declining trend in the region, with over 249 000 new cases, a 26% decrease as compared to the previous week. While most of the countries reported a decline in weekly cases this week, New Zealand, Papua New Guinea, Singapore and Australia reported an increase in cases as compared to the previous week. The highest numbers of new cases were reported from the Philippines (74 277 new cases; 67.8 new cases per 100 000; a 32% decrease), Malaysia (63 722 new cases; 196.9 new cases per 100 000; a 24% decrease), and Viet Nam (32 932 new cases; 33.8 new cases per 100 000; a 42% decrease).

Deaths continue to decline since early September, with over 3100 new deaths reported this week, a 34% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Philippines (849 new deaths; <1 new death per 100 000; a 32% decrease), Viet Nam (841 new deaths; <1 new death per 100 000; a 30% decrease), and Malaysia (700 new deaths; 2.2 new deaths per 100 000; a 50% decrease).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update (WOU) is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) monitoring and evaluation team which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework. In this week's edition, published on 13 October, highlights of country-level actions and WHO support to countries include:

- Scale-up to genomic sequencing capacities and monitoring of the evolution of SARS-CoV-2 in the African Region
- Supporting health workforce with personal protective equipment (PPE) in Yemen
- Support to national coordination through establishing Public Health Emergency Operations Centres in Armenia and Kyrgyzstan
- Progress on a subset of indicators from the SPRP 2021 Monitoring and Evaluation Framework
- Roll-out of COVID-19 vaccine in Lao People's Democratic Republic
- Translating training tools to support frontline workers in Timor-Leste
- Issuing the SPRP mid-term report and updated appeal for urgent priorities and funding requirements
- Updates on WHO's financing to support countries in SPRP 2021 implementation and provision of critical supplies.

Annex

COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 12 October 2021

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
Afghanistan	●	-	-	●	-
Albania	●	-	-	○	-
Algeria	●	-	-	●	-
Andorra	○	○	-	○	-
Angola	●	●	●	●	-
Anguilla	●	-	-	●	-
Antigua and Barbuda	●	●	●	●	-
Argentina	●	●	●	●	-
Armenia	●	-	-	●	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	○	-
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	-
Bangladesh	●	●	○	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	●	●	-
Benin	●	●	●	●	-
Bermuda	●	●	-	●	-
Bhutan	●	●	-	●	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	●	●	-
Bosnia and Herzegovina	●	●	●	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
Botswana	○	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	●	-
Brunei Darussalam	●	●	-	●	-
Bulgaria	●	●	-	●	-
Burkina Faso	●	-	-	●	-
Burundi	●	●	-	●	-
Cabo Verde	●	-	-	●	-
Cambodia	●	●	-	●	-
Cameroon	●	●	-	●	-
Canada	●	●	●	●	-
Cayman Islands	●	●	●	●	-
Central African Republic	●	●	-	●	-
Chad	●	-	-	-	-
Chile	●	●	●	●	-
China	●	●	●	○	-
Colombia	●	-	●	●	-
Comoros	-	●	-	-	-
Congo	●	○	●	●	-
Costa Rica	●	●	●	●	-
Croatia	●	●	●	○	-
Cuba	●	●	-	●	-
Curaçao	●	●	●	●	●
Cyprus	●	●	-	○	-
Czechia	●	●	●	●	-
Côte d'Ivoire	●	●	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-
Dominica	●	-	-	●	-
Dominican Republic	●	-	●	●	-
Ecuador	●	-	●	●	-
Egypt	●	-	-	●	-
El Salvador	●	-	●	●	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	○	-
Eswatini	○	●	-	●	-
Ethiopia	●	-	-	●	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	●	-	●	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-
Germany	●	●	●	●	-
Ghana	●	●	●	●	-
Gibraltar	●	-	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
Greece	●	●	●	●	-
Grenada	●	-	-	●	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	●	-
Guinea	●	●	-	●	-
Guinea-Bissau	●	●	-	●	-
Guyana	-	-	●	●	-
Haiti	●	-	●	●	-
Honduras	●	-	●	●	-
Hungary	●	○	●	○	-
Iceland	●	●	●	●	-
India	●	●	●	●	-
Indonesia	●	●	○	●	-
Iran (Islamic Republic of)	●	●	-	●	-
Iraq	●	●	-	●	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	●	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	●	○	-	●	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	○	-
Kuwait	●	●	-	●	-
Kyrgyzstan	●	●	-	●	-
Lao People's Democratic Republic	●	-	-	●	-
Latvia	●	●	●	○	-
Lebanon	●	-	-	●	-
Lesotho	-	●	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
Liberia	●	●	-	●	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	○	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-
Madagascar	●	●	-	-	-
Malawi	●	●	-	●	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Mali	-	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	●	●	-	●	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	●	-	●	-
Mongolia	●	-	-	●	-
Montenegro	●	-	○	○	-
Montserrat	●	-	●	●	-
Morocco	●	●	-	●	-
Mozambique	●	●	-	●	-
Myanmar	●	-	-	●	-
Namibia	●	●	-	●	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	●	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	●	-	●	-
North Macedonia	●	●	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
Northern Mariana Islands (Commonwealth of the)	○	-	-	●	-
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●	-
Oman	●	●	-	●	-
Pakistan	●	●	●	●	-
Panama	●	●	●	●	●
Papua New Guinea	-	-	-	●	-
Paraguay	●	-	●	●	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	●	-	-	●	-
Romania	●	●	●	●	-
Russian Federation	●	●	○	●	-
Rwanda	●	●	-	●	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	●	-
Saint Kitts and Nevis	-	-	-	●	-
Saint Lucia	●	-	-	●	-
Saint Martin	●	●	-	●	-
Saint Pierre and Miquelon	-	-	-	●	-
Saint Vincent and the Grenadines	-	-	●	●	-
Sao Tome and Principe	●	-	-	○	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
Serbia	●	-	-	●	-
Seychelles	●	●	-	●	-
Sierra Leone	-	●	-	●	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	●	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	●	-	-	-
South Africa	●	●	○	●	-
South Sudan	●	●	-	●	-
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-
Sudan	●	●	●	-	-
Suriname	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
Sweden	●	●	●	●	-
Switzerland	●	●	●	●	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	●	-
Togo	●	●	●	●	-
Trinidad and Tobago	●	-	●	●	-
Tunisia	●	●	-	●	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	-	●	-
Ukraine	●	○	-	○	-
United Arab Emirates	●	●	●	●	-
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
United States Virgin Islands	●	●	-	●	-
United States of America	●	●	●	●	-
Uruguay	●	●	●	●	-
Uzbekistan	●	●	-	○	-
Venezuela (Bolivarian Republic of)	●	-	●	●	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	-	●	-
Zimbabwe	●	●	-	●	-

**Newly reported in this update.*

Unspecified B.1.617 reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

indicates that information for this variant was received by WHO from official sources.

indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available.

***Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern.*

-Kindly note that Delta has been discarded for Syrian Arab Republic upon verification.

See also Annex 2: Data, table and figure notes.

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

COVID-19 Weekly Epidemiological Update

Edition 60, published 5 October 2021

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Summary of the Weekly Operational Update

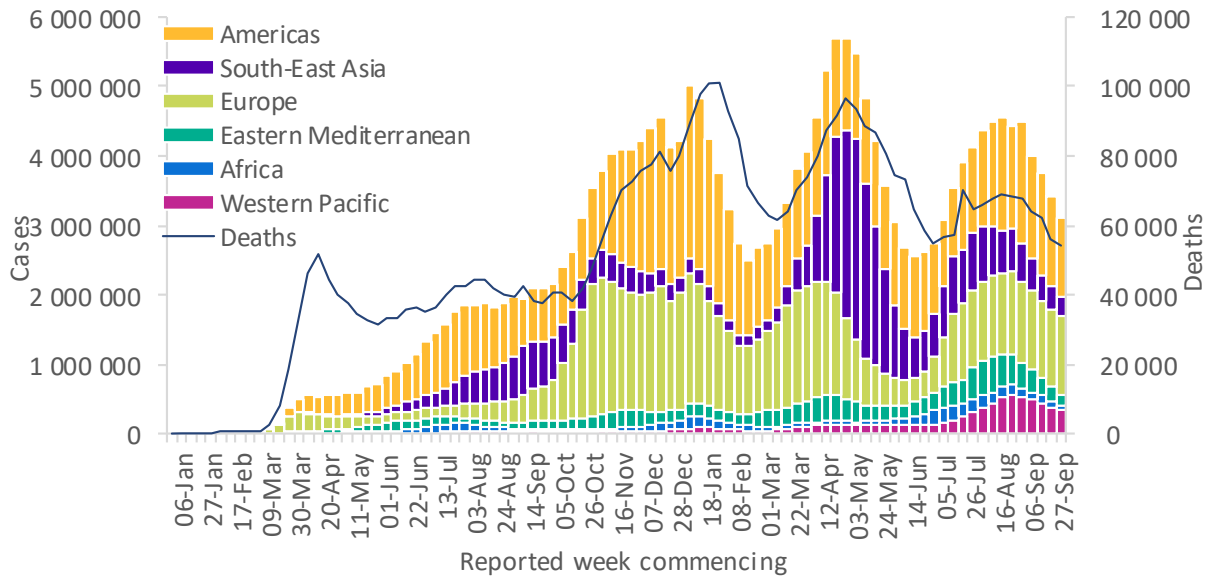
Global overview

Data as of 3 October 2021

Globally, the numbers of weekly COVID-19 cases and deaths continued to decline. This is a trend that has been observed since August (Figure 1). Over 3.1 million new cases and just over 54 000 new deaths were reported during the week of 27 September to 3 October 2021. Cases this week decreased by 9% as compared to the previous week, while the number of deaths remained similar to that of the past week (Table 1). All regions reported a decline in the number of new cases this week apart from the European Region which reported a number similar to that of the previous week. The largest decrease in new weekly cases was reported from the African Region (43%), followed by the Eastern Mediterranean Region (21%), the South-East Asia Region (19%), the Region of the Americas (12%) and the Western Pacific (12%). The cumulative number of confirmed cases reported globally is now over 234 million and the cumulative number of deaths is just under 4.8 million.

The number of new weekly deaths reported showed a large (>10%) decline for all regions except for the Regions of the Americas and Europe, which both reported a similar number of weekly deaths as compared to previous week. The largest decline in weekly deaths was reported from the African Region, with a 25% decline as compared to the previous week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 3 October 2021**



**See *Annex 2: Data, table and figure notes*

The regions reporting the highest weekly case incidence rates per 100 000 population were the European Region (123.1 new cases per 100 000 population) and the Region of the Americas (109.5 new cases per 100 000 population), while the same two regions reported this highest weekly incidence in deaths per 100 000 population; the Region of the Americas (2.4 new cases per 100 000 population) and the European Region (1.6 new cases per 100 000 population).

The highest numbers of new cases were reported from the United States of America (760 571 new cases; similar to the number reported in the previous week), the United Kingdom (239 781 new cases; similar to the number reported in the previous week), Turkey (197 277 new cases; similar to the number reported in the previous week), the Russian Federation (165 623 new cases; 13% increase), and India (161 158 new cases; 21% decrease).

Globally, cases of the Alpha variant have been reported in 195 countries, territories or areas (hereafter countries; two new countries added since last week), while 145 countries (3 new country since last week) have reported cases of the Beta variant; and 99 countries have reported cases of the Gamma variant (4 new countries since last week, with 1 report of the Gamma variant from last week being discarded upon sequencing) . The Delta variant has been reported in 192 countries (seven new countries since last week: 2 under verification and 5 verified), across all six WHO regions as of 5 October.

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 3 October 2021**

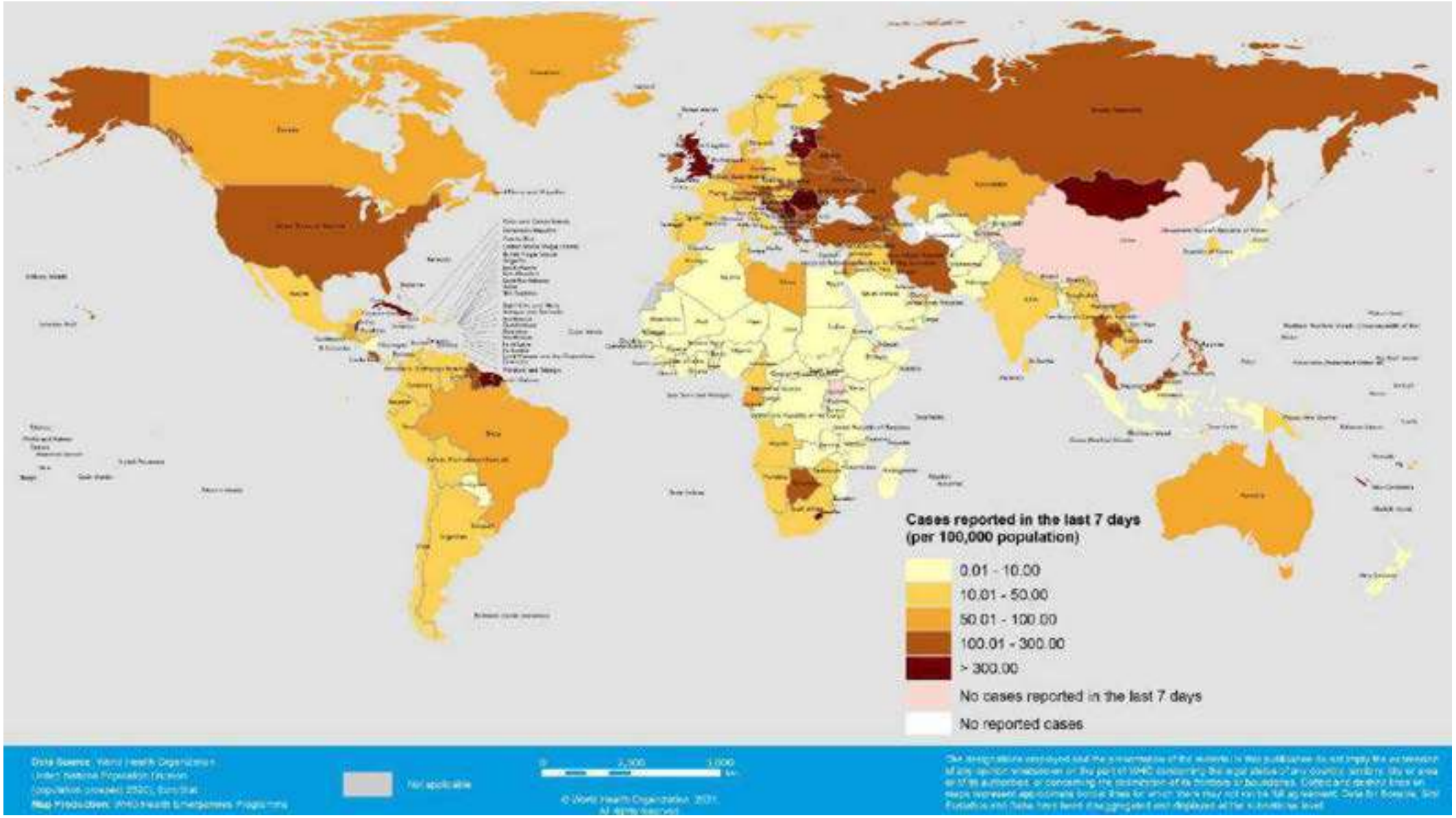
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 120 999 (36%)	-12%	90 357 809 (39%)	24 311 (45%)	2%	2 220 453 (46%)
Europe	1 164 750 (37%)	5%	70 589 709 (30%)	15 403 (28%)	2%	1 342 600 (28%)
South-East Asia	278 657 (9%)	-19%	43 121 902 (18%)	4 318 (8%)	-18%	678 035 (14%)
Eastern Mediterranean	166 068 (5%)	-21%	15 825 445 (7%)	3 567 (7%)	-17%	290 562 (6%)
Western Pacific	338 603 (11%)	-12%	8 609 714 (4%)	4 725 (9%)	-10%	117 705 (2%)
Africa	49 333 (2%)	-43%	6 048 196 (3%)	1 897 (3%)	-25%	146 854 (3%)
Global	**3 118 410 (100%)**	**-9%**	**234 553 539 (100%)**	**54 221 (100%)**	**-4%**	**4 796 222 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
***See Annex 2: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 27 September-3 October 2021**



**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 27 September-3 October 2021**

**See *Annex 2: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants.

Updates to the WHO SARS-CoV-2 variant tracking website

Given the continuous need to understand the epidemiological and clinical impacts of VOCs and VOIs, WHO regularly monitors and reviews circulation of variants. The changes in the rise of new variants are being monitored in light of other co-circulating variants, such as Delta.

This may mean that Variants of Interest (VOIs) or Variants of Concern (VOCs) may be outcompeted by newly emerging variants, such as VOC Delta. As evidence becomes available, we will revise classifications accordingly. These revisions reflect the continuous evolution of circulating variants and their changing epidemiology (see criteria for variant classification here).

Geographic distribution

As surveillance activities to detect SARS-CoV-2 variants are strengthened at national and subnational levels, including through the strengthening of genomic sequencing capacities, the number of countries/areas/territories (hereafter countries) reporting VOCs continues to increase (Figure 4, Annex 1). This distribution should nonetheless be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

Phenotypic characteristics

A recent peer-reviewed study evaluating persons infected with the Delta variant in France measured and compared the relative viral load with three other SARS-CoV-2 variants: Alpha, Beta and the non-VOC (20A.EU2) SARS-CoV-2 variant, collected from four hospital laboratories in the Paris area.[1] A total of 738 real time polymerase chain reaction (RT-PCR) SARS-CoV-2 positive nasopharyngeal samples collected from newly diagnosed COVID-19 cases, were screened to determine SARS-CoV-2 viral lineages and measure viral load. The results showed significant differences in the relative viral loads between Delta and other variants: viral loads of 2.5-fold higher were observed compared to Beta (median 7.26 [6.10–8.37]) ($p < 0.05$) and to the non-VOC variant; while infections with Alpha and Delta variants had similar viral loads.

A cross-sectional study (not yet peer reviewed), focusing on demographic characteristics, including severity of the illness and mortality rate, was conducted in India among COVID-19 cases caused by the non-VOC (B.1) variant and the Delta variant (B.1.617.2).[2] Using viral genomic sequences from 9500 COVID-19 patients, the study found an increased number of infections among younger age groups (0-19 years) and women, a lower mean age for infection and symptomatic illness/hospitalization, higher

mortality, and more frequent incidences of post-vaccination infections with Delta variant compared to the non-VOC (B.1) variant.

A retrospective cohort study conducted in the United States of America between 1 December 2020 and 30 July 2021 used sentinel surveillance to estimate the risk of hospitalization following infection with VOC or VOI, adjusting for age, sex, and vaccination status.[3] Of the 27 814 cases identified, 23 170 (83.3%) samples were sequenced through sentinel surveillance, of which 726 (3.1%) were hospitalized due to COVID-19. A higher hospitalization risk was found for infections with Gamma (HR 3.17, 95% CI 2.15-4.67), Beta (HR: 2.97, 95% CI 1.65–5.35), Delta (HR: 2.30, 95% CI 1.69-3.15), and Alpha (HR 1.59, 95% CI 1.26–1.99) compared to infections with a non-VOC variant. Following infection with a VOC, unvaccinated patients showed a higher hospitalization risk when compared to patients with non-VOC infections. Additionally, vaccinated patients showed an overall lower risk of hospitalization when compared to unvaccinated patients although there was no increased risk in these groups when comparing VOC and non-VOC infections.

Table 2: Summary of phenotypic impacts* of Variants of Concern

WHO label	Alpha	Beta	Gamma	Delta
Transmissibility	Increased transmissibility[4]	Increased transmissibility[5,6]	Increased transmissibility[6,7]	Increased transmissibility and secondary attack rate[6,8]
Disease severity	Increased risk of hospitalization[9], possible increased risk of severity and mortality[10,11]	Not confirmed, possible increased risk of in-hospital mortality[12]	possible increased risk of hospitalization[13],risk of severity [14]	Increased risk of hospitalization[15,16]
Risk of reinfection	Neutralizing activity retained[17], risk of reinfection remains similar[18]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[19]	Moderate reduction in neutralizing activity reported[20]	Reduction in neutralizing activity reported[21–23]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF); no impact on overall result from multiple target RT-PCR, No impact on Ag RDTs observed[24]	No impact on RT-PCR or Ag RDTs observed[23]	None reported to date	None reported to date

**Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.*

Table 3. Summary of vaccine performance against Variants of Concern

	WHO Emergency Use Listing (EUL) Qualified Vaccines							Vaccines without WHO EUL[+]			
	AstraZeneca-Vaxzevria/SII-Covishield	Beijing CNBG-BBIBP-CorV	Janssen-Ad26.COV 2.5	Moderna-mRNA-1273	Moderna-mRNA-1273/ Pfizer BioN BioNTech-Comirnaty	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Bharat-Covaxin	Gamaleya-Sputnik V	Novavax-Covavax
Alpha[25,26]											
Summary of VE*	Protection retained against all outcomes										
- Severe disease	↔$_{2}$	-	-	↔$_{1}$	↔$_{1}$	↔$_{5}$	-	-	-	-	-
- Symptomatic disease	↔ to ↓$_{5}$	-	-	↔$_{1}$	↔$_{1}$	↔$_{4}$	-	-	-	-	↓$_{1}$
- Infection	↔ to ↓$_{3}$	-		↔$_{1}$	-	↔$_{2}$	-	-	-	-	-
Neutralization	↔ to ↓$_{5}$	↔$_{1}$	↔$_{3}$	↔ to ↓$_{11}$	↓$_{1}$	↔ to ↓$_{38}$	↔ to ↓$_{5}$	↔$_{2}$	↔$_{2}$	↔$_{3}$	↓$_{1}$
Beta[27–30]											
Summary of VE*	Protection retained against severe disease; reduced protection against symptomatic disease; limited evidence										
- Severe disease	-	-	↔$_{1}$	-	-	↔$_{2}$	-	-	-	-	-
- Symptomatic disease	↓↓↓$_{1}$	-	↔$_{1}$	-	-	↔$_{1}$	-	-	-	-	↓↓↓$_{1}$
- Infection	-	-	-	↔$_{1}$	-	↓$_{1}$	-	-	-	-	-
Neutralization	↓ to ↓↓$_{6}$	↔ to ↓$_{2}$	↓ to ↓↓$_{5}$	↓ to ↓↓$_{13}$	↓↓↓$_{1}$	↓ to ↓↓$_{37}$	↓ to ↓↓$_{5}$	↔ to ↓$_{3}$	↓$_{2}$	↓ to ↓↓$_{3}$	↓↓↓$_{1}$
Gamma											
Summary of VE*	Unclear impact; very limited evidence										
- Severe disease	-	-	-	-	-	-	-	-	-	-	-
- Symptomatic disease	-	-	-	-	-	-	-	-	-	-	-
- Infection	-	-	-	-	-	-	↔$_{1}$	-	-	-	-
Neutralization	↓$_{2}$	-	↓$_{2}$	↓$_{6}$	-	↔ to ↓$_{21}$	↔ to ↓$_{4}$	↔$_{1}$	-	↓$_{2}$	-
Delta[31]											
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection; limited evidence										
- Severe disease	↔$_{2}$	-	-	↔$_{1}$	-	↔$_{4}$	-	-	-	-	-
- Symptomatic disease	↓ to ↓↓$_{4}$	-	-	-	-	↔ to ↓$_{4}$	-	-	↓$_{1}$	-	-
- Infection	↔ to ↓$_{2}$	-	-	-	-	↓$_{1}$	-	-	-	-	-
Neutralization	↓ to ↓↓$_{7}$	-	↓$_{3}$	↓$_{4}$	↓↓$_{1}$	↔ to ↓$_{14}$	↓ to ↓↓↓$_{3}$	↔ to ↓$_{2}$	↔ to ↓$_{3}$	↓$_{2}$	-

VE refers to vaccine effectiveness and vaccine efficacy

[+]As of submission of this update

*Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10% reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20% reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30%

reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30% reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used.

"Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study.

The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources page (https://view-hub.org/resources). For individual vaccine effectiveness studies, see 'COVID-19 Vaccine Effectiveness Results Summary', reference numbers noted with a '#'. For a list of all neutralization studies, see 'COVID-19 Vaccine Neutralization Studies Table'.

References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table and are included in the reference section below.

Additional notes on VOC impacts on vaccines

- Studies reporting VOC-specific vaccine efficacy or effectiveness (VE) estimates for full vaccination (≥ 7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 randomised RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates for these outcomes, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca Vaxzevria for infection (when a phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Table 3 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than four months post final dose.

Table 3 presents the impact of variants on product specific vaccine efficacy/effectiveness (VE) and quantifies the reduction in VE in the setting of variants compared to VE in non-VOC settings. Of note, reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of approximately 85%. In addition, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection overall, as is the case for the AstraZeneca-Vaxzevria vaccine.

Since the 21 September update, six notable new studies have provided evidence of COVID-19 vaccine performance after full vaccination against VOCs.

A pre-print study from the United Kingdom provided VOC-specific estimates of the effectiveness of COVID-19 vaccines. This study found that Pfizer BioNTech-Comirnaty provided similar levels of protection against infection due to Alpha (VE: 94%, 95% CI: 90-96%) and Delta (VE: 90%, 95%CI: 87-92%) 14 or more days post second dose, among household contacts of confirmed cases, with follow-up time since full vaccination up to ~20.5 weeks for Alpha cases and ~29 weeks for Delta cases.[32] AstraZeneca-Vaxzevria also had similar levels of protection against infection due to Alpha and Delta, with VE estimates of 71% (51-83%) and 72% (68-75%), respectively, with follow-up time since full vaccination up to ~8 weeks for Alpha cases and ~16 weeks for Delta cases.

A second study, not yet peer reviewed, evaluated the performance of Moderna-mRNA-1273 in the United States of America among persons who were included in a phase III randomized clinical trial of the vaccine, after study participants had been unblinded and persons in the placebo group were offered vaccination.[33] During the period from July to August 2021 (when Delta accounted for 97% of all cases sequenced), persons initially randomized to the vaccine arm and vaccinated between July and December 2020 experienced a higher incidence rate (IR) of symptomatic disease and severe disease (symptomatic disease IR: 77.1/1000 person-years; severe disease IR: 6.2/1000 person years) compared to persons initially assigned to the placebo group but vaccinated more recently between December 2020 and April 2021 (symptomatic disease

IR: 49.0/1000 person-years; severe disease IR: 3.3/1000 person years). This finding is suggestive of waning vaccine efficacy, although it was not possible to calculate an efficacy estimate using this case-only approach.

Two additional studies assessed performance of COVID-19 vaccines in outbreak settings. The first pre-print study evaluated the effectiveness of Pfizer BioNTech-Comirnaty in preventing infection and disease among residents and staff of a nursing home in Germany during an outbreak of the Alpha variant.[34] Two doses of the vaccine was 45% (0-69%), 68% (36-84%), and 88% (37-98%) effective at preventing infection, symptomatic disease, and hospitalization due to Alpha, respectively, seven or more days post second dose. The maximum follow-up after full vaccination was ~11 weeks. Authors also found that cycle threshold values at the time of SARS-CoV-2 detection were higher (suggesting lower viral load) among cases vaccinated more than 21 days prior compared to those vaccinated within 21 days of SARS-CoV-2 detection. Furthermore, the secondary attack rate was lower among household contacts of vaccinated cases (22.2%) than among household contacts of unvaccinated cases (66.7%). Another investigation of an outbreak of Delta in a prison in the USA found higher attack rates among unvaccinated (93%) persons as compared to those who had been vaccinated with Pfizer BioNTech-Comirnaty, Moderna-mRNA-1273, or Janssen-Ad26.COV 2.5, combined (70%).[35] In addition, higher attack rates were observed among persons vaccinated ≥ 4 months prior to the outbreak (89%) compared to those vaccinated within two weeks to two months prior to the outbreak (61%). Among those vaccinated, 66% had received Pfizer BioNTech-Comirnaty, 27% had received Moderna-mRNA-1273, and 7% had received Janssen-Ad26.COV 2.5; all persons vaccinated ≥ 4 months prior to the outbreak had received Pfizer BioNTech-Comirnaty.

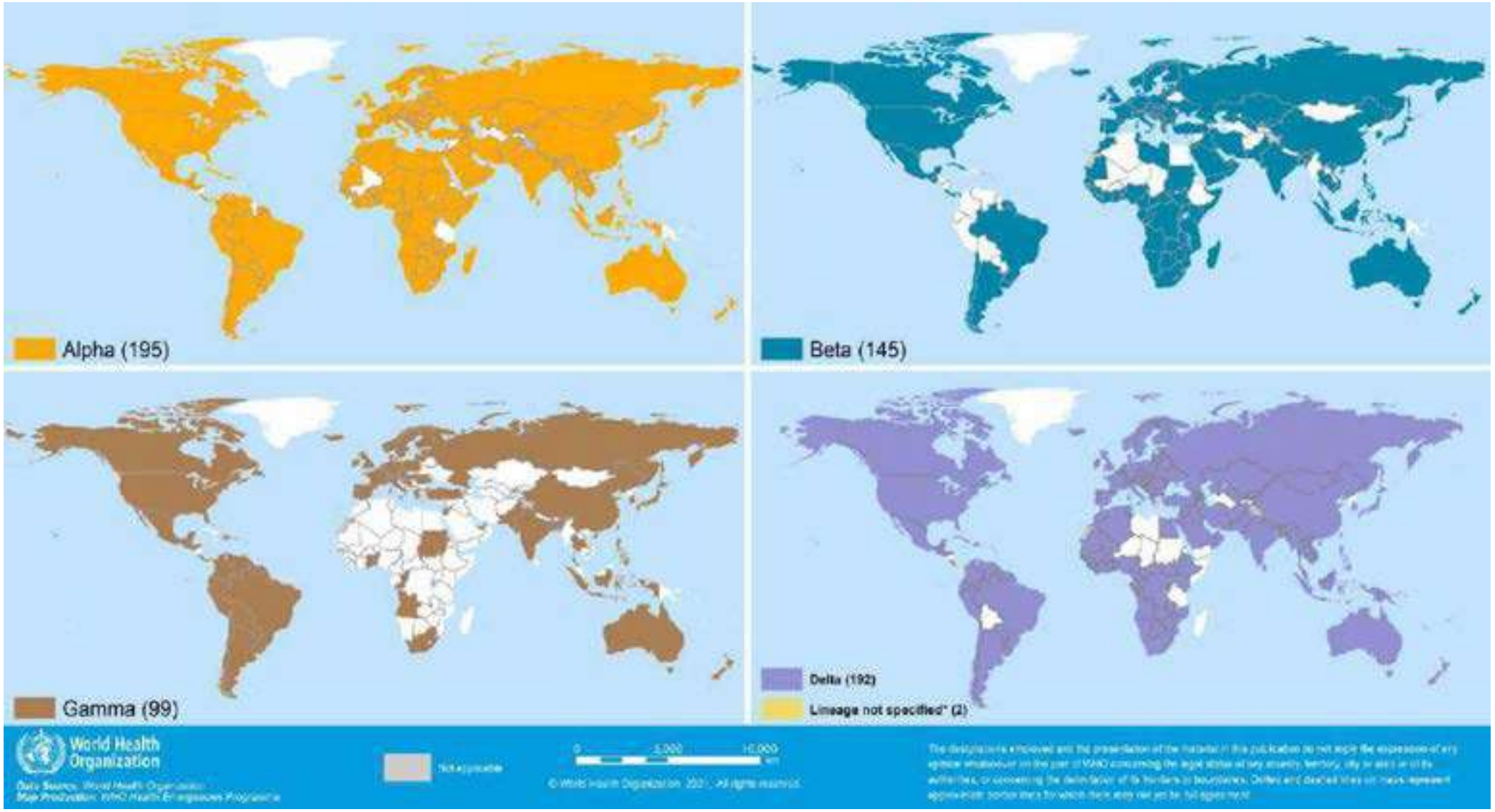
Finally, two retrospective cohort studies from Israel provide further data on the effectiveness of the Pfizer BioNTech-Comirnaty vaccine. The first, a peer-reviewed study, conducted during a period of high Alpha prevalence, found that the vaccine was over 95% effective for each at preventing infection, symptomatic disease, hospitalization, and death 22-28 days post receipt of the second dose among persons 16 years and older.[36] The second study, a pre-print, conducted during a time of high Delta prevalence, found Pfizer BioNTech-Comirnaty to be 91.5% (88.2-93.9%) effective against SARS-CoV-2 infection 8-28 days post second dose in children 12-15 years of age.[37]

Together these studies provide further evidence of high effectiveness of the mRNA vaccines and AstraZeneca-Vaxzevria vaccine against SARS-CoV-2 infection, and symptomatic and severe COVID-19 disease due to Alpha and Delta variants, although there remains some indication of decreasing effectiveness against infection and symptomatic disease as time since complete vaccination.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Figure 5. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 5 October 2021**



**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*

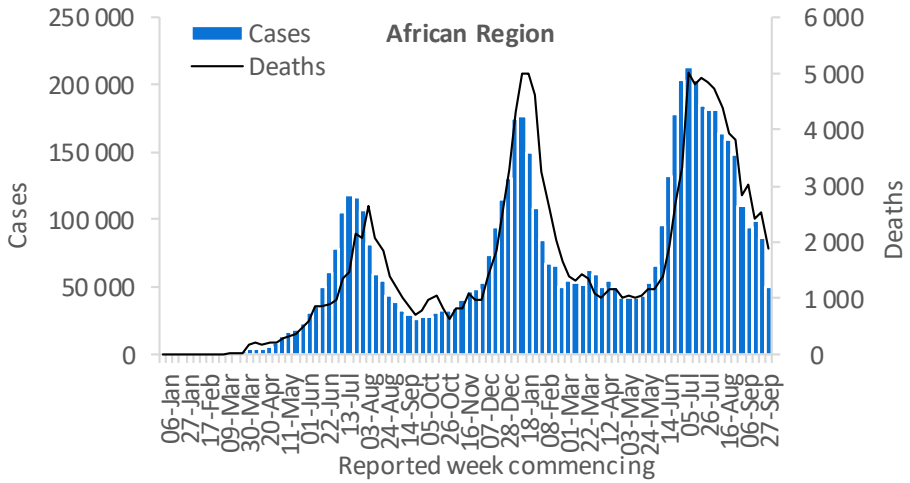
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details*

WHO regional overviews Epidemiological week 27 September-3 October 2021

African Region

The African Region reported over 49 000 new cases and just under 1900 new deaths, decreases of 43% and 25% respectively as compared to the previous week. The declining trend in cases reported in the region and observed since early July continued this week. While this trend is true for most countries in the region, in the past week, seven countries reported increases of over 20% in new cases as compared to the previous week.

The highest numbers of new cases were reported from South Africa (9637 new cases; 16.2 new cases per 100 000 population; a 38% decrease), Ethiopia (7127 new cases; 6.2 new cases per 100 000; a 19% decrease), and Lesotho* (6943 new cases; 324.1 new cases per 100 000). The highest numbers of new deaths were reported from South Africa (752 new deaths; 1.3 new deaths per 100 000 population; a 15% decrease), Ethiopia (306 new deaths; <1 new death per 100 000; a 20% increase), and Lesotho* (231 new deaths; 10.8 new deaths per 100 000).



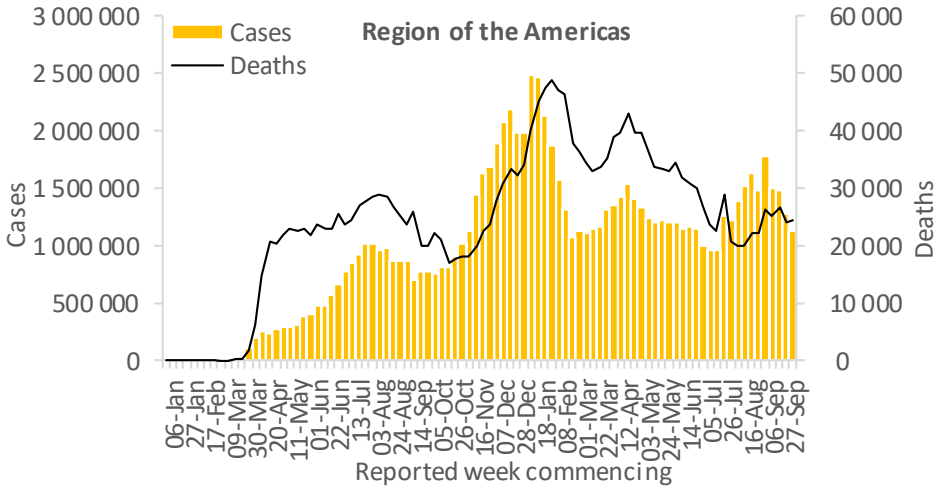
Updates from the African Region

* This marked increase was reported by Lesotho on 30 September 2021 as a batch number for both cases and deaths and will be reviewed as more information becomes available.

Region of the Americas

The Region of the Americas reported over 1.1 million new cases, a 12% decrease as compared to the previous week, and just over 24 000 new deaths, which was similar to the number reported the previous week. Overall, while the region has been reporting declining trends in both cases and deaths over the past month, the weekly incidence remains at levels below the peak seen in March.

The highest numbers of new cases were reported from the United States of America (760 571 new cases; 229.8 new cases per 100 000; similar to last week), Brazil (131 501 new cases; 61.9 new cases per 100 000; a 47% decrease), and Mexico (52 496 new cases; 40.7 new cases per 100 000; a 21% decrease). The highest numbers of new deaths were reported from the United States of America (13 736 new deaths; 4.1 new deaths per 100 000; a 12% increase), Brazil (4060 new deaths; 1.9 new deaths per 100 000; similar to last week), and Mexico (3275 new deaths; 2.5 new deaths per 100 000; a 21% decrease).

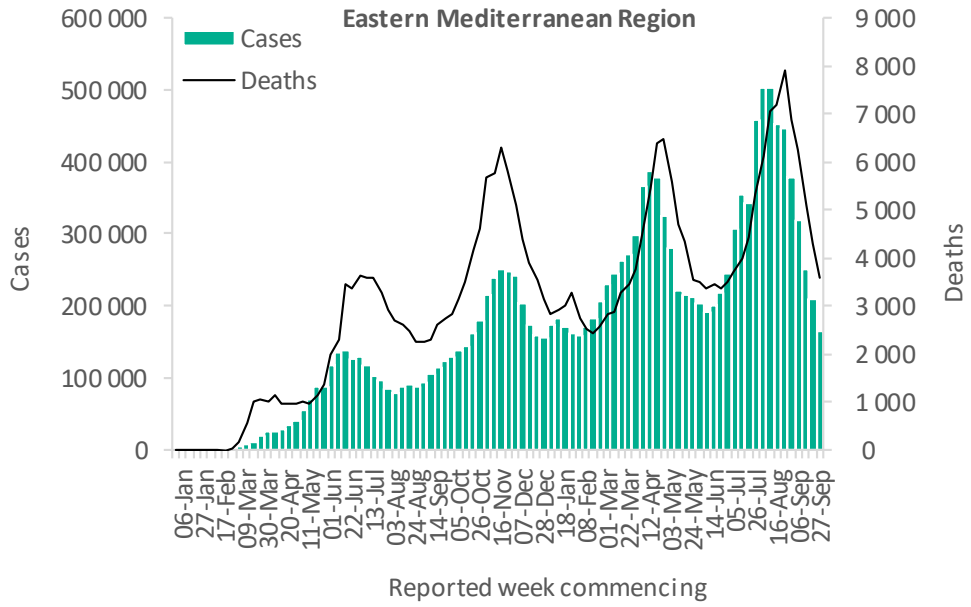


Updates from the Region of the Americas

Eastern Mediterranean Region

Since a peak in incidence in both cases and deaths in early August this year, weekly cases and deaths have continued to consistently decline in the Eastern Mediterranean Region. This week, the region reported over 166 000 new cases and over 3500 new deaths, decreases of 21% and 17% respectively as compared to the previous week. The highest numbers of new cases were reported from the Islamic Republic of Iran (91 972 new cases; 109.5 new cases per 100 000; a 17% decrease), Iraq (15 599 new cases; 38.8 new cases per 100 000; an 18% decrease), and Pakistan (11 314 new cases; 5.1 new cases per 100 000; a 28% decrease).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (1808 new deaths; 2.2 new deaths per 100 000; a 21% decrease), Pakistan (307 new deaths; <1 new death per 100 000; a 21% decrease), and Iraq (272 new deaths; <1 new death per 100 000; an 8% decrease).

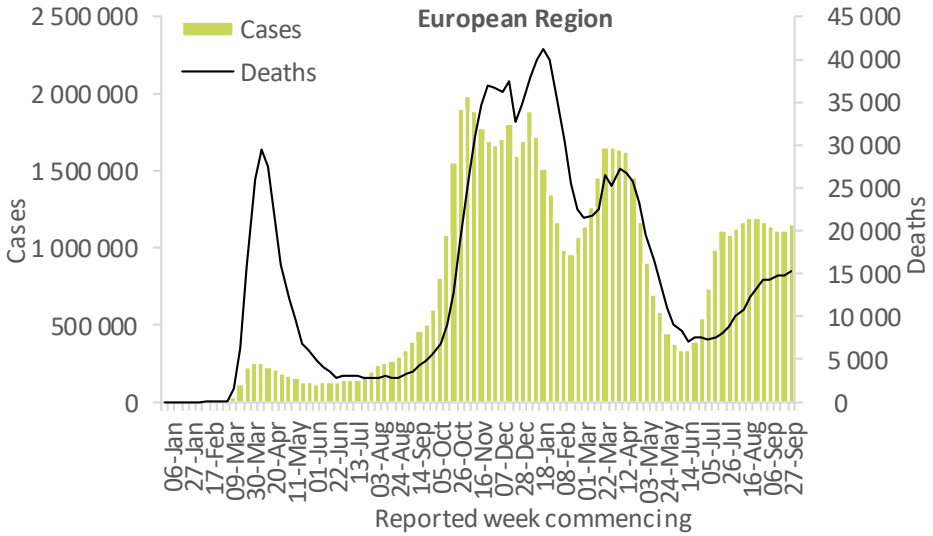


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 1.1 million new cases and over 15 000 new deaths, with both numbers similar to the numbers reported in the previous week. Following sharp declines in the incidence in both cases and deaths between March and June this year, numbers in the European Region spiked again in July and have since remained at higher but more stable levels (≤5% change) for the past three months. The highest numbers of new cases were reported from the United Kingdom (239 781 new cases; 353.2 new cases per 100 000; similar to previous week), Turkey (197 277 new cases; 233.9 new cases per 100 000; a number similar to that of the previous week), and the Russian Federation (165 623 new cases; 113.5 new cases per 100 000; a 13% increase).

The highest numbers of new deaths were reported from the Russian Federation (6018 new deaths; 4.1 new deaths per 100 000; a 6% increase), Turkey (1529 new deaths; 1.8 new deaths per 100 000; a number similar to that of previous week), and Ukraine (1149 new deaths; 2.6 new deaths per 100 000; a 53% increase).

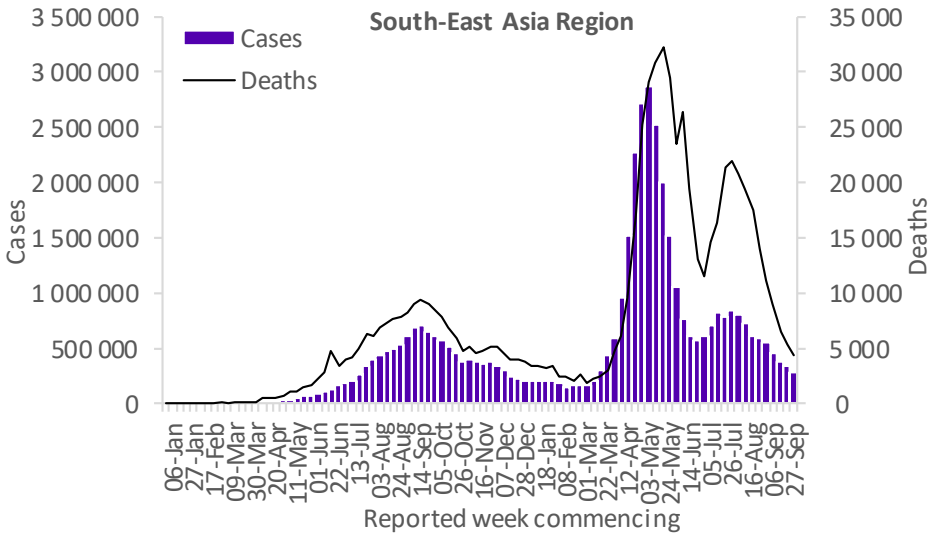


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 278 000 new cases and over 4300 new deaths, decreases of 19% and 18% respectively as compared to the previous week. This sustained regional decline in both cases and deaths has been observed since late July. This week, only one country- Bhutan - reported an increase in cases - although absolute numbers reported remain low. Similarly, Nepal was the only country to report an increase in the number of new deaths this week (68 new deaths; a 21% increase). The highest numbers of new cases were reported from India (161 158 new cases; 11.7 new cases per 100 000; a 21% decrease), Thailand (75 794 new cases; 108.6 new cases per 100 000; an 11% decrease), and Indonesia (11 271 new cases; 4.1 new cases per 100 000; a 35% decrease).

The highest numbers of new deaths were reported from India (1899 new deaths; <1 new death per 100 000; a 9% decrease), Thailand (746 new deaths; 1.1 new deaths per 100 000; an 18% decrease), and Indonesia (706 new deaths; <1 new death per 100 000; a 29% decrease).

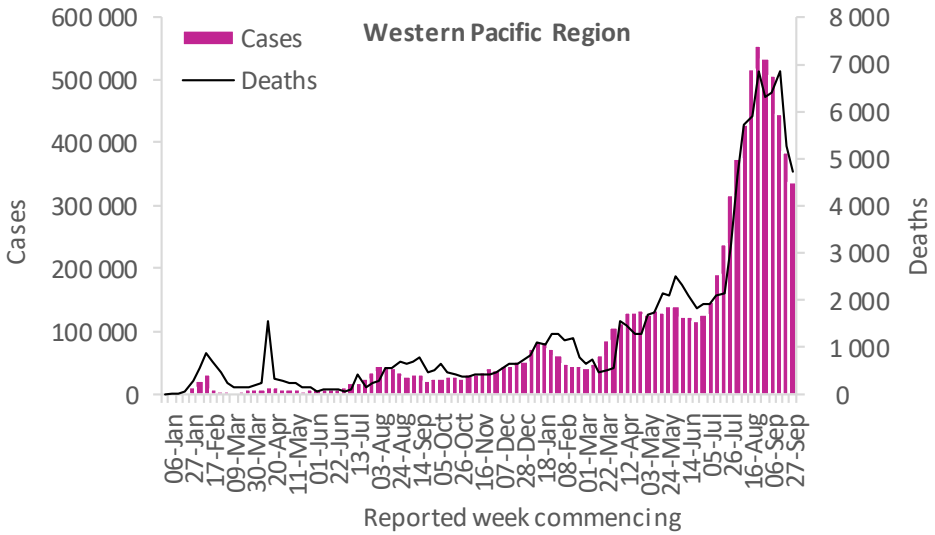


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported over 338 000 new cases and over 4700 new deaths, decreases of 12% and 10% respectively as compared to the previous week. After a sustained period of relatively stable numbers of both weekly cases and deaths, both began to rapidly increase from late June this year. However, this has been followed by consistent decreases in new cases and deaths observed in the region for over a month now and this is largely driven by declines in the Philippines and Malaysia. The highest numbers of new cases were reported from the Philippines (110 023 new cases; 100.4 new cases per 100 000; a 10% decrease), Malaysia (83 368 new cases; 257.6 new cases per 100 000; an 18% decrease), and Viet Nam (56 524 new cases; 58.1 new cases per 100 000; a 19% decrease).

The highest numbers of new deaths were reported from Malaysia (1406 new deaths; 4.3 new deaths per 100 000; a 33% decrease), the Philippines (1251 new deaths; 1.1 new deaths per 100 000; a 52% increase), and Viet Nam (1201 new deaths; 1.2 new deaths per 100 000; a 22% decrease).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update (WOU) is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) monitoring and evaluation team which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework.

In this week's edition of the COVID-19 Weekly Operational Update, published on 4 October, highlights of country-level actions and WHO support to countries include:

- Nearly a third of African countries hit 10% COVID-19 vaccination goal: support to accelerate vaccine rollouts
- Supporting national vaccine cold chain system in Islamic Republic of Iran
- WHO/Europe supports COVID-19 intensive care in Georgia
- Fourth Intra-Action Review (IAR) Meeting to strengthen Indonesia's COVID-19 response
- Working together in Nicaragua to bring training to the front lines
- Progress on a subset of indicators from the SPRP 2021 Monitoring and Evaluation Framework
- Updates on WHO's financing to support countries in SPRP 2021 implementation and provision of critical supplies.

For more information, see the Weekly operational update on COVID-19

Annex

COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 5 October 2021

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Afghanistan	●	-	-	●	-
Albania	●	-	-	○	-
Algeria	●	-	-	●	-
Andorra	○	○	-	○	-
Angola	●	●	●	●	-
Anguilla	●	-	-	●	-
Antigua and Barbuda	●	●	●	●	-
Argentina	●	●	●	●	-
Armenia	●	-	-	●	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	○	-
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	-
Bangladesh	●	●	○	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	●	●	-
Benin	●	-	●*	-	-
Bermuda	●	●	-	●	-
Bhutan	●	●	-	●	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Bosnia and Herzegovina	●	●	●	○	-
Botswana	○	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	●	-
Brunei Darussalam	●	●	-	●	-
Bulgaria	●	●	-	●	-
Burkina Faso	●	-	-	●*	-
Burundi	●	●	-	●	-
Cabo Verde	●	-	-	●	-
Cambodia	●	●	-	●	-
Cameroon	●	●	-	●*	-
Canada	●	●	●	●	-
Cayman Islands	●	●	●	●	-
Central African Republic	●	●	-	●	-
Chad	●	-	-	-	-
Chile	●	●	●	●	-
China	●	●	●	○	-
Colombia	●	-	●	●	-
Comoros	-	●	-	-	-
Congo	●	○	●*	●	-
Costa Rica	●	●	●	●	-
Croatia	●	●	●	○	-
Cuba	●	●	-	●	-
Curaçao	●	●	●	●	●
Cyprus	●	●	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Czechia	●	●	●	●	-
Côte d'Ivoire	●	●	-	○	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-
Dominica	●	-	-	●	-
Dominican Republic	●	-	●	●	-
Ecuador	●	-	●	●	-
Egypt	●	-	-	●	-
El Salvador	●	-	●	●	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	○	-
Eswatini	○	●	-	●	-
Ethiopia	●	-	-	●	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	●	-	●*	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Germany	●	●	●	●	-
Ghana	●	●	●*	●	-
Gibraltar	●	-	-	○	-
Greece	●	●	●	●	-
Grenada	●	-	-	●	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	●	-
Guinea	●	●	-	●	-
Guinea-Bissau	●	●	-	●	-
Guyana	-	-	●	●	-
Haiti	●	-	●	●	-
Honduras	●	-	●	●	-
Hungary	●	○	●	○	-
Iceland	●	●	●	●	-
India	●	●	●	●	-
Indonesia	●	●	○	●	-
Iran (Islamic Republic of)	●	●	-	●	-
Iraq	●	●	-	●	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	●	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	●	○	-	●	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	○	-
Kuwait	●	●	-	●	-
Kyrgyzstan	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Lao People's Democratic Republic	●	-	-	●	-
Latvia	●	●	●	○	-
Lebanon	●	-	-	●	-
Lesotho	-	●	-	○	-
Liberia	●	●*	-	●	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	○	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-
Madagascar	●*	●	-	-	-
Malawi	●	●	-	●	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Mali	-	-	-	●*	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	●	●	-	●	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	●	-	●	-
Mongolia	●	-	-	●	-
Montenegro	●	-	○	○	-
Montserrat	●	-	●	●	-
Morocco	●	●	-	●	-
Mozambique	●	●	-	●	-
Myanmar	●	-	-	●	-
Namibia	●	●	-	●	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
New Caledonia	●	-	-	●	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	●	-	●	-
North Macedonia	●	●	-	○	-
Northern Mariana Islands (Commonwealth of the)	○	-	-	●	-
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●	-
Oman	●	●	-	●	-
Pakistan	●	●	●	●	-
Panama	●	●	●	●	●
Papua New Guinea	-	-	-	●	-
Paraguay	●	-	●	●	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	●	-	-	●	-
Romania	●	●	●	●	-
Russian Federation	●	●	○	●	-
Rwanda	●	●	-	●	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	●	-
Saint Kitts and Nevis	-	-	-	●	-
Saint Lucia	●	-	-	●	-
Saint Martin	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Saint Pierre and Miquelon	-	-	-	●	-
Saint Vincent and the Grenadines	-	-	●	●	-
Sao Tome and Principe	●	-	-	○	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	●	-
Serbia	●	-	-	●	-
Seychelles	●	●	-	●	-
Sierra Leone	-	●*	-	●	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	●	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	●	-	-	-
South Africa	●	●	○	●	-
South Sudan	●	●	-	●	-
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-
Sudan	●	●	●	-	-
Suriname	●	●	●	●	-
Sweden	●	●	●	●	-
Switzerland	●	●	●	●	-
Syrian Arab Republic	-	-	-	○	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	●	-
Togo	●	●	●*	●	-
Trinidad and Tobago	●	-	●	●	-
Tunisia	●	●	-	●	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Ukraine	●	○	-	○	-
United Arab Emirates	●	●	●	●	-
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-
United States Virgin Islands	●	●	-	●	-
United States of America	●	●	●	●	-
Uruguay	●	●	●	●	-
Uzbekistan	●	●	-	○	-
Venezuela (Bolivarian Republic of)	●	-	●	●	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	-	●	-
Zimbabwe	●*	●*	-	●	-

**Newly reported in this update.*

Unspecified B.1.617 reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

indicates that information for this variant was received by WHO from official sources.

indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available.

***Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern.*

See also Annex 2: Data, table and figure notes.

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

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COVID-19 Weekly Epidemiological Update

Edition 59, published 28 September 2021

In this edition:

- Global overview
- Special focus: Approaches to determining waning COVID-19 vaccine effectiveness
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Summary of the Weekly Operational Update

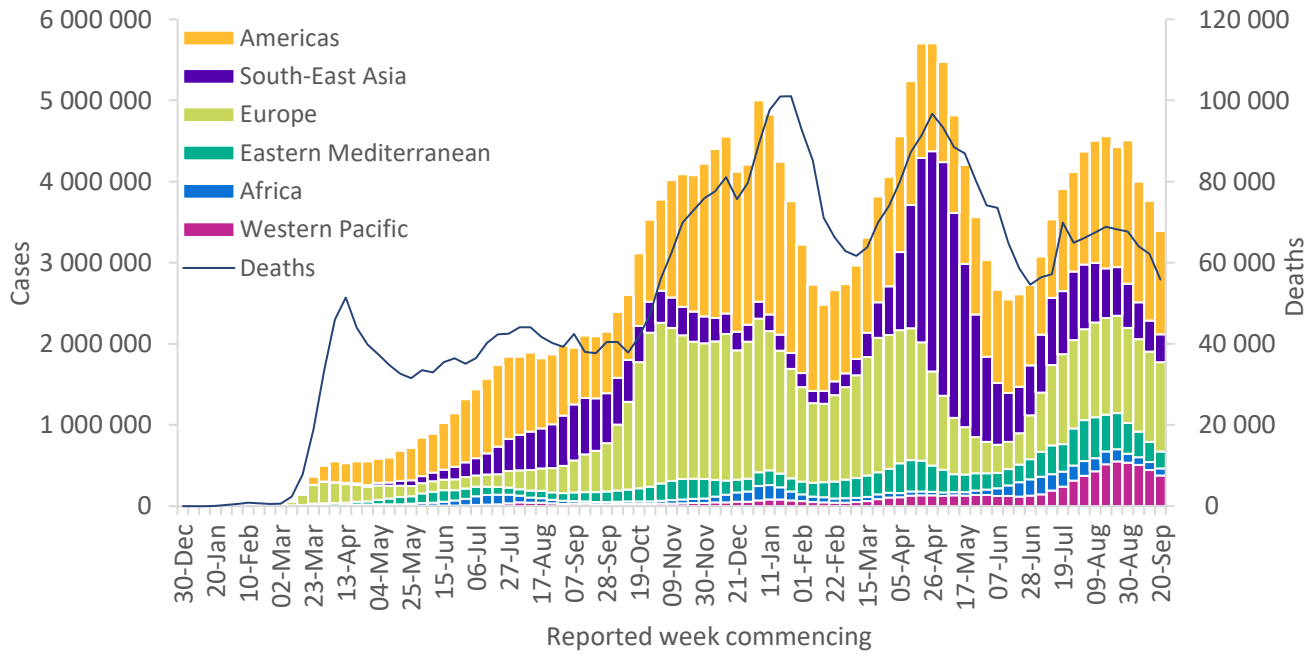
Global overview

Data as of 26 September 2021

Globally, the numbers of weekly COVID-19 cases and deaths continued to decline (Figure 1). Over 3.3 million new cases and over 55 000 new deaths were reported during the week of 20 – 26 September 2021, decreases of 10% as compared to the previous week for both cases and deaths (Table 1). The largest decrease in new weekly cases was reported from the Eastern Mediterranean Region (17%), followed by the Western Pacific Region (15%), the Region of the Americas (14%), the African Region (12%) and the South-East Asia Region (10%); while weekly cases in the European Region were similar to the previous week. The cumulative number of confirmed cases reported globally is now over 231 million and the cumulative number of deaths is more than 4.7 million.

The number of new weekly deaths reported showed a large (>15%) decline for all regions except for the European Region, which reported a similar number of weekly deaths compared to previous week, and the African Region which reported a slight increase (5%). The largest decline in weekly deaths was reported from the Western Pacific Region, with a 24% decline as compared to the previous week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 26 September 2021**



**See *Annex 2: Data, table and figure notes*

The regions reporting the highest weekly case and death incidence rates per 100 000 population remain the same as in the previous weeks: the Region of the Americas (124.6 new cases per 100 000 population; 2.3 deaths per 100 000 population) and the European Region (117.6 new cases per 100 000 population; 1.6 deaths per 100 000 population).

The highest numbers of new cases were reported from the United States of America (765 827 new cases; 31% decrease), Brazil (247 397 new cases; 135% increase due to changes in reporting), the United Kingdom (230 494 new cases; 14% increase), India (204 582 new cases; similar to previous week), and Turkey (192 778 new cases; similar to previous week), while the highest numbers of new deaths were from the United States of America (14 842 new deaths, a 17% decrease), the Russian Federation (5469 new deaths, similar to the previous week), Mexico (3689 new deaths, a 13% increase), Brazil (3727 new deaths, a 10% increase), and the Islamic Republic of Iran (2967 new deaths, a 23% decrease) respectively.

Globally, cases of the Alpha variant have been reported in 193 countries, territories or areas (hereafter countries; no new country added since last two weeks), while 142 countries (no new country since last week) have reported cases of the Beta variant; and 96 countries (no new countries since last week) have reported cases of the Gamma variant. The Delta variant has been reported in 187 countries (two new countries since last week), across all six WHO regions as of 28 September.

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 26 September 2021**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 273 971 (38%)	-14%	89 236 517 (39%)	23 890 (43%)	-10%	2 196 144 (46%)
Europe	1 097 735 (32%)	-1%	69 411 718 (30%)	14 638 (26%)	-1%	1 326 559 (28%)
South-East Asia	344 305 (10%)	-10%	42 843 227 (19%)	5 249 (9%)	-20%	673 717 (14%)
Eastern Mediterranean	209 329 (6%)	-17%	15 659 306 (7%)	4 284 (8%)	-16%	286 995 (6%)
Western Pacific	378 919 (11%)	-15%	8 266 265 (4%)	5 233 (9%)	-24%	112 945 (2%)
Africa	87 135 (3%)	-12%	5 998 863 (3%)	2 536 (5%)	5%	144 957 (3%)
Global	**3 391 394 (100%)**	**-10%**	**231 416 660 (100%)**	**55 830 (100%)**	**-10%**	**4 741 330 (100%)**

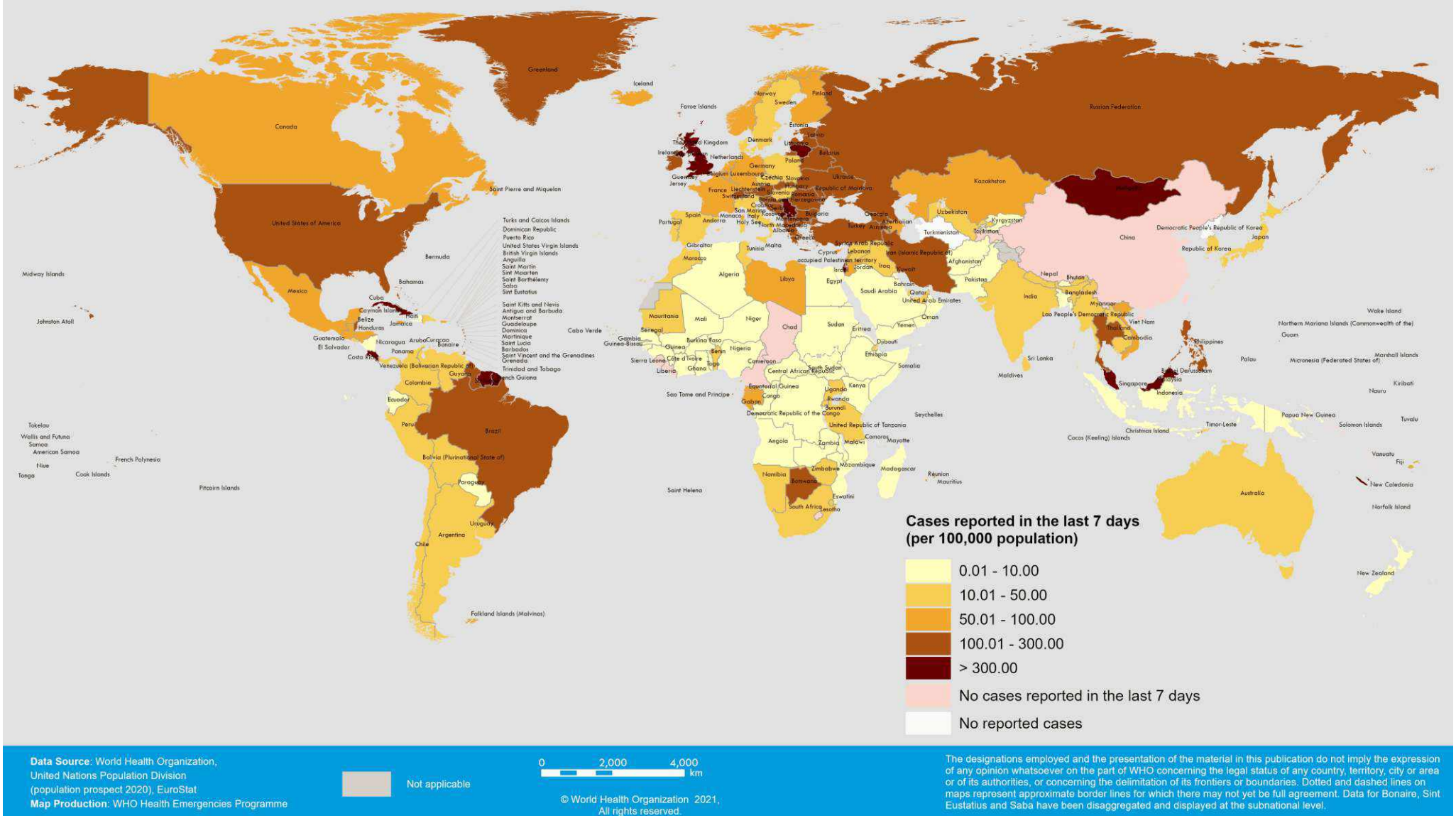
**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*

***See Annex 2: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

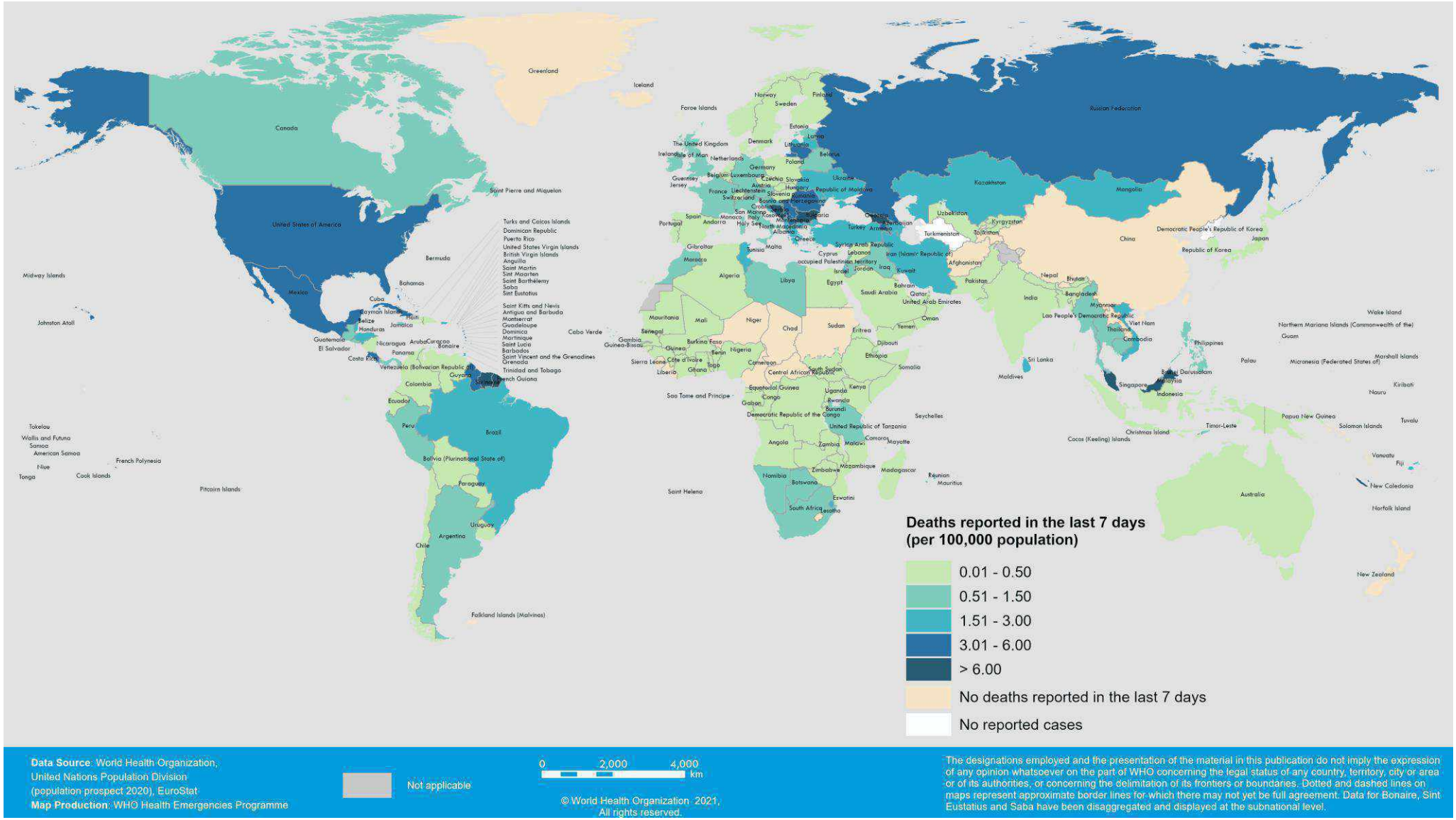
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 20 – 26 September 2021**



**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 20 -26 September 2021**



**See *Annex 2: Data, table and figure notes*

Special Focus: Approaches to determining waning COVID-19 vaccine effectiveness

Why should we be concerned about waning immunity?

More than 21 months into the pandemic, there remains critical information that remains unknown about SARS-CoV-2 and the disease it causes: COVID-19. One of these topics is whether immunity conferred after vaccination or infection wanes over time. Knowing whether and to what extent immunity may wane in the mid- to long-term is critical to inform the public health response and policy decisions. Here, we focus on waning immunity following vaccination – we describe the different ways in which scientists have studied changes in vaccine effectiveness in people who have been vaccinated over time and provide a summary of the findings thus far.

Does immunity wane after vaccination?

Multiple COVID-19 vaccines have received Emergency Use Listing (EUL) from WHO based on vaccine efficacy results from randomized controlled clinical trials[1]. However, the follow-up time of the clinical trials used to assess vaccine efficacy for EUL was shorter than the usual follow-up time for trials of other new vaccines, with most efficacy results having a median follow-up time of two months. Outside clinical trial settings, vaccine effectiveness (VE) results among persons immunized as part of national vaccine roll-outs were similar to the findings of the clinical trials in the first few months after vaccines began to be administered[2]. However, despite the encouraging results of early VE studies, the duration of reported protection for COVID-19 vaccines require continued monitoring because in vitro studies of neutralization by vaccine-induced antibodies showed that, levels of most vaccine-derived antibodies declined over time (for more details, please see Special Focus published in Weekly Epidemiological Update on 27 July)[3]. However, it is important to consider that the antibody response is only one part of the immune response. It is not known what level of antibodies in the body is needed to provide protection against SARS-CoV-2 infection or severe disease, nor whether vaccine-derived memory cells will be activated in response to subsequent exposure to SARS-CoV-2, nor whether any observed decline in antibodies correspond to decreases in VE and if so, over what timeframe[4].

Approaches to assess waning vaccine effectiveness against infection and all symptomatic disease

Interval-based estimates

Most VE studies provide estimates of cumulative VE to represent VE from 7-14 days after full vaccination through a defined follow-up period, the duration of which varies by study[5]. However, cumulative VE estimates can obscure any waning VE during the latter part of the follow-up period, particularly in situations when most cases occur in the months soon after vaccination. Several approaches have been taken to address this limitation, the most common being to measure the VE at fixed intervals after vaccination. As of 21 September 2021, an interval-based assessment of efficacy from one randomized controlled trial[6] and VE from eight real-world studies have identified waning VE for infection and symptomatic disease in several settings, for four COVID-19 vaccines[7-14] (Figure 4). Vaccine effectiveness appears to peak 1-2 months after vaccination and then starts to decline from the third month after vaccination for Pfizer BioNTech-Comirnaty and AstraZeneca-Vaxzevria vaccines in some studies[6-8,12-13]. Only one study has assessed VE at different time intervals up to 3.5 months post-vaccination for the Moderna-mRNA-1273 vaccine and, unlike the studies mentioned above, did not show any apparent waning against symptomatic infection[7].

A potential problem with the interval-based approach to VE estimates is that circulation of a new variant with more pronounced immune escape characteristics, such as the Beta or Delta variants, during the follow-up period can confound the later VE estimates. Limiting the analysis to only cases caused by a single variant over time can disaggregate waning VE from reduced VE due to a specific variant. To address this potential confounding factor, a study from the United Kingdom, using a test-negative design, demonstrated waning VE against symptomatic disease caused by the Delta variant for both the Pfizer BioNTech-Comirnaty and AstraZeneca-Vaxzevria vaccines from 10 weeks after full vaccination[7]. A study conducted in Qatar, found

waning VE against infection with Alpha, Beta and Delta variants three to four months after complete vaccination with Pfizer BioNTech-Comirnaty; however, confidence intervals for some time periods were wide and overlapping[8]. Most VE studies do not conduct genomic characterization for all cases as the studies in the United Kingdom and Qatar did, which limits the ability to differentiate waning VE from reduced VE due to variants.

Case-only analysis of vaccinated cases

Another approach to the interval-based approach is to undertake a case-only analysis of vaccinated cases, comparing rates of breakthrough infections and disease during a defined time period, stratified by the time of vaccination. A recent study from Israel measured incidence during a 3-week period in July 2021 when the Delta variant was the predominant variant, stratified by the month of vaccination[12]. It found rates of SARS-CoV-2 infection in July 2021 were two-fold or higher for those vaccinated in late January 2021 compared to May 2021. A case-only approach does not yield a VE estimate, which requires a comparison to unvaccinated persons, so this study did not provide estimates of waning VE.

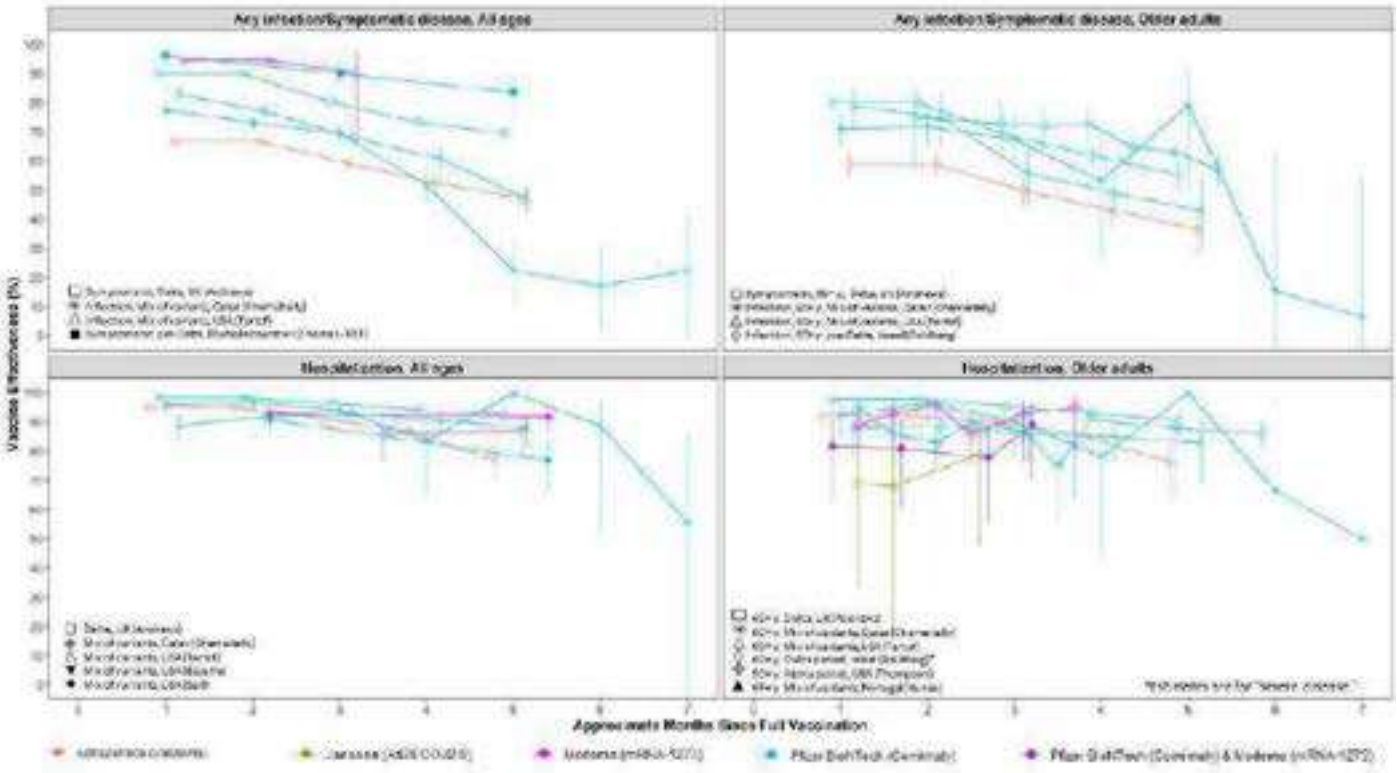
Comparison of disease occurrence

Another methodology to assess waning VE is using rates of breakthrough cases to compare the incidence rate ratio (IRR) between vaccinated and unvaccinated persons at different time points. This approach was used in 13 jurisdictions the United States of America where the age-standardized IRR for all COVID-19 symptomatic disease between those not fully vaccinated and those who were fully vaccinated decreased from 11.1 (95% CI, 7.8-15.8) between 5 April – 19 June 2021, to 4.6 (95% CI, 2.5-8.5) between 20 June - 17 July 2021[15]. A limitation of this study was the inability to disaggregate the effect of waning due to time since vaccination versus the increased circulation of the Delta variant in the later time period. An additional limitation was the challenge of accounting for confounding.

Approaches to assess waning immunity against hospitalization and severe disease

These same approaches described above have also been used to assess waning VE against hospitalization/severe disease. In contrast to the findings for infection and symptomatic disease, the VE against severe outcomes remains high (≥75%) over time for Pfizer BioNTech-Comirnaty, AstraZeneca-Vaxzevria, Moderna-mRNA-1273, and ≥68% for Janssen-Ad26.COV2.S. (Figure 1)[9, 10, 11, 14]. However, some studies, done in settings where the Delta variant was predominant, have shown that VE against severe disease dropped by 5-15 percentage points from four months after vaccination with Pfizer BioNTech-Comirnaty in Israel, the United Kingdom, Qatar and the United States of America[7, 8, 12, 13], and AstraZeneca-Vaxzevria in the United Kingdom[7]. No waning was seen for Moderna-mRNA-1273, and Janssen-Ad26.COV2.S, although there was less follow-up time for these vaccines. Further follow-up of the VE against severe disease for all vaccines is needed to clarify if and how much waning VE might occur after more time has elapsed since full vaccination.

Figure 4: Vaccine effectiveness against infection and symptomatic disease and hospitalization for all ages and older adults[6-14]



What type of biases must be considered?

There are multiple sources of bias that are present in observational studies of VE and that need to be considered by researchers who design and conduct the studies, as well as media professionals and the public when interpreting the study results. While none of these biases invalidate findings from observational studies which assess VE, we should pay close attention to them to understand results from studies. These potential biases include:

- Individuals prioritized for vaccination early in vaccination campaigns were often those at higher risk for SARS-CoV-2 infection and/or severe COVID-19, such as frontline workers, older people and long-term care facility residents. These people may continue to be at higher risk of exposure, infection, and/or severe disease over time and they will be over-represented among individuals with the longest follow-up time after vaccination, resulting in apparent waning VE.

- Those who have been vaccinated may change their behavior, engaging in activities that may increase their exposure to the virus as they gain a sense of increased protection.

- Those who have been vaccinated may differ from those who remain unvaccinated with respect to their propensity to get tested for COVID-19 over time. The use of a test-negative study design partially addresses this potential bias[16] through accounting, in part, for health seeking behaviours.

- As more time elapses since vaccination, it is possible that there may be more misclassification of vaccine status, whereby vaccination status is not documented for some people, falsely assigning them to the unvaccinated group, even though they may indeed have vaccine-derived protection.

- The cause of death may be misclassified as being COVID-19, particularly in elderly individuals who have a higher likelihood of dying from *any* cause, as compared to other age groups.

- SARS-CoV-2 infection and subsequent infection-derived immunity will increase over time in the unvaccinated group, resulting in protection from further infection, leading to some apparent waning of VE[17].

- In settings with high vaccine coverage, the risk for the remaining unvaccinated comparison group may differ from the general population in terms of risk behaviour, among other factors, resulting in distorted VE estimates.

Despite these limitations, when different methodologies, carefully employed in different settings, yield similar results by outcome, target group and vaccine platform, it provides a more consistent picture of waning VE; information which is critical for public health response and policy decisions.

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Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact vaccine, therapeutics, diagnostics or effectiveness of public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health.

As these risks evolve, WHO will continue to update lists of global VOIs and VOCs to support setting priorities for surveillance and research, and ultimately guide response strategies (for more information, please see the Tracking SARS-CoV-2 variants website).

National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants.

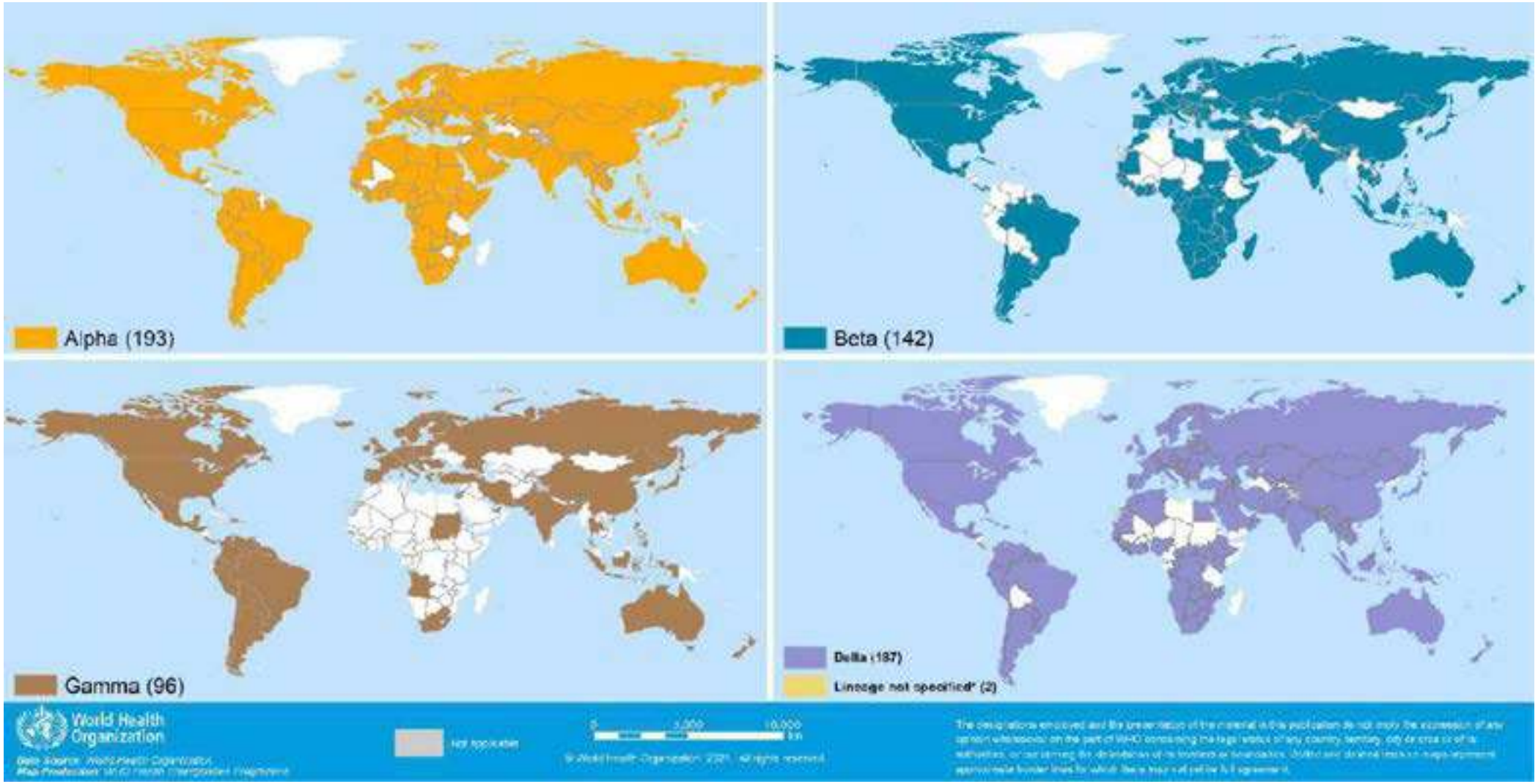
As surveillance activities to detect SARS-CoV-2 variants are strengthened at national and subnational levels, including through the expansion of genomic sequencing capacities, the number of countries/areas/territories (hereafter countries) reporting VOCs continues to increase (Figure 5, Annex 1). This distribution should nonetheless be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

As countries gradually resume non-essential international travel, the introduction of risk mitigation measures aiming to reduce travel-associated exportation, importation and onward transmission of SARS-CoV-2 should be based on thorough risk assessments conducted systematically and routinely.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Figure 5. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 28 September 2021**



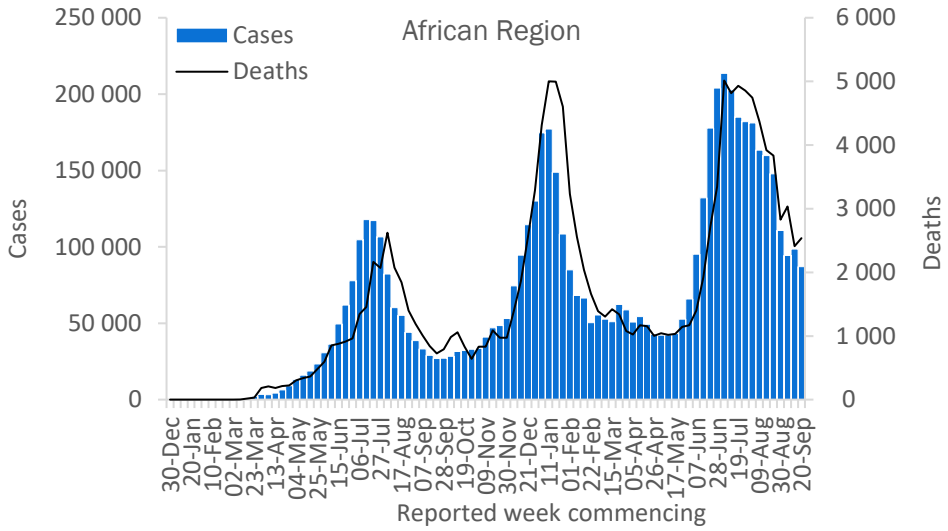
**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details*

WHO regional overviews Epidemiological week 20 – 26 September 2021

African Region

The African Region reported over 87 000 new cases and over 2500 new deaths, a 12% decrease and a 5% increase respectively as compared to the previous week. Since the latest peak early July, the number of weekly cases has been decreasing continuously for almost three months; while weekly deaths remain elevated. Approximately one third of countries (29%; 14/49) in the Region reported an increase in new cases, ranging from 17 to 61%, highlighting the heterogeneity of trends in the Region.

The highest numbers of new cases were reported from the United Republic of Tanzania (24 307 new cases, a country which has not reported regularly), South Africa (15 627 new cases; 26.3 new cases per 100 000; a 40% decrease), and Ethiopia (8842 new cases; 7.7 new cases per 100 000; a 5% decrease). The highest numbers of new deaths were reported from South Africa (885 new deaths; 1.5 new deaths per 100 000 population; a 35% decrease), the United Republic of Tanzania (664 new deaths this week), and Ethiopia (254 new deaths; <1 new deaths per 100 000; a 22% increase).

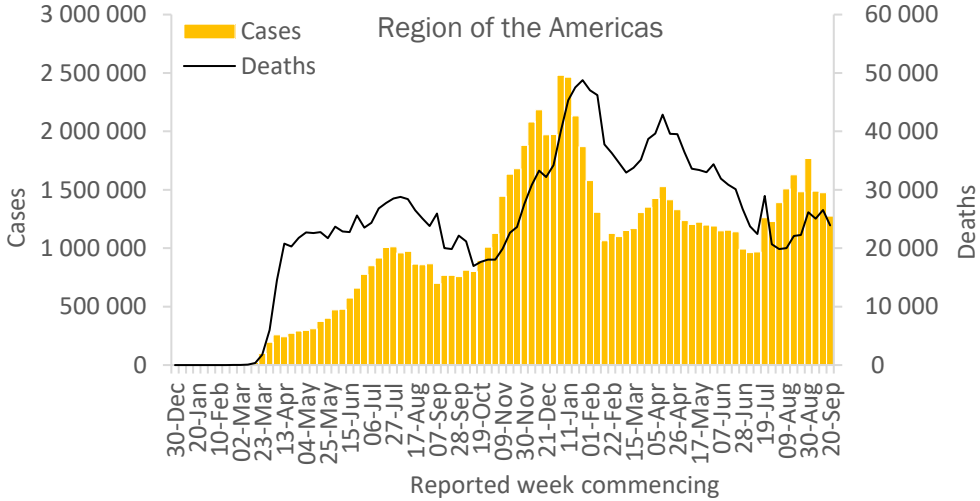


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 1.2 million new cases and over 23 000 new deaths, decreases of 14% and 10% respectively as compared to the previous week. Despite the declining trend in new weekly cases and deaths, the overall epidemiological situation has not improved significantly since a surge in mid-July 2021. While the case incidence in the Region has decreased, in some countries, such as Dominica and French Guiana, the number of cases and the case incidence per 100 000 population have increased in the past week. Dominica reported 610 new cases/100 000 population this week, as compared to 361 the previous week. Similarly, French Guiana reported 510 new cases/100 000 population this week as compared to 471 the previous week.

The highest numbers of new cases were reported from the United States of America (765 827 new cases; 231.4 new cases per 100 000; a 31% decrease), Brazil (247 397 new cases; 116.4 new cases per 100 000; a 135% increase due to changes in reporting), and Mexico (66 132 new cases; 51.3 new cases per 100 000; a 13% increase). The highest numbers of new deaths were reported from the United States of America (12 312 new deaths; 3.7 new deaths per 100 000; a 17% decrease), Mexico (4165 new deaths; 3.2 new deaths per 100 000; a 13% increase), and Brazil (4090 new deaths; 1.9 new deaths per 100 000; a 10% increase).

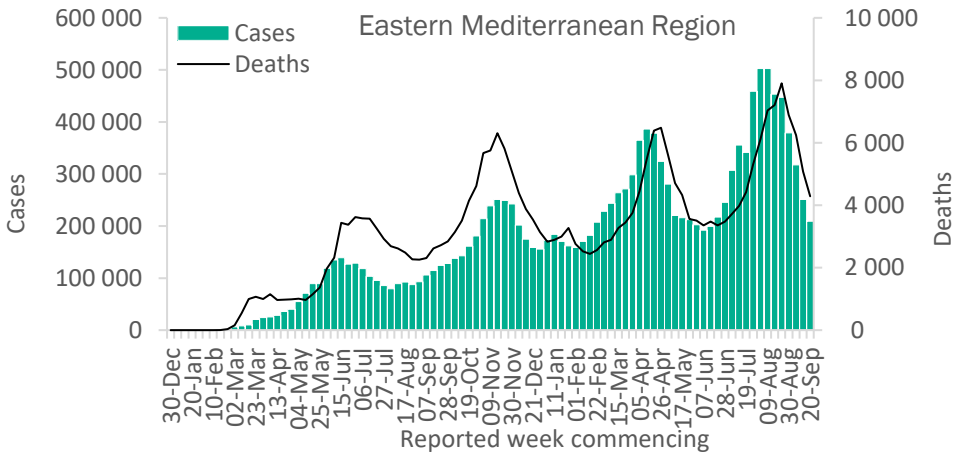


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region continued to report decreases in case and death incidences this week, with over 209 000 new cases and over 4200 new deaths, decreases of 17% and 16% respectively as compared to the previous week. The decline in the number of weekly cases was driven by decreases reported from the three countries reporting the highest numbers of new cases: the Islamic Republic of Iran (110 868 new cases; 132.0 new cases per 100 000; a 17% decrease), Iraq (18 923 new cases; 47.0 new cases per 100 000; a 26% decrease), and Pakistan (15 627 new cases; 7.1 new cases per 100 000; a 21% decrease). Together these countries accounted for 69% of new cases reported in the Region.

A decrease in death incidence was reported from 9 of the 22 countries in the Region, including the three countries which reported the highest numbers of new deaths in the past week: the Islamic Republic of Iran (2281 new deaths; 2.7 new deaths per 100 000; a 23% decrease), Pakistan (389 new deaths; 0.2 new deaths per 100 000; an 18% decrease), and Morocco (302 new deaths; 0.8 new deaths per 100 000; a 12% decrease).

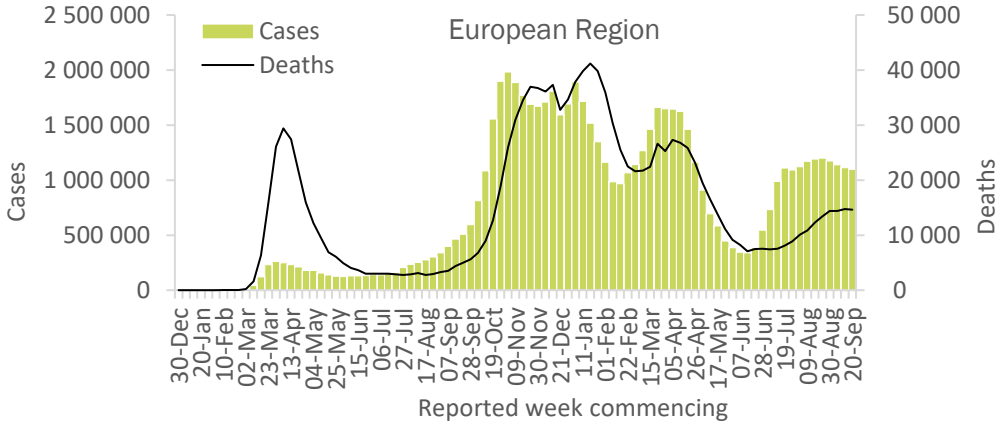


Updates from the Eastern Mediterranean Region

European Region

The European Region reported just under 1.1 million new cases and over 14 000 new deaths, similar numbers to those reported during the previous week. For over two months, the number of new weekly cases in the Region has oscillated within range of a <5% change week-on-week, although within the Region, countries have reported varying trends. For example, case incidence in Romania and Serbia have increased sharply, while case incidence has decreased in Israel over the past month. The highest numbers of new cases were reported from the United Kingdom (230 494 new cases; 339.5 new cases per 100 000; a 14% increase), Turkey (192 778 new cases; 228.6 new cases per 100 000; a 5% increase), and the Russian Federation (145 985 new cases; 100.0 new cases per 100 000; an 8% increase).

Death incidence has plateaued over the past month, after the Region reported a gradual increase in weekly deaths from mid-July to late-August. The three countries reporting the highest numbers of new deaths in the Region accounted for 56% of the Region's deaths this week: the Russian Federation (5682 new deaths; 3.9 new deaths per 100 000; a 4% increase), Turkey (1577 new deaths; 1.9 new deaths per 100 000; an 8% decrease), and the United Kingdom (958 new deaths; 1.4 new deaths per 100 000; a 4% decrease).

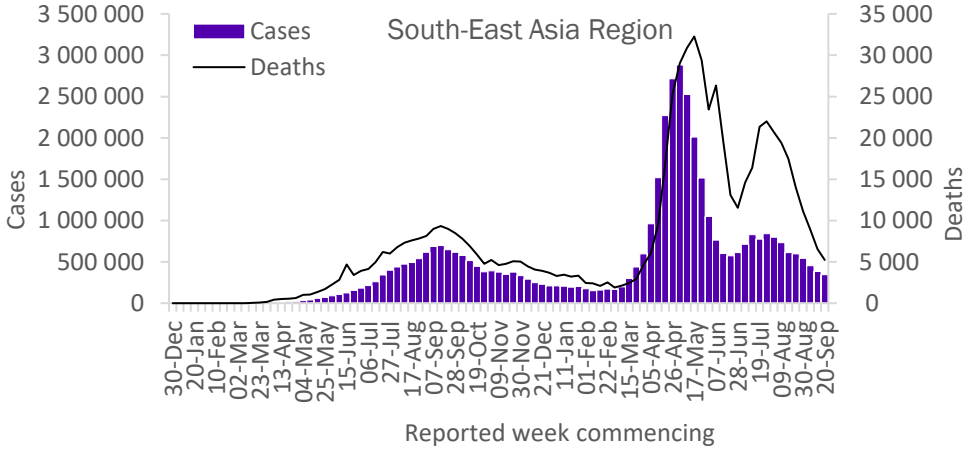


Updates from the European Region

South-East Asia Region

In the South-East Asian Region, both case and death incidence have declined for the past two months. In the past week, over 344 000 new cases and 5200 new deaths were reported, decreases of 10% and 20% respectively as compared to the previous week. All but two countries in the Region have reported declines in new cases over the past several weeks. This week, the highest numbers of new cases were reported from India (204 582 new cases; 14.8 new cases per 100 000; similar to last week's figures), Thailand (85 143 new cases; 122.0 new cases per 100 000; a 10% decrease), and Indonesia (17 250 new cases; 6.3 new cases per 100 000; a 26% decrease).

Seven of the 10 countries in the Region reported a decline in weekly deaths, with notable decreases reported from Nepal (by 38%) and Indonesia (by 37%). Bhutan did not report any new deaths, while the Maldives and Timor-Leste reported similar weekly figures as last week. The highest numbers of new deaths were reported from India (2080 new deaths; <1 new deaths per 100 000; similar to last week's figures), Indonesia (999 new deaths; <1 new deaths per 100 000; a 37% decrease), and Thailand (905 new deaths; 1.3 new deaths per 100 000; a 10% decrease).

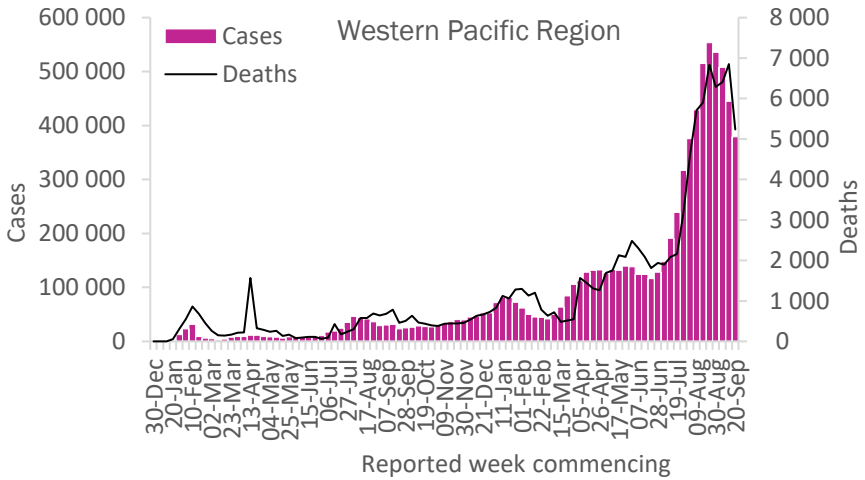


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported just under 379 000 new cases and over 5200 new deaths, decreases of 15% and 24% respectively as compared to the previous week. Although the regional case incidence has continued to decline for a month, weekly incidence increased in 5 of 26 (19%) countries, including in Singapore (63% increase) and Lao People's Democratic Republic (62% increase). The highest numbers of new cases were reported from the Philippines (122 625 new cases; 111.9 new cases per 100 000; a 13% decrease), Malaysia (102 255 new cases; 315.9 new cases per 100 000; a 16% decrease), and Viet Nam (69 655 new cases; 71.6 new cases per 100 000; an 8% decrease).

While there was a marked decline in the number of weekly deaths reported this week, four countries including Singapore, New Caledonia, Mongolia and China reported over 100% increase in new deaths as compared to the previous week. The highest numbers of new deaths were reported from Malaysia (2092 new deaths; 6.5 new deaths per 100 000; a 21% decrease), Viet Nam (1543 new deaths; 1.6 new deaths per 100 000; a 16% decrease), and the Philippines (822 new deaths; <1 new deaths per 100 000; a 49% decrease).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update (WOU) is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) monitoring and evaluation team which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework.

In this week's edition of the COVID-19 Weekly Operational Update, published on 28 September, highlights of country-level actions and WHO support to countries include:

- Delivering 2 million syringes for Sri Lanka's COVID-19 vaccination drive
- Shipment of WHO life-saving medical supplies to Kabul, Afghanistan with support from Qatar
- WHO logistics hub airlifts largest single shipment of humanitarian cargo to Ethiopia
- WHO/Europe and Germany support children with disabilities in Belarus
- Rebooting COVID-19 response strategy and measures in Cambodia
- Expanding capacity for Integrated Disease Surveillance and Response (IDSR) in the African Region
- External Quality Assessment for laboratories testing for SARS-CoV-2
- Testing Rapid Response Mobile Laboratories (RRML) deployment procedures and minimum standards in first virtual tabletop (V-TTX) exercise for RRML/GOARN
- Connecting countries to share experiences and learnings from their COVID-19 vaccine roll-out using the mini-cPIE (COVID-19 vaccination Intra-Action Review) process
- Progress on a subset of indicators from the SPRP 2021 Monitoring and Evaluation Framework
- Updates on WHO's financing to support countries in SPRP 2021 implementation and provision of critical supplies.

For more information, see the Weekly operational update on COVID-19

Annex

COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 28 September 2021

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Afghanistan	●	-	-	●	-
Albania	●	-	-	○	-
Algeria	●	-	-	●	-
Andorra	○	○	-	○	-
Angola	●	●	●	●	-
Anguilla	●	-	-	●	-
Antigua and Barbuda	●	●	●	●	-
Argentina	●	●	●	●	-
Armenia	●	-	-	●	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	○	-
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	-
Bangladesh	●	●	○	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	●	●	-
Benin	●	-	-	-	-
Bermuda	●	●	-	●	-
Bhutan	●	●	-	●	-
Bolivia (Plurinational State of)	●	-	●	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Bonaire	●	-	●	●	-
Bosnia and Herzegovina	●	●	●	○	-
Botswana	○	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	●	-
Brunei Darussalam	●	●	-	●	-
Bulgaria	●	●	-	●	-
Burkina Faso	●	-	-	-	-
Burundi	●	●	-	●	-
Cabo Verde	●	-	-	●	-
Cambodia	●	●	-	●	-
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	●	●	●	-
Central African Republic	●	●	-	●	-
Chad	●	-	-	-	-
Chile	●	●	●	●	-
China	●	●	●	○	-
Colombia	●	-	●	●	-
Comoros	-	●	-	-	-
Congo	●	○	-	●	-
Costa Rica	●	●	●	●	-
Croatia	●	●	●	○	-
Cuba	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Curaçao	●	●	●	●	●
Cyprus	●	●	-	○	-
Czechia	●	●	●	●	-
Côte d'Ivoire	●	●	-	○	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-
Dominica	●	-	-	●	-
Dominican Republic	●	-	●	●	-
Ecuador	●	-	●	●	-
Egypt	●	-	-	●	-
El Salvador	●	-	●	●	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	○	-
Eswatini	●	●	-	●	-
Ethiopia	●	-	-	●*	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Gabon	●	●	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	○	-
Greece	●	●	●	●	-
Grenada	●	-	-	●	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	●	-
Guinea	●	●	-	●	-
Guinea-Bissau	●	●	-	●	-
Guyana	-	-	●	●	-
Haiti	●	-	●	●	-
Honduras	●	-	●	●	-
Hungary	●	○	●	○	-
Iceland	●	●	●	●	-
India	●	●	●	●	-
Indonesia	●	●	●	●	-
Iran (Islamic Republic of)	●	●	●	●	-
Iraq	●	●	-	●	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	●	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	●	○	-	●	-
Kenya	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Kosovo[1]	●	○	-	○	-
Kuwait	●	●	-	●	-
Kyrgyzstan	●	●	-	●	-
Lao People's Democratic Republic	●	-	-	●	-
Latvia	●	●	●	○	-
Lebanon	●	-	-	●	-
Lesotho	-	●	-	●	-
Liberia	●	-	-	●	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	○	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-
Madagascar	-	●	-	-	-
Malawi	●	●	-	●	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	●	●	-	●	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	●	-	●	-
Mongolia	●	-	-	●	-
Montenegro	●	-	○	○	-
Montserrat	●	-	●	●	-
Morocco	●	●	-	●	-
Mozambique	●	●	-	●	-
Myanmar	●	-	-	●	-
Namibia	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	●	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	●	-	●	-
North Macedonia	●	●	-	○	-
Northern Mariana Islands (Commonwealth of the)	○	-	-	●	-
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●	-
Oman	●	●	-	●	-
Pakistan	●	●	●	●	-
Panama	●	●	●	●	●
Papua New Guinea	-	-	-	●	-
Paraguay	●	-	●	●	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	●	-	-	●	-
Romania	●	●	●	●	-
Russian Federation	●	●	○	●	-
Rwanda	●	●	-	●	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	●	-
Saint Kitts and Nevis	-	-	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Saint Lucia	●	-	-	●	-
Saint Martin	●	●	-	●	-
Saint Pierre and Miquelon	-	-	-	●	-
Saint Vincent and the Grenadines	-	-	●	●	-
Sao Tome and Principe	●	-	-	○	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	●	-
Serbia	●	-	-	●	-
Seychelles	●	●	-	●	-
Sierra Leone	-	-	-	●	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	●	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
South Africa	●	●	○	●	-
South Sudan	●	●	-	●	-
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-
Sudan	●	●	●	-	-
Suriname	●	●	●	●	-
Sweden	●	●	●	●	-
Switzerland	●	●	●	●	-
Syrian Arab Republic	-	-	-	○*	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	●	-
Togo	●	●	-	●	-
Trinidad and Tobago	●	-	●	●	-
Tunisia	●	●	-	●	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Uganda	●	●	-	●	-
Ukraine	●	○	-	○	-
United Arab Emirates	●	●	●	●	-
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-
United States Virgin Islands	●	●	-	●	-
United States of America	●	●	●	●	-
Uruguay	●	●	●	●	-
Uzbekistan	●	●	-	○	-
Venezuela (Bolivarian Republic of)	●	-	●	●	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	-	●	-
Zimbabwe	-	●	-	●	-

**Newly reported in this update.*

Unspecified B.1.617 reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

indicates that information for this variant was received by WHO from official sources.

indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available.

***Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern.*

See also Annex 2: Data, table and figure notes.

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

COVID-19 Weekly Epidemiological Update

Edition 58, published 21 September 2021

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Summary of the Weekly Operational Update

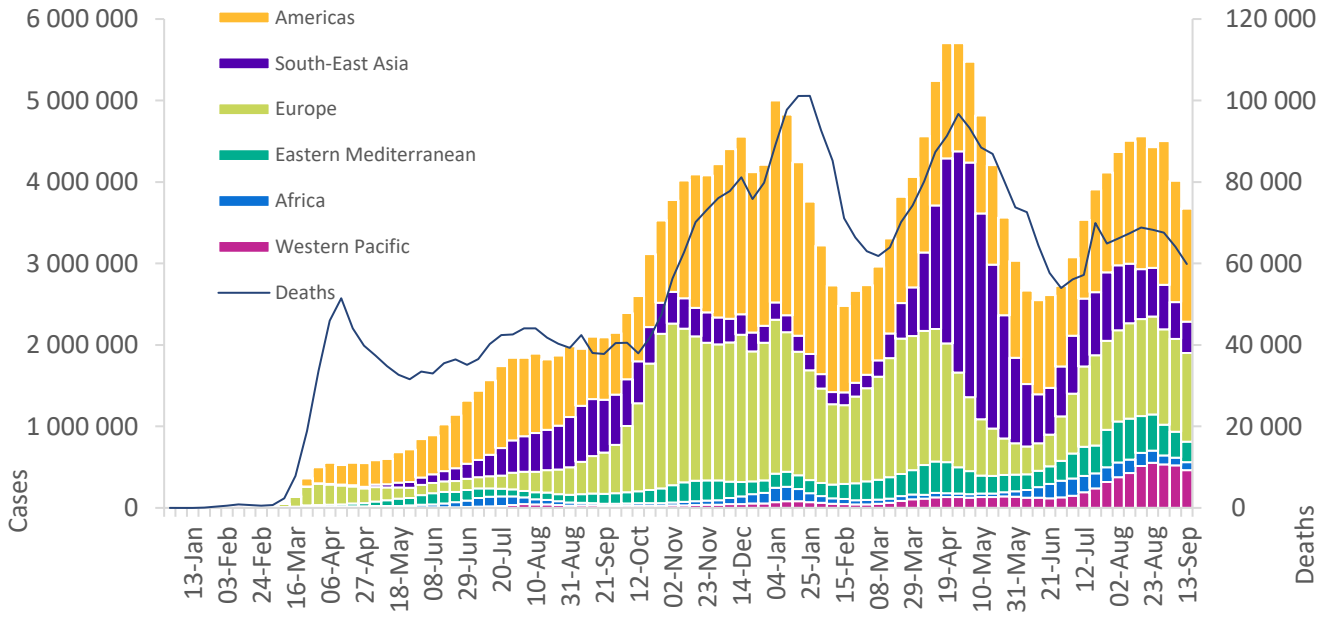
Global overview

Data as of 19 September 2021

The numbers of weekly COVID-19 cases and deaths globally continued to decline this week, with over 3.6 million cases and just under 60 000 deaths reported between 13-19 September. This brings the cumulative number of confirmed cases reported globally to just under 228 million. While the African and the European Regions reported numbers of cases similar to those of the previous week, the other regions reported decreases in weekly case incidence, with substantial decreases reported in the Eastern Mediterranean (22%) and South East Asia Regions (16%).

In terms of COVID-19 mortality, nearly 60 000 deaths were reported globally in the past week, a 7% decrease as compared to the previous week. This brings the cumulative number of deaths to over 4.6 million. The African, Eastern Mediterranean and South-East Asian Regions reported decreases in weekly mortality over the past week, with the South-East Asia Region reporting the largest percentage decrease (27%). In contrast, the Western Pacific Region reported an increase (7%) in the number of new weekly deaths, while the number of deaths reported in Americas and European Regions reported was similar to that of the previous week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 19 September 2021**



**See *Annex 2: Data, table and figure notes*

The regions reporting the highest weekly incidence rates per 100 000 population of cases and deaths remain the same as in the previous week: the Region of the Americas (135.5 new cases per 100 000 population; 2.4 deaths per 100 000 population) and the European Region (116.9 new cases per 100 000 population; 1.6 deaths per 100 000 population).

The highest numbers of new cases were reported from the United States of America (1 017 644 new cases; similar to last week), India (211 242 new cases; 15% decrease), the United Kingdom (203 077 new cases; 21% decrease), Turkey (183 962 new cases; 16% increase), and the Philippines (141 522 new cases; similar to last week); while the highest number of new deaths were reported from the United States of America (12 896 new deaths; 2% increase), the Russian Federation (5469 new deaths; similar to last week), Brazil (3 727 new deaths; 17% increase), Mexico (3 689 new deaths; 20% decrease), and the Islamic Republic of Iran (2 967 new deaths; 21% decrease).

Globally, cases of the Alpha variant have been reported in 193 countries, territories or areas (hereafter countries; no new country added since last two weeks), while 142 countries (one new country since last week) have reported cases of the Beta variant; and 96 countries (four new countries since last week) have reported cases of the Gamma variant. The Delta variant has been reported in 185 countries (five new countries since last week) across all six WHO regions as of 21 September.

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 19 September 2021**

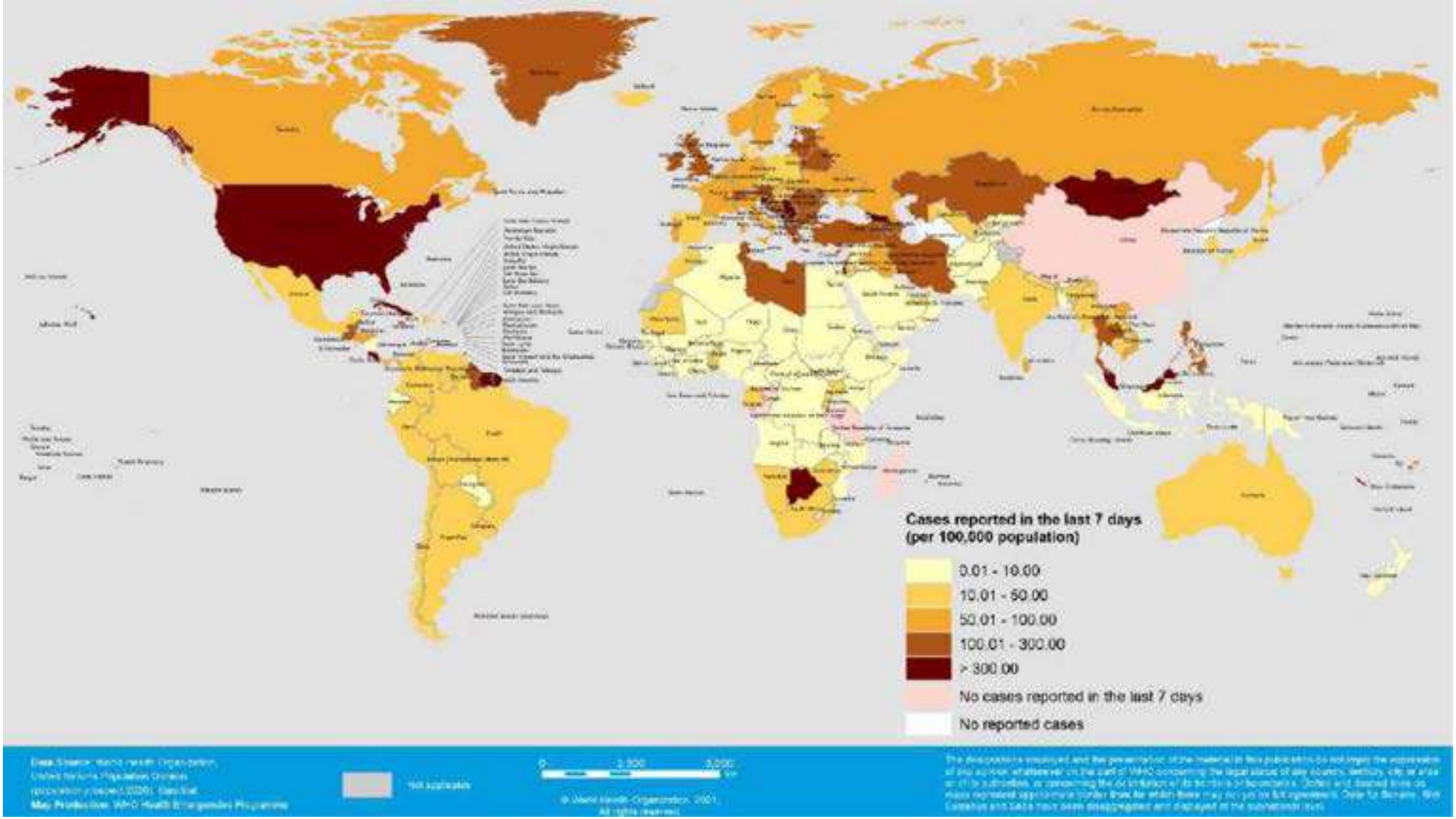
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 386 267 (38%)	-7%	87 874 973 (39%)	24 489 (41%)	-2%	2 170 188 (46%)
Europe	1 090 667 (30%)	-4%	68 290 457 (30%)	14 477 (24%)	1%	1 311 390 (28%)
South-East Asia	383 053 (10%)	-16%	42 498 922 (19%)	6 540 (11%)	-27%	668 468 (14%)
Eastern Mediterranean	250 781 (7%)	-22%	15 449 977 (7%)	5 074 (8%)	-20%	282 711 (6%)
Western Pacific	461 979 (13%)	-11%	7 914 374 (3%)	6 852 (11%)	7%	107 712 (2%)
Africa	98 485 (3%)	4%	5 911 505 (3%)	2 407 (4%)	-21%	142 417 (3%)
Global	**3 671 232 (100%)**	**-9%**	**227 940 972 (100%)**	**59 839 (100%)**	**-7%**	**4 682 899 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
***See Annex 2: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

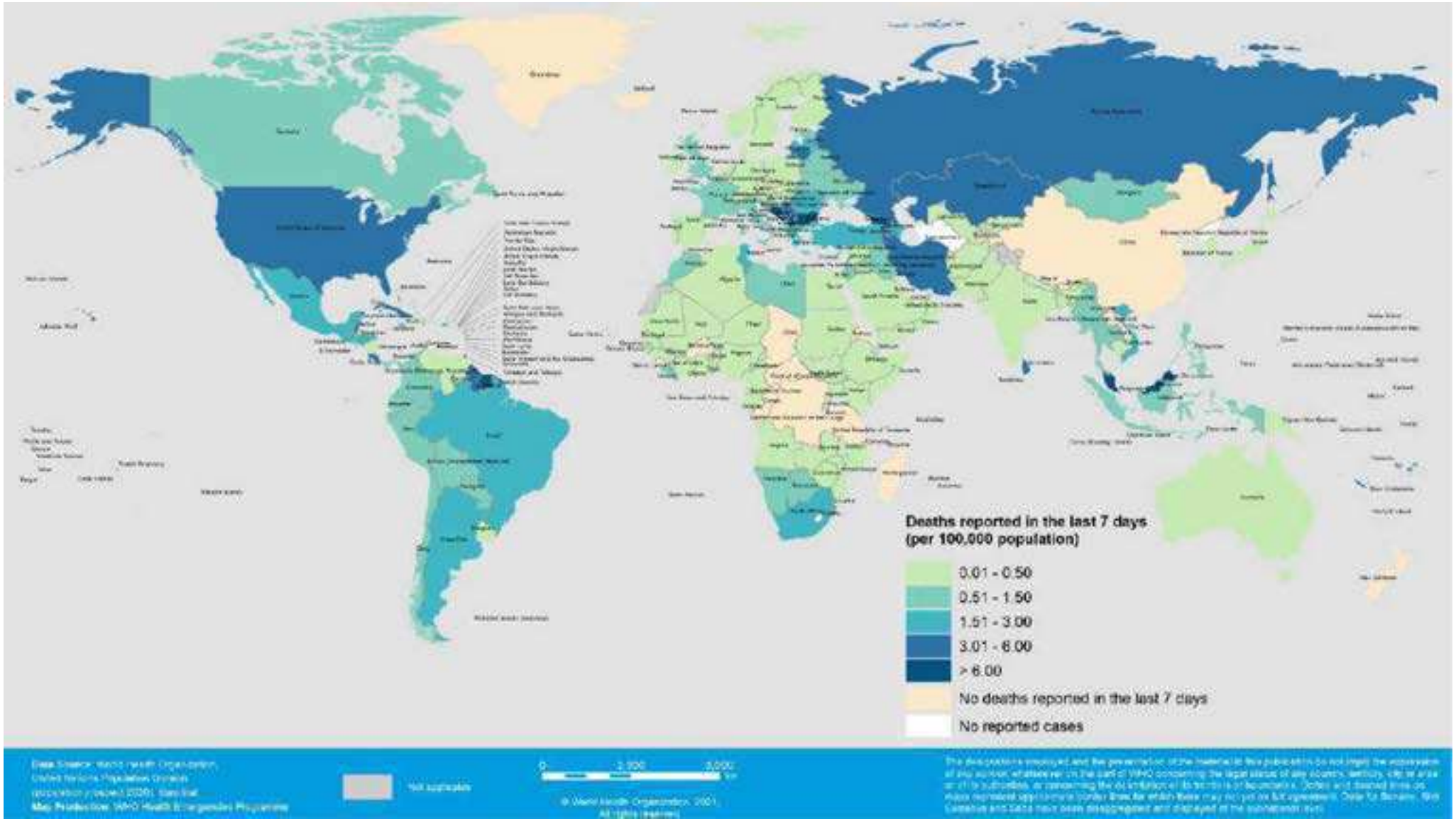
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 13 – 19 September 2021**



**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 13 -19 September 2021**



**See *Annex 2: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact vaccine, therapeutics, diagnostics or effectiveness of public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants.

Updates to the WHO SARS-CoV-2 variant tracking website

Given the continuous need to understand the epidemiological and clinical impacts of VOCs and VOIs, WHO regularly monitors and reviews circulation of variants. The changes in the rise of new variants are being monitored in light of other co-circulating variants, such as Delta.

This may mean that Variants of Interest (VOIs) or Variants of Concern (VOCs) may be outcompeted by newly emerging variants, such as VOC Delta. As evidence becomes available, we will revise classifications accordingly. These revisions reflect the continuous evolution of circulating variants and their changing epidemiology (see criteria for variant classification here).

The category of 'Alerts for further monitoring' have been renamed 'Variants Under Monitoring' (VUMs). The change applies only to the name, while the definition remains the same. Primary actions by Member States and WHO following the identification of a new VUM is also outlined.

Changes to the VOI classification

As the impacts of specific SARS-CoV-2 variants on public health become better understood, WHO will continue to assess the classification of VOIs and VOCs and revise the lists accordingly. The revision described below reflect the rapid spread and current dominance of the Delta variant in most regions of the world. The Delta variant accounted for 90% of the sequences submitted to GISAID with a sample collection date (between 15 June-15 September 2021).

A variant of SARS-CoV-2 can be designated as a VOI or VOC if it meets the criteria as stated here. These may also be reclassified when there is sufficient evidence suggesting that there is no major ongoing risk to global health associated with the specific variant compared to other circulating SARS-CoV-2 variants (and thus no longer meets the criteria of a VOI or VOC).

The VOIs Eta (B.1.525), Iota (B.1.526) and Kappa (B.1.617.1) have been reclassified as 'former VOIs' based upon the latest round of assessments, and after consultation with national and regional stakeholders, as well as in consultation with the Virus Evolution Working Group on 13 September 2021. These will now be assessed as Variants Under Monitoring. While all three variants carry mutations with suspected and/or established phenotypic impacts, the number of reported detections of these variants have decreased over time at the global, regional and country levels. Evidence from both sequencing data submitted to GISAID and information available to WHO indicate a substantial decline in their respective incidence worldwide, and therefore represent diminished public health risks relative to other VOCs and VOIs.

The WHO assessment of the impact of variants considers global risks posed by variants. At country level, national authorities may choose to continue to designate Eta, Iota and Kappa as variants of local interest. Moreover, these variants will continue to be monitored, and if their characteristics change over time, this classification will be reassessed.

Eta (B.1.525) has been detected in 81 countries since it was initially identified in December 2020. It was designated as a VOI on 17 March 2021. This variant has shown a limited reduction in neutralizing activity of sera of vaccinated individuals, comparable to the reduction observed for the Delta variant. Since a peak in circulation in April 2021 of 0.8% of the sequences submitted to GISAID, there has been a continuous decline in the detection of this variant. Sequencing data submitted to GISAID and information from WHO Regional Offices indicate that the prevalence of Eta has remained very low at a global, regional and country level since July 2021.

Iota (B.1.526) was first identified in the United States of America (USA) in November 2020. It was designated as a VOI on 24 March 2021, following an increase in the number of sequences submitted to GISAID across several countries (identified in at least 49 countries). Roughly half of the sequences of this variant contains the E484K mutation in the spike, and one third contain the S477N change, but those two changes are practically never seen together in this variant. By April 2021, the proportion of this variant to overall sequences submitted to GISAID reached a peak of just over 3%, with the majority of sequences being reported from the USA. Since then, the proportion of this variant has declined continuously. Sequencing data from the USA shows a significant and continued decline in the proportion of Iota, which has only been found in very sporadic cases since late July 2021.

Kappa (B.1.617.1) was first reported by India in early October 2020 and has since spread to 57 countries. It was designated as a VOI on 4 April 2021. Like the Delta variant, this variant has the spike mutation P681R, which is thought to increase the transmissibility of the variant. Kappa shares a common parent lineage with Delta, but Delta has additional notable amino acid changes in the spike protein. Also similar to Delta, Kappa shows a limited reduction in the neutralizing activity of convalescent sera and sera of vaccinated individuals. Kappa reached a peak of 1% of all sequences submitted to GISAID in April 2021 but has since shown a steep and continuous decline in the proportion of submitted sequences. Sequencing data submitted to GISAID and information available to WHO indicate that the prevalence of Kappa at a global and country levels has remained very low since July 2021. This decline to very low to no circulation was also observed in regions of India that had previously experienced high transmission of this variant, such as Maharashtra.

List of current VOIs

The revised list of current VOIs now includes Lambda and Mu variants, both circulating in Latin America, where the Delta variant has begun to circulate but has not yet become dominant. The epidemiology of these VOIs, particularly considering the co-circulation of the Delta variant, will continue to be monitored closely.

Updates on VOCs and VOIs, and a list of VUMs, are available on the WHO Tracking SARS-CoV-2 Variants website.

Guidance for surveillance of SARS-CoV-2 variants

On 9 August 2021, WHO published an interim guidance document on surveillance of SARS-CoV-2 variants. The document aims to describe a minimum set of surveillance activities recommended at the national level to detect and monitor the relative prevalence of SARS-CoV-2 variants and outlines a set of activities for the characterization and assessment of risk posed by these variants. A set of indicators is also provided to standardize monitoring and public reporting of variant circulation.

The document is primarily intended for national and sub-national public health authorities and partners who support implementation of SARS-CoV-2 variant surveillance. It complements the interim guidance on Public health surveillance for COVID-19, which provides overall guidance for public health surveillance of coronavirus disease 2019 (COVID-19) in humans. Additional guidance has been published for laboratory stakeholders on diagnostic testing for SARS-CoV-2 and sequencing for public health goals, alongside an implementation guide for SARS-CoV-2 sequencing.

Geographic distribution

As surveillance activities to detect SARS-CoV-2 variants are strengthened at national and subnational levels, including through the expansion of genomic sequencing capacities, the number of countries/areas/territories (hereafter countries) reporting VOCs continues to increase (Figure 4, Annex 1). This distribution should nonetheless be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

Phenotypic characteristics

Available evidence on phenotypic impacts of VOCs is summarized in Table 2, as well as in previous editions of these COVID-19 Weekly Epidemiological Updates. Since the last detailed update on 7 September, there are several new publications on the phenotypic characteristics of VOCs.

An observational preprint study conducted in a tertiary care hospital setting in India compared the surge in cases recorded from March to December 2020 to that in January to July 2021 when the Delta variant was in circulation. Preliminary results from the study found that the median (IQR) length of stay during pre-Delta Vs Delta circulation period was [7 (5-10) vs 8 (6-10) days] and ICU stay [6 (2-10) vs 9 (5-13) days] .[1] In-hospital deaths were 1.84 times higher during the period of Delta circulation (95% CI:1.32-2.55), which did not change significantly after adjusting for age and sex (adjusted odds ratio, 95% CI: 2.03, 1.44-2.86), and age, sex and comorbidities (adjusted odds ratio 95% CI: 2.09, 1.47-2.95). However, the study should be interpreted carefully as these are preliminary results. To note, the hospitalization rates pre-and post-emergence of Delta variant were also influenced by government policies as people were encouraged to seek hospital care during pre-emergence period (March to December 2020) while home-based isolation was promoted widely during the circulation of Delta variant, partly due to the pressure on the health-care systems and the lack of available beds in many hospitals.

An ecological peer-reviewed study using the Ministry of Health Influenza Epidemiological Surveillance Information System, analyzed the mortality in the state of Amazonas , Brazil over two periods: prior to circulation of the Gamma variant (April to May 2020) when B.1.1.28, B.1.1.29, B.1.1.33 were in circulation and

when Gamma started to predominate (January 2021). The study did not include the month of December 2020 when old lineages were replaced by Gamma.[2]The study found higher incidence and an increased proportion of COVID-19 cases in younger age groups (20- 39 years old) during the circulation of the Gamma variant. Additionally, when comparing the pre- and post-emergence of the Gamma variant, there was an increase in the proportion of women among cases of Severe Acute Respiratory Infection (SARI) (40% vs. 47%), as well as among those who died (34% vs. 47%). The case fatality rate (CFR) among those infected with the Gamma variant who were hospitalized between the age of 20-39-year-old was 2.7 times greater than the rate observed prior (between April to May 2020; pre-Gamma circulation) for both males and females. The CFR ratios in the general population were 1.15 (95% CI: 1.1-1.2) in females and 0.78 (95% CI: 0.7-0.8) in males. These findings suggest greater severity of disease for those infected with the Gamma variant among young adults of both sexes and the general female population. It is important to note that mortality was greatly influenced by the significant pressure on the health care system, which could have contributed to the increase in mortality , case fatality and hospital mortality, however, the study did not find a homogeneous increase across age groups by sex as was observed during the period prior to Gamma circulation. Further studies are needed to better understand the variant profile and their impact.

An observational preprint study from one Brazilian state investigated the proportion of reinfections due to Gamma variant using estimates from regular blood donors in Amazona's capital, Manaus.[3] A total of 223 samples were included in the study. Using the serological definition of reinfection, the study found that 13.6% (CI 95%: 7% - 24.5%) of all presumed Gamma infections that were observed in 2021 were reinfections. When probable or possible reinfections were included, these percentages increased to 22.7% (95% CI 14.3% - 34.2%) and 39.3% (95% CI 29.5% - 50.0%) respectively. Previous infection conferred a protection against reinfection by 85.3% (95% CI 71.3% - 92.7%), decreasing to 72.5% (95% CI 54.7% - 83.6%) and 39.5% (95% CI 14.1% - 57.8%), respectively, if probable and possible reinfections are included. The study concluded that the estimated rates of reinfection suggest that the Gamma variant may induce a higher reinfection risk than previous non-Gamma variants. These results reinforce the concerns over the risk of reinfection with continuous virus evolution. However, the study did not sample donors frequently enough to detect all potential reinfections which may have led to possible non detection of reinfection.

Table 2: Summary of phenotypic impacts* of Variants of Concern

WHO label	Alpha	Beta	Gamma	Delta
Transmissibility	Increased transmissibility[4]	Increased transmissibility[5,6]	Increased transmissibility[6,7]	Increased transmissibility and secondary attack rate[6,8]
Disease severity	Increased risk of hospitalization[9], possible increased risk of severity and mortality[10,11]	Not confirmed, possible increased risk of in-hospital mortality[12]	Possible increased risk of hospitalization[13],risk of severity[2]	Increased risk of hospitalization[14,15]
Risk of reinfection	Neutralizing activity retained [16], risk of reinfection remains similar[17]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[18]	Moderate reduction in neutralizing activity reported[19]	Reduction in neutralizing activity reported[20–22]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF); no impact on overall result from multiple target RT-PCR, No impact on Ag RDTs observed[23]	No impact on RT-PCR or Ag RDTs observed[22]	None reported to date	None reported to date

**Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision*

Table 3. Summary of vaccine performance against Variants of Concern

	Anhui ZL-Recombinant	AstraZeneca-Vaxzevria	Beijing CNBG-BBIBP-CorV	Bharat-Covaxin	Gamaleya-Sputnik V	Janssen-Ad26.COV 2.5	Moderna-mRNA-1273	Moderna-mRNA-1273/ Pfizer BioNTech-Comirnaty	Novavax-Covavax	Pfizer BioNTech-Comirnaty	SII - Covishield	Sinovac-CoronaVac
Alpha[24,25]												
Summary of VE*	Protection retained against all outcomes											
- Severe disease	-	↓$_{1}$	-	-	-	-	↔$_{1}$	↔$_{1}$	-	↔$_{5}$	-	-
- Symptomatic disease	-	↔ to ↓$_{3}$	-	-	-	-	↔$_{1}$	↔$_{1}$	↓$_{1}$	↔$_{4}$	-	-
- Infection	-	↔ to ↓$_{2}$	-	-	-		↔$_{1}$	-	-	↔$_{2}$	-	-
Neutralization	↔$_{2}$	↓$_{4}$	↔$_{1}$	↔$_{2}$	↔$_{3}$	↔$_{3}$	↔ to ↓$_{11}$	↓$_{1}$	↓$_{1}$	↔ to ↓$_{37}$	↔$_{1}$	↔ to ↓$_{5}$
Beta[26–29]												
Summary of VE*	Protection retained against severe disease; reduced protection against symptomatic disease; limited evidence											
- Severe disease	-	-	-	-	-	↔$_{1}$	-	-	-	↔$_{2}$	-	-
- Symptomatic disease	-	↓↓↓$_{1}$	-	-	-	↔$_{1}$	-	-	↓↓↓$_{1}$	↔$_{1}$	-	-
- Infection	-	-	-	-	-	-	↔$_{1}$	-	-	↓$_{1}$	-	-
Neutralization	↔ to ↓$_{3}$	↔ to ↓↓$_{5}$	↔ to ↓$_{2}$	↓$_{2}$	↓ to ↓↓$_{3}$	↓ to ↓↓$_{5}$	↓ to ↓↓$_{13}$	↓↓↓$_{1}$	↓↓↓$_{1}$	↓ to ↓↓$_{35}$	↓$_{1}$	↓ to ↓↓$_{5}$
Gamma												
Summary of VE*	Unclear impact; very limited evidence											
- Severe disease	-	-	-	-	-	-	-	-	-	-	-	-
- Symptomatic disease	-	-	-	-	-	-	-	-	-	-	-	-
- Infection	-	-	-	-	-	-	-	-	-	-	-	↔$_{1}$
Neutralization	↔$_{1}$	↓$_{2}$	-	-	↓$_{2}$	↓$_{2}$	↓$_{6}$	-	-	↔ to ↓$_{20}$	-	↔ to ↓$_{4}$
Delta[30]												
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection; limited evidence											
- Severe disease	-	↔$_{2}$	-	-	-	-	↔$_{1}$	-	-	↔$_{5}$	-	-
- Symptomatic disease	-	↔ to ↓↓$_{3}$	-	↓$_{1}$	-	-	-	-	-	↔ to ↓$_{4}$	-	-
- Infection	-	↓$_{1}$	-	-	-	-	-	-	-	↓$_{1}$	-	-
Neutralization	↔ to ↓$_{2}$	↓ to ↓↓$_{5}$	-	↔ to ↓$_{3}$	↓$_{2}$	↓$_{3}$	↓$_{4}$	↓↓$_{1}$	-	↔ to ↓$_{12}$	↓$_{2}$	↓ to ↓↓↓$_{3}$

VE refers to vaccine effectiveness and vaccine efficacy

Summary of VE*: indicates the general conclusions but only for the vaccines evaluated against the specific variant

Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10% reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20% reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30% reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30% reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used.

"Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study.

The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources page (https://view-hub.org/resources). For individual vaccine effectiveness studies, see 'COVID-19 Vaccine Effectiveness Results Summary', reference numbers noted with a '#'. For a list of all neutralization studies, see 'COVID-19 Vaccine Neutralization Studies Table'.

References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table and are included in the reference section below.

Additional notes on VOC impacts on vaccines

- Studies presenting VOC-specific vaccine efficacy or effectiveness (VE) estimates for full vaccination (≥ 7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 randomised RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates for these outcomes, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca Vaxzevria for infection (when a phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Some VE estimates may not be included in the table above when it is not possible to tease out the effect of waning from the effect of variants on vaccine performance.

Table 3 presents the impact of variants on product specific vaccine efficacy/effectiveness (VE) and quantifies the reduction in VE in the setting of variants compared to VE in non-VOC settings. Of note, reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. In addition, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection, as is the case for AstraZeneca-Vaxzevria.

Since the latest update published on 07 September, there have been six further publications assessing vaccine effectiveness against SARS-CoV-2 VOC.

A test-negative case-control study (pre-print) from Public Health England used UK national surveillance data, adjusting for multiple potential confounders, to assess the effectiveness of Pfizer BioNTech-Comirnaty, Moderna-mRNA-1273, and AstraZeneca-Vaxzevria over time separately for Alpha and Delta variants among persons 16 years and older. [31] VE against symptomatic disease up to 10+ weeks post full vaccination was higher for Alpha than Delta for both Pfizer BioNTech-Comirnaty and AstraZeneca-Vaxzevria. VE against Alpha symptomatic disease 2-9 weeks post full vaccination was 95.0% (95% CI: 93.8-96.0%) and 81.9% (79.2-84.3%) for Pfizer BioNTech-Comirnaty and AstraZeneca-Vaxzevria, respectively, whereas VE against Delta symptomatic disease 2-9 weeks post full vaccination was 89.8% (89.6-90.0%) and 66.7% (66.3-67.0%), respectively. VE of 2 doses of Moderna-mRNA-1273 against Delta symptomatic disease 2-9 weeks post full vaccination was 100% (no comparable estimate was available for Alpha). Results show that VE against symptomatic disease due to Delta peaked in the first weeks after full vaccination and then declined to 69.7% (95% CI: 68.7-70.5%) for Pfizer BioNTech-Comirnaty and 47.3% (45-49.6%) for AstraZeneca-Vaxzevria by 20+ weeks post full vaccination. Because Delta rapidly replaced Alpha in the UK, assessment of Alpha VE against symptomatic disease at 20+ weeks was not possible. Protection against hospitalisation and death due to Delta remained high for at least 20 weeks after the second dose of for Pfizer BioNTech-Comirnaty with VE estimates of 92.7% (90.3-94.6%) and 90.4 (85.1 to 93.8), respectively. Some waning of protection against hospitalization and death was observed for AstraZeneca-Vaxzevria with VE estimates of 77.0 (70.3-82.3%) and 78.7 (52.7 to 90.4), respectively, 20+ weeks post second dose. Authors also found greater waning among

those ≥65 years of age and those 40-64 years of age in clinical risk groups for both Pfizer BioNTech-Comirnaty and AstraZeneca-Vaxzevria.

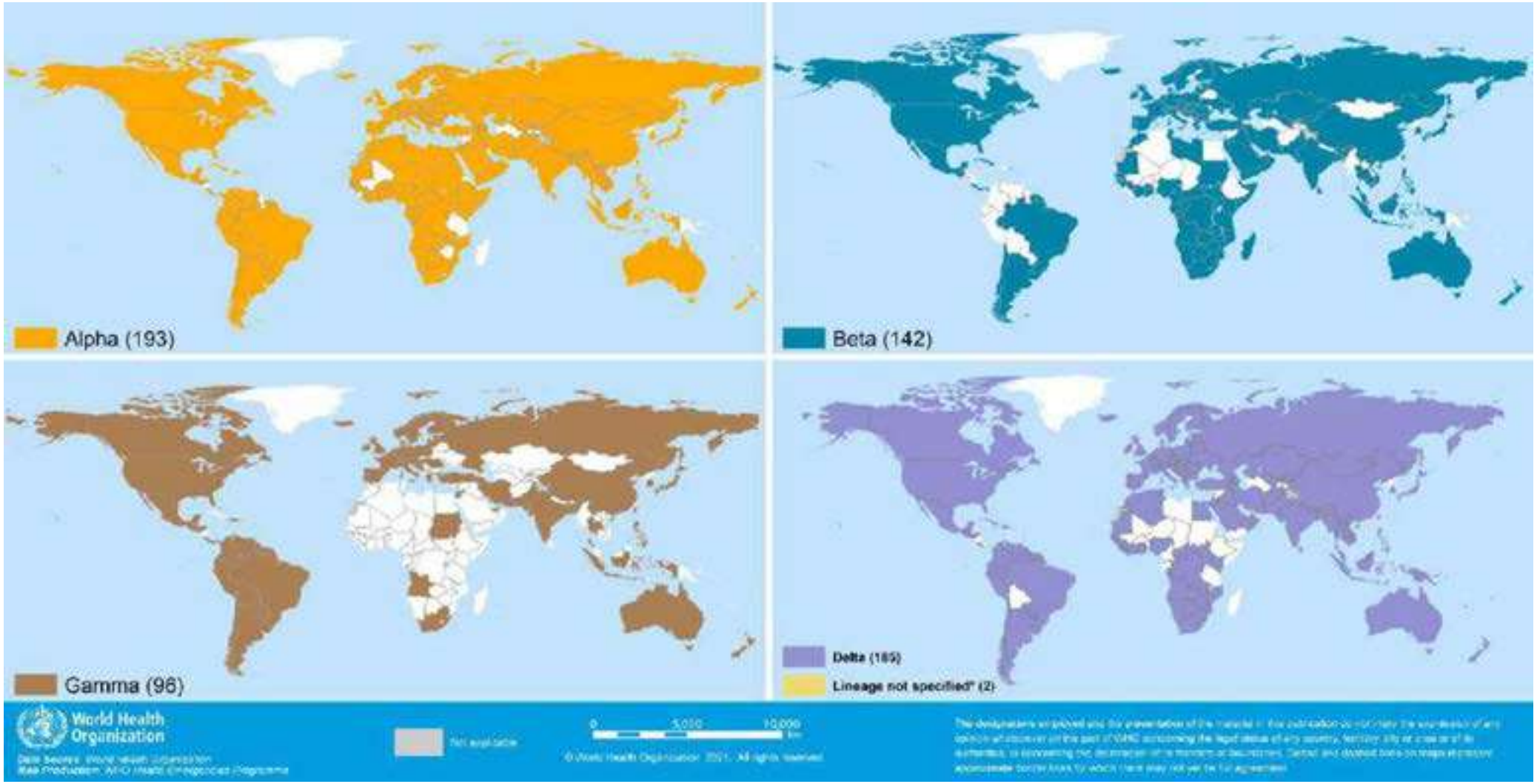
Five studies (including peer-reviewed journals and preprint) from the USA assessed VE of COVID-19 vaccines during periods of high Alpha and/or high Delta prevalence. A retrospective cohort study linking insurance claims data to health data sources assessed the effectiveness of Janssen-Ad26.COV2.S vaccine in preventing SARS-CoV-2 infection and hospitalization among persons 18 years and older for periods of high Alpha and Delta prevalence.[32] VE against infection was similar during both periods: 79% (77-80%) during the Alpha period and 78% (73-82%) during the Delta period. VE against hospitalization was also similar: 81% (79-84%) vs. 85% (73-91%) for Alpha and Delta periods, respectively. A second study used a test-negative design to evaluate the VE of mRNA vaccines against hospitalization among patients presenting with COVID-19-like illness at 5 Veterans Affairs medical centers. The VE of mRNA vaccines (Pfizer BioNTech-Comirnaty or Moderna-mRNA-1273) against hospitalization was similar during February-June 2021 when Alpha was the predominant variant (84.1%, 95% CI: 74.1-90.2%) and July-August 2021 when Delta was predominant (89.3%, 95% CI: 80.1-94.3%). A third study using the test-negative design evaluated the effectiveness of Pfizer BioNTech-Comirnaty, Moderna-mRNA-1273, and Janssen-Ad26.COV2.S vaccines among adults 18 years and older across nine states from June-July 2021 when Delta was the predominant variant in the USA.[33] VE against hospitalization 14 or more days after receipt of the final dose was 80% (73-85%), 95% (92-97%), and 60% (31-77%) for Pfizer BioNTech-Comirnaty, Moderna-mRNA-1273, and Janssen-Ad26.COV2.S, respectively. Similar VEs were observed for emergency and urgent care visits. Authors note these VE estimates were similar to those during the months before Delta became predominant as noted in two previous publications.[34,35] A fourth study also used a test-negative design to evaluate VE of mRNA vaccines and Ad26.COV2.S-Janssen against SARS-CoV-2 infection among persons ≥ 15 years in Oregon during July 2021, when Delta accounted for >75% of sequenced cases in the state.[36] VE of 2 doses of mRNA vaccines was 74% (65-82%); VE of 1 dose of Janssen-Ad26.COV2.S was 51% (-2-76%). Authors note that the VE estimate for mRNA vaccines are reduced compared to June 2021 when Delta accounted for only 4% of sequenced viruses (VE of 84%, 95% CI: 60-94), suggesting reduced VE against infection of the Delta variant, though confidence intervals overlapped. The VE estimate for Janssen-Ad26.COV2.S during June was unstable due to small numbers. Finally, a retrospective cohort study in Minnesota found slightly reduced VE of mRNA vaccines against asymptomatic SARS-CoV-2 infection during June-August when Delta was predominant, as compared to April-May when Alpha was predominant: 63% (44-76%) vs. 71% (53-83%), though confidence intervals overlap.[37] Note that studies that compare VE against Alpha from an earlier time period with Delta from a later time period might be confounded by waning VE over time.

Together these studies provide evidence that VE of mRNA vaccines, AstraZeneca-Vaxzevria, and Ad26.COV2.S-Janssen against severe disease outcomes due to Delta is high and similar to that of Alpha, with evidence of no-to-minimal waning for these severe outcomes to date. Consistent with previous research, the majority of studies described in this issue suggest that VE of these vaccines against symptomatic disease, infection, and asymptomatic disease may be reduced for Delta compared to Alpha; with waning VE against symptomatic disease apparentfor Delta variant in the UK study that provided longitudinal VE estimates.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Figure 4. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 21 September 2021**



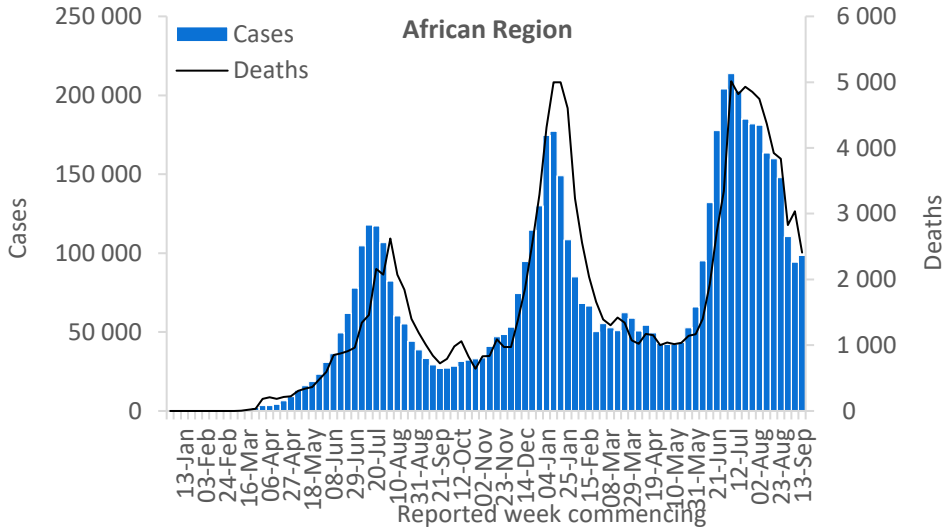
**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details*

WHO regional overviews Epidemiological week 13 – 19 September 2021

African Region

The African Region reported over 98 000 new cases, a case incidence similar to that of the previous week, following a consistent decline in the number of new weekly cases over the past two months. While most of the countries in the region reported a decline in case incidence, several countries reported an increase including Botswana, Burundi and Zimbabwe. The majority of countries in the region reported a decline in the number of new deaths last week.

The highest numbers of new cases were reported from South Africa (26 115 new cases; 44 new cases per 100 000 population; 35% decrease), Uganda (22 511 new cases; 49.2 new cases per 100 000), and Ethiopia (9266 new cases; 8.1 new cases per 100 000; figures similar to those of the previous week). The highest numbers of new deaths were reported from South Africa (1365 new deaths; 2.3 new deaths per 100 000 population; 14% decrease), Ethiopia (208 new deaths; <1 new deaths per 100 000, 18% increase), and Algeria (112 new deaths; <1 new deaths per 100 000; 39% decrease).

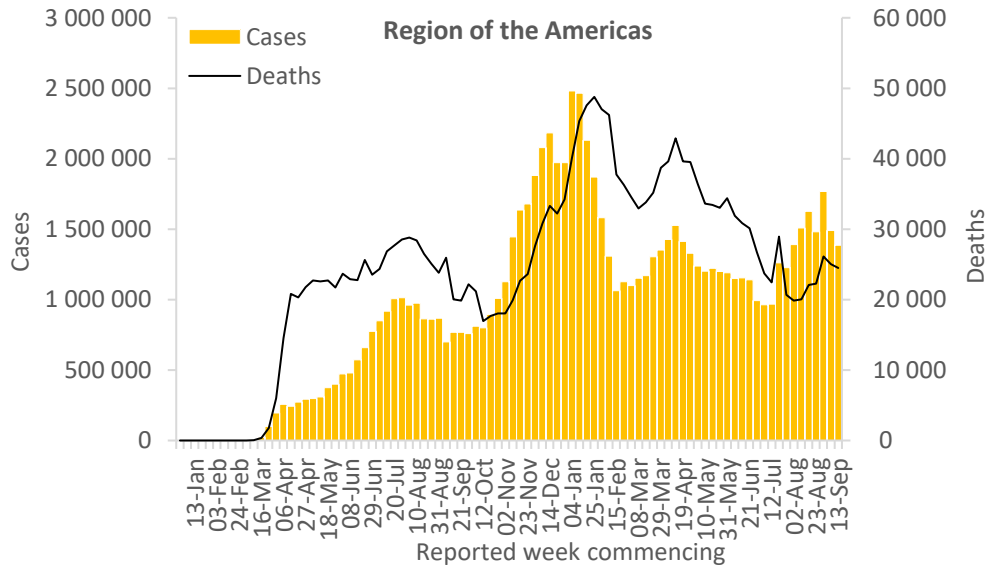


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 1.3 million new cases and over 24 000 new deaths in the past week, a 7% decrease in the number of cases and a number of new deaths similar to that of the previous week. While the majority of countries in the Region reported a decline in weekly case incidence, several countries including Canada, Chile and Suriname reported an increase over the past week. Nearly a third of countries in the Region reported an increase in the number of new deaths in the past week.

The highest numbers of new cases were reported from the United States of America (1 017 644 new cases; 307.4 new cases per 100 000; similar to the numbers reported last week), Brazil (105 369 new cases; 49.6 new cases per 100 000; 11% decrease), and Mexico (58 751 new cases; 45.6 new cases per 100 000; 34% decrease). Similarly, the highest numbers of new deaths were reported from the United States of America (12 896 new deaths; 3.9 new deaths per 100 000; similar to the numbers reported last week), Brazil (3727 new deaths; 1.8 new deaths per 100 000; 17% increase), and Mexico (3689 new deaths; 2.9 new deaths per 100 000; 20% decrease).

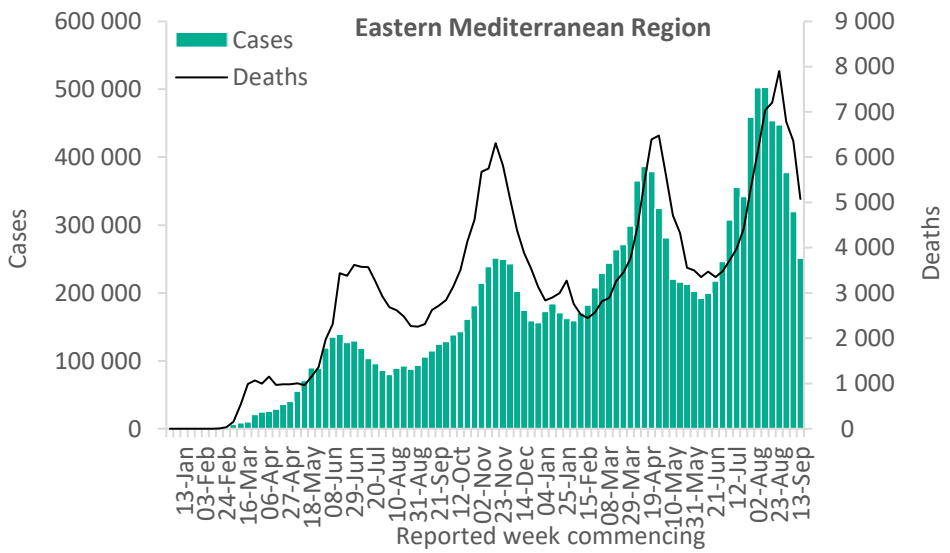


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported a marked decrease of 22% in the number of new weekly cases, with over 250 000 new cases reported this week as compared to the previous week. Although the regional case incidence has continued to decline for over a month, weekly incidence increased in five of 22 (23%) countries in the past week, including in Djibouti, Syrian Arab Republic, and Egypt. The highest numbers of new cases were reported from the Islamic Republic of Iran (133 293 new cases; 158.7 new cases per 100 000; 23% decrease), Iraq (25 494 new cases; 63.4 new cases per 100 000; 27% decrease), and Pakistan (19 894 new cases; 9 new cases per 100 000; 23% decrease).

Similarly, weekly deaths have continued to decline for past three weeks, with over 5000 new deaths reported this week, a 20% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Islamic Republic of Iran (2967 new deaths; 3.5 new deaths per 100 000; 21% decrease), Pakistan (473 new deaths; <1 new deaths per 100 000; 14% decrease), and Morocco (342 new deaths; <1 new deaths per 100 000; 31% decrease).

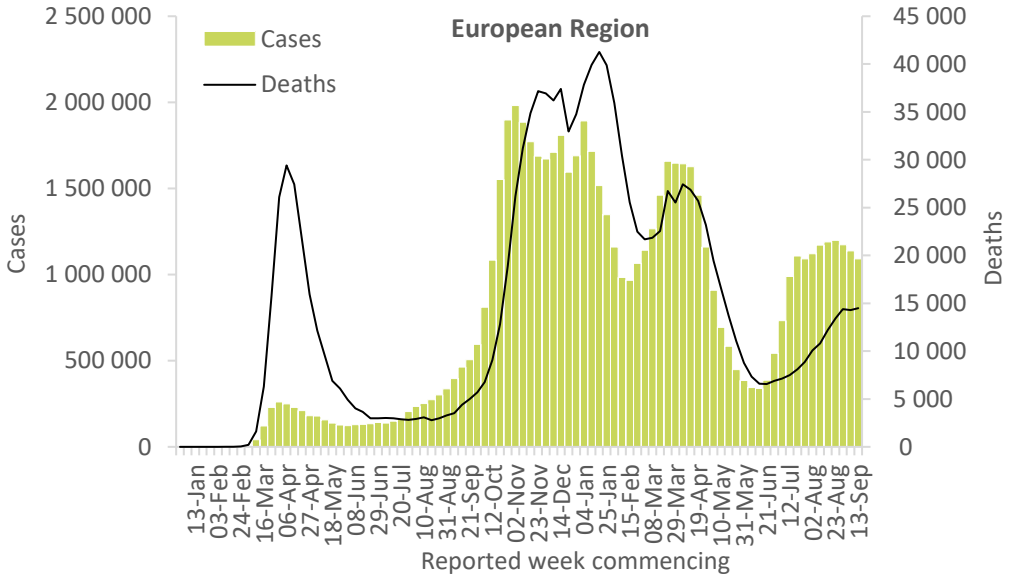


Updates from the Eastern Mediterranean Region

European Region

In the European Region, the weekly incidence in both cases and deaths remained similar to rates reported in the previous week, with just under 1.1 million new cases and over 14 000 new deaths reported this week, as compared to the previous week. The highest numbers of new cases were reported from the United Kingdom (203 077 new cases; 299.1 new cases per 100 000; 21% decrease), Turkey (183 962 new cases; 218.1 new cases per 100 000; 16% increase), and the Russian Federation (134 858 new cases; 92.4 new cases per 100 000; 6% increase).

The highest numbers of new deaths were reported from the Russian Federation (5469 new deaths; 3.7 new deaths per 100 000; similar to last week), Turkey (1718 new deaths; 2 new deaths per 100 000; a 5% decrease), and the United Kingdom (1003 new deaths; 1.5 new deaths per 100 000; similar to last week).

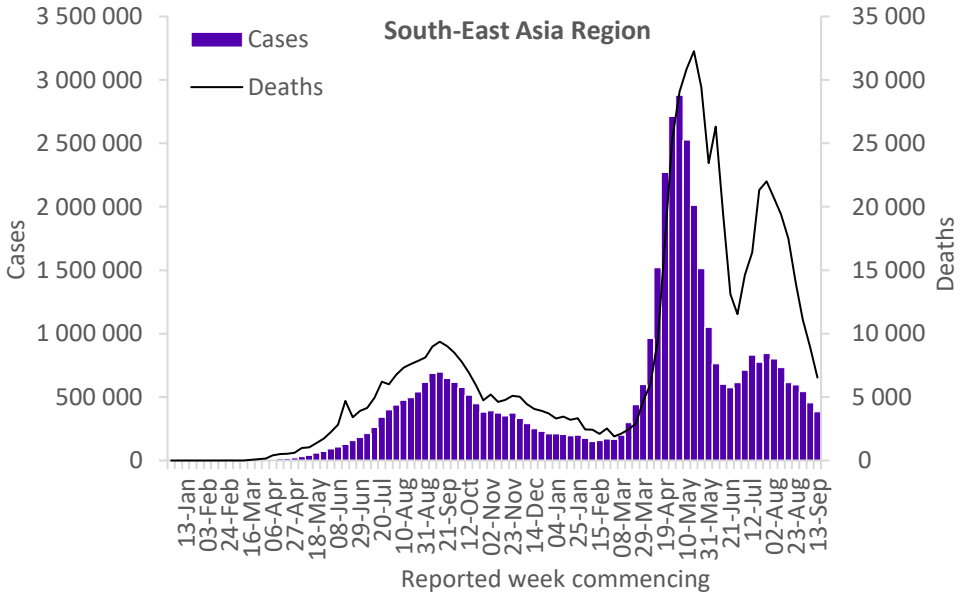


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 383 000 new cases and over 6500 new deaths, decreases of 16% and 27% respectively as compared to the previous week. Incidence of cases and deaths has declined for nearly two months, with all countries in the Region reporting a decrease in weekly cases for the past two weeks. This week, notable decreases were reported in Timor-Leste (by 42% for cases and 40% for deaths) and Indonesia (by 40% for cases and 48% for deaths) as compared to last week. The highest numbers of new cases were reported from India (211 242 new cases; 15.3 new cases per 100 000; 15% decrease), Thailand (94 304 new cases; 135.1 new cases per 100 000; 7% decrease), and Indonesia (23 252 new cases; 8.5 new cases per 100 000; 40% decrease).

The highest numbers of new deaths were reported from India (2183 new deaths; <1 new deaths per 100 000; similar to last week), Indonesia (1579 new deaths; <1 new deaths per 100 000; a 48% decrease), and Thailand (1010 new deaths; 1.4 new deaths per 100 000; a 33% decrease).

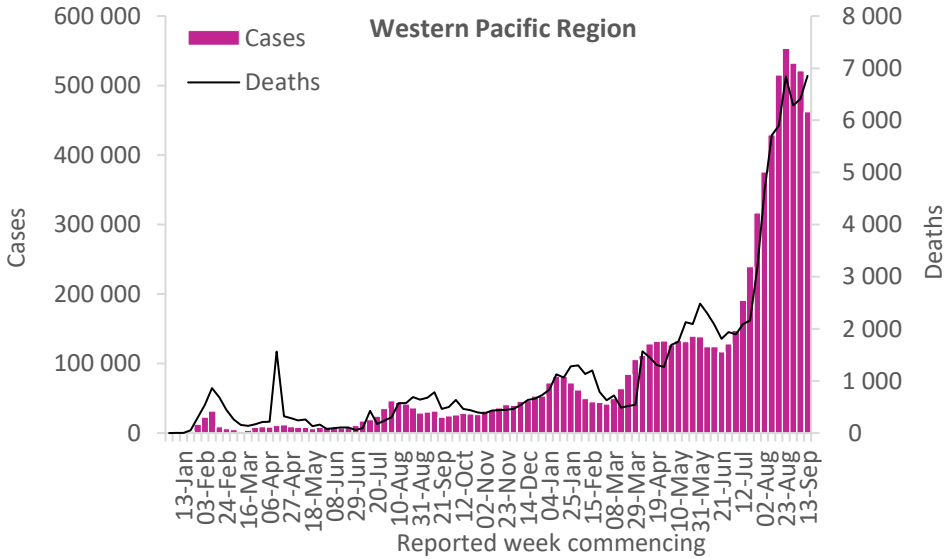


Updates from the South-East Asia Region

Western Pacific Region

Case incidence in the Western Pacific Region has decreased for past three weeks, with just under 462 000 new cases reported this week, a 11% decrease as compared to the previous week. There were notable decreases in weekly case incidence reported in Japan (45%) and French Polynesia (43%). The highest numbers of new cases were reported from the Philippines (141 522 new cases; 129.1 new cases per 100 000; similar to last week), Malaysia (122 376 new cases; 378.1 new cases per 100 000; a 10% decrease), and Viet Nam (75 674 new cases; 77.7 new cases per 100 000; a 16% decrease).

Weekly deaths have continued to increase since early July 2021, with notable increases reported in New Caledonia (by 2000%), Papua New Guinea (by 225%) and Mongolia (by 143%). The highest numbers of new deaths were reported from Malaysia (2648 new deaths; 8.2 new deaths per 100 000; similar to last week), Viet Nam (1839 new deaths; 1.9 new deaths per 100 000; 17% decrease), and the Philippines (1605 new deaths; 1.5 new deaths per 100 000; 75% increase).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update (WOU) is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) monitoring and evaluation team which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework.

In this week's edition of the COVID-19 Weekly Operational Update, published on 20 September, highlights of country-level actions and WHO support to countries include:

- Delivering 2 million syringes for Sri Lanka's COVID-19 vaccination drive
- Shipment of WHO life-saving medical supplies to Kabul, Afghanistan with support from Qatar
- WHO logistics hub airlifts largest single shipment of humanitarian cargo to Ethiopia
- WHO/Europe and Germany support children with disabilities in Belarus
- Rebooting COVID-19 response strategy and measures in Cambodia
- Expanding capacity for Integrated Disease Surveillance and Response (IDSR) in the African Region
- External Quality Assessment for laboratories testing for SARS-CoV-2
- Testing Rapid Response Mobile Laboratories (RRML) deployment procedures and minimum standards in first virtual tabletop (V-TTX) exercise for RRML/GOARN
- Connecting countries to share experiences and learnings from their COVID-19 vaccine roll-out using the mini-cPIE (COVID-19 vaccination Intra-Action Review) process
- Progress on a subset of indicators from the SPRP 2021 Monitoring and Evaluation Framework
- Updates on WHO's financing to support countries in SPRP 2021 implementation and provision of critical supplies.

For more information, see the Weekly operational update on COVID-19

Annex

COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 21 September 2021

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
Afghanistan	●	-	-	●	-
Albania	●	-	-	○	-
Algeria	●	-	-	●	-
Andorra	○	○	-	○	-
Angola	●	●	●	●	-
Anguilla	●	-	-	●	-
Antigua and Barbuda	●	●	●	●	-
Argentina	●	●	●	●	-
Armenia	●	-	-	●	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	○	-
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	-
Bangladesh	●	●	○	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	●	●	-
Benin	●	-	-	-	-
Bermuda	●	●	-	●	-
Bhutan	●	●	-	●	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	●	●	-
Bosnia and Herzegovina	●	●	●	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
Botswana	○	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	●	-
Brunei Darussalam	●	●	-	●	-
Bulgaria	●	●	-	●	-
Burkina Faso	●	-	-	-	-
Burundi	●	●	-	●	-
Cabo Verde	●	-	-	●	-
Cambodia	●	●	-	●	-
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	●	●	●	-
Central African Republic	●	●	-	●	-
Chad	●	-	-	-	-
Chile	●	●	●	●	-
China	●	●	●	○	-
Colombia	●	-	●	●	-
Comoros	-	●	-	-	-
Congo	●	○	-	●	-
Costa Rica	●	●	●	●	-
Croatia	●	●	●	○	-
Cuba	●	●	-	●	-
Curaçao	●	●	●	●	●
Cyprus	●	●	-	○	-
Czechia	●	●	●	●	-
Côte d'Ivoire	●	●	-	○*	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-
Dominica	●	-	-	●	-
Dominican Republic	●	-	●	●*	-
Ecuador	●	-	●	●	-
Egypt	●	-	-	●	-
El Salvador	●	-	●	●	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	○	-
Eswatini	●	●	-	●	-
Ethiopia	●	-	-	-	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	●	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
Greece	●	●	●	●	-
Grenada	●	-	-	●	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	●	-
Guinea	●	○	-	●	-
Guinea-Bissau	●	●	-	●	-
Guyana	-	-	●	●	-
Haiti	●	-	●	●	-
Honduras	●	-	●	●	-
Hungary	●	○	●	○	-
Iceland	●	●	●	●	-
India	●	●	●	●	-
Indonesia	●	●	●	●	-
Iran (Islamic Republic of)	●	●	●	●	-
Iraq	●	●	-	●	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	●	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	●	○	-	●	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	○	-
Kuwait	●	●	-	●	-
Kyrgyzstan	●	●	-	●	-
Lao People's Democratic Republic	●	-	-	●	-
Latvia	●	●	●	○	-
Lebanon	●	-	-	●	-
Lesotho	-	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
Liberia	●	-	-	○	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	○	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-
Madagascar	-	●	-	-	-
Malawi	●	●	-	●	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	●	●	-	●	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	●	-	●	-
Mongolia	●	-	-	●	-
Montenegro	●	-	○	○	-
Montserrat	●	-	●	●	-
Morocco	●	●	-	●	-
Mozambique	●	●	-	●	-
Myanmar	●	-	-	●	-
Namibia	●	●	-	●	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	●	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	●	-	●	-
North Macedonia	●	●	-	○	-
Northern Mariana Islands (Commonwealth of the)	○	-	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●	-
Oman	●	●	-	●	-
Pakistan	●	●	●	●	-
Panama	●	●	●	●	●
Papua New Guinea	-	-	-	●	-
Paraguay	●	-	●	●	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	●	-	-	●	-
Romania	●	●	●	●	-
Russian Federation	●	●	○	●	-
Rwanda	●	●	-	●	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	●*	-
Saint Kitts and Nevis	-	-	-	●	-
Saint Lucia	●	-	-	●	-
Saint Martin	●	●	-	●*	-
Saint Pierre and Miquelon	-	-	-	●	-
Saint Vincent and the Grenadines	-	-	●	●	-
Sao Tome and Principe	○	-	-	○*	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	●	-
Serbia	●	-	-	●	-
Seychelles	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
Sierra Leone	-	-	-	○	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	●	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	●	-	-	-
South Africa	●	●	○	●	-
South Sudan	●	●	-	●	-
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-
Sudan	●	●	●	-	-
Suriname	●	●	●	●	-
Sweden	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
Switzerland	●	●	●	●	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	●	-
Togo	●	●	-	○	-
Trinidad and Tobago	●	-	●	●	-
Tunisia	●	●	-	●	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	-	●	-
Ukraine	●	○	-	○	-
United Arab Emirates	●	●	●	●	-
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecif
United States Virgin Islands	●	●	-	●	-
United States of America	●	●	●	●	-
Uruguay	●	●	●	●	-
Uzbekistan	●	●	-	○	-
Venezuela (Bolivarian Republic of)	●	-	●	●	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	-	●	-
Zimbabwe	-	●	-	●	-

**Newly reported in this update.*

Unspecified B.1.617 reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

hat information for this variant was received by WHO from official sources.

ation become available.

***Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern.*

**** Alpha was excluded for Comoros this week based on further information.*

See also Annex 2: Data, table and figure notes.

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

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COVID-19 Weekly Epidemiological Update

Edition 57, published 14 September 2021

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- Special focus: COVID-19 in children and adolescents
- WHO regional overviews
- Summary of the Weekly Operational Update

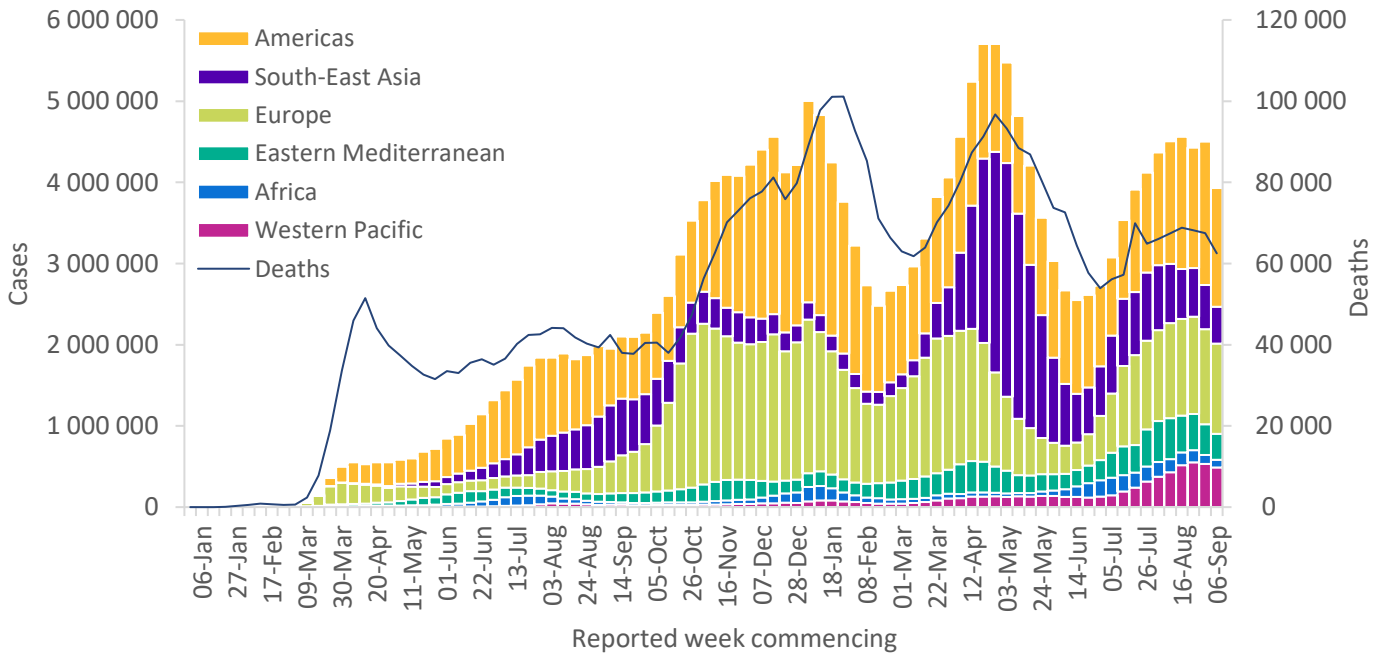
Global overview

Data as of 12 September 2021

With nearly 4 million new cases reported globally in the past week (6-12 September), this represents the first substantial decline in weekly cases in more than two months (Figure 1). All regions reported declines in new cases as compared to the previous week.

The number of deaths reported globally in the past week also decreased as compared to previous week, with just over 62 000 new deaths. The African Region reported an increase in the number of weekly deaths (7%), while the South-East Asia Region reported the largest decrease (20%). The American and Eastern Mediterranean Regions reported slightly smaller decreases, 9% and 6% respectively, while the numbers of deaths reported in the European and the Western Pacific Regions were similar to last week. The cumulative number of cases reported globally is now over 224 million and the cumulative number of deaths is just over 4.6 million.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 12 September 2021**



**See *Annex 2: Data, table and figure notes*

The regions reporting the highest weekly incidence rates per 100 000 population of cases and of deaths remain the same as in the previous week: the Region of the Americas (143 new cases per 100 000 population; 2.3 deaths per 100 000 population) and European Region (119.4 new cases per 100 000 population; 1.5 deaths per 100 000 population).

The highest numbers of new cases were reported from the United States of America (1 034 836 new cases; 20% decrease), the United Kingdom (256 051 new cases; 5% increase), India (248 248 new cases; 15% decrease), the Islamic Republic of Iran (172 030 new cases; 17% decrease), and Turkey (158 236 new cases; 6% increase).

Globally, cases of the Alpha variant have been reported in 193 countries, territories or areas (hereafter countries; no new country added since last week), while 142 countries (one new country since last week) have reported cases of the Beta variant; and 96 countries (four new countries since last week) have reported cases of the Gamma variant. For the Delta variant, since it was first reported in October 2020, it has been reported in 180 (six new countries since last week) countries across all six WHO regions as of 14 September.

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 12 September 2021**

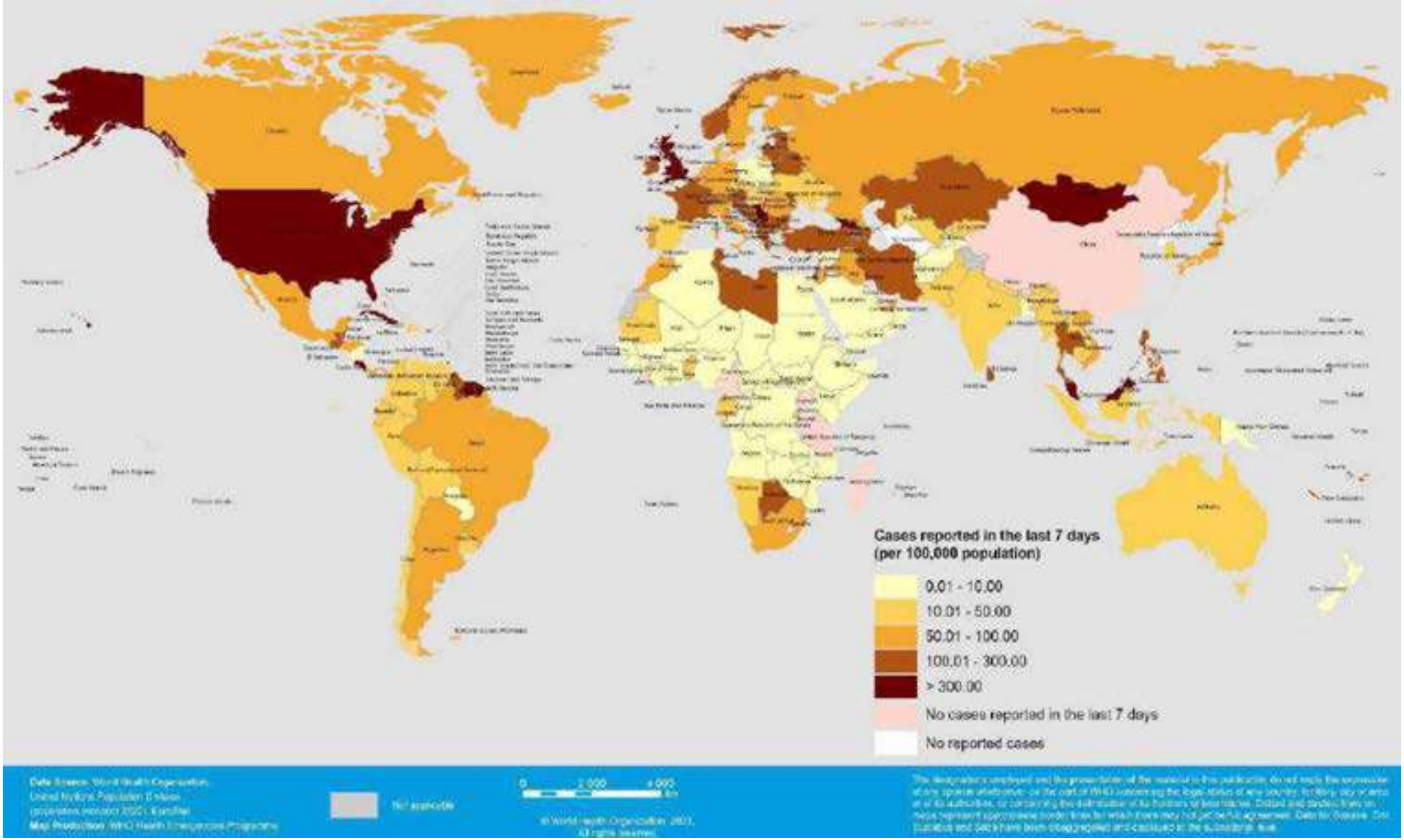
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 462 450 (37%)	-17%	86 462 003 (39%)	23 689 (38%)	-9%	2 144 336 (46%)
Europe	1 113 722 (28%)	-5%	67 170 804 (30%)	14 117 (23%)	-2%	1 296 421 (28%)
South-East Asia	453 539 (12%)	-16%	42 115 869 (19%)	8 938 (14%)	-20%	661 928 (14%)
Eastern Mediterranean	319 572 (8%)	-15%	15 199 196 (7%)	6 358 (10%)	-6%	277 637 (6%)
Western Pacific	487 586 (12%)	-8%	7 418 755 (3%)	6 410 (10%)	2%	100 860 (2%)
Africa	94 352 (2%)	-15%	5 813 020 (3%)	3 034 (5%)	7%	140 010 (3%)
Global	**3 931 221 (100%)**	**-13%**	**224 180 411 (100%)**	**62 546 (100%)**	**-7%**	**4 621 205 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
***See Annex 2: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

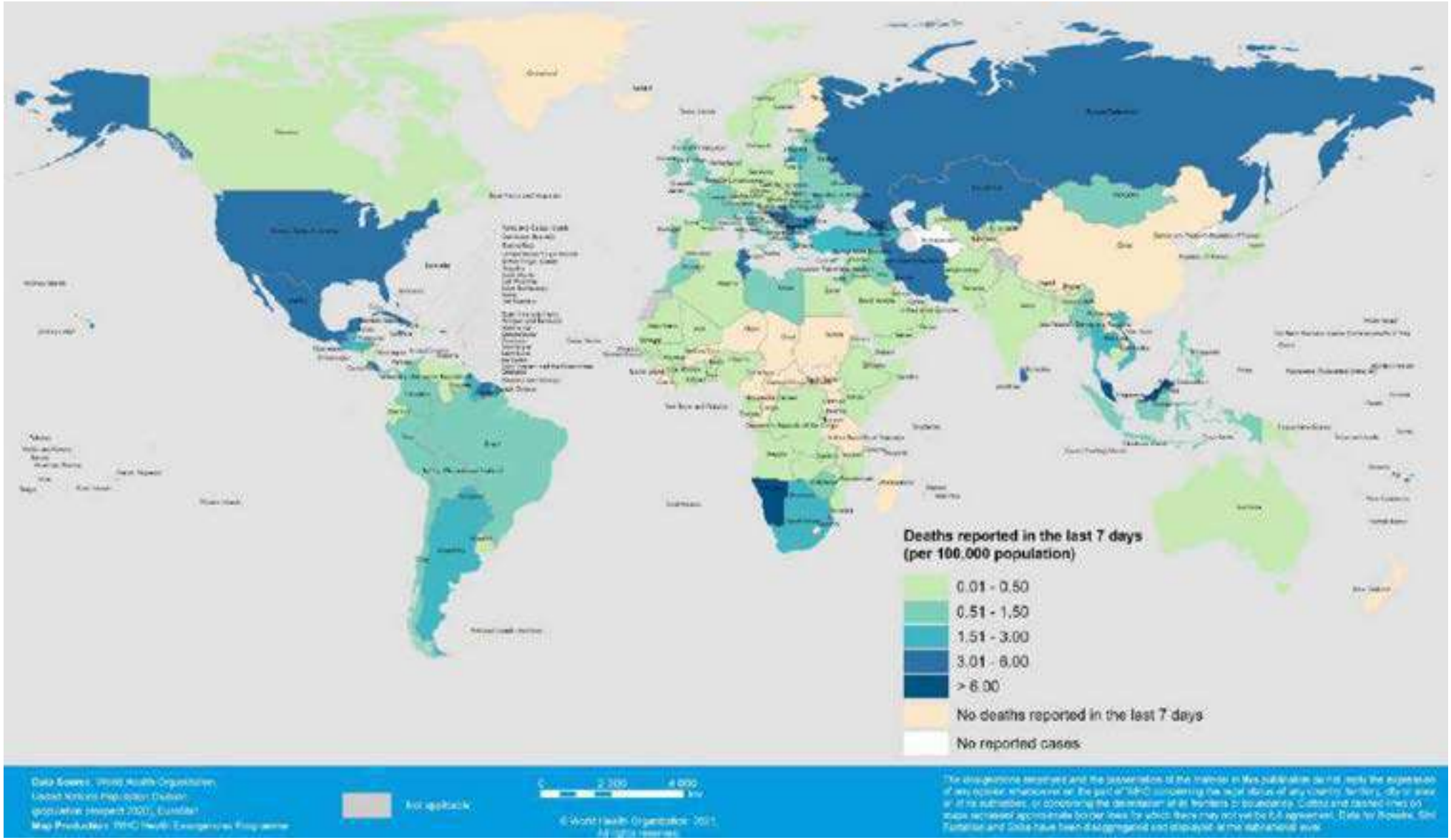
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 6 – 12 September 2021**



**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 6 -12 September 2021**



**See *Annex 2: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact vaccine, therapeutics, diagnostics or effectiveness of public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health.

As variants evolve, WHO will continue to update lists of global VOIs and VOCs to support setting priorities for surveillance and research, and ultimately guide response strategies (for more information, please see the Tracking SARS-CoV-2 variants website).

National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants.

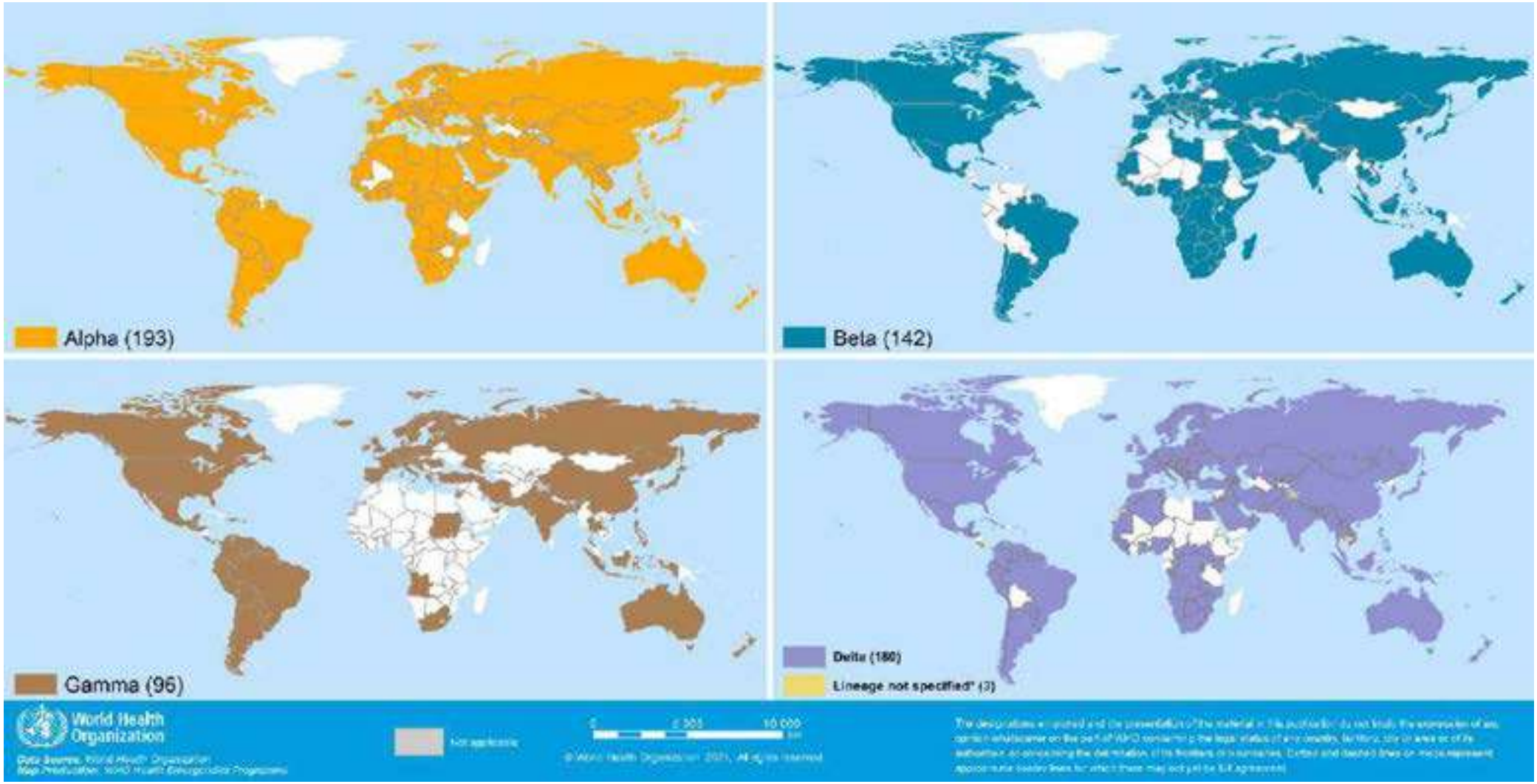
As surveillance activities to detect SARS-CoV-2 variants are strengthened at national and subnational levels, including through the expansion of genomic sequencing capacities, the number of countries, territories or areas (hereafter countries) reporting VOCs continues to increase (Figure 4, Annex 1). This distribution should nonetheless be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

As countries gradually resume non-essential international travel, the introduction of risk mitigation measures aiming to reduce travel-associated exportation, importation and onward transmission of SARS-CoV-2 should be based on thorough risk assessments conducted systematically and routinely.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Figure 4. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 14 September 2021**



**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details*

Special Focus: COVID-19 in children and adolescents

SARS-CoV-2 infections among children and adolescents typically cause less severe illness and fewer deaths as compared to adults. While a less severe course of disease is a positive outcome, there are concerns that mild symptoms may have led to less testing, resulting in fewer identified cases of SARS-CoV-2 infection in children and adolescents. If children and adolescents with mild or no symptoms also transmit the disease, they may also contribute to transmission in the community. Consequently, understanding symptoms, infectivity and patterns of SARS-CoV-2 transmission in children and adolescents is essential for developing, adapting and improving control measures for COVID-19 across all ages, especially since vaccination is not currently available or authorized for those under the age of 12 years in most contexts.

This report summarizes the current knowledge around SARS-CoV-2 infection acquisition and transmission and COVID-19 disease in children under the age of five years, older children (5 to 9 years old), younger adolescents (10 to 14 years old) and older adolescents (15 to 19 years old). Some information on incidence and mortality is also provided for young adults (20 to 24 years old). It aims to inform decisions, based on local contexts, on how best to keep schools, kindergarten and day-care facilities open and what advice to apply to intergenerational mixing.

Incidence and mortality in children, adolescents and young adults

Overall, there are proportionally fewer cases and deaths from COVID-19 among children, adolescents and young adults as compared to adults (Table 1). Based on age-disaggregated case data reported to WHO from 30 December 2019 to 6 September 2021[1], the proportion of global cases increased with age category: children under the age of five represented the smallest proportion of cases among individuals up to 24 years old, while older adolescents (15 to 19 years old) and young adults (20 to 24 years old) grouped together had the highest proportion of the global cases. Deaths for all age groups represented less than 0.5% of the proportion of global deaths.

Table 1. Global epidemiological overview on children and adolescents (information from 30 December 2019 to 06 September 2021; Data cleaning is continuous, please interpret with caution).

Age group	Number of cases	Proportion (%) to global cases*	Number of deaths	Proportion (%) to global deaths**
<5 years	1 599 073	1.8	1704	0.1
5 to 14 years	5 622 295	6.2	1218	0.1
15 to 24 years	13 071 320	14.3	6327	0.4

*Total global cases reported to WHO through case-based reporting, all ages: 90 011 040
**Total global deaths reported to WHO through case-based reporting, all ages: 1 752 008

What are the symptoms of COVID-19 in children and adolescents?

Younger children (under five years old), older children and adolescents (10 to 19 years old) usually have fewer and milder symptoms of SARS-CoV-2 infection than adults >25 years old and are less likely than adults to experience severe COVID-19 [1-9]. Milder symptoms and asymptomatic presentation often mean less frequent care-seeking for these groups; thus, children and adolescents tend to be tested less frequently and cases may go unreported. Early reports suggested an age-dependent risk of severe disease with those under one year experiencing more severe disease[6, 10], although several reviews show that neonates (first 28 days of life) have mild disease as compared to other paediatric patients[11-14]. However, it is important to note that children under the age of one year and within the neonatal period (first 28 days after birth) have a higher risk

[1]WHO Coronavirus (COVID-19) Dashboard | WHO Coronavirus (COVID-19) Dashboard with Vaccination Data; last accessed 06 September 2021.

of diseases which have overlapping presentation with COVID-19, such as pneumonia and malaria. Additionally, age disaggregation has not been systematically provided in the current literature and the results of these studies are context-specific such as timing within the pandemic and an emphasis on hospitalized patients.

Children and adolescents can experience prolonged clinical symptoms (known as post COVID-19 condition, or post-acute sequelae of SARS-CoV-2 infection), however, the frequency and characteristics of these are still under investigation[15].

Additionally, a hyperinflammatory syndrome, referred to as paediatric inflammatory multisystem syndrome, temporally associated with SARS-CoV-2 (PIMS-TS) in Europe and multisystem inflammatory syndrome in children (MIS-C) in the United States of America, although rare, can occur, and complicates recovery from COVID-19[16-19]. The severity of disease in children and adolescents caused by SARS-CoV-2 variants of concern (VOC), in comparison with non-VOC lineages, remains under investigation.

Are children and adolescents less susceptible to SARS-CoV-2 infection than adults?

The risk of becoming infected with SARS-CoV-2 depends on a combination of susceptibility (host biological factors), biological properties of the virus, environmental factors associated with exposure type (going to work, or school etc.) and exposure intensity (level of community transmission and adherence to public health and social measures (PHSM)).

Multiple population-based SARS-CoV-2 seroprevalence and viral shedding studies have investigated whether children and adolescents are infected at the same rate as adults, but the results have been mixed, possibly because of the studies being conducted at different time points in the pandemic when populations were subjected to different levels of PHSM[20]. Even so, we do know that children of all ages can become infected and can spread the virus to others.

Data on the global incidence of COVID-19 in adolescents suggests they test positive for SARS-CoV-2 at a higher proportion than children, however, seroprevalence surveys are needed to provide more information. Additionally, more detailed epidemiological information about the factors influencing susceptibility of children and adolescents to the new SARS-CoV-2 variants is urgently needed.

What about transmission of infection? Is there a difference between young children, older children and adolescents in transmitting SARS-CoV-2?

Outbreaks of COVID-19 have been identified in secondary schools, summer camps and day care centres, particularly when neither physical distancing nor masks were used to reduce risk [21-24]. There is some preliminary evidence that children may be less infectious, than adolescents and adults, as measured by secondary attack rates [25].

Children and adolescents who become infected with SARS-CoV-2 shed the virus in their respiratory tract and may also shed virus in their faeces [26-29]. Among individuals who were positive for SARS-CoV-2 who were tested at the same time point after symptom onset, SARS-CoV-2 viral RNA shedding in the respiratory track appeared similar in children, adolescents and adults [30].

The relationship between age, viral load and transmission across the full symptom spectrum of SARS-CoV-2 infection has not been comprehensively investigated because people with no, or mild, symptoms are seldom tested systematically.

Thus, the relative transmissibility of SARS-CoV-2 at different ages remains uncertain, largely due to the challenges involved in disentangling the influences of biological, host, virus and environmental factors [31-35].

Conclusions

Children and adolescents infected with SARS-CoV-2 generally present with milder symptoms of COVID-19 disease; although infection with the variants of SARS CoV-2, including the Delta variant, require more investigation to determine if this will remain the case. The risk of transmission to and from children and adolescents depends on contextual factors such as the level of community transmission and the measures implemented to control the virus, host factors in the child, as well as biological factors related to the virus itself. However, children and adolescents of all ages become infected and also transmit SARS-CoV-2 to others. Younger children may be less susceptible than older children and adolescents, but the precise role of children and adolescents in the overall transmission of SARS-CoV-2 still requires further investigation.

The use of public health and social measures (PHSM), including physical distancing, cleaning hands, coughing into a bent elbow or a tissue, adequate ventilation in indoor settings, and masks (for older children - see guidance below), should be consistently and appropriately implemented for all ages in schools, especially since children under the age of 12 years are generally not yet eligible for vaccination.

Resources: WHO guidance and reports on COVID-19 and children and adolescents

- Advice on the use of masks for children in the community in the context of COVID-19 - Guidance document (21 August 2020)
- Breastfeeding and COVID-19 – Scientific brief (23 June 2020), IRIS Link
- Estimating mortality from COVID-19 disease- Scientific brief
- Severe disease and Multi-symptom COVID-19 Syndrome

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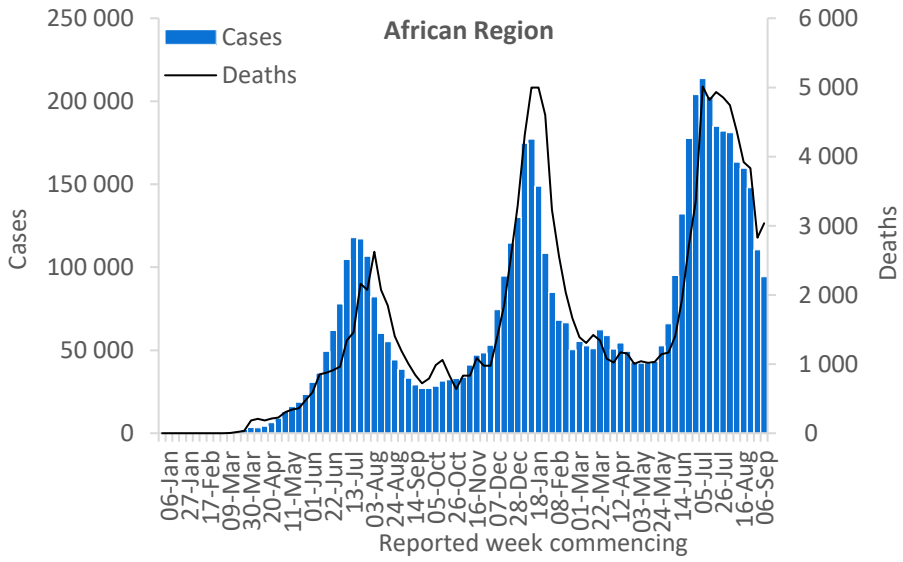
WHO regional overviews – Epidemiological week 6 – 12 September 2021

African Region

The African Region reported over 94 000 new cases and over 3000 new deaths, a 15% decrease and a 7% increase respectively as compared to the previous week. Although the regional case incidence has continued to decline for over two months, weekly incidence increased in 18 of 49 (37%) countries in the past week, including in Ethiopia and Nigeria. The highest numbers of new cases were reported from South Africa (40 220 new cases; 67.8 new cases per 100 000 population; a 29% decrease), Ethiopia (9269 new cases; 8.1 new cases per 100 000; a 10% increase), and Nigeria (5061 new cases; 2.5 new cases per 100 000; a 90% increase).

The highest numbers of new deaths were reported from South Africa (1590 new deaths; 2.7 new deaths per 100 000 population; a 6% decrease), Namibia (187 new deaths; 7.4 new deaths per 100 000), and Algeria (185 new deaths; 0.4 new deaths per 100 000; a 5% decrease).

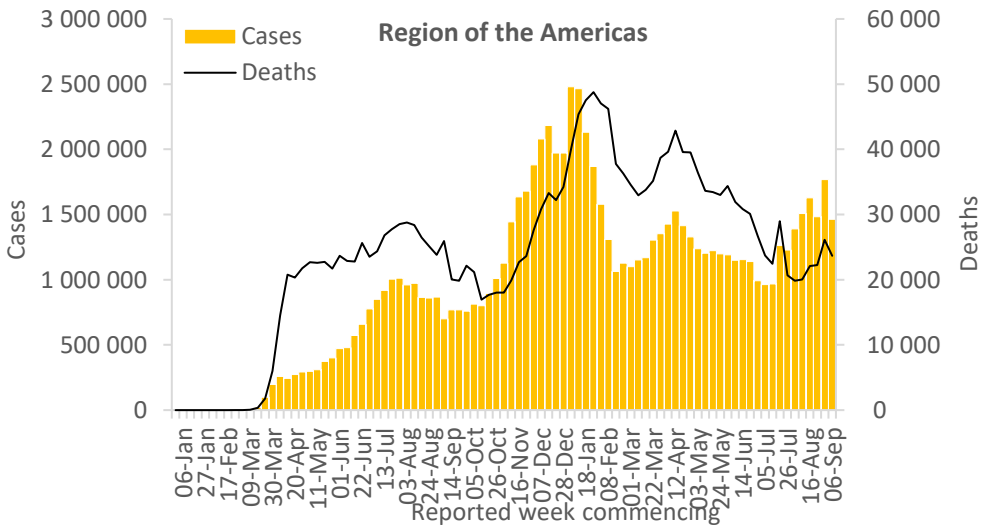


Updates from the African Region

Region of the Americas

The Region of the Americas reported the largest proportional decrease in cases and the second largest proportional decrease in deaths this week, decreases of 17% and 9%, respectively, as compared to the previous week. However, the Region also reported the highest number of weekly cases and deaths as compared to other Regions, with notable increases observed in Cuba (22% increase) and Ecuador (72% increase) for cases, and Honduras (55% increase) and Haiti (50% increase) for deaths. The highest numbers of new cases were reported from the United States of America (1 034 836 new cases; 312.6 new cases per 100 000; a 20% decrease), accounting for 70% of all new cases reported in the Region this week, Brazil (118 790 new cases; 55.9 new cases per 100 000; a 22% decrease), and Mexico (88 938 new cases; 69.0 new cases per 100 000; a 5% decrease).

Similarly, the highest numbers of new deaths were reported from the United States of America (11 371 new deaths; 3.4 new deaths per 100 000; a 5% decrease), Mexico (4628 new deaths; 3.6 new deaths per 100 000; a 9% decrease), and Brazil (3176 new deaths; 1.5 new deaths per 100 000; a 27% decrease).

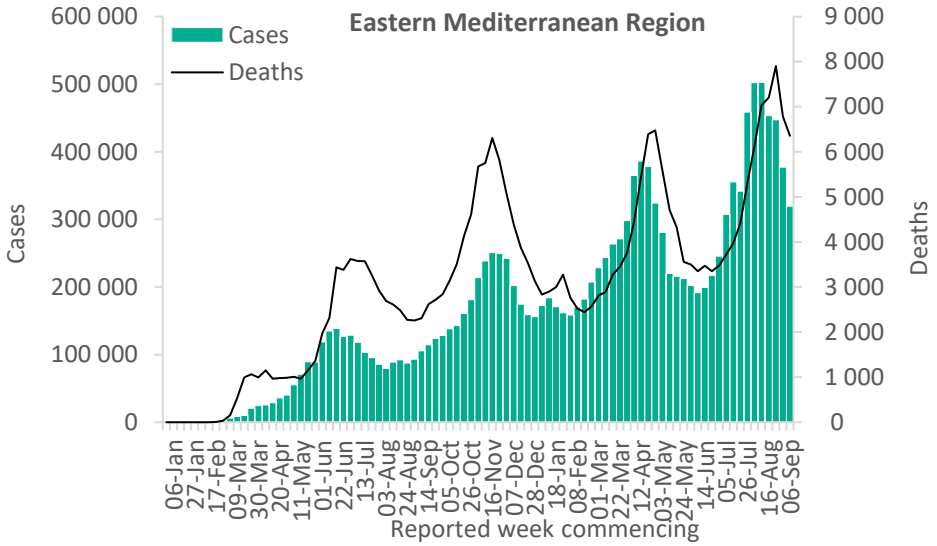


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported a marked decrease (15%) in the number of new cases reported this week, with over 319 000 new cases. The Region reported a slight decrease (6%) in the number of new deaths reported, with over 6300 new deaths this week. These decreasing trends in cases and deaths reflect decreases in 13 of the 22 countries (59%) for cases and 15 out of 22 (68%) for deaths in the region this week. The highest numbers of new cases were reported from the Islamic Republic of Iran (172 030 new cases; 204.8 new cases per 100 000; a 17% decrease), Iraq (34 816 new cases; 86.6 new cases per 100 000; a 21% decrease), and Pakistan (25 819 new cases; 11.7 new cases per 100 000; a 4% decrease).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (3760 new deaths; 4.5 new deaths per 100 000; a 10% decrease), Pakistan (548 new deaths; <1 new deaths per 100 000; a 5% decrease), and Tunisia (497 new deaths; 4.2 new deaths per 100 000; a 47% increase).

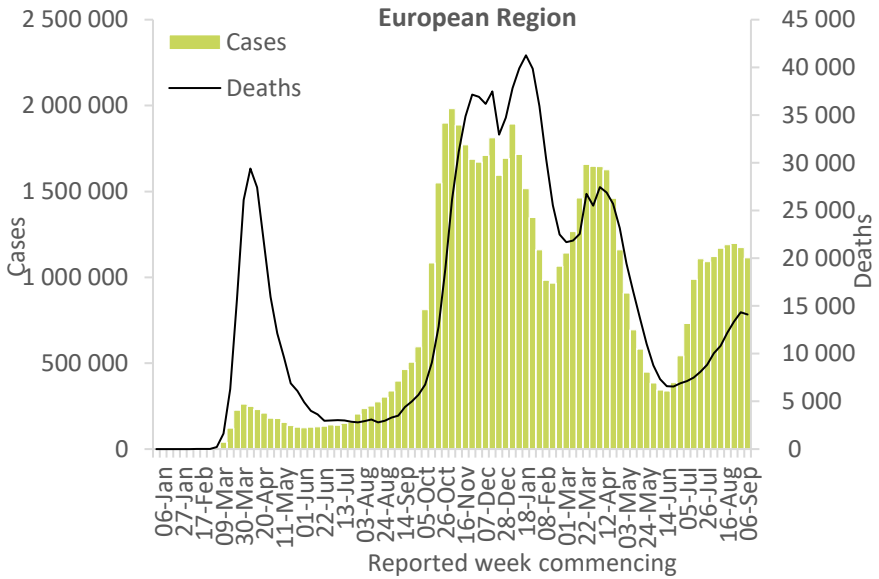


Updates from the Eastern Mediterranean Region

European Region

Case incidence in the European Region decreased by 5% with just over 1.1 million new cases, while death incidence remained similar to that of the previous week with over 14 000 deaths. The highest numbers of new cases were reported from the United Kingdom (256 051 new cases; 377.2 new cases per 100 000; a 5% increase), Turkey (158 236 new cases; 187.6 new cases per 100 000; a 6% increase), and the Russian Federation (127 471 new cases; 87.3 new cases per 100 000; similar to the previous week's figures).

Similarly, the highest numbers of new deaths were reported from the Russian Federation (5549 new deaths; 3.8 new deaths per 100 000; similar to the previous week's figures), Turkey (1806 new deaths; 2.1 new deaths per 100 000; similar to the previous week's figures), and the United Kingdom (983 new deaths; 1.4 new deaths per 100 000; a 25% increase). These three countries accounted for almost half (49%) of new weekly cases and 59% of new weekly deaths reported in the Region.

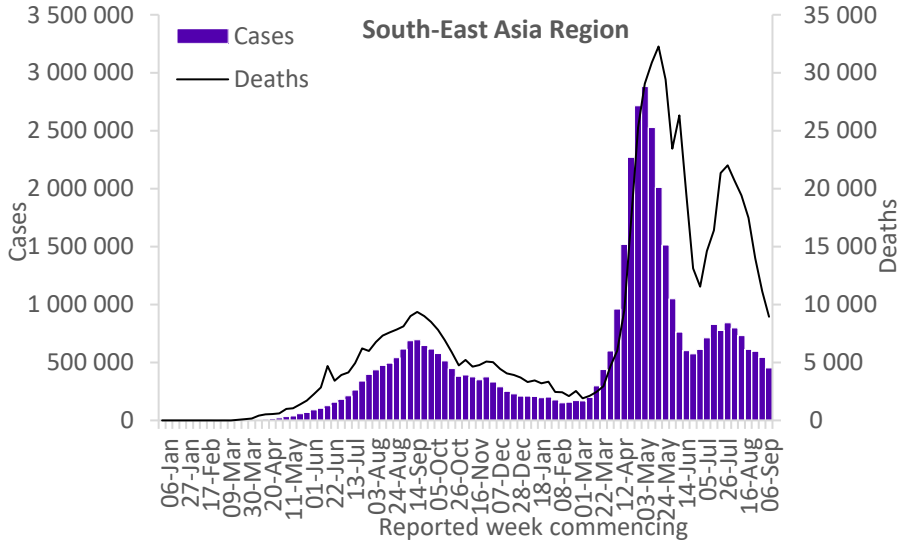


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported substantial decreases in new cases and deaths with over 453 000 new cases and over 8900 new deaths, decreases of 16% and 20%, respectively as compared to the previous week. Overall, regional cases and deaths have declined consistently over the past month and a half. This week all countries in the Region reported a decrease in weekly cases and deaths as compared to last week, with a notable decrease reported in Indonesia (30% decrease) for cases and Bangladesh (33% decrease) for deaths. The highest numbers of new cases were reported from India (248 248 new cases; 18.0 new cases per 100 000; a 15% decrease), Thailand (101 639 new cases; 145.6 new cases per 100 000; a 5% decrease), and Indonesia (38 491 new cases; 14.1 new cases per 100 000; a 30% decrease).

Similarly, the highest numbers of new deaths were reported from Indonesia (3028 new deaths; 1.1 new deaths per 100 000; a 23% decrease), India (2122 new deaths; <1 new deaths per 100 000; a 21% decrease), and Thailand (1498 new deaths; 2.1 new deaths per 100 000; a 13% decrease).

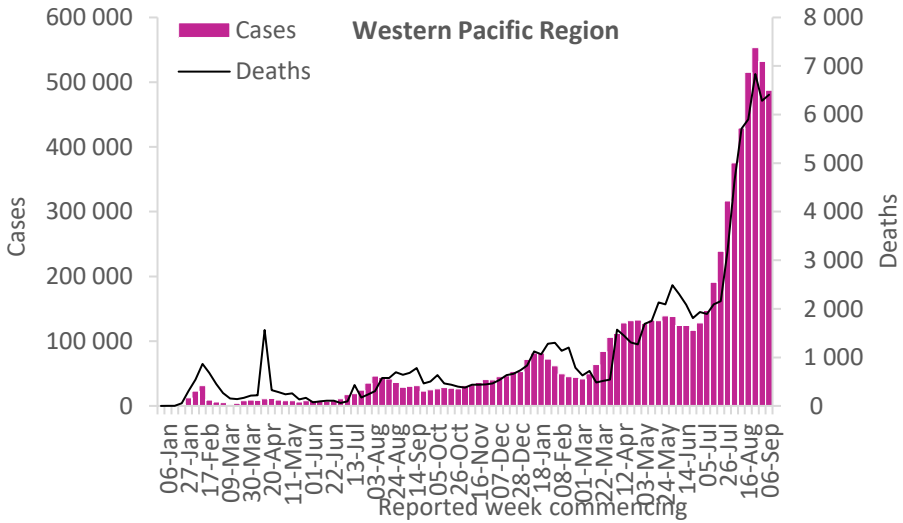


Updates from the South-East Asia Region

Western Pacific Region

Case incidence in the Western Pacific Region decreased by 8% with just over 487 000 new cases, while death incidence remained similar to that of the previous week with over 64 00 deaths. After reporting a continuous increase in cases since 21 June 2021, the Region has begun to show a declining trend in weekly cases over the past two weeks, mainly driven by declines in cases reported in Japan (46% decrease), Mongolia (46% decrease) and Fiji (45% decrease). However, the weekly deaths continue to show an increasing trend since 19 July 2021, with notable increases in weekly deaths reported for Guam (33% increase), and Malaysia (22% increase) this week.

The highest numbers of new cases were reported from the Philippines (144 991 new cases; 132.3 new cases per 100 000; a 16% increase), Malaysia (136 061 new cases; 420.4 new cases per 100 000; similar to the previous week's figures), and Viet Nam (90 179 new cases; 92.6 new cases per 100 000; similar to the previous week's figures). The highest numbers of new deaths were reported from Malaysia (2536 new deaths; 7.8 new deaths per 100 000; a 22% increase), Viet Nam (2225 new deaths; 2.3 new deaths per 100 000; a 7% decrease), and the Philippines (916 new deaths; <1 new deaths per 100 000; a 13% decrease).



Updates from the Western Pacific Region

Annex

COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 14 September 2021

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Afghanistan	●	-	-	●	-
Albania	●	-	-	○	-
Algeria	●	-	-	●	-
Andorra	○	○	-	○	-
Angola	●	●	●	●	-
Anguilla	●	-	-	●	-
Antigua and Barbuda	●	●	●	●	-
Argentina	●	●	●	●	-
Armenia	●	-	-	●	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	○	-
Bahamas	●	-	●*	●*	-
Bahrain	●	●	●	●	-
Bangladesh	●	●	○	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	●	●	-
Benin	●	-	-	-	-
Bermuda	●	●	-	●	-
Bhutan	●	●	-	●	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Bosnia and Herzegovina	●	●	●	○	-
Botswana	○	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	●	-
Brunei Darussalam	●	●	-	○	-
Bulgaria	●	●	-	●	-
Burkina Faso	●	-	-	-	-
Burundi	●	●	-	●	-
Cabo Verde	●	-	-	●	-
Cambodia	●	●	-	●	●
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	●	●	●	-
Central African Republic	●	●	-	●	-
Chad	●	-	-	-	-
Chile	●	●	●	●	-
China	●	●	●	○	-
Colombia	●	-	●	●	-
Comoros	-	●	-	-	-
Congo	●	○	-	●	-
Costa Rica	●	●	●	●	-
Croatia	●	●	●	○	-
Cuba	●	●	-	●	-
Curaçao	●	●	●	●	●
Cyprus	●	●	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Czechia	●	●	●	●	-
Côte d'Ivoire	●	●	-	-	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-
Dominica	●	-	-	●	-
Dominican Republic	●	-	●	-	-
Ecuador	●	-	●	●	-
Egypt	●	-	-	●	-
El Salvador	●	-	●	●	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	○	-
Eswatini	●	●	-	●	-
Ethiopia	●	-	-	-	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	●	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	○	-
Greece	●	●	●	●	-
Grenada	●	-	-	●	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	●	-
Guinea	●	○	-	●	-
Guinea-Bissau	●	●	-	●	-
Guyana	-	-	●	●*	-
Haiti	●	-	●	●*	-
Honduras	●	-	●	●	-
Hungary	●	○	●	○	-
Iceland	●	●*	●*	●*	-
India	●	●	●	●	-
Indonesia	●	●	●*	●	-
Iran (Islamic Republic of)	●	●	●	●	-
Iraq	●	●	-	●	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	●	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	●	○	-	●	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	○	-
Kuwait	●	●	-	●	-
Kyrgyzstan	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Lao People's Democratic Republic	●	-	-	●	-
Latvia	●	●	●	○	-
Lebanon	●	-	-	●	-
Lesotho	-	●	-	●	-
Liberia	●	-	-	○	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	○	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-
Madagascar	-	●	-	-	-
Malawi	●	●	-	●	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	●	●	-	●	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	●	-	●	-
Mongolia	●	-	-	●	-
Montenegro	●	-	○	○	-
Montserrat	●	-	●	●*	-
Morocco	●	●	-	●	-
Mozambique	●	●	-	●	-
Myanmar	●	-	-	●	-
Namibia	●	●	-	●	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	●*	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	●	-	●	-
North Macedonia	●	●	-	○	-
Northern Mariana Islands (Commonwealth of the)	○	-	-	●	-
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●	-
Oman	●	●	-	●	-
Pakistan	●	●	●	●	-
Panama	●	●	●	●	●
Papua New Guinea	-	-	-	●	-
Paraguay	●	-	●	●	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	●	-	-	●	-
Romania	●	●	●	●	-
Russian Federation	●	●	○	●	-
Rwanda	●	●	-	●	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	-	-
Saint Kitts and Nevis	-	-	-	●	-
Saint Lucia	●	-	-	●	-
Saint Martin	●	●	-	-	-
Saint Pierre and Miquelon	-	-	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Saint Vincent and the Grenadines	-	-	●*	●	-
Sao Tome and Principe	○	-	-	-	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	●	-
Serbia	●	-	-	●	-
Seychelles	●	●	-	●	-
Sierra Leone	-	-	-	○	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	●	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	●	-	-	-
South Africa	●	●	○	●	-
South Sudan	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-
Sudan	●	●	●	-	-
Suriname	●	●	●	●	-
Sweden	●	●	●	●	-
Switzerland	●	●	●	●	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	●	-
Togo	●	●	-	○	-
Trinidad and Tobago	●	-	●	●	-
Tunisia	●	●	-	●	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	-	●	-
Ukraine	●	○	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
United Arab Emirates	●	●	●	●	-
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-
United States Virgin Islands	●	●	-	●	-
United States of America	●	●	●	●	-
Uruguay	●	●	●	●	-
Uzbekistan	●	●	-	○	-
Venezuela (Bolivarian Republic of)	●	-	●	●	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	-	●	-
Zimbabwe	-	●	-	●	-

**Newly reported in this update.*

Unspecified B.1.617 reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

from official sources.

ation become available.

***Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern.*

**** Alpha was excluded for Comoros this week based on further information.*

See also Annex 2: Data, table and figure notes.

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

COVID-19 Weekly Epidemiological Update

Edition 56, published 7 September 2021

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Summary of the COVID-19 Weekly Operational Update

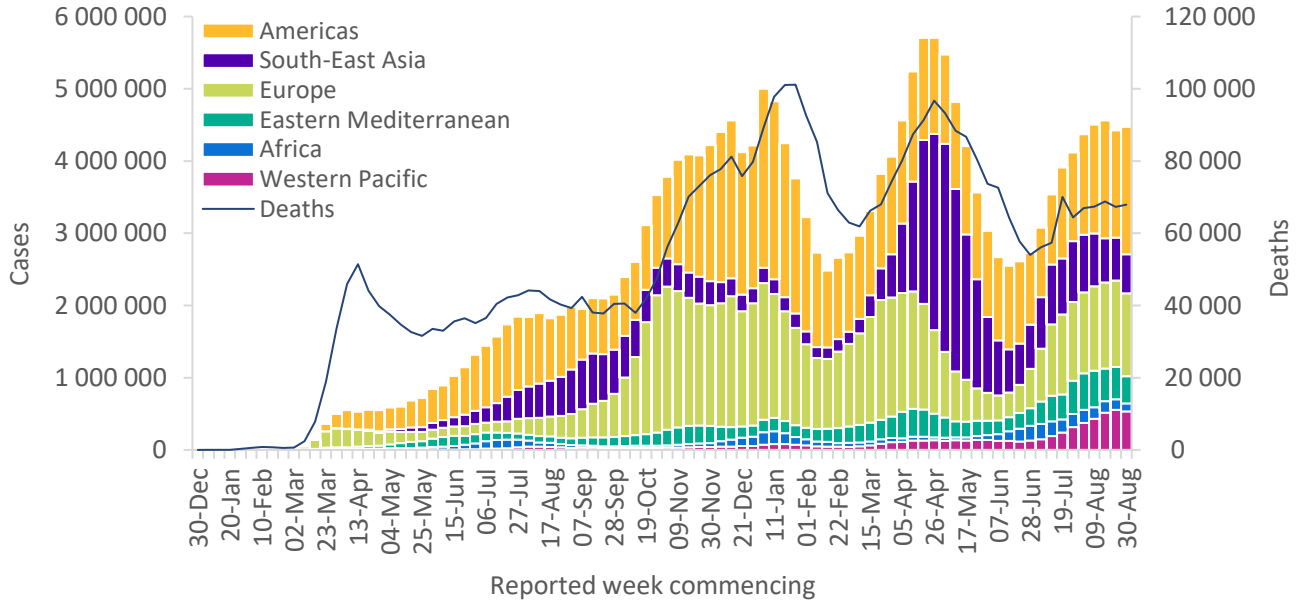
Global overview

Data as of 5 September 2021

Globally, the number of new cases reported this week remained similar to that of the previous week. With over 4.4 million new cases reported this week (30 August-5 September; Figure 1), the global incidence of COVID-19 cases has remained stable over the past month. In the past week, all regions reported either a decline (Regions of Africa, South-East Asia, and the Eastern Mediterranean) or a similar trend in new reported cases, as compared to previous week (Regions of Europe and the Western Pacific); the Region of the Americas reported a 19% increase.

The number of deaths reported globally this week also remained similar to the previous week, with just under 68 000 new deaths reported. The incidence of new deaths declined in all regions apart from the Region of the Americas and Europe where deaths increased by 17% and 20%, respectively. Regionally, the largest proportionate decreases in new deaths this week were observed in the South-East Asia (21% decrease) and African (26% decrease) regions, while the regions of the Western Pacific (8% decrease) and the Eastern Mediterranean (14% decrease) also reported notable declines, as compared to the previous week. The cumulative number of cases reported globally is now just over 220 million and the cumulative number of deaths is over 4.5 million.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 5 September 2021**



**See *Annex 2: Data, table and figure notes*

The Regions reporting the highest weekly case and deaths incidence rates per 100 000 population remain the same as last week: the Regions of the Americas (172.4 new cases per 100 000 population; 2.5 deaths per 100 000 population) and Europe (122.8 new cases per 100 000 population; 1.6 deaths per 100 000 population).

The highest numbers of new cases were reported from the United States of America (1 297 399 new cases; 38% increase), India (293 643 new cases; 8% increase), the United Kingdom (243 125 new cases; similar to the previous week), the Islamic Republic of Iran (208 089 new cases; 18% decrease), and Brazil (152 154 new cases; 13% decrease).

Globally, cases of the Alpha variant have been reported in 194 countries (one new country since last week), territories or areas (hereafter countries), while 141 countries (no new countries) have reported cases of the Beta variant; 92 countries (one new country) have reported cases of the Gamma variant; and 174 countries (four new countries) have reported cases of the Delta variant.

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 5 September 2021**

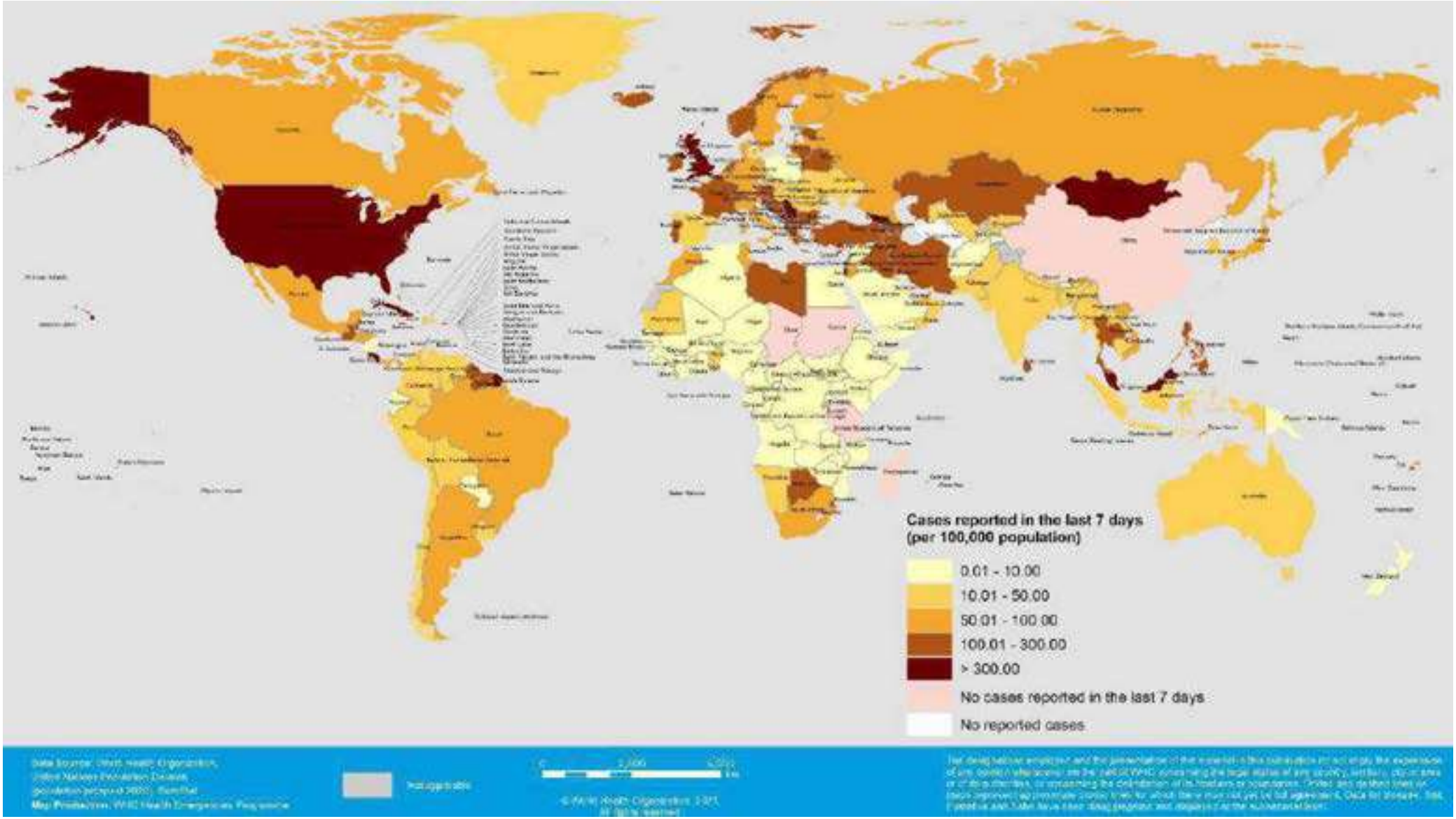
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 763 048 (39%)	19%	84 995 058 (39%)	26 028 (38%)	17%	2 120 533 (47%)
Europe	1 146 065 (26%)	-4%	66 029 959 (30%)	14 883 (22%)	20%	1 282 565 (28%)
South-East Asia	543 013 (12%)	-9%	41 662 330 (19%)	11 116 (16%)	-21%	652 990 (14%)
Eastern Mediterranean	377 304 (8%)	-16%	14 879 624 (7%)	6 782 (10%)	-14%	271 279 (6%)
Western Pacific	531 922 (12%)	-4%	6 931 169 (3%)	6 282 (9%)	-8%	94 450 (2%)
Africa	110 594 (2%)	-25%	5 718 668 (3%)	2 826 (4%)	-26%	136 976 (3%)
Global	**4 471 946 (100%)**	**1%**	**220 217 572 (100%)**	**67 917 (100%)**	**1%**	**4 558 806 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
***See Annex 2: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

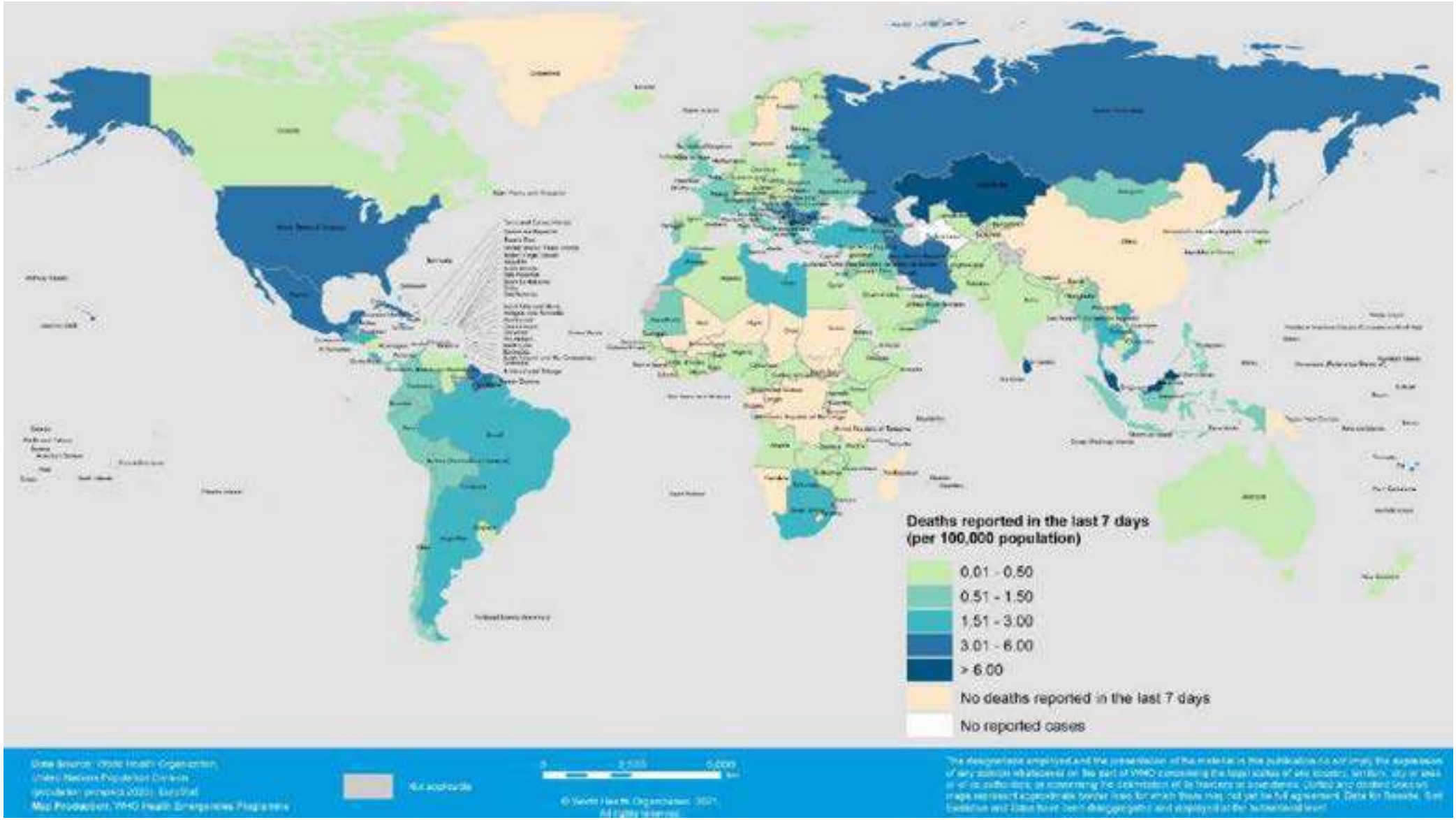
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 30 August – 5 September 2021**



**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 30 August – 5 September 2021**



**See *Annex 2: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact vaccine, therapeutics, diagnostics or effectiveness of public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants.

Updates on VOCs and VOIs, and a list of Alerts for Further Monitoring, are available on the WHO Tracking SARS-CoV-2 Variants website.

Geographic distribution

As surveillance activities to detect SARS-CoV-2 variants are strengthened at national and subnational levels, including through the expansion of genomic sequencing capacities, the number of countries/areas/territories (hereafter countries) reporting VOCs continues to increase (Figure 4, Annex 1). This distribution should nonetheless be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

Phenotypic characteristics

Available evidence on phenotypic impacts of VOCs is summarized in Table 2, as well as in previous editions of these COVID-19 Weekly Epidemiological Updates. Since the last detailed update on 24 August, new evidence has been published on the phenotypic characteristics of VOCs.

A retrospective cohort study, available in preprint, of RT-PCR SARS-CoV-2 positive individuals was conducted using healthcare datasets in the provinces of Ontario and Alberta, Canada, which were the most affected provinces during the resurgence of cases in Canada from February to May 2021. During this time, the 30-day outcomes of those infected with VOCs (n=37 902), of which 91% (34 658/37 902) were infected with the Alpha variant, showed a higher risk of death [adjusted Odds Ratio (aOR) of 1.34 (95% Confidence Interval 1.29-1.39) in Ontario and 1.53 (95% CI: 1.41-1.65) in Alberta] and hospitalization [aOR 1.57 (95% CI: 1.47-1.69) in Ontario and aOR 1.88 (95% CI: 1.74-2.02) in Alberta)] as compared to those infected with non-VOCs.[1]

In a prospective clinical cohort study of hospitalized and community cases (n=1475) conducted between 1 November 2020 to 30 January 2021 in Scotland as part of a larger study in the United Kingdom, and published as a preprint, infection with the Alpha variant was associated with increased clinical severity [cumulative OR 1.40 (95% CI: 1.02-1.93)] as compared to non-Alpha SARS-CoV-2 infection. Additionally, the viral load of samples positive for the Alpha variant, as measured by the cycle threshold (Ct) value, was lower than that of non-Alpha samples [mean change in Ct: -2.46 (95% CI -4.22, -0.70)], where lower Ct value indicates higher viral load of specimens.[2]

A recent study from China, published as a preprint, found a higher viral load and higher risk of pre-symptomatic transmission in patients infected with the Delta variant when compared to those infected with non-VOC SARS-CoV-2.[3] The study identified 167 patients infected with the Delta variant in an outbreak in Guangdong. The mean estimates of the latent period and the incubation period were 4.0 and 5.8 days, respectively. A relatively higher viral load was observed in Delta cases than in the 49 non-VOC SARS-CoV-2

infections. The study also found the secondary attack rate among close contacts of Delta cases was 1.4%, and 73.9% (95% CI: 67.2%- 81.3%) of the transmissions occurred before onset of symptoms. Index cases without vaccination (OR: 2.84, 95% CI: 1.19, 8.45) or with a single dose of vaccination (OR: 6.02, 95% confidence interval: 2.45, 18.16) were more likely to transmit infection to their contacts than those who had received two doses of vaccination.[3] Although this study provides insight into differences in the incubation period and secondary transmission of the Delta variant, these are preliminary findings specific to one outbreak and further studies will aid in understanding how these findings can be generalized to other contexts.

A large national cohort study from the United Kingdom found higher risk of admission to hospital or emergency care for COVID-19 patients infected with the Delta variant as compared to those infected with the Alpha variant.[4] In this study, 2.3% (196/8682) patients infected with the Delta variant versus 2.2% (764/34 656) patients infected with the Alpha variant were admitted to hospital within 14 days after the first positive specimen was collected (adjusted hazard ratio [HR] 2.26 [95% CI 1.32–3.89]). Additionally, the HR for hospital admission with the addition of attendance to emergency care was higher in patients infected with the Delta variant within 14 days (5.7%) than those infected with the Alpha variant (4.2%) (adjusted HR 1.45 [1.08–1.95]).[4] Nearly three quarters (74%) of all individuals, across both groups included in the study, were unvaccinated. Overall, these findings suggest that outbreaks of the Delta variant may lead to a greater burden on health-care services than the Alpha variant, a burden which may be even greater in largely unvaccinated populations.

Table 2: Summary of phenotypic impacts* of Variants of Concern

WHO label	Alpha	Beta	Gamma	Delta
Transmissibility	Increased transmissibility[5]	Increased transmissibility[6,7]	Increased transmissibility[7,8]	Increased transmissibility and secondary attack rate[7,9]
Disease severity	Increased risk of hospitalization[10], possible increased risk of severity and mortality[11,2]	Not confirmed, possible increased risk of in-hospital mortality[12]	Not confirmed, possible increased risk of hospitalization[13]	Increased risk of hospitalization[14]
Risk of reinfection	Neutralizing activity retained [15], risk of reinfection remains similar[16]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[17]	Moderate reduction in neutralizing activity reported[18]	Reduction in neutralizing activity reported[19–21]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF); no impact on overall result from multiple target RT-PCR, No impact on Ag RDTs observed[22]	No impact on RT-PCR or Ag RDTs observed[21]	None reported to date	None reported to date

**Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.*

Table 3. Summary of vaccine performance against Variants of Concern

	Anhui ZL-Recombinant	AstraZeneca-Vaxzevria	Beijing CNBG-BBIBP-CorV	Bharat-Covaxin	Gamaleya-Sputnik V	Janssen-Ad26.COV 2.5	Moderna-mRNA-1273	Moderna-mRNA-1273/ Pfizer BioNTech-Comirnaty	Novavax-Covavax	Pfizer BioNTech-Comirnaty	SII - Covishield	Sinovac-CoronaVac
Alpha[23,24]												
Summary of VE*	Protection retained against all outcomes											
- Severe disease	-	↓$_{1}$	-	-	-	-	↔$_{1}$	↔$_{1}$	-	↔$_{4}$	-	-
- Symptomatic disease	-	↔to↓$_{3}$	-	-	-	-	↔$_{1}$	↔$_{1}$	↓$_{1}$	↔$_{3}$	-	-
- Infection	-	↔to↓$_{2}$	-	-	-		↔$_{1}$	-	-	↔$_{2}$	-	-
Neutralization	↔$_{2}$	↓$_{5}$	↔$_{1}$	↔$_{2}$	↔$_{3}$	↔$_{3}$	↔to↓$_{11}$	↓$_{1}$	↓$_{1}$	↔to↓$_{37}$	↔$_{1}$	↔to↓$_{5}$
Beta[25–28]												
Summary of VE*	Protection retained against severe disease; reduced protection against symptomatic disease; limited evidence											
- Severe disease	-	-	-	-	-	↔$_{1}$	-	-	-	↔$_{2}$	-	-
- Symptomatic disease	-	↓↓↓$_{1}$	-	-	-	↔$_{1}$	-	-	↓↓↓$_{1}$	↔$_{1}$	-	-
- Infection	-	-	-	-	-	-	↔$_{1}$	-	-	↓$_{1}$	-	-
Neutralization	↔to↓$_{3}$	↔to↓↓$_{6}$	↔to↓$_{2}$	↓$_{2}$	↓to↓↓$_{3}$	↓to↓↓$_{5}$	↓to↓↓$_{13}$	↓↓↓$_{1}$	↓↓↓$_{1}$	↓to↓↓$_{34}$	↓$_{1}$	↓to↓↓$_{4}$
Gamma												
Summary of VE*	Unclear impact; very limited evidence											
- Severe disease	-	-	-	-	-	-	-	-	-	-	-	-
- Symptomatic disease	-	-	-	-	-	-	-	-	-	-	-	-
- Infection	-	-	-	-	-	-	-	-	-	-	-	↔$_{1}$
Neutralization	↔$_{1}$	↓$_{2}$	-	-	↓$_{2}$	↓$_{2}$	↓$_{6}$	-	-	↔to↓$_{18}$	-	↔to↓$_{3}$
Delta[29]												
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection; limited evidence											
- Severe disease	-	↔$_{1}$	-	-	-	-	↔$_{1}$	-	-	↔$_{4}$	-	-
- Symptomatic disease	-	↓↓$_{2}$	-	↓$_{1}$	-	-	-	-	-	↔to↓$_{3}$	-	-
- Infection	-	↓$_{1}$	-	-	-	-	-	-	-	↓$_{1}$	-	-
Neutralization	↔to↓$_{2}$	↓to↓↓$_{5}$	-	↔to↓$_{3}$	↓$_{2}$	↓$_{3}$	↓$_{4}$	↓↓$_{1}$	-	↓to↓↓$_{10}$	↓$_{2}$	↓to↓↓↓$_{2}$

VE refers to vaccine effectiveness and vaccine efficacy

Summary of VE*: indicates the general conclusions but only for the vaccines evaluated against the specific variant

Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10% reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20% reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30% reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30% reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used.

"Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study.

The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources page (https://view-hub.org/resources). For individual vaccine effectiveness studies, see 'COVID-19 Vaccine Effectiveness Results Summary', reference numbers noted with a '#'. For a list of all neutralization studies, see 'COVID-19 Vaccine Neutralization Studies Table'.

References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table and are included in the reference section below.

Since the 24 August update, three studies have been published that have assessed vaccine effectiveness against SARS-CoV-2 variants of concern.

A retrospective cohort study (preprint) from the United States of America evaluated the effectiveness of the Pfizer BioNTech-Comirnaty vaccine against documented infection and hospitalization due to the Delta variant seven or more days after receiving the second dose, among persons ≥ 12 years of age in a large healthcare system.[30] VE against Delta infection was lower than that against infection due to non-Delta variants [75%, (95% CI: 71-78%) vs. 91% (95% CI: 88-92%)]. The decreased VE for Delta infection is likely explained by multiple factors including but not limited to confounding effect of waning VE and inherent properties of Delta variants that influence immune escape. Given that the Delta variant became dominant in June, the timing of most Delta infections included in this study likely occurred after longer intervals post-vaccination as compared to that of non-Delta infections. When stratifying by time since vaccination, VE against infection due to Delta was high (93%) one month after full vaccination but dropped to 53% four or more months after full vaccination. While a decrease in VE was also observed for non-Delta variants as the time since full vaccination increased, this decrease was less pronounced (97% at one month vs. 67% at four months post vaccination), which, although not statistically significantly different from the findings for Delta, could suggest that waning may be more pronounced for Delta than other variants. VE against hospitalization due to Delta remained high at 90% (95% CI: 89-92%) and was comparable to the VE against hospitalization due to non-Delta variants of 95% (95% CI: 90-98%).

A second retrospective cohort study (preprint) of over 9 million individuals ≥ 16 years of age in Israel assessed the effectiveness of Pfizer BioNTech-Comirnaty in preventing infection and severe disease during the month of July when Delta was the predominant variant.[31] The study evaluated the VE among persons vaccinated more recently compared to those vaccinated earlier. For persons fully vaccinated two months prior, VE against infection ranged from 73%-80% by age group, whereas VE for persons vaccinated six months prior ranged from 50-58% by age group. For all age groups, VE against infection decreased with increasing age at time of vaccination. However, consistent with the above study from the United States of America, investigators found that VE against severe disease remained high for persons 40 years and older vaccinated six months prior. (VE of 94% for persons 40-59 years and 86% for persons ≥ 60 years of age). Of note, this study did not compare VE for Delta against other variants, so the relative VE by variant was not presented.

A third study (preprint) used a test-negative design to evaluate the effectiveness of Pfizer BioNTech-Comirnaty against infection and severe disease due to Alpha, Beta, and Delta variants, separately, among individuals ≥ 16 years in Qatar.[32] VE against infection due to Alpha, Beta, and Delta five to nine weeks post second dose was 82.2% (95% CI: 72.1-89.0%), 52.7% (95% CI: 40.3-62.7%), and 72.0% (95% CI: 60.5-80.5%), respectively. VE against infection showed a general trend of decreasing VE after five to nine weeks post second dose for all variants through to ≥ 25 weeks post second dose, with 0% VE for the Alpha and Delta variants beyond 20 weeks. VE against infection due to each of the variants was lower than that observed in other studies, although the Qatar study was different in that most infections were asymptomatic. VE against severe, critical and fatal disease at five to nine weeks post second dose was high for all variants: 100.0% (95% CI: 0.0-100%), 94.6% (95% CI: 63.5-99.9%), and 100% (95% CI: 74.3-100%) for the Alpha, Beta, and Delta variants, respectively. VE against hospitalization and at later time points after vaccination remained high, but it is not possible to interpret the waning VE against severe disease because there were very small numbers of subjects and wide confidence intervals for these later time points.

In addition to the above studies, two recent studies from Israel evaluated the short-term relative effectiveness of a third dose of Pfizer BioNTech-Comirnaty in preventing infection and severe disease compared to those who received two doses of vaccine, during the past month when Delta was the dominant circulating strain.[33,34] One study found that a third dose of the vaccine decreased the relative risk of infection

and of severe disease ≥ 12 or more days post vaccination by 11.4- and 15.5-fold, respectively compared to persons receiving two doses of the vaccine. In a second study, 79% (95% CI: 72-84%) of infections 14-20 days post vaccination were estimated to have been prevented by a third dose of the vaccine compared to persons receiving two doses. Of note, neither of these studies provide the absolute VE compared to an unvaccinated group, as was done in the previously mentioned studies of fully vaccinated persons.

Similar to the studies included in the 24 August update, these studies provide additional evidence for continued high VE of Pfizer BioNTech-Comirnaty against severe COVID-19 due to the Delta variant. There is some evidence from multiple studies that VE against SARS-CoV-2 infection and non-severe disease may be reduced with Delta. However, it is challenging to separate the effect of Delta from the effect of potential waning immunity, as Delta circulation in most countries became dominant several months after vaccine introduction. In addition, differential risk of exposure profiles between vaccinated and unvaccinated populations, as well as early versus late vaccines, increasing levels of natural immunity in the unvaccinated population over time, or other potential confounding factors, complicate interpretation of VE estimates over time. Furthermore, the study from Qatar provides additional evidence of reduced Pfizer BioNTech-Comirnaty effectiveness against infection due to Beta, consistent with previous studies. Additional studies, over longer time periods and in different settings are needed to further support these initial findings.

Additional notes on VOC impacts on vaccines

- Studies presenting VOC-specific vaccine efficacy or effectiveness (VE) estimates for full vaccination (≥ 7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 randomised RCT results from non-VOC settings. For severe disease and infection, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca Vaxzevria for severe disease (phase 3 RCT efficacy estimates against severe disease are used as comparator since a within study comparator is unavailable) and for infection (when phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).

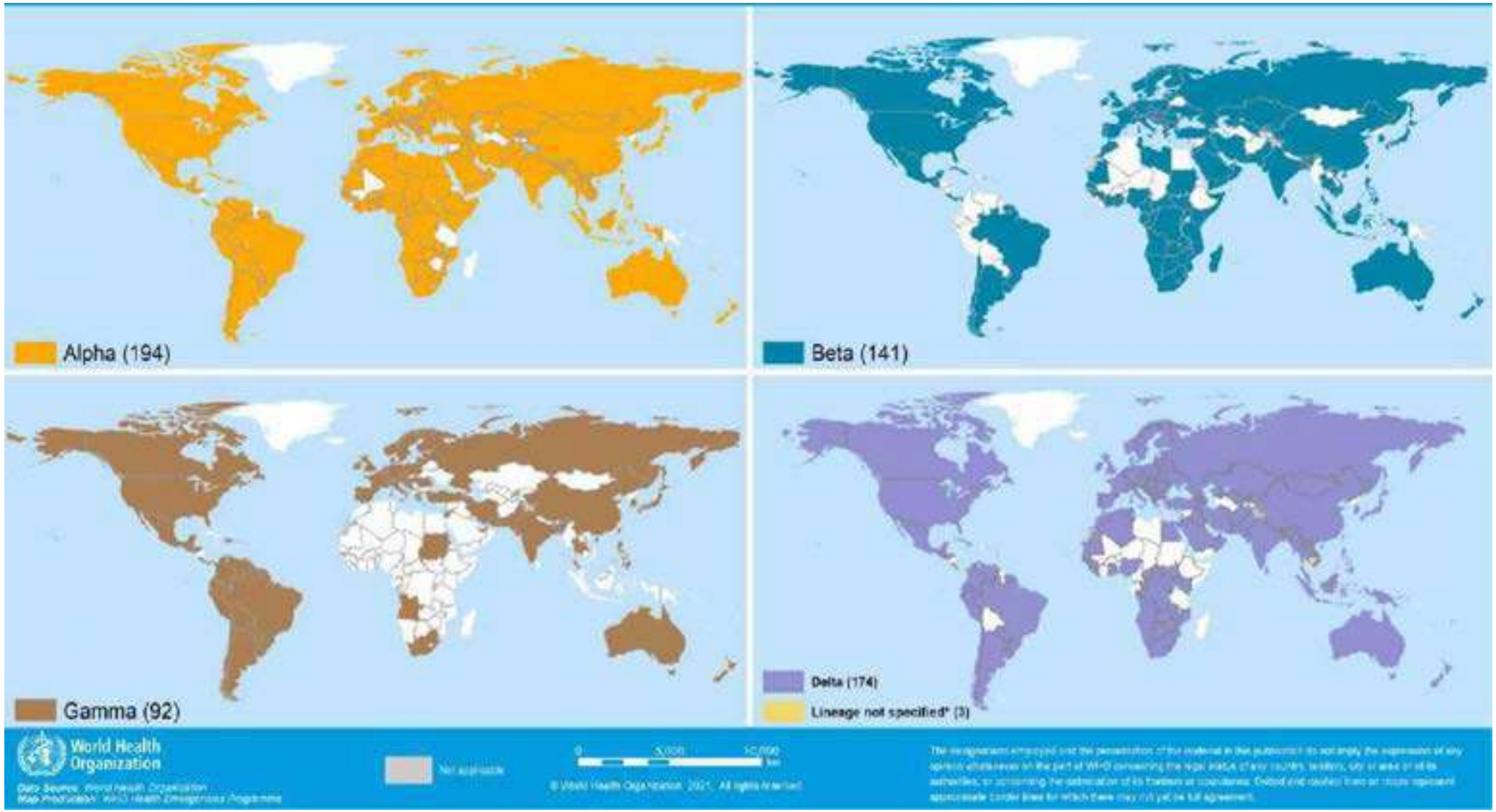
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Some VE estimates may not be included in the table above when it is not possible to tease out the effect of waning from the effect of variants on vaccine performance.

Table 3 presents the impact of variants on product specific vaccine efficacy/effectiveness (VE) and quantifies the reduction in VE in the setting of variants compared to VE in non-VOC settings. Of note, reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. In addition, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection, as is the case for AstraZeneca-Vaxzevria.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Figure 4. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 7 September 2021**



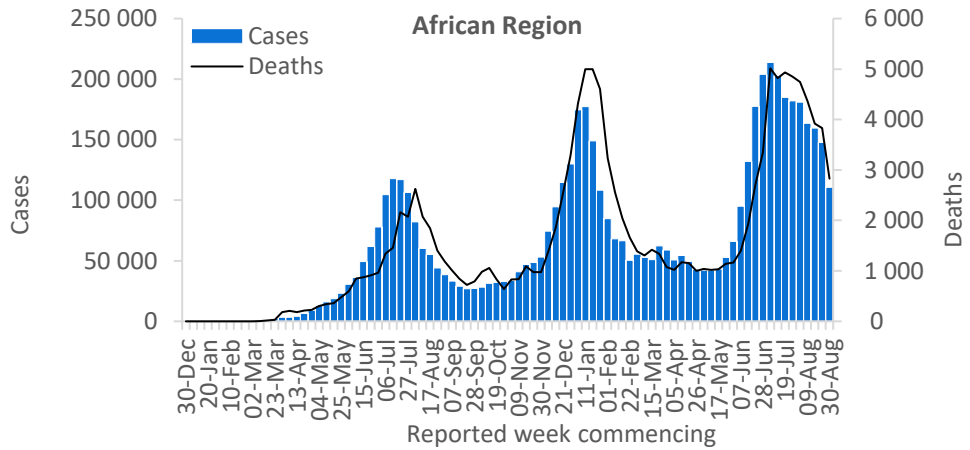
**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details.*

WHO regional overviews – Epidemiological week 30 Aug–5 Sep 2021

African Region

The African Region continued to report substantial declines in incidence of both cases and deaths. This week the Region reported over 110 000 new cases and over 2800 new deaths, decreases of 25% and 26%, respectively, as compared to the previous week. These declining trends for the Region's third wave are encouraging, and largely driven by continued declines in South Africa. Nonetheless, several countries continued to report increasing trends in cases (> 30%) this week while mortality continued to increase, albeit at a lower proportion (>10%) in five countries. The highest numbers of new cases were reported from South Africa (56 823 new cases; 95.8 new cases per 100 000 population; a 26% decrease), Ethiopia (8391 new cases; 7.3 new cases per 100 000; a 17% decrease), and Botswana (5524 new cases; 234.9 new cases per 100 000; a 25% decrease).

The highest numbers of new deaths were reported from South Africa (1700 new deaths; 2.9 new deaths per 100 000 population; a 23% decrease), Algeria (194 new deaths; <1 new death per 100 000; similar to the previous week), and Nigeria (127 new deaths; <1 new death per 100 000; a 26% increase).

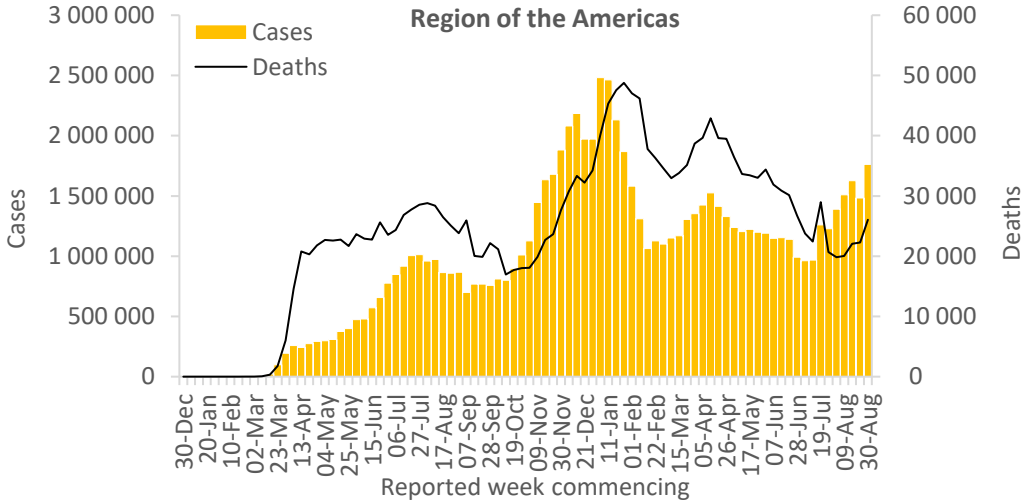


Updates from the African Region

Region of the Americas

The Region of the Americas reported marked increases in the number of cases and deaths in the past week. With over 1.7 million new cases and over 26 000 new deaths, increases of 19% and 17%, respectively. These are the largest regional proportionate increases in cases at the regional level as compared to the previous week. The highest numbers of new cases were reported from the United States of America (1 297 399 new cases; 392.0 new cases per 100 000; a 38% increase), Brazil (152 154 new cases; 71.6 new cases per 100 000; a 13% decrease), and Mexico (93 977 new cases; 72.9 new cases per 100 000; an 18% decrease).

The highest numbers of new deaths were reported from the United States of America (11 946 new deaths; 3.6 new deaths per 100 000; a 63% increase), Mexico (5071 new deaths; 3.9 new deaths per 100 000; similar to the previous week), and Brazil (4344 new deaths; 2.0 new deaths per 100 000; a 10% decrease).

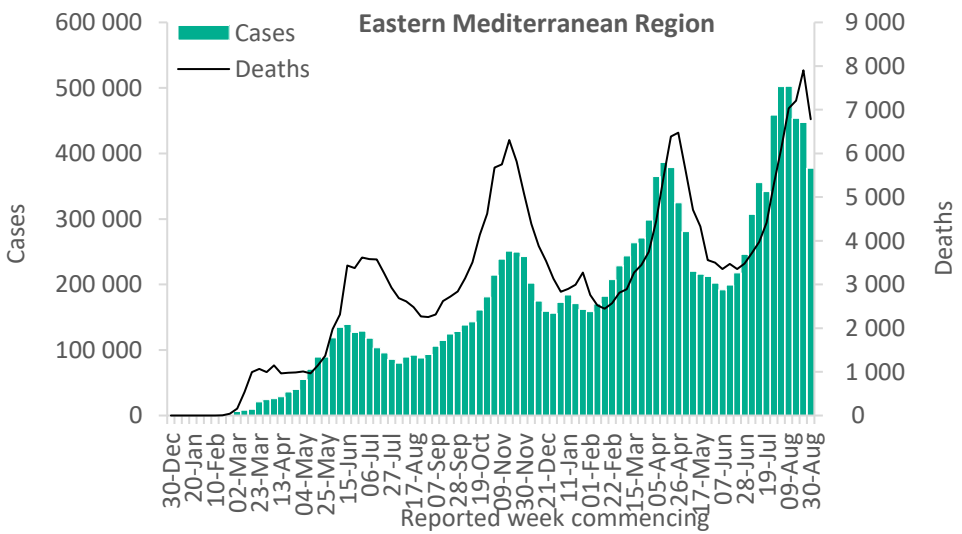


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 377 000 new cases and over 6700 new deaths, decreases of 16% and 14%, respectively, as compared to the previous week. The downward trend in the number of new cases reflects the decrease in case incidence from the top three countries reporting the highest numbers in the Region; the Islamic Republic of Iran (208 089 new cases; 247.7 new cases per 100 000; an 18% decrease), Iraq (44 043 new cases; 109.5 new cases per 100 000; a 10% decrease), and Morocco (31 510 new cases; 85.4 new cases per 100 000; a 27% decrease). These three countries accounted for over 75% of all new cases in the Eastern Mediterranean. However, six of 22 countries in the Region, including Djibouti, Egypt, occupied Palestinian territory, Oman, Syrian Arab Republic and Yemen reported increases in case incidence.

The highest numbers of new deaths were reported from the Islamic Republic of Iran (4163 new deaths; 5.0 new deaths per 100 000; an 8% decrease), Morocco (632 new deaths; 1.7 new deaths per 100 000; an 8% decrease), and Pakistan (579 new deaths; 0.3 new deaths per 100 000; a 16% decrease).

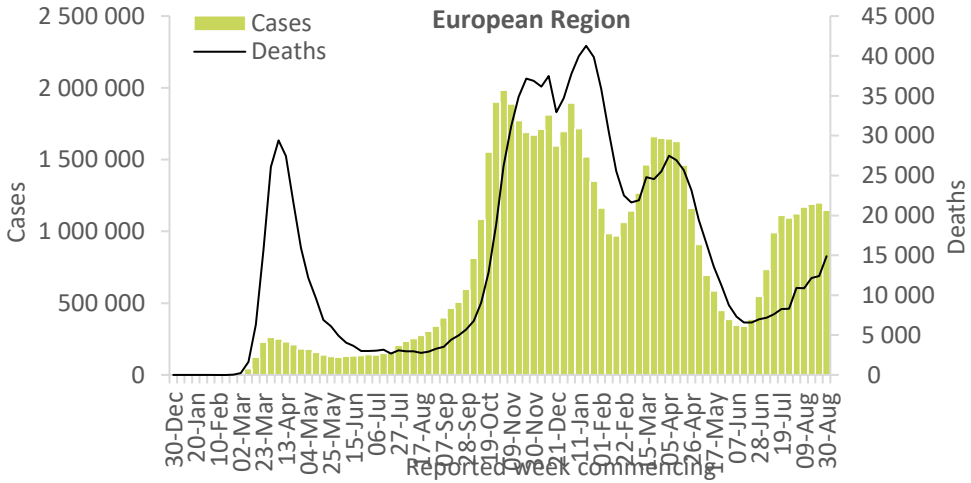


Updates from the Eastern Mediterranean Region

European Region

While the European Region reported a number of new cases similar to that of the past week, with over 1.1 million new cases, the number of deaths increased by 20% with over 14 000 new deaths as compared to the previous week. Almost half (29/61) of the countries reported an increase in death incidence compared to last week. However, in a few countries in the Region where relatively high vaccination coverage and high case incidence were reported, death incidence was relatively low compared to that of countries with low vaccination coverage. The highest numbers of new cases were reported from the United Kingdom (243 125 new cases; 358.1 new cases per 100 000; similar to the previous week), Turkey (149 114 new cases; 176.8 new cases per 100 000; a 13% increase), and the Russian Federation (129 772 new cases; 88.9 new cases per 100 000; similar to the previous week).

The highest numbers of new deaths were reported from the Russian Federation (5563 new deaths; 3.8 new deaths per 100 000; similar to the previous week), Turkey (1879 new deaths; 2.2 new deaths per 100 000; a 15% increase), and Kazakhstan (1768 new deaths; 9.4 new deaths per 100 00).

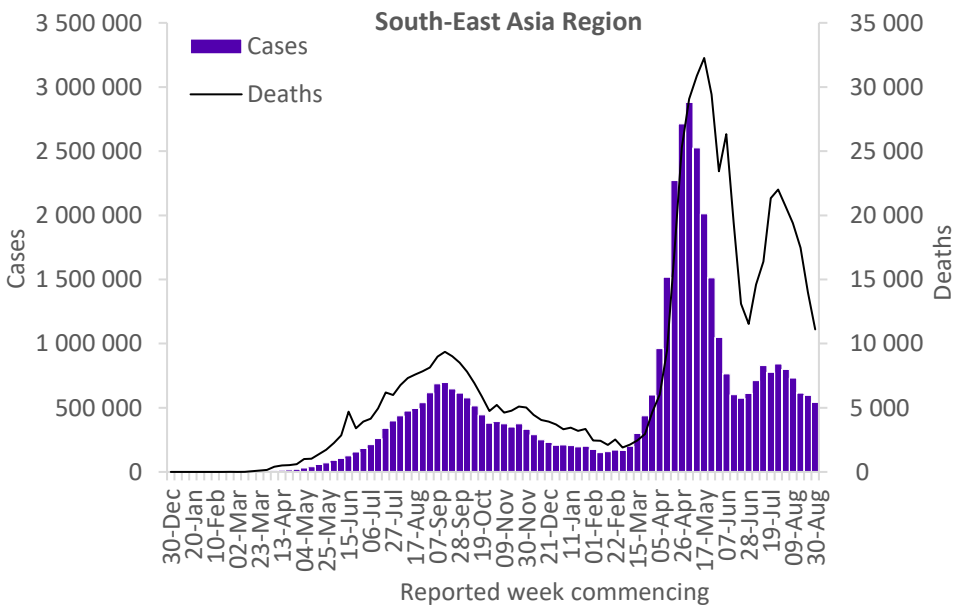


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 543 000 new cases and over 11 000 new deaths, decreases of 9% and 21%, respectively, as compared to the previous week. Despite the overall regional decline in case incidence, India, Myanmar and the Maldives reported increases in the number of cases of 8%, 24% and 43%, respectively, as compared to the previous week. The highest numbers of new cases were reported from India (293 643 new cases; 21.3 new cases per 100 000; an 8% increase), Thailand (106 443 new cases; 152.5 new cases per 100 000; a 15% decrease), and Indonesia (55 189 new cases; 20.2 new cases per 100 000; a 42% decrease).

All countries except for Sri Lanka and Timor-Leste reported decreases in weekly mortality by more than 5%. The highest numbers of new deaths were reported from Indonesia (3938 new deaths; 1.4 new deaths per 100 000; a 29% decrease), India (2703 new deaths; <1 new deaths per 100 000; a 22% decrease), and Thailand (1712 new deaths; 2.5 new deaths per 100 000; a 6% decrease).

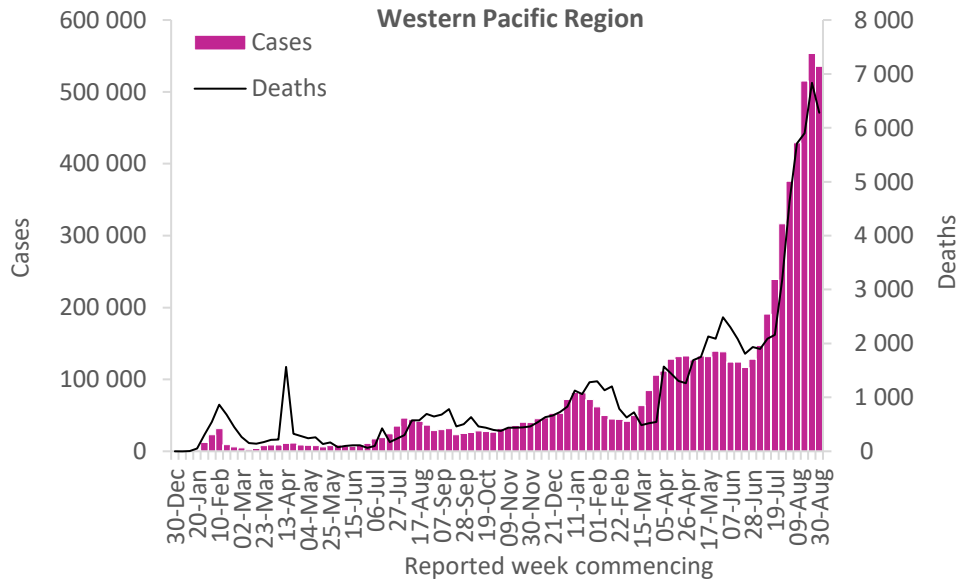


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported over 531 000 new cases, a similar number as the previous week, and over 6200 new deaths, an 8% decrease compared to the previous week. Although the absolute numbers of cases and deaths remain very high, this is the first week in over two months in which declining trends in the number of deaths were reported. The highest numbers of new cases were reported from Malaysia (138 929 new cases; 429.2 new cases per 100 000; an 8% decrease), the Philippines (125 470 new cases; 114.5 new cases per 100 000; a 12% increase), and Japan (122 628 new cases; 97.0 new cases per 100 000; a 22% decrease).

The highest numbers of new deaths were reported from Viet Nam (2388 new deaths; 2.5 new deaths per 100 000; a 17% decrease), Malaysia (2081 new deaths; 6.4 new deaths per 100 000; a 12% increase), and the Philippines (1054 new deaths; 1.0 new deaths per 100 000; a 25% decrease).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update (WOU) is a report provided by the COVID-19 Strategic preparedness and response plan (SPRP) monitoring and evaluation team which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework.

In this week's edition of the COVID-19 Weekly Operational Update, published on 6 September, highlights of country-level actions and WHO support to countries include:

- Shipment of medical supplies to Viet Nam
- Engagement of the African Regional Monitoring of Vaccine Effectiveness (AFRO-MoVE) in 17 countries
- Scale-up capacity for real-time PCR testing for SARS-CoV-2 and biosafety in Montenegro at the subnational level
- Risk Communications and Community Engagement support hotline in Thailand
- Civil Society engagement in North-West Syria
- Updates on WHO's Early AI-Powered Social Listening Tool (EARS) to support country infodemic management
- Inauguration of the WHO Hub for Pandemic and Epidemic Intelligence in Berlin
- Progress on a subset of indicators from the SPRP 2021 Monitoring and Evaluation Framework
- Updates on WHO's financing to support countries in SPRP 2021 implementation and provision of critical supplies.

For more information, see the Weekly operational update on COVID-19

Annex

- COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 7 September 2021**

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Afghanistan	●	-	-	●	-
Albania	●	-	-	○	-
Algeria	●	-	-	●	-
Andorra	○	○	-	○	-
Angola	●	●	●	●	-
Anguilla	●	-	-	●	-
Antigua and Barbuda	●	●	●	●	-
Argentina	●	●	●	●	-
Armenia	●	-	-	●	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	○	-
Bahamas	●	-	-	-	-
Bahrain	●	●	●	●	-
Bangladesh	●	●	●	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	●	●	-
Benin	●	-	-	-	-
Bermuda	●	●	-	●	-
Bhutan	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	●	●	-
Bosnia and Herzegovina	●	●	●	○	-
Botswana	○	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	●	-
Brunei Darussalam	●	●	-	○	-
Bulgaria	●	●	-	●	-
Burkina Faso	●	-	-	-	-
Burundi	●	●	-	●	-
Cabo Verde	●	-	-	●	-
Cambodia	●	●	-	●	●*
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	●	●	●	-
Central African Republic	●	●	-	●	-
Chad	●	-	-	-	-
Chile	●	●	●	●	-
China	●	●	●	○	-
Colombia	●	-	●	●	-
Comoros	●	●	-	-	-
Congo	●	○	-	●	-
Costa Rica	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Croatia	●	●	●	○	-
Cuba	●	●	-	●	-
Curaçao	●	●	●	●	●
Cyprus	●	●	-	○	-
Czechia	●	●	●	●	-
Côte d'Ivoire	●	●	-	-	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-
Dominica	●	-	-	●*	-
Dominican Republic	●	-	●	-	-
Ecuador	●	-	●	●	-
Egypt	●	-	-	●	-
El Salvador	●	-	●	●	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	○	-
Eswatini	●*	●	-	●	-
Ethiopia	●	-	-	-	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	●	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	○	-
Greece	●	●	●	●	-
Grenada	●	-	-	●	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	●	-
Guinea	●	○	-	●*	-
Guinea-Bissau	●	●	-	●*	-
Guyana	-	-	●	-	-
Haiti	●	-	●	-	-
Honduras	●	-	●*	●*	-
Hungary	●	○	●	○	-
Iceland	●	-	-	-	-
India	●	●	●	●	-
Indonesia	●	●	-	●	-
Iran (Islamic Republic of)	●	●	●	●	-
Iraq	●	●	-	●	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	●	○	-	●	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	○	-
Kuwait	●	●	-	●	-
Kyrgyzstan	●	●	-	●	-
Lao People's Democratic Republic	●	-	-	●	-
Latvia	●	●	●	○	-
Lebanon	●	-	-	●	-
Lesotho	-	●	-	●	-
Liberia	●	-	-	○	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	○	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-
Madagascar	-	●	-	-	-
Malawi	●	●	-	●	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	●	●	-	●	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	●	-	●	-
Mongolia	●	-	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Montenegro	●	-	○	○	-
Montserrat	●	-	●	-	-
Morocco	●	●	-	●	-
Mozambique	●	●	-	●	-
Myanmar	●	-	-	●	-
Namibia	●	●	-	●	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	-	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	●	-	●	-
North Macedonia	●	●	-	○	-
Northern Mariana Islands (Commonwealth of the)	○	-	-	●	-
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●	-
Oman	●	●	-	●	-
Pakistan	●	●	●	●	-
Panama	●	●	●	●	●
Papua New Guinea	-	-	-	●	-
Paraguay	●	-	●	●	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Republic of Moldova	●	-	-	●	-
Romania	●	●	●	●	-
Russian Federation	●	●	○	●	-
Rwanda	●	●	-	●	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	-	-
Saint Kitts and Nevis	-	-	-	●	-
Saint Lucia	●	-	-	●	-
Saint Martin	●	●	-	-	-
Saint Pierre and Miquelon	-	-	-	●	-
Saint Vincent and the Grenadines	-	-	-	●	-
Sao Tome and Principe	○	-	-	-	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	●	-
Serbia	●	-	-	●	-
Seychelles	●	●	-	●	-
Sierra Leone	-	-	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Singapore	●	●	●	●	-
Sint Maarten	●	●	●	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	●	-	-	-
South Africa	●	●	○	●	-
South Sudan	●	●	-	●	-
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-
Sudan	●	●	●	-	-
Suriname	●	●	●	●	-
Sweden	●	●	●	●	-
Switzerland	●	●	●	●	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	●	-
Togo	●	●	-	○	-
Trinidad and Tobago	●	-	●	●	-
Tunisia	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	-	●	-
Ukraine	●	○	-	○	-
United Arab Emirates	●	●	●	●	-
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-
United States Virgin Islands	●	●	-	●	-
United States of America	●	●	●	●	-
Uruguay	●	●	●	●	-
Uzbekistan	●	●	-	○	-
Venezuela (Bolivarian Republic of)	●	-	●	●	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	-	●	-
Zimbabwe	-	●	-	●	-

**Newly reported in this update.*

Unspecified B.1.617 reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

from official sources.

ation become available.

****Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern*

See also Annex 2: Data, table and figure notes.

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

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COVID-19 Weekly Epidemiological Update

Edition 55, published 31 August 2021

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Summary of the Weekly Operational Update

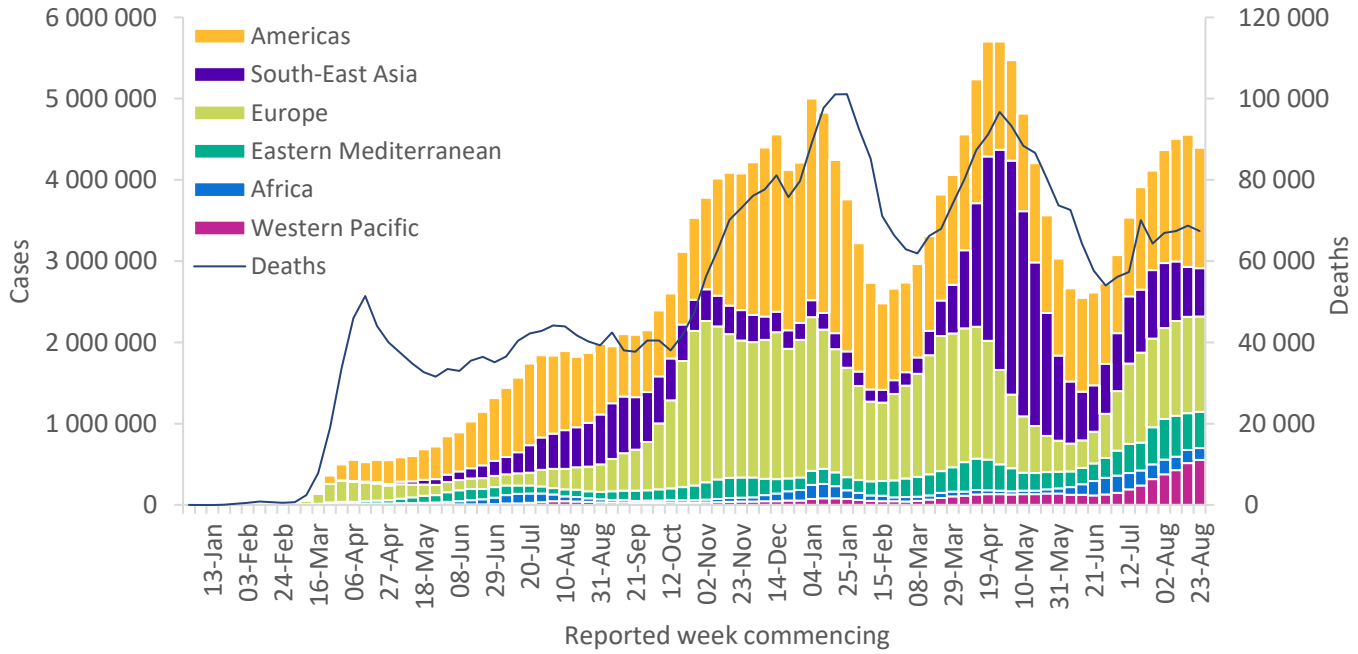
Global overview

Data as of 29 August 2021

With just under 4.4 million new cases reported this week (23-29 August), the number of new cases reported globally remains similar to the previous week after having increased for nearly two months (Figure 1). In the past week, all regions reported either a decline (Regions of Africa and the Americas) or a similar trend (Europe, South-East Asia and Eastern Mediterranean Regions) in new cases, except for the Western Pacific Region which reported a 7% increase as compared to previous week.

The number of deaths reported globally this week was also similar to last week, with just over 67 000 new deaths reported. The Eastern Mediterranean and Western Pacific Regions reported an increase in the number of weekly deaths, 9% and 16% respectively, while the South-East Asia Region reported the largest decrease (20%). The numbers of deaths reported in the Regions of Africa, Europe and the Americas were similar to last week. The cumulative number of cases reported globally is now nearly 216 million and the cumulative number of deaths is just under 4.5 million.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 29 August 2021**



**See *Annex 2: Data, table and figure notes*

The Regions reporting the highest weekly incidence rates per 100 000 population of cases and of deaths remain the same as last week: the Regions of the Americas (144.9 new cases per 100 000 population; 2.2 deaths per 100 000 population) and Europe (125.7 new cases per 100 000 population; 1.3 deaths per 100 000 population). The Eastern Mediterranean Region also reported a high incidence of weekly deaths (1.1 per 100 000 population).

The highest numbers of new cases were reported from the United States of America (938 014 new cases; 8% decrease), India (270 796 new cases; 17% increase), the Islamic Republic of Iran (254 753 new cases; similar to the previous week), the United Kingdom (237 556 new cases; 8% increase), and Brazil (175 807 new cases; 16% decrease).

Globally, cases of the Alpha variant have been reported in 193 countries (one new country since last week), territories or areas (hereafter countries), while 141 countries (no new countries) have reported cases of the Beta variant; 91 countries (five new countries) have reported cases of the Gamma variant; and 170 countries (seven new countries) have reported cases of the Delta variant.

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 29 August 2021**

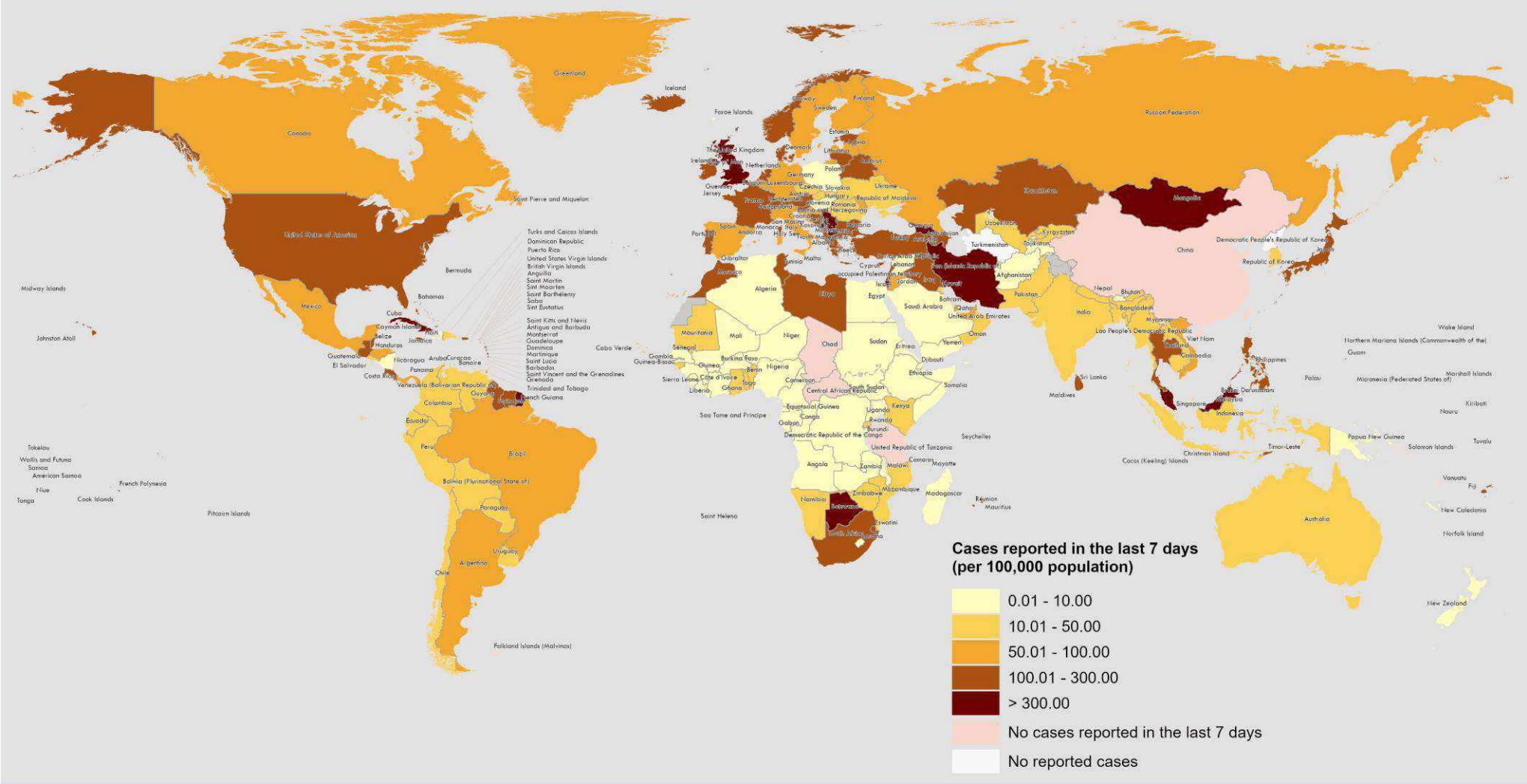
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 481 995 (34%)	-9%	83 231 838 (39%)	22 259 (33%)	1%	2 094 503 (47%)
Europe	1 172 461 (27%)	-1%	64 856 816 (30%)	12 584 (19%)	4%	1 267 494 (28%)
South-East Asia	596 456 (14%)	-3%	41 119 317 (19%)	14 010 (21%)	-20%	641 874 (14%)
Eastern Mediterranean	443 703 (10%)	-2%	14 498 768 (7%)	7 831 (12%)	9%	264 425 (6%)
Western Pacific	553 344 (13%)	7%	6 399 247 (3%)	6 835 (10%)	16%	88 168 (2%)
Africa	147 789 (3%)	-7%	5 608 074 (3%)	3 869 (6%)	-3%	134 276 (3%)
Global	**4 395 748 (100%)**	**-4%**	**215 714 824 (100%)**	**67 388 (100%)**	**-2%**	**4 490 753 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
***See Annex 2: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 23 – 29 August 2021**



Data Source: World Health Organization, United Nations Population Division (population prospect 2020), EuroStat
Map Production: WHO Health Emergencies Programme

Not applicable

0 2,000 4,000 km

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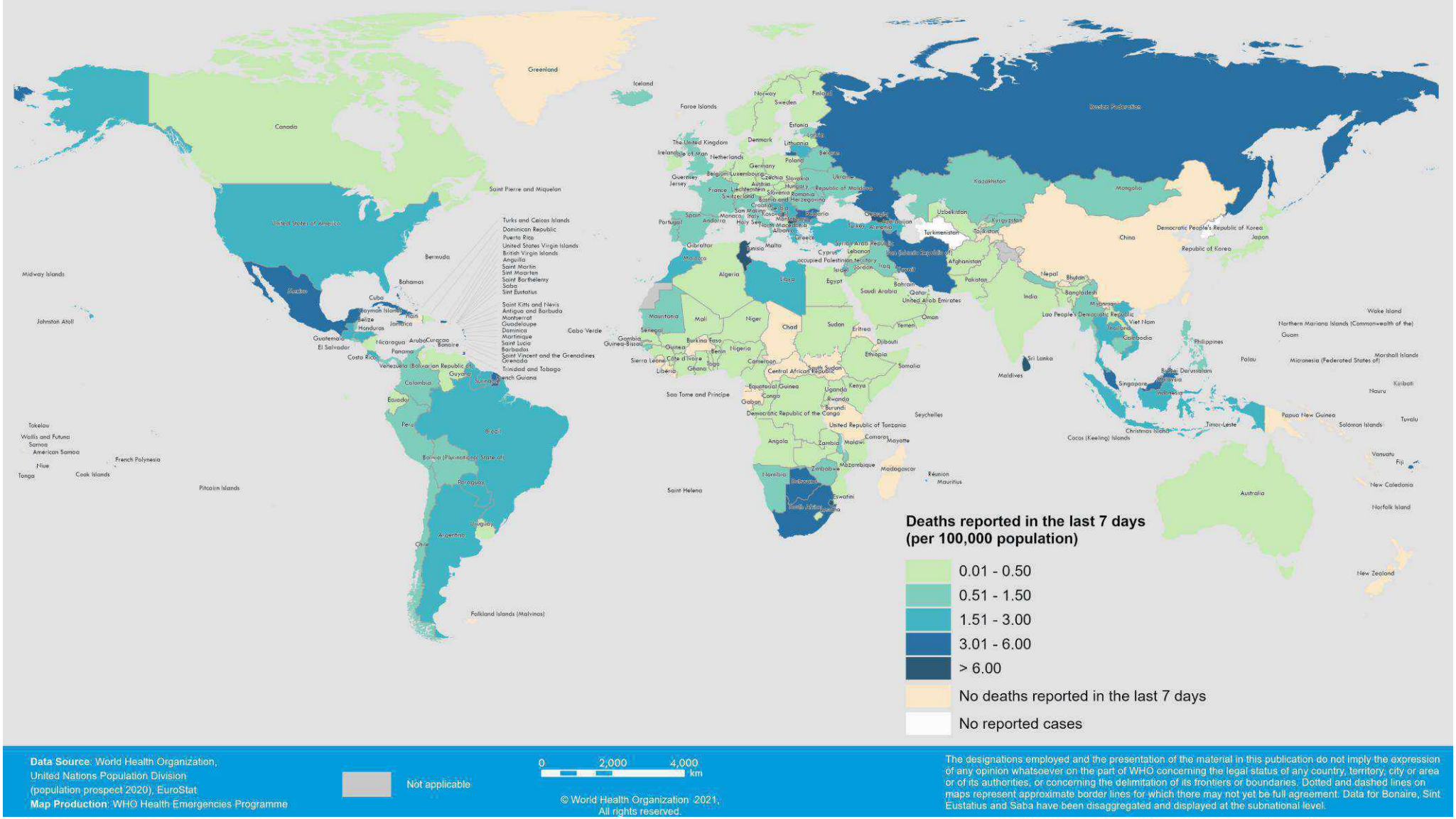
**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 23 – 29 August 2021**



**See *Annex 2: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact vaccine, therapeutics, diagnostics or effectiveness of public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health.

As these risks evolve, WHO will continue to update lists of global VOIs and VOCs to support setting priorities for surveillance and research, and ultimately guide response strategies (for more information, please see the Tracking SARS-CoV-2 variants website).

National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants.

As surveillance activities to detect SARS-CoV-2 variants are strengthened at national and subnational levels, including through the expansion of genomic sequencing capacities, the number of countries/areas/territories (hereafter countries) reporting VOCs continues to increase (Figure 4, Annex 1). This distribution should nonetheless be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

As countries gradually resume non-essential international travel, the introduction of risk mitigation measures aiming to reduce travel-associated exportation, importation and onward transmission of SARS-CoV-2 should be based on thorough risk assessments conducted systematically and routinely.

Updates to the variant classifications

As the global public health risks posed by specific SARS-CoV-2 variants become better understood, WHO will continue to update the list of global VOIs and VOCs to support the setting of priorities for surveillance and research, and ultimately to guide response strategies. These updates reflect virus evolution and the emergence of new variants, changing epidemiology, as well as our evolving understanding of the phenotypic impacts of variants as new evidence becomes available. A previously designated Alert for further monitoring which subsequently meets the WHO working definition of a Variant of Interest (VOI) or Variant of Concern (VOC) can be reclassified.

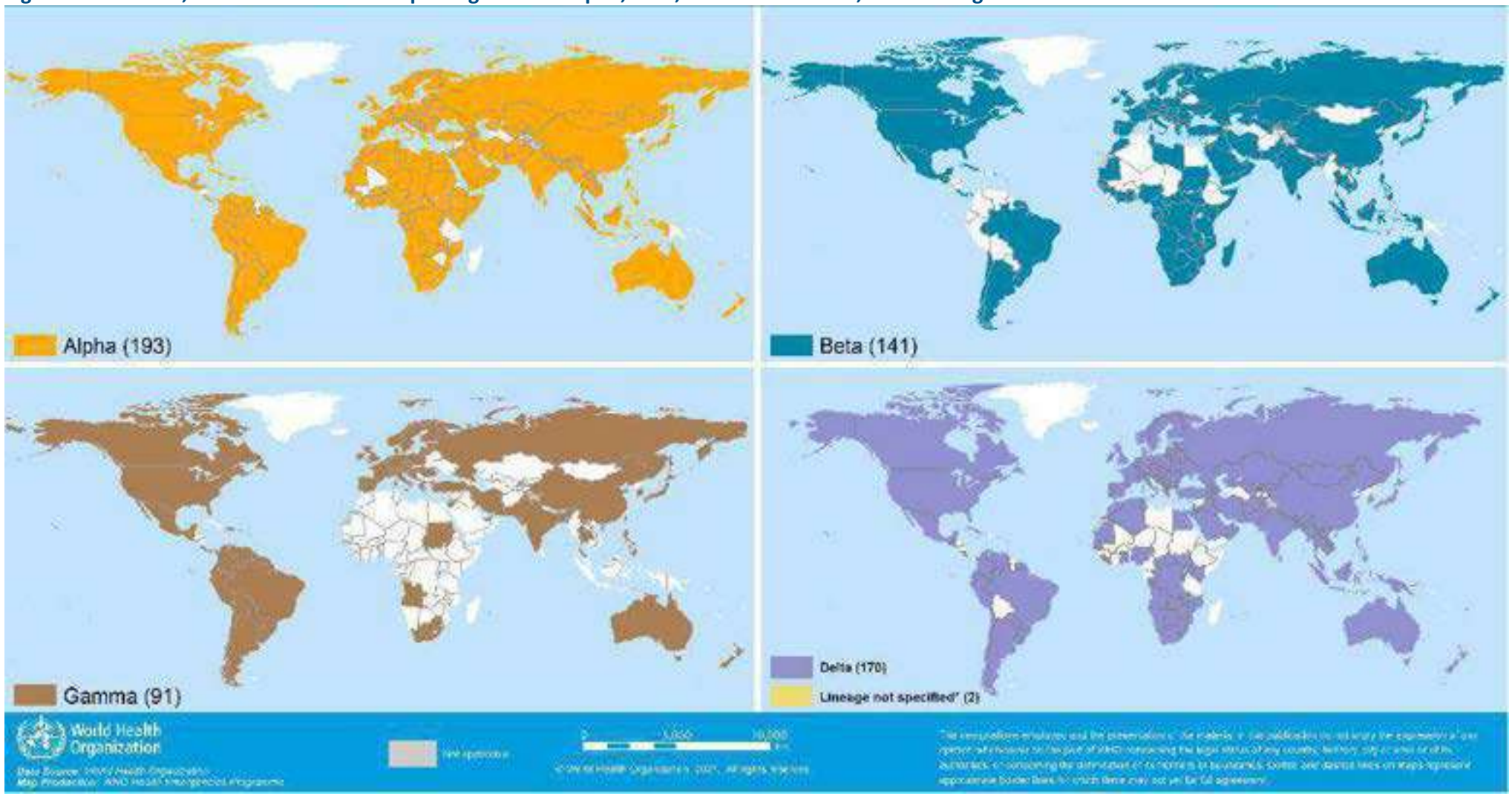
Based on the latest round of assessments, B.1.621 was classified as a VOI on 30 August 2021 and given the WHO label "Mu". This includes the descendent Pango lineage B.1.621.1. This variant is known as 21H in Nextstrain nomenclature. The Mu variant has a constellation of mutations that indicate potential properties of immune escape. Preliminary data presented to the Virus Evolution Working Group show a reduction in neutralization capacity of convalescent and vaccinee sera similar to that seen for the Beta variant, but this needs to be confirmed by further studies.

Since its first identification in Colombia in January 2021, there have been a few sporadic reports of cases of the Mu variant and some larger outbreaks have been reported from other countries in South America and in Europe. As of 29 August, over 4500 sequences (3794 sequences of B.1.621 and 856 sequences of B.1.621.1) have been uploaded to GISAID from 39 countries. Although the global prevalence of the Mu variant among sequenced cases has declined and is currently below 0.1%, the prevalence in Colombia (39%) and Ecuador (13%) has consistently increased. The reported prevalence should be interpreted with due consideration of sequencing capacities and timeliness of sharing of sequences, both of which vary between countries. More studies are required to understand the phenotypic and clinical characteristics of this variant. The epidemiology of the Mu variant in South America, particularly with the co-circulation of the Delta variant, will be monitored for changes.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Figure 4. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 31 August 2021**



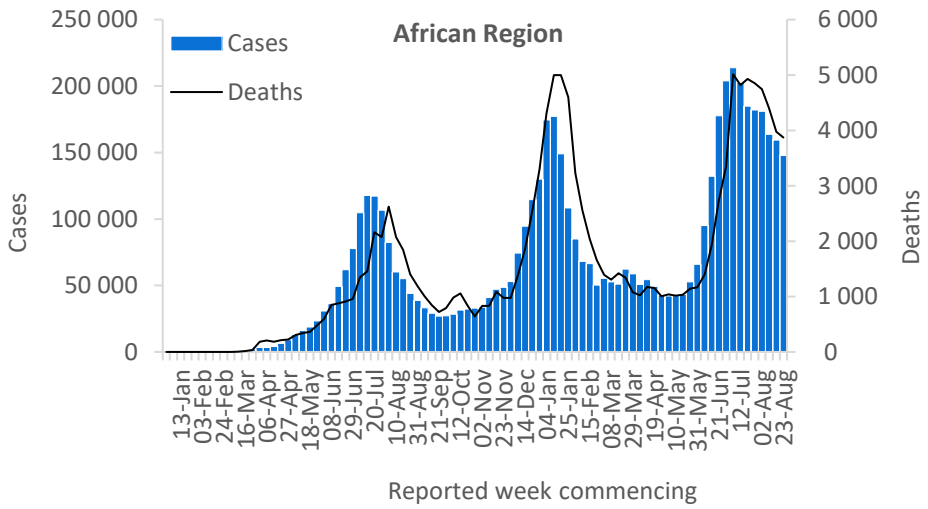
**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details.*

WHO regional overviews – Epidemiological week 23 – 29 Aug 2021

African Region

This week the African Region reported over 147 000 new cases, a 7% decrease as compared to the previous week as the Region continued its decreasing trend. In the past week, two countries, South Africa and Ethiopia, accounted for over half (59%) of all the new cases reported in the Region. Over 3800 new deaths were reported in the Region this week, a similar number to that reported during the previous week. However, there are still a number of countries reporting worrying mortality trends; in the past week, eight countries reported increases of over 50% in weekly deaths. The highest numbers of new cases were reported from South Africa (76 966 new cases; 129.8 new cases per 100 000 population; a 9% decrease), Ethiopia (10 058 new cases; 8.7 new cases per 100 000; a 61% increase), and Botswana (7332 new cases; 311.8 new cases per 100 000; a 24% decrease).

The highest numbers of new deaths were reported from South Africa (2210 new deaths; 3.7 new deaths per 100 000 population; a 7% decrease), Kenya (227 new deaths; <1 new death per 100 000; a 53% increase), and Algeria (195 new deaths; 0.4 new deaths per 100 000; an 11% decrease).

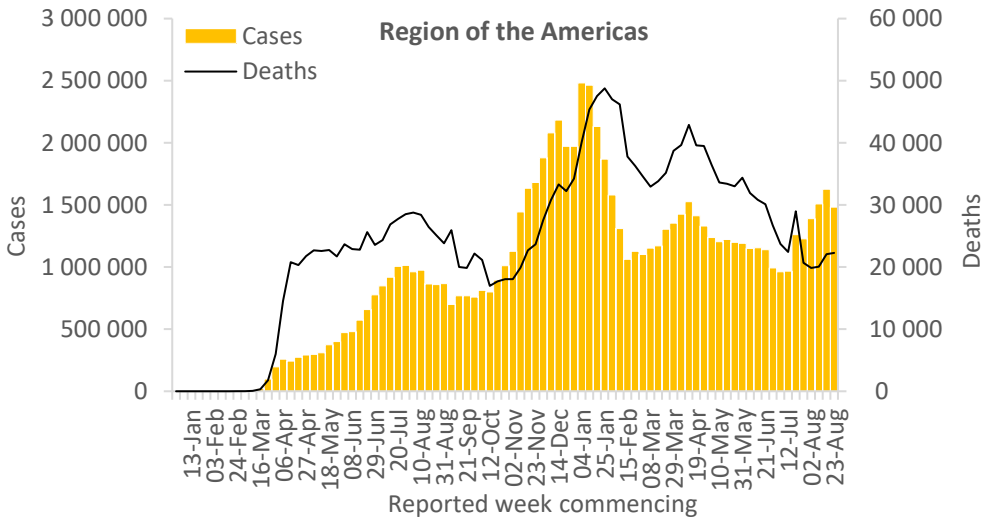


Updates from the African Region

Region of the Americas

Despite reporting the largest proportional decrease (9%) in cases this week, the Region of the Americas reported over 1.4 million new cases, the largest number of cases reported globally; the United States of America continued to report the largest number of cases in the Region accounting for 63% of all new cases reported this week. Notable increases in cases were also observed in Canada (28% increase) and Guatemala (23% increase) this week. The Region reported over 22 000 new deaths this week, similar to the number reported during the previous week. The highest numbers of new cases were reported from the United States of America (938 014 new cases; 283.4 new cases per 100 000; an 8% decrease), Brazil (175 807 new cases; 82.7 new cases per 100 000; a 16% decrease), and Mexico (114 209 new cases; 88.6 new cases per 100 000; an 11% decrease).

The highest numbers of new deaths were reported from the United States of America (7323 new deaths; 2.2 new deaths per 100 000; a 9% increase), Mexico (5070 new deaths; 3.9 new deaths per 100 000; a 9% increase), and Brazil (4815 new deaths; 2.3 new deaths per 100 000; a 15% decrease).

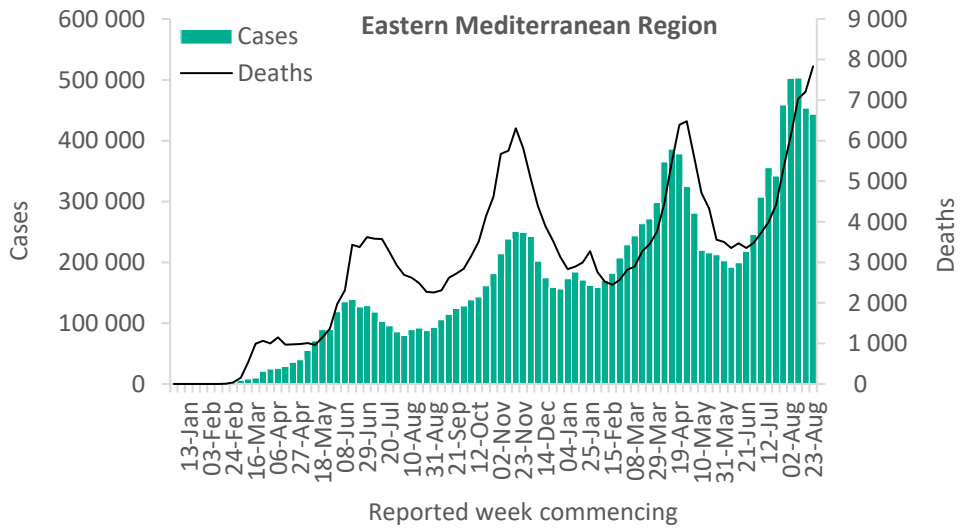


Updates from the Region of the Americas

Eastern Mediterranean Region

While the number of new cases reported in the Eastern Mediterranean Region this week remained similar to the previous week with over 443 000 new cases reported, the Region reported over 7800 new deaths, a 9% increase compared to the previous week. This increasing trend in mortality can be attributed to the number of deaths increasing in 9 of the 22 countries (41%) in the region this week. The highest numbers of new cases were reported from the Islamic Republic of Iran (254 753 new cases; 303.3 new cases per 100 000; similar to the previous week), Iraq (48 897 new cases; 121.6 new cases per 100 000; similar to the previous week), and Morocco (43 244 new cases; 117.2 new cases per 100 000; a 20% decrease).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (4547 new deaths; 5.4 new deaths per 100 000; a 10% increase), Tunisia (760 new deaths; 6.4 new deaths per 100 000; a 7% increase), and Pakistan (687 new deaths; <1 new death per 100 000; a 35% increase).

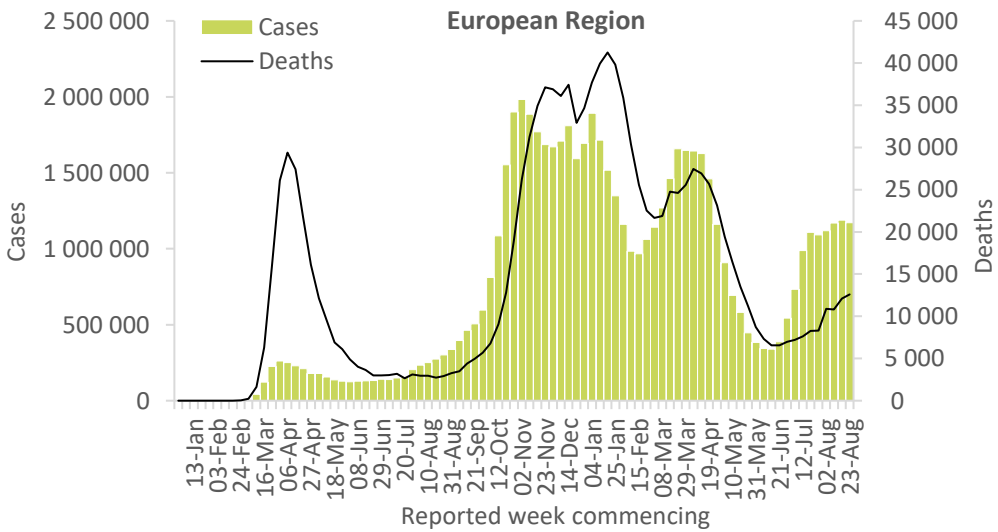


Updates from the Eastern Mediterranean Region

European Region

Overall, in the European Region the numbers of new cases and deaths reported this week remained similar to the previous week, with over 1.1 million new cases and over 12 000 new deaths. Although the number of new weekly cases seem to be plateauing, the number of new deaths, while showing signs of slowing, has continued to increase in many countries in the Region, and should continue to be closely monitored. The highest numbers of new cases were reported from the United Kingdom (237 556 new cases; 349.9 new cases per 100 000; an 8% increase), the Russian Federation (135 740 new cases; 93.0 new cases per 100 000; a 7% decrease), and Turkey (132 508 new cases; 157.1 new cases per 100 000; similar to the previous week).

The highest numbers of new deaths were reported from the Russian Federation (5593 new deaths; 3.8 new deaths per 100 000; similar to the previous week), Turkey (1631 new deaths; 1.9 new deaths per 100 000; a 23% increase), and the United Kingdom (785 new deaths; 1.2 new deaths per 100 000; a 13% increase).

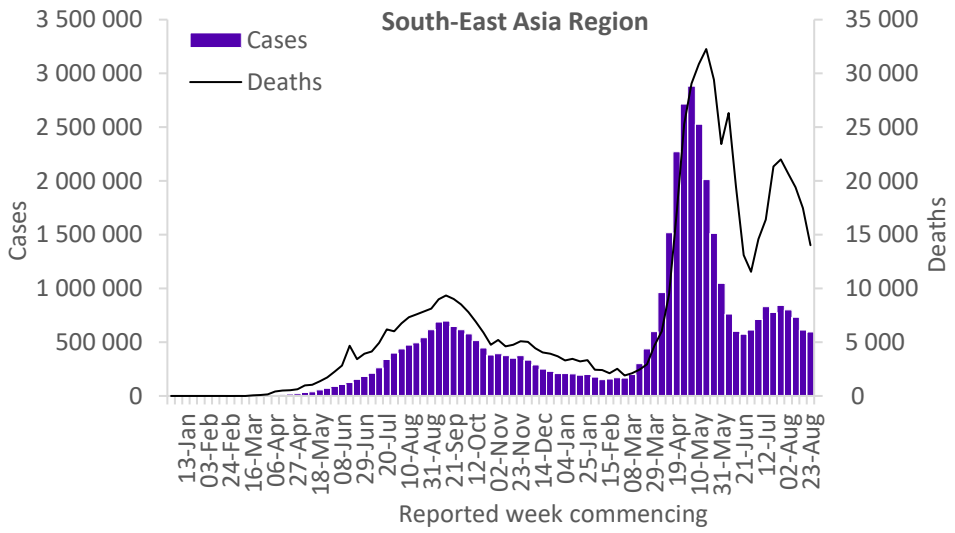


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported a relatively similar case incidence as compared to the previous week with over 596 000 new cases. Despite a regional decrease in deaths, three countries reported increases of over 15% this week: Timor-Leste (32%), Sri Lanka (19%) and India (17%). The Region reported over 14 000 new deaths, a 20% decrease compared to the previous week, largely due to 60% (6/10) of countries in the Region reporting decreases in weekly mortality during the past week. The highest numbers of new cases were reported from India (270 796 new cases; 19.6 new cases per 100 000; a 17% increase), Thailand (124 796 new cases; 178.8 new cases per 100 000; a 12% decrease), and Indonesia (94 375 new cases; 34.5 new cases per 100 000; a 25% decrease).

The highest numbers of new deaths were reported from Indonesia (5551 new deaths; 2.0 new deaths per 100 000; a 37% decrease), India (3463 new deaths; <1 new death per 100 000; a 10% increase), and Thailand (1823 new deaths; 2.6 new deaths per 100 000; similar to the previous week).

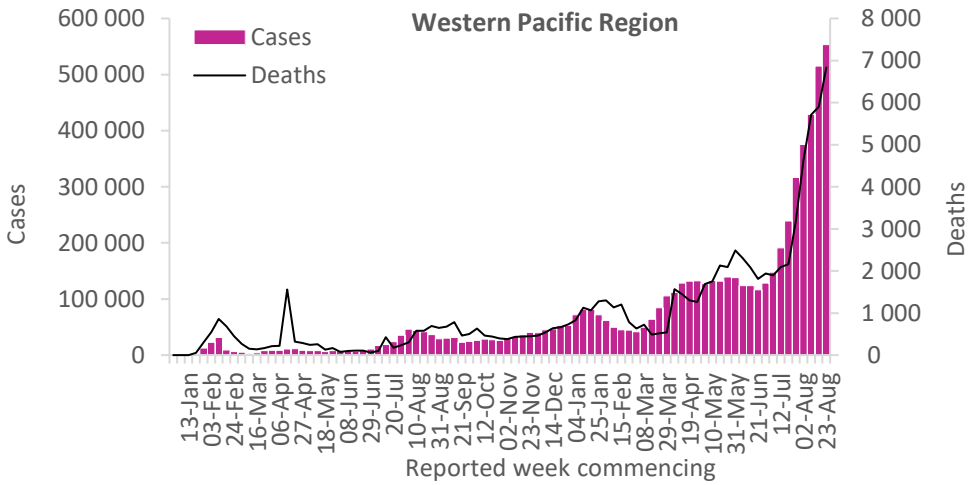


Updates from the South-East Asia Region

Western Pacific Region

For the past two months, the Western Pacific Region has reported an increasing trend in the numbers of weekly cases and deaths. In the past week, the Region reported over 553 000 new cases and over 6800 new deaths, increases of 7% and 16%, respectively, as compared to the previous week. Nearly half (48%) of all countries in the Region reported increases this week. The Western Pacific Region reported the highest proportionate increase in new deaths this week, an increase driven by substantial increases in case incidence in French Polynesia (86%), Japan (53%) and Viet Nam (36%). The highest numbers of new cases were reported from Japan (156 931 new cases; 124.1 new cases per 100 000; a 5% increase), Malaysia (150 224 new cases; 464.1 new cases per 100 000; similar to the previous week), and the Philippines (111 904 new cases; 102.1 new cases per 100 000; a 16% increase).

The highest numbers of new deaths were reported from Viet Nam (2865 new deaths; 2.9 new deaths per 100 000; a 36% increase), Malaysia (1866 new deaths; 5.8 new deaths per 100 000; a 9% increase), and the Philippines (1412 new deaths; 1.3 new deaths per 100 000; a 7% decrease).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update (WOU) is a report provided by the COVID-19 Strategic preparedness and response plan (SPRP) monitoring and evaluation team which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework.

In this week's edition of the COVID-19 Weekly Operational Update, published on 30 August, highlights of country-level actions and WHO support to countries include:

- GeneXpert machine donated to Belize's Central Medical Laboratory
- Supporting quality management implementation, coordination and costing as part of the COVID-19 laboratory response in Kyrgyzstan
- 15 000 kg of medical supplies arrive in Fiji to support the response to a surge in COVID-19 cases
- Extending COVID-19 vaccination to Rohingya refugees in Cox's Bazar camps in Bangladesh
- Responding to COVID-19 in Jordan: The Innovative Use of Online Platforms
- The Elsje Finck-Sanichar College COVAB in Suriname embraces OpenWHO and online learning during COVID-19 pandemic
- Progress on a subset of indicators from the SPRP 2021 Monitoring and Evaluation Framework
- Updates on WHO's financing to support countries in SPRP 2021 implementation and provision of critical supplies.

For more information, see the Weekly operational update on COVID-19

Annex

COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 31 August 2021**

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Afghanistan	●	-	-	●	-
Albania	●	-	-	○	-
Algeria	●	-	-	●	-
Andorra	○	○	-	○	-
Angola	●	●	●	●	-
Anguilla	●	-	-	●	-
Antigua and Barbuda	●	●	●	●	-
Argentina	●	●	●	●	-
Armenia	●	-	-	●	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	○	-
Bahamas	●	-	-	-	-
Bahrain	●	●	●*	●	-
Bangladesh	●	●	●*	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	●	●	-
Benin	●	-	-	-	-
Bermuda	●	●	-	●	-
Bhutan	●	●	-	●	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Bosnia and Herzegovina	●	●	●	○	-
Botswana	○	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	●	-
Brunei Darussalam	●	●	-	○*	-
Bulgaria	●	●	-	●	-
Burkina Faso	●	-	-	-	-
Burundi	●	●	-	●	-
Cabo Verde	●	-	-	●	-
Cambodia	●	●	-	●	-
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	●	●	●	-
Central African Republic	●	●	-	●	-
Chad	●	-	-	-	-
Chile	●	●	●	●	-
China	●	●	●	○	-
Colombia	●	-	●	●	-
Comoros	●*	●	-	-	-
Congo	●	○	-	●	-
Costa Rica	●	●	●	●	-
Croatia	●	●	●	○	-
Cuba	●	●	-	●	-
Curaçao	●	●	●	●	●
Cyprus	●	●	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Czechia	●	●	●	●	-
Côte d'Ivoire	●	●	-	-	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-
Dominica	●	-	-	-	-
Dominican Republic	●	-	●	-	-
Ecuador	●	-	●	●	-
Egypt	●	-	-	●	-
El Salvador	●	-	●	●	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	○	-
Eswatini	-	●	-	●	-
Ethiopia	●	-	-	-	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	●	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	○*	-
Greece	●	●	●	●	-
Grenada	●	-	-	●	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	●	-
Guinea	●	○	-	-	-
Guinea-Bissau	●	●	-	-	-
Guyana	-	-	●	-	-
Haiti	●	-	●	-	-
Honduras	●	-	-	-	-
Hungary	●	○	●	○	-
Iceland	●	-	-	-	-
India	●	●	●	●	-
Indonesia	●	●	-	●	-
Iran (Islamic Republic of)	●	●	●	●	-
Iraq	●	●	-	●	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	●	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	●	○	-	●	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	○	-
Kuwait	●	●	-	●	-
Kyrgyzstan	●	●	-	●*	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Lao People's Democratic Republic	●	-	-	●	-
Latvia	●	●	●	○	-
Lebanon	●	-	-	●	-
Lesotho	-	●	-	●	-
Liberia	●	-	-	○*	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	○*	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-
Madagascar	-	●	-	-	-
Malawi	●	●	-	●	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	●	●	-	●	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	●	-	●	-
Mongolia	●	-	-	●	-
Montenegro	●	-	○*	○	-
Montserrat	●	-	●	-	-
Morocco	●	●	-	●	-
Mozambique	●	●	-	●	-
Myanmar	●	-	-	●	-
Namibia	●	●	-	●	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	●	-	●	-
North Macedonia	●	●	-	○	-
Northern Mariana Islands (Commonwealth of the)	○	-	-	○	-
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●	-
Oman	●	●	-	●	-
Pakistan	●	●	●	●	-
Panama	●	●	●	●	●
Papua New Guinea	-	-	-	●	-
Paraguay	●	-	●	●	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	●	-	-	●	-
Romania	●	●	●	●	-
Russian Federation	●	●	○	●	-
Rwanda	●	●	-	●	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	-	-
Saint Kitts and Nevis	-	-	-	●*	-
Saint Lucia	●	-	-	●	-
Saint Martin	●	●	-	-	-
Saint Pierre and Miquelon	-	-	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Saint Vincent and the Grenadines	-	-	-	●	-
Sao Tome and Principe	○	-	-	-	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	●	-
Serbia	●	-	-	●	-
Seychelles	●	●	-	●	-
Sierra Leone	-	-	-	○	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	●	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	●	-	-	-
South Africa	●	●	○*	●	-
South Sudan	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-
Sudan	●	●	●*	-	-
Suriname	●	●	●	●	-
Sweden	●	●	●	●	-
Switzerland	●	●	●	●	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	●	-
Togo	●	●	-	○*	-
Trinidad and Tobago	●	-	●	●	-
Tunisia	●	●	-	●	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Ukraine	●	○	-	○	-
United Arab Emirates	●	●	●	●	-
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-
United States Virgin Islands	●	●	-	●	-
United States of America	●	●	●	●	-
Uruguay	●	●	●	●	-
Uzbekistan	●	●	-	○	-
Venezuela (Bolivarian Republic of)	●	-	●	●	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	-	●	-
Zimbabwe	-	●	-	●	-

**Newly reported in this update.*

Unspecified B.1.617 reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

WHO from official sources.

ation become available.

***Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern*

See also Annex 2: Data, table and figure notes.

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

COVID-19 Weekly Epidemiological Update

Edition 54, published 24 August 2021

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Key weekly updates

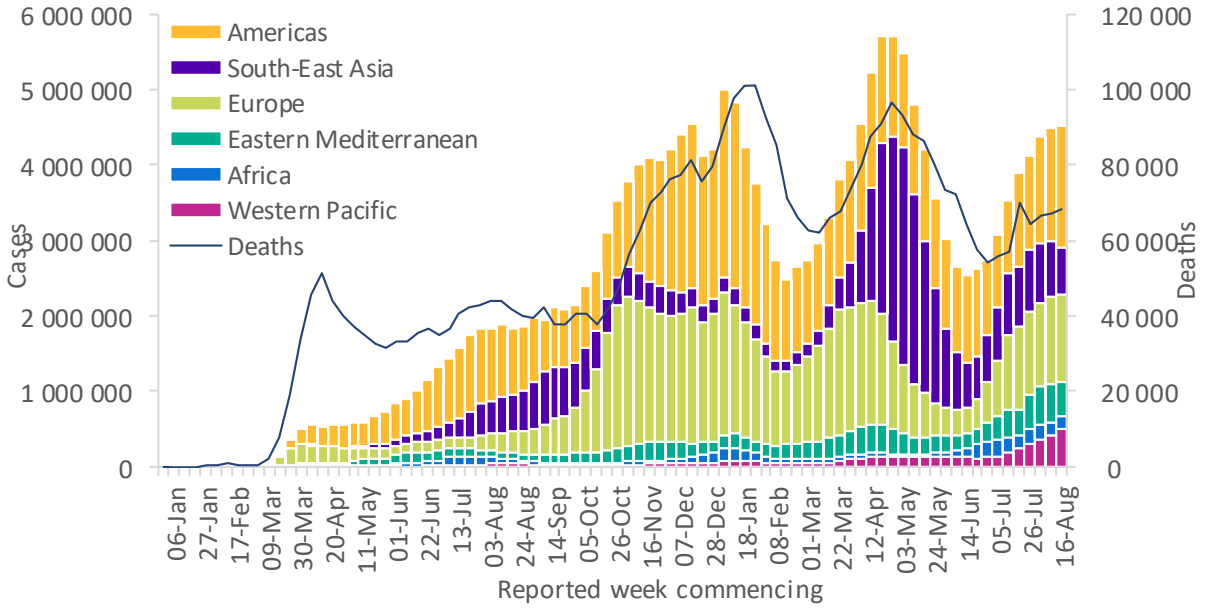
Global overview

Data as of 22 August 2021

With over 4.5 million new cases reported this week (16-22 August), the number of new cases reported globally seems to be stable after increasing for nearly two months (since mid-June) (Figure 1). The Regions of Western Pacific and Americas continue to report increases in new cases, with increases of 20% and 8% respectively as compared to last week. The South-East Asia and Eastern Mediterranean regions reported decreases in weekly incidence of 16% and 10% respectively. The European and African Regions reported case incidence rates similar to those reported last week.

The number of deaths reported globally this week remains similar to last week, with over 68 000 new deaths reported. Two Regions including Europe and Americas reported increases in new deaths of 11% and 10% respectively. The African and South-East Asia Regions reported decreases in new deaths of 11% and 10% respectively, whereas the numbers of deaths reported in the Eastern Mediterranean and Western Pacific Regions were similar to the numbers reported last week. The cumulative number of cases reported globally is now over 211 million and the cumulative number of deaths is just over 4.4 million.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 22 August 2021**



**See *Annex 2: Data, table and figure notes*

The Regions reporting the highest weekly case and deaths incidence rates per 100 000 population remain the same as last week: the Regions of the Americas (158.8 new cases per 100 000 population; 2.1 deaths per 100 000 population) and Europe (124.9 new cases per 100 000 population; 1.3 deaths per 100 000 population) . The Eastern Mediterranean Regionalso reported a high weekly incidence in deaths (1.0 per 100 000 population).

The highest numbers of new cases were reported from the United States of America (1 020 072 new cases; 15% increase), the Islamic Republic of Iran (251 610 new cases; 7% decrease), India (231 658 new cases; 10% decrease), the United Kingdom (219 919 new cases; 11% increase), and Brazil (209 099 new cases; 1% decrease).

Globally, cases of the Alpha variant have been reported in 192 countries (three new countries since last week), territories or areas (hereafter countries), while 141 countries (four new countries) have reported cases of the Beta variant; 86 countries (no new country) have reported cases of the Gamma variant; and 163 countries (seven new countries) have reported cases of the Delta variant.

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 22 August 2021**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 623 891 (36%)	8%	81 746 260 (39%)	21 983 (32%)	10%	2 072 143 (47%)
Europe	1 165 092 (26%)	0%	63 662 465 (30%)	11 912 (17%)	11%	1 254 406 (28%)
South-East Asia	614 080 (14%)	-16%	40 522 861 (19%)	17 475 (26%)	-10%	627 864 (14%)
Eastern Mediterranean	450 624 (10%)	-10%	14 052 013 (7%)	7 115 (10%)	1%	256 504 (6%)
Western Pacific	513 581 (11%)	20%	5 844 252 (3%)	5 896 (9%)	3%	81 329 (2%)
Africa	158 595 (4%)	-3%	5 459 743 (3%)	3 958 (6%)	-11%	130 407 (3%)
Global	**4 525 863 (100%)**	**0%**	**211 288 358 (100%)**	**68 339 (100%)**	**1%**	**4 422 666 (100%)**

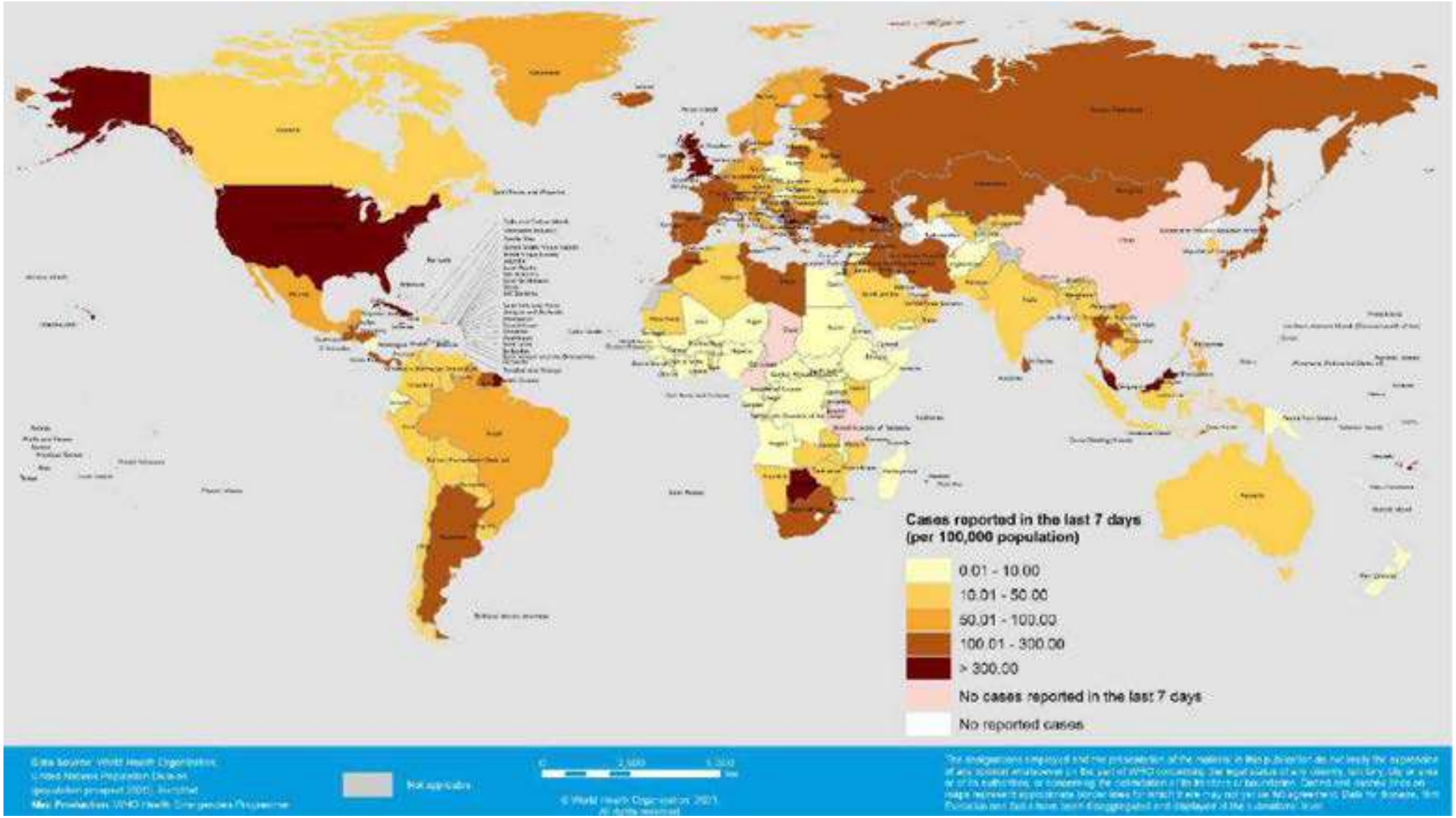
Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior

**See *Annex 2: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

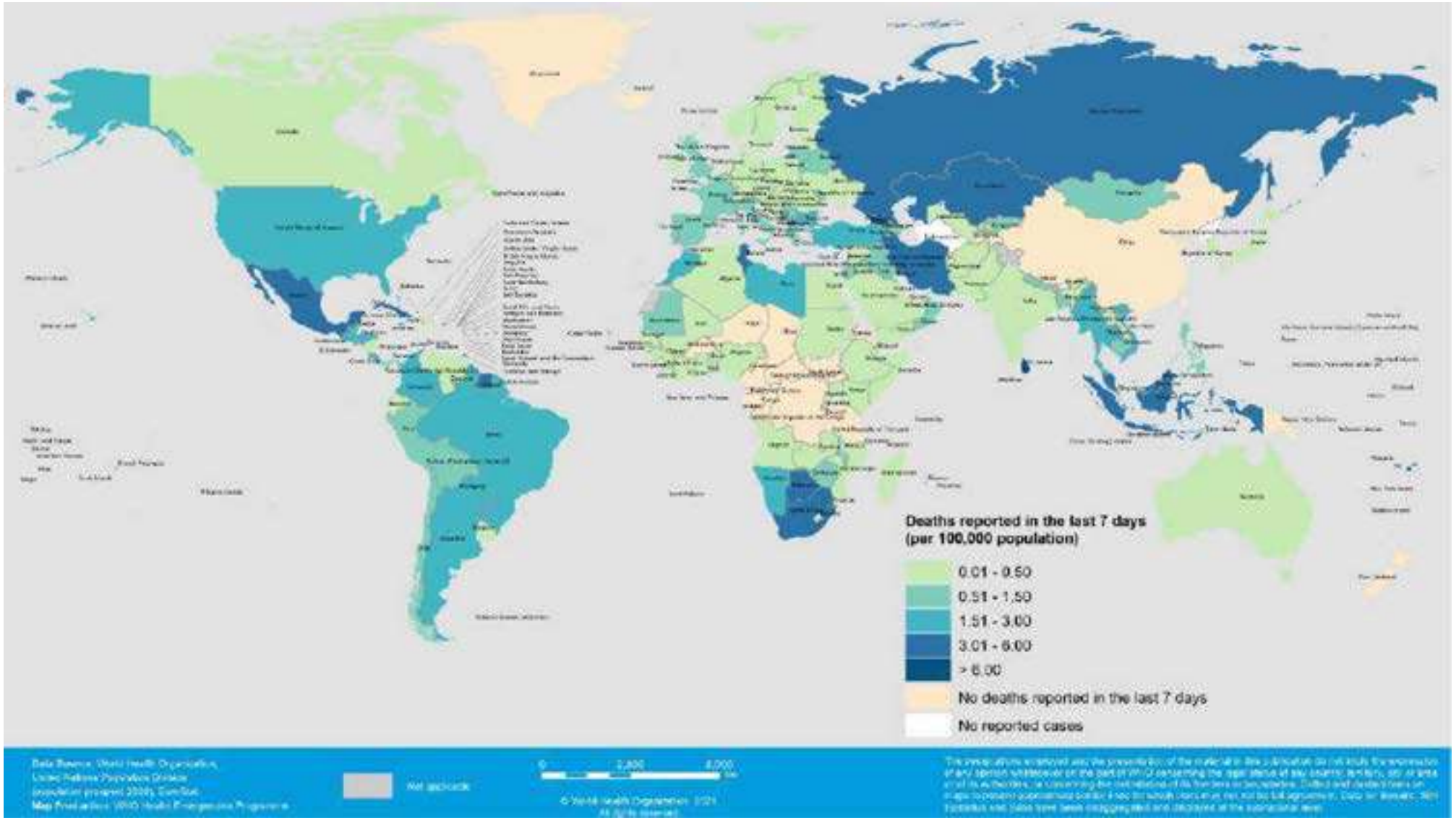
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 16 – 22 August 2021**



**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 16 – 22 August 2021**



**See *Annex 2: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact vaccine, therapeutics, diagnostics or effectiveness of public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants.

Updates on VOCs and VOIs, and a list of Alerts for Further Monitoring, are available on the WHO Tracking SARS-CoV-2 Variants website.

Geographic distribution

As surveillance activities to detect SARS-CoV-2 variants are strengthened at national and subnational levels, including through the expansion of genomic sequencing capacities, the number of countries/areas/territories (hereafter countries) reporting VOCs continues to increase (Figure 4, Annex 1). This distribution should nonetheless be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

Phenotypic characteristics

Available evidence on phenotypic impacts of VOCs is summarized in Table 2, as well as in previous editions of these COVID-19 Weekly Epidemiological Updates. Since the last detailed update on 10 August, new evidence has been published on the phenotypic characteristics of VOCs.

A preliminary population-level observational study conducted in Israel found that infection with the Alpha variant did not lead to higher case fatality rates. This finding contradicts previous studies from the United Kingdom that indicated an increase in the risk of severe outcomes and mortality associated with the Alpha variant[1].These findings could nonetheless be influenced by several factors such as much younger general population, high vaccination coverage and extensive free testing throughout Israel[2]. Another prospective longitudinal household study (preprint) found a higher secondary attack rate among cases infected with the Alpha variant (77.8%) as compared to those infected with non-VOCs (42.5%) in Norway, suggesting thepotential for very high household transmission levels for the Alpha variant. The same study also found that primary cases experiencing loss of taste/smell were associated with a significant increase in the onwards secondary attack rates, which could also be due to the observed increase in viral load [3,4] in these cases.[5]

A systematic review (preliminary study) which aimed tounderstand the impact of the Alpha and Gamma variants on the rates of hospitalization sof nine of these studies in the analysis. The study found that the relative risk of hospitalization is higher (between 1.4 to 2) for the Alpha variant as compared to non-VOCs. The evidence for hospitalization with the Gamma variant, compared to non-VOC was limited (only one

study was included), but the odds ratio of hospitalization was found to be much higher (above 2), particularly for cases between the age of 20-39 years.[6]

Results from a recent preprint study in the United States of America suggest that the Delta variant has greater replication fitness as compared to the Alpha variant, meaning that Delta has the propensity to replicate more easily and is in turn more infectious.[7] The study identified a key spike protein mutation (P681R at the furin cleavage site) as the molecular determinant for the enhanced fitness of the Delta variant and its dominance over the Alpha variant. In a systematic review (preprint) comparing the basic reproductive number (R_0) of the Delta variant to the early R_0 estimates of non-VOC strains, the mean R_0 of the Delta variant was found to be 5.08, far higher than the R_0 of non-VOC strains (2.79).[8] The authors of the study screened nearly 30 000 records, of which only 5 were identified as providing evidence that the true value of the R_0 of the Delta variant is likely under-estimated as the R_0 estimates in the studies identified were taken at the time when variable movement restrictions were in place in most parts of the world.

The emergence of these Variants of Concern highlight the importance of maintaining public health and social measures (PHSM) and the need to increase vaccination coverage against SARS-CoV-2. The timing of lifting these measures is critical as highlighted by a modelling study conducted in England whereby lifting the PHSM fully on 21 June, as originally planned, as opposed to 19 July, would have led to a peak of 3,400 (95% CI: 1,300-4,400) daily admissions to hospital due to the emergence of the Delta variant . Delaying the lifting of PHSL until 19 July reduced the peak in daily hospitalizations by nearly three fold to 1,400 (95% CI: 700-1500).[9] It is important to note that these hospitalization rates were based on estimates, including uncertainties as to the effectiveness of vaccines against the Delta variant, which require careful interpretation. Relaxation of PHSM should therefore be carefully and cautiously balanced against levels of vaccination coverage, and the circulation of Variants of Concern.

Table 2: Summary of phenotypic impacts* of Variants of Concern

WHO label	Alpha	Beta	Gamma	Delta
Transmissibility	Increased transmissibility and secondary attack rate[10]	Increased transmissibility[11]	Increased transmissibility[12]	Increased transmissibility and secondary attack rate[13] Similar transmissibility between vaccinated and unvaccinated individuals[14–16]
Disease severity	Increased risk of hospitalization[17], possible increased risk of severity and mortality[1]	Not confirmed, possible increased risk of in-hospital mortality[18]	Not confirmed, possible increased risk of hospitalization[19]	Increased risk of hospitalization[20]

Risk of reinfection	Neutralizing activity retained [21], risk of reinfection remains similar[22]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[23]	Moderate reduction in neutralizing activity reported[24]	Reduction in neutralizing activity reported[25–27]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF); no impact on overall result from multiple target RT-PCR, No impact on Ag RDTs observed[28]	No impact on RT-PCR or Ag RDTs observed[27]	None reported to date	None reported to date

**Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.*

Table 3. Summary of vaccine performance against Variants of Concern

	Anhui ZL-Recombinant	AstraZeneca-Vaxzevria	Beijing CNBG-BBIBP-CorV	Bharat-Covaxin	Gamaleya-Sputnik V	Janssen-Ad26.COV 2.5	Moderna-mRNA-1273	Moderna-mRNA-1273/ Pfizer BioNTech-Comirnaty	Novavax-Covavax	Pfizer BioNTech-Comirnaty	SII - Covishield	Sinovac-CoronaVac
Alpha[29,30]												
Summary of VE*	Protection retained against all outcomes											
- Severe disease	-	↓$_{1}$	-	-	-	-	↔$_{1}$	↔$_{1}$	-	↔$_{3}$	-	-
- Symptomatic disease	-	↔ to ↓$_{3}$	-	-	-	-	↔$_{1}$	↔$_{1}$	↓$_{1}$	↔$_{3}$	-	-
- Infection	-	↔ to ↓$_{2}$	-	-	-		↔$_{1}$	-	-	↔$_{2}$	-	-
Neutralization	↔$_{2}$	↓$_{4}$	↔$_{1}$	↔$_{2}$	↔$_{2}$	↔$_{3}$	↔ to ↓$_{11}$	↓$_{1}$	↓$_{1}$	↔ to ↓$_{34}$	↔$_{1}$	↔ to ↓$_{5}$
Beta[31–34]												
Summary of VE*	Protection retained against severe disease; reduced protection against symptomatic disease; limited evidence											
- Severe disease	-	-	-	-	-	↔$_{1}$	-	-	-	↔$_{1}$	-	-
- Symptomatic disease	-	↓↓↓$_{1}$	-	-	-	↔$_{1}$	-	-	↓↓↓$_{1}$	↔$_{1}$	-	-
- Infection	-	-	-	-	-	-	↔$_{1}$	-	-	↓$_{1}$	-	-
Neutralization	↔ to ↓$_{3}$	↓↓$_{5}$	↔ to ↓$_{2}$	↓$_{2}$	↓ to ↓↓$_{2}$	↓ to ↓↓$_{5}$	↓ to ↓↓$_{13}$	↓↓↓$_{1}$	↓↓↓$_{1}$	↓ to ↓↓$_{31}$	↓$_{1}$	↓ to ↓↓$_{4}$
Gamma												
Summary of VE*	Unclear impact; very limited evidence											
- Severe disease	-	-	-	-	-	-	-	-	-	-	-	-
- Symptomatic disease	-	-	-	-	-	-	-	-	-	-	-	-
- Infection	-	-	-	-	-	-	-	-	-	-	-	↔$_{1}$
Neutralization	↔$_{1}$	↓$_{1}$	-	-	↓$_{1}$	↓$_{2}$	↓$_{6}$	-	-	↔ to ↓$_{16}$	-	↔ to ↓$_{3}$
Delta[35]												
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection; limited evidence											
- Severe disease	-	↔$_{1}$	-	-	-	-	↔$_{1}$	-	-	↔$_{2}$	-	-
- Symptomatic disease	-	↓↓$_{2}$	-	↓$_{1}$	-	-	-	-	-	↔ to ↓$_{3}$	-	-
- Infection	-	↓$_{1}$	-	-	-	-	-	-	-	↓$_{1}$	-	-
Neutralization	↔ to ↓$_{2}$	↓to↓↓$_{4}$	-	↔ to ↓$_{3}$	-	↓$_{3}$	↓$_{3}$	↓↓$_{1}$	-	↓to↓↓$_{8}$	↓$_{2}$	↓to↓↓↓$_{2}$

VE refers to vaccine effectiveness and vaccine efficacy
Summary of VE*: indicates the general conclusions but only for the vaccines evaluated against the specific variant
Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10% reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20% reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30% reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30% reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used.
"Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study.
The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources page (https://view-hub.org/resources).
For individual vaccine effectiveness studies, see 'COVID-19 Vaccine Effectiveness Results Summary', reference numbers noted with a '#'. For a list of all neutralization studies, see 'COVID-19 Vaccine Neutralization Studies Table'.
References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table and are included in the reference section below.

Additional notes on VOC impacts on vaccines

- Studies presenting VOC-specific vaccine efficacy or effectiveness (VE) estimates for full vaccination (≥ 7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 randomised RCT results from non-VOC settings. For severe disease and infection, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca Vaxzevria for severe disease (phase 3 RCT efficacy estimates against severe disease are used as comparator since a within study comparator is unavailable) and for infection (when phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.

Table 3 presents the impact of variants on product specific vaccine efficacy/effectiveness (VE) and quantifies the reduction in VE in the setting of variants compared to VE in non-VOC settings. Of note, reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. In addition, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection, as is the case for AstraZeneca-Vaxzevria.

Since the 10 August update, four notable studies have assessed vaccine effectiveness against SARS-CoV-2 Variants of Concern. A test-negative case-control study from Qatar (preprint) evaluated the effectiveness of mRNA vaccines against symptomatic and severe COVID-19 disease due to Delta. VE against symptomatic Delta infection ≥ 14 days post second dose was 56.1% (95% CI: 41.4-67.2%) for Pfizer BioNTech-Comirnaty and 85.8% (95% CI: 70.6-93.9%) for Moderna-mRNA-1273. The lower VE for Pfizer BioNTech-Comirnaty may be explained by a lower VE against Delta and/or. by waning of protection with time . The VE against symptomatic disease due to Delta for Pfizer BioNTech-Comirnaty is lower than that found by studies conducted in the UK and Canada[36–38] where, due to the longer interval between doses, most of the study population had received their second dose 3 months later than in the study in Qatar. The same drop in VE was not observed in this study for the Moderna-mRNA-1273 vaccine, which may be due to the vaccine being introduced into Qatar three months later than Pfizer BioNTech-Comirnaty and being administered with a slightly longer dosing interval (i.e., 4 weeks instead of 3 weeks). Third, as the authors note, differential application of restrictions in Qatar could have contributed to a lower VE, with some restrictions in Qatar eased for the vaccinated while maintained for the unvaccinated. Importantly, VE against hospitalization and death due to Delta remained high (VEs of 97-100%) for both vaccines. Finally, persons with a prior history of SARS-CoV-2 infection were not excluded from this study which could downwardly bias VE estimates if a substantial proportion of the unvaccinated population has natural immunity.[39]

Two studies from the United States of America evaluated VE of Pfizer BioNTech-Comirnaty and Moderna-mRNA-1273 vaccines during a period of high Delta prevalence (June-July 2021). The first, a retrospective cohort study found decreased VE against infection among nursing home residents during June-July 2021 when Delta predominated as compared to the period of March-May 2021. VE against infection from June-July 2021 was 52.4% (95% CI: 48.0-56.4%) and 50.6% (95% CI: 45.0-55.7%) for Pfizer BioNTech-Comirnaty and

Moderna-mRNA-1273 vaccines, respectively. Corresponding VE during March-May were 74.2% (95% CI: 69.0-78.7%) and 74.7% (95% CI: 66.2-81.1%). It is not possible to know whether decreased VE during the later time period was due to the Delta variant or due to waning of protection. The estimates are also limited due to the inability to control for potential confounders.[40] The second study, a case-control study of adults ≥ 18 years, found VE of Pfizer BioNTech-Comirnaty or Moderna-mRNA-1273 vaccines found that protection against hospitalization ≥ 14 days post second dose was maintained during the period when Delta was predominant (VE of 84%, 95% CI: 79-89%) as compared to the pre-Delta period (VE of 87%, 95% CI: 83-90%).[41]

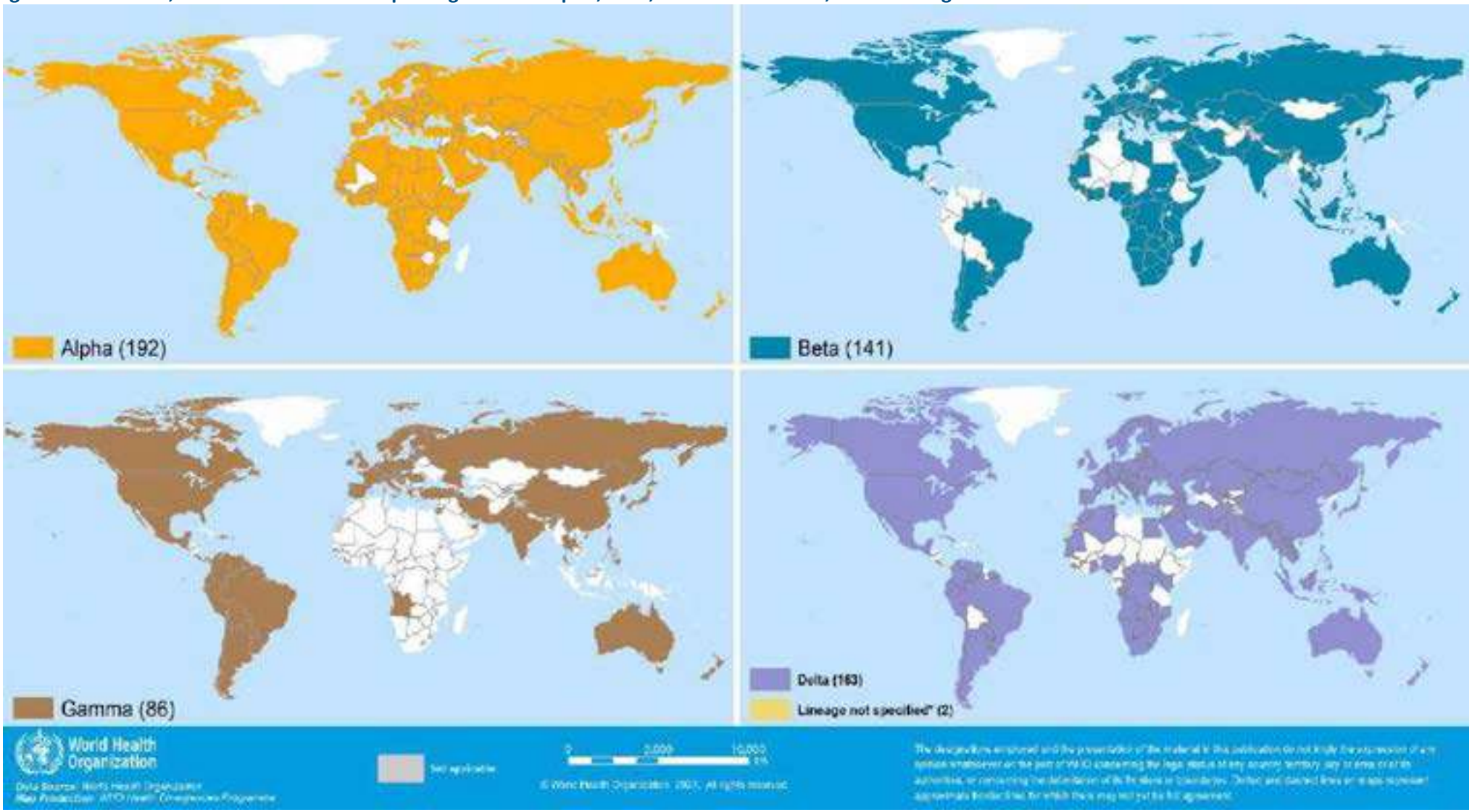
The fourth study, from the UK (preprint), assessed VE of Pfizer BioNTech-Comirnaty and AstraZeneca-Vaxzevria vaccines against SARS-CoV-2 infection (asymptomatic and symptomatic) among adults ≥ 18 years through a large survey ofrandomly selected households. The study compares VE during a period of high Alpha prevalence to that of a period of high Delta prevalence. Findings showed possible reduced effectiveness of AstraZeneca-Vaxzevria vaccine in the period when Delta was most dominant compared to when Alpha was dominant: 67% (95% CI: 62-71%) vs 79% (95% CI: 56-90%). No reduction was observed for Pfizer BioNTech-Comirnaty: VE was 78% (95% CI: 68-84%) during the period when Alpha was dominant and 80% (95% CI: 77-83%) during when Delta was most dominant. One-dose effectiveness for both vaccines was markedly lower: VE of nearly 60% during both periods for Pfizer BioNTech-Comirnaty and VE estimates of 63% and 46% for AstraZeneca-Vaxzevria during the time the Alpha and Delta variants were predominant, respectively. The study also estimates one-dose VE of Moderna-mRNA-1273 against SARS-CoV-2 during the period the Delta variant was predominant to be 75% (95% CI: 64% - 83%), higher than that of the other vaccines although this could be in part due to predominantly younger persons receiving Moderna-mRNA-1273.[42]

Together these studies provide evidence for the maintenance of high levels of protection against severe COVID-19 disease due to Delta. While there is some evidence that VE against SARS-CoV-2 infection and non-severe disease may be reduced with Delta, it is currently not possible to separate the effect of Delta from the effect of potential waning immunity, differential risk of exposure profiles between vaccinated and unvaccinated populations, spuriously low VE due to increasing levels of natural immunity in the unvaccinated population, or other potential confounding factors.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Figure 4. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 24 August 2021**



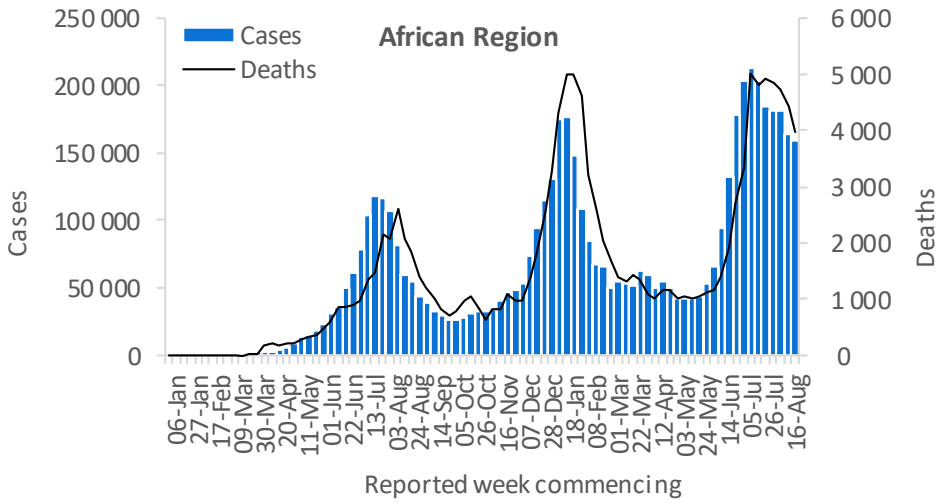
**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details.*

WHO regional overviews – Epidemiological week 16 – 22 Aug 2021

African Region

The Region reported a similar weekly case incidence as compared to last week , with over 158 500 new cases reported this week. Overall, since the 5 July, the Region continues to show a declining trend in weekly new cases. This week, around half (53%) of the weekly new cases were reported from South Africa . Weekly new deaths have been declining for past four consecutive weeks, and a sharp decrease (by 11%) was reported this week as compared to last week, with just over 3900 new deaths reported . A total of 17 of 49 countries/territories/areas reported an increase in weekly case incidence, with highest increase reported in Benin and Sao Tome and Principe.

This week, the highest numbers of new cases were reported from South Africa (84 778 new cases; 142.9 new cases per 100 000 population; an 18% increase), Botswana (9703 new cases; 412.6 new cases per 100 000; a 32% decrease), and Kenya (8425 new cases; 15.7 new cases per 100 000; a 5% decrease). The highest numbers of new deaths were reported from South Africa (2382 new deaths; 4.0 new deaths per 100 000 population; a 6% increase), Algeria (218 new deaths; <1 new deaths per 100 000; a 22% decrease), and Kenya (148 new deaths; <1 new deaths per 100 000; a 27% decrease).

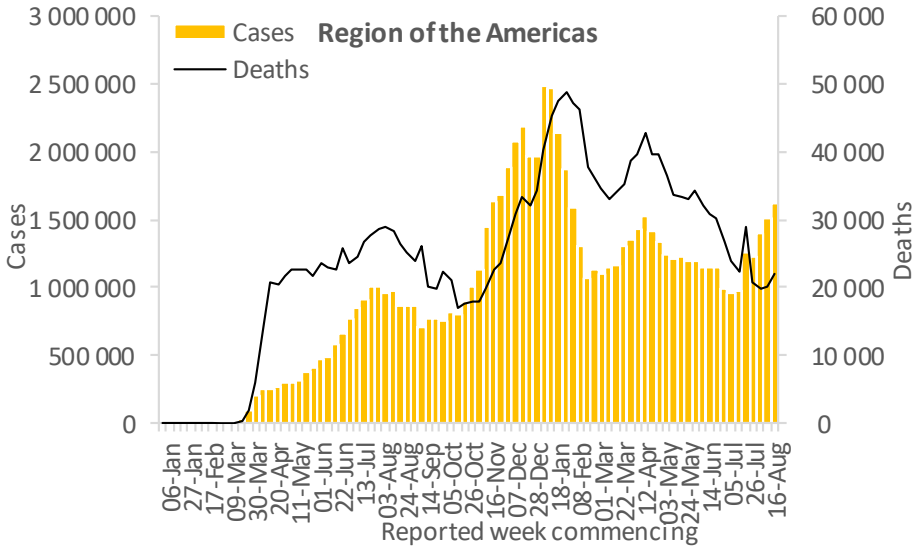


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 1.6 million new cases and just under 22 000 new deaths, an 8% and a 10% increase respectively compared to the previous week. This increase is mainly driven by increase in cases in the United States of America which accounted for 63% of all new cases reported this week. Overall, cases continue to increase for past three weeks in the Region. In South America, most countries reported a decline in new cases, with the exception of El Salvador and Costa Rica which reported increases in new cases of 45% and 6% respectively as compared to last week.

The highest numbers of new cases were reported from the United States of America (1 020 072 new cases; 308.2 new cases per 100 000; a 15% increase), Brazil (209 099 new cases; 98.4 new cases per 100 000; a 1% decrease), and Mexico (128 779 new cases; 99.9 new cases per 100 000; a 4% increase). Similarly, the highest numbers of new deaths were reported from the United States of America (6712 new deaths; 2.0 new deaths per 100 000; a 58% increase), Brazil (5649 new deaths; 2.7 new deaths per 100 000; a 7% decrease), and Mexico (4666 new deaths; 3.6 new deaths per 100 000; a 27% increase).

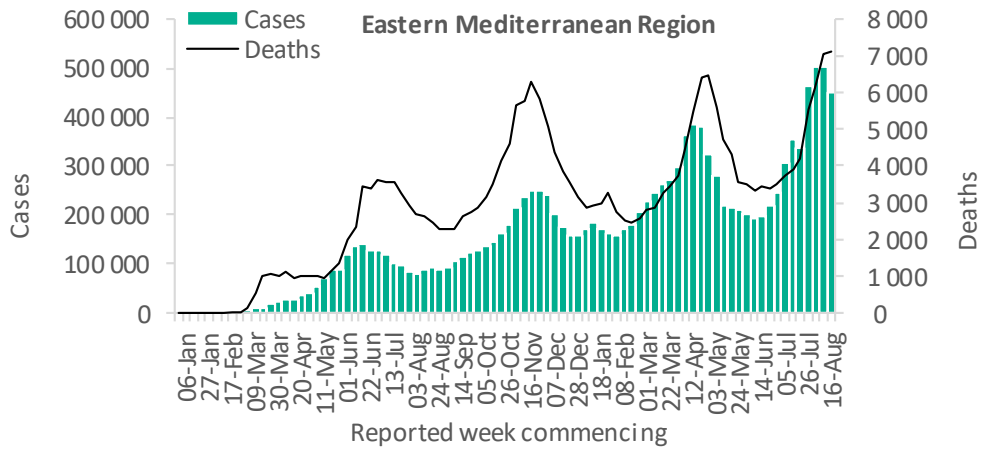


Updates from the Region of the Americas

Eastern Mediterranean Region

The majority of countries in the Eastern Mediterranean Region (13/22; 59%) reported declining trends this week and for the first time since the end of May, the Region reported a 10% decrease in cases, with just over 450 000 new cases this week. These declines were largely due to decreases in the number of new cases reported in the Islamic Republic of Iran, Morocco, Pakistan and Iraq, although it is important to note that there is still ongoing transmission in all countries in the Region and case numbers while declining, remain high in most countries. Following seven weeks of increasing death incidence, this week over 7100 new deaths were reported in the Region, a number s similar to that of the previous week. Eight out of the twenty-two countries reported increases in deaths over the past seven days.

The highest numbers of new cases were reported from the Islamic Republic of Iran (251 610 new cases; 299.6 new cases per 100 000; a 7% decrease), Morocco (54 212 new cases; 146.9 new cases per 100 000; a 16% decrease), and Iraq (50 702 new cases; 126.1 new cases per 100 000; a 21% decrease). The highest numbers of new deaths were reported from the Islamic Republic of Iran (4146 new deaths; 4.9 new deaths per 100 000; an 11% increase), Morocco (744 new deaths; 2.0 new deaths per 100 000; a 10% increase), and Tunisia (630 new deaths; 5.3 new deaths per 100 000; a 30% decrease).

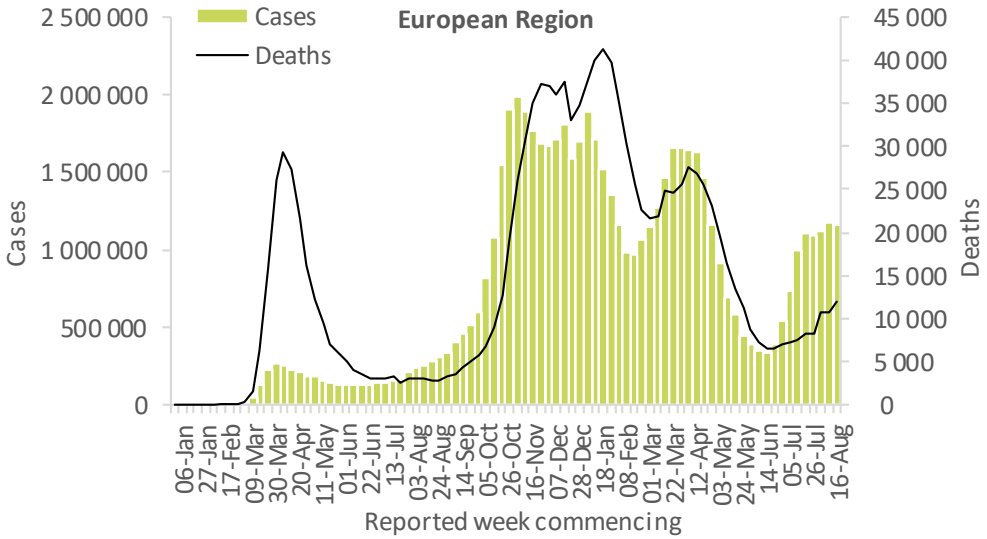


Updates from the Eastern Mediterranean Region

European Region

The number of new cases in the European Region remained similar to that of the previous week with over 1.1 million new cases reported. With just under 12 000 deaths reported this week, the weekly deaths in the Region represent the largest proportionate increase (11%) seen across all six WHO regions this week as compared to the previous week. In the past week, this increase in new deaths was largely due to increases in deaths reported in France (74%), Italy (54%) and Turkey (44%).

The highest numbers of new cases were reported from The United Kingdom (219 919 new cases; 324.0 new cases per 100 000; an 11% increase), Russian Federation (146 251 new cases; 100.2 new cases per 100 000; a 4% decrease), and Turkey (137 235 new cases; 162.7 new cases per 100 000; a 16% decrease).The highest numbers of new deaths were reported from Russian Federation (5545 new deaths; 3.8 new deaths per 100 000; a 1% decrease), Turkey (1322 new deaths; 1.6 new deaths per 100 000; a 44% increase), and Kazakhstan (930 new deaths; 5.0 new deaths per 100 000; a 0% decrease).

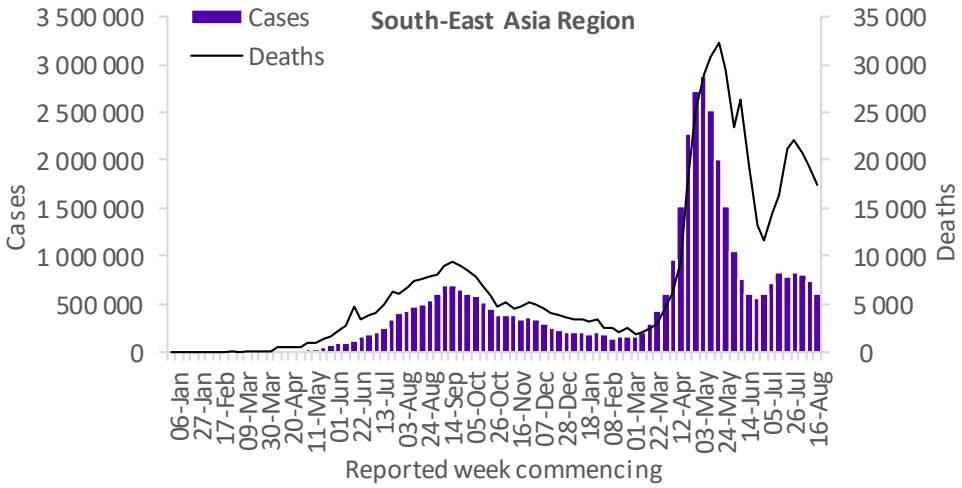


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 614 000 new cases this week, a 16% decrease as compared to the previous week and the largest proportional decrease across all six WHO regions. All countries in the Region reported a decrease in the number of weekly cases, except from Maldives, Sri Lanka, and Timor-Leste where the number of new cases increased by 6%, 40%, and 59% respectively. This week the Region reported 17 000 new deaths, a 10% decrease respectively compared to the previous week, although half of the countries (5/10; 50%) continued to report increases.

The highest numbers of new cases were reported from India (231 658 new cases; 16.8 new cases per 100 000; a 10% decrease), Thailand (142 138 new cases; 203.6 new cases per 100 000; a 6% decrease), and Indonesia (125 102 new cases; 45.7 new cases per 100 000; a 34% decrease). The highest numbers of new deaths were reported from Indonesia (8784 new deaths; 3.2 new deaths per 100 000; a 16% decrease), India (3142 new deaths; 0.2 new deaths per 100 000; a 7% decrease), and Thailand (1768 new deaths; 2.5 new deaths per 100 000; a 31% increase).

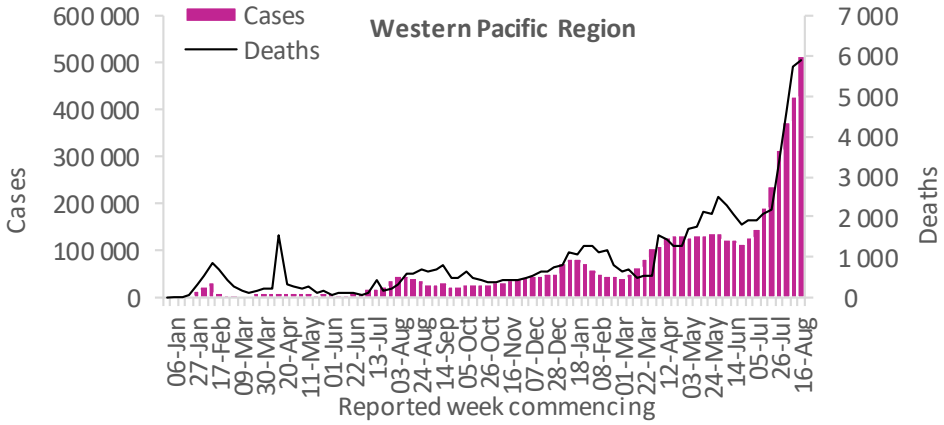


Updates from the South-East Asia Region

Western Pacific Region

The number of new cases in the Western Pacific Region continued to increase this week with over 513 000 new cases, a 20% increase as compared to the previous week. Regionally, 14 of the 18 countries (78%) reported increasing trends this week, although sharp increases in case incidence in Malaysia, Viet Nam, Japan and Philippines are responsible for much of the regional increase. In the past week, although the number of deaths remained similar to that of the previous week with just under 5900 new deaths reported, a quarter of the countries (6/24) in the region reported significant proportionate increases (<30%) in the number of new deaths reported.

The highest numbers of new cases were reported from Malaysia (150 933 new cases; 466.3 new cases per 100 000; a 7% increase), Japan (149 057 new cases; 117.9 new cases per 100 000; a 34% increase), and the Philippines (96 724 new cases; 88.3 new cases per 100 000; a 25% increase). The highest numbers of new deaths were reported from Viet Nam (2103 new deaths; 2.2 new deaths per 100 000; a 4% decrease), Malaysia (1708 new deaths; 5.3 new deaths per 100 000; a 7% decrease), and the Philippines (1526 new deaths; 1.4 new deaths per 100 000; a 24% increase).



Updates from the Western Pacific Region

Key weekly updates

WHO Director-General's key messages

- In his opening remarks at the 18 August media briefing on COVID-19, the Director-General called for
  - a moratorium on booster shots to help shift supply to those countries that have not been able to vaccinate their health workers or at risk-risk communities and are now experiencing major surge in cases.
  - equitable allocation of Interleukin-6 blockers, a drug that has shown a reduction in death amongst patients hospitalised with severe COVID-19.
- In his opening remarks at on 19 August, the Director-General provided an update on the setting up of a permanent International Scientific Advisory Group on the Origins of Novel Pathogens (SAGO) to establish a more systematic way of identifying the source of new outbreaks. SAGO will play a vital role in studying the emergence of new pathogens, including the origins of SARS-CoV-2.

Updates and publications

- Joint Statement from Unitaid and the World Health Organization (on behalf of the Access to COVID-19 Tools Accelerator) regarding availability of tocilizumab
- Call for experts to join Scientific Advisory Group for the Origins of Novel Pathogens
- Making clean cooking affordable and accessible during COVID-19: 'Pay-as-you-go' smart meters promote health equity, Nairobi

Annex

- COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 24 August 2021**

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Afghanistan	●	-	-	●	-
Albania	●	-	-	○	-
Algeria	●	-	-	●	-
Andorra	○*	○*	-	○*	-
Angola	●	●	●*	●	-
Anguilla	●	-	-	●	-
Antigua and Barbuda	●	●	●*	●*	-
Argentina	●	●	●	●	-
Armenia	●	-	-	●	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	○	-
Bahamas	●	-	-	-	-
Bahrain	●	●	-	●	-
Bangladesh	●	●	-	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	●*	●*	-
Benin	●	-	-	-	-
Bermuda	●	●	-	●*	-
Bhutan	●	●	-	●	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	●	●	-
Bosnia and Herzegovina	●	●	●	○	-
Botswana	○	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	●*	-
Brunei Darussalam	●	●	-	-	-
Bulgaria	●	●	-	●	-
Burkina Faso	●	-	-	-	-
Burundi	●	●	-	●	-
Cabo Verde	●	-	-	●	-
Cambodia	●	●	-	●	-
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	●*	●	●*	-
Central African Republic	●	●	-	●	-
Chad	●	-	-	-	-
Chile	●	●	●	●	-
China	●	●	●	○	-
Colombia	●	-	●	●	-
Comoros	-	●	-	-	-
Congo	●	○	-	●	-
Costa Rica	●	●	●	●	-
Croatia	●	●	●	○	-
Cuba	●	●	-	●*	-
Curaçao	●	●*	●	●	●
Cyprus	●	●	-	○	-
Czechia	●	●	●	●	-
Côte d'Ivoire	●	●	-	-	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-
Dominica	●	-	-	-	-
Dominican Republic	●	-	●	-	-
Ecuador	●	-	●	●	-
Egypt	●	-	-	●*	-
El Salvador	●	-	●	●	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	○	-
Eswatini	-	●	-	●	-
Ethiopia	●	-	-	-	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	●	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	-	-
Greece	●	●	●	●	-
Grenada	●	-	-	●*	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	●	-
Guinea	●	○	-	-	-
Guinea-Bissau	●	●	-	-	-
Guyana	-	-	●	-	-
Haiti	●	-	●	-	-
Honduras	●	-	-	-	-
Hungary	●	○	●	○	-
Iceland	●	-	-	-	-
India	●	●	●	●	-
Indonesia	●	●	-	●	-
Iran (Islamic Republic of)	●	●	●	●	-
Iraq	●	●	-	●	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	●*	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	●	○	-	●	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	○	-
Kuwait	●	●	-	●	-
Kyrgyzstan	●	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Lao People's Democratic Republic	●	-	-	●	-
Latvia	●	●	●	○	-
Lebanon	●	-	-	●	-
Lesotho	-	●	-	●	-
Liberia	●	-	-	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	-	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-
Madagascar	-	●	-	-	-
Malawi	●	●	-	●	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	●	●	-	●	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	●	-	●	-
Mongolia	●	-	-	●	-
Montenegro	●	-	-	○*	-
Montserrat	●	-	●*	-	-
Morocco	●	●	-	●	-
Mozambique	●	●	-	●	-
Myanmar	●	-	-	●	-
Namibia	●	●	-	●	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	●	-	●	-
North Macedonia	●	●	-	○	-
Northern Mariana Islands (Commonwealth of the)	○*	-	-	○*	-
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●	-
Oman	●	●	-	●	-
Pakistan	●	●	●	●	-
Panama	●	●	●	●	●
Papua New Guinea	-	-	-	●	-
Paraguay	●	-	●	●	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	●	-	-	●	-
Romania	●	●	●	●	-
Russian Federation	●	●	○	●	-
Rwanda	●	●	-	●	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	-	-
Saint Lucia	●	-	-	●	-
Saint Martin	●	●	-	-	-
Saint Pierre and Miquelon	-	-	-	●*	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Saint Vincent and the Grenadines	-	-	-	●*	-
Sao Tome and Principe	○	-	-	-	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	●	-
Serbia	●	-	-	●	-
Seychelles	●	●	-	●	-
Sierra Leone	-	-	-	○	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	●*	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	●	-	-	-
South Africa	●	●	-	●	-
South Sudan	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-
Sudan	●	●	-	-	-
Suriname	●	●	●	●	-
Sweden	●	●	●	●	-
Switzerland	●	●	●	●	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	●	-
Togo	●	●	-	-	-
Trinidad and Tobago	●	-	●	●	-
Tunisia	●	●	-	●	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	●*	-
Uganda	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Ukraine	●	○	-	○	-
United Arab Emirates	●	●	●	●	-
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-
United States Virgin Islands	●	●	-	●	-
United States of America	●	●	●	●	-
Uruguay	●	●	●	●	-
Uzbekistan	●	●	-	○	-
Venezuela (Bolivarian Republic of)	●	-	●	●	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	-	●	-
Zimbabwe	-	●	-	●	-

**Newly reported in this update.*

Unspecified B.1.617 reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. Th ese will be reallocated as further details become available.

O from official sources.

ation become available.

****Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern*

See also Annex 2: Data, table and figure notes.

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

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COVID-19 Weekly Epidemiological Update

Edition 53, published 17 August 2021

In this edition:

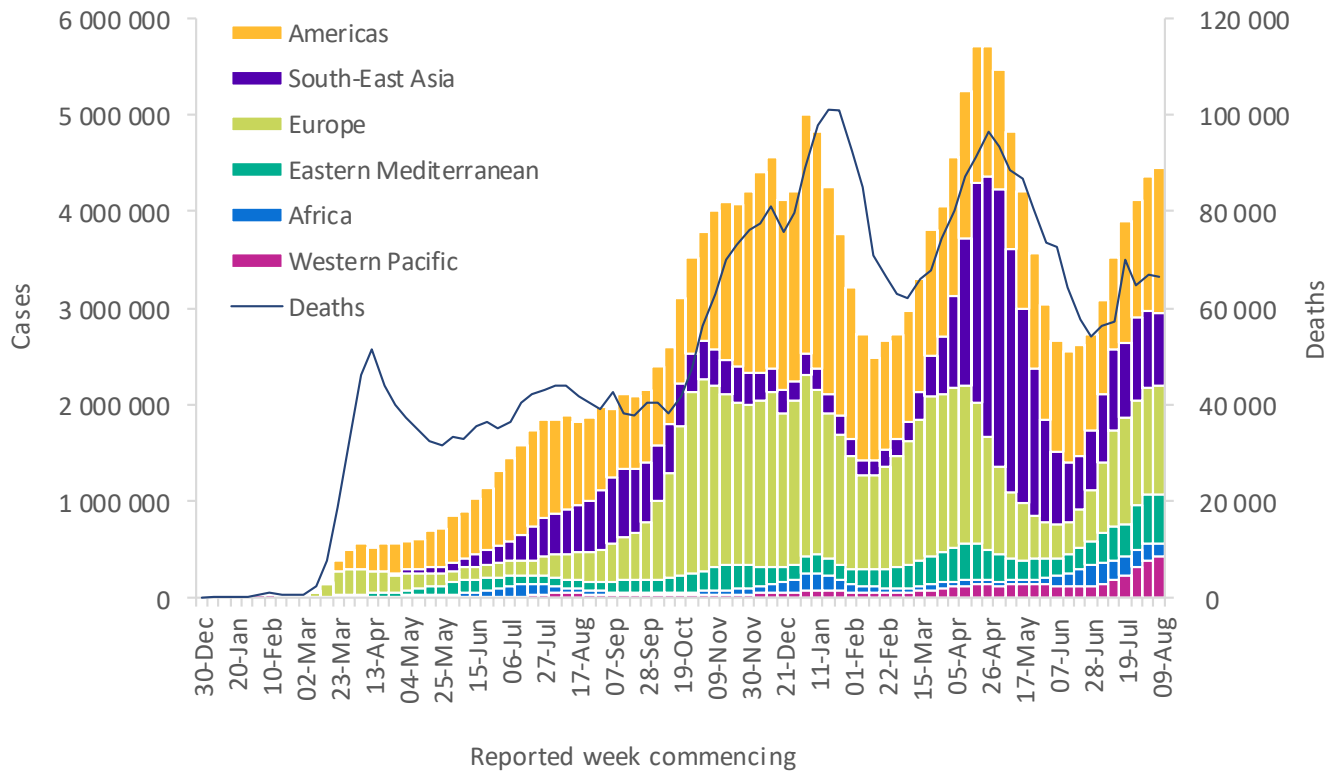
- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- Special focus: COVID-19 in Prisons
- WHO regional overviews
- Key weekly updates

Global overview

Data as of 15 August 2021

The global number of new cases has been increasing for the last two months, with over 4.4 million cases reported in the past week (9 – 15 August 2021) (Figure 1). This increasing trend is largely attributed to increases in the Western Pacific Region and the Region of the Americas which reported 14% and 8% increases respectively as compared to the previous week; the other four regions reported similar or a decrease in new weekly cases as compared to the previous week. The cumulative number of cases reported globally is now over 206 million and the cumulative number of deaths is almost 4.4 million. All regions except the Western Pacific and the Eastern Mediterranean Regions reported similar or a decrease in the number of deaths this week as compared to the previous week. While the African Region reported the largest decline in cases and deaths, with 23% and 18% decreases in incidence respectively, data from the weekend is incomplete which may overestimate differences as compared to the previous week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 15 August 2021**



**See *Annex 2: Data, table and figure notes*

The regions with the highest weekly incidence rates of cases and deaths per 100 000 population remain the same as last week: the Region of the Americas and the European Region reported the highest weekly case (147.4 and 121.6 new cases per 100 000 population, respectively) and death incidence (2.0 and 1.1 new deaths per 100 000 population, respectively).

At the country level, the highest numbers of new cases in the past week were reported by the United States of America (883 996 new cases; 9% increase), the Islamic Republic of Iran (26 9975 new cases, 9% increase), and India (258 121 new cases; 7% decrease). However, the highest numbers of new deaths in the past week were reported by Indonesia (10 492996 new cases; 8% decrease), Brazil (6100 new cases, 3% decrease) and the Russian Federation (5618 new cases; a 2% increase).

Globally, cases of the Alpha variant have been reported in 190 countries, territories or areas (hereafter countries), while 138 countries (one new country) have reported cases of the Beta variant; 82 countries (one new country) have reported cases of the Gamma variant; and 148 countries (three new countries) have reported cases of the Delta variant.

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 15 August 2021**

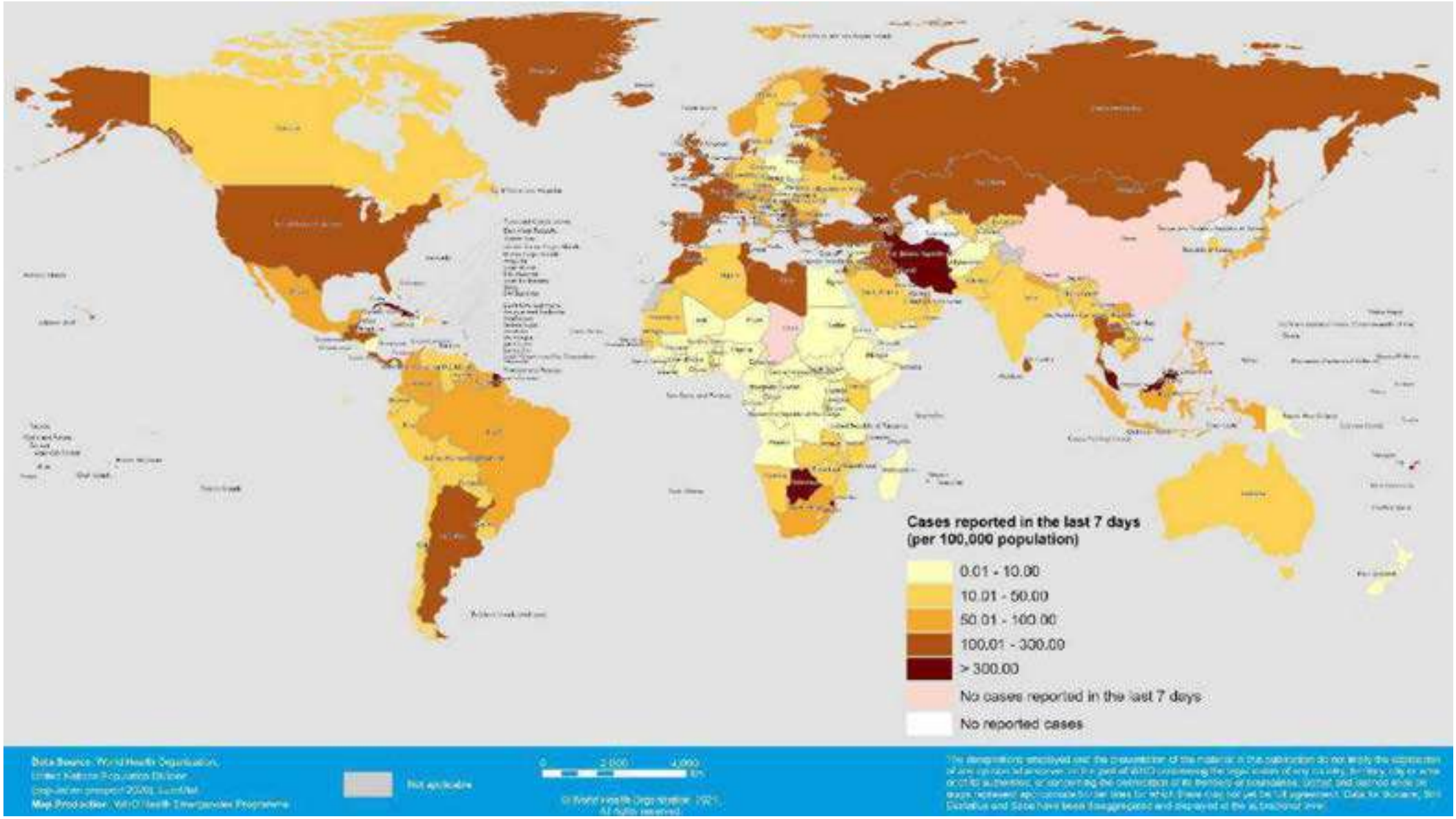
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 507 234 (34%)	8%	80 121 215 (39%)	19 956 (30%)	1%	2 050 072 (47%)
Europe	1 134 516 (26%)	1%	62 474 616 (30%)	10 495 (16%)	-3%	1 242 204 (29%)
South-East Asia	731 279 (16%)	-9%	39 908 781 (19%)	19 401 (29%)	-6%	610 389 (14%)
Eastern Mediterranean	502 683 (11%)	0%	13 601 389 (7%)	7 034 (11%)	15%	249 389 (6%)
Western Pacific	429 153 (10%)	14%	5 330 671 (3%)	5 711 (9%)	23%	75 433 (2%)
Africa	139 767 (3%)	-23%	5 276 855 (3%)	3 909 (6%)	-18%	125 934 (3%)
Global	**4 444 632 (100%)**	**2%**	**206 714 291 (100%)**	**66 506 (100%)**	**0%**	**4 353 434 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to the seven days prior*
***See Annex 2: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

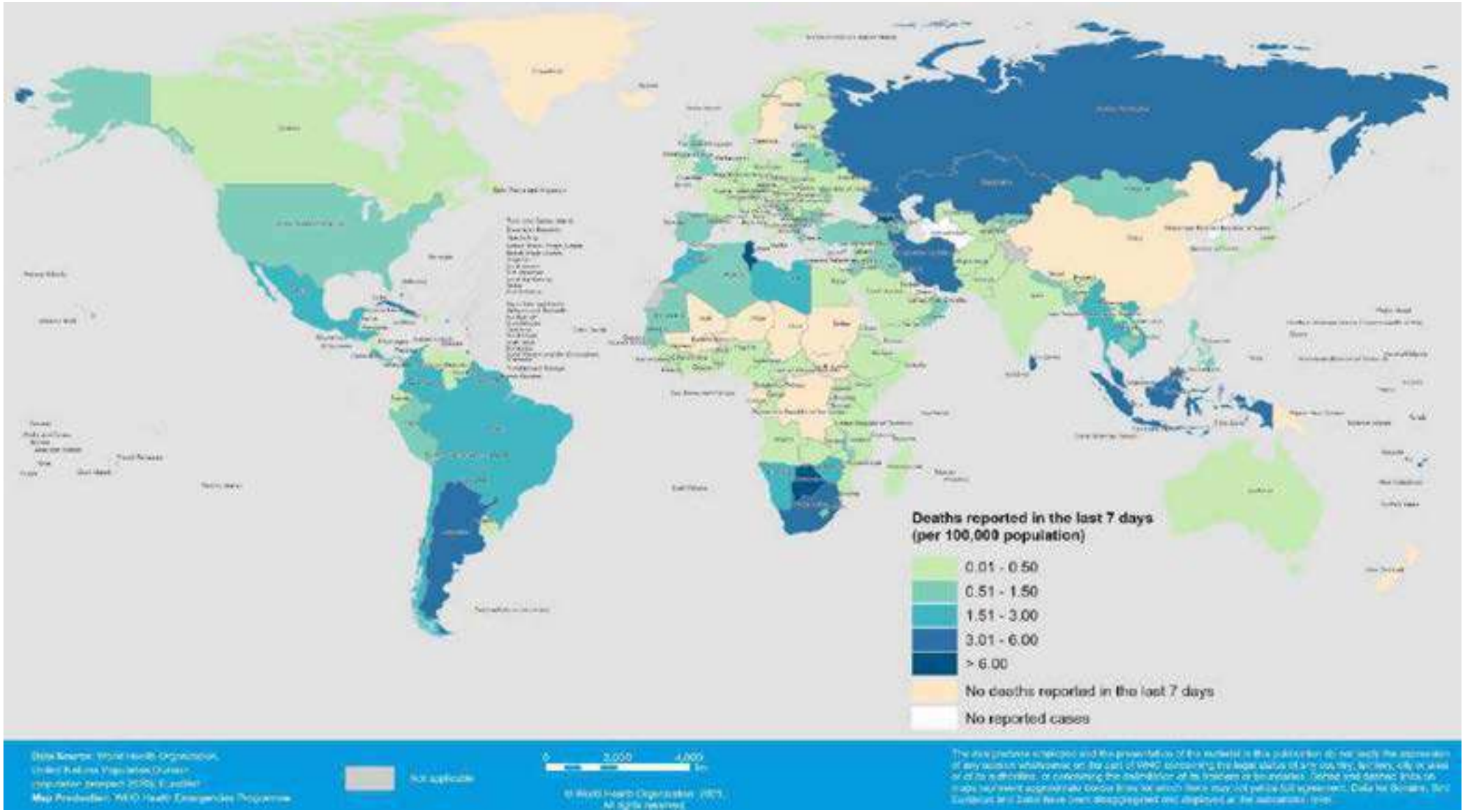
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 9 - 15 August 2021**



**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 9 – 15 August 2021**



**See *Annex 2: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact vaccine, therapeutics, diagnostics or effectiveness of public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. As these risks evolve, WHO will continue to update the lists of global VOIs and VOCs to support prioritization for surveillance and research, and ultimately guide response strategies (for more information, please see the Tracking SARS-CoV-2 variants website).

National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

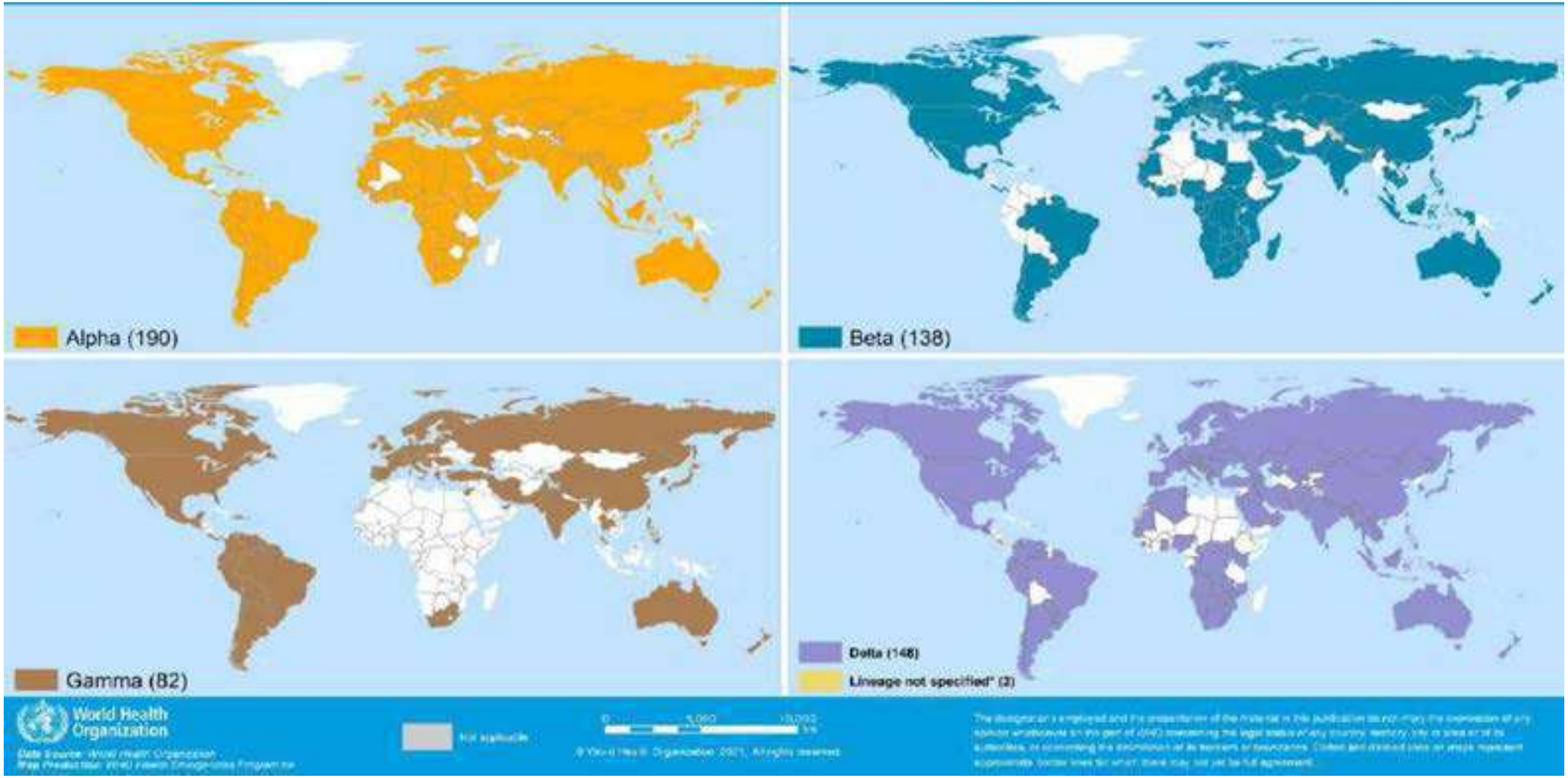
As surveillance activities to detect SARS-CoV-2 variants are strengthened at national and subnational levels, including through the expansion of genomic sequencing capacities, the number of countries/areas/territories (hereafter countries) reporting VOCs continues to increase (Figure 4, Annex 1). This distribution should nonetheless be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

As countries gradually resume non-essential international travel, the introduction of risk mitigation measures aiming to reduce travel-associated exportation, importation and onward transmission of SARS-CoV-2 should be based on a thorough risk assessment conducted systematically and routinely.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Figure 4. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 17 August 2021**



**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details.*

Special Focus: COVID-19 in Prisons

Prisons are unique environments for pathogen transmission due to high population density, overcrowding, and proximity among detainees and guards. Since the beginning of the pandemic, outbreaks of COVID-19 have been reported in prisons and correctional facilities in at least 122 countries across the world.[1] COVID-19 outbreaks in detention centers have been reported in countries across all WHO regions.[2.] Early in the pandemic, and *in* response to a request made by Member States, the WHO Health In Prisons Programme (WHO/HIPP; based out of the WHO Regional Office for Europe) published interim guidance on 15 March 2020 to support countries in preparedness, prevention and control of COVID-19 in prisons and other places of detention. As the pandemic progressed, further understanding of the pathophysiology of COVID-19 informed a revision, which was published on 8 February 2021. The revised guidance included updates on the signs and symptoms, transmission of the virus that causes COVID-19 and the measures to prevent infection. It also addressed issues of vaccine availability and allocation and advised on indicators for the surveillance of COVID-19 in detention settings.

To enable monitoring of the evolution of the pandemic in detention settings, WHO developed a minimum set of indicators, which Member States have been voluntarily reporting to WHO/HIPP since April 2020. The indicators requested include information on the operational capacity and on the number of individuals living in prisons (disaggregated by age categories and sex) to monitor the occupancy rate over time; the number of individuals tested and diagnosed with SARS-CoV-2 infection (also disaggregated by age category, sex and divided by staff and detainees); those being transferred to hospital and those who have died. This minimum dataset was revised in February 2021 to include vaccination in detainees, staff and health care workers. As this is a voluntary system, reporting by Member States is not consistent and only 18 Member States have submitted data to WHO/HIPP since the system was established. The submitted data are analyzed on a weekly basis to compare the epidemiology of COVID-19 in detention facilities with that observed in the general population. This comparison enables the early identification of outbreaks that could benefit from WHO's technical support.

Despite a clear positive progression in the reporting capacity of Member States, in some countries it is challenging to separate the subsection of COVID-19 data attributable to detainees or detention center staff within larger public health datasets. Disaggregating the data in prison health information systems from the general public health data would allow for a more specific and tailored evaluation of the evolving situation and burden of the COVID-19 pandemic within these settings.

Summarizing the evidence: Early analysis conducted on persons living in prisons (from January to June 2020) identified 42 107 cases of SARS-CoV-2 infection and 510 deaths among nearly 1.3 million people living in prisons, in the United States of America. This is similar to the case rate of 3251 per 100 000 population reported in the same country and 5.5 times higher than that in people of the same age and sex in the general population across the same time period.[3] Among prison staff, the case rate reported up to November 2020 was 3.2 times higher than in community settings in the United States of America.[4] Based on data between 31 March and 6 June 2020, the estimated mortality rate among people in prisons was 39 per 100 000 compared to 29 per 100 000 for the general population of the United States of America.[5] In the WHO European region, some countries have observed a mortality rate 3.3 times higher in detention centers compared to people of the same age and sex in the general population between March 2020 and February 2021.[6]

[1] https://www.prisonstudies.org/sites/default/files/resources/downloads/keeping_covid_out_of_prisons.pdf
[2] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7568916/
[3] https://pubmed.ncbi.nlm.nih.gov/32639537/
[4] https://pubmed.ncbi.nlm.nih.gov/33750599/
[5] https://pubmed.ncbi.nlm.nih.gov/32639537/
[6] https://www.thelancet.com/journals/lanres/article/PIIS2213-2600%2821%2900137-5/fulltext

Overcrowding in prisons has negative consequences on health. For COVID-19, one study has shown that when prison capacity exceeds 85%, there is an increased risk of SARS-CoV-2 infection and death.[7] In an effort to reduce overcrowding, the adoption of non-custodial measures, including decarceration of non-violent offenders, pardons and home confinement, are among some of the most commonly adopted measures globally. A survey conducted between March and June 2020 indicated that 109 countries took such measures, resulting in an average reduction of the prison population by 6%.[8] These COVID-19 mitigation measures were in line with the call from the United Nations High Commission for Human Rights and the UN System common position on incarceration[9] The mitigation measures implemented were considered crucial as overcrowding posed issues in being able to prevent and control COVID-19 outbreaks. Overcrowding also adversely affects access to health care and essential, basic hygiene practices products such water and soap. Despite these measures being implemented, overcrowding and its implications on SARS-CoV-2 transmission and other health issues continues to be a challenge in prisons.[10, 11]

An effective measure used to control transmission of SARS-CoV-2 in detention centers has been the implementation of intensive epidemiological surveillance and contact tracing.[12] However, in many countries, due to limited resources, the capacity to routinely identify SARS-CoV-2 infections in detention centers is insufficient, making it difficult to ascertain the true burden of the disease in these settings.[13]

A potential strategy to ensure more representative COVID-19 case and mortality identification is to increase testing efforts. A study conducted in 16 facilities, in the United States of America, showed that mass testing increased the detection of cases by nearly 13-fold.[14] Some countries in the European Region have intensified their testing strategy in the most recent months. While effective, this approach may not be feasible in every country and where this is the case, alternative approaches to testing in settings with limited resources have been recommended in WHO guidance.

As the availability of testing and COVID-19 vaccines has increased in a number of countries, advocacy for equitable access to vaccines among people living and working in detention centers continues.[15] Many Member States have been working to increase the vaccine coverage among people living in detention centers with this coverage in the European Region, where this data is available, varying between less than 15% to above 60% coverage, and others not reporting on vaccination rollout in detention centers.

It is important to understand the impact of the pandemic in prisons, including the numbers of cases identified and the associated outcomes. Governments assume fully accountability for the health and well-being of detainees; therefore, providing detainees with protection from COVID-19 is a fundamental component of upholding their human rights. Furthermore, people living in prisons are not isolated from communities: there is constant movement of staff and visitors, and detainees are admitted, released and transferred frequently. Protecting those in detention will therefore have an impact on the surrounding communities and potentially on the capacity of the healthcare system.

Much progress has been made in the identification, detection and control of COVID-19 in some detention centers around the world. As the pandemic evolves, this progress must continue to better align health outcomes in prisons with overall public health goals.

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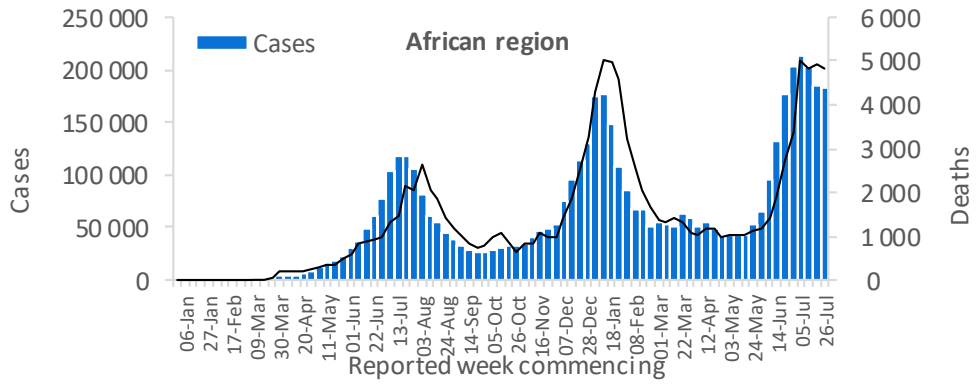
[7] https://pubmed.ncbi.nlm.nih.gov/33337529/
[8] https://www.hri.global/covid-19-prison-diversion- measures
[9] https://www.unodc.org/res/justice-and-prison-reform/nelsonmandelarules-GoF/UN_System_Common_Position_on_Incarceration.pdf
[10] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7826114/
[11] https://pubmed.ncbi.nlm.nih.gov/33211577/
[12] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7347475/
[13] https://pubmed.ncbi.nlm.nih.gov/33564262/
[14] https://pubmed.ncbi.nlm.nih.gov/32817597/
[15] https://www.euro.who.int/en/health-topics/health-determinants/prisons-and-health/publications/2021/why-people-living-and-working-in-detention-facilities-should-be-included-in-national-covid-19-vaccination-plans-advocacy-brief-2021

WHO regional overviews - Epidemiological week 9 - 15 August 2021

African Region

This week, the data for the African Region is incomplete due to reporting delays and trends should be interpreted with caution until the missing data has been incorporated. The Region reported just over 139 000 new cases and over 3900 new deaths. The overall decrease in weekly cases reported in the region since the middle of July has been largely driven by declines observed in South Africa. In contrast, many other countries in the region continue to report increases in case incidence. For mortality, the trend in the region is largely driven by a decline in new weekly deaths reported by a majority of the countries in the Region, including Mozambique, South Africa, Zambia and Zimbabwe among others. This decrease in overall weekly mortality could be partly due to the lack of reporting of regional data for 15 August.

The highest numbers of new cases were reported from South Africa (58 939 new cases; 99.4 new cases per 100 000 population; 22% decrease), Botswana (14 184 new cases; 603.2 new cases per 100 000; 11% decrease), and Kenya (7685 new cases; 14.3 new cases per 100 000; 2% decrease).The highest numbers of new deaths were reported from South Africa (2008 new deaths; 3.4 new deaths per 100 000 population; 23% decrease), Botswana (269 new deaths; 11.4 new deaths per 100 000; 99% increase), and Zimbabwe (247 new deaths; 1.7 new deaths per 100 000; 16% decrease).

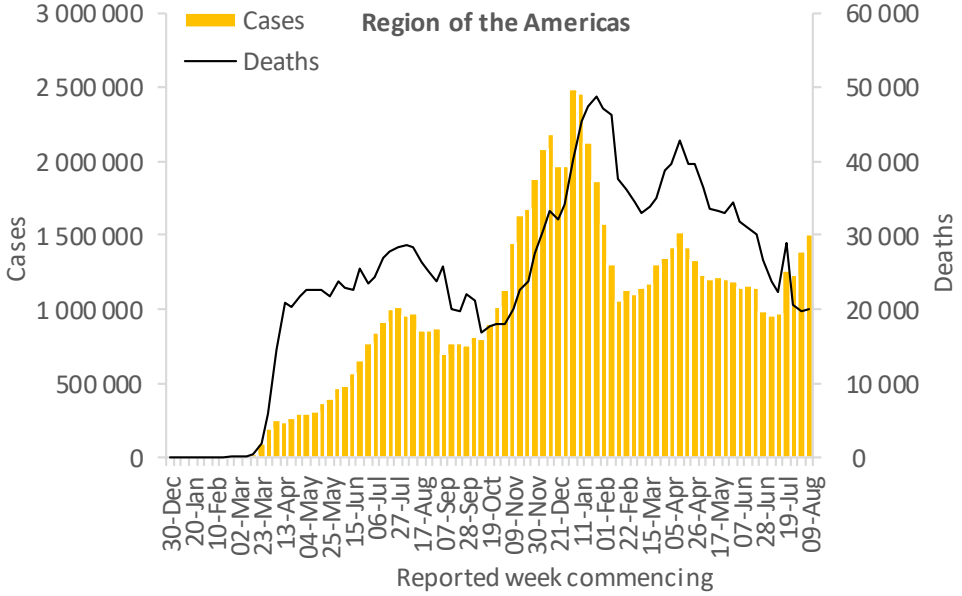


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 1.5 million new cases and nearly 20 000 new deaths in the past week. While the number of cases increased by 8% as compared to last week, the number of weekly deaths was similar to the week before. Dominica, Saint Vincent and the Grenadines and Guadeloupe reported the largest percentage increase in weekly case incidence over the past seven days.

The highest numbers of new cases were reported from the United States of America (883 996 new cases; 267.1 new cases per 100 000; 20% increase), Brazil (210 254 new cases; 98.9 new cases per 100 000; 8% decrease), and Mexico (124 103 new cases; 96.3 new cases per 100 000; 8% increase). The highest numbers of new deaths were reported from Brazil (6100 new deaths, 2.9 new deaths per 100 000 population, 3% decrease), the United States of America (4245 new deaths; 1.3 new deaths per 100 000; 25% increase), and Mexico (3681 new deaths; 2.9 new death per 100 000; 12% increase).

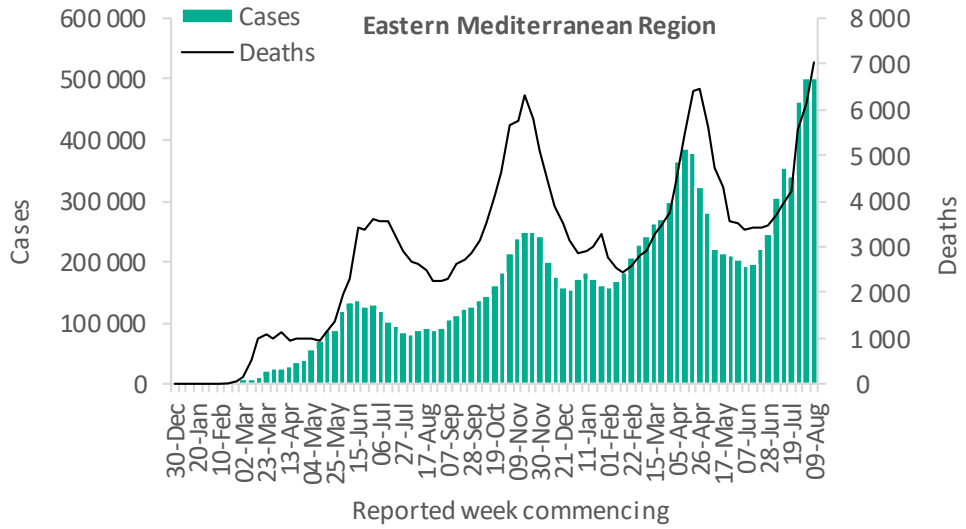


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 502 000 new cases and over 7000 new deaths this past week. While the number of cases reported were similar to those reported in the previous week, the number of weekly deaths increased by 15%. This week, the region reported the highest weekly number of deaths since the beginning of the pandemic. The increase in deaths was mainly driven by an increase in new deaths reported by several countries in the region, including the Islamic Republic of Iran, Morocco, Pakistan, Syrian Arab Republic and Yemen.

The highest numbers of new cases were reported from the Islamic Republic of Iran (269 975 new cases; 321.4 new cases per 100 000; 9% increase), Morocco (64 784 new cases; 175.5 new cases per 100 000; 2% increase), and Iraq (64 390 new cases; 160.1 new cases per 100 000; 17% decrease). The highest numbers of new deaths were reported from the Islamic Republic of Iran (3735 new deaths; 4.4 new deaths per 100 000; 31% increase), Tunisia (896 new deaths; 7.6 new deaths per 100 000; 17% decrease), and Morocco (678 new deaths; 1.8 new deaths per 100 000; 44% increase).

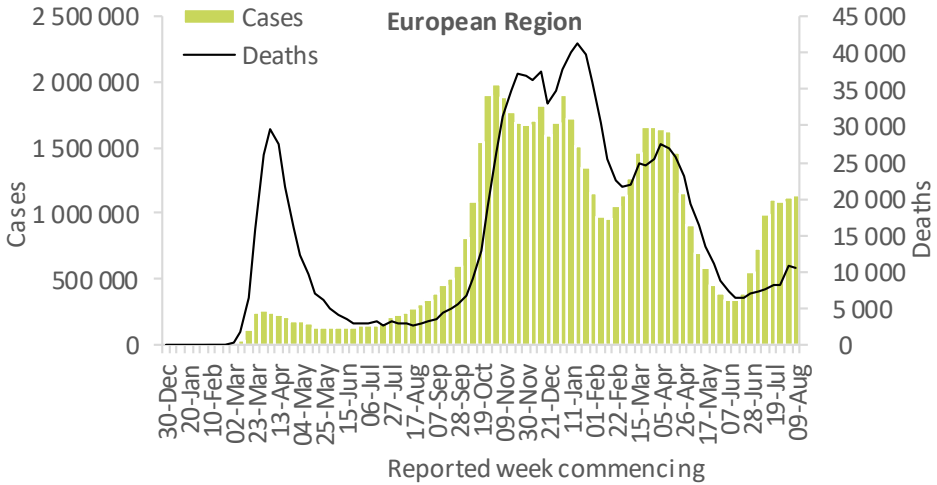


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 1.1 million new cases and over 10 000 new deaths, similar numbers to those reported the previous week. While overall, the region is starting to plateau in terms of new weekly cases and deaths, most of the countries in the region continue to see significant increases in the number of weekly cases, including Azerbaijan, Georgia, Israel, Kosovo, Montenegro and North Macedonia. Following a gradual increase in weekly death incidence for the sixth week in a row, a slight decrease in the number of new deaths was reported over the last seven days.

The highest numbers of new cases were reported from the United Kingdom (198 759 new cases; 292.8 new cases per 100 000; 7% increase), Turkey (163 965 new cases; 194.4 new cases per 100 000; 3% decrease), and the Russian Federation (153 086 new cases; 104.9 new cases per 100 000; 4% decrease).The highest numbers of new deaths were reported from the Russian Federation (5618 new deaths; 3.8 new deaths per 100 000; 2% increase), Kazakhstan (934 new deaths; 5.0 new deaths per 100 000; 46% decrease), and Turkey (917 new deaths; 1.1 new deaths per 100 000; 21% increase).

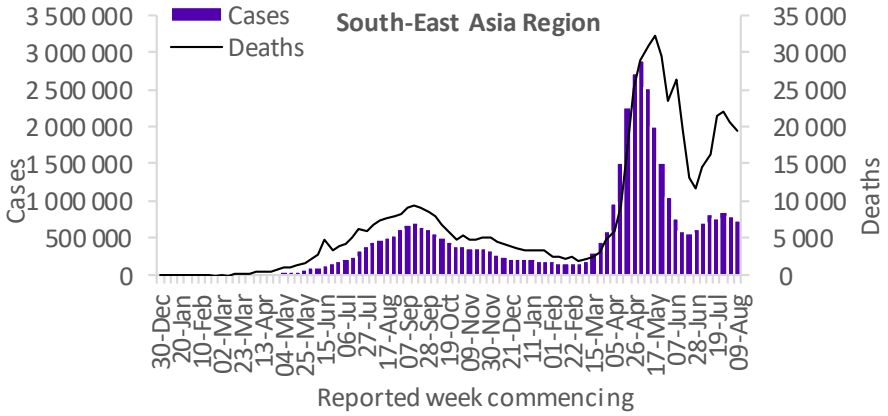


Updates from the European Region

South-East Asia Region

Cases in the South-East Asia Region continued to decline this week. The region reported just over 731 000 new cases and 19 000 new deaths, decreases of 9% and 6% respectively, as compared to the previous week. Following a spike in the regional mortality rate two weeks ago, the number of new deaths has been declining following large decreases reported in the Maldives and Myanmar. While most of the countries reported decreases or similar numbers of cases this week, Sri Lanka, Thailand, and Timor-Leste reported increases in case incidence. Similarly, not all countries follow the regional declining trend in deaths as large increases were reported in a number of countries including Sri Lanka, Thailand and Timor-Leste this week, an increase of 63%, 11% and 200% respectively. The highest numbers of new cases were reported from India (258 121 new cases; 18.7 new cases per 100 000; 7% decrease), Indonesia (188 323 new cases; 68.9 new cases per 100 000; 17% decrease), and Thailand (150 652 new cases; 215.8 new cases per 100 000; 7% increase).

The highest numbers of new deaths were reported from Indonesia (10 492 new deaths; 3.8 new deaths per 100 000; 8% decrease), India (3363 new deaths; 0.2 new deaths per 100 000; 4% decrease), and Bangladesh (1523 new deaths; 0.9 new deaths per 100 000; 12% decrease).

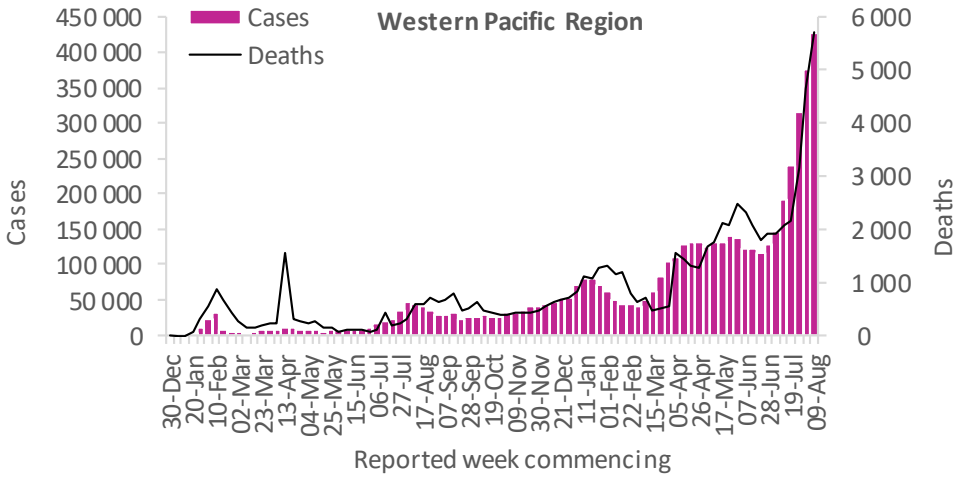


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported the largest proportionate increases in cases and deaths this week, with over 429 000 new cases and 5700 new deaths, increases of 14% and 23% respectively, as compared to the previous week. This exponential increase in cases and deaths has been ongoing for nearly two months. Over half of the countries and territories in the region that are providing regular data to WHO are reporting an increase in cases (10/18; 56%) and nearly half are reporting increases in deaths (8/18; 44%). The largest proportionate increases in cases and deaths were seen in Australia, French Polynesia, Japan, Philippines and Republic of Korea. The highest numbers of new cases were reported from Malaysia (140 501 new cases; 434.1 new cases per 100 000; 8% increase), Japan (111 601 new cases; 88.2 new cases per 100 000; 23% increase), and the Philippines (77 540 new cases; 70.8 new cases per 100 000; 28% increase).

The highest numbers of new deaths were reported from Viet Nam (2187 new deaths; 2.2 new deaths per 100 000; 13% increase), Malaysia (1839 new deaths; 5.7 new deaths per 100 000; 35% increase), and the Philippines (1235 new deaths; 1.1 new deaths per 100 000; 31% increase).



Updates from the Western Pacific Region

Key weekly updates

WHO Director-General's key messages

- In his opening remarks at the media briefing on COVID-19 – 11 August 2021, the Director-General highlighted the following:
  - In October 2020, WHO shared the results of the Solidarity Therapeutics Trial, which tested four treatments for COVID-19, involving almost 13,000 patients in 500 hospitals, in 30 countries
  - The next phase of the trial - Solidarity PLUS - will test three drugs: artesunate, a treatment for severe malaria; imatinib, a drug for certain cancers; and infliximab, a treatment for immune system disorders such as Crohn's disease. The trial involves thousands of researchers at more than 600 hospitals in 52 countries.

Updates and publications

- Interim statement on heterologous priming for COVID-19 vaccines
- Interim statement on dose-sparing strategies for COVID-19 vaccines (fractionated vaccine doses)
- Interim statement on COVID-19 vaccine booster doses
- WHO's Solidarity clinical trial enters a new phase with three new candidate drugs
- WHO Statement on advancing the next series of studies to find the origins of SARS-CoV-2
- ACT-Accelerator launches urgent US$ 7.7 billion appeal to stem surge of dangerous variants and save lives everywhere

Annex

- COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 17 August 2021**

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Afghanistan	●	-	-	●	-
Albania	●	-	-	○	-
Algeria	●	-	-	●	-
Angola	●	●	-	●	-
Anguilla	●	-	-	●	-
Antigua and Barbuda	●	●	-	-	-
Argentina	●	●	●	●	-
Armenia	●	-	-	●	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	○	-
Bahamas	●	-	-	-	-
Bahrain	●	●	-	●	-
Bangladesh	●	●	-	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	-	-	-
Benin	●*	-	-	-	-
Bermuda	●	●	-	-	-
Bhutan	●	●	-	●	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	●	●	-
Bosnia and Herzegovina	●	●	●	○	-
Botswana	○	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	-	-
Brunei Darussalam	●	●	-	-	-
Bulgaria	●	●	-	●	-
Burkina Faso	●	-	-	-	-
Burundi	●	●	-	●	-
Cabo Verde	●	-	-	●	-
Cambodia	●	●	-	●	-
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	-	●	-	-
Central African Republic	●	●	-	●*	-
Chad	●*	-	-	-	-
Chile	●	●	●	●	-
China	●	●	●	○	-
Colombia	●	-	●	●	-
Comoros	-	●	-	-	-
Congo	●	○	-	●	-
Costa Rica	●	●	●	●	-
Croatia	●	●	●	○	-
Cuba	●	●	-	-	-
Curaçao	●	-	●	●	●
Cyprus	●	●	-	○	-
Czechia	●	●	●	●	-
Côte d'Ivoire	●	●	-	-	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-
Dominica	●	-	-	-	-
Dominican Republic	●	-	●	-	-
Ecuador	●	-	●	●	-
Egypt	●	-	-	-	-
El Salvador	●	-	●*	●	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	○	-
Eswatini	-	●	-	●*	-
Ethiopia	●	-	-	-	-
Falkland Islands (Malvinas)	●*	●*	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	●	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-
Germany	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Ghana	●	●	-	●	-
Gibraltar	●	-	-	-	-
Greece	●	●	●	●	-
Grenada	●	-	-	-	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	●	-
Guinea	●	○	-	-	-
Guinea-Bissau	●	●	-	-	-
Guyana	-	-	●	-	-
Haiti	●	-	●	-	-
Honduras	●	-	-	-	-
Hungary	●	○	●	○	-
Iceland	●	-	-	-	-
India	●	●	●	●	-
Indonesia	●	●	-	●	-
Iran (Islamic Republic of)	●	●	●*	●	-
Iraq	●	●	-	●	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	-	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	●	○	-	●	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	○	-
Kuwait	●	●	-	●	-
Kyrgyzstan	●	●	-	-	-
Lao People's Democratic Republic	●	-	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Latvia	●	●	●	○	-
Lebanon	●	-	-	●	-
Lesotho	-	●	-	●*	-
Liberia	●	-	-	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	-	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-
Madagascar	-	●	-	-	-
Malawi	●	●	-	●	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	●	●	-	●	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	●	-	●	-
Mongolia	●	-	-	●	-
Montenegro	●	-	-	-	-
Montserrat	●	-	-	-	-
Morocco	●	●	-	●	-
Mozambique	●	●	-	●	-
Myanmar	●	-	-	●	-
Namibia	●	●	-	●	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	-	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Nigeria	●	●	-	●	-
North Macedonia	●	●	-	○	-
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●	-
Oman	●	●	-	●	-
Pakistan	●	●	●	●	-
Panama	●	●	●	●	●
Papua New Guinea	-	-	-	●	-
Paraguay	●	-	●	●	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	●	-	-	●	-
Romania	●	●	●	●	-
Russian Federation	●	●	○	●	-
Rwanda	●	●	-	●	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	-	-
Saint Lucia	●	-	-	●*	-
Saint Martin	●	●	-	-	-
Sao Tome and Principe	○	-	-	-	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	●	-
Serbia	●	-	-	●	-
Seychelles	●*	●	-	●*	-
Sierra Leone	-	-	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Singapore	●	●	●	●	-
Sint Maarten	●	●	-	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	●	-	-	-
South Africa	●	●	○	●	-
South Sudan	●	●	-	●	-
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-
Sudan	●	●	-	-	-
Suriname	●	●	●	●	-
Sweden	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Switzerland	●	●	●	●	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	●	-
Togo	●	●	-	-	-
Trinidad and Tobago	●	-	●	●*	-
Tunisia	●	●	-	●	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	-	-
Uganda	●	●	-	●	-
Ukraine	●	○	-	○	-
United Arab Emirates	●	●	●	●	-
United Kingdom	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
United Republic of Tanzania	-	●	-	-	-
United States Virgin Islands	●	●	-	●	-
United States of America	●	●	●	●	-
Uruguay	●	●	●	●	-
Uzbekistan	●	●	-	○	-
Venezuela (Bolivarian Republic of)	●	-	●	●	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Yemen	●*	●*	-	-	-
Zambia	●	●	-	●	-
Zimbabwe	-	●	-	●	-

**Newly reported in this update.*

Unspecified B.1.617 reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. Th ese will be reallocated as further details become available.

hat information for this variant was received by WHO from official sources.

ation become available.

*** Gamma was excluded for Bangladesh this week based on further information.*

****Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern*

See also Annex 2: Data, table and figure notes.

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[2] On 20 July, Ecuador Ministry of Public Health (MSP) revised their process of reporting on deaths. The country has now started reporting probable deaths and deaths in other facilities, as well as confirmed deaths, as part of their cumulative death count. Due to this change in reporting, an artificial inflation in last week's deaths in the Region has been observed. Thus, the decline in deaths observed this week should be interpreted carefully.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

COVID-19 Weekly Epidemiological Update

Edition 52, published 10 August 2021

In this edition:

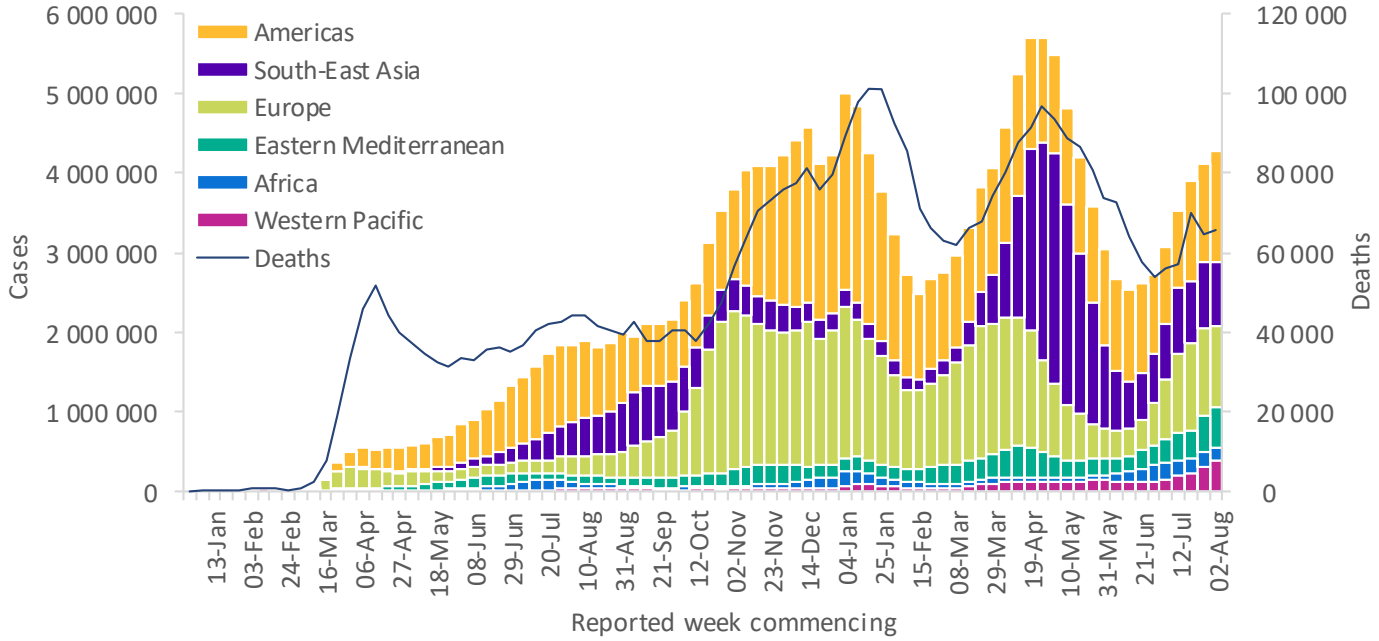
- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Key weekly updates

Global overview

Data as of 8 August 2021

On 5 August, the cumulative number of COVID-19 cases globally surpassed 200 million, just six months after reaching 100 million cases. This week alone, over 4.2 million new cases and over 65 000 new deaths were reported, a slight increase as compared to the previous week. The largest proportionate increases in new cases were reported by the Region of the Americas (14%) and Western Pacific Region (19%), with 1.3 million and over 375 000 new cases reported, respectively. Additionally, a substantial increase (46%) in the number of new deaths was reported this week in the Western Pacific Region (Table 1). Of the 228 Member States and territories, 38 (17%) reported more than a 50% increase in new cases as compared to the previous week and 34 (15%) reported a more than a 50% increase in new deaths.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 8 August 2021**



**See *Annex 2: Data, table and figure notes*

The Regions reporting the highest weekly case and deaths incidence rates per 100 000 population remain the same as last week: the Regions of the Americas (136.5 new cases per 100 000 population; 14% increase) and Europe (108.6 new cases per 100 000 population; 7% decrease) reported the highest weekly incidence in cases; while the Regions of the Americas (1.9 per 100 000 population; 4% decrease), Europe (1.0 per 100 000

population; 16% increase) and South-East Asia (1.0 per 100 000 population; 6% decrease) reported the highest weekly incidence in deaths.

At the country level, the highest numbers of new cases were reported from the United States of America (734 354 new cases; 35% increase), India (278 631 new cases; 2% decrease), the Islamic Republic of Iran (248 102 new cases; 20% increase), Brazil (228 473 new cases; 8% decrease), and Indonesia (225 635 new cases; 18% decrease).

Globally, cases of the Alpha variant have been reported in 185 countries, territories or areas (hereafter countries), with three new countries reporting this Variant of Concern (VOC) since last week, while 136 countries (four new countries) have reported cases of the Beta variant; 81 countries (no new country) have reported cases of the Gamma variant; and 142 countries (seven new countries) have reported cases of the Delta variant.

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 8 August 2021**

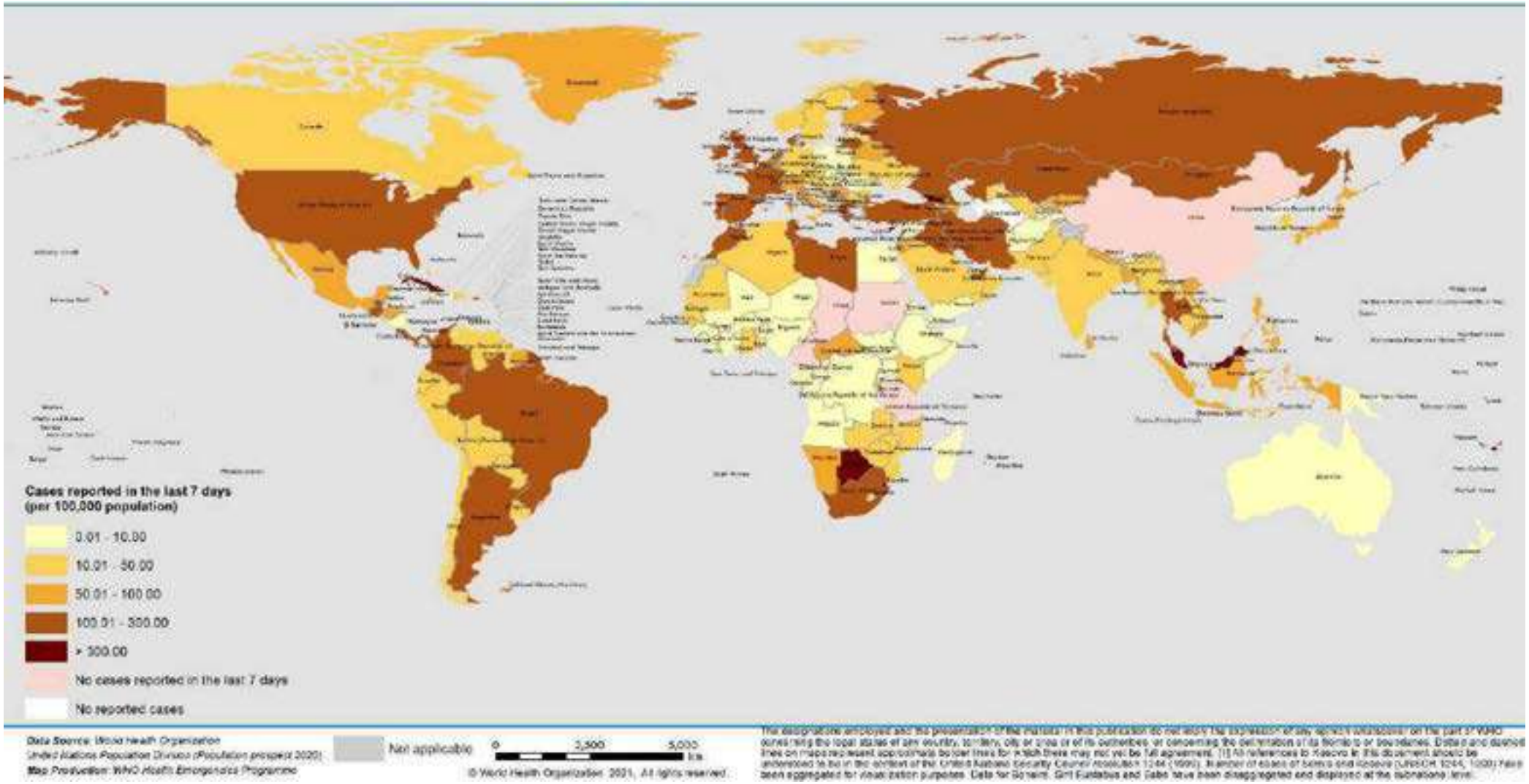
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 396 284 (33%)	14%	78 619 744 (39%)	19 832 (30%)	-4%	2 030 101 (47%)
Europe	1 012 890 (24%)	-7%	61 214 530 (30%)	9 562 (15%)	16%	1 230 343 (29%)
South-East Asia	799 225 (19%)	-5%	39 177 502 (19%)	20 702 (32%)	-6%	590 988 (14%)
Eastern Mediterranean	499 655 (12%)	8%	13 095 783 (6%)	6 000 (9%)	8%	242 229 (6%)
Africa	181 019 (4%)	-1%	5 137 088 (3%)	4 743 (7%)	-2%	122 025 (3%)
Western Pacific	375 568 (9%)	19%	4 901 518 (2%)	4 633 (7%)	46%	69 722 (2%)
Global	**4 264 641 (100%)**	**4%**	**202 146 929 (100%)**	**65 472 (100%)**	**2%**	**4 285 421 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
***See Annex 2: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

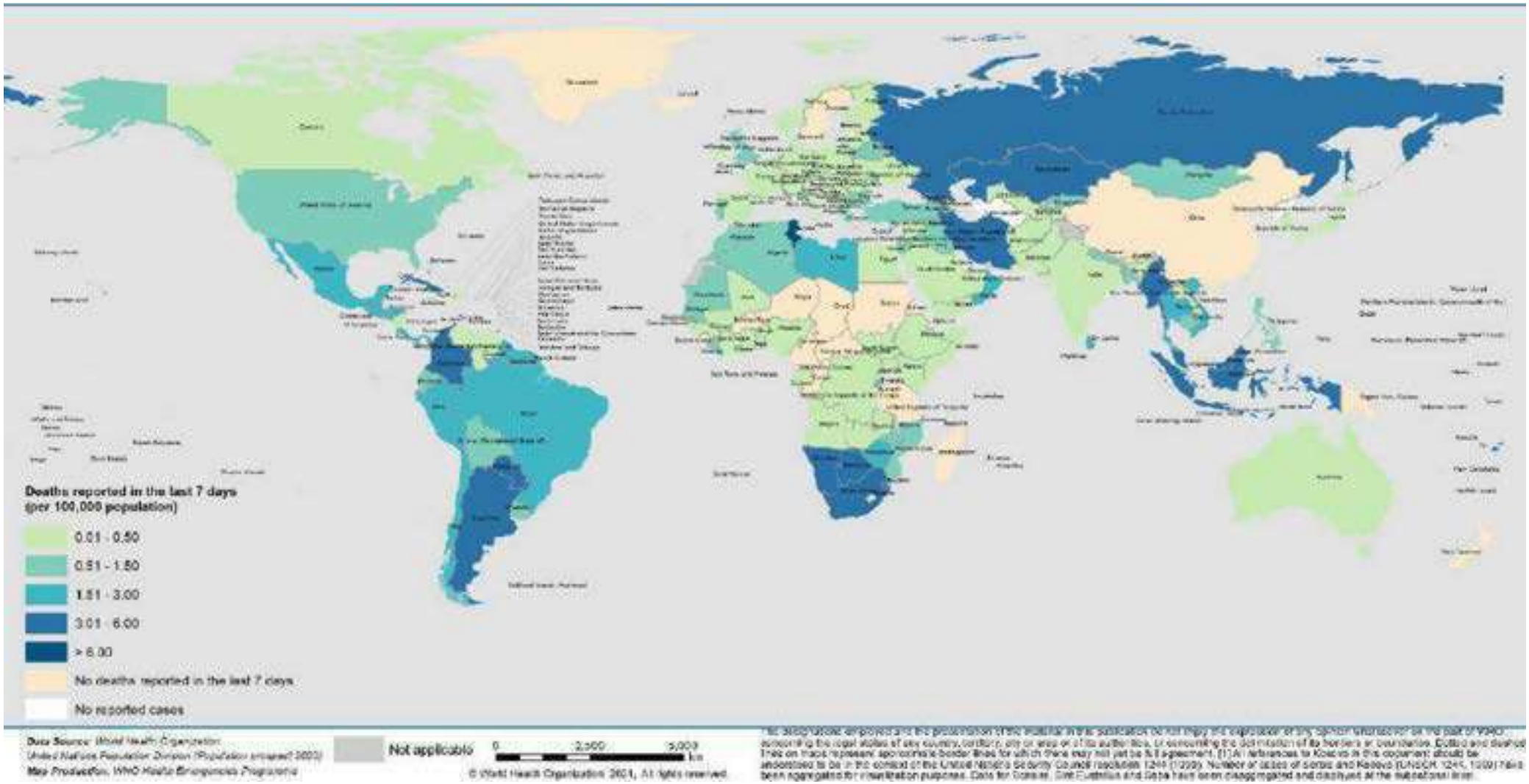
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 2 – 8 August 2021**



**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 2 – 8 August 2021**



**See *Annex 2: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact vaccine, therapeutics, diagnostics or effectiveness of public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants.

For updates on VOCs and VOIs, and a list of Alerts for Further Monitoring, are available on the WHO Tracking SARS-CoV-2 Variants website.

Geographic distribution

As surveillance activities to detect SARS-CoV-2 variants are strengthened at national and subnational levels, including through the expansion of genomic sequencing capacities, the number of countries/areas/territories (hereafter countries) reporting VOCs continues to increase (Figure 4, Annex 1). This distribution should nonetheless be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

Phenotypic characteristics

Available evidence on phenotypic impacts of VOCs is summarized in Table 2, as well as in previous editions of these COVID-19 Weekly Epidemiological Updates. Since the last detailed update on 20 July, new evidence has been published on the phenotypic characteristics of VOCs.

A case-control study conducted in Qatar[1] using a national database comparing outcomes of cases(defined as individuals with severe or critical COVID-19 or who progressed to death) and controls (individuals with asymptomatic or mild disease) found the odds of progressing to severe disease requiring acute-care hospitalization was 1.24 (95% CI 1.11-1.39) for cases infected with Beta compared to Alpha. The odds of cases progressing to critical disease requiring ICU admission was 1.49 (95%CI 1.13-1.97) for Beta compared to Alpha, and the odds of death were 1.57 (95% CI 1.03-2.43) for Beta compared to Alpha[1(p)].

An analysis of symptomatic[2], PCR positive cases aged 15 years or older in the United Kingdom (n=83 197) identified between 12 April and 27 June 2021 found that 1.2% (980/83 197) were possible reinfections. The adjusted odds ratio of reinfection with the Delta variant was 1.46 (95% CI 1.03-2.05) compared to the Alpha variant[3].

A report on the first local transmission of the Delta SARS-CoV-2 variant in China[4] described viral infection and transmission dynamics of 167 cases that were traced back to the index case. Daily sequential PCR testing of the quarantined subjects indicated that among those who became infected, the viral load of the first positive test of Delta infections was approximately 1000 times

higher than that of the original non-VOC strain, suggesting the potential for faster viral replication and increased infectiousness of the Delta variant during early stages of infection[5].

Another report by Public Health England[6] showed similar findings of high viral loads among breakthrough cases infected with Delta. However, the authors highlighted that the results may be influenced by test-seeking behaviour or by changes, such as age distribution of cases, which can also influence cycle threshold (Ct) values.

Table 2: Summary of phenotypic impacts* of Variants of Concern

WHO label	Alpha	Beta	Gamma	Delta
Transmissibility	Increased transmissibility and secondary attack rate[7]	Increased transmissibility[8]	Increased transmissibility[9]	Increased transmissibility and secondary attack rate[10] Similar transmissibility between vaccinated and unvaccinated individuals[11–13]
Disease severity	Increased risk of hospitalization[14], possible increased risk of severity and mortality[15]	Not confirmed, possible increased risk of in-hospital mortality[16]	Not confirmed, possible increased risk of hospitalization[17]	Increased risk of hospitalization[18]
Risk of reinfection	Neutralizing activity retained [19], risk of reinfection remains similar[20]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[21]	Moderate reduction in neutralizing activity reported[22]	Reduction in neutralizing activity reported[23–25]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF); no impact on overall result from multiple target RT-PCR, No impact on Ag RDTs observed[26]	No impact on RT-PCR or Ag RDTs observed[25]	None reported to date	None reported to date

**Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.*

Table 3. Summary of vaccine performance against Variants of Concern

	Anhui ZL-Recombinant	AstraZeneca-Vaxzevria	Beijing CNBG-BBIBP-CorV	Bharat-Covaxin	Gamaleya-Sputnik V	Janssen-Ad26.COV 2.5	Moderna-mRNA-1273	Moderna-mRNA-1273/ Pfizer BioNTech-Comirnaty	Novavax-Covavax	Pfizer BioNTech-Comirnaty	SII - Covishield	Sinovac-CoronaVac
Alpha[27,28]												
Summary of VE*	Protection retained against all outcomes											
- Severe disease	-	↓$_{1}$	-	-	-	-	↔$_{1}$	↔$_{1}$	-	↔$_{3}$	-	-
- Symptomatic disease	-	↔ to ↓$_{3}$	-	-	-	-	↔$_{1}$	↔$_{1}$	↓$_{1}$	↔$_{3}$	-	-
- Infection	-	↔ to ↓$_{2}$	-	-	-		↔$_{1}$	-	-	↔$_{2}$	-	-
Neutralization	↔$_{2}$	↓$_{3}$	↔$_{1}$	↔$_{1}$	↔$_{1}$	↔$_{2}$	↔$_{10}$	↓$_{1}$	↔$_{1}$	↔ to ↓$_{28}$	-	↔ to ↓$_{5}$
Beta[29–32]												
Summary of VE*	Protection retained against severe disease; reduced protection against symptomatic disease; limited evidence											
- Severe disease	-	-	-	-	-	↔$_{1}$	-	-	-	↔	-	-
- Symptomatic disease	-	↓↓↓$_{1}$	-	-	-	↔$_{1}$	-	-	↓↓↓$_{1}$	-	-	-
- Infection	-	-	-	-	-	-	↔$_{1}$	-	-	↔ to ↓$_{2}$	-	-
Neutralization	↔ to ↓$_{3}$	↓↓$_{5}$	↔ to ↓$_{2}$	↓$_{1}$	↓↓$_{1}$	↓ to ↓↓$_{5}$	↓ to ↓↓$_{12}$	↓↓↓$_{1}$	↓↓↓$_{1}$	↓ to ↓↓$_{28}$	-	↓ to ↓↓$_{4}$
Gamma												
Summary of VE*	Unclear impact; very limited evidence											
- Severe disease	-	-	-	-	-	-	-	-	-	-	-	-
- Symptomatic disease	-	-	-	-	-	-	-	-	-	-	-	-
- Infection	-	-	-	-	-	-	-	-	-	-	-	↔$_{1}$
Neutralization	↔$_{1}$	↓$_{1}$	-	-	-	↓$_{2}$	↓$_{4}$	-	-	↔ to ↓$_{13}$	-	↔ to ↓$_{3}$
Delta[33]												
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection; limited evidence											
- Severe disease	-	↔$_{1}$	-	-	-	-	-	-	-	↔	-	-
- Symptomatic disease	-	↓↓$_{2}$	-	↓$_{1}$	-	-	-	-	-	↔ to ↓$_{3}$	-	-
- Infection	-	↓$_{1}$	-	-	-	-	-	-	-	↓$_{1}$	-	-
Neutralization	↔ to ↓$_{2}$	↓to↓↓$_{3}$	-	↔ to ↓$_{2}$	-	↓$_{3}$	↓$_{3}$	↓↓$_{1}$	-	↓$_{7}$	↓$_{1}$	↓to↓↓↓$_{2}$

VE refers to vaccine effectiveness and vaccine efficacy Summary VE*: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10% reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20% reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30% reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30% reduction in VE, or ≥10-fold reduction in neutralization. When

more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study.

The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources page (https://view-hub.org/resources). For vaccine effectiveness studies, see references noted with '#' in the 'COVID-19 Vaccine Effectiveness Results Summary Table'. For a list of all neutralization studies, see 'COVID-19 Vaccine Neutralization Studies Table'.
References indicated by superscripts are vaccine efficacy studies informing this table and are included in the reference section below.

Additional notes on VOC impacts on vaccines

- All comparisons of results with and without VOC are within a given vaccine product.
- Studies presenting VOC-specific vaccine efficacy or effectiveness (VE) estimates for full vaccination (≥ 7 days post final dose) are assessed against a comparator VE estimate for that product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 randomised RCT results from non-VOC settings. For severe disease and infection, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca Vaxzevria for severe disease (phase 3 RCT efficacy estimates against severe disease are used as comparator since a within study comparator is unavailable) and for infection (when phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.

Table 3 presents the impact of variants on product specific vaccine efficacy/effectiveness (VE) and quantifies the reduction in VE in the setting of VOCs compared to VE in non-VOC settings. Of note, reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. In addition, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection, as is the case for AstraZeneca-Vaxzevria.

Since the 20 July update, results from an ongoing randomized clinical trial evaluating the 6-month efficacy of Pfizer BioNTech-Comirnaty against SARS-CoV-2 infection (symptomatic + asymptomatic) in persons ≥ 12 years old reports an overall vaccine efficacy against infection and against severe disease ≥7 days post second dose of 91% (95% CI: 89.0-93.2%) and 96.7% (95% CI: 80.3-99.9%), respectively, across 152 participating sites in 6 countries. The authors also estimated VE against the Beta variant in South Africa and found 2 doses of Pfizer BioNTech-Comirnaty prevented 100% (95% CI: 53.5-100.0%) of SARS-CoV-2 infections ≥7 days post second dose, though confidence intervals are wide.[32] These results have not yet been peer-reviewed.

A second study (not yet peer-reviewed) estimated the effectiveness of Pfizer BioNTech-Comirnaty against infection with the Beta variant among residents of long-term care facilities (LCTFs) in France. The authors describe two outbreaks associated with the Beta variant among LTCFs in which more than 70% of residents had received both doses of the vaccine. VE in this population against any SARS-CoV-2 infection ≥ 7 days after receipt of the second dose was 49% (95% CI: 14-69%). VE against severe disease remained high at 86% (95% CI: 67-94%).[34]

Another study (not yet peer-reviewed) evaluated the real-world effectiveness of mRNA (Moderna-mRNA-1273 and Pfizer BioNTech-Comirnaty) vaccines among health care workers in Canada, where the interval between doses was 16 weeks. Most participants (88%) included in the analysis received Pfizer BioNTech-Comirnaty vaccine. Using a test-negative design, the study found that a single dose of mRNA vaccine had lower effectiveness against symptomatic COVID-19 due to the Alpha variant compared to non-VOC strains: 60% (95%CI: 53.6-65.5%) vs. 77.0% (95%CI: 72.6-80.7%), but no substantive difference in two-dose recipients: 92.6%% (95%CI: 87.1%-95.8%) vs. 86.5%% (95%CI: 56.8-95.8%).[35]

A fourth study (not yet peer-reviewed), also using a test-negative case-control design, evaluated the effectiveness of AstraZeneca-Vaxzevria in adults ≥ 60 years in Brazil in a setting of high prevalence of the Gamma variant. Single dose VE estimates against SARS-CoV-2 infection, hospitalization, and death ≥ 28 days after immunization were 33.4% (95% CI: 26.4 to 39.7%), 55.1% (95% CI: 46.6 to 62.2%), and 61.8% (95% CI: 48.9 to 71.4%), respectively. Beginning at 14 days after receipt of the second dose, respective VE estimates increased to 77.9% (95% CI: 69.2 to 84.2%), 87.6% (95% CI: 78.2 to 92.9%), and 93.6% (95% CI: 81.9 to 97.7%).[36]

Eight recent studies have assessed the impact of the Delta variant on COVID-19 vaccine performance. Three evaluated vaccine effectiveness. A study from India (not yet peer-reviewed) assessed the effectiveness of AstraZeneca-Vaxzevria vaccine at preventing SARS-CoV-2 infection and severe COVID-19 disease in a setting with high prevalence of the Delta variant. Two doses of the vaccine were 63.1% (95%CI: 51.5-72.1%) and 81.5% (95%CI: 9.9- 99.0) effective at preventing infection and moderate-severe disease, respectively. Single dose VE against infection (46.2%, 95%CI: 31.6, 57.7) was lower than 2 dose VE, while single dose VE against moderate-severe disease (79.2%, 95%CI: 46.1-94.0%) was similar to that of 2 doses. While this study was conducted during a time of high transmission of the Delta variant, it is noteworthy that viral sequencing and lineage determination were available from only a small subset of positive cases (4.4%); of these samples 90% were the Delta variant.[37]

A second study, from the United States, evaluated cases occurring between April and June 2021 in Mesa County, Colorado, where cases of the Delta variant had increased rapidly. The fraction of cases who were fully vaccinated with any vaccine was evaluated in Mesa county and compared to the rest of the state which experienced a slower increase in the proportion of the Delta variant cases among new infections. Among COVID-19 cases aged ≥65 years in Mesa county, 27.5% were fully vaccinated compared to 17.4% in other Colorado counties. The authors report a crude VE of 78% (95% CI: 71%–84%) against symptomatic infection for a 2-week period ending June 5 in Mesa County and 89% (95% CI = 88%–91%) for the rest of the state; during this time Delta made up close to 100% of sequenced samples in Mesa compared to ~50% for all other counties.[38] A third study (not yet peer reviewed), from the UK, estimated VE of any COVID-19 vaccine against infection and symptomatic disease to be 49% (95%: 22-67%) and 59% (95% CI: 23-78%), respectively, among adults 18 to 64 years during the period from 24 June to 12 July 2021 when the Delta variant was highly prevalent. These estimates were reduced compared to the period from 20 May to 7 June 2021 characterized by lower Delta prevalence and VE estimates against infection and symptomatic disease of 64% (95% CI: 11%-85%) and 83% (95% CI: 19-97%), respectively. VE against severe disease was not evaluated in this study.[39]

The authors of this UK study also found reduced viral load (higher cycle threshold values) among vaccinated COVID-19 cases compared to unvaccinated cases during the period of high Delta prevalence. A study of Delta breakthrough infections in Singapore (not yet peer reviewed) found that those who were fully vaccinated with an mRNA vaccine had similar viral loads to those who were infected with Delta but unvaccinated; however, the viral loads were found to decrease faster among those who were vaccinated. The authors also reported that fully vaccinated individuals experienced less severe illness than unvaccinated individuals.[40] Two additional studies from the United States of America (one not yet peer reviewed) also found no difference in viral load among cases who had been vaccinated with any vaccine and unvaccinated cases during a time when there was a high prevalence of the Delta variant.[11,13]

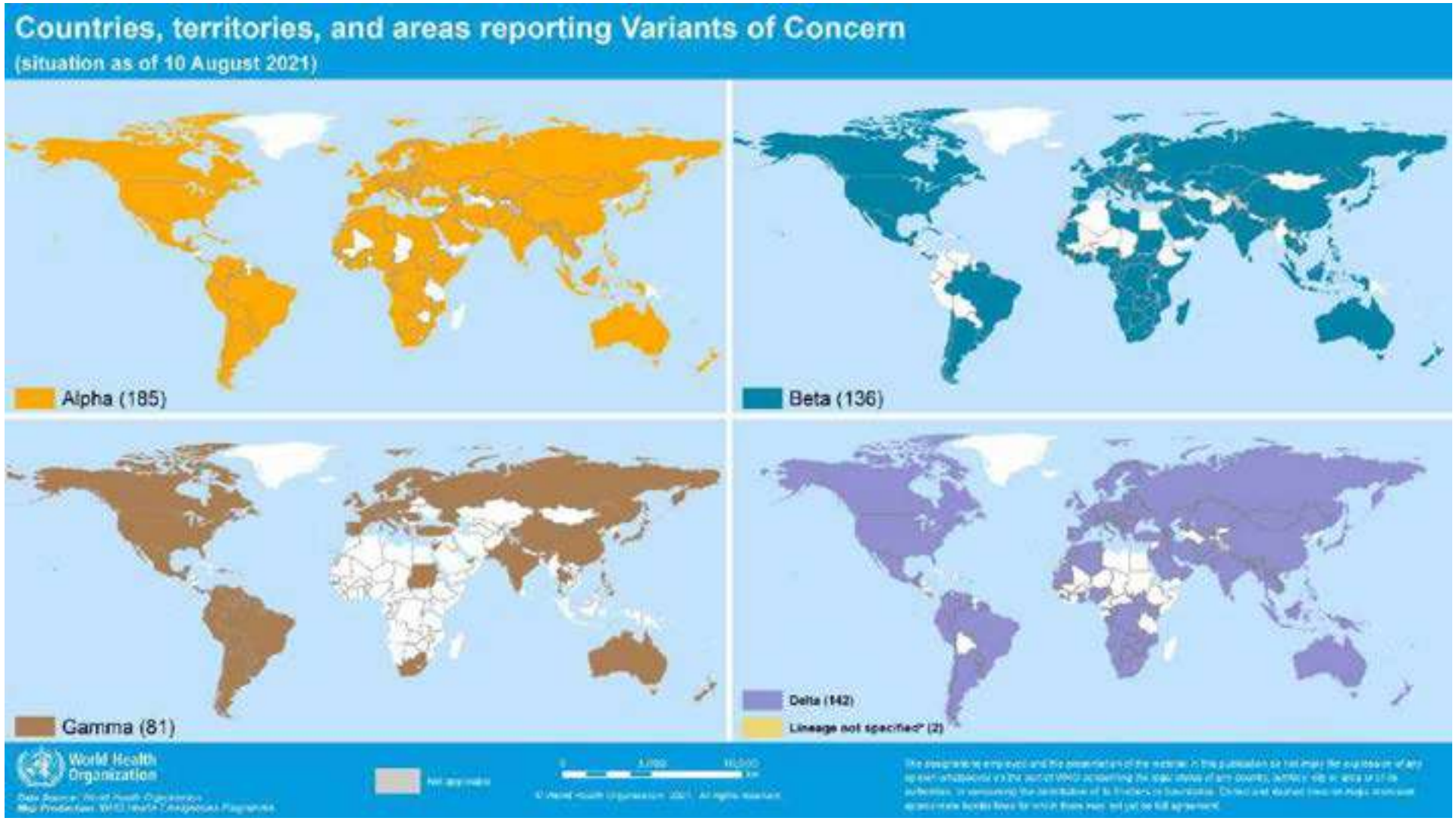
Two studies from Israel (both not yet peer-reviewed) assessed the duration of protection by the Pfizer BioNTech-Comirnaty vaccine. The first study compared the rate of breakthrough infection during June and July 2021, a period during which the Delta variant was dominant, between individuals who received 2 doses of the vaccine in winter 2021 to individuals who received two doses of the vaccine in the spring, adjusting for confounders. The authors report that persons vaccinated between January and February 2021 had a 53% (95% CI: 40-68%) increased risk of breakthrough infection in June and July compared to individuals vaccinated between March and April 2021.[41] The second study, conducted during a time of high Delta

transmission (Delta infections accounted for 93% of a small subset of cases which were sequenced) found an increased odds (odds ratio: 2.1, 95% CI: 1.7-2.5) of SARS-CoV-2 infection among persons vaccinated at least 146 days before their positive test results compared to individuals who were vaccinated less than 146 days prior to becoming infected.[42] These preliminary findings may suggest a decrease in long-term protection of the vaccine or decreased effectiveness of the vaccine against the Delta variant or a combination of these factors. No unvaccinated persons were included in these two studies; thus vaccine effectiveness was not evaluated.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Figure 4. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 10 August 2021**



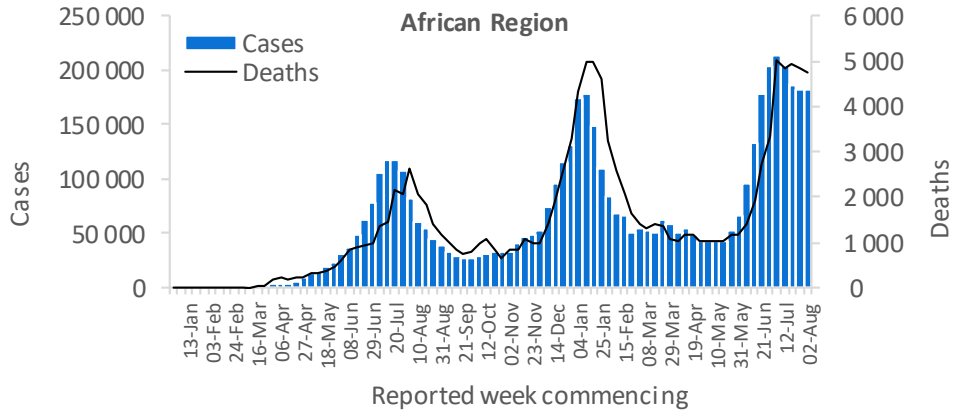
**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details.*

WHO regional overviews – Epidemiological week 2 – 8 Aug 2021

African Region

The Region reported relatively similar numbers of weekly cases and deaths as the previous week, with just over 181 000 new cases (-1%) and over 4700 new deaths (-2%) reported this week. After cases peaked in June 2021, the Region has experienced a decrease in weekly reported cases since the middle of July, largely driven by declines observed in South Africa. However, over the past two weeks the rate of decline has slowed and nearly half of the countries in the Region (24; 49%) are now reporting increasing trends.

Most countries in the Region (31; 63%) showed decreasing trends in the number of new deaths reported. This decline has been driven by decreases in deaths reported from Namibia (-51%), Uganda (-42%), Zimbabwe (-39%) and Zambia (-39%). Overall, the highest numbers of new cases were reported from South Africa (76 034 new cases; 128.2 new cases per 100 000 population; 4% decrease), Botswana (15 884 new cases; 675.4 new cases per 100 000; 76% increase), and Mozambique (9771 new cases; 31.3 new cases per 100 000; 26% decrease). The highest numbers of new deaths were reported from South Africa (2610 new deaths; 4.4 new deaths per 100 000 population; 3% increase), Zimbabwe (294 new deaths; 2.0 new deaths per 100 000; 39% decrease), and Algeria (233 new deaths; 0.5 new deaths per 100 000; 10% increase).

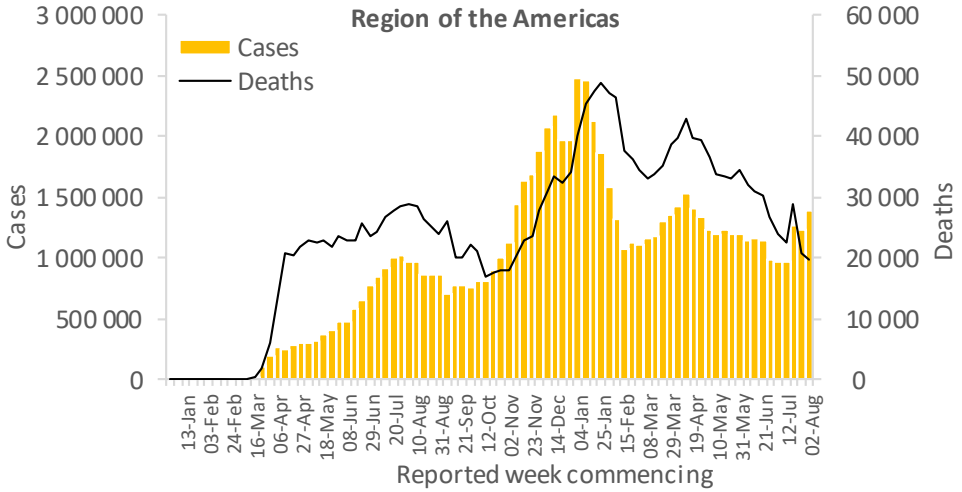


Updates from the African Region

Region of the Americas

This week, the Region of the Americas reported an increase of 14% in new cases as compared to the previous week, with just under 1.4 million new cases reported. The Region showed a slight decrease in the number of weekly deaths as compared to the previous week, with nearly 20 000 new deaths reported (4% decrease compared with the previous week).

The increase in weekly cases is mainly driven by Peru (a 64% increase), and the United States of America (35%). The declines in mortality reported by the Region in recent weeks have been mainly driven by Ecuador* (-81%), Argentina (-27%), Colombia (-26%) and Brazil (-12%). Overall, the highest numbers of new cases were reported from the United States of America (734 354 new cases; 221.9 new cases per 100 000; 35% increase), Brazil (228 473 new cases; 107.5 new cases per 100 000; 8% decrease), and Mexico (114 783 new cases; 89.0 new cases per 100 000; 11% increase). The highest numbers of new deaths were reported from Brazil (6302 new deaths; 3.0 new deaths per 100 000; 11% decrease), the United States of America (3391 new deaths; 1.0 new deaths per 100 000; 38% increase), and Mexico (3277 new deaths; 2.5 new deaths per 100 000; 31% increase).

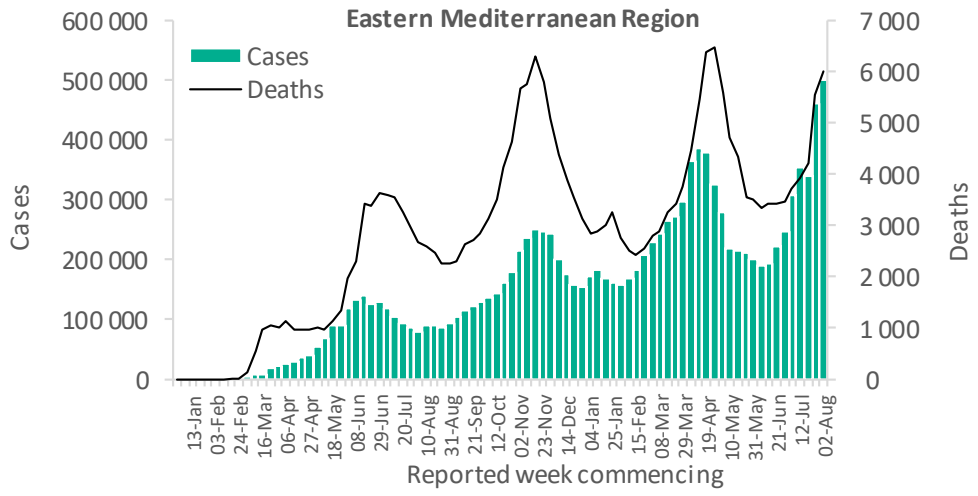


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported just under half a million new cases and over 6000 new deaths, increases of 8% as compared to the previous week. The Region continued to report the highest weekly number of cases since the beginning of the pandemic for the second consecutive week. Almost half of the countries in the Region (10 of 22) have reported an increase in cases as compared to the previous week, mainly driven by the surge reported by the Islamic Republic of Iran (20%) and Morocco (31%). The highest numbers of new cases were reported from the Islamic Republic of Iran (248 102 new cases; 295.4 new cases per 100 000), Iraq (77 764 new cases; 193.3 new cases per 100 000; 6% decrease), and Morocco (63 764 new cases; 172.8 new cases per 100 000).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (2843 new deaths; 3.4 new deaths per 100 000; 36% increase), Tunisia (951 new deaths; 8.0 new deaths per 100 000; 24% decrease), and Iraq (489 new deaths; 1.2 new deaths per 100 000; 15% increase).

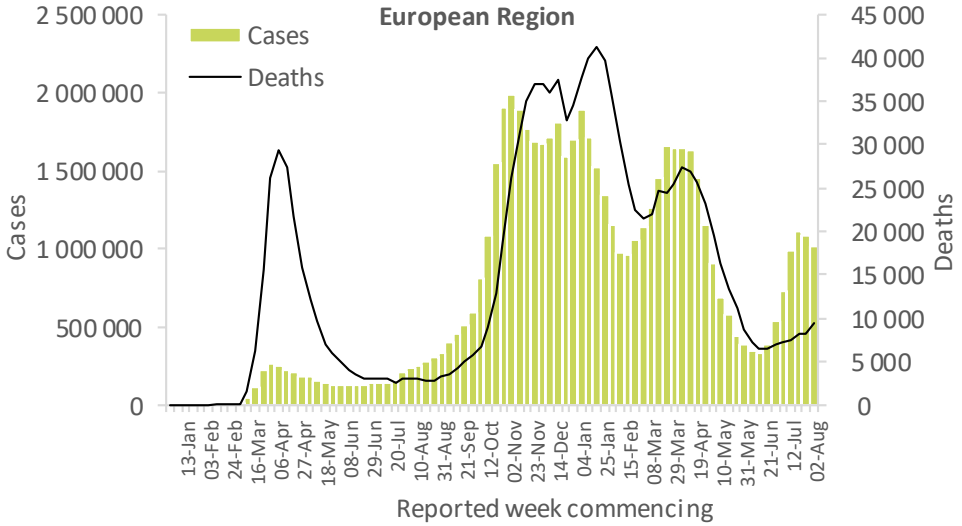


Updates from the Eastern Mediterranean Region

European Region

While the European Region reported a 7% decrease in the number of weekly cases as compared to the previous week, it still reported over one million new cases with an increasing trend in a number of countries in South-East Europe including North Macedonia, Kosovo and Albania. The number of weekly deaths increased by 16% as compared to the previous week, with over 9500 new deaths reported, and Estonia, Kosovo and Romania reporting sharp increases in new deaths. The highest numbers of new cases were reported from the United Kingdom (185 724 new cases; 273.6 new cases per 100 000; similar to the previous week), Russian Federation (159 073 new cases; 109.0 new cases per 100 000; similar to the previous week), and Turkey (144 839 new cases; 171.7 new cases per 100 000; a 4% increase).

The highest numbers of new deaths were reported from the Russian Federation (5529 new deaths; 3.8 new deaths per 100 000; similar to the previous week), Kazakhstan (832 new deaths; 4.4 new deaths per 100 000; 25% decrease) and Turkey (649 new deaths; <1 new deaths per 100 000; 43% increase).

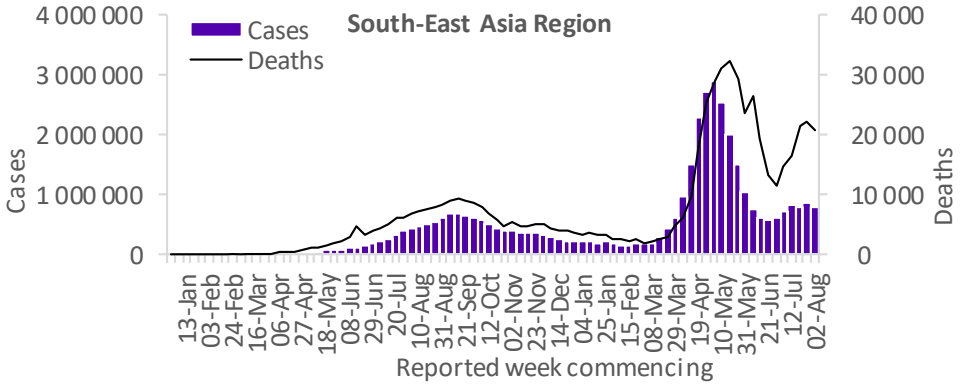


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 799 000 new cases, a 5% decrease as compared to the previous week, however, several countries in the Region continue to report increasing trends, including Sri Lanka and Thailand (26% and 20% increases, respectively). Case incidence in the region peaked in early May and has since largely plateaued over the past month. This is largely due to cases in India remaining stable, and consistent decreases in Indonesia and Myanmar over the past month. Following a steep increase in the mortality rate in the Region, this is the first time in seven weeks that a decline in the number of new weekly deaths has been reported; a trend largely driven by declines in the Maldives and Myanmar this week. Large increases in weekly deaths were reported in several countries including Sri Lanka, Nepal and Thailand (47%, 35% and 30% increases, respectively). The highest numbers of new cases were reported from India (278 631 new cases; 20.2 new cases per 100 000; 2% decrease), Indonesia (225 635 new cases; 82.5 new cases per 100 000; 18% decrease), and Thailand (141 191 new cases; 202.3 new cases per 100 000; 20% increase).

The highest numbers of new deaths were reported from Indonesia (11 373 new deaths; 4.2 new deaths per 100 000; 9% decrease), India (3511 new deaths; 0.3 new deaths per 100 000; 8% decrease), and Myanmar (2045 new deaths; 3.8 new deaths per 100 000; 22% decrease).

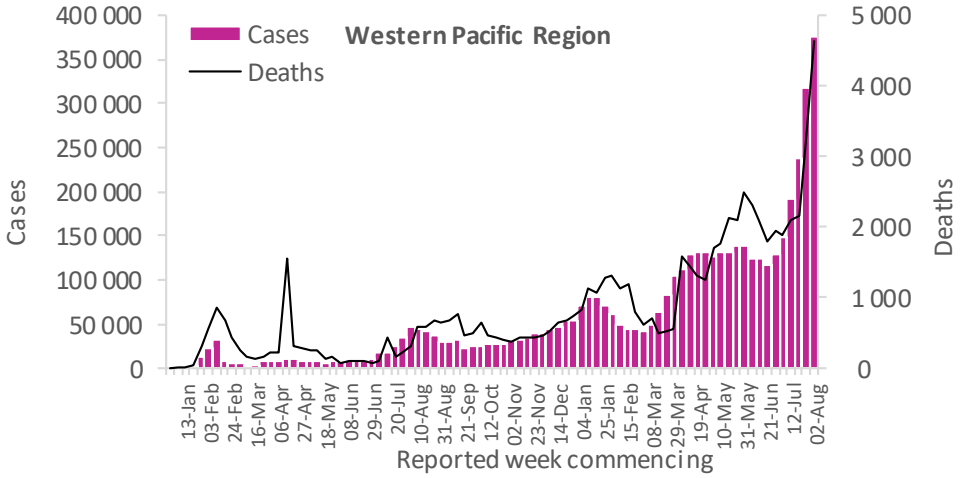


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported over 375 000 new cases and over 4600 new deaths, increases of19% and a 46%, respectively, as compared to the previous week. This increasing trend in both cases and deaths has been observed for nearly two months and is largely due to continued increases in case incidence in Japan, Philippines and Malaysia, although nearly half of the countries in the region are reporting rising case numbers (11 of 24; 46%). Similarly, the number of reported deaths has also been climbing over the past six weeks with a third (8 of 24: 33%) of the region's countries reporting an increase in deaths in the past week.

The highest numbers of new cases were reported from Malaysia (130 580 new cases; 403.4 new cases per 100 000; 12% increase), Japan (90 958 new cases; 71.9 new cases per 100 000; 51% increase), and the Philippines (60 373 new cases; 55.1 new cases per 100 000; 32% increase). The highest numbers of new deaths were reported from Viet Nam (1944 new deaths; 2.0 new deaths per 100 000; 108% increase), Malaysia (1365 new deaths; 4.2 new deaths per 100 000; 22% increase), and the Philippines (946 new deaths; 0.9 new deaths per 100 000; 25% increase).



Updates from the Western Pacific Region

Key weekly updates

WHO Director-General's key messages

- In his opening remarks at the media briefing on COVID-19 - 4 August 2021, the Director-General called for a moratorium on booster shots until at least the end of September to enable at least 10% of the population of every country to be vaccinated.
- In his remarks at the 1st International Forum on Vaccine Cooperation - 5 August 2021, the Director-General quantified the WHO's global targets for vaccines against COVID-19: vaccinate at least 10% of the population of every country by September, at least 40% by the end of the year, and 70% of the world's population by mid-next year. With more than 11 billion doses of vaccine needed to reach these critical milestones.
- In his opening remarks at the Member State Information Session on COVID-19 - 5 August 2021, the Director-General highlighted:
    - The WHO Strategic Preparedness and Response Plan for 2021 faces a funding shortfall of US$900 million, less than half of what is needed. Of the funds received, nearly all of them are earmarked and not flexible to sustain urgent priorities for vaccination, surveillance and response in countries experiencing surges in cases based on emerging needs.
    - In addition, the Access to COVID-19 Tools Accelerator is launching the Rapid ACT-Accelerator Delta Response, or RADAR, issuing an urgent call for US$7.7 billion for tests, treatments and vaccines.
    - In parallel, WHO will need $3.8 billion in additional financing this year for COVAX to exercise its options to purchase vaccines for 2022.

Updates and publications

- Training on handling, storing, and transporting Pfizer BioNTech COVID-19 Vaccine COMIRNATY® (Tozinameran), 4 August 2021
- ACT Accelerator: Quarterly Update Q2: 1 April - 30 June 2021, published on 4 August 2021
- Fraudulent "COVID-19 Compensation Lottery Prize" scam, falsely alleges association with WHO and others, 6 August 2021
- COVID-19 vaccines available for all healthcare workers in the Western Pacific Region, 6 August 2021

Annex

- COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 10 August 2021**

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Afghanistan	●	-	-	●	-
Albania	●	-	-	○	-
Algeria	●	-	-	●	-
Angola	●	●	-	●	-
Anguilla	●	-	-	●	-
Antigua and Barbuda	●	●	-	-	-
Argentina	●	●	●	●	-
Armenia	○	-	-	●	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	○	-
Bahamas	●	-	-	-	-
Bahrain	●	●	-	●	-
Bangladesh	●	●	-	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	-	-	-
Bermuda	●	●	-	-	-
Bhutan	●	●	-	●	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	●	●	-
Bosnia and Herzegovina	○	○	○	○	-
Botswana	●*	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	-	-
Brunei Darussalam	●	●	-	-	-
Bulgaria	●	●	-	●	-
Burkina Faso	●	-	-	-	-
Burundi	●	●	-	●	-
Cabo Verde	●	-	-	●*	-
Cambodia	●	●	-	●	-
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	-	●	-	-
Central African Republic	●	●*	-	-	-
Chile	●	●	●	●	-
China	●	●	●	○	-
Colombia	●	-	●	●	-
Comoros	-	●	-	-	-
Congo	●	●	-	●	-
Costa Rica	●	●	●	●	-
Croatia	●	●	○	○	-
Cuba	●	●	-	-	-
Curaçao	●	-	●	●	●
Cyprus	●	●	-	○	-
Czechia	●	●	●	●	-
Côte d'Ivoire	●	●	-	-	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-
Dominica	●	-	-	-	-
Dominican Republic	●	-	●	-	-
Ecuador	●	-	●	●	-
Egypt	●	-	-	-	-
El Salvador	●*	-	-	●*	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	○	-
Eswatini	-	●	-	-	-
Ethiopia	●	-	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	●	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Greece	●	●	●	●	-
Grenada	●	-	-	-	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	●*	-
Guinea	●	●	-	-	-
Guinea-Bissau	●	●	-	-	-
Guyana	-	-	●	-	-
Haiti	●	-	●	-	-
Honduras	●	-	-	-	-
Hungary	●	○	●	○	-
Iceland	●	-	-	-	-
India	●	●	●	●	-
Indonesia	●	●	-	●	-
Iran (Islamic Republic of)	●	●	-	●	-
Iraq	●	●	-	●	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	-	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	○	○	-	●	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	○	-
Kuwait	●	●	-	●	-
Kyrgyzstan	●	●	-	-	-
Lao People's Democratic Republic	●	-	-	●	-
Latvia	●	●	●	○	-
Lebanon	●	-	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Lesotho	-	●	-	-	-
Liberia	●	-	-	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	-	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-
Madagascar	-	●	-	-	-
Malawi	●	●	-	●	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	●	●	-	●	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	○	-	○	-
Mongolia	●	-	-	●	-
Montenegro	●	-	-	-	-
Montserrat	●	-	-	-	-
Morocco	●	●	-	●	-
Mozambique	●	●	-	●	-
Myanmar	●	-	-	●	-
Namibia	●	●	-	●	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	-	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	●*	-	●	-
North Macedonia	●	●	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●	-
Oman	●	●	-	●	-
Pakistan	●	●	●	●	-
Panama	●	●	●	●*	●
Papua New Guinea	-	-	-	●	-
Paraguay	●	-	●	●	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	○	-	-	●	-
Romania	●	●	●	●	-
Russian Federation	●	●	○	●	-
Rwanda	●	●	-	●	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	-	-
Saint Lucia	●	-	-	-	-
Saint Martin	●	●	-	-	-
Sao Tome and Principe	●	-	-	-	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	●	-
Serbia	●	-	-	●	-
Seychelles	-	●	-	-	-
Sierra Leone	-	-	-	○	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	●	-	-	-
South Africa	●	●	○	●	-
South Sudan	●	●	-	●	-
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-
Sudan	●	●	●	-	-
Suriname	●	●	●	●*	-
Sweden	●	●	●	●	-
Switzerland	●	●	○	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	●	-
Togo	●	●	-	-	-
Trinidad and Tobago	●	-	●	-	-
Tunisia	●	●	-	●	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	-	-
Uganda	●	●	-	●	-
Ukraine	●	○	-	○	-
United Arab Emirates	●	●	●	●	-
United Kingdom	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
United Republic of Tanzania	-	●	-	-	-
United States Virgin Islands	●*	●*	-	●	-
United States of America	●	●	●	●	-
Uruguay	●	●*	●	●*	-
Uzbekistan	●	●	-	○	-
Venezuela (Bolivarian Republic of)	●	-	●	●*	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Zambia	●	●	-	●	-
Zimbabwe	-	●	-	●	-

**Newly reported in this update.*

Unspecified B.1.617 reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

from official sources.

ation become available.

*** Gamma was excluded for Bangladesh this week based on further information.*

****Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern*

See also Annex 2: Data, table and figure notes.

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[2] On 20 July, Ecuador Ministry of Public Health (MSP) revised their process of reporting on deaths. The country has now started reporting probable deaths and deaths in other facilities, as well as confirmed deaths, as part of their cumulative death count. Due to this change in reporting, an artificial inflation in last week's deaths in the Region has been observed. Thus, the decline in deaths observed this week should be interpreted carefully.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

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COVID-19 Weekly Epidemiological Update

Edition 51, published 3 August 2021

In this edition:

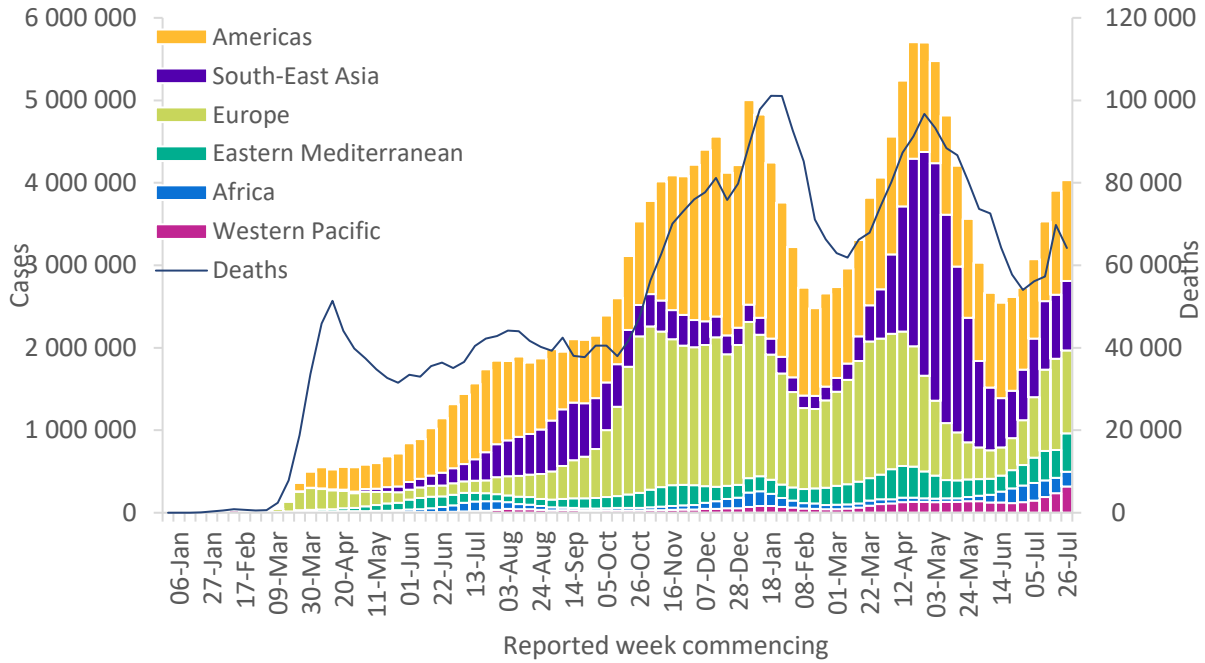
- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Key weekly updates

Global overview

Data as of 1 August 2021

The global number of new cases has been increasing for more than a month, with over 4 million cases reported in the past week (26 July to 1 August 2021) (Figure 1). This increasing trend is largely attributed to substantial increases in the Eastern Mediterranean and the Western Pacific Regions which reported 37% and 33% increases respectively as compared to the previous week, while the South-East Asia Region reported a 9% increase (Table 1); the other three Regions reported similar weekly case incidence or a slight decrease as compared to the previous week. Overall, the number of deaths reported this week decreased by 8% as compared to the previous week, with over 64 000 deaths reported. However, the Western Pacific and Eastern Mediterranean Regions showed a sharp increase in new deaths as compared to the previous week, reporting 48% and 31% increases, respectively. The other four Regions reported a similar number of weekly deaths as compared to the previous week, with the exception of the Region of the Americas which reported a 29% decrease. The cumulative number of cases reported globally is now nearly 197 million and the number of cumulative deaths is 4.2 million. If these trends continue, the cumulative number of cases reported globally could exceed 200 million by next week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 3 August 2021**



**See *Annex 2: Data, table and figure notes*

The Regions with the highest weekly case and deaths incidence rates per 100 000 population remain the same as last week: the Regions of the Americas (123.3 new cases per 100 000 population) and Europe (118.4 new cases per 100 000 population) reported the highest weekly case incidence while the Americas and South-East Asia Regions reported the highest weekly incidence in deaths , 2.0 and 1.1 new deaths per 100 000 population, respectively.

At the country level, the highest numbers of new cases in the past week were reported by the United States of America (543 420 new cases; 9% increase), India (283 923 new cases; 7% increase), Indonesia (273 891 new cases; 5% decrease), Brazil (247 830 new cases; 24% decrease), and the Islamic Republic of Iran (206 722 new cases; 27% increase).

Globally, cases of the Alpha variant have been reported in 182 countries, territories or areas (hereafter countries), while 132 countries (one new country) have reported cases of the Beta variant; 81 countries (one new country) have reported cases of the Gamma variant; and 135 countries (three new countries) have reported cases of the Delta variant.

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 3 August 2021**

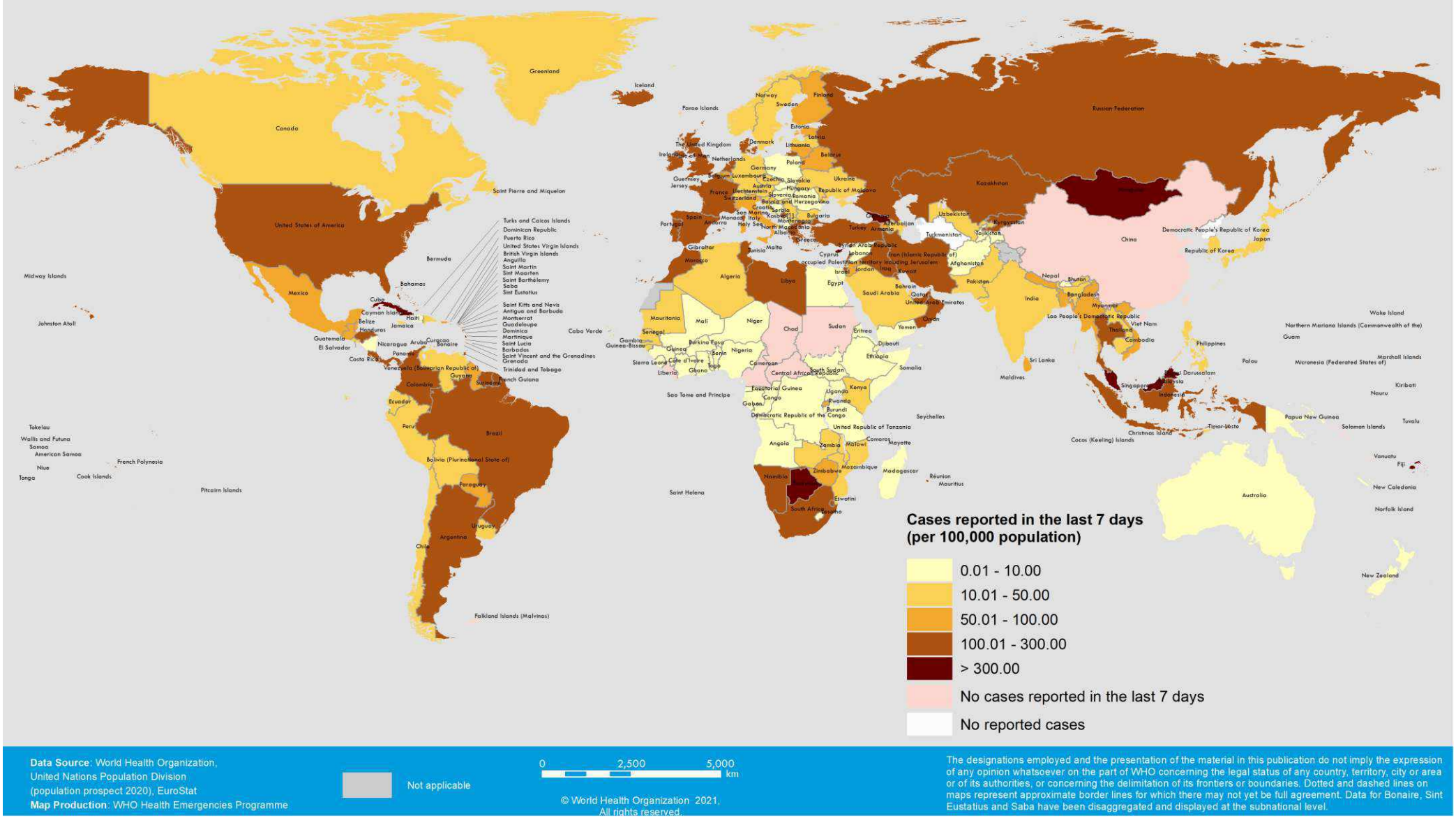
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 225 408 (30%)	-3%	77 221 387 (39%)	20 590 (32%)	-29%	2 010 183 (48%)
Europe	1 004 722 (25%)	-9%	60 109 964 (30%)	8 024 (12%)	-2%	1 220 491 (29%)
South-East Asia	841 753 (21%)	9%	38 378 277 (19%)	22 010 (34%)	3%	570 286 (14%)
Eastern Mediterranean	463 090 (11%)	37%	12 596 128 (6%)	5 553 (9%)	31%	236 229 (6%)
Africa	182 067 (5%)	-1%	4 955 648 (3%)	4 853 (8%)	-2%	117 282 (3%)
Western Pacific	316 796 (8%)	33%	4 525 949 (2%)	3 186 (5%)	48%	65 094 (2%)
Global	**4 033 836 (100%)**	**3%**	**197 788 117 (100%)**	**64 216 (100%)**	**-8%**	**4 219 578 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
***See Annex 2: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

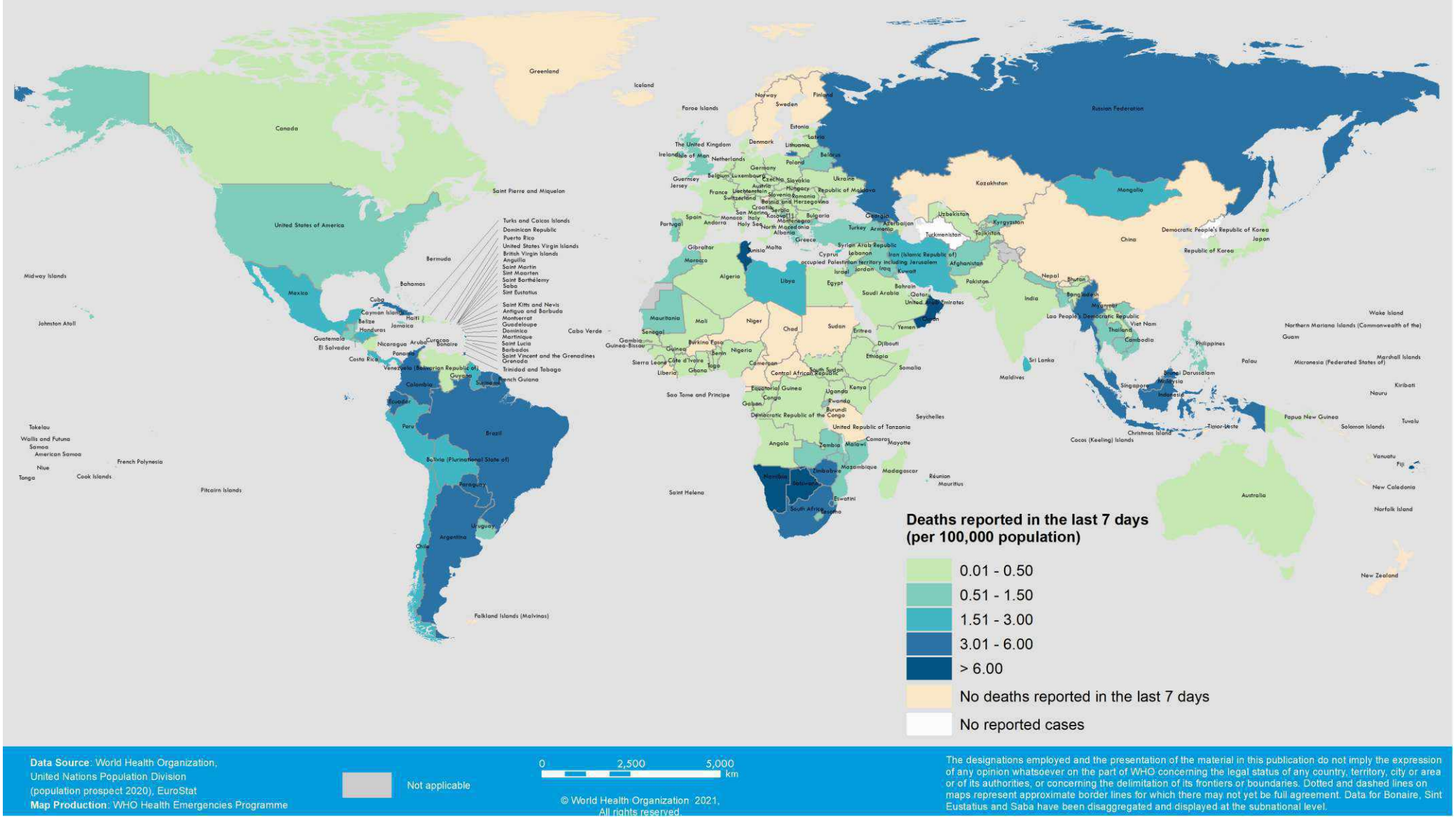
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 26 July – 1 August 2021**



**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 26 July – 1 August 2021**



**See *Annex 2: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact vaccine, therapeutics, diagnostics or effectiveness of public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. As these risks evolve, WHO will continue to update lists of global VOIs and VOCs to support setting priorities for surveillance and research, and ultimately guide response strategies (for more information, please see the Tracking SARS-CoV-2 variants website).

National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants.

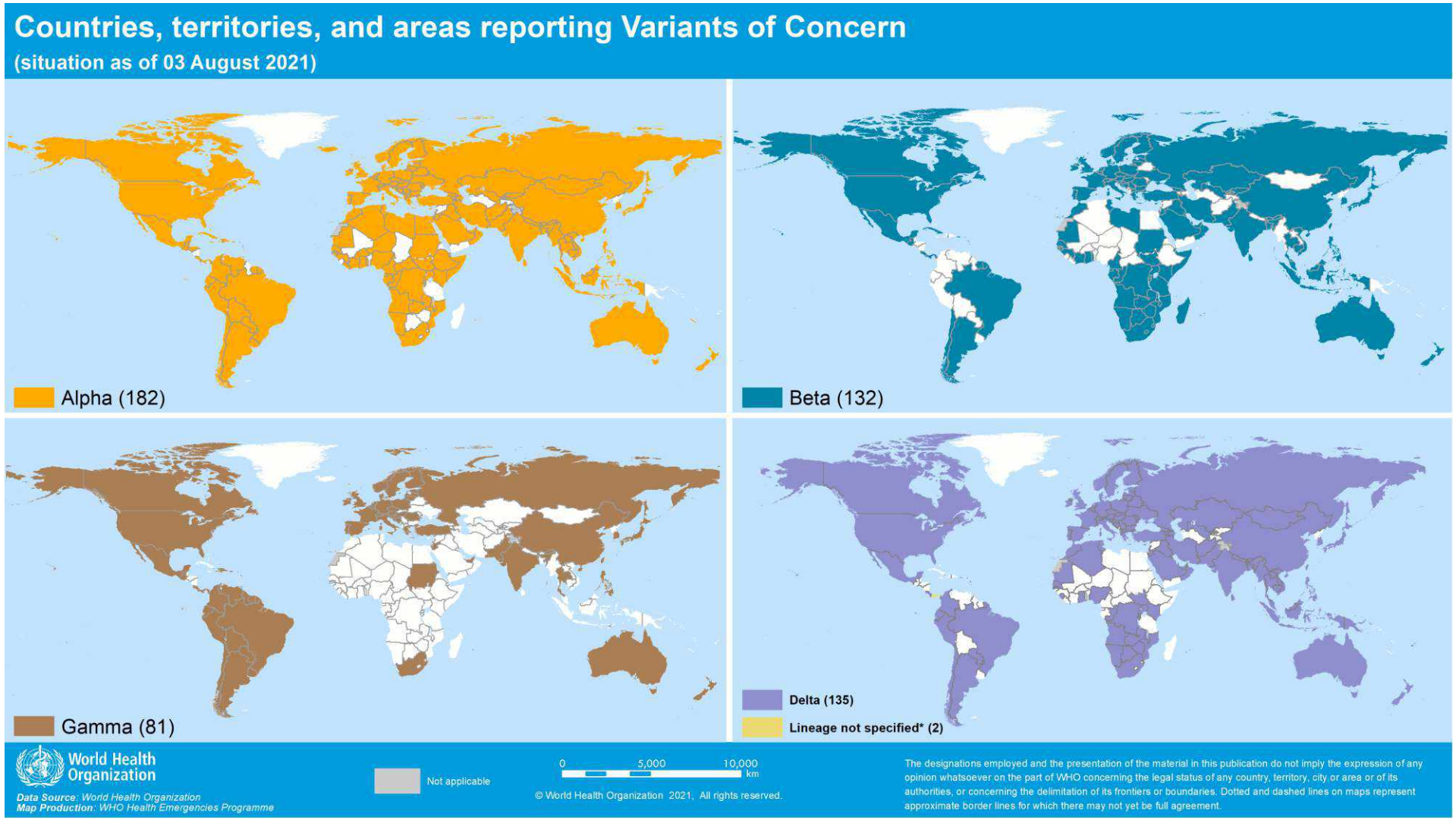
As surveillance activities to detect SARS-CoV-2 variants are strengthened at national and subnational levels, including through the expansion of genomic sequencing capacities, the number of countries/areas/territories (hereafter countries) reporting VOCs continues to increase (Figure 4, Annex 1). This distribution should nonetheless be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

As countries gradually resume non-essential international travel, the introduction of risk mitigation measures aiming to reduce travel-associated exportation, importation and onward transmission of SARS-CoV-2 should be based on thorough risk assessments conducted systematically and routinely.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Figure 4 . Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 3 August 2021**



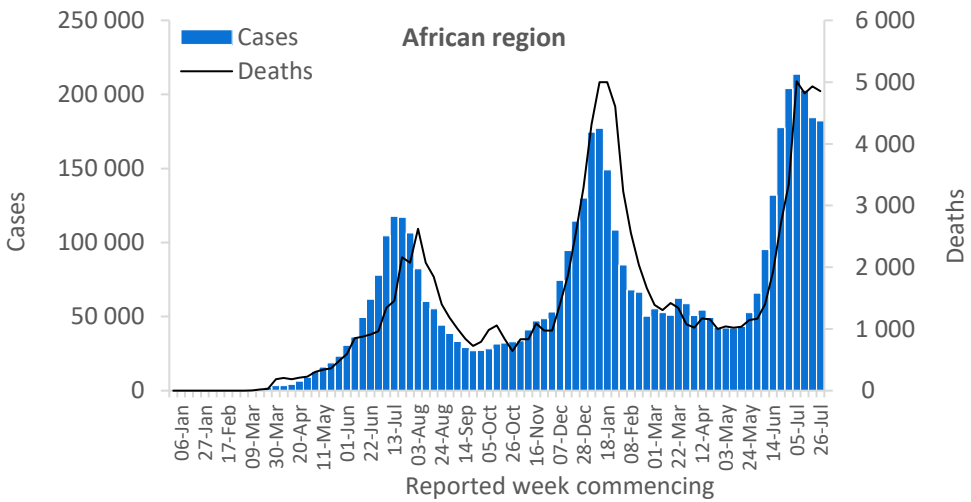
**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details.*

WHO regional overviews - Epidemiological week 26 July - 1 Aug 2021

African Region

The Region reported relatively similar numbers of weekly cases and deaths as the previous week, with just over 182 000 new cases and over 4800 new deaths reported this week. The overall decrease in weekly cases reported in the Region since the middle of July has been largely driven by declines observed in South Africa. In contrast, many other countries in the Region continue to report increasing case incidence. Similarly, for mortality, the trend in the region is largely driven by a decline in new weekly deaths reported by South Africa.

The highest numbers of new cases were reported from South Africa (79 349 new cases; 133.8 new cases per 100 000 population; 6% decrease), Mozambique (13 268 new cases; 42.5 new cases per 100 000; 25% increase), and Zimbabwe (11 583 new cases; 77.9 new cases per 100 000; 21% decrease).The highest numbers of new deaths were reported from South Africa (2525 new deaths; 4.3 new deaths per 100 000 population; 10% decrease), Zimbabwe (482 new deaths; 3.2 new deaths per 100 000; 4% increase), and Namibia (284 new deaths; 11.2 new deaths per 100 000; 12% increase).

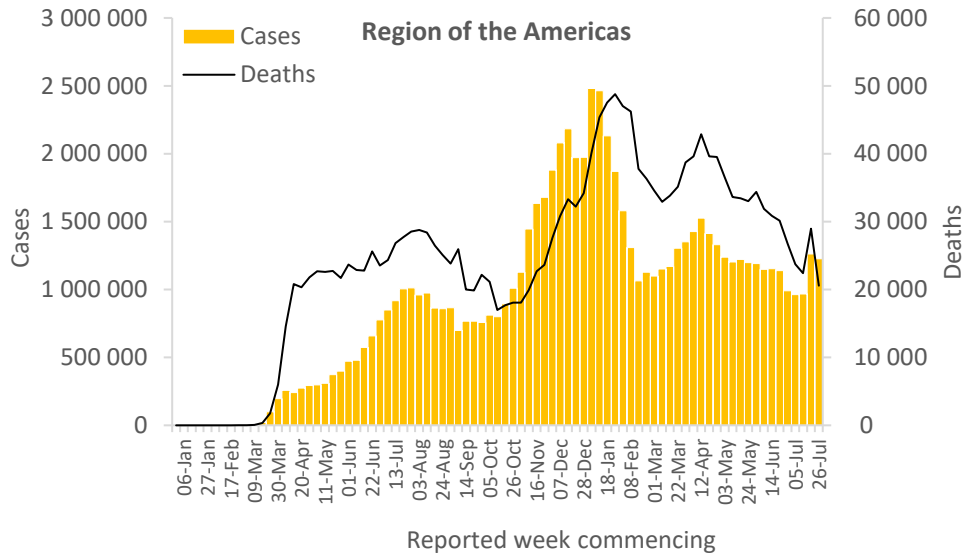


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 1.2 million new cases and over 20 000 new deaths in the past week. While the number of cases reported was similar to the previous week, the number of weekly deaths decreased by 29%. This is largely due to a sharp decline in deaths in Ecuador this week as compared to last week (19-25 July) when the country reported a sharp increase in new weekly deaths . This increase was mainly due to a change in the definition of a COVID-19 death in Ecuador [2] that had artificially inflated the death count for the region in the previous week.

The highest numbers of new cases were reported from the United States of America (543 420 new cases; 164.2 new cases per 100 000; 9% increase), Brazil (247 830 new cases; 116.6 new cases per 100 000; 24% decrease), and Mexico (103 283 new cases; 80.1 new cases per 100 000; 23% increase). The highest numbers of new deaths were reported from Brazil (7120 new deaths; 3.3 new deaths per 100 000; 10% decrease), Mexico (2502 new deaths; 1.9 new deaths per 100 000; 29% increase), and the United States of America (2455 new deaths; <1 new death per 100 000; 32% increase).

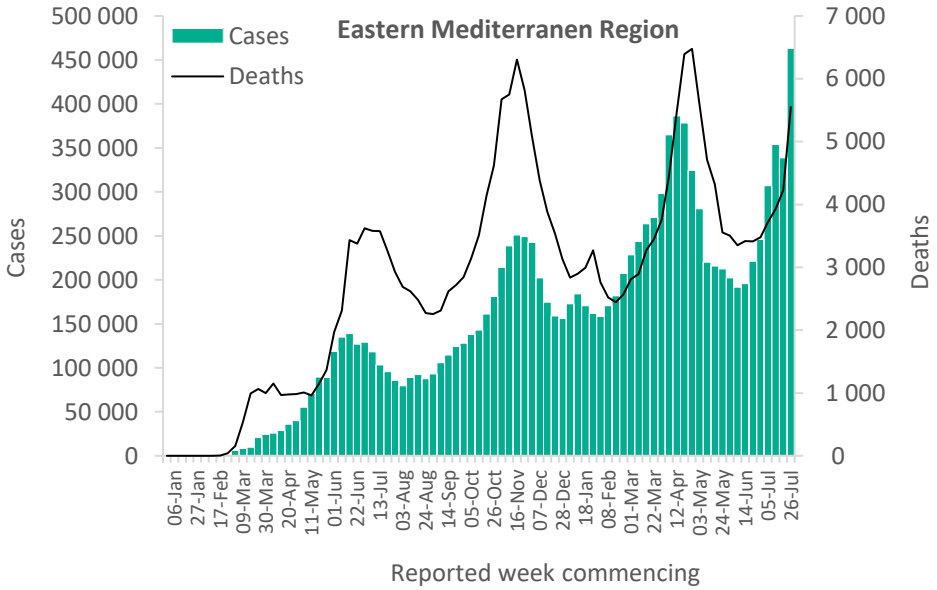


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 463 000 new cases and over 5500 new deaths, increases of 37% and 31%, respectively, as compared to the previous week. This week, the Region reported the highest weekly number of cases since the beginning of the pandemic. The increase in cases and deaths is mainly driven by an increase in new cases reported by the Islamic Republic of Iran. The highest numbers of new cases were reported from the Islamic Republic of Iran (206 722 new cases; 246.1 new cases per 100 000; 27% increase), Iraq (83 098 new cases; 206.6 new cases per 100 000; 37% increase), and Morocco (48 366 new cases; 131.0 new cases per 100 000; 146% increase).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (2098 new deaths; 2.5 new deaths per 100 000; 34% increase), Tunisia (1258 new deaths; 10.6 new deaths per 100 000; 5% increase), and Iraq (425 new deaths; 1.1 new deaths per 100 000; 4% decrease).

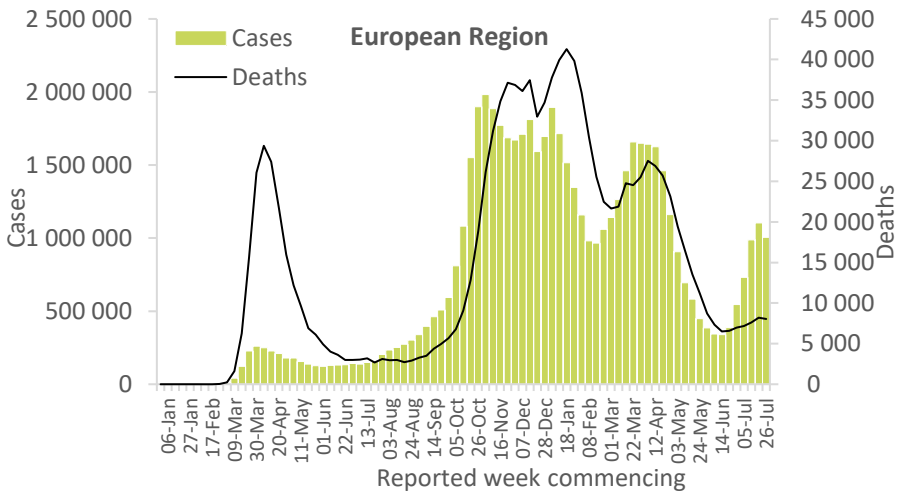


Updates from the Eastern Mediterranean Region

European Region

After more than a month of reporting increases in the number of weekly cases and deaths, the Region reported a 9% decrease in weekly cases as compared to the previous week, with just over one million new cases reported. The number of weekly reported deaths was similar to the previous week, with just over 8 000 new deaths reported. The highest numbers of new cases were reported from the United Kingdom (187 268 new cases; 275.9 new cases per 100 000; 34% decrease), the Russian Federation (162 136 new cases; 111.1 new cases per 100 000; 4% decrease), and Turkey (139 667 new cases; 165.6 new cases per 100 000; 114% increase). The observed decrease in newly reported cases in the Region has been mainly driven by decline in new cases from Spain, where cases dropped from 181 322 cases reported during the past week to 90 332 this week, and from the United Kingdom where cases dropped from 282 920 in the previous week to 187 268 this week.

The highest numbers of new deaths were reported from the Russian Federation (5478 new deaths; 3.8 new deaths per 100 000; no change compared to last week), the United Kingdom (524 new deaths; 0.8 new deaths per 100 000; 17% increase), and Turkey (453 new deaths; <1 new death per 100 000; 16% increase).

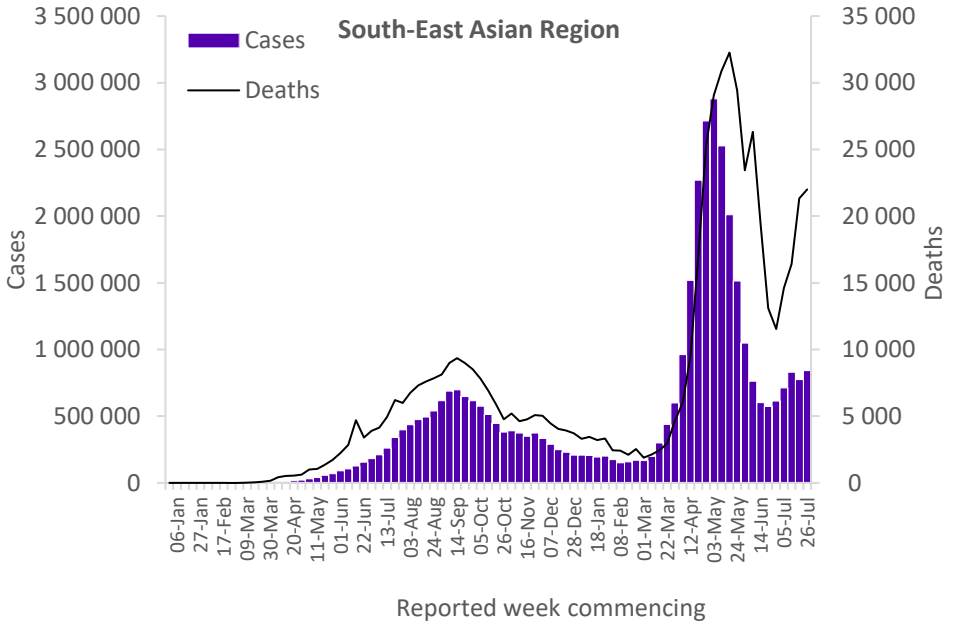


Updates from the European Region

South-East Asia Region

The Region reported a 9% increase in new cases as compared to the previous week (over 841 000 cases), while the number of weekly deaths remained similar to the previous week (22 000 deaths). The highest numbers of new cases were reported from India (283 923 new cases; 20.6 new cases per 100 000; 7% increase), Indonesia (273 891 new cases; 100.1 new cases per 100 000; 5% decrease), and Thailand (118 012 new cases; 169.1 new cases per 100 000; 26% increase). Cases from these three countries accounted for 80% of new cases being reported from the Region.

The highest numbers of new deaths were reported from Indonesia (12 444 new deaths; 4.5 new deaths per 100 000; 28% increase), India (3800 new deaths; <1 new death per 100 000; 45% decrease), and Myanmar (2620 new deaths; 4.8 new deaths per 100 000; 24% increase).

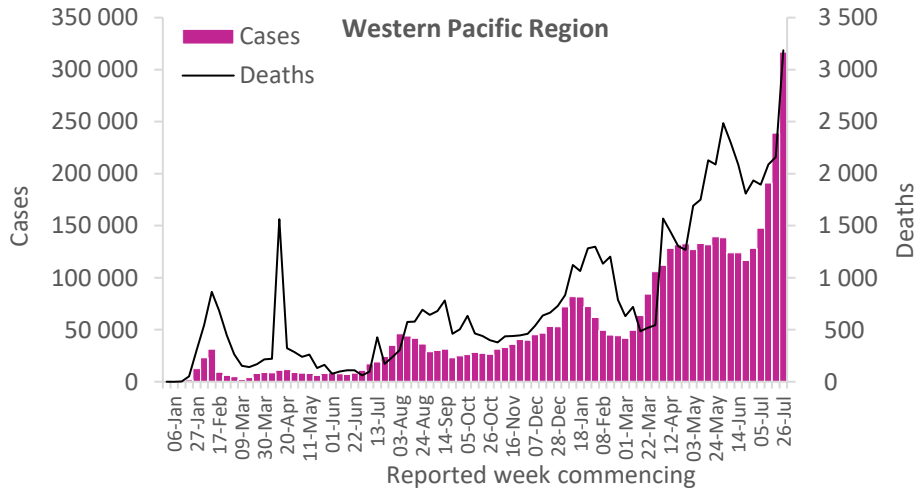


Updates from the South-East Asia Region

Western Pacific Region

Cases have continued to increase for over a month. This week, the Region reported nearly 317 000 new cases and nearly 3200 new deaths, increases of 33% and 48% respectively, as compared to the previous week. The increase in newly reported cases has been mainly driven by Japan and Malaysia while the increase in newly reported deaths is largely driven by Viet Nam as well as Malaysia, where Viet Nam reported over 500% increase when compared to last week while Malaysia reported an 8% increase, with over 1100 new deaths reported. Overall, the majority of countries in the Region (15 out of 24; 62.5%) have reported an increasing trend in newly reported cases, as compared to the previous week.

The highest numbers of new cases were reported from Malaysia (116 879 new cases; 361.1 new cases per 100 000; 29% increase), Japan (60 157 new cases; 47.6 new cases per 100 000; 121% increase), and Viet Nam (55 147 new cases; 56.7 new cases per 100 000; 26% increase). The highest numbers of new deaths were reported from Malaysia (1122 new deaths; 3.5 new deaths per 100 000; 8% increase), Viet Nam (936 new deaths; 1.0 new deaths per 100 000; 546% increase), and the Philippines (758 new deaths; <1 new death per 100 000; 42% increase).



Updates from the Western Pacific Region

Key weekly updates

WHO Director-General's key messages

- In his opening remarks at the media briefing on COVID-19 – 30 July 2021, the Director-General highlighted the following:
    - In response to the Delta surge, the Access to COVID-19 Tools Accelerator is launching the Rapid ACT-Accelerator Delta Response, or RADAR, issuing an urgent call for 7.7 billion U.S. dollars for tests, treatments and vaccines.
    - WHO's goal remains to support every country to vaccinate at least 10% of its population by the end of September, at least 40% by the end of this year, and 70% by the middle of next year.

Updates and publications

- Holding gatherings during the COVID-19 pandemic: WHO policy brief, 2 August 2021
- Interim recommendations for use of the ChAdOx1-S [recombinant] vaccine against COVID-19 (AstraZeneca COVID-19 vaccine AZD1222 Vaxzevria™, SII COVISHIELD™)
- Annexes to the interim recommendations for use of theChAdOx1-S [recombinant] vaccine against COVID-19 (AstraZeneca COVID-19 vaccine AZD1222 Vaxzevria™, SII COVISHIELD™)
- Joint Statement of the Multilateral Leaders Task Force on COVID-19 Vaccines, Therapeutics, and Diagnostics for Developing Countries following its Second Meeting
- COVID-19 Task Force on COVID-19 vaccines, therapeutics, and diagnostics: website
- New consortium working to boost vaccine production in South Africa

Annex

- COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 3 August 2021**

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Afghanistan	●	-	-	●	-
Albania	●	-	-	○	-
Algeria	●	-	-	●	-
Angola	●	●	-	●	-
Anguilla	●	-	-	●	-
Antigua and Barbuda	●	●	-	-	-
Argentina	●	●	●	●	-
Armenia	○	-	-	●*	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	○	-
Bahamas	●	-	-	-	-
Bahrain	●	●	-	●	-
Bangladesh	●	●	-	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	-	-	-
Bermuda	●	●	-	-	-
Bhutan	●	●	-	●	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	●*	●*	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Bosnia and Herzegovina	○	○	○	○	-
Botswana	-	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	-	-
Brunei Darussalam	●	●	-	-	-
Bulgaria	●	●	-	●	-
Burkina Faso	●	-	-	-	-
Burundi	●	●	-	●	-
Cabo Verde	●	-	-	-	-
Cambodia	●	○	-	●	-
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	-	●	-	-
Central African Republic	●	-	-	-	-
Chile	●	●	●	●	-
China	●	●	●	○	-
Colombia	●	-	●	●	-
Comoros	-	●	-	-	-
Congo	●	●	-	●	-
Costa Rica	●	●	●	●	-
Croatia	●	●	○	○	-
Cuba	●	●	-	-	-
Curaçao	●	-	●	●	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Cyprus	●	●	-	○	-
Czechia	●	●	●	●	-
Côte d'Ivoire	●	●	-	-	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-
Dominica	●	-	-	-	-
Dominican Republic	●	-	●	-	-
Ecuador	●	-	●	●	-
Egypt	●	-	-	-	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	○	-
Eswatini	-	●	-	-	-
Ethiopia	○	-	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	○	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	-	-
Greece	●	●	●	●	-
Grenada	●	-	-	-	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	-	-
Guinea	●	●	-	-	-
Guinea-Bissau	●	●	-	-	-
Guyana	-	-	●	-	-
Haiti	●	-	●	-	-
Honduras	●	-	-	-	-
Hungary	●	○	●	○	-
Iceland	●	-	-	-	-
India	●	●	●	●	-
Indonesia	●	●	-	●	-
Iran (Islamic Republic of)	●	●	-	●	-
Iraq	●	●	-	●	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	-	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	○	○	-	●	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	○	-
Kuwait	●	●	-	●	-
Kyrgyzstan	●	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Lao People's Democratic Republic	●	-	-	●	-
Latvia	●	●	●	○	-
Lebanon	●	-	-	●	-
Lesotho	-	●	-	-	-
Liberia	●	-	-	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	-	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-
Madagascar	-	●	-	-	-
Malawi	●	●	-	●	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	○	●	-	●	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	○	-	○	-
Mongolia	●	-	-	●	-
Montenegro	●	-	-	-	-
Montserrat	●	-	-	-	-
Morocco	●	●*	-	●	-
Mozambique	○	●	-	●	-
Myanmar	●	-	-	●	-
Namibia	●	●	-	●	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	-	-	●	-
North Macedonia	●	●	-	○	-
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●	-
Oman	●	●	-	●	-
Pakistan	●	●	●	●	-
Panama	●	●	●	-	●
Papua New Guinea	-	-	-	●	-
Paraguay	●	-	●	●*	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	○	-	-	●	-
Romania	●	●	●	●	-
Russian Federation	●	●	○	●	-
Rwanda	●	○	-	●	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	-	-
Saint Lucia	●	-	-	-	-
Saint Martin	●	●	-	-	-
Sao Tome and Principe	●	-	-	-	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	●	-
Serbia	●	-	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Seychelles	-	●	-	-	-
Sierra Leone	-	-	-	○	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	-	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	○	-	-	-
South Africa	●	●	○	●	-
South Sudan	●	○	-	●	-
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-
Sudan	●	●	●	-	-
Suriname	●	●	●	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Sweden	●	●	●	●	-
Switzerland	●	●	○	●	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	●	-
Togo	●	●	-	-	-
Trinidad and Tobago	●	-	●	-	-
Tunisia	●	●	-	●	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	-	-
Uganda	●	●	-	●	-
Ukraine	●	○	-	○	-
United Arab Emirates	●	●	●	●	-
United Kingdom	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
United Republic of Tanzania	-	●	-	-	-
United States Virgin Islands	-	-	-	●	-
United States of America	●	●	●	●	-
Uruguay	●	-	●	-	-
Uzbekistan	●	●	-	○	-
Venezuela (Bolivarian Republic of)	●	-	●	-	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Zambia	●	●	-	●	-
Zimbabwe	-	●	-	●	-

**Newly reported in this update.*

Unspecified B.1.617 reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

from official sources.

ation become available.

*** Gamma was excluded for Bangladesh this week based on further information.*

****Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern*

See also Annex 2: Data, table and figure notes.

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[2] On 20 July, Ecuador Ministry of Public Health (MSP) revised their process of reporting on deaths. The country has now started reporting probable deaths and deaths in other facilities, as well as confirmed deaths, as part of their cumulative death count. Due to this change in reporting, an artificial inflation in last week's deaths in the Region has been observed. Thus, the decline in deaths observed this week should be interpreted carefully.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

COVID-19 Weekly Epidemiological Update

Edition 50, published 27 July 2021

In this edition:

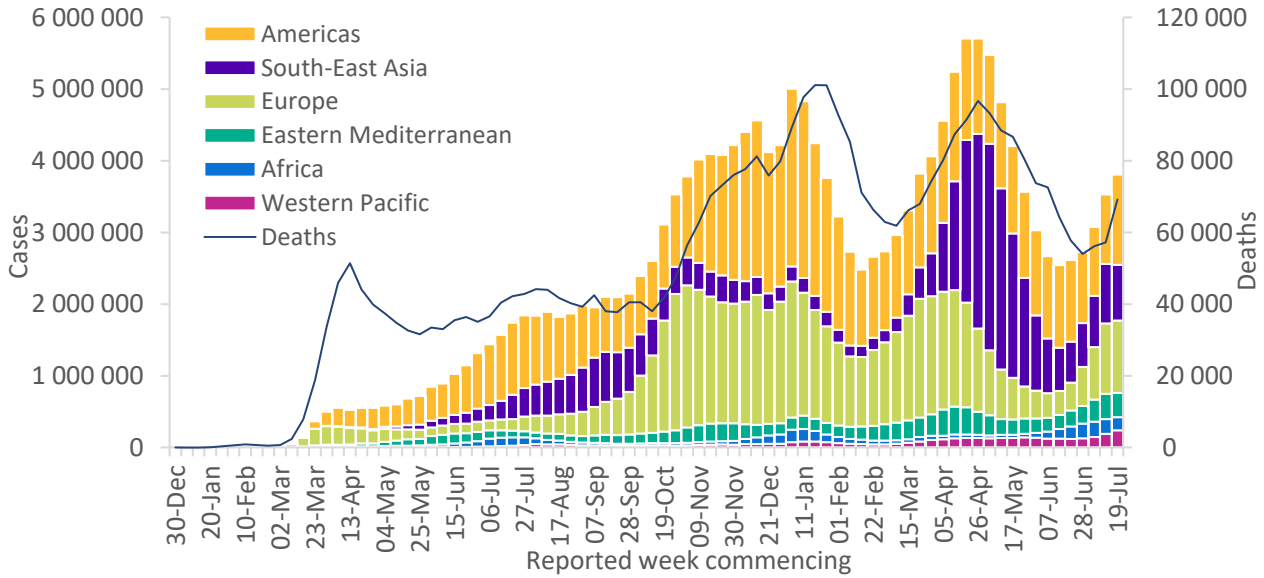
- Global overview
- Special focus: Evaluations of the effectiveness of COVID-19 vaccines in real-world settings
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Key weekly updates

Global overview

Data as of 25 July 2021

The global number of new cases reported last week (19-25 July 2021) was over 3.8 million, an 8% increase as compared to the previous week (Figure 1); an average of around 540 000 cases were reported each day over the past week as compared to 490 000 cases reported daily the week before. This trend is largely attributed to substantial increases in the Americas and Western Pacific Regions. The number of deaths reported this week increased sharply with over 69 000 deaths, a 21% increase when compared to the previous week; the greatest number of new deaths were reported from the Americas and South-East Asia Regions. The cumulative number of cases reported globally is now nearly 194 million and the number of cumulative deaths exceeds 4 million. If these trends continue, the cumulative number of cases reported globally could exceed 200 million in the next two weeks. Last week, three WHO Regions - the Americas, Europe and South-East Asia reported an increase in case incidence. The Region of the Americas reported the largest increase in case incidence as compared to the previous week, followed by the Western Pacific Region (30% and 25%, respectively) (Table 1). The South-East Asia Region also reported an increase in new cases, albeit at a much lower rate of 3%, when compared to the previous week. The number of new deaths increased in all regions apart from the European Region where it remained similar to the previous week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 25 July 2021**



**See *Annex 2: Data, table and figure notes*

The highest weekly case incidence rates per 100 000 population were reported by the Americas and European Regions, which reported 123.3 and 108.3 new cases per 100 000 population, respectively. The highest numbers of deaths per 100 000 population over the past week were observed in the Americas and South-East Asia Regions which reported 2.8 and 1.1 new deaths per 100 000 population, respectively.

Over the past week, the highest numbers of new cases were reported from the United States of America (500 332 new cases; 131% increase), Brazil (324 334 new cases; 13% increase), Indonesia (289 029 new cases; 17% decrease), the United Kingdom (282 920 new cases; 5% decrease), and India (265 836 new cases; similar to the previous week).

Globally, cases of the Alpha variant have been reported in 182 countries, territories or areas (hereafter countries; two new countries in the past week), while 131 countries (two new countries) have reported cases of the Beta variant; 81 countries (three new countries) have reported cases of the Gamma variant; and 132 countries (eight new countries) have reported cases of the Delta variant.

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 25 July 2021**

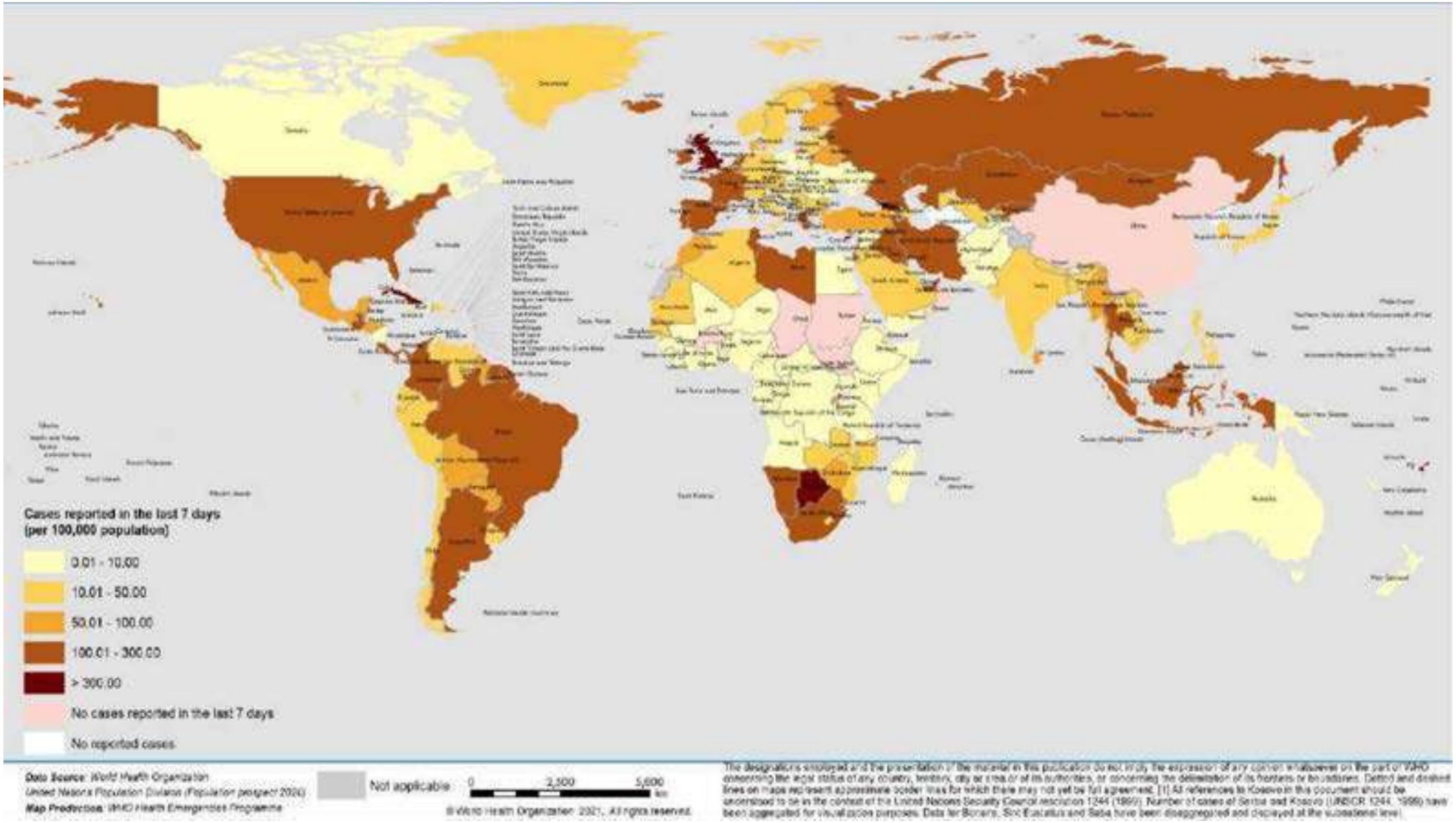
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 260 598 (33%)	30%	75 995 514 (39%)	28 938 (42%)	29%	1 989 575 (48%)
Europe	1 010 270 (27%)	3%	59 009 652 (30%)	7 545 (11%)	-1%	1 211 783 (29%)
South-East Asia	775 618 (20%)	-7%	37 536 524 (19%)	21 334 (31%)	30%	548 276 (13%)
Eastern Mediterranean	338 605 (9%)	-4%	12 133 038 (6%)	4 225 (6%)	8%	230 676 (6%)
Africa	184 361 (5%)	-9%	4 773 581 (2%)	4 931 (7%)	2%	112 429 (3%)
Western Pacific	238 487 (6%)	25%	4 208 652 (2%)	2 159 (3%)	3%	61 908 (1%)
Global	**3 807 939 (100%)**	**8%**	**193 657 725 (100%)**	**69 132 (100%)**	**21%**	**4 154 660 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
***See Annex 2: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

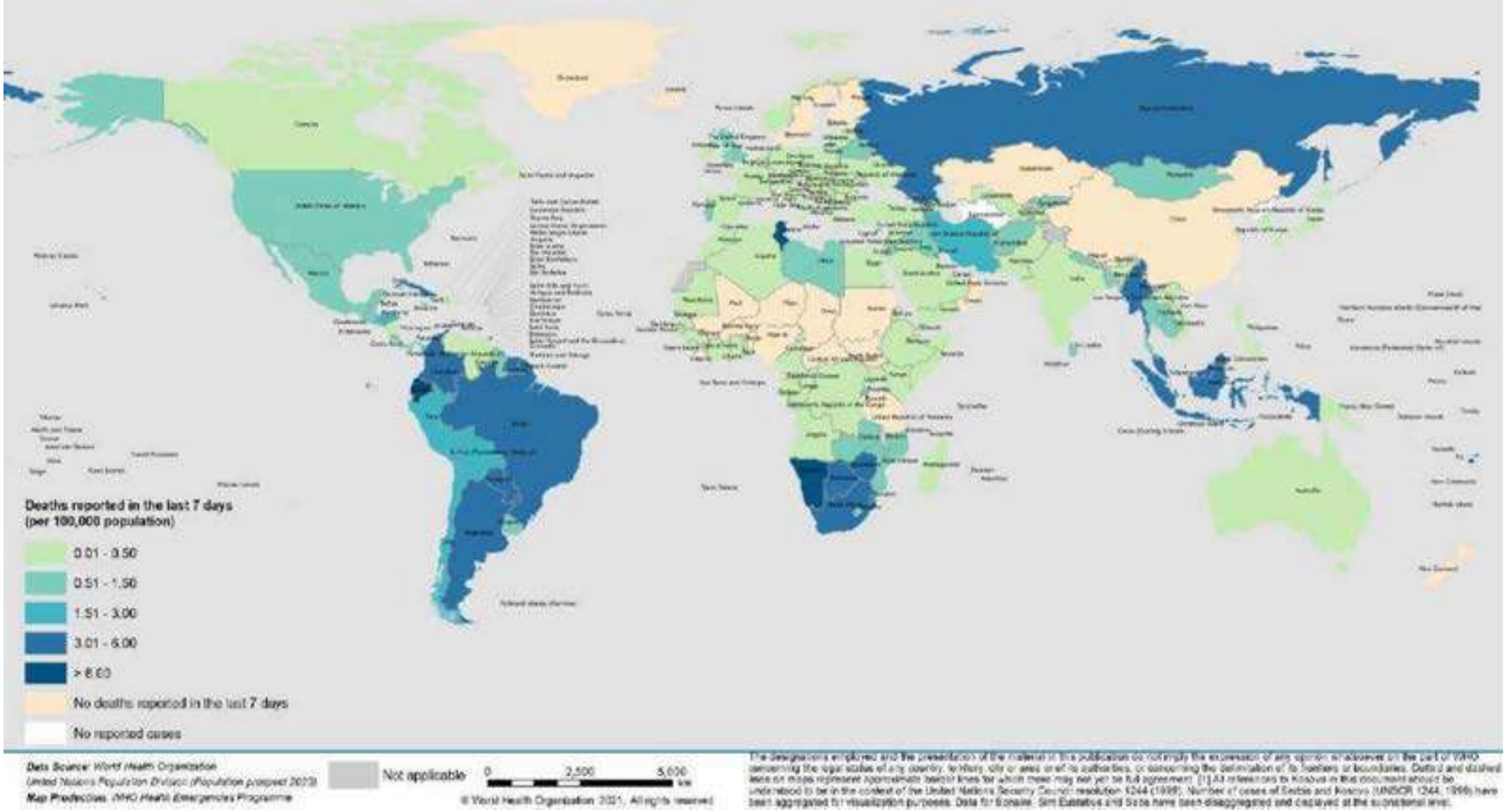
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 19 – 25 July 2021**



**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 19 – 25 July 2021**



**See *Annex 2: Data, table and figure notes*

Special Focus: Evaluations of the effectiveness of COVID-19 vaccines in real-world settings

As of 20 July 2021, six vaccine types (AstraZeneca-Vaxzevria, Janssen Ad26.COV 2.5, Moderna-mRNA-1273, Pfizer BioNTech-Comirnaty, COVID-19 vaccine BIBP, and Sinovac-CoronaVac) have received WHO emergency use listing (EUL) based, in part, on vaccine efficacy results from randomized controlled trials (RCTs). In contrast to vaccine efficacy, which is estimated in the controlled clinical trial setting, vaccine effectiveness, is estimated from observational (non-randomized) studies in real-world settings.

What is vaccine effectiveness?

Vaccine effectiveness (VE) is the percentage reduction in the risk or odds of disease or infection among vaccinated persons. It is important to note that breakthrough infections or disease (infection or symptomatic disease among individuals who have been fully vaccinated) are expected with all COVID-19 vaccines, even those with very high VE (such as greater than 90%), becoming more apparent as more of the population becomes vaccinated.

Evaluations of the effectiveness of multiple COVID-19 vaccines in different settings and populations are needed to assess how well these vaccines work in preventing symptomatic disease, severe disease, hospitalization, death, as well as infection and transmission, among other outcomes. Moreover, answers to some important public health questions can only be addressed by post-introduction VE studies, such as: whether additional doses would be needed to address declines in VE over time, or whether new vaccines or additional doses will be needed for SARS-CoV-2 variants of concern (VOCs). Vaccine effectiveness estimates may differ from the results of RCTs for valid reasons (e.g., different target populations, different vaccine schedule) or for invalid reasons (e.g., bias and confounding). However, biases and confounding can be minimized by careful planning, execution and analysis of VE studies.

How is vaccine effectiveness measured?

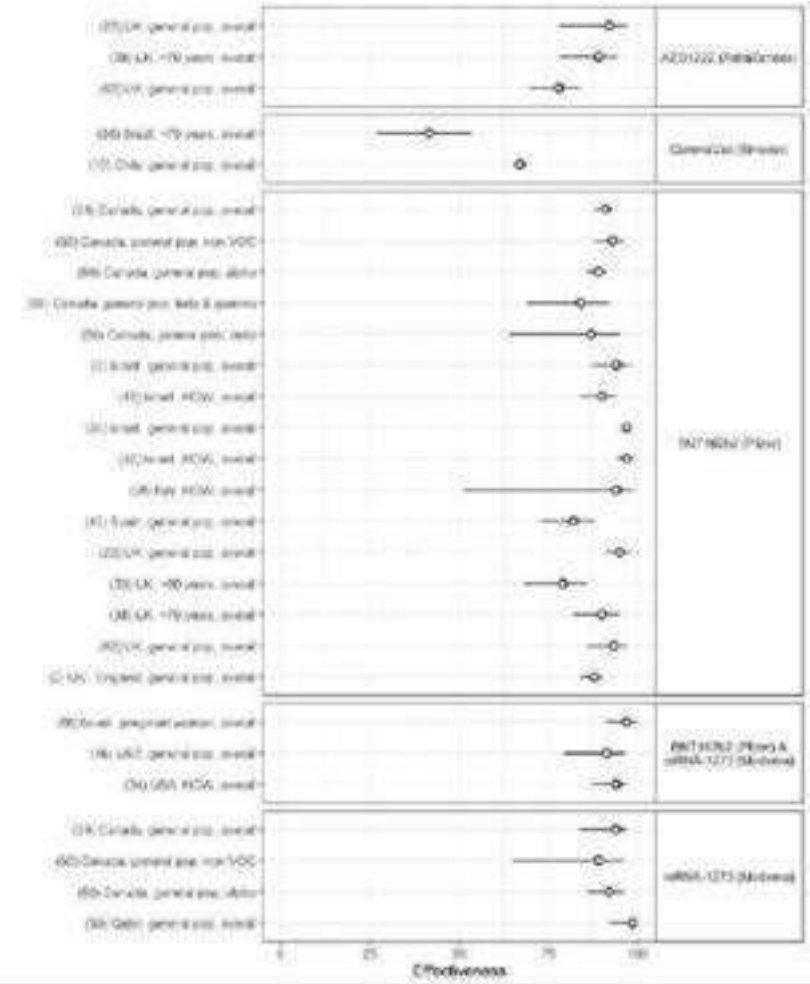
WHO has produced best practice guidance on how to undertake VE studies,[1] including for VOCs, and provides links to VE study protocols.[2] Two methodologies have been most widely used to evaluate COVID-19 VE to date[1]: the retrospective cohort and the test-negative design case-control study. Some of the largest COVID-19 VE studies have used a retrospective cohort design and linkable electronic databases that compare rates of infection or symptomatic disease between vaccinated and unvaccinated individuals.[3,4] Such large databases provide precise VE estimates and often allow adjustment for important confounders that can lead to bias, such as age, date of infection, geographic location and socioeconomic status.

The test-negative case-control design, where the vaccination status of persons testing positive for SARS-CoV-2 are compared to those who test negative, has also been widely deployed. The test-negative design is most often deployed among hospitalized patients or using an existing severe acute respiratory infection surveillance platform. This design minimizes confounding due to differences in healthcare- seeking behavior or access between vaccinated and unvaccinated persons, which can be present in traditional case-control studies.[1]

What evidence is available to date?

As of 20 July 2021, there have been over 90 VE studies made publicly available in peer-reviewed or pre-print literature, though the quality of these studies varies considerably.[5–7] The evidence base to date has been skewed, with 62% (58/93) of studies coming from three countries with early introduction of vaccination campaigns (i.e. Israel, the United Kingdom and the United States of America); and 71% (66/93) reporting on VE of only two vaccines - Pfizer BioNTech-Comirnaty and AstraZeneca-Vaxzevria. In general, symptomatic disease efficacy results from these studies, for fully vaccinated individuals, have been similar to the results of the RCTs that informed the WHO EUL decision (Figure 1). Overall, VE against severe disease, hospitalization and death has been higher than against non-severe symptomatic disease, with VE estimates for these more serious outcomes to be above 80% for AstraZeneca-Vaxzevria, Moderna-mRNA-1273, Pfizer BioNTech-Comirnaty, and Sinovac-CoronaVac. (See weekly summary table of Results of COVID-19 Vaccine Effectiveness Studies)

Figure 4. Vaccine effectiveness against COVID-19 symptomatic disease in fully vaccinated population



Note: Numbers in parentheses refer to references in the weekly summary table. Horizontal lines indicate the 95% confidence interval.

Although the VE against infection and asymptomatic infection are slightly lower than against symptomatic disease for AstraZeneca- Vaxzevria, Moderna-mRNA-1273, and Pfizer BioNTech-Comirnaty,[5,8–10] the VE estimates for these outcomes are almost uniformly ≥60%. Additionally, several studies have shown that the transmission to household members is reduced by approximately 50% when the infected household member was vaccinated with at least one dose as compared to unvaccinated.[5] Importantly, VE appears to be consistently higher for all outcomes after full vaccination, defined as at least 7-14 days after the final dose.

Vaccine effectiveness and VOCs

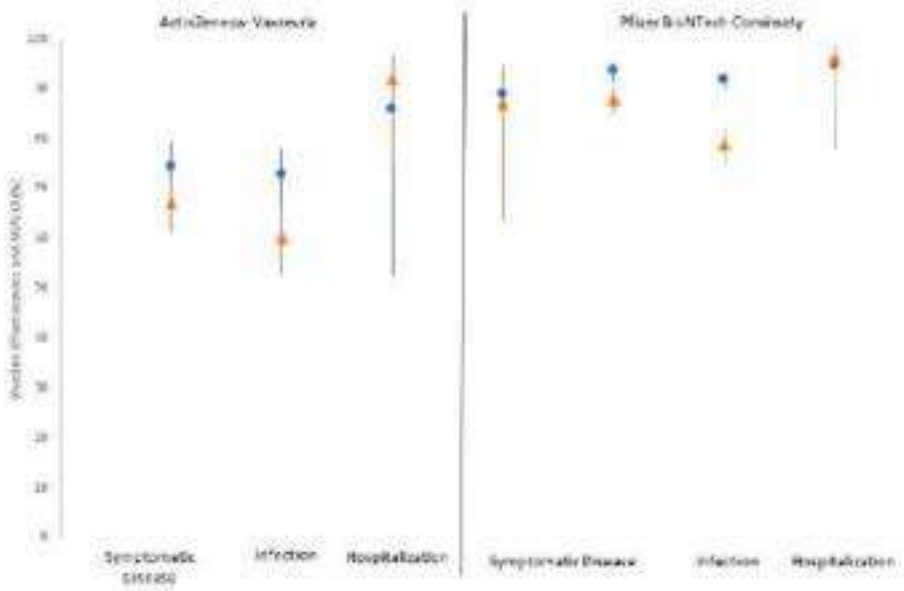
There is widespread concern that existing COVID-19 vaccines may have reduced VE against the four VOCs designated by WHO (see Tracking SARS-CoV-2 variants). Neutralization studies (laboratory studies of how well vaccine-induced antibodies reduce the effect of virus) have shown that there is a several-fold reduction in neutralization against the VOCs, specifically Beta, Gamma and Delta (see Weekly Epidemiological Update edition 49). However, a reduction in neutralization does not directly correlate with reduced VE. This can be explained by several reasons: 1) there is currently no known threshold of neutralization (i.e., correlate of protection) below which vaccines no longer protect; 2) some vaccines produce higher neutralizing antibody concentrations so reductions in neutralization will likely have a lesser effect on the VE for these vaccines[11]; 3) and other factors besides neutralizing antibody levels, such as cellular immunity, may maintain protection.

As an example, results of several studies evaluating VE of AstraZeneca-Vaxzevria and Pfizer BioNTech-Comirnaty against symptomatic disease and infection tend to be lower for the highly transmissible Delta variant as compared to the Alpha variant. However, this difference is reduced or not observed for severe disease outcomes, nor after receiving the second dose (Figure 2). More VE studies of additional vaccines against the Delta variant and other VOCs that look at multiple outcomes are needed to better characterize VE against VOCs (for more information on VOC impact on vaccines, see Weekly Epidemiological Update edition 49).

Conclusion

Although post-introduction VE studies are not a replacement for RCTs, they currently provide much of the rapidly emerging evidence for vaccine performance in real-world settings and can inform public health response and answer key public health questions that are not able to be answered by RCTs. WHO, along with its partners, will continue to track new evidence from published VE studies, as well as those that are ongoing and planned, to assure that they will contribute critical information for global, regional and national COVID-19 vaccine policy decisions.[5]

Figure 5. Comparison of Vaccine Effectiveness of Variants of Concern Alpha and Delta among fully vaccinated persons[3,4,12,13]



Variant Alpha is shown as a blue circle and variant Delta is shown as an orange arrow.

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Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact vaccine, therapeutics, diagnostics or effectiveness of public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. As these risks evolve, WHO will continue to update lists of global VOIs and VOCs to support setting priorities for surveillance and research, and ultimately guide response strategies (for more information, please see the Tracking SARS-CoV-2 variants website). National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants.

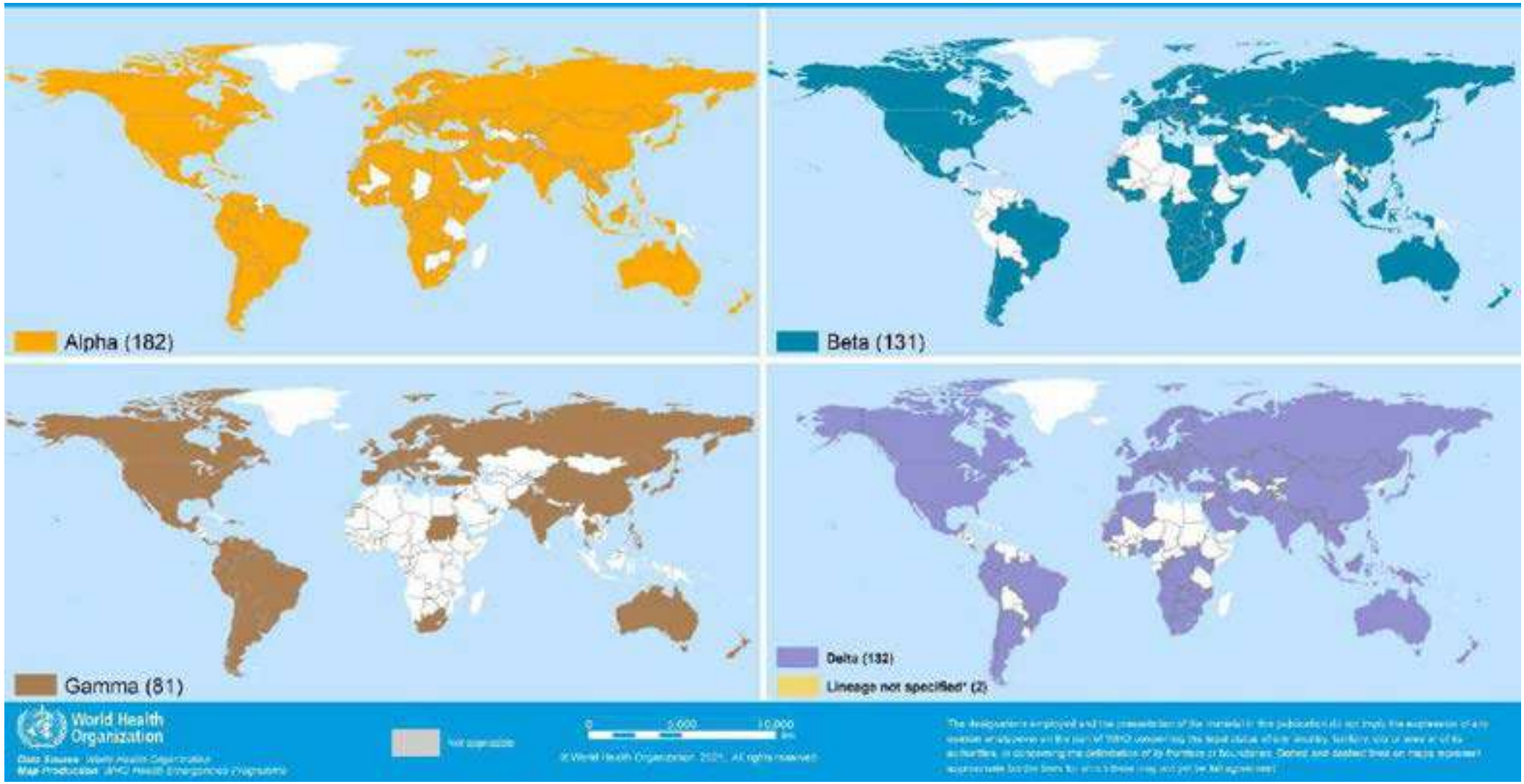
As surveillance activities to detect SARS-CoV-2 variants are strengthened at national and subnational levels, including through the expansion of genomic sequencing capacities, the number of countries/areas/territories (hereafter countries) reporting VOCs continues to increase (Figure 6, Annex 1). This distribution should nonetheless be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

As countries gradually resume non-essential international travel, the introduction of risk mitigation measures aiming to reduce travel-associated exportation, importation and onward transmission of SARS-CoV-2 should be based on thorough risk assessments conducted systematically and routinely.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Figure 6. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 27 July 2021**



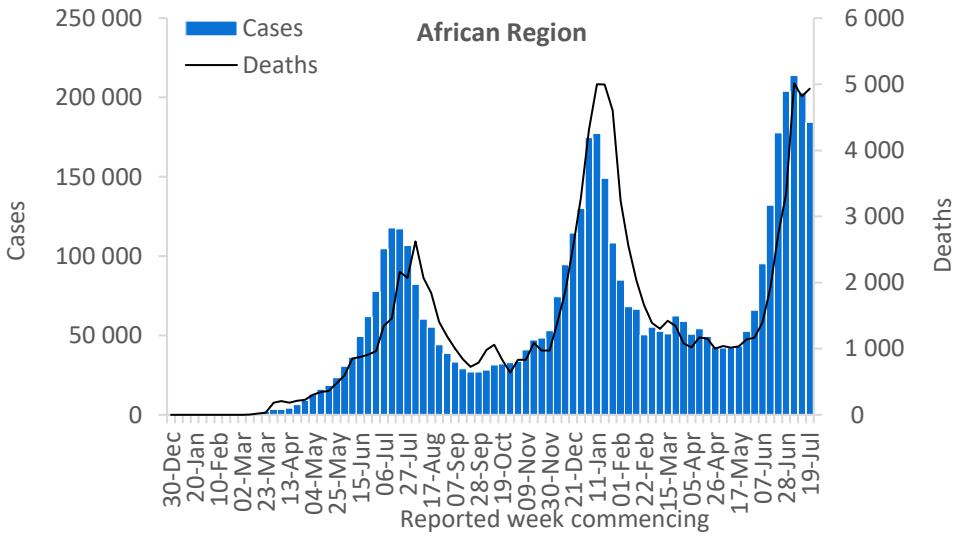
**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details.*

WHO regional overviews - Epidemiological week 19 – 25 July 2021

African Region

The African Region reported over 184 000 new cases, a 9% decrease, and over 4900 new deaths, similar numbers as compared to the previous week. Over the past two weeks, weekly cases in the Region have begun to decrease after increasing sharply over the previous three weeks. This is largely driven by declines observed in South Africa as many other countries in the Region are still reporting increasing case incidences. The highest numbers of new cases were reported from South Africa (84 225 new cases; 142.0 new cases per 100 000 population; -19%), Zimbabwe (14 664 new cases; 98.7 new cases per 100 000; -7%), and Botswana (11 524 new cases; 490.0 new cases per 100 000; +7%).

The highest numbers of new deaths were reported from South Africa (2812 new deaths; 4.7 new deaths per 100 000 population; +11%), Zimbabwe (462 new deaths; 3.1 new deaths per 100 000; similar to the previous week), and Namibia (254 new deaths; 10.0 new deaths per 100 000; -57%).

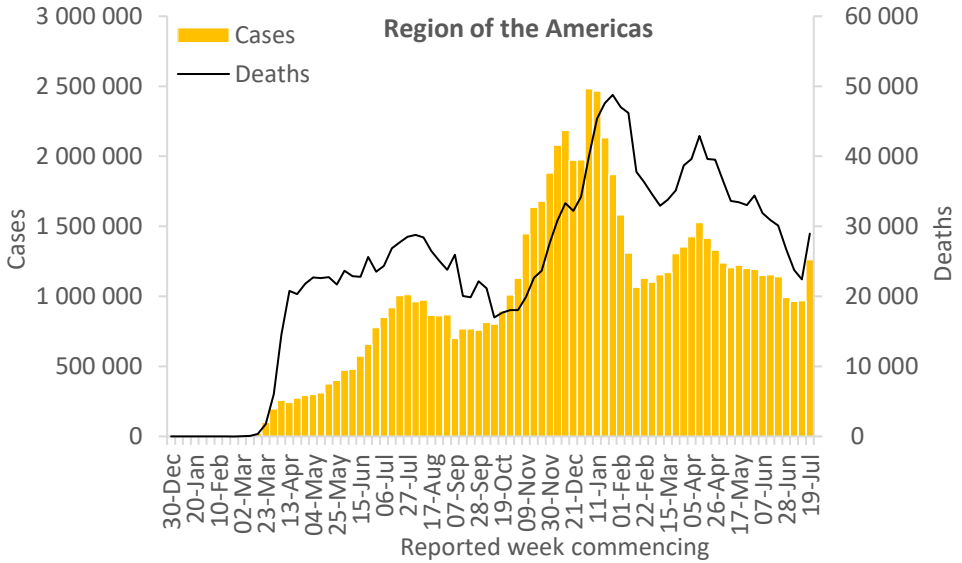


Updates from the African Region

Region of the Americas

After more than three months of overall declining trends in case and death incidence, in the past week the Region reported sharp increases in both. The Region of the Americas reported over 1.2 million new cases and just under 29 000 new deaths, a 30% and a 29% increase respectively as compared to the previous week. The highest numbers of new cases were reported from the United States of America (500 332 new cases; 151.2 new cases per 100 000; +131%), Brazil (324 334 new cases; 152.6 new cases per 100 000; +13%), and Colombia (104 399 new cases; 205.2 new cases per 100 000; -20%).

The highest numbers of new deaths were reported from Ecuador (8864 new deaths; 50.2 new deaths per 100 000; +7349%), Brazil (7942 new deaths; 3.7 new deaths per 100 000; -9%), and Colombia (2855 new deaths; 5.6 new deaths per 100 000; -21%).

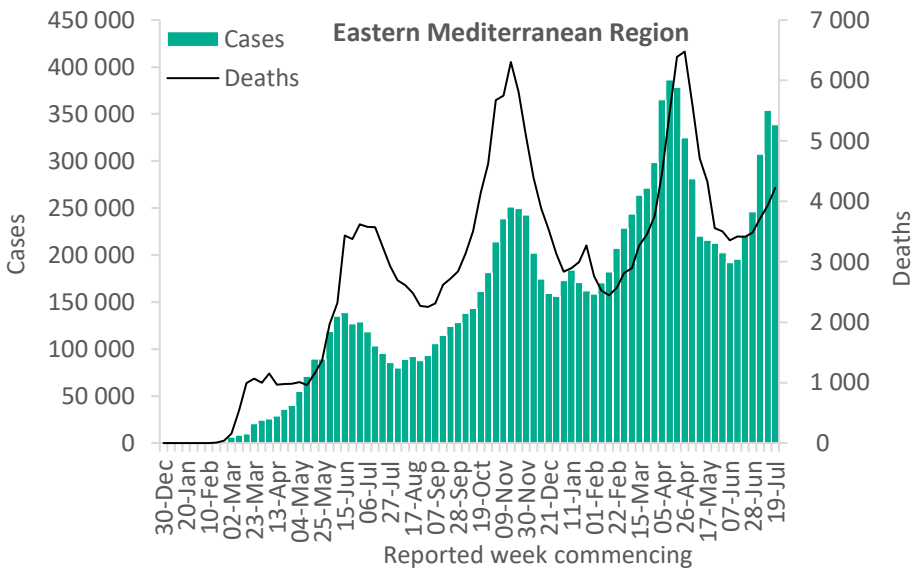


Updates from the Region of the Americas

Eastern Mediterranean Region

The number of weekly cases reported in the Eastern Mediterranean Region declined in the past week after increasing sharply from mid-June through to mid-July. The Region recorded over 338 000 new cases in the past week, similar to the previous week. Deaths, however, continued to increase this week by 8% as compared to the previous week with over 4200 new deaths reported. The highest numbers of new cases were reported from the Islamic Republic of Iran (163 207 new cases; 194.3 new cases per 100 000; +2%), Iraq (60 487 new cases; 150.4 new cases per 100 000; -1%), and Tunisia (28 491 new cases; 241.1 new cases per 100 000; -43%).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (1566 new deaths; 1.9 new deaths per 100 000; +23%), Tunisia (1194 new deaths; 10.1 new deaths per 100 000; +3%), and Iraq (443 new deaths; 1.1 new deaths per 100 000; +62%).

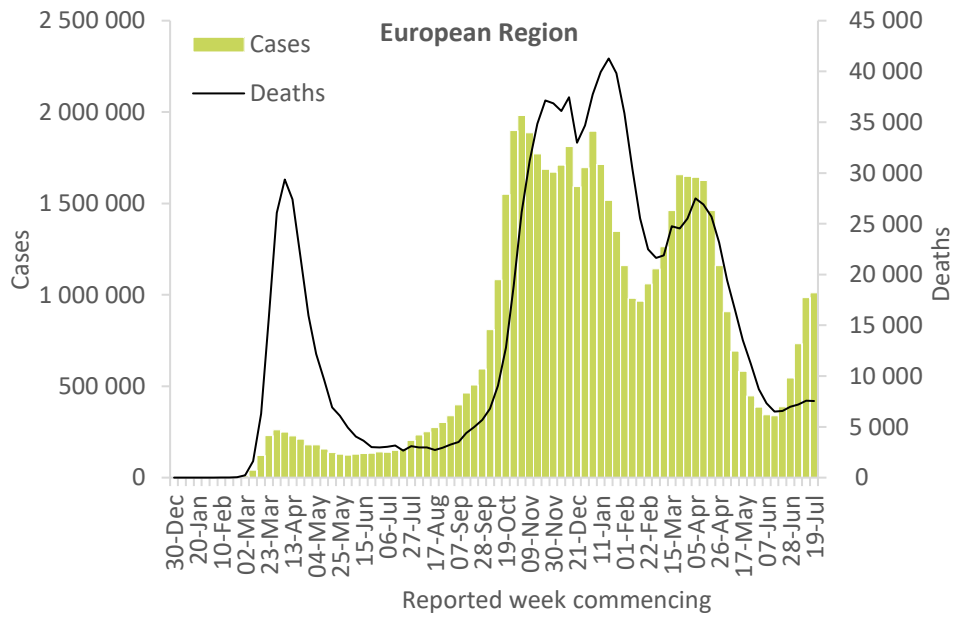


Updates from the Eastern Mediterranean Region

European Region

After reporting increases in weekly case and death incidence for the past month, the European Region this week reported numbers of cases and deaths similar to that of the past week (over 1.0 million cases and 7500 deaths reported). The highest numbers of new cases were reported from the United Kingdom (282 920 new cases; 416.8 new cases per 100 000; a 5% decrease), the Russian Federation (168 408 new cases; 115.4 new cases per 100 000; similar to the previous week), and France (117 832 new cases; 181.2 new cases per 100 000; a 178% increase).

The highest numbers of new deaths were reported from the Russian Federation (5455 new deaths; 3.7 new deaths per 100 000; a 1% increase), the United Kingdom (447 new deaths; 0.7 new deaths per 100 000; a 57% increase), and Turkey (391 new deaths; 0.5 new deaths per 100 000; a 32% increase).

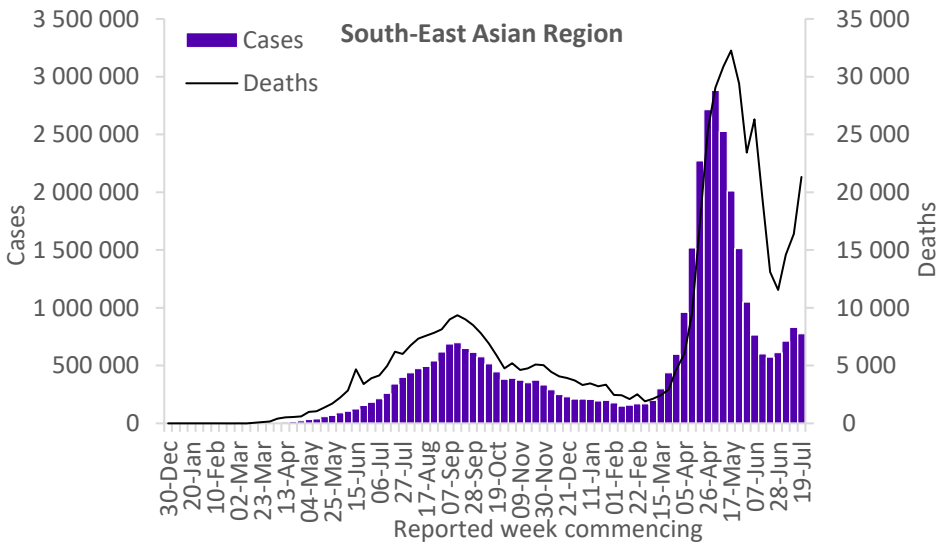


Updates from the European Region

South-East Asia Region

After reporting an increase in weekly cases for three consecutive weeks, the Region reported a slight decrease (-7%) in cases this week, with over 775 000 new cases reported. However, new weekly deaths have continued to increase for the past three weeks, with over 21 000 new deaths reported in the past week, a 30% increase as compared to the previous week. The highest numbers of new cases were reported from Indonesia (289 029 new cases; 105.7 new cases per 100 000; a 17% decrease), India (265 836 new cases; 19.3 new cases per 100 000; similar to the previous week), and Thailand (93 916 new cases; 134.6 new cases per 100 000; a 40% increase).

The highest numbers of new deaths were reported from Indonesia (9697 new deaths; 3.5 new deaths per 100 000; a 36% increase), India (6942 new deaths; 0.5 new deaths per 100 000; a 25% increase), and Myanmar (2111 new deaths; 3.9 new deaths per 100 000; an 82% increase).

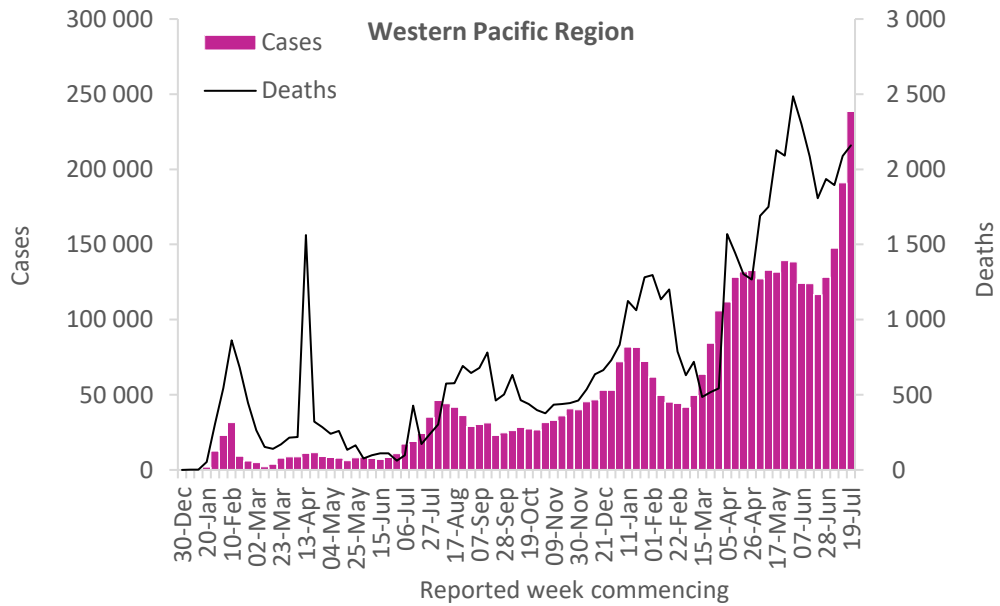


Updates from the South-East Asia Region

Western Pacific Region

In the Western Pacific Region, cases have continued to increase for a month, with over 238 000 new cases reported in the past week, a 25% increase compared to the previous week. Deaths have also have shown an increasing trend for the past several weeks, with over 2100 new deaths reported in the past week, this remains similar to the previous week's trend. The highest numbers of new cases were reported from Malaysia (90 542 new cases; 279.7 new cases per 100 000; a 15% increase), Viet Nam (43 911 new cases; 45.1 new cases per 100 000; a 95% increase), and the Philippines (40 932 new cases; 37.4 new cases per 100 000; a 16% increase).

The highest numbers of new deaths were reported from Malaysia (1036 new deaths; 3.2 new deaths per 100 000; a 30% increase), the Philippines (533 new deaths; 0.5 new deaths per 100 000; a 32% decrease), and Cambodia (178 new deaths; 1.1 new deaths per 100 000; a 9% decrease).



Updates from the Western Pacific Region

Key weekly updates

WHO Director-General's key messages

- In his opening remarks at the WTO - WHO High Level Dialogue: Expanding COVID-19 Vaccine Manufacture to Promote Equitable Access - 21 July, the Director-General highlighted:
    - Over 3.5 billion vaccines have been distributed globally, but more than 75% of those have gone to just ten countries. To reach at least 40% of the global population by the end of the year, and 70% by the middle of 2022, we need 11 billion doses of vaccine, and dose sharing is vital to fill our current supply gap.
    - In July, WHO and our COVAX partners announced the first COVID-19 mRNA vaccine technology transfer hub, to be set up in South Africa. Additionally, WHO has prequalified numerous health technologies including vaccines from manufacturers in middle-income countries. These manufacturers have shown that they can produce according to international standards of quality, safety and efficacy.
    - WHO continues to provide technical assistance to companies to build capacity, especially in Africa, Asia, and Latin America, through the COVID-19 Technology Access Pool.

- In his speech at the 138th International Olympic Committee Session, the Director-General emphasized:
    - A massive global push to vaccinate against COVID-19 is needed - at least 10% of the population of every country by September 2021, at least 40% by the end of the year, and 70% by the middle of 2022.
    - WHO's top priority is universal health coverage, so that all people can access the health services they need, where and when they need them, without facing financial hardship.

Updates and publications

- Vaccine inequity undermining global economic recovery
- Guidance on conducting vaccine effectiveness evaluations in the setting of new SARS-CoV-2 variants: Interim guidance, 22 July 2021. Addendum to Evaluation of COVID-19 vaccine effectiveness
- Global minimum estimates of children affected by COVID-19-associated orphanhood and deaths of caregivers: a modelling study

Annex

COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

As of 27 July, the WHO Coronavirus (COVID-19) Dashboard will be updated once per day and the daily case and death counts for all WHO regions will be published by 23:59 CET/CEST on weekdays. Data reported over the weekend will be published on the following Monday as soon as they become available.

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 27 July 2021**

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Afghanistan	●	-	-	●	-
Albania	●	-	-	○	-
Algeria	●	-	-	●	-
Angola	●	●	-	●	-
Anguilla	●	-	-	●	-
Antigua and Barbuda	●	●	-	-	-
Argentina	●	●	●	●	-
Armenia	○	-	-	-	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	○*	-
Bahamas	●*	-	-	-	-
Bahrain	●	●	-	●	-
Bangladesh	●	●	○	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	-	-	-
Bermuda	●	●	-	-	-
Bhutan	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	-	-	-
Bosnia and Herzegovina	○	○	○	○	-
Botswana	-	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	-	-
Brunei Darussalam	●	●	-	-	-
Bulgaria	●	●	-	●	-
Burkina Faso	●	-	-	-	-
Burundi	●	●	-	●	-
Cabo Verde	●	-	-	-	-
Cambodia	●	○	-	●	-
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	-	●	-	-
Central African Republic	●	-	-	-	-
Chile	●	●	●	●	-
China	●	●	●	○	-
Colombia	●	-	●	●*	-
Comoros	-	●	-	-	-
Congo	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Costa Rica	●	●	●	●*	-
Croatia	●	●	○	○	-
Cuba	●	●	-	-	-
Curaçao	●	-	●	●*	●
Cyprus	●	●	-	○	-
Czechia	●	●	●	●	-
Côte d'Ivoire	●	●	-	-	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-
Dominica	●	-	-	-	-
Dominican Republic	●	-	●	-	-
Ecuador	●	-	●	●	-
Egypt	●	-	-	-	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	○	-
Eswatini	-	●	-	-	-
Ethiopia	○	-	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	○	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	-	-
Greece	●	●	●	●	-
Grenada	●	-	-	-	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	-	-
Guinea	●	●	-	-	-
Guinea-Bissau	●	●	-	-	-
Guyana	-	-	●	-	-
Haiti	●	-	●	-	-
Honduras	●	-	-	-	-
Hungary	●	○	●*	○	-
Iceland	●	-	-	-	-
India	●	●	●	●	-
Indonesia	●	●	-	●	-
Iran (Islamic Republic of)	●	●	-	●	-
Iraq	●	●	-	●	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	-	-
Japan	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Jordan	●	●	●	●	-
Kazakhstan	○	○	-	●	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	○	-
Kuwait	●	●*	-	●	-
Kyrgyzstan	●	●	-	-	-
Lao People's Democratic Republic	●	-	-	●	-
Latvia	●	●	●	○	-
Lebanon	●	-	-	●	-
Lesotho	-	●	-	-	-
Liberia	●	-	-	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	-	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-
Madagascar	-	●	-	-	-
Malawi	●	●	-	●	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	○	●	-	●	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	○	-	○	-
Mongolia	●	-	-	●	-
Montenegro	●	-	-	-	-
Montserrat	●	-	-	-	-
Morocco	●	-	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Mozambique	○	●	-	●	-
Myanmar	●	-	-	●	-
Namibia	●	●	-	●	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	-	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	-	-	●	-
North Macedonia	●	●	-	○	-
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●	-
Oman	●	●	-	●	-
Pakistan	●	●	●	●	-
Panama	●	●	●	-	●
Papua New Guinea	-	-	-	●	-
Paraguay	●	-	●	-	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	○	-	-	○*	-
Romania	●	●	●	●	-
Russian Federation	●	●	○*	●	-
Rwanda	●	○	-	●	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Saint Lucia	●	-	-	-	-
Saint Martin	●	●	-	-	-
Sao Tome and Principe	●	-	-	-	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	●	-
Serbia	●	-	-	●*	-
Seychelles	-	●	-	-	-
Sierra Leone	-	-	-	○	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	-	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	○	-	-	-
South Africa	●	●	○	●	-
South Sudan	●	○	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-
Sudan	●*	●*	●*	-	-
Suriname	●	●	●	-	-
Sweden	●	●	●	●	-
Switzerland	●	●	○	●	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	●*	-
Togo	●	●	-	-	-
Trinidad and Tobago	●	-	●	-	-
Tunisia	●	●	-	●	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	-	-
Uganda	●	●	-	●	-
Ukraine	●	○	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
United Arab Emirates	●	●	●	●	-
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-
United States Virgin Islands	-	-	-	●*	-
United States of America	●	●	●	●	-
Uruguay	●	-	●	-	-
Uzbekistan	●	●	-	○	-
Venezuela (Bolivarian Republic of)	●	-	●	-	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Zambia	●	●	-	●	-
Zimbabwe	-	●	-	●	-

**Newly reported in this update.*

Unspecified B.1.617 reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

WHO from official sources.

ation become available.

*** Beta was excluded for Uruguay this week based on further information.*

****Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern*

See also Annex 2: Data, table and figure notes.

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

COVID-19 Weekly Epidemiological Update

Edition 49, published 20 July 2021

In this edition:

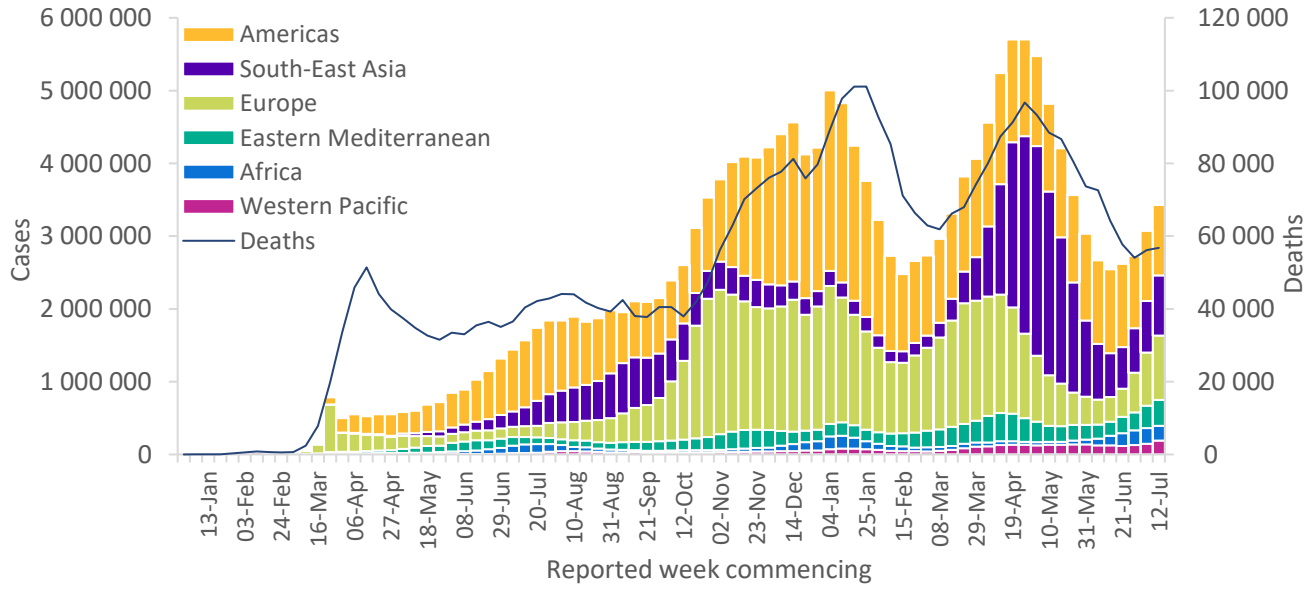
- Global overview
- Special focus: Release of a detailed WHO COVID-19 global surveillance dashboard
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Key weekly updates

Global overview

Data as of 18 July 2021

The global number of new cases reported last week (12-18 July 2021) was over 3.4 million, a 12% increase as compared to the previous week (Figure 1). Globally, COVID-19 weekly case incidence increased with an average of around 490 000 cases reported each day over the past week as compared to 400 000 cases reported daily in the previous week. Following a steady decline for over two months, the number of weekly deaths reported was similar to the previous week, with almost 57 000 deaths reported. The cumulative number of cases reported globally is now over 190 million and the number of deaths exceeds 4 million. At this rate, it is expected that the cumulative number of cases reported globally could exceed 200 million in the next three weeks. Last week, four Regions (all except the Regions of the Americas and Africa) reported an increase in case incidence. The Western Pacific Region recorded the largest increase in case incidence as compared to the previous week, followed by the European Region (30% and 21%, respectively) (Table 1). The South-East Asia and Eastern Mediterranean Regions also recorded increases in case incidence, 16% and 15%, respectively, as compared to the previous week. The number of deaths increased in the South-East Asia and the Western Pacific Regions by 12% and 10%, respectively, as compared to the previous week. The African, Eastern Mediterranean and European Regions reported similar numbers of deaths as compared to the previous week, whereas the Region of Americas reported a 6% decrease.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 18 July 2021**



**See *Annex 2: Data, table and figure notes*

The Region of the Americas and the European Region reported the highest weekly case incidence per capita, both reporting 95 new cases per 100 000 population, as well as the highest number of deaths per population over the past week, with 2.2 and 0.8 new deaths per 100 000 population, respectively. The Eastern Mediterranean and South-East Asia Regions reported 48 and 41 new cases per 100 000 population, respectively.

Despite efforts to extend vaccination coverage, many countries across all six WHO Regions continue to experience surges in COVID-19 cases. Over the past week, the highest numbers of new cases were reported from Indonesia (350 273 new cases; 44% increase), the United Kingdom (296 447 new cases; 41% increase), Brazil (287 610 new cases; 14% decrease), India (268 843 new cases; 8% decrease), and the United States of America (216 433 new cases; 68% increase).

Globally, cases of the Alpha variant have been reported in 180 countries, territories or areas (hereafter countries; six new countries in the past week), while 130 countries (seven new countries) have reported cases of the Beta variant; 78 countries (three new countries) have reported cases of the Gamma variant; and 124 countries (13 new countries) have reported cases of the Delta variant.

The increases in transmission appear to be driven by four factors: the circulation of more transmissible Variants of Concern (VOCs), relaxation of public health social measures originally intended to control transmission, increases in social mixing, and the large number of people who remain susceptible to SARS-CoV-2 infection as a result of inequitable vaccine distribution around the world.

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 18 July 2021**

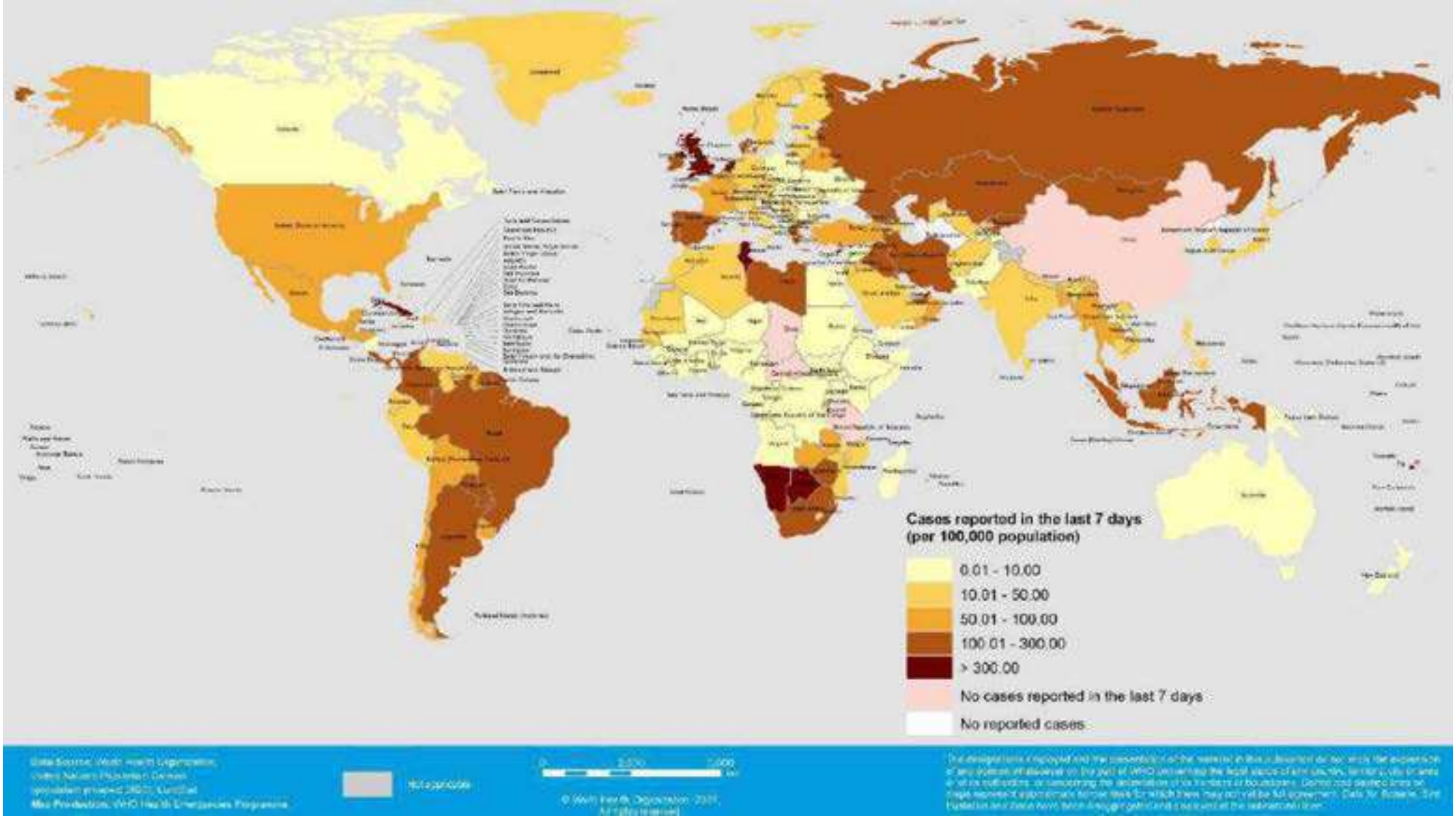
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	967 205 (28%)	0%	74 734 644 (39%)	22 411 (39%)	-6%	1 960 619 (48%)
Europe	885 048 (26%)	21%	58 319 701 (31%)	7 173 (13%)	0%	1 204 780 (29%)
South-East Asia	829 552 (24%)	16%	36 760 906 (19%)	16 403 (29%)	12%	526 942 (13%)
Eastern Mediterranean	354 030 (10%)	15%	11 794 433 (6%)	3 875 (7%)	4%	226 399 (6%)
Africa	202 801 (6%)	-5%	4 589 220 (2%)	4 817 (8%)	-4%	107 498 (3%)
Western Pacific	191 009 (6%)	30%	3 970 165 (2%)	2 088 (4%)	10%	59 749 (1%)
Global	**3 429 645 (100%)**	**12%**	**190 169 833 (100%)**	**56 767 (100%)**	**1%**	**4 086 000 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
**See *Annex 2: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

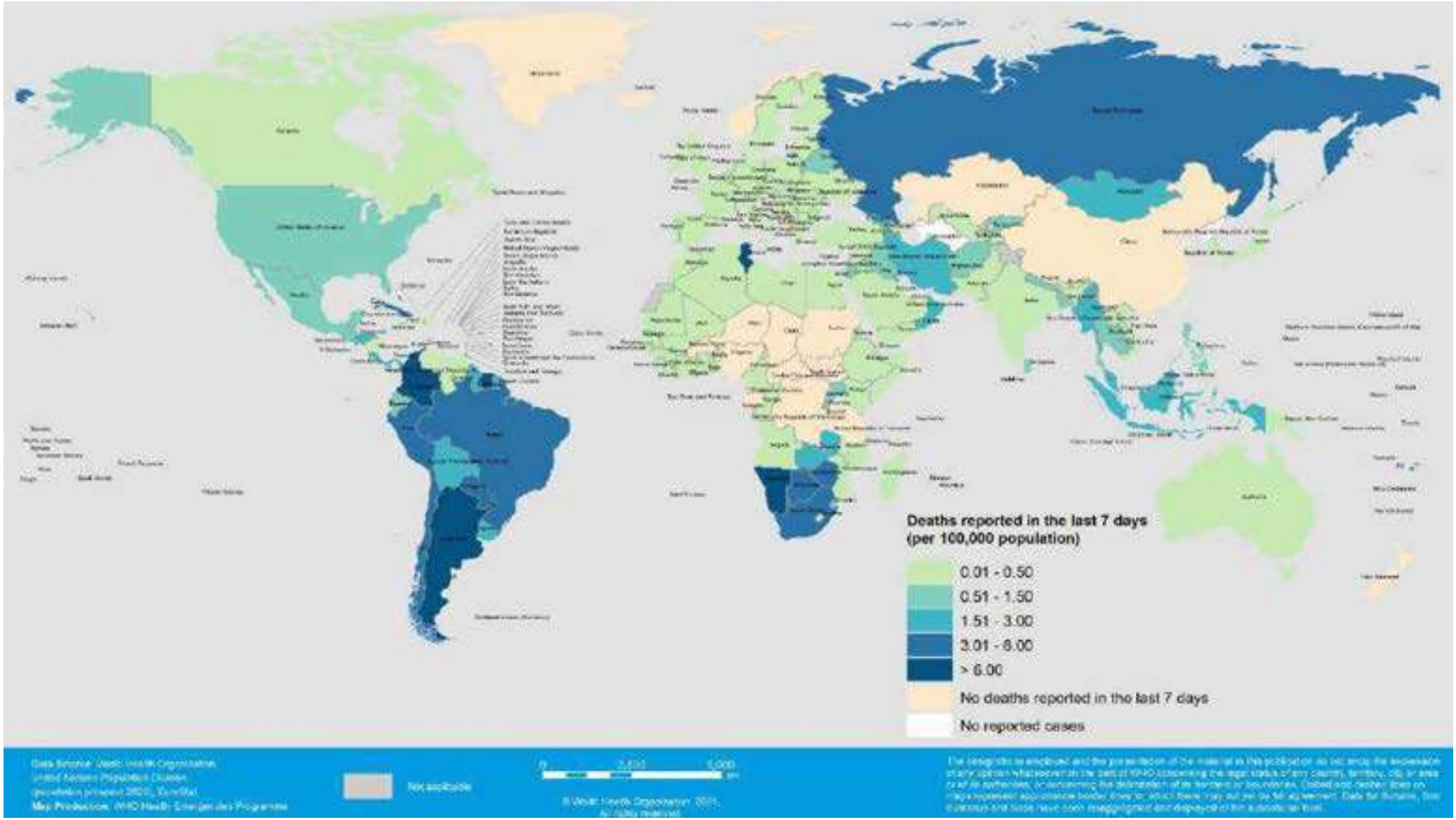
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 12 – 18 July 2021**



**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 12 – 18 July 2021**



**See *Annex 2: Data, table and figure notes*

Special Focus: Release of a WHO COVID-19 detailed surveillance data dashboard, including a downloadable database feature

Over eighteen months into the COVID-19 pandemic, the need for global epidemiological surveillance for COVID-19 continues to be of high importance. The evolution of transmission patterns as the pandemic continues will likely be influenced by the impact of the COVID-19 vaccination campaigns and by the emergence of more transmissible variants, or variants with properties of immune escape. Timely and complete surveillance data are therefore key to monitoring these changes.

WHO has been conducting global surveillance of COVID-19 as part of the WHO's preparedness, readiness and response activities for COVID-19. Besides the daily count of confirmed COVID-19 cases and deaths, WHO has requested all Member States to report a minimum set of information using one of the two following mechanisms: a case report form; or via the weekly aggregated surveillance system, as specified in the Public Health Surveillance for COVID-19 interim guidance.

The data reported by Member States are now publicly available through the WHO COVID-19 detailed surveillance data dashboard, without editing or filtering by WHO. This dashboard complements the existing WHO COVID-19 dashboard and provides data by WHO Region and by country, stratified by age and sex, trends over time, case fatality ratios by age, testing, hospitalization, and data on health care workers. The WHO COVID-19 detailed surveillance data dashboard, and the downloadable dataset, provides the ability for users to conduct further analyses by country and over selected time periods.

Figure 4. WHO COVID-19 detailed surveillance dashboard which features a downloadable database

As of 16 July 2021, a total of 186 countries, territories, and areas had reported the minimum required information via case report forms and/or weekly aggregate surveillance to WHO. Of the 188 million cases reported globally at this time, WHO received information for 123 million cases (65%). Of these, sex was reported for over 95 million cases (77%), age reported for 76.5 million cases (62%), and age and sex combined was reported for 73.6 million cases (60%). To date, over 2.1 million cases and just under 7000 deaths among health workers have been recorded in the dashboard.

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact vaccine, therapeutics, diagnostics or effectiveness of public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants.

For updates on VOCs and VOIs, and a list of Alerts for Further Monitoring, are available on the WHO Tracking SARS-CoV-2 Variants website.

Geographic distribution

As surveillance activities to detect SARS-CoV-2 variants are strengthened at national and subnational levels, including through the expansion of genomic sequencing capacities, the number of countries/areas/territories (hereafter countries) reporting VOCs continues to increase (Figure 5, Annex 1). This distribution should nonetheless be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

Phenotypic characteristics

Available evidence on phenotypic impacts of VOCs is summarized in Table 2, as well as in previous editions of these COVID-19 Weekly Epidemiological Updates. Since the last detailed update on 6 July, new evidence has been published on the phenotypic characteristics of the Delta variant.

As of 20 July 2021, a total of 2 418 133 SARS-CoV-2 sequences have been submitted to GISAID, a global science initiative and primary source that provides open access to genomic data. Over 220 000 (9%) of SARS-CoV-2 sequences submitted to GISAID are confirmed as the Delta Variant. As mentioned in our last update, based on the estimated transmission advantage of the Delta variant, it is expected that it will rapidly outcompete other variants and become the dominant circulating lineage over the coming months.[1] According to GISAID data, as of 20 July, the prevalence of Delta among the specimens sequenced over the past 4 weeks exceeded 75% in many countries worldwide including Australia, Bangladesh, Botswana, China, Denmark, India, Indonesia, Israel, Portugal, Russian Federation, Singapore, South Africa and the United Kingdom.

Growing evidence supports the increased transmissibility of the Delta variant as compared to non-VOCs. However, the exact mechanism for the increase in transmissibility remains unclear. A recent study from China during an outbreak of the Delta variant examined the time interval from the exposure of a quarantined population to the first positive PCR result and found that the interval may be shorter for the Delta variant when compared to non-VOCs [4 (IQR 3.00-5.00) days compared to 6 (IQR 5.00 to 8.00) days, respectively]. Moreover, the viral load of the first positive test of Delta infection was over 1200 times higher than non-VOCs, suggesting that this VOC may be able to replicate faster and be more infectious during the early stages of infection.[2]

A study from Canada analysing data from over 200 000 COVID-19 cases showed an increase in virulence of the Delta variant when compared to non-VOCs. Among the COVID-19 cases, the risk of hospitalization, ICU admission and death associated with the Delta variant compared to non-VOCs increased by 120% (93-153%), 287% (198-399%) and 137% (50-230%), respectively. Increased disease severity was also identified for Alpha, Beta and Gamma variants combined when compared to non-VOCs: 59% (49-69%) for hospitalization, 105% (82-134%) for ICU admission and 61% (40-87%) for death.[3]

Preliminary findings from a study in the United Kingdom, which measured antibodies in a cohort of 112 SARS-CoV-2-infected individuals, indicated significantly reduced neutralization titres (2.5 to 5-fold reduction) in sera from individuals infected with Delta, Beta or Alpha variants with a S:484K mutation (but not Alpha without any additional mutations) when compared to the non-VOCs.[4]

A recent modelling study simulated the effects of non-pharmaceutical interventions (NPIs) in the context of expanding vaccination coverage and the predominance of the Delta variant in Germany, while accounting for age-associated factors and commuting activities. The authors indicated that timely implementation of NPIs in combination with masks and testing would considerably reduce the chance of a further surge in infections.[5]

Table 2: Summary of phenotypic impacts* of Variants of Concern

WHO label	Alpha	Beta	Gamma	Delta
Transmissibility	Increased transmissibility and secondary attack rate[6]	Increased transmissibility[7]	Increased transmissibility[8]	Increased transmissibility and secondary attack rate[1,9,10]
Disease severity	Increased risk of hospitalization[11], possible increased risk of severity and mortality[12]	Not confirmed, possible increased risk of in-hospital mortality[13,14]	Not confirmed, possible increased risk of hospitalization[15]	Increased risk of hospitalization[3,16]
Risk of reinfection	Neutralizing activity retained,[17] risk of reinfection remains similar[18,19]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[20–23]	Moderate reduction in neutralizing activity reported[24,25]	Reduction in neutralizing activity reported[26]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF); no impact on overall result from multiple target RT-PCR, No impact on Ag RDTs observed[27]	No impact on RT-PCR or Ag RDTs observed[16]	None reported to date	None reported to date

**Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.*

VOC impacts on vaccines

Table 3 presents the impact of variants on vaccine efficacy/effectiveness (VE) and quantifies the reduction in VE due to variants compared to VE in non-VOC settings. Of note, reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. In addition, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean good protection, as is the case for AstraZeneca-Vaxzevria.

Since the 6 July update, two notable studies have provided further evidence of the performance of mRNA vaccines against Alpha and Beta variants. The first, a test-negative case-control study in the United States of America, found that vaccination with two doses of Moderna-mRNA-1273 or Pfizer BioNTech-Comirnaty vaccines was 92.8% (95% CI: 83.0-96.9%) effective at preventing hospitalization due to the Alpha variant 14 or more days after receipt of the second dose; VE against all variants was 86.9% (95% CI: 80.4-91.2%). It should be noted that approximately 21% of the 1210 adults participating in the study were immunosuppressed.[28]

A second study, from Qatar, evaluated VE of Moderna-mRNA-1273 against SARS-CoV-2 infection and severe disease due to Alpha and Beta variants among a large cohort of adults using a matched test negative case-control design. Adjusted VE against infection due to the Alpha and Beta variants 14 or more days after receipt of the second dose was 100% and 96% (95% CI: 90.9-98.2%), respectively. Single dose VE against infection due to Alpha and Beta was reduced: 88.2% (95% CI: 83.8-91.4%) and 68.2% (95% CI: 64.3-71.7%), respectively. The study also evaluated VE of Moderna-mRNA-1273 against asymptomatic, symptomatic, and severe, critical, or fatal disease due to all variants (predominantly Alpha and Beta). VE of two doses of the vaccine ranged from 90-99% for these outcomes. VE of a single dose remained high for severe, critical or fatal disease (84%) but was markedly lower for asymptomatic and symptomatic disease at 47.3% (95% CI: 37.6-55.5%) and 66.0% (60.6-70.7%), respectively, thus, highlighting the importance of two doses.[29]

Table 3. Summary of vaccine performance against Variants of Concern

Alpha	Beta	Gamma	Delta
Efficacy/effectiveness against disease or infection (full vaccination), see key below table			
Protection retained against all outcomes	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection	Unclear impact; very limited evidence	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection
Severe disease			
• ↔: Moderna-mRNA-1273 (1), Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty (1), Pfizer BioNTech-Comirnaty (2)[28,30–32] • ↓: AstraZeneca- Vaxzevria (1) [31]	• ↔: Janssen Ad26.COV 2.5 (1), PfizerBioNTech-Comirnaty (1)[30,33]	• No evidence	• ↔: AstraZeneca- Vaxzevria (1), Pfizer BioNTech-Comirnaty (1)[31]
Symptomatic disease			
• ↔: Moderna-mRNA-1273 (1), Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty (1), Pfizer BioNTech-Comirnaty (3)[34–37] • ↔ to ↓: AstraZeneca-Vaxzevria (3)[35,36,38] • ↓: Novavax-Covavax (1)[39]	• ↔: Janssen-Ad26. COV 2.5 (1)[33] • ↓↓↓: AstraZeneca-Vaxzevria (1), Novavax-Covavax (1)[40,41]	• ↔ to ↓: Sinovac-CoronaVac (1)[42,43]	• ↔ to ↓: PfizerBioNTech-Comirnaty (3)[35–37] • ↓:Bharat-Covaxin (1)[44] • ↓↓: AstraZeneca- Vaxzevria (2)[35,36]
Infection			
• ↔: PfizerBioNTech-Comirnaty (1)[36] • ↔ to ↓: AstraZeneca-Vaxzevria (2)[36,38]	• ↔: Moderna-mRNA-1273 (1)[29] • ↓: PfizerBioNTech-Comirnaty (1)[30]	• No evidence	• ↓: AstraZeneca-Vaxzevria (1), Pfizer BioNTech-Comirnaty (1)[36]
Neutralization (full vaccination), see key below table			
• ↔: Anhui ZL-Recombinant (1), Beijing CNBG-BBIBP-CorV (1), Bharat-Covaxin (1), Gamaleya-Sputnik V (1), Novavax-Covavax (1) [45–49] • ↔ to ↓: Janssen-Ad26.COV 2.5 (3), Moderna-mRNA-1273 (9), Pfizer BioNTech-Comirnaty (27) Sinovac-CoronaVac (5)[23,45,48–84] • ↓ to ↓↓: AstraZeneca-Vaxzevria (2)[38,55]	• ↔ to ↓: Anhui ZL-Recombinant (2), Beijing CNBG-BBIBP-CorV (2)[45,85,86] • ↓: Bharat-Covaxin (1)[87] • ↓ to ↓↓: Moderna-mRNA-1273 (11), Pfizer BioNTech-Comirnaty (27), Sinovac-CoronaVac (4)[23,45,50–52,55,57–61,63,64,66–69,71,73–78,81,84,85,88–96] • ↓ to ↓↓↓: Janssen-Ad26.COV 2.5 (3)[79,80,97] • ↓↓: AstraZeneca-Vaxzevria (4), Gamaleya-Sputnik V (1)[40,47,55,68,93] • ↓↓↓: Novavax-Covavax (1)[59]	• ↔ to ↓: Pfizer BioNTech-Comirnaty, (12), Sinovac-CoronaVac (3)[51,55,57,59,61,64,74,82–84,88,99–101] • ↓: AstraZeneca-Vaxzevria (1), Janssen-Ad26.COV 2.5 (2), Moderna-mRNA-1273 (4)[55,57,73,78–80,100]	• ↔: Janssen-Ad.COV 2.5 (1)[79] • ↓: Anhui ZL-Recombinant (1), AstraZeneca-Vaxzevria (2), Bharat-Covaxin (1), Moderna-mRNA-1273 (2), SII – Covishield (1)[49,78,87,93,102–104] • ↓ to ↓↓: Pfizer BioNTech-Comirnaty (6)[71,84,93,99,102,103] • ↓ to ↓↓↓: Sinovac-CoronaVac (2)[49,81]

Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10% reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20% reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30% reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30% reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used.
The number of studies is shown in parentheses.
"Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study.

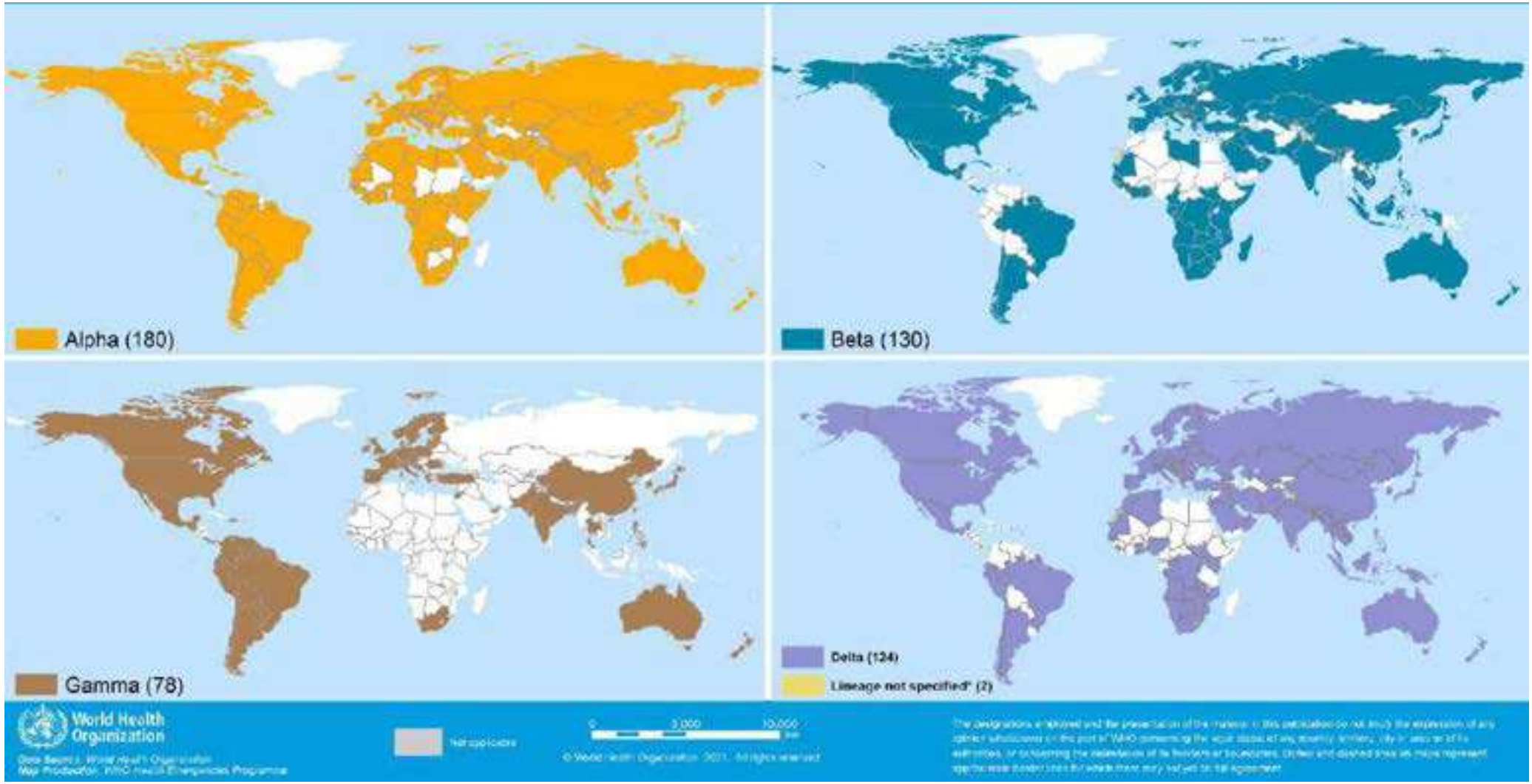
Additional notes on VOC impacts on vaccines

- Studies presenting VOC specific VE estimates for full vaccination (≥ 7 days post final dose) are assessed against a comparator VE estimate to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 randomised RCT results from non-VOC settings. For severe disease and infection, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca Vaxzevria for severe disease (phase 3 RCT efficacy estimates against severe disease are used as comparator since within study comparator is unavailable) and for infection (when phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection even without a comparator if very high VE estimate against a VOC is reported (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates between different studies. In addition, the reductions presented consider VE point estimates only and do not take into account the uncertainty around these estimates. The reductions in VE noted should be interpreted with these limitations in mind.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Figure 5. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 20 July 2021**



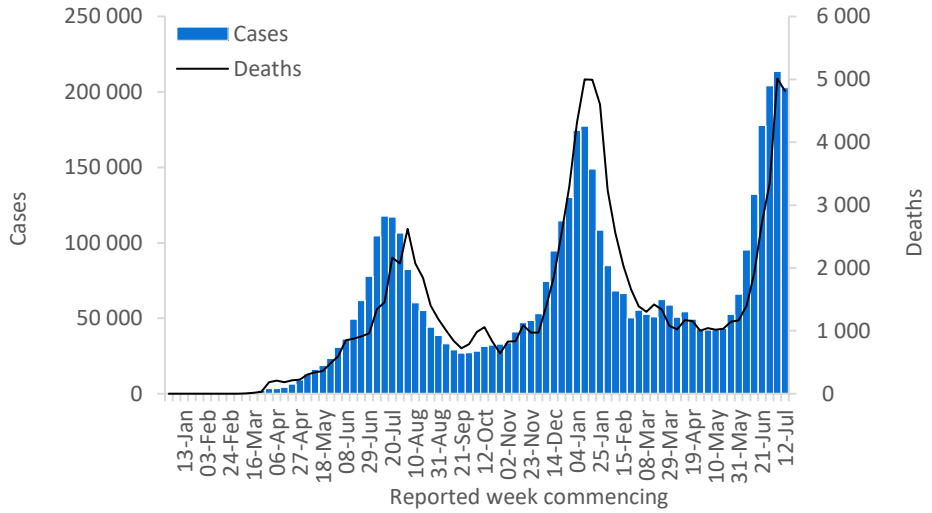
**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details.*

WHO regional overviews - Epidemiological week 12 – 18 July 2021

African Region

Following an increasing trend in the weekly number of new COVID-19 cases and deaths since early May 2021, the Region reported a slight decrease in case incidence (with over 202 000 new cases) and mortality (over 4800 new deaths) in the past week, as compared to the previous week. These trends were largely driven by decreases reported in South Africa, which reported the highest numbers of new cases (104 583 cases) and more than 50% of the cases reported in the region in the past week. Other countries reporting high numbers of new cases include: Zimbabwe (15 760 cases; 106.0 cases/100 000; +20%), and Botswana (10 745 cases; 456.9 cases/100 000; +172%), while the highest numbers of new cases per population were reported in Seychelles (545 cases/100 000; -28%), Botswana (see above) and Namibia (317 cases/100 000; -19%).

The highest numbers of new deaths were reported from South Africa (2538 deaths; 4.3 deaths/100 000; -4%), Namibia (595 deaths; 23.4/100 000; -109%), and Zimbabwe (462 deaths; 3.1 deaths/100 000; +73%).

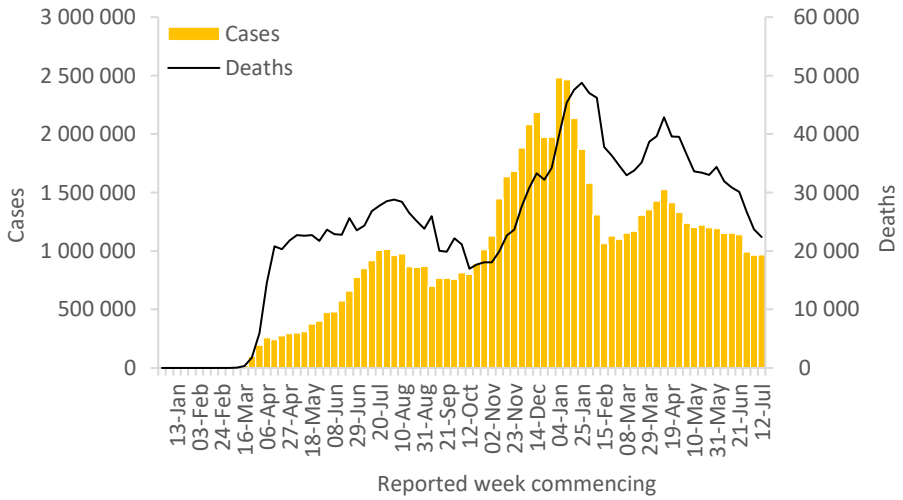


Updates from the African Region

Region of the Americas

The Region reported over 967 000 new cases, a similar number as compared to the previous week, and over 22 000 new deaths, a 6% decrease as compared to the previous week. A decline in weekly case incidence has been reported since the last peak in mid-April 2021, however, very high transmission levels and high mortality rates are still observed across many countries in the Region. The highest numbers of new cases were reported from Brazil (287 610 cases; 135.3 cases/ 100 000; -14%), the United States of America (216 433 cases; 65.4 cases/100 000; +68%), and Colombia (129 713 cases; 254.9 cases/100 000; -26%), while the highest numbers of new cases per population were reported in the British Virgin Islands (2900 cases/100 000; +16%), Martinique (574.8 cases/100 000; +425%) and Cuba (388.8 cases/100 000; +43%).

The highest numbers of new deaths were reported from Brazil (8710 deaths; 4.1 deaths/100 000; -11%), Colombia (3602 deaths; 7.1/100 000; -10%), and Argentina (2927 deaths; 6.5 deaths/100 000; similar to the previous week).

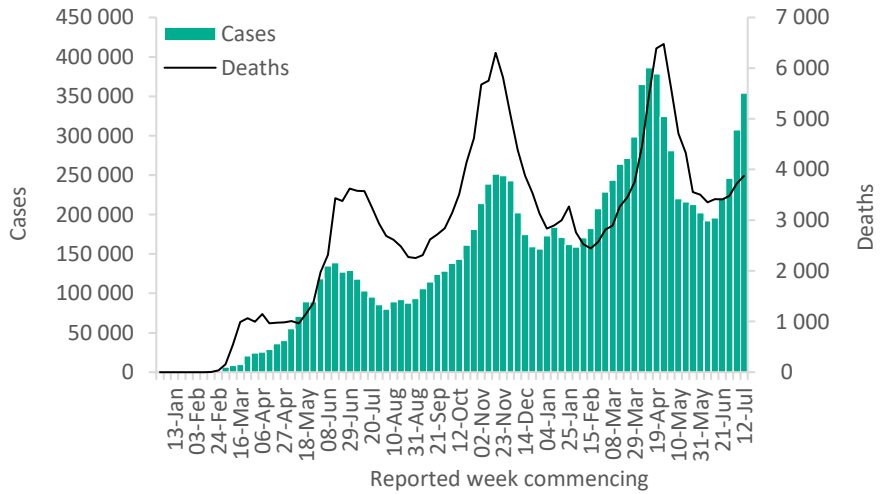


Updates from the Region of the Americas

Eastern Mediterranean Region

The Region has reported a marked increase in weekly case incidence for more than one month with over 354 000 new cases reported, a 15% increase as compared to the previous week. This increase has been driven mainly by surges in several countries in the Region including Iran, Iraq, Libya, Pakistan and Morocco. The Region reported over 3800 new deaths, a similar number as compared to the previous week.

The highest numbers of new cases were reported from the Islamic Republic of Iran (145 293 cases; 173.0 cases/100 000; +27%), Iraq (61 268 cases; 152.3 cases/ 100 000; + 8%), and Tunisia (49 777 cases; 421.2 cases/100 000; similar to the previous week), while the highest weekly case incidence per population was registered in Tunisia (see above), Kuwait (245.1 cases/100 000) and Libya (235.7 cases/100 000). The highest numbers of new deaths were reported from the Islamic Republic of Iran (1272 deaths; 1.5 deaths/100 000; +9%), Tunisia (1110 deaths; 9.4 deaths/100 000; +13%), and Afghanistan (423 deaths; 1.1 deaths/100 000; -19%).

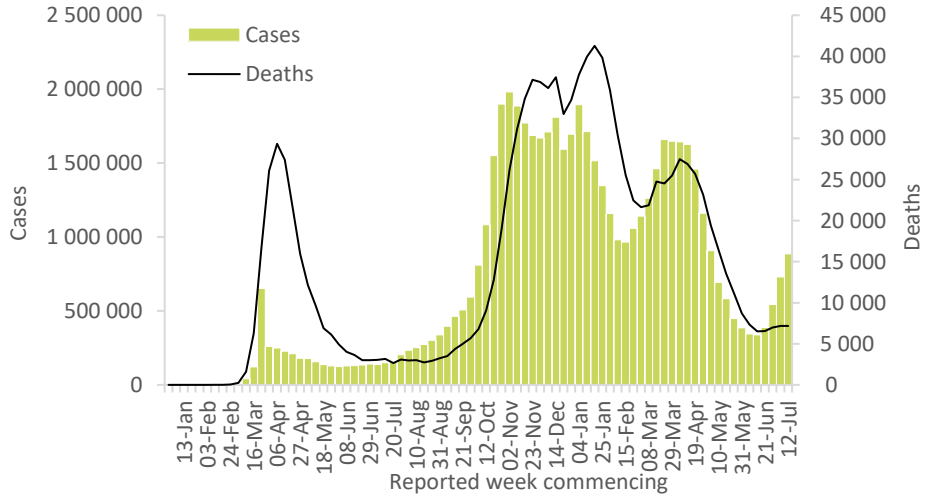


Updates from the Eastern Mediterranean Region

European Region

In the European Region, weekly case incidence has increased significantly across the past month, with over 885 000 new cases reported in the past week, a 21% increase as compared to the previous week. Over 7100 new deaths were reported in the past week, similar to the number reported during the previous week. The increase in reported COVID-19 cases in the Region since mid-June 2021 has been observed across all age groups, but has been most pronounced in those aged 15-24 years. The highest numbers of new cases were reported from the United Kingdom (296 447 cases; 436.7 cases/100 000; +41%), the Russian Federation (174 800 cases; 119.8 cases/100 000; similar to the previous week), and Spain (85 802 cases; 181.3 cases/100 000; -29%), while the highest weekly case incidence per population was registered in Jersey (1274 cases/100 000), Cyprus (779 cases/100 000) and Gibraltar (451 cases/100 000).

The highest numbers of new deaths were reported from the Russian Federation (5417 deaths; 3.7 deaths/100 000; +7%), Turkey (296 deaths; 0.4 deaths/100 000; -7%), and the United Kingdom (284 deaths; 0.4 deaths/100 000; +48%).

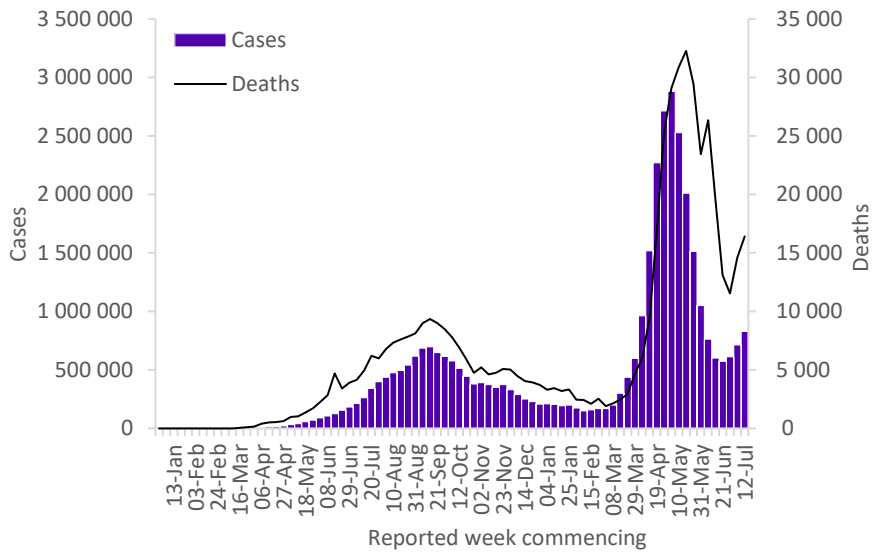


Updates from the European Region

South-East Asia Region

The Region reported over 829 000 new cases and over 16 000 new deaths, increases of 16% and 12%, respectively as compared to the previous week. Weekly case incidence and mortality in India and Sri Lanka continue to decline, with the regional trends being driven mainly by marked increases in Indonesia, Thailand and Myanmar. The highest numbers of new cases were reported from Indonesia (350 273 cases; 128.1 cases/100 000; +44%), India (268 843 cases; 19.5 cases/100 000; -8%) and Bangladesh (82 800 cases; 50.3 cases/100 000; +9%), while the highest weekly case incidence per population was registered in Maldives (150 cases/100 000), Indonesia (see above) and Thailand (96 cases/100 000).

The highest numbers of new deaths were reported from Indonesia (7118 deaths; 2.6 deaths/ 100 000; +21%), India (5569 deaths; 0.4 deaths/100 000; -8%), and Bangladesh (1475 deaths; 0.9 deaths/100 000; +9%).

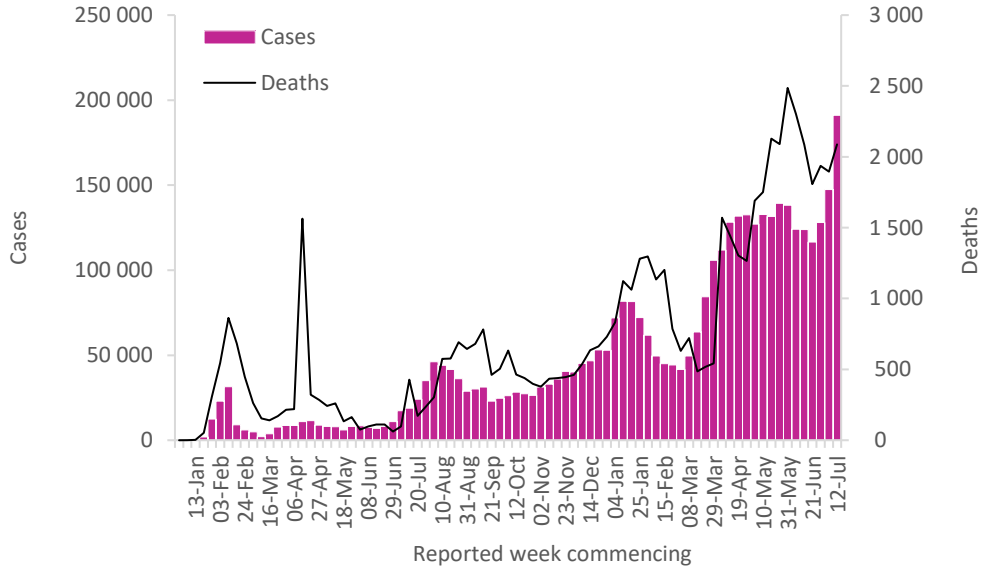


Updates from the South-East Asia Region

Western Pacific Region

Over the past week, weekly case incidence increased sharply in the Region with over 191 000 new cases reported, representing a 30% increase as compared to the previous week. This trend was driven mainly by increases in Fiji, Japan, Malaysia and Viet Nam. The Region reported over 2000 new deaths this week, a 10% increase as compared to the previous week. The highest numbers of new cases were reported from Malaysia (78 660 cases; 243.0 cases/100 000; +44%), the Philippines (35 235 cases; 32.2 cases/100 000; similar to the previous week), and Viet Nam (22 532 cases; 23.1 cases per 100 000; +146%), while the highest weekly case incidence per population was registered in Fiji (719 cases/100 000), Mongolia (297 cases/100 000) and Malaysia (see above).

The highest numbers of new deaths were reported from Malaysia (799 deaths; 2.5 deaths/100 000; +26%), the Philippines (782 deaths; 0.7 deaths/100 000; similar to the previous week), and Cambodia (195 deaths; 1.2 deaths/100 000; +5%).



Updates from the Western Pacific Region

Key weekly updates

WHO Director-General's key messages

- In his opening remarks at the Member State Information Session on Origins – 16 July 2021, the Director-General highlighted the proposed next steps that the WHO Secretariat will take to advance the studies to identify the origins of SARS-CoV-2. He emphasized that finding where the virus came from is essential, not only for understanding how the pandemic started and preventing future outbreaks, but also as an obligation to the families of the 4 million people who have lost someone they love, and the millions who have suffered.

- In his opening remarks at the 8th meeting of the IHR Emergency Committee on COVID-19 – 14 July 2021, the Director-General called for a massive push to vaccinate at least 10% of the population of every country by September 2021, at least 40% by the end of this year, and at least 70% by the middle of 2022. To reach these targets, he highlighted the need for 11 billion vaccine doses. He expressed his gratitude for the announcements made by the G7 countries that together will donate 870 million doses, primarily through COVAX, but emphasized that much more is needed, much faster.

Updates and publications

- Germany reinforces its commitment to support WHO's work, 16 July 2021
- Clinical features and prognostic factors of COVID-19 in people living with HIV hospitalized with suspected or confirmed SARS-CoV-2 infection, 15 July 2021
- COVID-19 pandemic leads to major backsliding on childhood vaccinations, new WHO, UNICEF data shows, 15 July 2021
- Latest updates on emergency use listing (EUL) status of COVID-19 vaccines, 15 July 2021
- Vaccine efficacy, effectiveness and protection, 14 July 2021
- WHO technical consultation on oxygen access scale-up for COVID-19, 14 July 2021
- Safe Eid al Adha practices in the context of COVID-19, 13 July 2021

Annex

COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table

As of 20 July, WHO will stop collecting reports of national-level transmission classifications and displaying transmission classifications on the global COVID-19 dashboard. WHO however encourages Member States to continue the self-monitoring of transmission at the sub-national level to inform adjustments to PHSM.

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 20 July 2021**

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Afghanistan	●	-	-	●	-
Albania	●	-	-	○*	-
Algeria	●	-	-	●	-
Angola	●	●	-	●*	-
Anguilla	●*	-	-	●*	-
Antigua and Barbuda	●	●	-	-	-
Argentina	●	●	●	●	-
Armenia	○	-	-	-	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	-	-
Bahrain	●	●	-	●	-
Bangladesh	●	●	○*	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	-	-	-
Bermuda	●	●	-	-	-
Bhutan	●	●	-	●	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Bosnia and Herzegovina	○	○*	○*	○	-
Botswana	-	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	-	-
Brunei Darussalam	●	●	-	-	-
Bulgaria	●	●	-	●	-
Burkina Faso	●	-	-	-	-
Burundi	●*	●*	-	●*	-
Cabo Verde	●	-	-	-	-
Cambodia	●	○*	-	●	-
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	-	●	-	-
Central African Republic	●	-	-	-	-
Chile	●	●	●	●	-
China	●	●	●	○	-
Colombia	●	-	●	-	-
Comoros	-	●	-	-	-
Congo	●	●*	-	●*	-
Costa Rica	●	●	●	-	-
Croatia	●	●	○	○	-
Cuba	●	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Curaçao	●	-	●	-	●
Cyprus	●	●	-	○	-
Czechia	●	●	●	●	-
Côte d'Ivoire	●	●	-	-	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-
Dominica	●	-	-	-	-
Dominican Republic	●	-	●	-	-
Ecuador	●	-	●	●	-
Egypt	●	-	-	-	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	○*	-
Eswatini	-	●	-	-	-
Ethiopia	○	-	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Gabon	●	○	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	-	-
Greece	●	●	●	●	-
Grenada	●	-	-	-	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	-	-
Guinea	●	●	-	-	-
Guinea-Bissau	●	●	-	-	-
Guyana	-	-	●	-	-
Haiti	●	-	●	-	-
Honduras	●	-	-	-	-
Hungary	●	○	-	○	-
Iceland	●	-	-	-	-
India	●	●	●	●	-
Indonesia	●	●	-	●	-
Iran (Islamic Republic of)	●	●	-	●	-
Iraq	●	●	-	●*	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	-	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	○	○	-	●	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Kuwait	●	●*	-	●	-
Kyrgyzstan	●	●	-	-	-
Lao People's Democratic Republic	●	-	-	●	-
Latvia	●	●	●	○	-
Lebanon	●	-	-	●	-
Lesotho	-	●	-	-	-
Liberia	●	-	-	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	-	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-
Madagascar	-	●	-	-	-
Malawi	●	●	-	●	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	○	●	-	●	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	○	-	○	-
Mongolia	●*	-	-	●*	-
Montenegro	●	-	-	-	-
Montserrat	●	-	-	-	-
Morocco	●	-	-	●	-
Mozambique	○*	●	-	●	-
Myanmar	●	-	-	●*	-
Namibia	●	●	-	●	-
Nepal	●	-	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	-	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	-	-	●	-
North Macedonia	●	●	-	○	-
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●	-
Oman	●	●	-	●	-
Pakistan	●	●	●	●	-
Panama	●	●	●	-	●
Papua New Guinea	-	-	-	●*	-
Paraguay	●	-	●	-	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	○	-	-	-	-
Romania	●	●	●	●	-
Russian Federation	●	●	-	●	-
Rwanda	●	○	-	●*	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	-	-
Saint Lucia	●	-	-	-	-
Saint Martin	●	●	-	-	-
Sao Tome and Principe	●	-	-	-	-
Saudi Arabia	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Senegal	●	●	-	●*	-
Serbia	●	-	-	-	-
Seychelles	-	●	-	-	-
Sierra Leone	-	-	-	○	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	-	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	○*	-	-	-
South Africa	●	●	○*	●	-
South Sudan	●*	○*	-	●*	-
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Suriname	●	●	●	-	-
Sweden	●	●	●	●	-
Switzerland	●	●	○	●	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	-	-
Togo	●	●	-	-	-
Trinidad and Tobago	●	-	●	-	-
Tunisia	●	●	-	●	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	-	-
Uganda	●	●	-	●	-
Ukraine	●	○	-	○	-
United Arab Emirates	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-
United States of America	●	●	●	●	-
Uruguay	●	-	●	-	-
Uzbekistan	●	●	-	○	-
Venezuela (Bolivarian Republic of)	●	-	●	-	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Zambia	●*	●	-	●	-
Zimbabwe	-	●	-	●	-

**Newly reported in this update.*

Unspecified B.1.617 reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

from official sources.

ation become available.

*** Alpha was excluded for Benin, Botswana, Eswatini and Madagascar, and unspecified B.1.617 was excluded for Estonia this week based on further information.*

****Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern*

See also Annex 2: Data, table and figure notes.

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

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COVID-19 Weekly Epidemiological Update

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In this edition:

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- Special focus: Update on WHO COVID-19 global rapid risk assessment
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
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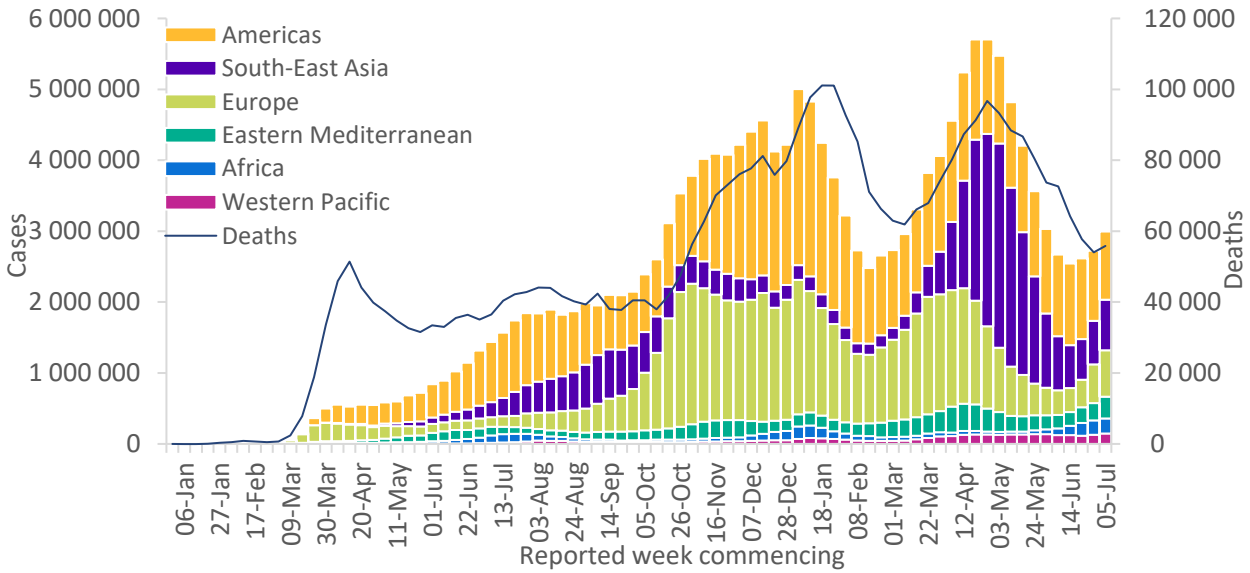
Global overview

Data as of 11 July 2021

The global number of new cases reported last week (5-11 July 2021) was nearly 3 million, a 10% increase as compared to the previous week (Figure 1). Following a steady decline for nine consecutive weeks, the number of weekly deaths increased by 3% this week compared to the previous week, with over 55,000 deaths reported. Globally, COVID-19 incidence increased with an average of over 400,000 cases reported each day as compared to 370,000 from the previous week. The cumulative number of cases reported globally is now over 186 million and the number of deaths exceeds 4 million.

This week, all Regions with the exception of the Americas recorded an increase in incidence. The Eastern Mediterranean Region recorded the largest increase in incidence (25%) followed by European Region with a 20% increase as compared to the previous week (Table 1). The African Region had the smallest percentage increase in incidence with a 5% increase. However, the region recorded a 50% increase in the number of deaths as compared to the previous week. The South-East Asia Region also recorded a significant increase in number of deaths, reporting a 26% increase as compared to the previous week. The Region of the Americas reported a 3% decline in incidence and an 11% decrease in number of deaths reported last week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 11 July 2021**



**See *Annex 2: Data, table and figure notes*

The highest numbers of new cases were reported from Brazil (333 030 new cases; 9% decrease), India (291 789 new cases; 7% decrease), Indonesia (243 119 new cases; 44% increase), The United Kingdom (210 277 new cases; 30% increase), and Colombia (174 320 new cases; 15% decrease). Over the past week, the highest numbers of new cases per 100 000 population were reported from British Virgin Islands (2497 new cases per 100 000 pop), Seychelles (763 new cases per 100 000 pop), Cyprus (673 new cases per 100 000 pop), Jersey (628 new cases per 100 000 pop), and Fiji (490 new cases per 100 000 pop).

Globally, cases of the Alpha variant have been reported in 178 countries, territories or areas (six new countries in the past week), while 123 countries (three new countries) reported cases of the Beta variant; 75 countries (three new countries) reported cases of the Gamma variant; 111 countries (15 new countries) reported cases of the Delta variant.

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 11 July 2021**

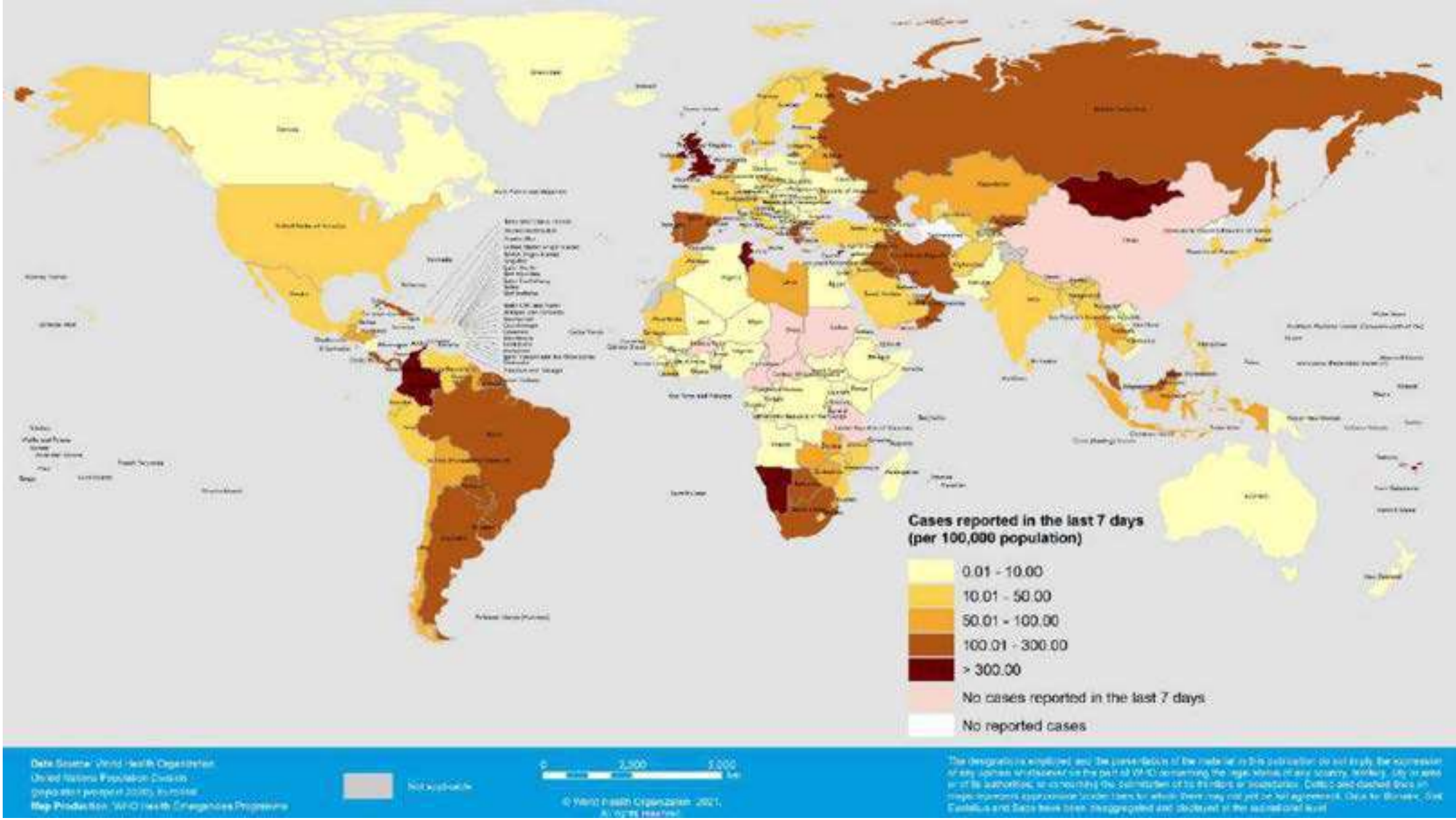
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	962 280 (32%)	-3%	73 767 194 (40%)	23 715 (42%)	-11%	1 938 190 (48%)
Europe	653 803 (22%)	20%	56 935 257 (31%)	6 926 (12%)	-1%	1 196 301 (30%)
South-East Asia	712 210 (24%)	16%	35 931 354 (19%)	14 600 (26%)	26%	510 539 (13%)
Eastern Mediterranean	306 986 (10%)	25%	11 440 249 (6%)	3 706 (7%)	7%	222 510 (6%)
Africa	213 694 (7%)	5%	4 386 419 (2%)	5 013 (9%)	50%	102 681 (3%)
Western Pacific	147 492 (5%)	15%	3 779 156 (2%)	1 870 (3%)	-3%	57 627 (1%)
Global	**2 996 465 (100%)**	**10%**	**186 240 393 (100%)**	**55 830 (100%)**	**3%**	**4 027 861 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
**See *Annex 2: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

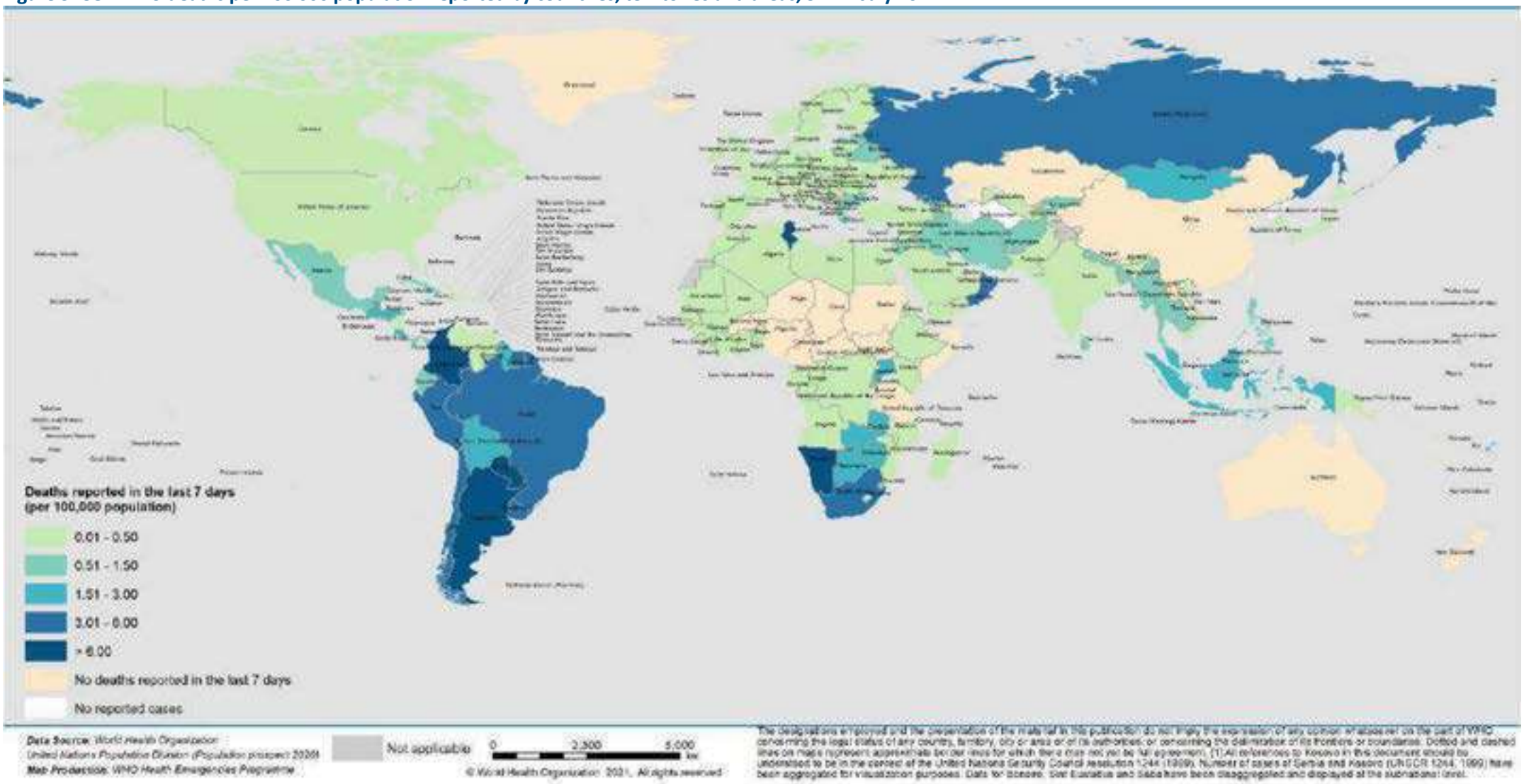
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 5 – 11 July 2021**



**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 5 – 11 July 2021**



**See *Annex 2: Data, table and figure notes*

Special Focus: Update on WHO COVID-19 global rapid risk assessment

The COVID-19 pandemic continues to evolve, as does our understanding of the SARS-CoV-2 virus, and the response needed to control the spread and impact of the virus. In WHO's most recent rapid risk assessment, conducted on 9 July 2021, the global public health risk remains very high.

Under the Emergency Response Framework, WHO undertakes risk assessments and situation analyses on a regular basis to inform our response to emerging situations. In addition, WHO periodically reviews the current risk status of public health events through an in-depth hazard, exposure and context assessment. This also includes a review of the vulnerabilities and capacities available to respond to the public health event and to investigate the current risk to human health, risks of ongoing spread globally, and risk of insufficient control capacities. Such assessments are used as an internal WHO decision-making tool; they are also used to support independent deliberations, including (but not limited to) meetings of the International Health Regulations (IHR 2005) Emergency Committee. To date, a total of 11 global rapid risk assessments have been undertaken for COVID-19, and additional assessments have been conducted for specific events surrounding the emergence of SARS-CoV-2 Variants of Concern (VOCs). Here, we provide a synopsis of the most recent in-depth global rapid risk assessment for COVID-19.

The global public health risks associated with COVID-19 remain very high. Following a two-month steady decline at the global level, case incidence rates remain high (once again approaching around 3 million new confirmed cases per week) and are increasing in most regions and in many countries. Following a decline in the death rate since the peak registered at the end of April 2021, a slight increase in deaths has been reported this week in comparison to the previous week, with several countries across all WHO regions with low levels of vaccination now reporting sharp increases in cases, hospitalizations, and deaths.

As the SARS-CoV-2 virus continues to circulate and evolve, emerging variants of interest and concern are being characterised by WHO and partners, to evaluate increased transmissibility and other potential phenotypic impacts. The four VOCs characterized to date (Alpha; Beta; Gamma, Delta) have demonstrated increased transmissibility. The Delta variant has now been detected in at least 111 countries across all six WHO regions in the last two months and has shown higher transmissibility than other VOCs identified to date. The increased transmissibility means that it is likely to become the dominant variant globally over the coming months. The emergence of more transmissible variants, coupled with the relaxation and inappropriate use of public health and social measures (PHSM) and increased social mobility and mixing, , and low vaccination coverage in many countries , continue to contribute to rapid surges in incidence, hospitalizations and deaths in many countries. Moreover, in large parts of the world, there remain gaps in epidemiological surveillance, testing, and genomic sequencing, and this limits our ability to monitor and assess the impact of current and future variants in a timely manner.

While almost a quarter (24.7%) of the world's population has received at least one dose of a COVID-19 vaccine (over three billion doses administered), there are vast inequities in vaccine distribution and administration with the majority of vaccines administered in a small number of high and upper-middle-income countries. The COVAX facility has been working to reduce this gap, but a large proportion of the world's population remains susceptible to SARS-CoV-2 infection. The breadth and quality of evidence of the efficacy and effectiveness of current vaccines against emerging variants remains limited; nevertheless, the available evidence suggests full vaccination offers high levels of protection against severe disease and death for all four VOCs, with mixed evidence as to the impacts on infection, mild-moderate disease, and transmission. Virus evolution and the phenotypic impacts of all variants, including potential immune escape, require close monitoring and assessment, including the possible need for future adjustments to vaccine composition, vaccination strategies and/or coverage targets.

In response to the COVID-19 pandemic, countries have moved in and out of restrictions of varying stringency over the past 18 months with many now facing considerable pressure to lift all remaining PHSM. Social mixing and mobility are increasing, in the forms of small- to large-scale gatherings and non-essential travel. Improper

planning or assessment of the risk of transmission during any gathering or travel provides opportunities for the virus to spread. Ongoing analyses evaluating the impact of VOCs in countries suggest that the individual- and community-level PHSM and infection prevention and control (IPC) strategies remain effective, including against current VOCs/VOIs. Suboptimal epidemiological surveillance, testing and contact tracing, isolation of cases and quarantine of contacts, and waning support and adherence to PHSM, are currently undoing gains made to date in controlling the pandemic.

Finally, supply shortages in vaccines, medical oxygen, personal protective equipment, laboratory tests, and other critical items continue to present key challenges in responding to the pandemic in the worst-affected countries. In 2021, maintaining the COVID-19 Supply Chain System has taken on an added dimension of complexity, given the requirement for ultra-cold-chain storage from production facilities to points of vaccine administration for some of the COVID-19 vaccines. In addition to the supply chain, the U$1.96 billion COVID-19 Strategic Preparedness and Response Plan for 2021 still has a 67% funding gap, straining resources for other urgent priorities such as vaccine deployment, epidemiological surveillance, contact tracing, and maintaining essential health services.

Additional resources

- Further information about WHO risk assessment process

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact vaccine, therapeutics, diagnostics or effectiveness of public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. As these risks evolve, WHO will continue to update lists of global VOIs and VOCs to support setting priorities for surveillance and research, and ultimately guide response strategies (for more information, please see the Tracking SARS-CoV-2 variants website).

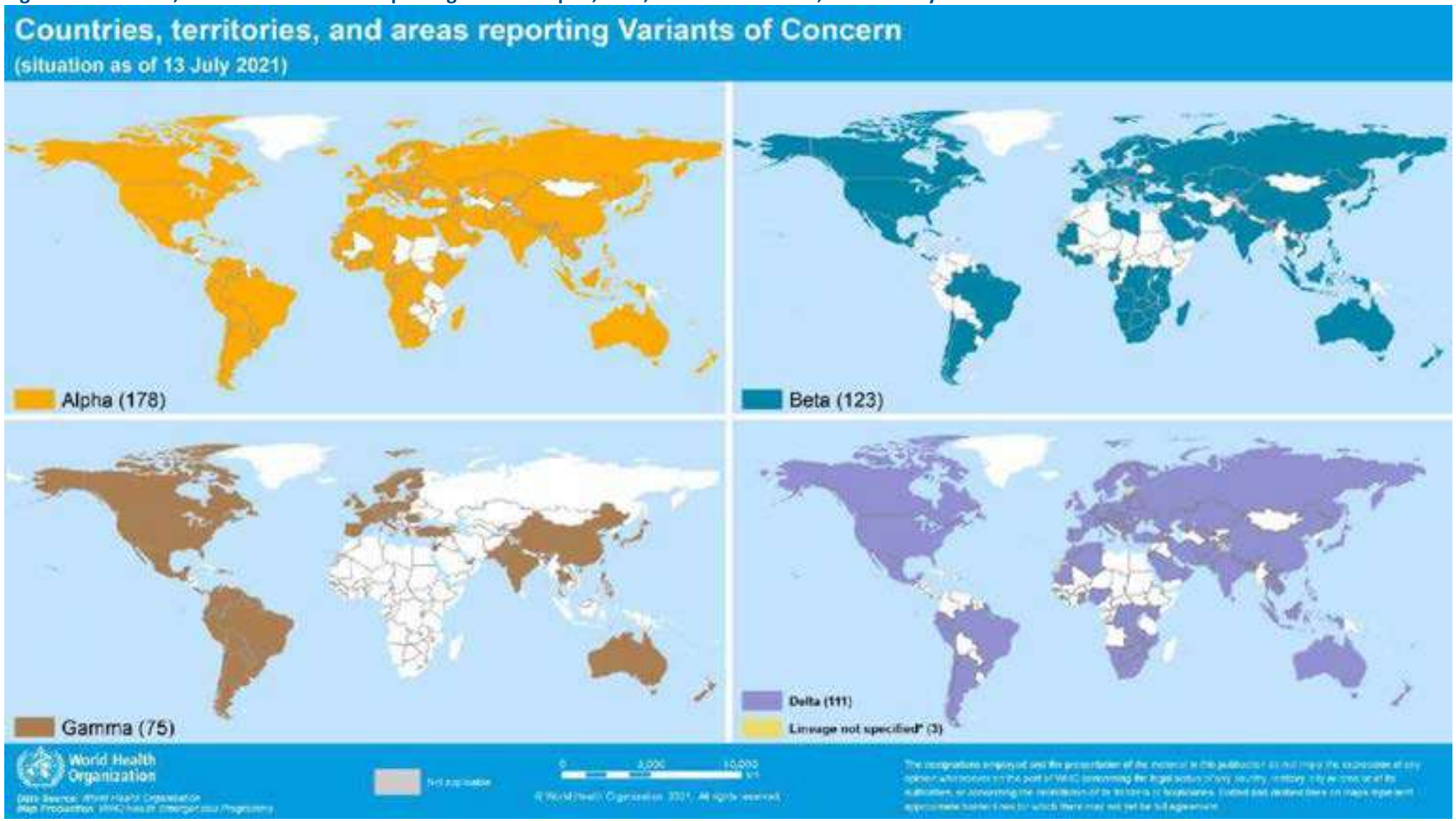
As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing, the number of countries/areas/territories (hereafter countries) reporting VOCs has continued to increase (Figure 3, Annex 2). This distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries. Nevertheless, an overall rise in COVID-19 cases due to the Delta variant is reported across all WHO regions. As of 13 July, at least 111 countries, territories and areas have reported detection of Delta variant, and this is expected to continue to increase, becoming the dominant variant globally in the coming months. The increased transmissibility associated with the Delta variant is likely to result in substantial increases in case incidence and greater pressure on healthcare systems, particularly in contexts of low vaccine coverage.

As countries gradually resume non-essential international travel, the introduction of risk mitigation measures aiming to reduce travel-associated exportation, importation and onward transmission of SARS-CoV-2 should be based on thorough risk assessments conducted systematically and routinely.

Additional resources

- COVID-19 new variants: Knowledge gaps and research
- Tracking SARS-CoV-2 variants
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19
- Technical considerations for implementing a risk-based approach to international travel in the context of COVID-19: Interim guidance, 2 July 2021
- Landscape of observational study designs on the effectiveness of COVID-19 vaccination

Figure 3. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 13 July 2021**



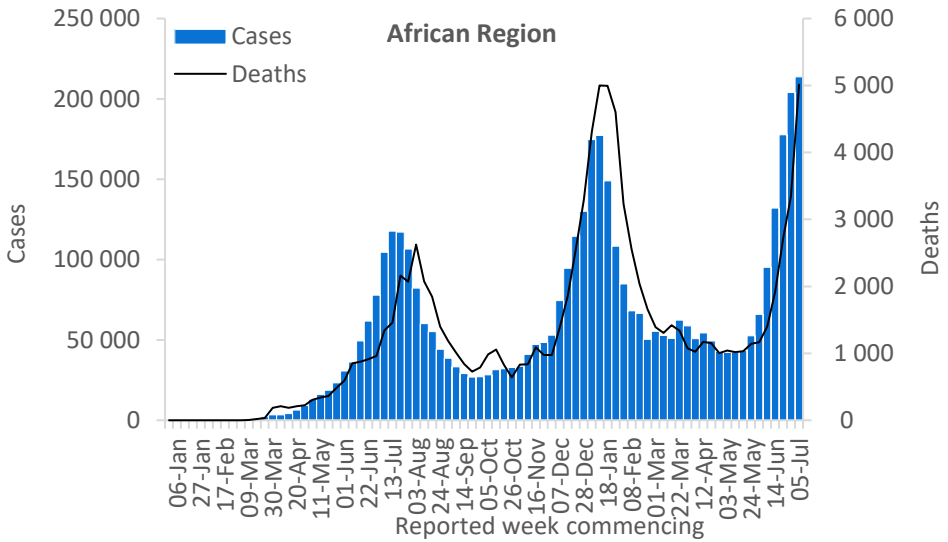
**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details.*

WHO regional overviews - Epidemiological week 5 – 11 July 2021

African Region

The weekly case incidence and deaths continues to increase for the past consecutive nine weeks and eight weeks, respectively. The African Region reported over 213 000 new cases and over 5000 new deaths, a 5% and a 50% increase respectively as compared to the previous week. In the past week, 62% of all new cases and 53% of all new deaths were reported from South Africa. The highest numbers of new cases were reported from South Africa (132 986 new cases; 224.2 new cases per 100 000 population; percentage difference similar to last week), Zimbabwe (13 188 new cases; 88.7 new cases per 100 000; a 72% increase), and Zambia (12 302 new cases; 66.9 new cases per 100 000; a 25% decrease).

The highest numbers of new deaths were reported from South Africa (2631 new deaths; 4.4 new deaths per 100 000 population; a 52% increase), Uganda (897 new deaths; 2.0 new deaths per 100 000; a 176% increase), and Zambia (378 new deaths; 2.1 new deaths per 100 000; a 12% decrease).

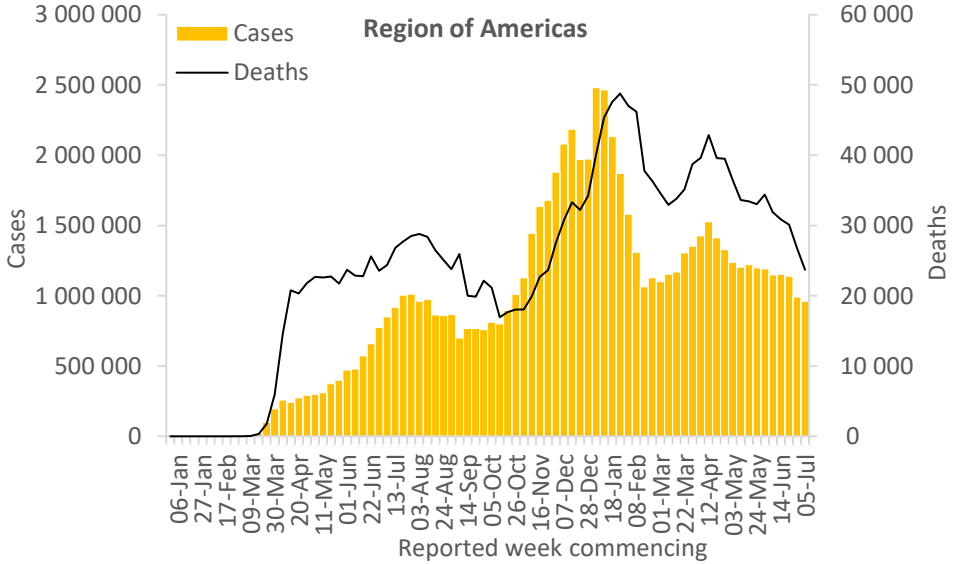


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 962 000 new cases and over 23 000 new deaths, a 3% and an 11% decrease respectively as compared to the previous week. Overall, cases continue to decline in the region, however, large increases in case incidence were reported in small islands such as British Virgin Islands, Martinique, Barbados and Turks and Caicos Islands. The highest numbers of new cases were reported from Brazil (333 030 new cases; 156.7 new cases per 100 000; a 9% decrease), Colombia (174 320 new cases; 342.6 new cases per 100 000; a 15% decrease), and the United States of America (128 482 new cases; 38.8 new cases per 100 000; a 38% increase).

The highest numbers of new deaths were reported from Brazil (9736 new deaths; 4.6 new deaths per 100 000; a 10% decrease), Colombia (4008 new deaths; 7.9 new deaths per 100 000; a 9% decrease), and Argentina (2849 new deaths; 6.3 new deaths per 100 000; a 16% decrease).

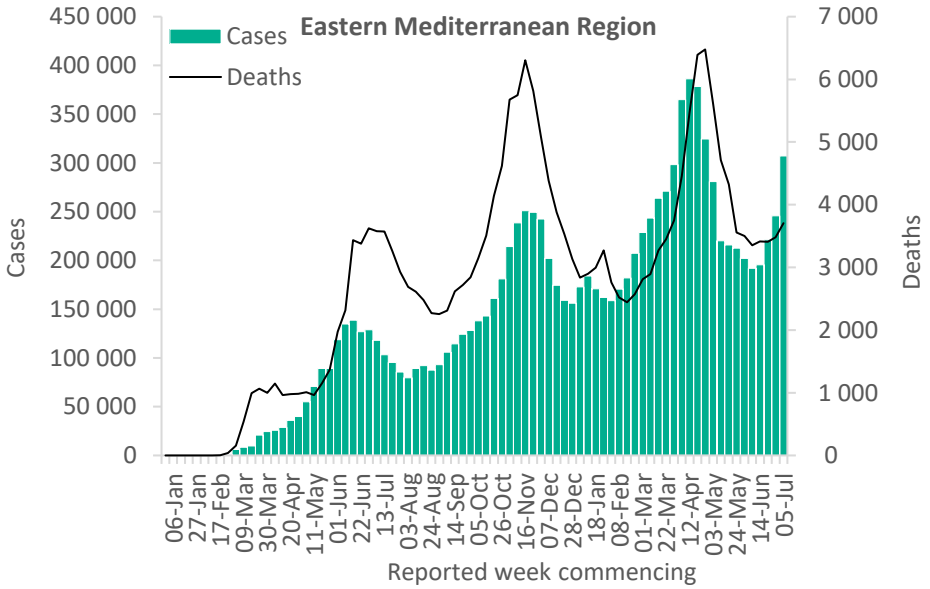


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported just under 307 000 new cases and over 3700 new deaths, a 25% and a 7% increase respectively as compared to the previous week. This is the fourth consecutive week of increase in cases reported in the region. The highest numbers of new cases were reported from the Islamic Republic of Iran (114 749 new cases; 136.6 new cases per 100 000; a 38% increase), Iraq (56 535 new cases; 140.6 new cases per 100 000; a 29% increase), and Tunisia (52 076 new cases; 440.6 new cases per 100 000; a 47% increase).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (1067 new deaths; 1.3 new deaths per 100 000; a 16% increase), Tunisia (983 new deaths; 8.3 new deaths per 100 000; a 44% increase), and Afghanistan (525 new deaths; 1.3 new deaths per 100 000; a 4% decrease).

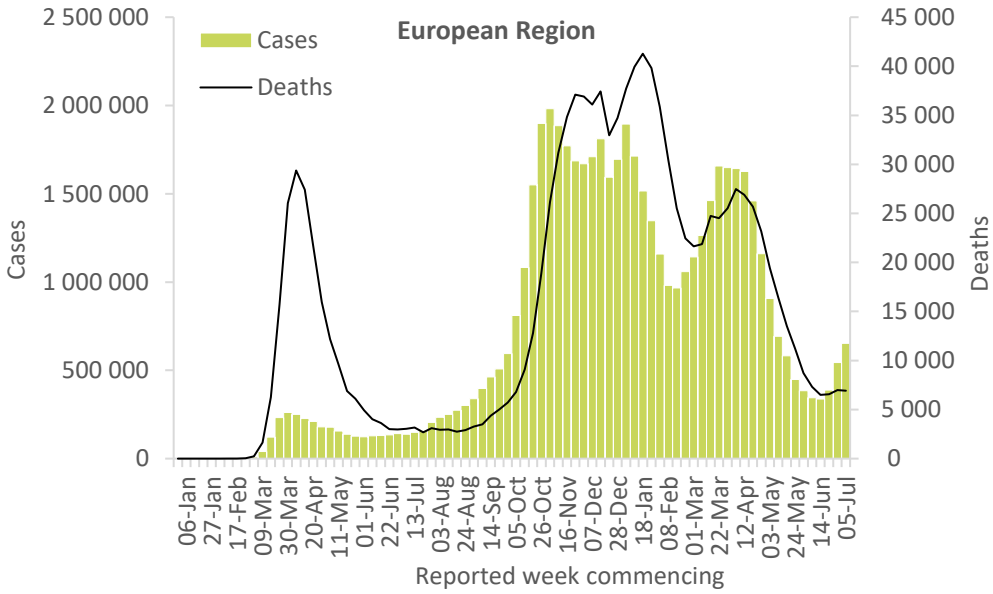


Updates from the Eastern Mediterranean Region

European Region

Cases in the European Region have been steadily increasing over the past month and this week, the Region reported over 653 000 new cases, a 20% increase as compared to the previous week. The number of new deaths reported regionally this week was similar to that of the previous week. The highest numbers of new cases were reported from the United Kingdom (210 277 new cases; 309.8 new cases per 100 000; a 30% increase), Russian Federation (172 392 new cases; 118.1 new cases per 100 000; an 8% increase), and Spain (52 824 new cases; 111.6 new cases per 100 000; a 19% decrease).

The highest numbers of new deaths were reported from the Russian Federation (5077 new deaths; 3.5 new deaths per 100 000; a 9% increase), Turkey (318 new deaths; 0.4 new deaths per 100 000; a 9% decrease), and Germany (201 new deaths; 0.2 new deaths per 100 000; a 27% decrease).

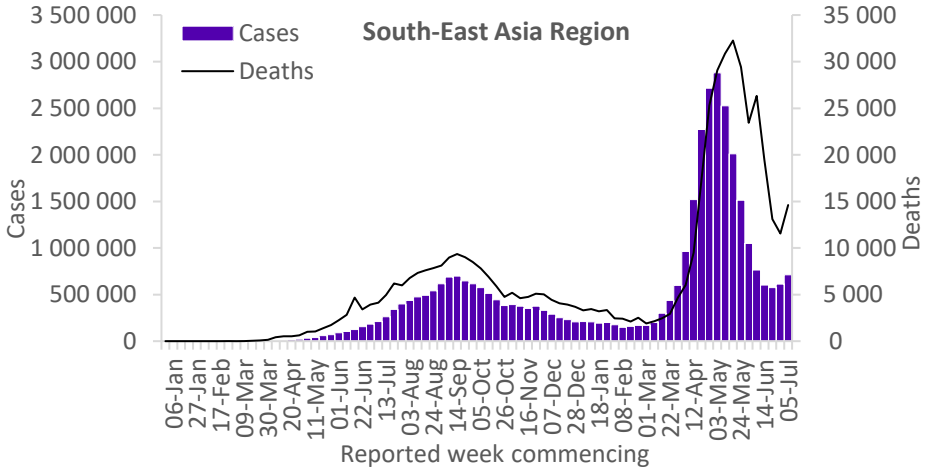


Updates from the European Region

South-East Asia Region

Although trends in the incidence of new cases in the South-East Asia Region are at much lower levels as compared to the region's highest peaks at the start of May, the Region is reporting another resurgence in cases with over 712 000 new cases reported in the Region this week, a 16% increase as compared to the previous week. More concerning is the number of new deaths: the past week saw over 14 000 new deaths, a 26% increase as compared to the previous week. The highest numbers of new cases were reported from India (291 789 new cases; 21.1 new cases per 100 000; a 7% decrease), Indonesia (243 119 new cases; 88.9 new cases per 100 000; a 44% increase), and Bangladesh (76 272 new cases; 46.3 new cases per 100 000; a 35% increase).

The highest numbers of new deaths were reported from India (6035 new deaths; 0.4 new deaths per 100 000; a 4% decrease), Indonesia (5882 new deaths; 2.2 new deaths per 100 000; a 71% increase), and Bangladesh (1354 new deaths; 0.8 new deaths per 100 000; a 52% increase).

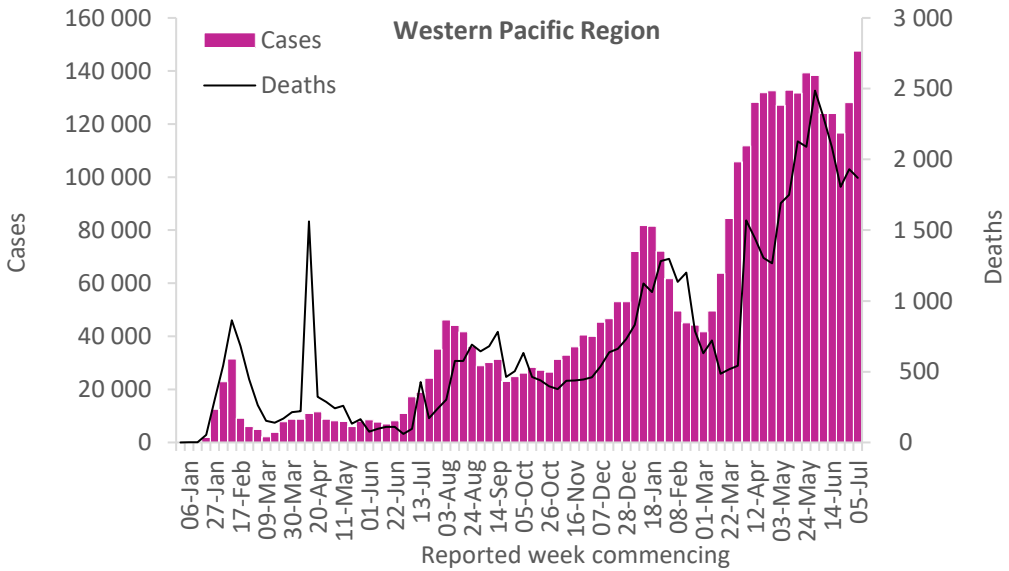


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region has reported increasing trends in case incidence for the past three weeks although deaths remain relatively stable. This week over 147 000 new cases and over 1800 new deaths were reported, a 15% increase and a 3% decrease respectively as compared to the previous week. The highest numbers of new cases were reported from Malaysia (54 584 new cases; 168.6 new cases per 100 000; a 24% increase), the Philippines (36 706 new cases; 33.5 new cases per 100 000; a 5% decrease), and Japan (13 314 new cases; 10.5 new cases per 100 000; a 22% increase).

The highest numbers of new deaths were reported from the Philippines (753 new deaths; 0.7 new deaths per 100 000; an 8% decrease), Malaysia (633 new deaths; 2.0 new deaths per 100 000; a 15% increase), and Cambodia (185 new deaths; 1.1 new deaths per 100 000; a 7% increase).



Updates from the Western Pacific Region

Key weekly updates

WHO Director-General's key messages

- In his opening remarks at the media briefing on COVID-19 – 7 July 2021, the Director-General highlighted:
  - the need for vaccinating 10 per cent of people in all countries by September and 40 per cent by the end of the year to position the world on the path to vaccinating 70 percent of the people in all countries by the middle of 2022.
  - the use of Interleukin-6 receptor blockers in patients who are severely or critically ill with COVID-19, a class of medicines that is lifesaving, especially when administered alongside corticosteroids.
- In his introductory remarks at the high-level event: Impact of violence on children's mental health- 8 July 2021, the Director-General emphasized the need to step up the efforts to improve the prevention, diagnoses and treatment of mental health conditions in children, and the need for building nurturing environments within families, schools and communities for children to achieve the right to be free from violence and enjoy high quality mental healthcare.

Updates and publications

- Infection prevention and control during health care when coronavirus disease (COVID-19) is suspected or confirmed
- COVID-19 Vaccines: safety surveillance manual. Module on safety surveillance of COVID-19 vaccines in pregnant and breastfeeding women
- Diagnostics, therapeutics, vaccine readiness, and other health products for COVID-19
- Modelling the health impacts of disruptions to essential health services during COVID-19
- WHO Global Clinical Platform for the Clinical Characterization of COVID-19: Statistical Analysis Plan, 7 July 2021
- Therapeutics and COVID-19: living guideline

Annex

COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 13 July 2021**

Country/Territory/Area***	Alpha	Beta	Gamma	Delta	Unspecified
Afghanistan	●	-	-	●*	-
Albania	●	-	-	-	-
Algeria	●	-	-	●	-
Angola	●	●	-	-	-
Antigua and Barbuda	●	●	-	-	-
Argentina	●	●	●	●	-
Armenia	○	-	-	-	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	-	-
Bahrain	●	●	-	●	-
Bangladesh	●	●	-	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	-	-	-
Benin	●*	-	-	-	-
Bermuda	●	●	-	-	-
Bhutan	●	●	-	●	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	-	-	-
Bosnia and Herzegovina	○	-	-	○*	-
Botswana	●*	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	-	-

Country/Territory/Area***	Alpha	Beta	Gamma	Delta	Unspecified
Brunei Darussalam	●	●	-	-	-
Bulgaria	●	●	-	●	-
Burkina Faso	●	-	-	-	-
Cabo Verde	●	-	-	-	-
Cambodia	●	-	-	●	-
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	-	●*	-	-
Central African Republic	●	-	-	-	-
Chile	●	●	●	●	-
China	●	●	●	○	-
Colombia	●	-	●	-	-
Comoros	-	●	-	-	-
Congo	●	-	-	-	-
Costa Rica	●	●	●	-	-
Croatia	●	●	○	○	-
Cuba	●	●	-	-	-
Curaçao	●	-	●	-	●
Cyprus	●	●	-	○*	-
Czechia	●	●	●	●	-
Côte d'Ivoire	●	●	-	-	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-
Dominica	●	-	-	-	-

Country/Territory/Area***	Alpha	Beta	Gamma	Delta	Unspecified
Dominican Republic	●	-	●	-	-
Ecuador	●	-	●	●*	-
Egypt	●	-	-	-	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	-	○
Eswatini	●*	●	-	-	-
Ethiopia	○	-	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	○	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	-	-
Greece	●	●	●	●	-
Grenada	●	-	-	-	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	-	-
Guinea	●	●	-	-	-
Guinea-Bissau	●	●	-	-	-

Country/Territory/Area***	Alpha	Beta	Gamma	Delta	Unspecified
Guyana	-	-	●	-	-
Haiti	●	-	●	-	-
Honduras	●	-	-	-	-
Hungary	●	○	-	○	-
Iceland	●	-	-	-	-
India	●	●	●	●	-
Indonesia	●	●	-	●	-
Iran (Islamic Republic of)	●	●	-	●	-
Iraq	●	●	-	-	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	-	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	○	○	-	●	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	○	-
Kuwait	●	-	-	●	-
Kyrgyzstan	●	●*	-	-	-
Lao People's Democratic Republic	●	-	-	●	-
Latvia	●	●	●	○	-
Lebanon	●	-	-	●	-
Lesotho	-	●	-	-	-
Liberia	●	-	-	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	-	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-
Madagascar	●*	●	-	-	-
Malawi	●	●	-	●	-

Country/Territory/Area***	Alpha	Beta	Gamma	Delta	Unspecified
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	○	●	-	●	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	○	-	○*	-
Montenegro	●	-	-	-	-
Montserrat	●	-	-	-	-
Morocco	●	-	-	●	-
Mozambique	-	●	-	●	-
Myanmar	●	-	-	-	-
Namibia	●*	●	-	●	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	-	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	-	-	●*	-
North Macedonia	●	●	-	○*	-
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●	-
Oman	●	●	-	●	-
Pakistan	●	●	●	●	-
Panama	●	●	●	-	●
Paraguay	●	-	●	-	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-

Country/Territory/Area***	Alpha	Beta	Gamma	Delta	Unspecified
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	○	-	-	-	-
Romania	●	●	●	●	-
Russian Federation	●	●	-	●	-
Rwanda	●	○	-	-	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	-	-
Saint Lucia	●	-	-	-	-
Saint Martin	●	●	-	-	-
Sao Tome and Principe	●	-	-	-	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	-	-
Serbia	●	-	-	-	-
Seychelles	-	●	-	-	-
Sierra Leone	-	-	-	○	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	-	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	-	-	-	-
South Africa	●	●	-	●	-
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-
Suriname	●	●	●	-	-
Sweden	●	●	●	●	-
Switzerland	●	●	○	●	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	-	-
Togo	●	●	-	-	-

Country/Territory/Area***	Alpha	Beta	Gamma	Delta	Unspecified
Trinidad and Tobago	●	-	●	-	-
Tunisia	●	●	-	●	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	-	-
Uganda	●	●	-	●	-
Ukraine	●	○	-	○	-

Country/Territory/Area***	Alpha	Beta	Gamma	Delta	Unspecified
United Arab Emirates	●	●	●	●	-
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-
United States of America	●	●	●	●	-
Uruguay	●	-	●	-	-
Uzbekistan	●	●	-	○	-

Country/Territory/Area***	Alpha	Beta	Gamma	Delta	Unspecified
Venezuela (Bolivarian Republic of)	●	-	●	-	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Zambia	-	●	-	●	-
Zimbabwe	-	●	-	●	-

**Newly reported in this update.*

Unspecified B.1.617 reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

from official sources.

ation become available.

*** Unspecified B.1.617 were excluded for Nigeria, Cyprus and North Macedonia this week based on further information.*

****Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern*

See also Annex 2: Data, table and figure notes.

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

COVID-19 Weekly Epidemiological Update

Edition 47, published 6 July 2021

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Key weekly updates

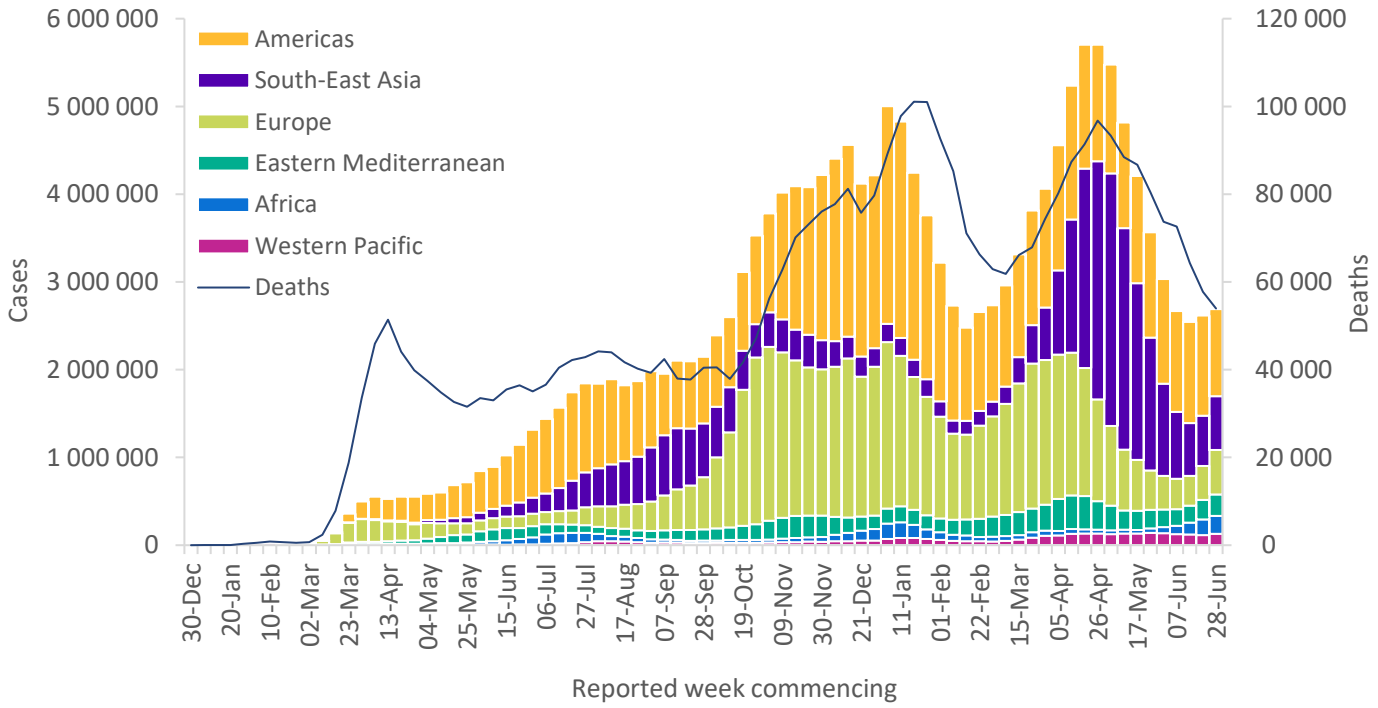
Global overview

Data as of 4 July 2021

Globally, after a decline in newly reported cases for seven consecutive weeks, there has been a slight increase in new weekly cases in the last two weeks, with over 2.6 million cases reported last week (28 June – 4 July 2021) as compared to the previous week (Figure 1). The number of weekly deaths continued to decrease, with just under 54 000 deaths reported in the past week, a 7% decrease as compared to the previous week. This is the lowest weekly mortality figure since early October 2020. The cumulative number of cases reported globally now exceeds 183 million and the number of deaths is almost 4 million.

This week, all Regions except the Americas reported an increase in new cases. The European Region reported a sharp increase in incidence (30%) whereas the African region reported a sharp increase in mortality (23%) as compared to the previous week (Table 1). All Regions, with the exception of the Americas and South-East Asia Regions, reported an increase in the number of deaths in the past week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 4 July 2021**



**See *Annex 2: Data, table and figure notes*

The highest numbers of new cases were reported from Brazil (364 709 new cases; 30% decrease), India (312 250 new cases; 11% decrease), Colombia (204 556 new cases; similar to last week), Indonesia (168 780 new cases; 35% increase), and the United Kingdom (161 805 new cases; 67% increase). Over the past week, the highest numbers of new cases per 100 000 population were reported from Seychelles (758 new cases per 100 000 population), Mongolia (472 new cases per 100 000 population), Colombia (402 new cases per 100 000 population), Namibia (367 new cases per 100 000 population) and Cyprus (324 new cases per 100 000 population).

Globally, cases of the Alpha variant have been reported in 173 countries, territories or areas (hereafter countries; one new country in the past week), Beta in 122 countries (three new countries), Gamma in 74 countries (two new countries) and Delta in 104 countries (7 new countries).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 4 July 2021**

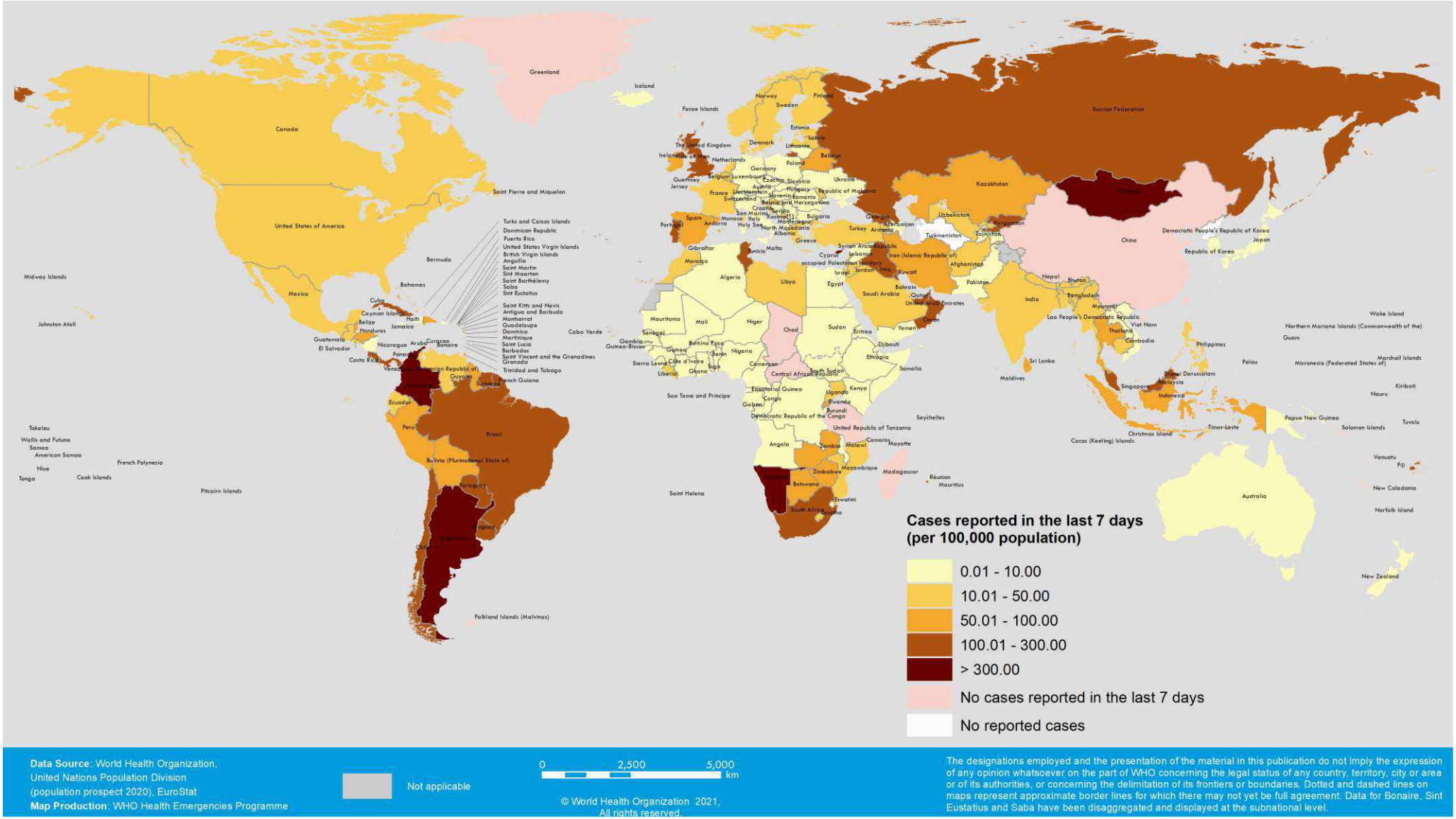
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	992 023 (37%)	-13%	72 804 991 (40%)	26 721 (50%)	-11%	1 914 473 (48%)
Europe	505 790 (19%)	30%	56 235 850 (31%)	6 926 (13%)	6%	1 189 019 (30%)
South-East Asia	612 933 (23%)	7%	35 219 144 (19%)	11 542 (21%)	-12%	495 939 (12%)
Eastern Mediterranean	245 740 (9%)	11%	11 133 173 (6%)	3 479 (6%)	2%	218 804 (6%)
Africa	204 012 (8%)	15%	4 172 433 (2%)	3 359 (6%)	23%	97 682 (2%)
Western Pacific	128 063 (5%)	10%	3 631 664 (2%)	1 931 (4%)	7%	55 757 (1%)
Global	**2 688 561 (100%)**	**3%**	**183 198 019 (100%)**	**53 958 (100%)**	**-7%**	**3 971 687 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
**See *Annex 2: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

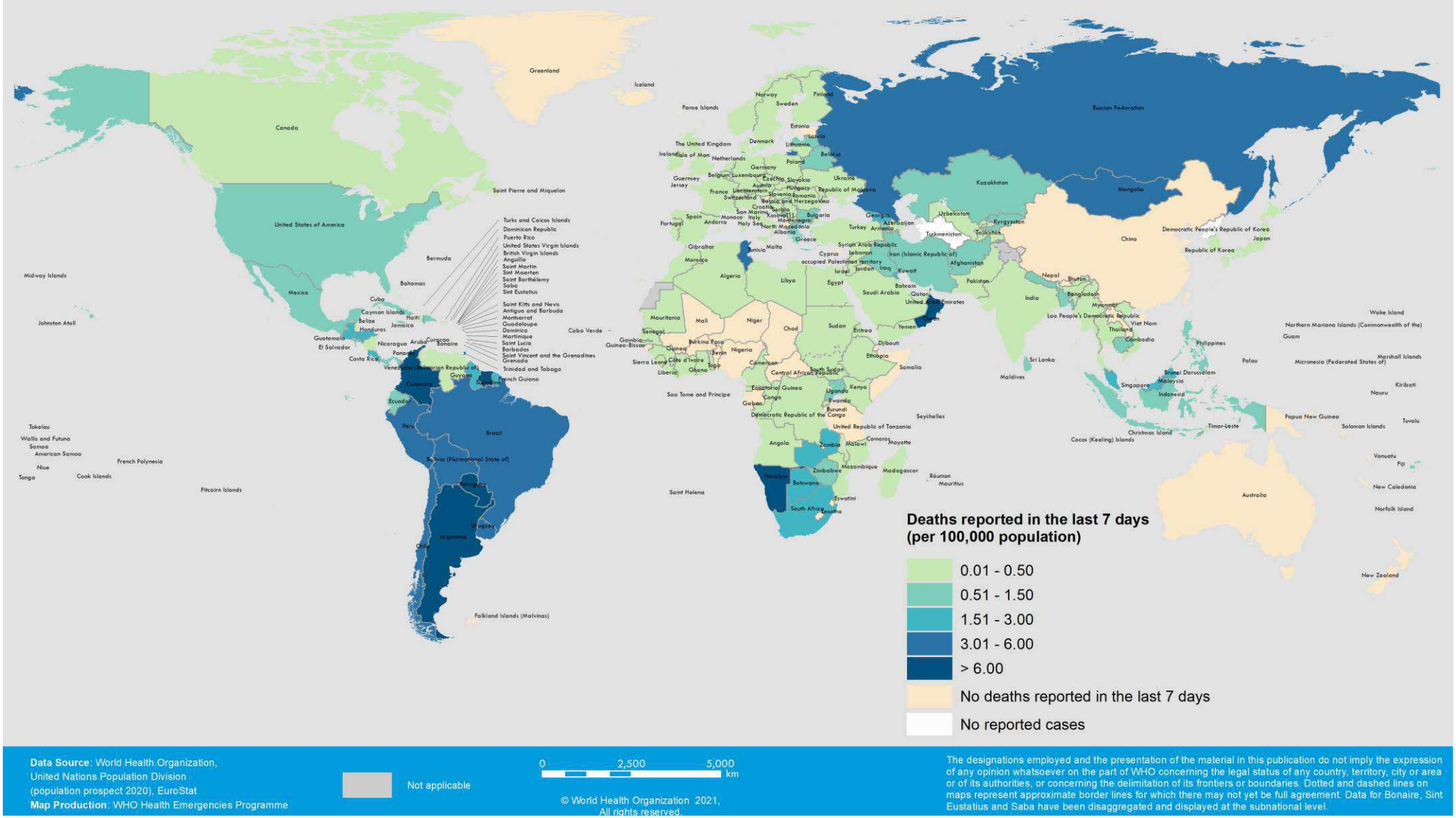
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 28 June – 4 July 2021**



**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 28 June – 4 July 2021**



**See *Annex 2: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact vaccine, therapeutics, diagnostics or effectiveness of public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants. Here we provide updates on:

- Variant working definitions, and other variants and amino acid changes under monitoring
- Updates to the variant classifications
- Countries/territories/areas reporting the detection of VOCs

Variant working definitions, and other variants and amino acid changes under monitoring

Given the ongoing evolution in our understanding of the impacts of VOCs and VOIs, and the requirements for surveillance and response, WHO periodically reviews and adjusts working definitions (see Box 1 and WHO Tracking SARS-CoV-2 Variants website).

The revised set of definitions additionally formalizes a third category labelled 'Alerts for Further Monitoring', which includes variants with indications that they may pose a risk to global public health, depending on the evolving pandemic, but for which evidence of phenotypic or epidemiological impacts are less clear when compared to the listed VOCs or VOIs. These Alerts are reassessed regularly against criteria outlined in the VOI/VOC working definitions.

Box 1: SARS-CoV-2 Variant Working Definitions, last updated 6 July

Variant of Concern
A SARS-CoV-2 variant that meets the definition of a VOI (see below) and, through a comparative assessment, has been demonstrated to be associated with one or more of the following changes at a degree of global public health significance:

- Increase in transmissibility or detrimental change in COVID-19 epidemiology; OR
- Increase in virulence or change in clinical disease presentation; OR
- Decrease in effectiveness of public health and social measures or available diagnostics, vaccines, therapeutics.

Variant of Interest
A SARS-CoV-2 variant:

- with genetic changes that are predicted or known to affect virus characteristics such as transmissibility, disease severity, immune escape, diagnostic or therapeutic escape; AND
- Identified to cause significant community transmission or multiple COVID-19 clusters, in multiple countries with increasing relative prevalence alongside increasing number of cases over time, or other apparent epidemiological impacts to suggest an emerging risk to global public health.

Alerts for Further Monitoring
A SARS-CoV-2 variant with genetic changes that are suspected to affect virus characteristics with some indication that it may pose a future risk, but evidence of phenotypic or epidemiological impact is currently unclear, requiring enhanced monitoring and further assessment pending new evidence.

See also the WHO Tracking SARS-CoV-2 Variants website for the latest working definitions, and currently designated VOCs, VOIs and Alerts for Further Monitoring, and further information.

In addition to these alerts, reported detections of VOCs with additional amino acid changes, which may or may not carry increased risk of additional phenotypic impacts, are being regularly assessed – e.g., Delta with K417N mutation or Alpha with E484K mutation. Notably, all variants, including VOCs and VOIs, are expected to continue to evolve over time given the ongoing high rates of transmission globally. A phenomenon whereby variants independently acquire the same or similar amino acid substitutions that may offer a competitive advantage (also known as convergent evolution) has been repeatedly observed over the course of the pandemic. Where there is evidence of a common constellation of amino acid changes that have sufficiently diverged from the parent VOC lineage, such sequences may be reclassified under Pango into sublineages to support ongoing investigations, tracking and scientific discourse. While it remains important to track and better understand the impacts of these variants, to date VOCs with additional notable amino acid changes comprise a small fraction of the total number of sequenced cases, and there remains limited direct evidence of further phenotypic impacts.

It is expected that our understanding of designated 'Alerts for Further Monitoring', VOCs with notable amino acid changes (including established sublineages) will evolve over time, and variants may be readily added/removed from these characterizations. WHO will, therefore, not be designating labels for these two categories of variants at this time, but where appropriate refer to these cases by their parent lineages (e.g., Delta includes B.1.617.2, AY.1, and AY.2; or Alpha (Pango lineage B.1.1.7; GISAID clade GRY (formerly GR/501Y.V1); Nextstrain clade 20I (V1)) includes B.1.1.7 with E484K. If these variants demonstrate changes in virus characteristics, compared to the parent lineage, in the future, and as such, are assessed as independently meeting the VOC or VOI definitions, then labels will be assigned accordingly.

Updates to the variant classifications

As the global public health risks posed by specific SARS-CoV-2 variants becomes better understood, WHO will continue to update the list of global VOIs and VOCs (Table 2) to support setting priorities for surveillance and research, and ultimately guide response strategies. These updates reflect emergence of new variants, changing epidemiology, and our evolving understanding of the phenotypic impacts of variants as new evidence becomes available. A previously designated Variant of Interest (VOI) or Variant of Concern (VOC) which has conclusively demonstrated to no longer pose a major added risk to global public health compared to other circulating SARS-CoV-2 variants, can be reclassified.

Based upon the latest round of assessments, VOIs Epsilon (B.1.427/B.1.429), Zeta (P.2), and Theta (P.3) were reclassified as 'Alerts for further monitoring'. While all three variants carry mutations with suspected and/or established phenotypic impacts, reported detections of these variants have decreased over time, suggesting a decline in their respective incidence worldwide, and diminishing public health risks relative to other VOCs and VOIs. Importantly, this assessment considers primarily global risks posed by these variants, and national authorities may choose to continue to designate these as variants of local interest/concern. Moreover, these variants will continue to be monitored, and if new evidence of impacts emerges, their classification will be reassessed.

Epsilon (B.1.427/B.1.429) has been associated with increased transmissibility, a modest decrease in susceptibility to some antibody treatments, and reduced neutralization by convalescent and post-vaccination sera.[1] As of 6 July, just under 50 000 sequences have been uploaded to GISAID from 45 countries.[2] Worldwide prevalence among sequenced samples has declined from 5% at peak in early February, to less than 0.5% of samples in recent months.[3] The vast majority of worldwide sequences (98%) were reported from the United States of America, where Epsilon has been progressively displaced by the emergence of Alpha, Gamma, Delta and other variants, and contributed <0.2% of sequenced samples collected during the weeks two weeks ending 19 June.[4] Moreover, available data suggest vaccines and treatments remain effective; prompting the Centers for Disease Prevention and Control to reclassify Epsilon from a local VOC on 29 June.[1]

Zeta (P.2) harbours spike amino acid change E484K, which has been implicated in resistant to neutralizing antibodies; however, lacks the constellation of mutations synonymous with other VOCs and VOIs. It emerged during October 2020 concomitantly to an increase in case incidence in parts of South America, suggesting a potential increase risk. The global prevalence of samples sequenced as Zeta has remained relatively low and progressively declined to very low levels (<0.5%) from March 2021. As of 6 July, 4439 sequences have been uploaded to GISAID from 42 countries. Half of global sequences (52%, n=2319) originate from Brazil, where prevalence peaked at ~55% in early January 2021. Following the emergence and dominance of VOC Gamma (P.1) in Brazil, prevalence of Zeta has fell to <2% of sequenced samples during April 2021 and has continued to decline.[5]

Theta (P.3) harbours several amino acid changes suggestive of increased resistance to neutralizing antibodies and is potentially more transmissible; however, overall detections of this variant have remained relatively low to date. As to 6 July, a total of 269 sequences were uploaded to GISAID from 14 countries. Most of these sequences (71%, n=191) were reported from the Philippines; predominantly in the Central Visayas Region, where a cluster of cases was identified earlier this year.[2] Globally over the past 3 months, only sporadic detections or small clusters of cases have been reported.

Updated working definitions, summary table of VOCs and VOIs, and a list of Alerts for Further Monitoring, are available on the WHO Tracking SARS-CoV-2 Variants website.

Geographic distribution

As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing, the number of countries/areas/territories (hereafter countries) reporting VOCs continues to increase (Figure 2, Annex 1). This distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

Phenotypic characteristics

Available evidence on phenotypic impacts of VOCs is summarized in Table 3, as well as in previous editions of these COVID-19 Weekly Epidemiological Updates. Since the last detailed update on 22 June, new evidence has been published on the phenotypic characteristics of the Delta variant. Based on the estimated transmission advantage of the Delta variant, it is expected that Delta will rapidly outcompete other variants and become the dominant circulating lineage over the coming months.[6] Based on global data submitted to GISAID, the estimated effective reproductive number for the Delta variant is 55% (95%CI 43-68%) higher than the Alpha variant and 97% (95%CI 76-117%) higher relative to non-VOC/VOI.

In the European Region, based on the estimated transmission advantage of the Delta variant and using modelling forecasts, an estimated 90% of new SARS-CoV-2 infections are expected to be due to Delta by the end of August.[7] Early data from Scotland, from individuals who tested positive from 1 April to 21 June 2021, showed an increased risk of hospitalization (hazard ratio of hospitalization 1.8; 95%CI 1.4-2.3; data adjusted for age, sex, poverty index, temporal trend, and comorbidities) among cases infected with the Delta variant (as detected by screening of PCR S-gene positive samples), compared with those infected with the Alpha variant (S-gene target failure).[8]

In regards to the Alpha variant, findings from a recent study carried out in 2147 inpatients showed no overall increase in mortality [hazard ratio (HR) 1.01; 95% CI 0.79 – 1.28] or Intensive Therapy Unit (ITU) admission (HR 1.01; 95% CI: 0.75 – 1.37) associated with the Alpha variant as compared to other lineages after adjusting for age, sex, co-morbidities, care home residence, pregnancy and ethnicity. However, an analysis of gender-specific effects of the Alpha variant suggests an increased risk of mortality (HR 1.30; 95% CI: 0.95 – 1.78) and ITU admission (HR 1.82; 95% CI: 1.15 -2.90) in females infected with this variant as compared to other lineages. Males do not show an increased risk of mortality or ITU admission

(mortality HR 0.82, 95% CI 0.61-1.10; ITU HR 0.74, 95% CI 0.52-1.04); this indicates that women may potentially be at an increased risk of admission to ITU and at modestly increased risk of mortality.[9] Being among the largest studies of hospitalized patients, this study conducted in the United Kingdom provides useful information on disease course and progression, however, analysis of these patients may not provide information on disease severity across all SARS-CoV-2 infections in the population as a whole. Additionally, information on vaccination status for individual patients was not considered in this study.

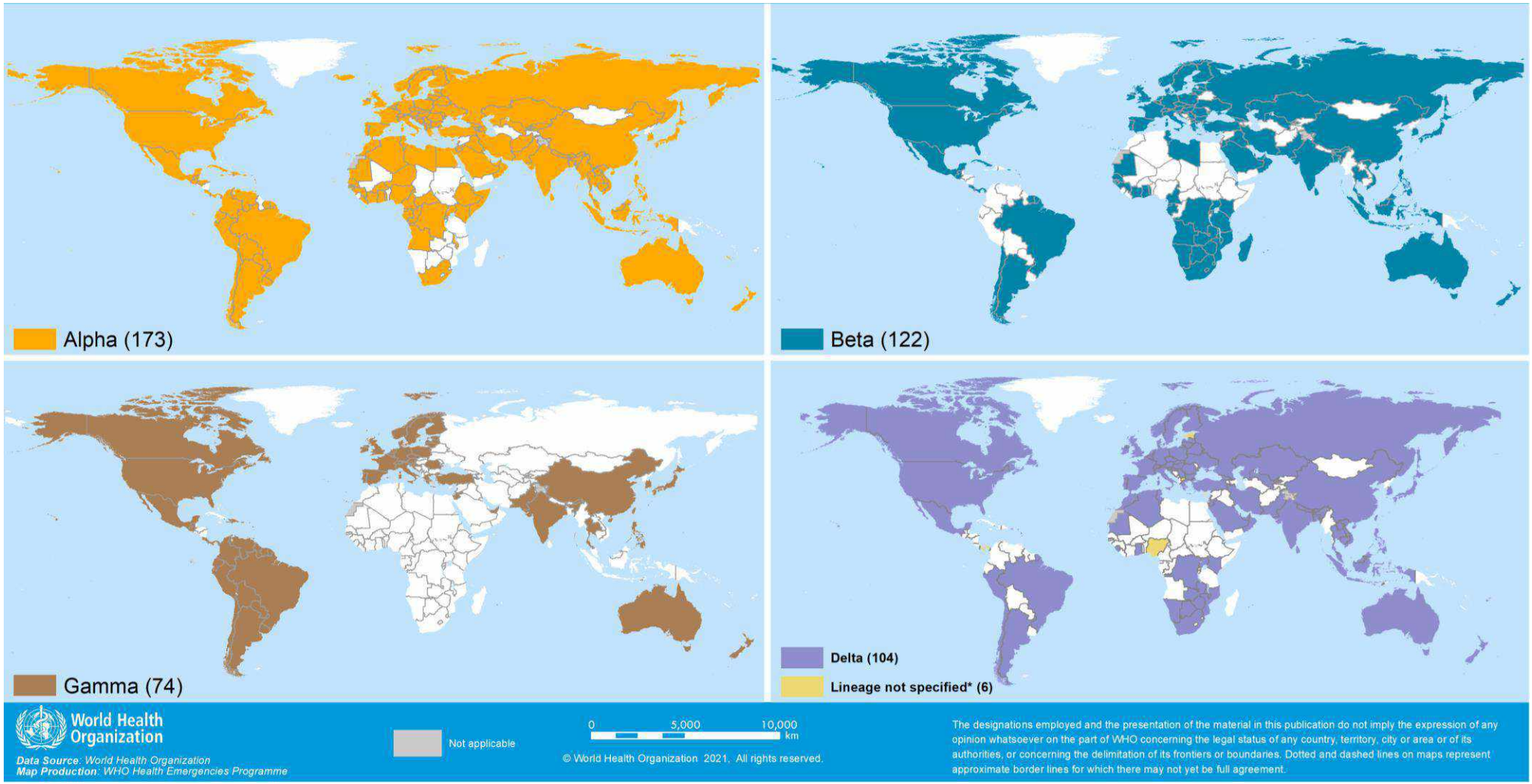
A preprint cohort study conducted in Norway analyzed 1103 unvaccinated individuals hospitalized for COVID-19 from 21 December 2020 to 25 April 2021. Among people infected with the Alpha variant, there was no difference in the length of stay in the hospital or ICU, and no significant difference in mortality up to 30 days following discharge as compared to those infected with non-VOCs .[10] This suggests that, while Alpha may increase the risk of hospitalization, other characteristics such as age and underlying risk factors likely influence the hospitalized patients' clinical course and the type of healthcare required.[10,11]

Table 3: Summary of phenotypic impacts* of Variants of Concern

WHO label	Alpha	Beta	Gamma	Delta
Transmissibility	Increased transmissibility and secondary attack rate[12]	Increased transmissibility[13]	Increased transmissibility[14]	Increased transmissibility and secondary attack rate[6,15,16]
Disease severity	Increased risk of hospitalization[17], possible increased risk of severity and mortality[18]	Not confirmed, possible increased risk of in-hospital mortality[19,20]	Not confirmed, possible increased risk of hospitalization[21]	Not confirmed, possible increased risk of hospitalization[22]
Risk of reinfection	Neutralizing activity retained,[23] risk of reinfection remains similar[24,25]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[26–29]	Moderate reduction in neutralizing activity reported[30,31]	Reduction in neutralizing activity reported[32]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF); no impact on overall result from multiple target RT-PCR, No impact on Ag RDTs observed[33]	No impact on RT-PCR or Ag RDTs observed[16]	None reported to date	None reported to date

**Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.*

Figure 4. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 6 July 2021**



**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details.*

VOC impacts on vaccines

Table 4 summarises the impact of variants on vaccine efficacy/effectiveness (VE) and quantifies the reduction in VE due to variants compared to VE in non-VOC settings. Of note, reductions in VE do not mean loss of protection, as indicated by the absolute VE estimate. For example, a 10 percent point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. In addition, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean good protection, as is the case for AstraZeneca-Vaxzevria.

Since the 22 June update, phase 3 trial results for Bharat-Covaxin (not yet peer-reviewed) have been made available. This double-blind, randomized control trial included 25 798 participants aged 18 years and older, randomized to receive two doses of the vaccine or a placebo with 4 weeks in between doses. Overall vaccine efficacy against severe and symptomatic disease ≥ 14 days post second dose was 93.4% (95% CI: 57.1-99.8%) and 77.8% (65.2-86.4%), respectively. Among 130 SARS-CoV-2 positive samples, 79 (60.8%) were genotyped. VE against Delta symptomatic disease (65.2% (33.1-83.0%)) was lower than other typed variants; 90.1% (30.4-99.8%) against Kappa (B.1.617.1), and 73.0% (-2.2-95.2%) against all other variants, although numbers were small with overlapping confidence intervals.[34]

A test-negative case-control study in Ontario, Canada (not yet peer reviewed) assessed the effectiveness against variants of concern among 421 073 individuals aged 16 years and older, who were tested for SARS-CoV-2. The authors used a combination of whole genome sequencing and mutation screening by PCR to classify VOC. VE of two doses of both Pfizer BioNTech-Comirnaty and Moderna-mRNA-1273 against symptomatic disease ≥ 7 days post final dose was measured. VE for Pfizer BioNTech-Comirnaty was 93% (95% CI: 88-96%), 89% (86-91%), 84% (69-92%), and 87% (64-95%) against non-VOC, Alpha, Beta/Gamma, and Delta variants, respectively. VE of Moderna-mRNA-1273 was 92% (86-96%) against Alpha as compared to 89% (65-96%) against non-VOC (VE against Beta/Gamma and Delta not measured). A single dose of AstraZeneca-Vaxzevria resulted in a VE of 64-67% for non-VOC, Alpha and Delta, and a VE of 48% against Beta/Gamma. Two dose VE estimates for AstraZeneca-Vaxzevria were not provided due to insufficient numbers. The study also found two doses of Pfizer BioNTech-Comirnaty and Moderna-mRNA-1273 vaccines to provide very good protection against hospitalization or death due to Alpha and non-VOC (VE estimates of 94-96%), and two doses of Pfizer BioNTech-Comirnaty also had high VE against Beta/Gamma (95%); no data for Moderna-mRNA-1273 against Beta/Gamma. A single dose of Pfizer BioNTech-Comirnaty, Moderna-mRNA-1273 and AstraZeneca-Vaxzevria prevented 78%, 96% and 88% of hospitalizations/deaths due to Delta, respectively.[35]

Another study (not yet peer-reviewed) reported on the effectiveness of Sinovac-CoronaVac in Manaus, Brazil, during a time when the predominant circulating strain was Gamma (86% of genotyped SARS-CoV-2 were the Gamma variant during the peak of the epidemic in Manaus). The study used a test-negative case-control design to estimate VE among ~400 case-control pairs of health care workers. VE of two doses of the vaccine against symptomatic disease and against infection 14+ days post final dose was 36.8% (95%: CI -54.9-74.2%) and 37.9% (95% CI: -46.4 to 73.6%), respectively. Authors note the low VE estimate likely reflect a bias towards the null hypothesis as suggested by the finding that vaccinated individuals were much more likely to be infected than unvaccinated individuals in the period 0-13 days after receipt of the first dose (aOR 2.11, 95% CI 1.36-3.27). Authors also note that the analysis may have been underpowered to be able to detect a VE of lower than 70%.[36]

Four new studies (not yet peer reviewed) have evaluated the ability of vaccine sera to neutralize the Delta variant. While these four studies found relatively modest reductions in neutralization of the Delta variant by AstraZeneca-Vaxzevria (4.0-fold reduction), SII-Covishield (3.2-fold reduction), Moderna-mRNA-1273 (2.1-fold reduction), and Janssen-Ad26.COV 2.5 (1.6-fold reduction) relative to the reference strain, a larger reduction was found for the Pfizer BioNTech-Comirnaty (11.3-fold reduction) in one of the studies.[37–40] To date, five studies have evaluated neutralization of the Delta variant by Pfizer BioNTech-Comirnaty and report fold-reductions ranging from 1.4 to 11.3; two studies evaluating AstraZeneca-Vaxzevria have both reported an approximate 4-fold reduction; and single studies have found ~2-3-fold reductions by sera from individuals who had received Janssen-Ad26.COV 2.5, Moderna-mRNA-1273, Bharat-Covaxin, and SII-Covishield vaccines.[37–46]

Table 4. Summary of vaccine performance against Variants of Concern

Alpha	Beta	Gamma	Delta
Efficacy/effectiveness against disease or infection (full vaccination), see key below table			
Protection retained against all outcomes	Reduced protection against symptomatic disease, but retained against severe disease; limited evidence	Unclear impact; very limited evidence	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection
Severe disease			
• ↔ to ↓: Moderna-mRNA-1273 (1), Pfizer BioNTech-Comirnaty (3), Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty (1) [35,47–49] • ↓: AstraZeneca- Vaxzevria (1) [49]	• ↔: Janssen Ad26.COV 2.5 (1), Pfizer BioNTech-Comirnaty (1)[48,50]	• No evidence	• ↔: AstraZeneca- Vaxzevria (1), Pfizer BioNTech-Comirnaty (1)[49]
Symptomatic disease			
• ↔: Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty (2), Pfizer BioNTech-Comirnaty (3)[35,47,51,52] • ↔ to ↓: AstraZeneca-Vaxzevria (3)[51–53] • ↓: Novavax-Covavax (1)[54]	• ↔: Janssen-Ad26. COV 2.5 (1)[50] • ↓↓↓: AstraZeneca-Vaxzevria (1), Novavax-Covavax (1)[55,56]	• ↔ to ↓: Sinovac-CoronaVac (1)[36,57]	• ↔ to ↓: Pfizer BioNTech-Comirnaty (3)[35,51,52] • ↓: Bharat-Covaxin (1)[34] • ↓↓: AstraZeneca- Vaxzevria (2)[51,52]
Infection			
• ↔: Pfizer BioNTech-Comirnaty (3)[52,58] • ↔ to ↓: AstraZeneca-Vaxzevria (2)[52,53]	• ↓: PfizerBioNTech-Comirnaty (1)[48]	• No evidence	• ↓: AstraZeneca-Vaxzevria (1), Pfizer BioNTech-Comirnaty (1)[52]
Neutralization (full vaccination), see key below table			
• ↔: Beijing CNBG-BBIBP-CorV (1), Bharat-Covaxin (1), Gamaleya-Sputnik V (1), Novavax-Covavax (1), Sinovac-CoronaVac (2)[59–63] • ↔ to ↓: Janssen-Ad26.COV 2.5 (2), Moderna- mRNA-1273 (9), Pfizer BioNTech-Comirnaty (26)[29,37,38,41,63–90] • ↓ to ↓↓: AstraZeneca-Vaxzevria (2)[53,68]	• ↔ to ↓: Anhui ZL-Recombinant (2), Beijing CNBG-BBIBP-CorV (2)[59,91,92] • ↓: Bharat-Covaxin (1)[42] • ↓ to ↓↓: Pfizer BioNTech-Comirnaty (27), Sinovac-CoronaVac (3)[29,39,41,59,62,64,65,68,70–74,76,77,80–82,86–89,91,93–97] • ↓ to ↓↓↓: Janssen-Ad26.COV 2.5 (3)[38,90,98] • ↓↓: AstraZeneca-Vaxzevria (3), Gamaleya-Sputnik V (1), Moderna-mRNA-1273 (10)[37,39,55,61,68,70,76,79,81,85,96,97,99–101] • ↓↓ to ↓↓↓: Janssen-Ad26.COV 2.5 (3)[38,90,98] • ↓↓↓: Novavax-Covavax (1)[59]	• ↔: Sinovac-CoronaVac (1)[102] • ↔ to ↓: Pfizer BioNTech-Comirnaty (11)[43,64,68,70,72,74,77,86,93,103] • ↓: AstraZeneca-Vaxzevria (1), Janssen-Ad26.COV 2.5 (2), Moderna-mRNA-1273 (4)[37,38,68,70,85,90,103]	• ↔: Janssen-Ad.COV 2.5 (1)[38] • ↓: AstraZeneca-Vaxzevria (2), Bharat-Covaxin (1), Moderna-mRNA-1273 (1)[37,39,42,44] • ↓ to ↓↓: Pfizer BioNTech-Comirnaty (5)[39,41,43–45]

Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10% reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20% reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30% reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30% reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used.
The number of studies is shown in parentheses.
"Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in study.

Additional resources

- Tracking SARS-CoV-2 variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Additional notes on VOC impacts on vaccines

- Studies presenting VOC specific VE estimates are assessed against a comparator VE estimate to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 randomised RCT results from non-VOC settings. For severe disease and infection, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca Vaxzevria for severe disease (phase 3 RCT efficacy estimates against severe disease are used as comparator since within study comparator is unavailable) and for infection (phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection even without a comparator if very high VE estimate against a VOC is reported (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates between different studies. In addition, the reductions presented consider VE point estimates only and do not take into account the uncertainty around these estimates. The reductions in VE noted should be interpreted with these limitations in mind.

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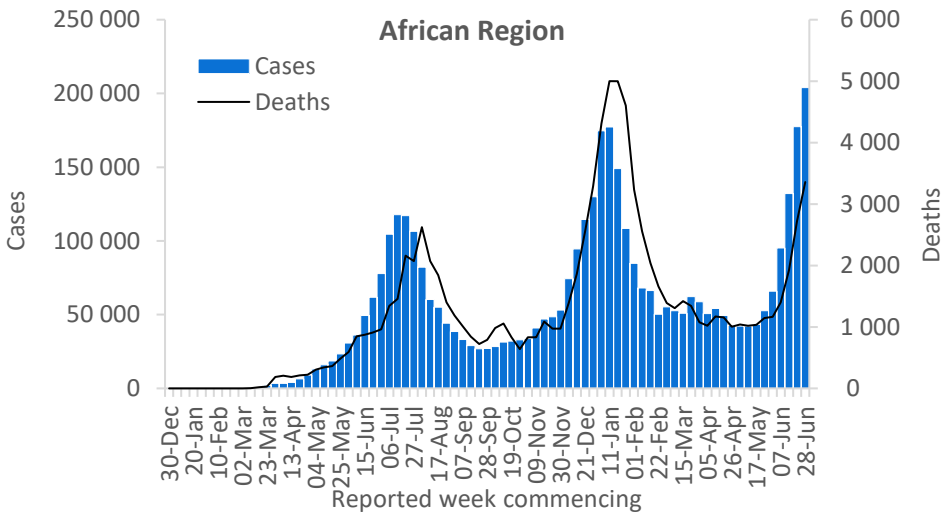
WHO regional overviews - Epidemiological week 28 June-4 July 2021

African Region

The African Region reported over 204 000 new cases and over 3300 new deaths, a 15% and a 23% increase respectively as compared to the previous week. For the sixth consecutive week, the region continues to show a marked increase in weekly case incidence and mortality; the Southern and Eastern parts of Africa remain the most affected areas on the continent. The highest numbers of new cases were reported from South Africa (132 450 new cases; 223.3 new cases per 100 000 population; a 28% increase), Zambia (16 456 new cases; 89.5 new cases per 100 000; a 14% decrease), and Namibia (9342 new cases; 367.7 new cases per 100 000; a 28% decrease).

The highest numbers of new deaths were reported from South Africa (1729 new deaths; 2.9 new deaths per 100 000 population; a 46% increase), Zambia (430 new deaths; 2.3 new deaths per 100 000; a 16% increase), and Uganda (325 new deaths; <1 new deaths per 100 000; a 34% increase).

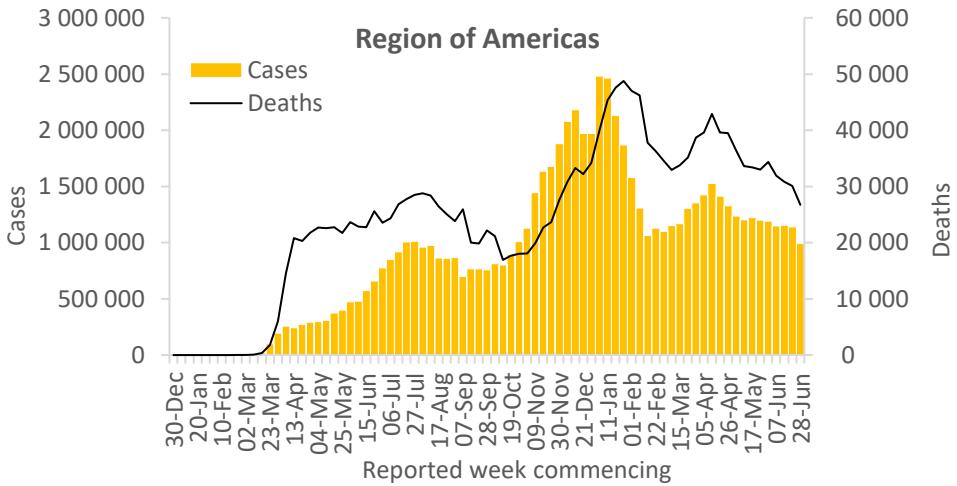


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 992 000 new cases and over 26 000 new deaths, a 13% and an 11% decrease respectively compared to the previous week. The Americas is the only region showing a decrease in both weekly case incidence and mortality. For the first time since October 2020, the region reported under 1 million weekly cases. However, several countries from South America, Central America and the Caribbean are still reporting high case incidence and mortality over the past weeks. The highest numbers of new cases were reported from Brazil (364 709 new cases; 171.6 new cases per 100 000; a 30% decrease), Colombia (204 556 new cases; 402.0 new cases per 100 000; similar to the previous week), and Argentina (137 852 new cases; 305.0 new cases per 100 000; a 5% increase).

The highest numbers of new deaths were reported from Brazil (10 810 new deaths; 5.1 new deaths per 100 000; a 14% decrease), Colombia (4402 new deaths; 8.7 new deaths per 100 000; a 4% decrease), and Argentina (3403 new deaths; 7.5 new deaths per 100 000; a 9% decrease).

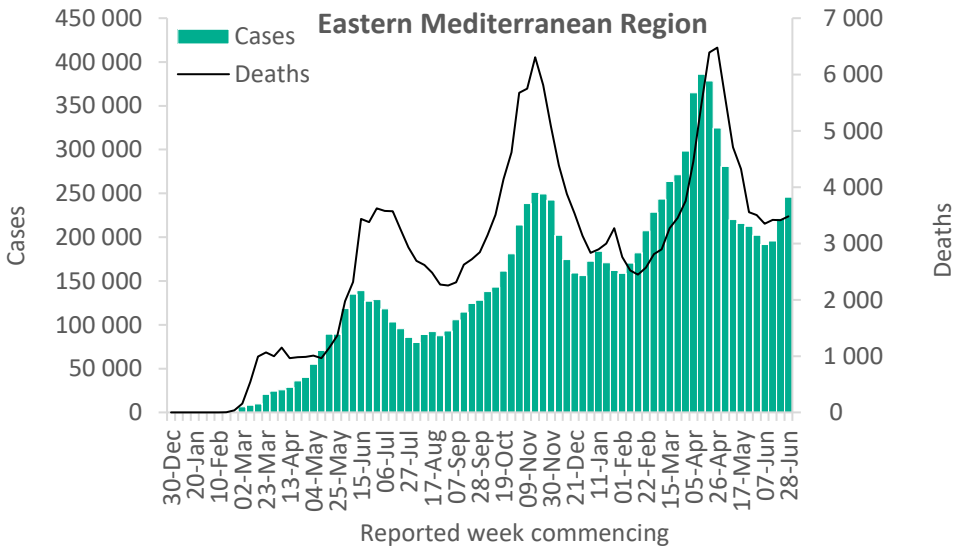


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 245 000 new cases and over 3400 new deaths, an 11% and a 2% increase respectively as compared to the previous week. Following more than two months of decrease in weekly case incidence, for the third consecutive week the region showed an increase of case incidence, while mortality remained relatively stable for the past month. The highest numbers of new cases were reported from the Islamic Republic of Iran (83 054 new cases; 98.9 new cases per 100 000; a 17% increase), Iraq (43 979 new cases; 109.3 new cases per 100 000; a 16% increase), and Tunisia (35 452 new cases; 300.0 new cases per 100 000; a 59% increase).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (916 new deaths; 1.1 new deaths per 100 000; a 7% increase), Tunisia (682 new deaths; 5.8 new deaths per 100 000; a 10% increase), and Afghanistan (549 new deaths; 1.4 new deaths per 100 000; a 4% increase).

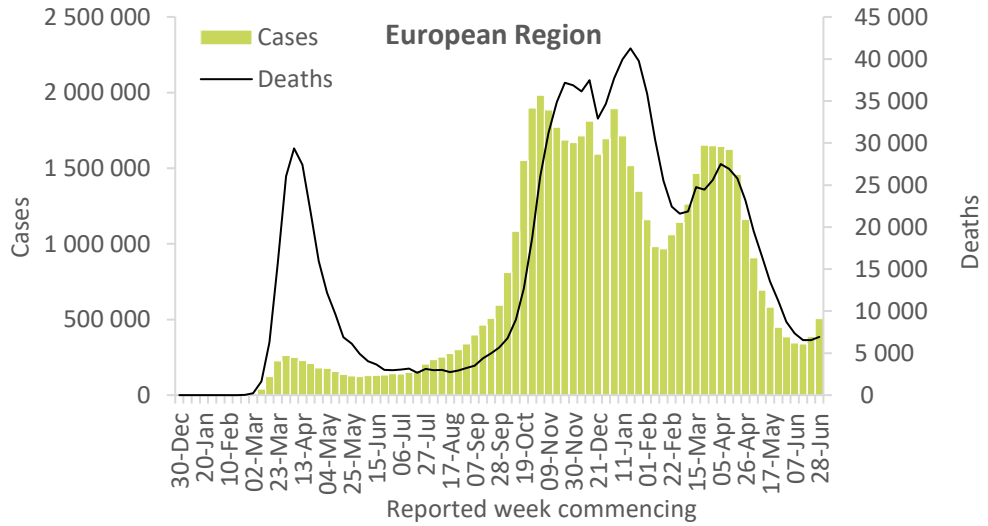


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 505 000 new cases and over 6900 new deaths. Following almost three months of declining trends, the region showed for the second consecutive week an increase in the number of new weekly cases and deaths, a 30% and a 6% increase respectively as compared to the previous week. The highest numbers of new cases were reported from the United Kingdom (161 805 new cases; 238.3 new cases per 100 000; a 67% increase), the Russian Federation (159 650 new cases; 109.4 new cases per 100 000; a 19% increase), and Turkey (36 224 new cases; 43.0 new cases per 100 000; a 7% decrease).

The highest numbers of new deaths were reported from the Russian Federation (4643 new deaths; 3.2 new deaths per 100 000; an 18% increase), Turkey (350 new deaths; <1 new deaths per 100 000; a 13% decrease), and Germany (276 new deaths; <1 new deaths per 100 000; a 25% decrease).

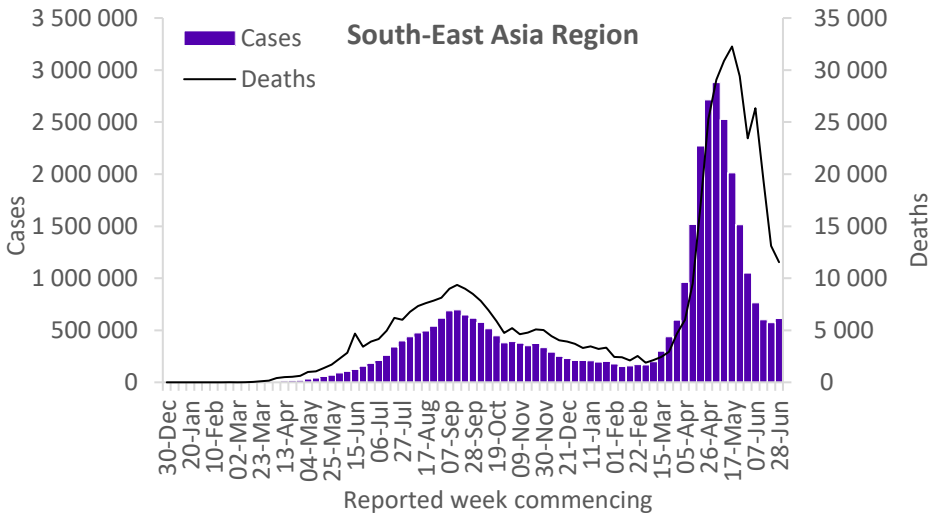


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported just under 613 000 new cases and over 11 000 new deaths, a 7% increase and a 12% decrease respectively as compared to the previous week. Following a decreasing trend in weekly case incidence for almost two months, mostly driven by the decrease in cases reported in India, the region showed a slight increase of cases this week. Bangladesh, Indonesia, Myanmar and Thailand continue to report large increases in the number of newly reported cases and deaths for this week.

The highest numbers of new cases were reported from India (312 250 new cases; 22.6 new cases per 100 000; an 11% decrease), Indonesia (168 780 new cases; 61.7 new cases per 100 000; a 35% increase), and Bangladesh (56 511 new cases; 34.3 new cases per 100 000; a 54% increase).The highest numbers of new deaths were reported from India (6254 new deaths; 0.5 new deaths per 100 000; a 31% decrease), Indonesia (3444 new deaths; 1.3 new deaths per 100 000; a 39% increase), and Bangladesh (893 new deaths; 0.5 new deaths per 100 000; a 43% increase).



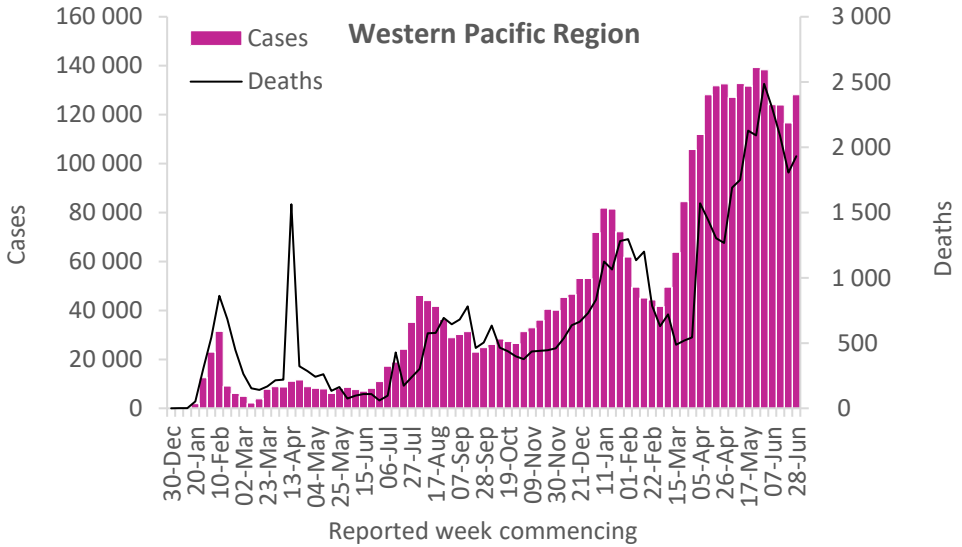
Updates from the [South-East Asia Region]

Western Pacific Region

The Western Pacific Region reported over 128 000 new cases and over 1900 new deaths, a 10% and a 7% increase respectively. Cambodia, Fiji and Malaysia, continue to report increases in both weekly cases and deaths.

The highest numbers of new cases were reported from Malaysia (44 145 new cases; 136.4 new cases per 100 000; an 18% increase), the Philippines (38 507 new cases; 35.1 new cases per 100 000; similar to last week), and Mongolia (15 478 new cases; 472.1 new cases per 100 000; a 4% decrease).

The highest numbers of new deaths were reported from the Philippines (819 new deaths; <1 new deaths per 100 000; a 16% increase), Malaysia (550 new deaths; 1.7 new deaths per 100 000; a 3% increase), and Japan (185 new deaths; <1 new deaths per 100 000; a 28% decrease).



Updates from the [Western Pacific Region]

Key weekly updates

WHO Director-General's key messages

- In his opening remarks at the media briefing on COVID-19 – 2 July 2021, the Director-General highlighted two ways for countries to push back against COVID-19 surges. These include:
  - **Strengthening public health and social measures (PHSM)-** including strong surveillance, strategic testing, early case detection, isolation and clinical care- remains critical. Additionally, masking, physical distance, avoiding crowded places and keeping indoor areas well ventilated remain the basis for the response.
  - **Equitable distribution or sharing of resources** such as protective gear, medical oxygen, tests, treatments and vaccines.
- In his introductory remarks at the event: Gender Equal Health and Care Workforce Initiative - 1 July 2021, the Director-General emphasized the need to address gender inequalities as a priority especially when majority of the world's health workers - almost 70% - are women. WHO is committed to advocating for decent and safe work conditions for all health and care workers.

Updates and publications

- **COVID-19 Vaccines and Vaccine Safety**
  - Ethical Framework for WHO's work in the ACT-Accelerator
  - Observational Study Protocol Template for sentinel surveillance of adverse events of special interest (AESIs) after vaccination with COVID-19 vaccines
- **International Travel**
  - Technical considerations for implementing a risk-based approach to international travel in the context of COVID-19: Interim guidance, 2 July 2021
  - Policy considerations for implementing a risk-based approach to international travel in the context of COVID-19, 2 July 2021
- **Essential Health Services**
  - Implementation guidance for assessments of frontline service readiness: strengthening real-time monitoring of health services in the context of the COVID-19 pandemic, 1 July 2021

Annex

COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 6 July 2021**

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Afghanistan	●	-	-	-	-
Albania	●	-	-	-	-
Algeria	●	-	-	●	-
Angola	●	●	-	-	-
Antigua and Barbuda	●*	●*	-	-	-
Argentina	●	●	●	●	-
Armenia	○	-	-	-	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	-	-
Bahrain	●	●	-	●	-
Bangladesh	●	●	-	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	-	-	-
Bermuda	●	●	-	-	-
Bhutan	●	●	-	●	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	-	-	-
Bosnia and Herzegovina	○	-	-	-	-
Botswana	-	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Brunei Darussalam	●	●	-	-	-
Bulgaria	●	●	-	●	-
Burkina Faso	●	-	-	-	-
Cabo Verde	●	-	-	-	-
Cambodia	●	-	-	●	-
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	-	-	-	-
Central African Republic	●	-	-	-	-
Chile	●	●	●	●	-
China	●	●	●	○	-
Colombia	●	-	●	-	-
Comoros	-	●	-	-	-
Congo	●	-	-	-	-
Costa Rica	●	●	●	-	-
Croatia	●	●	○*	○	-
Cuba	●	●	-	-	-
Curaçao	●	-	●	-	●
Cyprus	●	●	-	-	●
Czechia	●	●	●	●	-
Côte d'Ivoire	●	●	-	-	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Dominica	●	-	-	-	-
Dominican Republic	●	-	●	-	-
Ecuador	●	-	●	-	-
Egypt	●	-	-	-	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	-	○
Eswatini	-	●	-	-	-
Ethiopia	○	-	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	○	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	-	-
Greece	●	●	●	●	-
Grenada	●	-	-	-	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●*	●*	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Guinea	●	●	-	-	-
Guinea-Bissau	●	●	-	-	-
Guyana	-	-	●	-	-
Haiti	●	-	●	-	-
Honduras	●	-	-	-	-
Hungary	●	○	-	○	-
Iceland	●	-	-	-	-
India	●	●	●	●	-
Indonesia	●	●	-	●	-
Iran (Islamic Republic of)	●	●	-	●	-
Iraq	●	●	-	-	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	-	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	○	○	-	●*	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	○	-
Kuwait	●	-	-	●	-
Kyrgyzstan	●	-	-	-	-
Lao People's Democratic Republic	●	-	-	●*	-
Latvia	●	●	●	○*	-
Lebanon	●	-	-	●*	-
Lesotho	-	●	-	-	-
Liberia	●	-	-	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	-	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Madagascar	-	●	-	-	-
Malawi	●	●	-	●	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	○	●	-	●	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	○	-	-	-
Montenegro	●	-	-	-	-
Montserrat	●	-	-	-	-
Morocco	●	-	-	●	-
Mozambique	-	●	-	●	-
Myanmar	●	-	-	-	-
Namibia	-	●	-	○*	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	-	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	-	-	-	●
North Macedonia	●	●	-	-	●
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●	-
Oman	●	●*	-	●*	-
Pakistan	●	●	●	●	-
Panama	●	●	●	-	●
Paraguay	●	-	●	-	-
Peru	●	-	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	○	-	-	-	-
Romania	●	●	●	●	-
Russian Federation	●	●	-	●	-
Rwanda	●	○	-	-	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	-	-
Saint Lucia	●	-	-	-	-
Saint Martin	●	●	-	-	-
Sao Tome and Principe	●	-	-	-	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	-	-
Serbia	●	-	-	-	-
Seychelles	-	●	-	-	-
Sierra Leone	-	-	-	○*	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	-	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	-	-	-	-
South Africa	●	●	-	●	-
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-
Suriname	●	●	●	-	-
Sweden	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Switzerland	●	●	○	●	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	-	-
Togo	●	●	-	-	-
Trinidad and Tobago	●	-	●	-	-
Tunisia	●	●	-	●	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Uganda	●	●	-	●	-
Ukraine	●	○	-	○	-
United Arab Emirates	●	●	●	●	-
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-
United States of America	●	●	●	●	-
Uruguay	●	-	●	-	-
Uzbekistan	●	●	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Venezuela (Bolivarian Republic of)	●	-	●	-	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Zambia	-	●	-	●	-
Zimbabwe	-	○	-	●	-

**Newly reported in this update.*
Unspecified B.1.617 reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

from official sources.

ation become available.

***Variant Beta for Kyrgyzstan and unspecified B.1.617 for Latvia were excluded this week based on further information received.*
****Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Efforts are ongoing to differentiate these in future reports. Excludes countries, territories, and areas that have never reported the detection of a variant of concern.*
See also Annex 2: Data, table and figure notes.

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

COVID-19 Weekly Epidemiological Update

Edition 46, published 29 June 2021

In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- Special focus: Special Focus: Current challenges in the context of the COVID-19 pandemic
- Special focus: WHO global conference on communicating science during health emergencies, 7-25 June 2021
- WHO regional overviews
- Key weekly updates

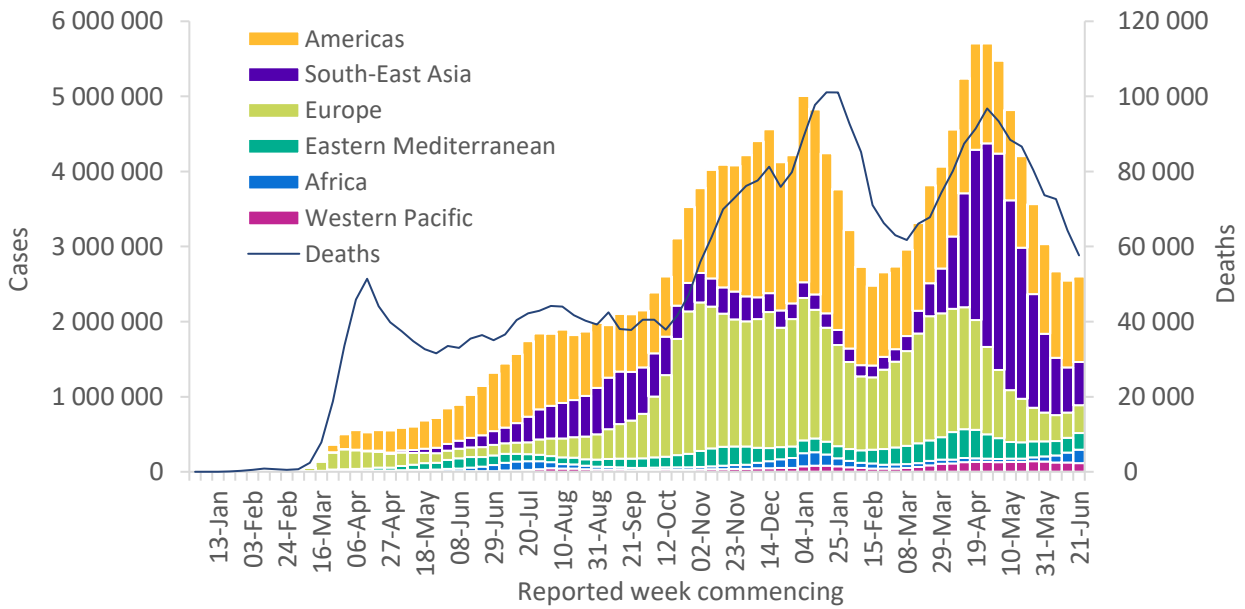
Global overview

Data as of 27 June 2021

The global number of new cases over the past week (21-27 June 2021) was over 2.6 million, a similar number compared to the previous week (Figure 1). The number of weekly deaths continued to decrease, with more than 57 000 deaths reported in the past week, a 10% decrease as compared to the previous week. This is the lowest weekly mortality figure since those recorded in early November 2020. Globally, COVID-19 incidence remains very high with an average of over 370 000 cases reported each day over the past week. The cumulative number of cases reported globally now exceeds 180 million and the number of deaths is almost 4 million.

This week, the African region recorded a sharp increase in incidence (33%) and mortality (42%) when compared to the previous week (Table 1). The Eastern Mediterranean and European Regions also reported increases in the number of weekly cases. All Regions, with the exception of the African Region, reported a decline in the number of deaths in the past week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 27 June 2021**



**See *Annex 2: Data, table and figure notes*

The highest numbers of new cases were reported from Brazil (521 298 new cases; 3% increase), India (351 218 new cases; 12% increase), Colombia (204 132 new cases; 5% increase), the Russian Federation (134 465 new cases; 24% increase), and Argentina (131 824 new cases; 11% decrease). Over the past week, the highest numbers of new cases per 100 000 population were reported from Seychelles (708 new cases per 100 000 pop), Namibia (509 new cases per 100 000 pop) and Mongolia (491 new cases per 100 000 pop).

Globally, cases of the Alpha variant have been reported in 172 countries, territories or areas (hereafter countries; two new countries in the past week), of Beta in 120 countries (one new country), Gamma in 72 countries (one new country) and Delta in 96 countries (11 new countries).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 27 June 2021**

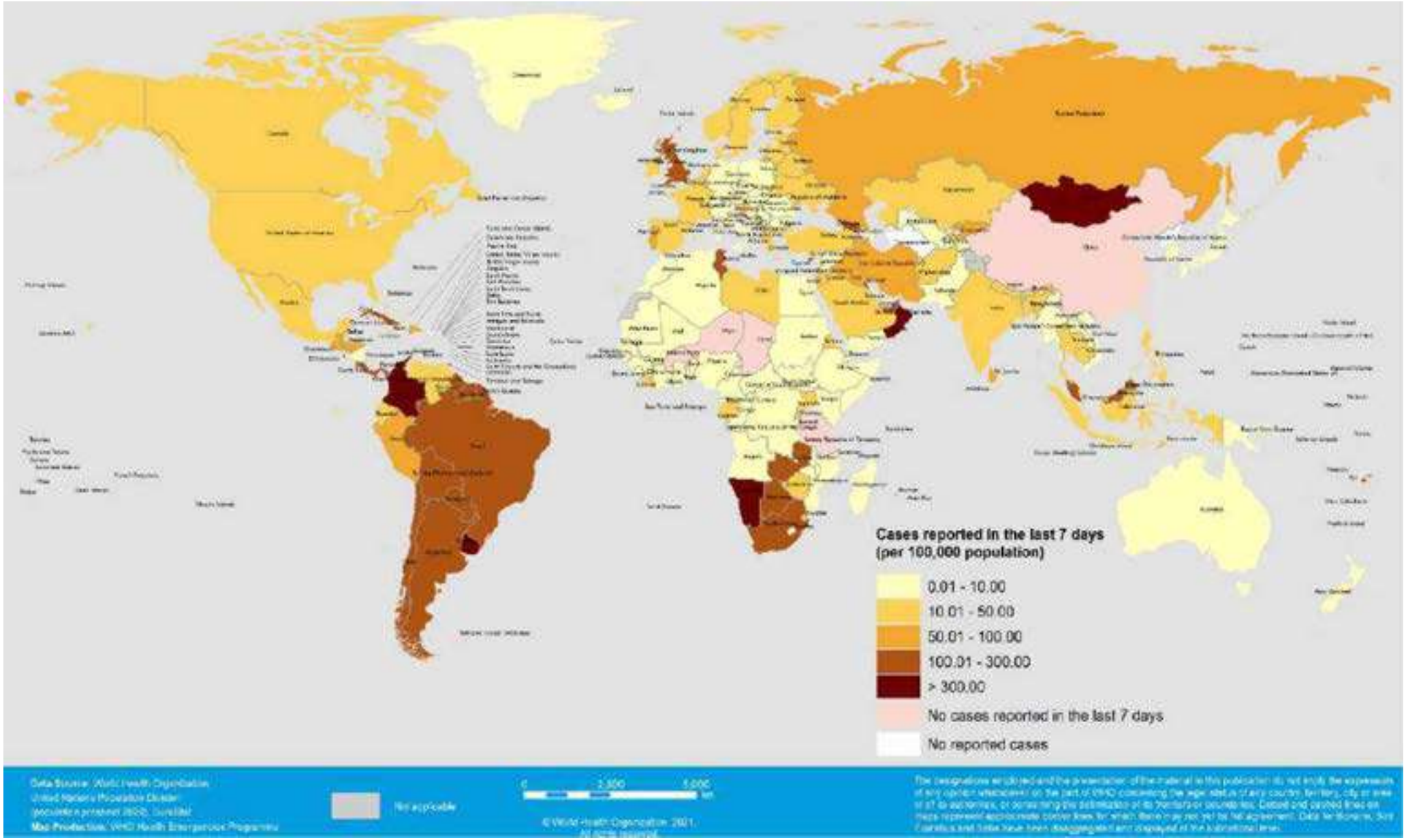
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 139 518 (44%)	-1%	71 812 677 (40%)	30 120 (52%)	-2%	1 887 752 (48%)
Europe	372 448 (14%)	10%	55 713 043 (31%)	6 435 (11%)	-1%	1 181 135 (30%)
South-East Asia	573 244 (22%)	-5%	34 606 211 (19%)	13 107 (23%)	-33%	484 397 (12%)
Eastern Mediterranean	221 169 (9%)	13%	10 887 414 (6%)	3 411 (6%)	0%	215 325 (5%)
Africa	177 367 (7%)	34%	3 968 421 (2%)	2 724 (5%)	42%	94 323 (2%)
Western Pacific	116 567 (4%)	-6%	3 503 601 (2%)	1 806 (3%)	-13%	53 826 (1%)
Global	**2 600 313 (100%)**	**2%**	**180 492 131 (100%)**	**57 603 (100%)**	**-10%**	**3 916 771 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
**See *Annex 2: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

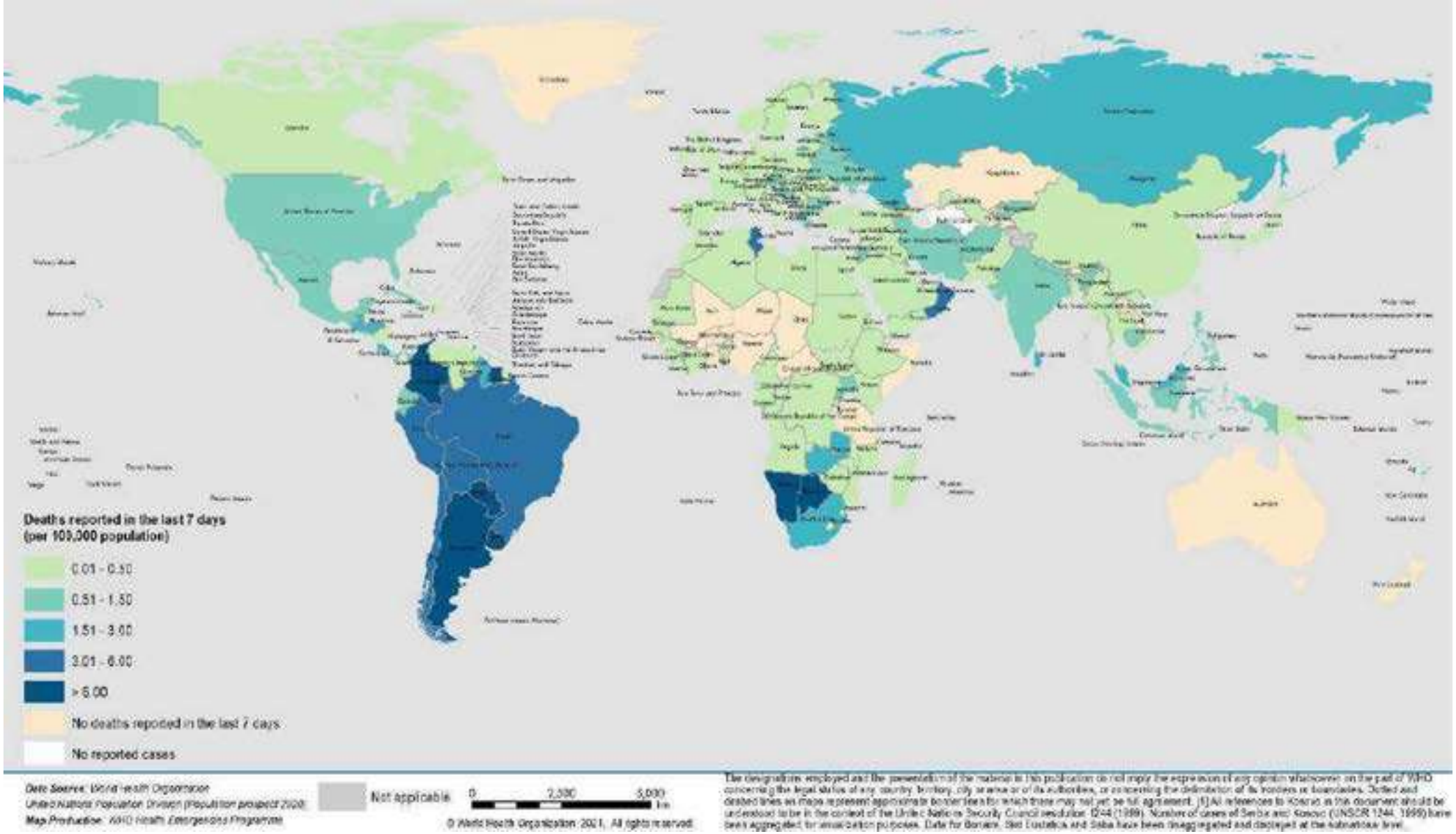
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 21 – 27 June 2021**



**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 21 – 27 June 2021**



**See *Annex 2: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact vaccine, therapeutics, diagnostics or effectiveness of public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. As these risks evolve, WHO will update lists of global VOIs and VOCs (Table 2) to support setting priorities for surveillance and research, and ultimately guide response strategies. National authorities may choose to designate other variants of local interest/concern, and are encouraged to investigate and report on impacts of these variants. Here we provide updates on classifications of VOCs and VOIs, as well as the updated countries/territories/areas reporting the detection of VOCs.

Table 2: SARS-CoV-2 Variants of Concern (VOCs) and Variants of Interest (VOIs), as of 29 June 2021

WHO label	Pango lineage	GISAID clade	Nextstrain clade	Earliest documented samples	Date of designation
Variants of Concern (VOCs):					
Alpha	B.1.1.7	GRY (formerly GR/501Y.V1)	20I (V1)	United Kingdom, Sep-2020	18-Dec-2020
Beta	B.1.351	GH/501Y.V2	20H (V2)	South Africa, May-2020	18-Dec-2020
Gamma	P.1	GR/501Y.V3	20J (V3)	Brazil, Nov-2020	11-Jan-2021
Delta	B.1.617.2	G/478K.V1	21A	India, Oct-2020	VOI: 4-Apr-2021 VOC: 11-May-2021
Variants of Interest (VOIs):					
Epsilon	B.1.427/ B.1.429	GH/452R.V1	21C	United States of America, Mar-2020	5-Mar-2021
Zeta	P.2	GR/484K.V2	20B	Brazil, Apr-2020	17-Mar-2021
Eta	B.1.525	G/484K.V3	21D	Multiple countries, Dec-2020	17-Mar-2021
Theta	P.3	GR/1092K.V1	21E	Philippines, Jan-2021	24-Mar-2021
Iota	B.1.526	GH/253G.V1	21F	United States of America, Nov-2020	24-Mar-2021
Kappa	B.1.617.1	G/452R.V3	21B	India, Oct-2020	4-Apr-2021
Lambda	C.37	GR/452Q.V1	20D	Peru, Dec-2020	14-Jun-2021

Geographic distribution

As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing, the number of countries/areas/territories (hereafter countries) reporting VOCs continue to increase (Figure 3, Annex 1). This distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

WHO recommendations

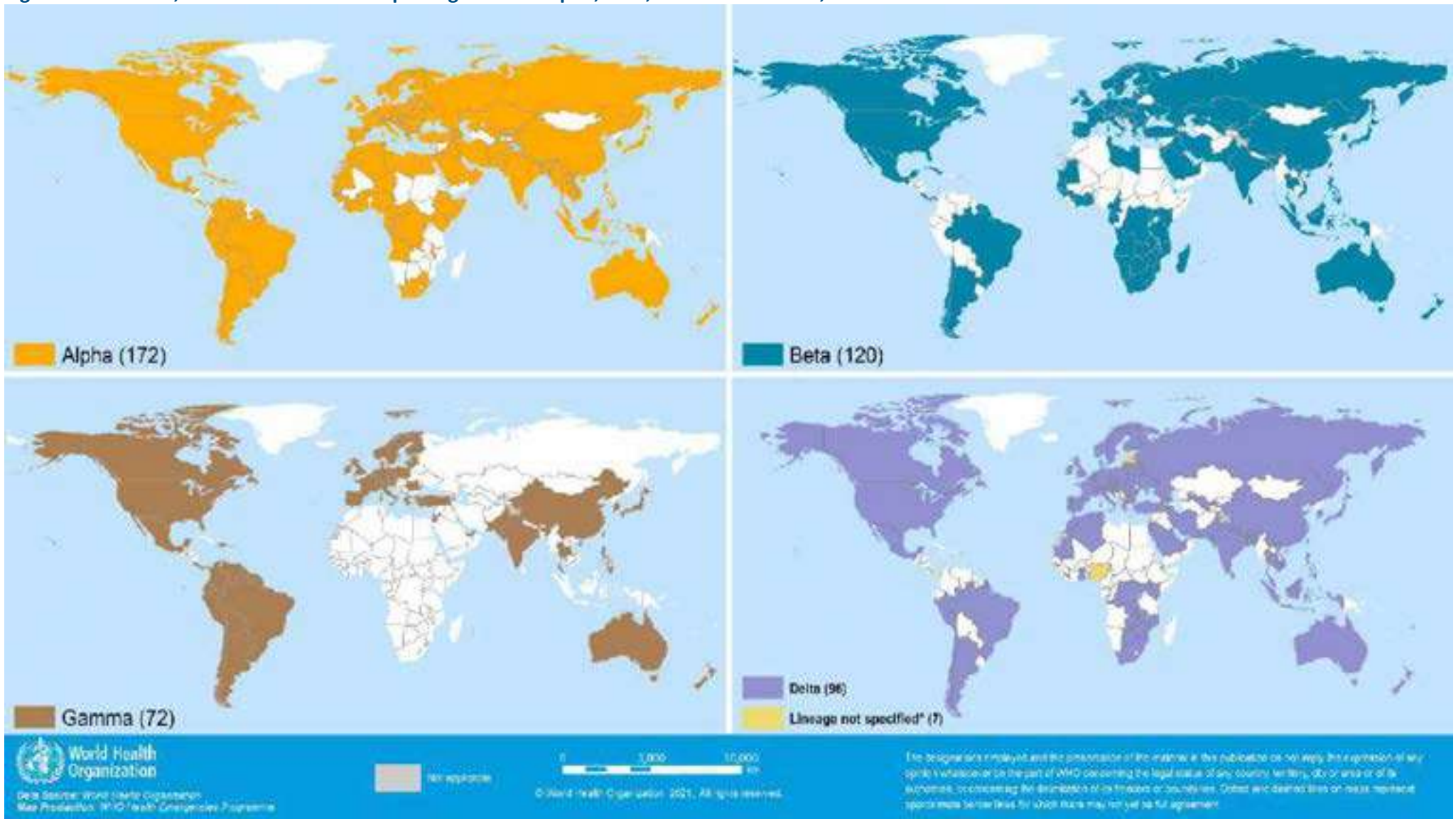
Virus evolution is expected, and the more SARS-CoV-2 circulates, the more opportunities it has to evolve. Reducing transmission through established and proven disease control methods such as those outlined in the COVID-19 Strategic Preparedness and Response Plan, as well as avoiding introductions into animal populations, are crucial aspects of the global strategy to reduce the occurrence of mutations that have

negative public health implications. PHSM remain critical to curb the spread of all SARS-CoV-2 variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that PHSM, including infection prevention and control (IPC) measures, have been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. National and local authorities are encouraged to continue strengthening existing PHSM and IPC measures. Authorities are also encouraged to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and to detect unusual epidemiological events.

Additional resources

- Tracking SARS-CoV-2 variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- COVID-19 Situation Reports from WHO Regional Offices and partners: AFRO, AMRO/PAHO, EMRO, EURO/ECDC, SEARO, WPRO

Figure 3. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 29 June 2021**



**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details.*

Special Focus: Current challenges in the context of the COVID-19 pandemic

Well into the second year of the COVID-19 pandemic, the global situation remains highly fragile. While at the global level, trends in cases and deaths have been declining in recent weeks, there is significant variation by region, by country and within countries. In all WHO regions, there are countries reporting sharp increases in cases and hospitalizations. There are a number of factors contribute to this, as repeatedly outlined by WHO,[1] including the emergence and circulation of more transmissible variants of SARS-CoV-2, increased social mixing and mobility, uneven and inequitable vaccination; and considerable pressure to lift public health and social measures.

SARS-CoV-2 variants of concern

On 11 May 2021, WHO designated Delta (B.1.617.2) as a variant of concern due to evidence of increased transmissibility.[2] The increase in the effective reproduction number compared with the Alpha variant (B.1.1.7) is estimated to be 55% (95% CI: 43–68).[3] Given the increase in transmissibility, the Delta variant is expected to rapidly outcompete other variants and become the dominant variant over the coming months.[3]

As of 29 June 2021, 96 countries have reported cases of the Delta variant, though this is likely an underestimate as sequencing capacities needed to identify variants are limited. A number of these countries are attributing surges in infections and hospitalizations to this variant.

Low vaccination coverage at the global level

While more than 2.65 billion doses of COVID-19 vaccines have been administered,[4] the majority of these have been in a small number of high-income countries. The gap in vaccine administration between high- and low-income countries is starting to shrink due to the delivery of vaccines through the COVAX facility, but the majority of the world's population still remains susceptible to SARS-CoV-2 infection and at risk of developing COVID-19.

Increased social mixing and lifting of public health and social measures

Countries have moved in and out of restrictions of varying stringency over the past 18 months. Now, many face considerable pressure to lift any remaining public health and social measures. Social mixing and mobility are increasing, as are the number of gatherings – from small-scale gatherings of friends and family to large sporting and side events, and religious celebrations. Improper planning or assessment of risk of transmission provide opportunities for the virus to spread.

WHO response

Since the beginning of the pandemic, WHO has recommended a comprehensive approach to controlling COVID-19,[5] including the implementation and adjustment of public health and social measures to suppress transmission and reduce severe disease and death.[6] This includes, but is not limited to, strong surveillance, strategic testing, early case detection, isolation and clinical care of cases by trained and protected health and care workers, tracing and supported quarantine of contacts, infection prevention and control measures, engineering controls and adopting risk-based approaches for gatherings and international travel. The

[1] World Health Organization. Director-General's opening remarks at the media briefing on COVID-19 – 25 June 2021. https://www.who.int/director-general/speeches/detail/director-general-s-opening-remarks-at-the-media-briefing-on-covid-19-25-june-2021

[2] World Health Organization. Weekly Epidemiological Update on COVID-19: 11 May 2021. Available at: https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---11-may-2021

[3] Campbell F, Archer B, Laurenson-Schafer L et al. Increased transmissibility and global spread of SARS-CoV-2 variants of concern as at June 2021. Euro Surveill; 2021;26(24):pii=2100509.

[4] World Health Organization. WHO Coronavirus (COVID-19) Dashboard. https://covid19.who.int

[5] World Health Organization. Strategic response and preparedness plan. Available from: https://www.who.int/publications/i/item/strategic-preparedness-and-response-plan-for-the-new-coronavirus

[6] World Health Organization. Considerations for implementing and adjusting public health and social measures in the context of COVID-19. Available from: https://www.who.int/publications/i/item/considerations-in-adjusting-public-health-and-social-measures-in-the-context-of-covid-19-interim-guidance

addition of several safe and effective COVID-19 vaccines and the initiation of vaccination adds an incredibly powerful tool to complement prevention and control efforts.

Importantly, the tools that exist today—including individual-, community level-public health and social measures, infection prevention and control measures, that have been used since the beginning of the pandemic—remain effective against current variants of concern, including the Delta variant. Although the increased transmissibility of VOCs means that measures may need to be maintained for longer periods of time, particularly in a context of low vaccination coverage, these measures must be targeted, time-bound, reinforced and supported by Member States.

SARS-CoV-2 will continue to evolve, with selective advantage generally favouring more transmissible variants.[7] The emergence of new variants requires constant evaluation and careful adjustment of public health and social measures and vaccination strategies as the COVID-19 pandemic continues.

WHO will continue to work with Member States and technical partners through existing and new technical networks and advisory groups to critically evaluate variants through the Global Risk Assessment and Monitoring Framework for SARS-CoV-2 variants.[8] The situation is dynamic and WHO is working with partners to harmonize the decision-making processes for assessing the impact of variants of concern on public health and medical interventions.

Over the past 18 months, substantial progress has been made towards ending the acute phase of the COVID-19 pandemic. However, the combination of more transmissible variants, increasing social mixing, suboptimal vaccination coverage and relaxation of public health and social measures will slow this progress and delay the end of the pandemic.

[7] Krause PR, Fleming TR, Longini IM, et al. SARS-CoV-2 variants and vaccines. New Engl J Med. 2021;

[8] World Health Organization. Tracking SARS-CoV-2 variants. https://www.who.int/en/activities/tracking-SARS-CoV-2-variants/

Special focus: WHO global conference on communicating science during health emergencies, 7-25 June 2021

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Since the beginning of the pandemic, the evidence on COVID-19 and related protective measures evolved continuously. Changes in recommendations and pandemic response measures expose the public to high levels of uncertainty. Increasing pandemic fatigue and an overabundance of information highlight the need for effective, innovative and reliable science communication. Due to the all-disruptive nature of the COVID-19 pandemic, almost everybody has become a science communicator – be it at work, the dinner table or on social media.

However, scientific processes are complex and not always communicated in an understandable manner. To facilitate the solution-oriented discussion of challenges and innovations to improve the translation of science and make it accessible and relevant to all, the World Health Organization Information Network for Epidemics (WHO EPI-WIN) organized a global conference on communicating science during health emergencies from 7 to 25 June 2021. The conference took a multidisciplinary approach, convening science communicators, representing research, policy, civil society and international organizations, working in the areas of health, education, journalism and broadcasting, tourism and social media and culture, among others.

Conference structure

The opening and closing sessions of the conference featured renowned keynote speakers from academia and practice in the fields of public health, medicine, communication and design. Over 3000 participants from 159 countries joined the opening session and submitted almost 500 questions. To date, the recording of the opening session on YouTube has been viewed more than 14 000 times, reflecting the public interest in the topic of science communication during the pandemic. The closing session featured three innovative science communication concepts submitted to a global call for good practice examples launched by WHO in April 2021.

A panel further reported back on the thematic discussions held in June 2021 including researchers, media representatives, decision-makers and professionals working in health, education, tourism and culture. The thematic discussions included 61 experts from 26 countries. Discussions were grouped into four thematic tracks and ran over the course of three weeks. Each group attended three 90-minute discussions on profession-specific challenges and solutions to improve science communication during health emergencies. The discussions with the global experts disclosed some of the challenges science communicators have been facing

during the pandemic: from science being instrumentalized for political purposes, to a lack of scientific literacy among different population groups and a flood of information – both correct and incorrect - that does not take into account the target audiences' needs, beliefs and values.

Lessons learnt from the expert discussions

Participants identified key steps towards effective science translation. First, a need to re-think existing scientific processes to ensure research is being shared in a timely manner during health crises but still undergoes quality control and scientific debate. This includes a transparent communication of scientific processes to help people understand what science can and cannot do. While the public often expects science to provide clear answers, scientific knowledge generation takes time, is built on scientific debate and is inherently linked to uncertainty. Open communication of this uncertainty will prevent people from losing trust in science when the constantly evolving evidence leads to changes in public health recommendations. Second, the concerns, beliefs and needs of target audiences need to be taken into consideration when communicating science. There is no one-size-fits all solution. Instead of "pouring out" general information, a constant dialogue with communities is required to ensure the scientific information is relevant, understandable and credible to them. The continuous dialogue with different stakeholders will also help to build trust in science and encourage people to ask questions and voice concerns. Third, it takes innovation and creativity for effective science translation. People consume information on different channels, at different times of the day and in different formats. Science communication should add to people's lives in a meaningful and action-oriented manner and meet them where they are in terms of preferences, values and beliefs.

Next steps

WHO is committed to translating the insights from the conference into action; not just to improve science translation during the COVID-19 pandemic but also to be prepared for future health emergencies. Follow-up activities of the conference will include:

- Building a global, multidisciplinary network of science communicators. A continuous dialogue with researchers, media representatives, decision-makers and professionals working in health, education, culture and tourism will help to identify and address challenges in a concerted, collaborative manner;
- Developing capacity building resources for science communicators, especially journalists, to empower them to judge the quality and independence of scientific research and share this with their audiences;
- Strengthening scientific and health literacy in the whole population to empower all stakeholders to ask critical questions about the information they encounter on- and offline and make evidence-informed decisions;
- Analyzing existing good practice examples of science communication to understand what works and what does not work, and develop more effective, innovative science communication concepts for the future.

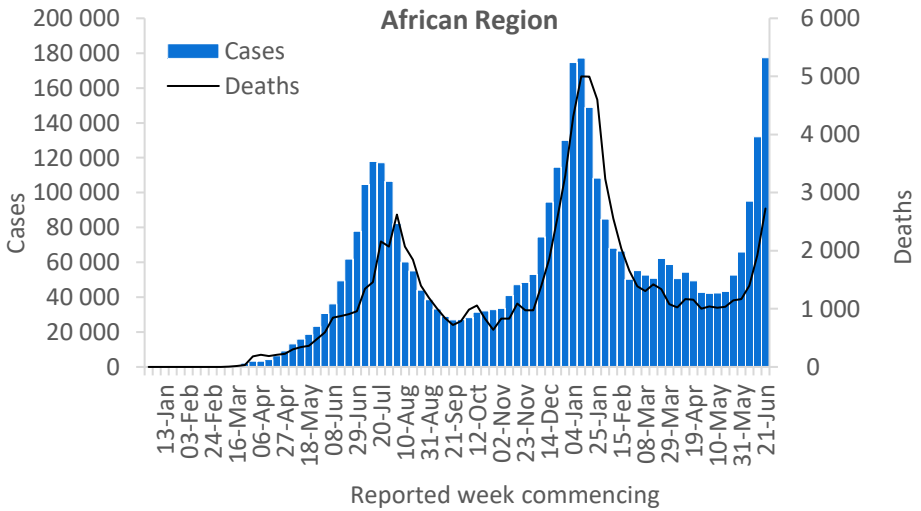
The high interest in the global conference confirmed WHO's mandate to play a key role in science communication during health emergencies. The timely implementation of follow-up activities will be crucial to support countries and the multidisciplinary science communication community to build trust in science and make it accessible and understandable to all.

WHO regional overviews - Epidemiological week 21-27 June 2021

African Region

Many countries in the African region continue to see increases in weekly case incidence and mortality. The Region reported over 177 000 new cases and over 2700 new deaths, a 34% and a 42% increase respectively compared to the previous week. The weekly number of COVID-19 cases has been increasing sharply since 15 May. Since then, 76% of cases and 72% of reported deaths in the Region where from countries in Southern Africa.

Aside from South Africa (103 697 new cases; 174.8 new cases per 100 000 population; a 47% increase), the highest numbers of new cases in the Region were reported from Zambia (19 058 new cases; 103.7 new cases per 100 000; a 15% increase), and Namibia (12 944 new cases; 509.4 new cases per 100 000; a 71% increase). Mortality in the African Region continued to increase sharply with the countries reporting the highest numbers of new deaths per 100 000 population over the past week being Namibia (11 new deaths per 100 000), Botswana (7 deaths per 100 000) and Zambia (20 new deaths per 100 000).



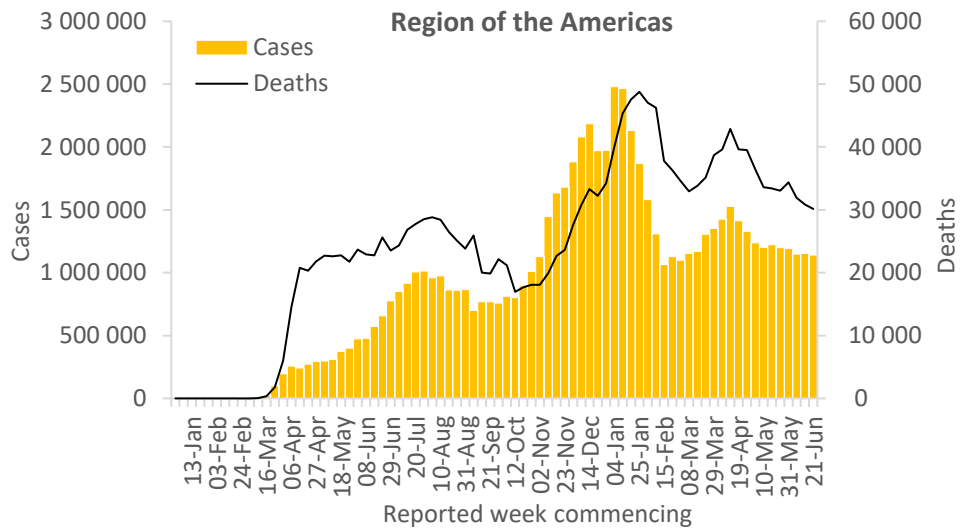
Updates from the African Region

Region of the Americas

The Region of the Americas reported over 1.1 million new cases and over 30 000 new deaths, similar to the previous week. The Region reported the highest number of new cases and deaths per 100 000 over the past week when compared to the other regions (111 cases and 3 deaths per 100 000 population).

The highest numbers of new cases were reported from Brazil (521 298 new cases; 245.2 new cases per 100 000; a 3% increase), Colombia (204 132 new cases; 401.2 new cases per 100 000; a 5% increase), and Argentina (131 824 new cases; 291.7 new cases per 100 000; a 12% decrease).

The highest numbers of new deaths per 100 000 population were reported from Paraguay (113 deaths per 100 000), Colombia (90 deaths per 100 000) and Argentina (83 deaths per 100 000) over the past week.



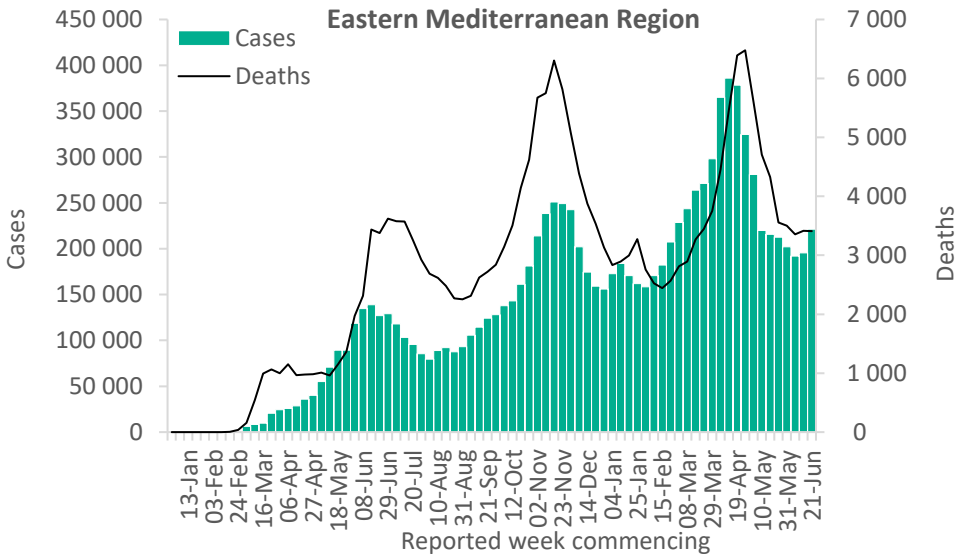
Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 221 000 new cases, a 13% increase compared to the previous week. This increase in cases is the largest relative increase seen in the Region since the end of March 2021. Over 3400 new deaths were reported, a similar number with the previous week. The Region reported 30 new cases and 0.5 new deaths per 100 000 population over the past week.

The highest numbers of new cases per 100 000 population were reported from Oman (348 new cases per 100 pop), Kuwait (294 new cases per 100 pop) and Tunisia (189 new cases per 100 000 pop).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (857 new deaths; 1.0 new deaths per 100 000; a 9% decrease), Tunisia (619 new deaths; 5.2 new deaths per 100 000; an 18% increase), and Afghanistan (528 new deaths; 1.4 new deaths per 100 000; an 11% decrease).



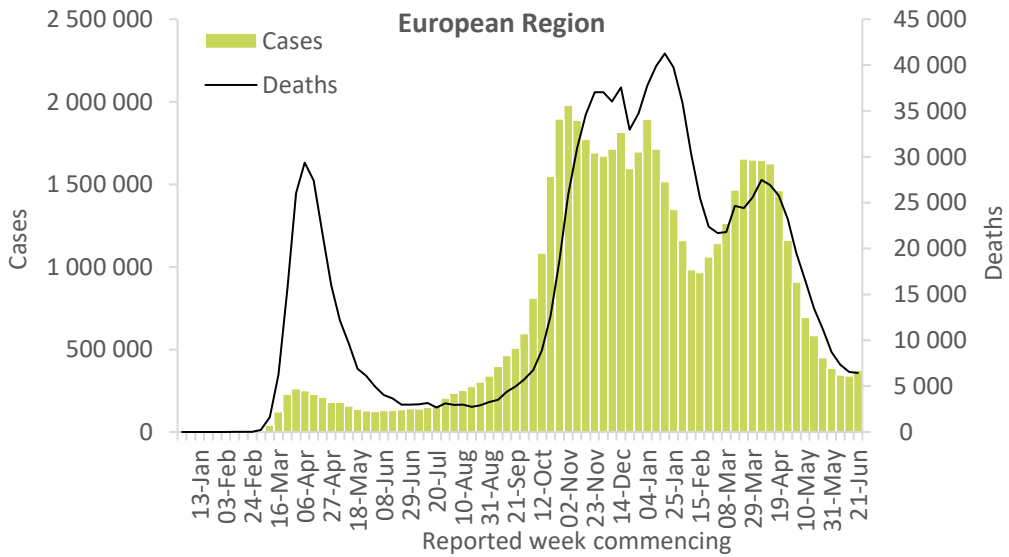
Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 372 000 new cases, a 10% increase compared to the previous week, and over 6400 new deaths, similar to the previous week. This is the first weekly increase in the number of cases reported by the Region after more than two months of a decreasing trend.

The highest numbers of new cases were reported from the Russian Federation (134 465 new cases; 92.1 new cases per 100 000; a 24% increase), the United Kingdom (96 843 new cases; 142.7 new cases per 100 000; a 55% increase), and Turkey (38 936 new cases; 46.2 new cases per 100 000; a 2% decrease).

The highest numbers of new deaths were reported from the Russian Federation (3921 new deaths; 2.7 new deaths per 100 000; a 34% increase), Turkey (402 new deaths; 0.5 new deaths per 100 000; an 11% decrease), and Germany (369 new deaths; 0.4 new deaths per 100 000; a 33% decrease).

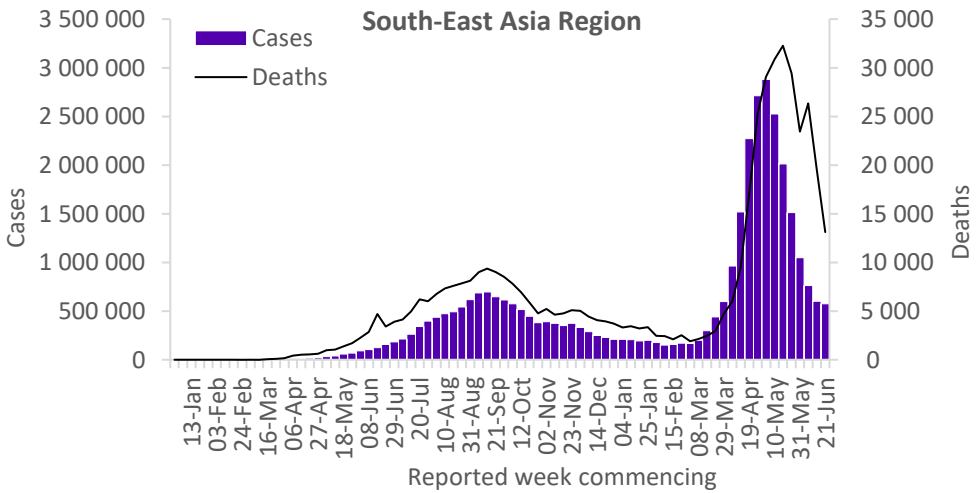


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 573 000 new cases and over 13 000 new deaths, a 5% and a 33% decrease respectively compared to the previous week. Although there is a slight overall decrease in the number of cases reported this week, mostly due to the decrease in the number of cases reported in India, a number of countries, including Myanmar (112% increase), Indonesia (60% increase) and Bangladesh (48% increase), reported large increases in the number of newly reported cases for this week.

The highest numbers of new cases were reported from India (351 218 new cases; 25.5 new cases per 100 000; a 21% decrease), Indonesia (125 395 new cases; 45.8 new cases per 100 000; a 60% increase), and Bangladesh (36 738 new cases; 22.3 new cases per 100 000; a 48% increase). The highest numbers of new deaths were reported from India (9038 new deaths; 0.7 new deaths per 100 000; a 45% decrease), Indonesia (2476 new deaths; 0.9 new deaths per 100 000; a 39% increase), and Bangladesh (624 new deaths; 0.4 new deaths per 100 000; a 45% increase).



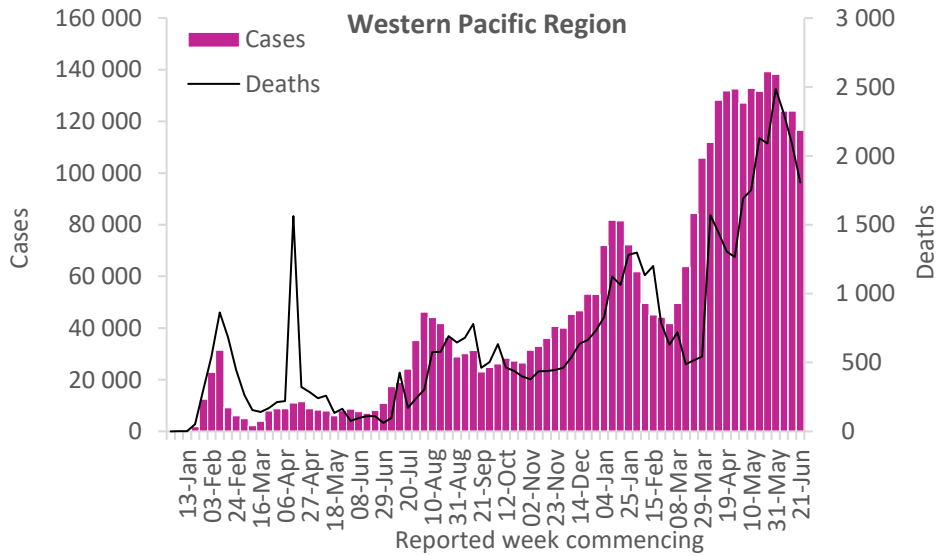
Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported over 116 000 new cases and over 1800 new deaths, a 6% and a 13% decrease respectively compared to the previous week. The weekly number of newly reported cases has decreased over the past several weeks, after reaching a peak in mid-May.

The highest numbers of new cases were reported from the Philippines (38 684 new cases; 35.3 new cases per 100 000; a 14% decrease), Malaysia (37 347 new cases; 115.4 new cases per 100 000; a 4% decrease), and Mongolia (16 111 new cases; 491.4 new cases per 100 000; a 7% decrease).

The highest numbers of new deaths were reported from the Philippines (706 new deaths; 0.6 new deaths per 100 000; a 20% decrease), Malaysia (536 new deaths; 1.7 new deaths per 100 000; a 6% increase), and Japan (257 new deaths; 0.2 new deaths per 100 000; a 30% decrease).



Updates from the Western Pacific Region

Key weekly updates

WHO Director-General's key messages

- In his opening remarks at the media briefing on COVID-19 – 25 June 2021, the Director-General highlighted one of the most important ways WHO coordinates the response to COVID-19 and other emergencies is through our global network of emergency medical teams. Globally, WHO has certified teams from 20 countries, who have gone through a rigorous process of quality assurance to ensure they meet internationally agreed standards.
- In his introductory remarks at the high-level event: The Role of Primary Health Care in the COVID-19 Pandemic response and leading equitable recovery- 22 June 2021, the Director-General emphasized that there is no global health security without local health security, thus strengthening primary health care is essential for an equitable and resilient recovery.

Updates and publications

- WHO support remains critical in countries and regions facing COVID-19 surges- 24 June 2021
- Directors General of WHO, WIPO and the WTO agree on intensified cooperation in support of access to medical technologies worldwide to tackle the COVID-19 pandemic – 24 June 2021
- Recommendations for national SARS-CoV-2 testing strategies and diagnostic capacities -25 June 2021
- Indicator framework for the evaluation of the public health effectiveness of digital proximity tracing solutions- 25 June 2021

Annex

COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 29 June 2021**

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Afghanistan	●	-	-	-	-
Albania	●	-	-	-	-
Algeria	●	-	-	●	-
Angola	●	●	-	-	-
Argentina	●	●	●	●	-
Armenia	○	-	-	-	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	-	-
Bahrain	●	●	-	●	-
Bangladesh	●	●	-	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○*	-
Belgium	●	●	●	●	-
Belize	●	-	-	-	-
Bermuda	●	●	-	-	-
Bhutan	●	●	-	●	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	-	-	-
Bosnia and Herzegovina	○	-	-	-	-
Botswana	-	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	-	-
Brunei Darussalam	●	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Bulgaria	●	●*	-	●	-
Burkina Faso	●	-	-	-	-
Cabo Verde	●	-	-	-	-
Cambodia	●	-	-	●	-
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	-	-	-	-
Central African Republic	●	-	-	-	-
Chile	●	●	●	●*	-
China	●	●	●	○	-
Colombia	●	-	●	-	-
Comoros	-	●	-	-	-
Congo	●	-	-	-	-
Costa Rica	●	●	●	-	-
Croatia	●	●	-	○*	-
Cuba	●	●	-	-	-
Curaçao	●	-	●	-	●
Cyprus	●	●	-	-	●
Czechia	●	●	●*	●	-
Côte d'Ivoire	●	●	-	-	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-
Dominica	●	-	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Dominican Republic	●	-	●	-	-
Ecuador	●	-	●	-	-
Egypt	●	-	-	-	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	-	○
Eswatini	-	●	-	-	-
Ethiopia	○	-	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●*	-
French Polynesia	●	●	●	●	-
Gabon	●	○	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	-	-
Greece	●	●	●	●	-
Grenada	●	-	-	-	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	-	-	-	-
Guinea	●	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Guinea-Bissau	●	●	-	-	-
Guyana	-	-	●	-	-
Haiti	●	-	●	-	-
Honduras	●*	-	-	-	-
Hungary	●	○	-	○	-
Iceland	●	-	-	-	-
India	●	●	●	●	-
Indonesia	●	●	-	●	-
Iran (Islamic Republic of)	●	●	-	●	-
Iraq	●	●	-	-	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	-	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	○	○	-	-	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	-	-
Kuwait	●	-	-	●	-
Kyrgyzstan	●	●	-	-	-
Lao People's Democratic Republic	●	-	-	-	-
Latvia	●	●	●	-	○
Lebanon	●	-	-	-	-
Lesotho	-	●	-	-	-
Liberia	●	-	-	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	-	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Madagascar	-	●	-	-	-
Malawi	●	●	-	●*	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	-	-
Mauritania	●	●	-	●	-
Mauritius	○	●	-	●*	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	○	-	-	-
Montenegro	●	-	-	-	-
Montserrat	●	-	-	-	-
Morocco	●	-	-	●	-
Mozambique	-	●	-	●*	-
Myanmar	●	-	-	-	-
Namibia	-	●	-	-	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	-	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	-	-	-	●*
North Macedonia	●	●	-	-	●
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●*	-
Oman	●	-	-	-	-
Pakistan	●	●	●	●	-
Panama	●	●	●	-	●
Paraguay	●*	-	●	-	-
Peru	●	-	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	○	-	-	-	-
Romania	●	●	●	●	-
Russian Federation	●	●	-	●	-
Rwanda	●	○	-	-	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	-	-
Saint Lucia	●	-	-	-	-
Saint Martin	●	●	-	-	-
Sao Tome and Principe	●	-	-	-	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	-	-
Serbia	●	-	-	-	-
Seychelles	-	●	-	-	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	-	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	-	-	-	-
South Africa	●	●	-	●	-
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-
Suriname	●	●	●	-	-
Sweden	●	●	●	●	-
Switzerland	●	●	○	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	-	-
Togo	●	●	-	-	-
Trinidad and Tobago	●	-	●	-	-
Tunisia	●	●	-	●*	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Uganda	●	●	-	●*	-
Ukraine	●	○	-	○*	-
United Arab Emirates	●	●	●	●*	-
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-
United States of America	●	●	●	●	-
Uruguay	●	-	●	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Uzbekistan	●	●	-	○*	-
Venezuela (Bolivarian Republic of)	●	-	●	-	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Zambia	-	●	-	●	-
Zimbabwe	-	○	-	●	-

**Newly reported in this update.*

Unspecified B.1.617 reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

on for this variant was received by WHO from official sources.

ation become available.

***Variant Delta for Honduras, Iraq, Kazakhstan, Kyrgyzstan and Oman were excluded this week based on further information received.*

****Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Efforts are ongoing to differentiate these in future reports. Excludes countries, territories, and areas that have never reported the detection of a variant of concern.*

See also Annex 2: Data, table and figure notes.

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

COVID-19 Weekly Epidemiological Update

Edition 45, published 22 June 2021

In this edition:

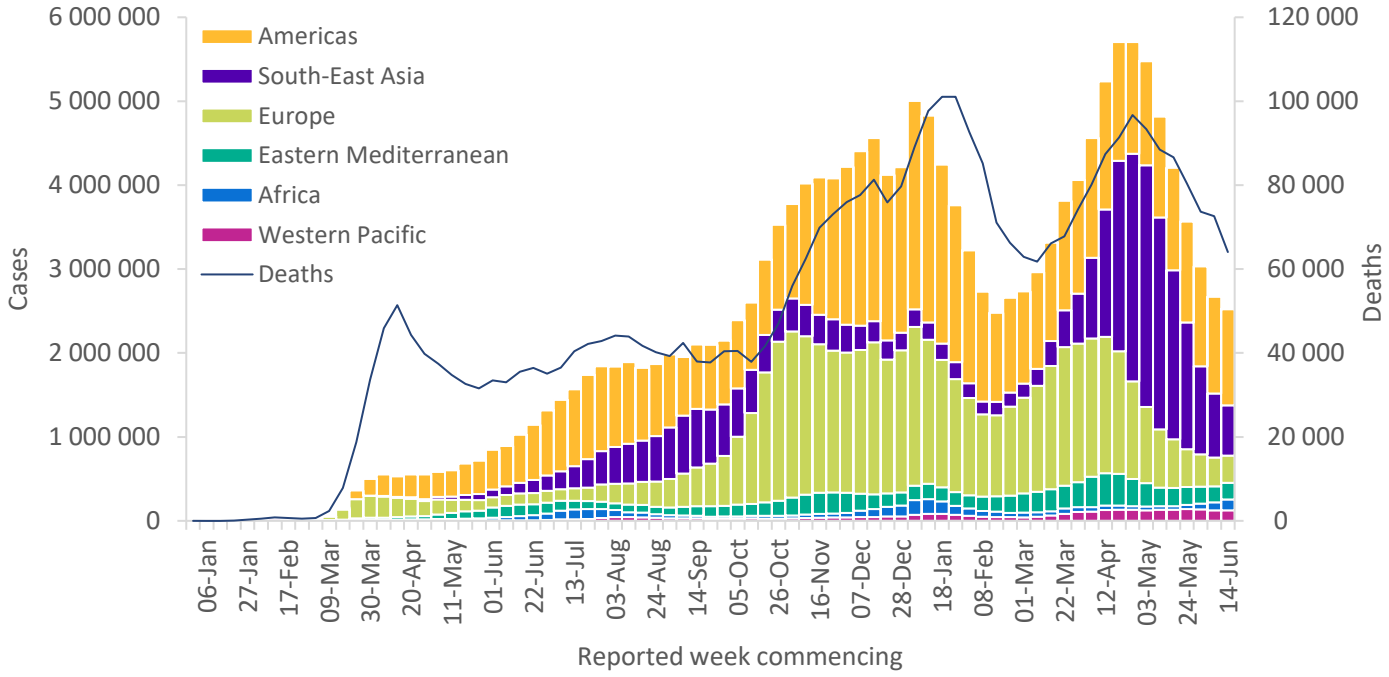
- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- Special focus: Global Consultation on SARS-CoV-2 Variants of Concern and their Impact on Public Health Interventions
- WHO regional overviews
- Key weekly updates

Global overview

Data as of 20 June 2021

Global numbers of cases and deaths continued to decrease over the past week (14-20 June 2021) with over 2.5 million new weekly cases and over 64 000 deaths, a 6% and a 12% decrease respectively, compared to the previous week (Figure 1). While the number of cases reported globally now exceeds 177 million, last week saw the lowest weekly case incidence since February 2021. This week, the Americas and Western Pacific Regions reported numbers of new weekly cases similar to the previous week, while the South-East Asia and the European Regions reported a decline in the number of new cases. The African Region recorded a marked increase in the number of weekly cases as compared to the previous week (Table 1). Globally, mortality remains high with more than 9000 deaths reported each day over the past week, however, the number of new deaths reported in the past week decreased across all Regions except for the Eastern Mediterranean and the African Regions.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 20 June 2021**



**See *Annex 2: Data, table and figure notes*

The highest numbers of new cases were reported from Brazil (505 344 new cases; 11% increase), India (441 976 new cases; 30% decrease), Colombia (193 907 new cases; 10% increase), Argentina (149 673 new cases; 16% decrease), and the Russian Federation (108 139 new cases; 31% increase).

Globally, variant Alpha has been reported in 170 countries, territories or areas (hereafter countries; seven new countries in the past week), Beta in 119 countries (four new countries), Gamma in 71 countries (three new countries) and Delta in 85 countries (six new countries).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 20 June 2021**

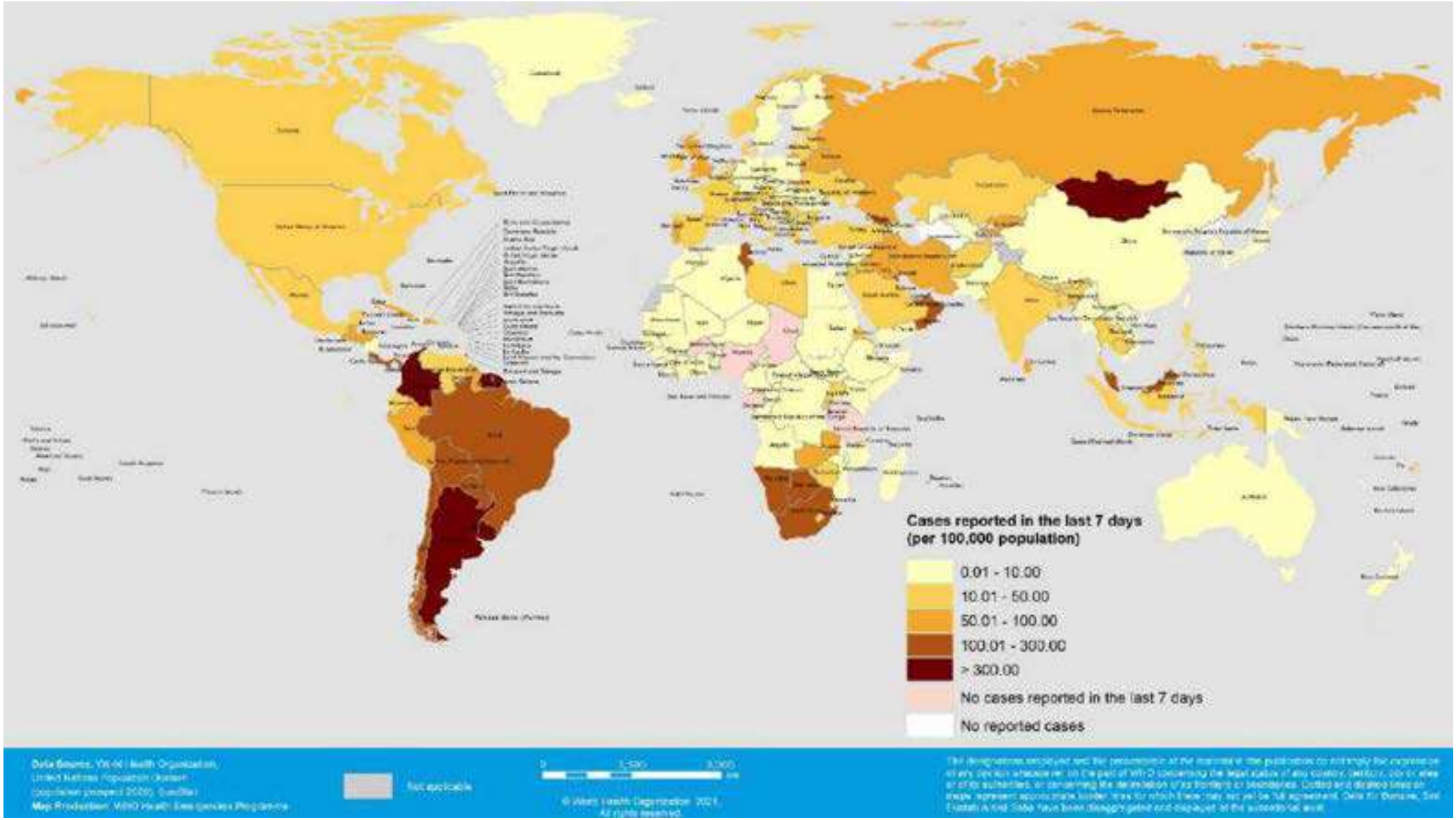
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 143 672 (45%)	0%	70 663 034 (40%)	30 748 (48%)	-4%	1 857 523 (48%)
South-East Asia	600 677 (24%)	-21%	34 032 967 (19%)	19 452 (30%)	-26%	471 290 (12%)
Europe	324 829 (13%)	-6%	55 325 145 (31%)	6 452 (10%)	-12%	1 173 618 (30%)
Eastern Mediterranean	195 464 (8%)	2%	10 666 162 (6%)	3 413 (5%)	2%	211 911 (5%)
Africa	132 078 (5%)	39%	3 791 054 (2%)	1 925 (3%)	38%	91 599 (2%)
Western Pacific	123 964 (5%)	0%	3 387 034 (2%)	2 085 (3%)	-9%	52 020 (1%)
Global	**2 520 684 (100%)**	**-6%**	**177 866 160 (100%)**	**64 075 (100%)**	**-12%**	**3 857 974 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
**See *Annex 2: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

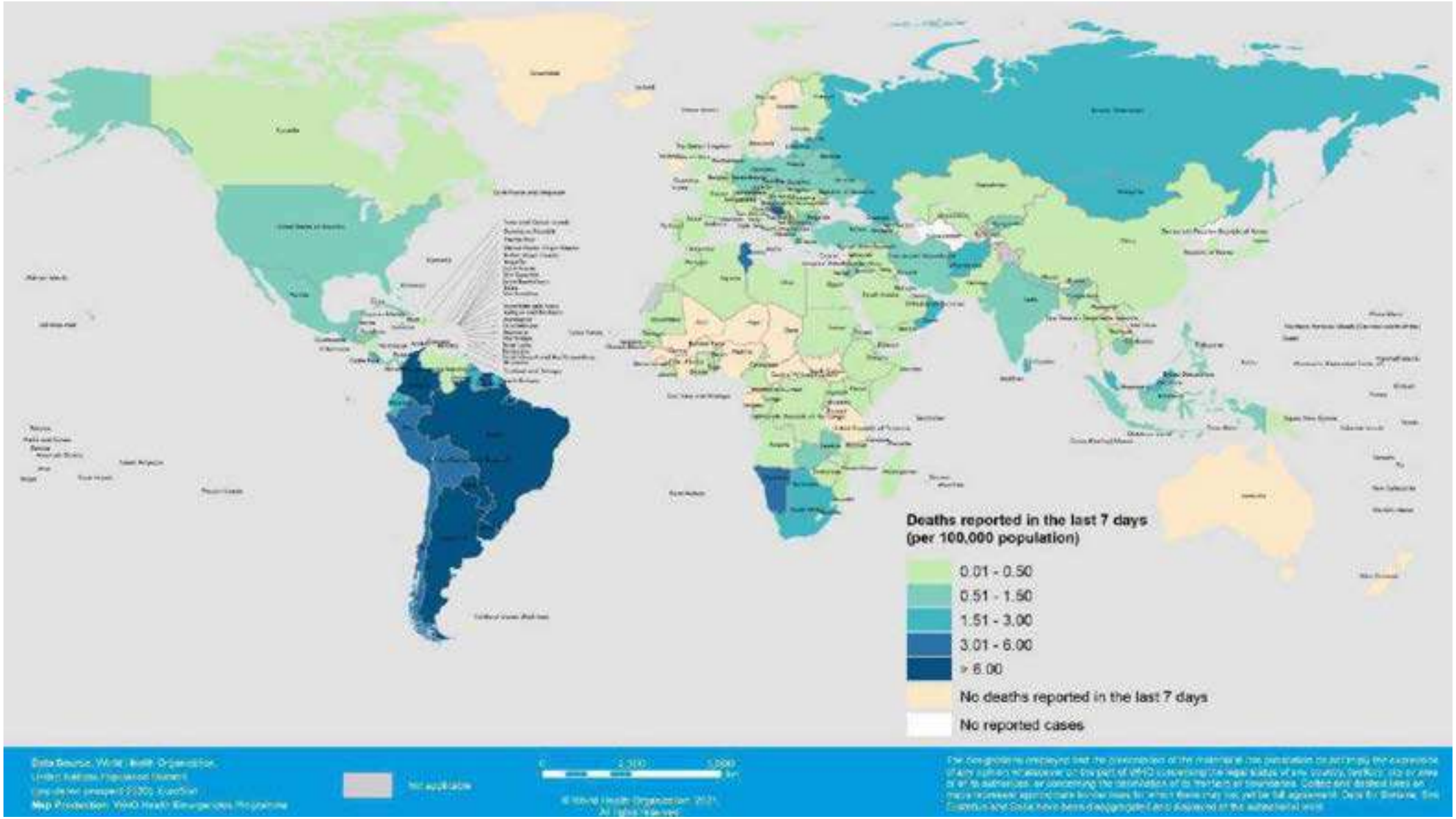
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 14 – 20 June 2021**



**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 14 – 20 June 2021**



**See *Annex 2: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact vaccine, therapeutics, diagnostics or public health and social measures (PHSM) applied by national authorities to control disease spread. Systems have been established to detect signals of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) and assess these based on the risk posed to global public health. As these risks evolve, WHO updates the list of global VOIs and VOCs (Table 2) to support setting priorities for surveillance and research, and ultimately guide response strategies. National authorities may choose to designate other variants of local interest/concern, and are encouraged to investigate and report on the impact of these variants. Here we provide updates on globally characterized VOCs and VOIs, as well as the updated countries/territories/areas reporting the detection of VOCs. No new VOCs or VOIs have been added to or removed from the list last week.

Table 2: SARS-CoV-2 Variants of Concern (VOCs) and Variants of Interest (VOIs), as of 22 June 2021

WHO label	Pango lineage	GISAID clade	Nextstrain clade	Earliest documented samples	Date of designation
Variants of Concern (VOCs):					
Alpha	B.1.1.7	GRY (formerly GR/501Y.V1)	20I (V1)	United Kingdom, Sep-2020	18-Dec-2020
Beta	B.1.351	GH/501Y.V2	20H (V2)	South Africa, May-2020	18-Dec-2020
Gamma	P.1	GR/501Y.V3	20J (V3)	Brazil, Nov-2020	11-Jan-2021
Delta	B.1.617.2	G/478K.V1	21A	India, Oct-2020	VOI: 4-Apr-2021 VOC: 11-May-2021
Variants of Interest (VOIs):					
Epsilon	B.1.427/ B.1.429	GH/452R.V1	21C	United States of America, Mar-2020	5-Mar-2021
Zeta	P.2	GR/484K.V2	20B	Brazil, Apr-2020	17-Mar-2021
Eta	B.1.525	G/484K.V3	21D	Multiple countries, Dec-2020	17-Mar-2021
Theta	P.3	GR/1092K.V1	21E	Philippines, Jan-2021	24-Mar-2021
Iota	B.1.526	GH/253G.V1	21F	United States of America, Nov-2020	24-Mar-2021
Kappa	B.1.617.1	G/452R.V3	21B	India, Oct-2020	4-Apr-2021
Lambda	C.37	GR/452Q.V1	20D	Peru, Aug-2020	14-Jun-2021

Table 3: Summary of phenotypic impacts* of Variants of Concern (VOCs)

WHO label	Alpha	Beta	Gamma	Delta
Transmissibility	Increased transmissibility and secondary attack rate[1]	Increased transmissibility[2]	Increased transmissibility[3]	Increased transmissibility and secondary attack rate[4,5,]
Disease severity	Increased risk of hospitalization[6], possible increased risk of severity and mortality[7]	Not confirmed, possible increased risk of in-hospital mortality[8,9]	Not confirmed, possible increased risk of hospitalization[10]	Not confirmed, possible increased risk of hospitalization[11]
Risk of reinfection	Neutralizing activity retained,[12] risk of reinfection remains similar[13,14]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[15–18]	Moderate reduction in neutralizing activity reported[19,20]	Reduction in neutralizing activity reported[21]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF); no impact on overall result from multiple target RT-PCR, No impact on Ag RDTs observed[22]	No impact on RT-PCR or Ag RDTs observed[16]	None reported to date	None reported to date
Impacts on vaccine efficacy/effectiveness	Protection retained against disease • Severe disease: No/minimal loss: Pfizer BioNTech-Comirnaty[23–28] • Symptomatic Disease: No/minimal loss: AstraZeneca- Vaxzevria, Novavax-Covavax, PfizerBioNTech-Comirnaty[24,25,28–31] • Infection: No/minimal loss: PfizerBioNTech-Comirnaty[32] • Asymptomatic infection: No/minimal loss: Pfizer BioNTech-Comirnaty[24,33]; inconclusive/Moderate-substantial loss, limited sample size:AstraZeneca-Vaxzevria[30]	Reduced protection against disease; limited evidence • Severe disease: No/minimal loss: Janssen Ad26.COV 2.5, Pfizer BioNTech-Comirnaty[25,34] • Mild-moderate disease: No/minimal loss: Janssen-Ad26. COV 2.5[34]; Moderate loss: Novavax-Covavax[35]; Inconclusive/substantial loss, limited sample size: AstraZeneca-Vaxzevria[36] • Infection: Moderate loss: Pfizer BioNTech-Comirnaty[25] • Asymptomatic infection: no evidence	Protection likely against disease; very limited evidence on three vaccines • Symptomatic disease: No/minimal loss: Sinovac-CoronaVac, [37,38]; no/minimal to modest loss: *single dose* of Moderna- mRNA-1273 or PfizerBioNTech-Comirnaty[39]* • Infection: No/minimal loss: Sinovac-CoronaVac[38]	Protection retained against severe disease; possible reduced protection against disease and infection; limited evidence on only two vaccines • Severe disease: No/minimal loss: PfizerBioNTech-Comirnaty, AstraZeneca-Vaxzevria[31,40] • Symptomatic disease: No/minimal to modest loss: PfizerBioNTech-Comirnaty[41,42]; no/minimal to moderate loss: AstraZeneca-Vaxzevria[41,42] • Infection: No/minimal to moderate loss: AstraZeneca-Vaxzevria, PfizerBioNTech-Comirnaty[42];
Impacts on neutralization (full vaccination) by vaccine	• No/minimal loss: Bharat-Covaxin, Gamaleya-Sputnik V, Moderna- mRNA-1273, Novavax-Covavax, Pfizer BioNTech-Comirnaty, BeijingCNBG-BBIBP-CorV, Sinovac-CoronaVac[18,41,43–67] • Minimal/moderate loss: AstraZeneca-Vaxzevria[30,57]	• Minimal/modest loss: Bharat-Covaxin, Beijing CNBG-BBIBP-CorV, Sinovac-CoronaVac, Anhui ZL - Recombinant[68–71] • Minimal to substantial loss: Moderna-mRNA-1273, Pfizer BioNTech-Comirnaty[18,44,48,50–52,54,56–58,64,66,67,72–78] • Moderate to substantial loss: AstraZeneca-Vaxzevria, Gamaleya- Sputnik V, Janssen-Ad26.COV 2.5, Novavax-Covavax[50,59,75,75,79–81]	• No/minimal loss: AstraZeneca-Vaxzevria, Sinovac-CoronaVac [57,82] • Minimal to moderate loss: Moderna-mRNA-1273, Pfizer BioNTech-Comirnaty[18,44,45,54,56,57,63,66,83,84] • Modest loss: Janssen-Ad26.COV 2.5[81]	• No/minimal loss: Bharat-Covaxin[71] • No/Minimal to moderate loss: Pfizer BioNTech Comirnaty, Bharat-Covaxin[64,85,86] • Substantial loss: *single dose* of AstraZeneca-Vaxzevria[85]

**Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.*

Phenotypic characteristics

Available evidence on phenotypic impacts of VOCs and vaccine performance against VOCs are summarised in Table 3, as well as in previous editions of the WEU.

Since the last detailed update on 8 June, new evidence has been published on the phenotypic characteristics of the Delta variant. A study from Singapore showed that infection with Delta variant was associated with higher odds of oxygen requirement, intensive care unit (ICU) admission, or death [adjusted odds ratio (aOR) 4·90, 95% CI 1.43-30.78]. Additionally, the aOR for pneumonia was 1.88 times higher (95% CI 0·95-3·76) for those infected with Delta compared to infection with non-VOC SARS-CoV-2 lineages. Additionally, the Delta variant was associated with significantly lower PCR cycle threshold (Ct) values - the lower the Ct level the greater the amount of viral RNA in a sample. Findings from this study also showed that there was a longer duration of sustained low Ct values (≤30) in Delta (median duration of 18 days) compared to non-VOC lineages of SARS-CoV-2 (13 days).[87]

A study in Japan estimating the relative instantaneous reproductive number (a measure of transmission at a specific point in time) showed that the Delta variant was associated with greater transmissibility when compared to the Alpha variant. When compared with the variants circulating in Japan before December 2020, the relative instantaneous reproduction number for Alpha was estimated to be at 1.56 and for Delta 1.78. Overall, this study showed Delta was associated with 1.23 times higher transmissibility than Alpha.[88] This is consistent with the summary of Rt of Alpha, Beta, Gamma and Delta variants published by WHO in previous issues of the Weekly Epidemiological Update on COVID-19 and in Eurosurveillance this past week[89].

Findings from a recently published retrospective cohort analysis involving nearly 840 000 participants with laboratory confirmed SARS-CoV-2 in England between 23 November 2020 and 31 January 2021 suggested that the Alpha variant, as compared to non-VOC SARS CoV-2 lineages, was associated with an increased risk of hospitalization between one and fourteen days after the first positive SARS-CoV-2 test (adjusted hazard ratio of hospital admission 1.52, 95% CI 1.47 - 1.57). When looking at these results by age, they showed a higher risk of hospitalization among those aged ≥30 years as compared to younger participants.[90] Another study comparing the secondary attack rates in households among Alpha index cases versus non-VOC index cases in Ontario, Canada found that the secondary attack rate for Alpha index cases was 1.31 times (31%) higher than non-VOC index cases (RR=1.31, 95%CI 1.14-1.49). When these analyses were further grouped into Alpha and non-Alpha index cases, there was evidence to suggest increased transmission among both asymptomatic (RR=1.91, 95% CI 0.96-3.80) and pre-symptomatic (RR=3.41, 95%CI 1.13-10.26) index cases.[1]

A study conducted to examine diagnostic accuracy of three SARS-CoV-2 antigen detecting rapid tests (Ag-RDT) in Germany between 20 January to 15 April 2021 showed comparable sensitivities in the performance of Ag-RDTs for Alpha, Beta and wild-type variants, irrespective of the infecting variant.[91] This finding is consistent with a previously published evaluation by Public Health England which found no major changes in the diagnostic accuracy of six widely available Ag-RDTs for Alpha, despite a limited number of amino acid changes from the original viral sequence in the target antigen for most commercially available Ag-RDTs.[22]

A recent study using a transmission model based on clinical and epidemiological data from almost 1000 individuals from South Africa and Switzerland, estimated that the Alpha variant was associated with either

a 37% (95% compatibility interval, CI: 25–63%) increase in transmissibility or a 51% (95% CI: 32-80%) increase of the infectious duration or a combination of the two mechanisms. It was also estimated that the Beta variant was associated with a 23% (95% CI: 10-37%) increase in transmissibility or a 38% (95% CI: 15-78%) increase of the infectious duration. The authors concluded that Beta might be expected to outgrow Alpha in regions where the level of naturally acquired immunity against previously circulating variants exceeds 20% to 40%.[92] The study also measured viral load in 950 individuals and found that infections with variant Alpha exhibited a higher viral load and longer viral shedding compared to non-VOCs. Findings from another study showed that the receptor binding domain (RBD) of the Alpha and Beta variants bound ACE2 with 1.98- and 4.62 times greater affinity than non-VOCs, respectively. This enhanced affinity likely mediates increased infectivity by lowering the effective concentration of virions required for cell entry.[93]

In a rapid scoping review examining the impacts of VOCs on health systems, authors of a recently published study suggested that a combination of public health and social measures (e.g., masking, physical distancing, lockdowns, testing) should be implemented alongside a vaccine strategy to improve population and health system outcomes.[94]

VOC impacts on vaccines

Since the 8 June update, two studies have provided evidence of the effectiveness of Pfizer BioNTech-Comirnaty and AstraZeneca-Vaxzevria vaccines against the Delta variant. The first is a follow-up to a United Kingdom study published last month by Lopez Bernal et al., which reported on vaccine effectiveness (VE) of full courses of both Pfizer BioNTech-Comirnaty and AstraZeneca-Vaxzevria vaccines against symptomatic disease due to the Delta variant; VE against Delta, while slightly reduced, was maintained for both vaccines (88% for Pfizer BioNTech-Comirnaty and 67% for AstraZeneca-Vaxzevria).[41] In the follow-up study, Stowe et al. report on the effectiveness of these vaccines against severe disease (hospitalization) due to Delta among persons ≥ 16 years in the United Kingdom. The authors combined odds ratios for symptomatic COVID-19 disease from a test-negative case-control analysis with hazard ratios for hospitalization among symptomatic cases to estimate overall VE against hospitalization. VE estimates against hospitalization due to Delta and Alpha variants ≥ 14 days post second dose was estimated to be 96% (95% CI: 86-89%) and 95% (95% CI: 78-99%) respectively, for Pfizer BioNTech-Comirnaty and 92% (85% CI: 75-97%) and 86% (95% CI: 53-96%) respectively, for AstraZeneca-Vaxzevria. Single dose effectiveness against hospitalization ≥ 21 days after immunization remained high for Pfizer BioNTech-Comirnaty at 94% (95% CI: 46-99%) against Delta and 83% (95% CI: 62-93%) against Alpha. Effectiveness of one dose of AstraZeneca-Vaxzevria against hospitalization was similar for Delta and Alpha variants, but reduced relative to two doses at 71% (95% CI: 51-83%) and 76% (95% CI: 61-85%), respectively.[40]

A second study from Scotland by Sheikh et al. applied a test negative case-control design to a large COVID-19 surveillance platform and found that two doses of Pfizer BioNTech-Comirnaty were 83% (95% CI: 78-87) and 79% (95% CI: 75-82%) effective against symptomatic disease and infection due to Delta, respectively, ≥ 14 days after receipt of second dose in persons 15 years and older. These estimates were somewhat reduced compared to VE estimates against Alpha: 92% (95% CI: 88-94%) and 92% (90-93%) for symptomatic disease and infection, respectively. The study also showed reduced effectiveness of two doses of AstraZeneca-Vaxzevria against Delta compared to Alpha with VE estimates of 61% (95% CI: 51-70%) and 60% (95% CI: 53-66%) against symptomatic disease and infection ≥ 14 days after second dose,

respectively, compared to corresponding estimates of 81% (95% CI: 72-87%) and 73% (95% CI: 66-78%) against Alpha. Single dose effectiveness against Delta was similar to that of Alpha with low VE for both vaccines and for both symptomatic disease and infection ≥28 days after immunization with VE estimates ranging from 18% to 39%. In a separate cohort analysis, single dose effectiveness against hospitalization ≥28 days after immunization among SARS-CoV-2 positive individuals was estimated for Pfizer BioNTech-Comirnaty and AstraZeneca-Vaxzevria vaccines combined; VE was estimated to be 62% (95% CI: 42-76%) and 72% (95% CI: 57-82%) against Delta and Alpha, respectively, demonstrating lower protection against Delta compared to Alpha (though confidence intervals overlap, indicating no statistical significance).[42]

Together, these studies suggest moderately reduced VE at preventing symptomatic disease and infection due to the Delta variant as compared to Alpha. While the Scotland study suggests there could be reduced effectiveness of vaccines against hospitalization due to Delta as compared to Alpha, confidence levels overlap and VE for individual vaccines was not estimated. No such reduction in VE was observed for hospitalization in the United Kingdom study for either Pfizer BioNTech-Comirnaty or AstraZeneca-Vaxzevria vaccines. The studies also provide further evidence of the importance of two doses of both Pfizer BioNTech-Comirnaty and AstraZeneca-Vaxzevria in preventing hospitalization, symptomatic disease and infection due to both Delta and Alpha variants.

A third study by Skowronski et al. evaluated the effectiveness of a single dose of Pfizer BioNTech-Comirnaty or Moderna-mRNA-1273 against infection with SARS-CoV-2 Alpha and Gamma variants among older adults in Canada using a test-negative case-control design; 85% of participants had received Pfizer BioNTech-Comirnaty and 15% had received Moderna-mRNA-1273 vaccine. VE against Alpha and Gamma variants ≥21 days after the first dose were 67% (95% CI: 57-75%) and 61% (95% CI: 45-72%), respectively, compared to 72% (95% CI: 58-81) against non-VOC SARS-CoV-2 viruses.[39] While the VE point estimate against Gamma was somewhat lower compared to Alpha and non-VOCs, all confidence intervals were overlapping, indicating no statistical significance.

Geographic distribution

As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing and sharing of sequences and supporting meta-data, the number of countries/areas/territories (hereafter countries) reporting VOCs has continued to increase (Figure 4, Annex 1). In the past two weeks, Alpha continued to be reported in new countries, including smaller island nations in the Americas and Southeast Asia Regions. Delta, now reported in 85 countries globally, continues to be reported in new countries across all WHO Regions, 11 of which were newly reported in the past two weeks. This distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

WHO recommendations

Virus evolution continues to be expected, and the more SARS-CoV-2 circulates, the more opportunities it has to evolve. Reducing transmission through established and proven disease control methods such as those outlined in the COVID-19 Strategic Preparedness and Response Plan, as well as avoiding introductions into animal populations, are fundamental to and crucial aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critical to curb the spread of SARS-CoV-2, including all variants that evolve.

Evidence from multiple countries with extensive transmission of VOCs has indicated that PHSM, including infection prevention and control (IPC) measures in health facilities, have been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities. Authorities are also encouraged to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and to detect unusual events.

Additional resources

- Tracking SARS-CoV-2 variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19
- COVID-19 Situation Reports from WHO Regional Offices and partners: AFRO, AMRO/PAHO, EMRO, EURO/ECDC, SEARO, WPRO

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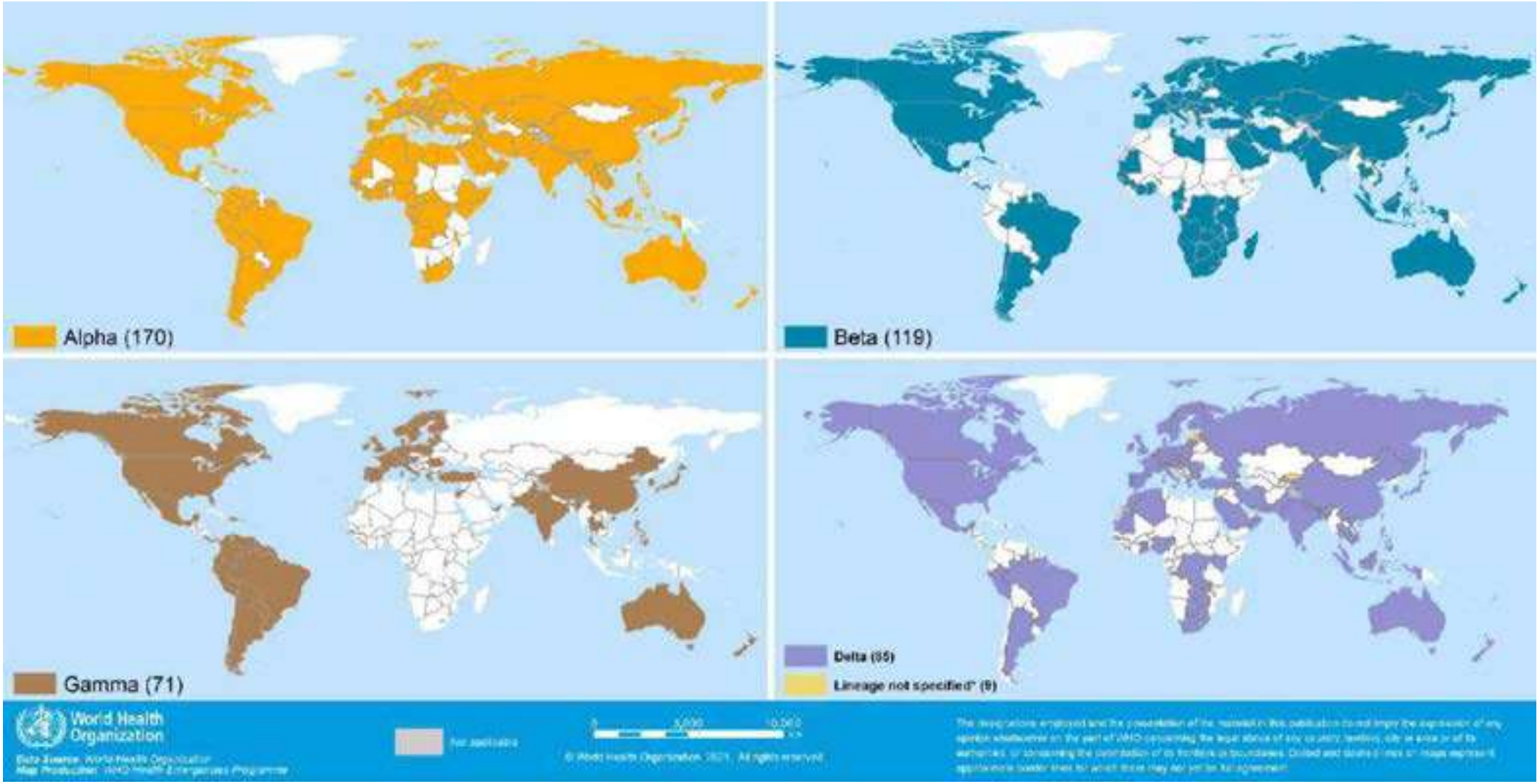
Figure 4. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 22 June 2021**



**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details.*

Special focus: Global Consultation on SARS-CoV-2 Variants of Concern and their Impact on Public Health Interventions

On 10 June 2021, WHO convened a second Global Consultation on SARS-CoV-2 Variants of Concern (VOCs) and their Impact on Public Health Interventions, as part of its efforts to coordinate the global response to SARS-CoV-2. Global stakeholders came together to present the existing evidence on VOCs, review information needs and decision-making processes, and outline potential decision-making processes for modifying COVID-19 vaccine composition.

According to experts, continued SARS-CoV-2 evolution is expected and requires strengthening epidemiological and genomic surveillance. In response, the WHO SARS-CoV-2 Virus Evolution Working Group (VEWG), which is in the process of being formalized as the Technical Advisory Group on SARS-CoV-2 Virus Evolution (TAG-VE), was established to monitor new mutations and variants, assess their potential public health impact, and rapidly identify and coordinate the filling of research gaps related to transmissibility, severity and neutralization of specific mutations and variants. Available evidence on variants are shared, discussed and used to characterize as VOCs or Variants of Interest (VOIs) by WHO in consultation with this group. The four current VOCs being monitored closely – Alpha, Beta, Gamma and Delta - are widespread (Table 2) and have been detection in all WHO regions. The Delta variant is significantly more transmissible than Alpha variant, and is expected to become a dominant lineage if current trends continue.[89]

In addition to increased transmissibility, SARS-CoV-2 evolution may result in changes that allow for increased disease severity, escape from immune responses, decreased effectiveness of antiviral treatment or infection in a new animal host. While current VOCs show antigenic distance from vaccine immunogens (the part of the virus gene that the vaccines targets), the current vaccines are still effective at protecting against severe disease and hospitalization. Experience from multiple countries with extensive transmission of the four VOCs has demonstrated that proven public health and social measures (PHSM), including infection prevention and control (IPC) measures in health facilities, remain effective in controlling VOCs and VOIs.

As several vaccines are in use and under development, coordinated decision-making on vaccine modification and administration is required. A newly-formed Technical Advisory Group on vaccine composition (TAG-CO-VAC) will review available evidence and provide recommendations on vaccine modifications if needed; specific considerations include appropriate antigen selection for broad protection, using broadly protective variant-specific vaccines in non-immune individuals, and balanced timing of booster vaccinations to ensure continued efficacy while avoiding extra vaccination if previous vaccination is still protective. Preliminary results from an ongoing systematic review of randomized studies suggest that current COVID-19 vaccines provide moderate protection against current VOCs, though the results should be interpreted with caution due to low-powered analyses with incomplete data. Pre-clinical and clinical assessments suggest that protection against SARS-CoV-2 variants can be expected among the diverse array of vaccines both currently available and in development. Moving forward, evidence for vaccine modification decision-making should include stronger epidemiological and genomic surveillance data, especially from low- and middle-income countries, information on breakthrough infections (infections of individuals who have been fully vaccinated for ≥14 days), and a better understanding of protective immunity at the individual and population levels in the context of circulating variants. Importantly, a clearing house documenting the most current evidence on variants would enable informed decision-making.

From the perspective of vaccine regulators and 11 vaccine developers that shared their plans during the consultation, there is ongoing work to assess the need to boost current vaccines. If/when this becomes necessary, it will be important that the regulatory community continues to work collaboratively. Moreover, whichever strategy is used (a booster dose of prototype vaccines or a variant-specific vaccine), should induce broad protection. Given the differential prevalence of variants, vaccine availability and vaccination rates, implementation of a 'mix and match' vaccination approach may be necessary. Country and global-level decision-makers echoed the call for better integrated genomic and epidemiological surveillance, including at the sub-national level, and the human resources to carry out the collection and rapid sharing of data and

analyses on variants. More complete evidence on variants and their impact on public health interventions is required for evidence-based recommendations, which could include modelling-based analyses. Additionally, the rapid sharing of data will support vaccine developers to develop new variant vaccines, if this becomes necessary.

In summary, this consultation provided a global forum to share the latest information and evidence regarding SARS-CoV-2 variants and their impact on public health interventions. The key messages from this consultation are:

- The public health interventions in place for COVID-19, including public health and social measures and vaccines, are still effective against the current VOCs (Alpha, Beta, Gamma and Delta variants);
- Variants will continue to emerge over time, and this is expected. While not all will be of concern, continuous monitoring and assessment is necessary. WHO's TAG-VE will continue to advise WHO on the characterization of VOIs and VOCs. Because more variants will likely emerge, there is also a critical need to continue assessing the available evidence on impacts on therapeutics, diagnostics and the impact on current and future COVID-19 vaccines. WHO is establishing the TAG-CO-VAC to interpret available evidence and provide recommendations for adapting COVID-19 vaccine composition, if needed;
- WHO remains committed to coordinating the response against SARS-CoV-2 variants by supporting its Member States and collaborating with stakeholders.

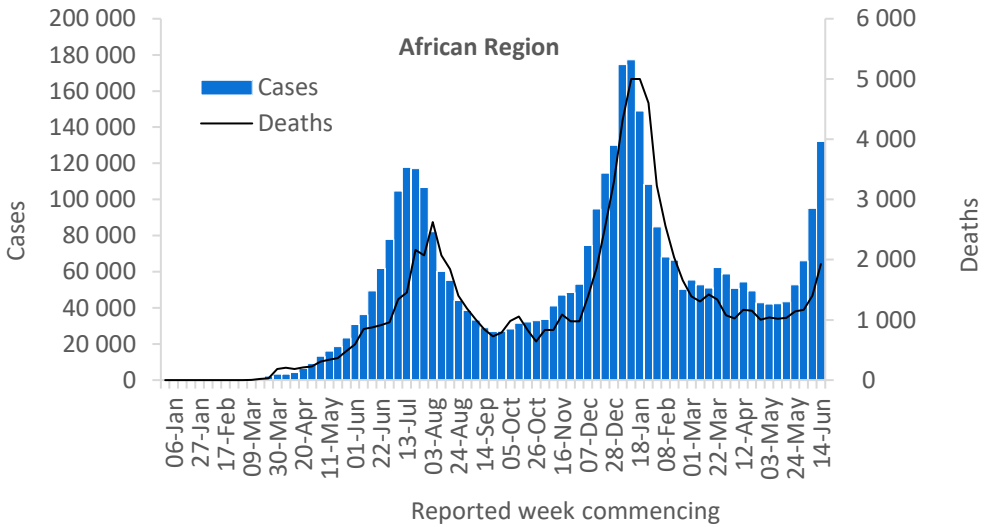
The recording from the consultation can be found here (passcode: m#t9b!Tl).

WHO regional overviews - Epidemiological week 14-20 June 2021

African Region

The African Region reported over 132 000 new cases and over 1900 new deaths, a 39% and a 38% increase respectively compared to the previous week, the highest percentage increase reported globally. The region reported a marked increase in weekly case incidence for the past month, with the largest increases in countries in the Southern and Eastern parts of Africa. The highest numbers of new cases were reported from South Africa (70 739 new cases; 119.3 new cases per 100 000 population; a 48% increase), Zambia (16 641 new cases; 90.5 new cases per 100 000; a 54% increase), and Uganda (9926 new cases; 21.7 new cases per 100 000; a 16% increase).

The highest numbers of new deaths were reported from South Africa (937 new deaths; 1.6 new deaths per 100 000 population; a 29% increase), Zambia (230 new deaths; 1.3 new deaths per 100 000; a 271% increase), and Uganda (203 new deaths; 0.4 new deaths per 100 000; a 314% increase).

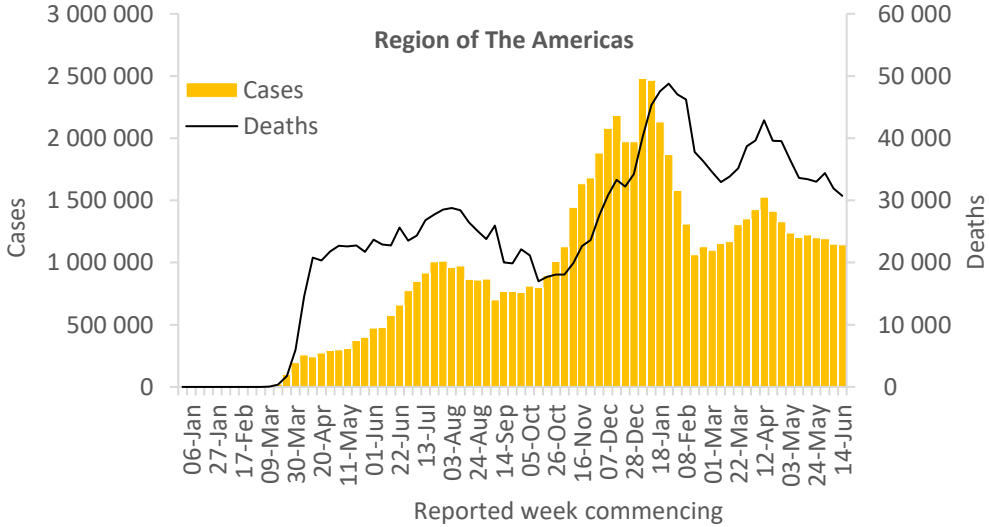


Updates from African Region

Region of the Americas

The Region of the Americas reported over 1.1 million new cases and over 30 000 new deaths, a similar number of cases and a 4% decrease in deaths compared to the previous week. Despite this, high levels of transmission and mortality are still being recorded in many countries in South and Central America as well as in the Caribbean. The highest numbers of new cases were reported from Brazil (505 344 new cases; 237.7 new cases per 100 000; an 11% increase), Colombia (193 907 new cases; 381.1 new cases per 100 000; a 10% increase), and Argentina (149 673 new cases; 331.2 new cases per 100 000; a 16% decrease).

The highest numbers of new deaths were reported from Brazil (14 264 new deaths; 6.7 new deaths per 100 000; a 7% increase), Colombia (4131 new deaths; 8.1 new deaths per 100 000; an 11% increase), and Argentina (3619 new deaths; 8.0 new deaths per 100 000; a 14% decrease).

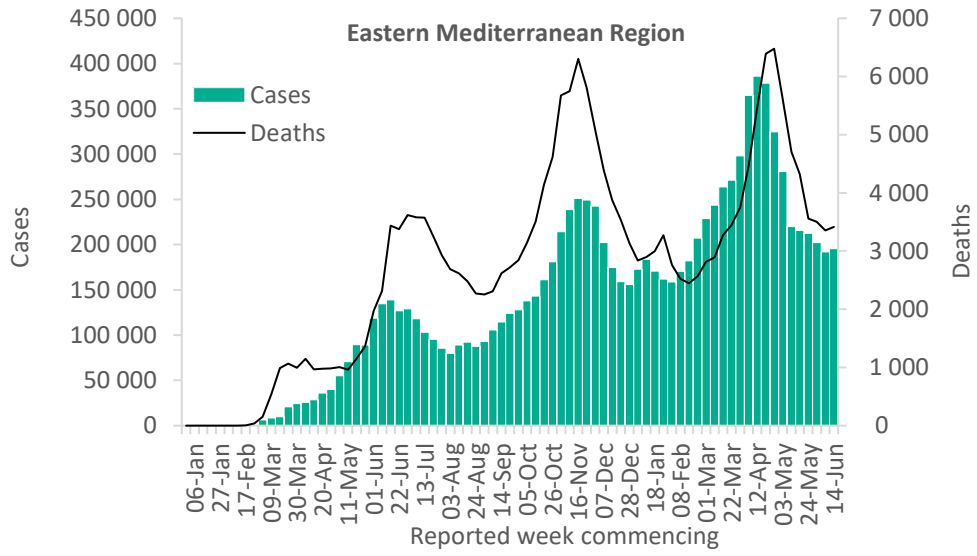


Updates from Region of the Americas

Eastern Mediterranean Region

Following two months of decline in the weekly case incidence, the Eastern Mediterranean Region reported over 195 000 new cases and over 3400 new deaths, similar numbers as compared to the previous week. Nearly half of countries across the region are starting to report increasing case and death incidence, including Afghanistan, Kuwait, Somalia and Syrian Arab Republic. The highest numbers of new cases were reported from the Islamic Republic of Iran (66 452 new cases; 79.1 new cases per 100 000; an 11% increase), Iraq (32 614 new cases; 81.1 new cases per 100 000; a 12% increase), and the United Arab Emirates (14 162 new cases; 143.2 new cases per 100 000; a 4% decrease).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (943 new deaths; 1.1 new deaths per 100 000; a 3% decrease), Afghanistan (595 new deaths; 1.5 new deaths per 100 000; a 56% increase), and Tunisia (524 new deaths; 4.4 new deaths per 100 000; a 7% increase).

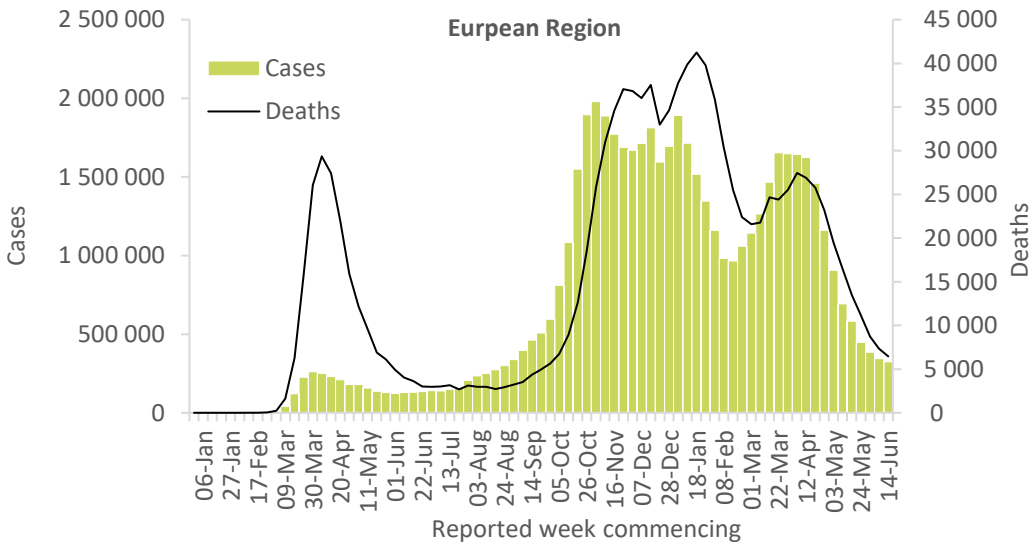


Updates from [Eastern Mediterranean Region]

European Region

The European Region reported over 324 000 new cases and over 6400 new deaths, a 6% and a 12% decrease respectively compared to the previous week. While most countries across the Region continue to see decreasing or stabilizing trends, some countries, including Greenland, Israel, Kyrgyzstan, Portugal, the Russian Federation and Slovakia have reported increases in the number of cases and deaths this week compared to the previous week. The highest numbers of new cases were reported from the Russian Federation (108 139 new cases; 74.1 new cases per 100 000; a 31% increase), the United Kingdom (62 474 new cases; 92.0 new cases per 100 000; a 33% increase), and Turkey (39 773 new cases; 47.2 new cases per 100 000; a 7% decrease).

The highest numbers of new deaths were reported from Russian Federation (2931 new deaths; 2.0 new deaths per 100 000; an 11% increase), Germany (551 new deaths; 0.7 new deaths per 100 000; a 10% decrease), and Turkey (454 new deaths; 0.5 new deaths per 100 000; a 24% decrease).



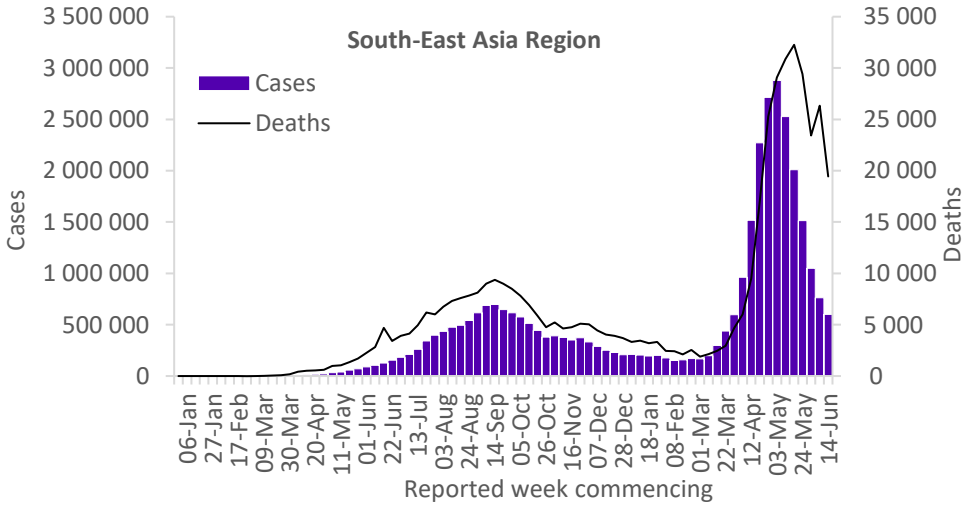
Updates from [European Region]

South-East Asia Region

The South-East Asia Region reported over 600 000 new cases and over 19 000 new deaths, a 21% and a 26% decrease respectively compared to the previous week. Decreasing trends in weekly case and death incidence in the Region are predominantly associated with decreases reported in India. Other countries, including Myanmar, Bangladesh and Indonesia, reported increasing case and death incidence this week when compared to the previous week.

The highest numbers of new cases were reported from India (441 976 new cases; 32.0 new cases per 100 000; a 30% decrease), Indonesia (78 551 new cases; 28.7 new cases per 100 000; a 42% increase), and Bangladesh (24 746 new cases; 15.0 new cases per 100 000; a 55% increase).

The highest numbers of new deaths were reported from India (16 329 new deaths; 1.2 new deaths per 100 000; a 31% decrease), Indonesia (1783 new deaths; 0.7 new deaths per 100 000; a 41% increase), and Bangladesh (430 new deaths; 0.3 new deaths per 100 000; a 54% increase).



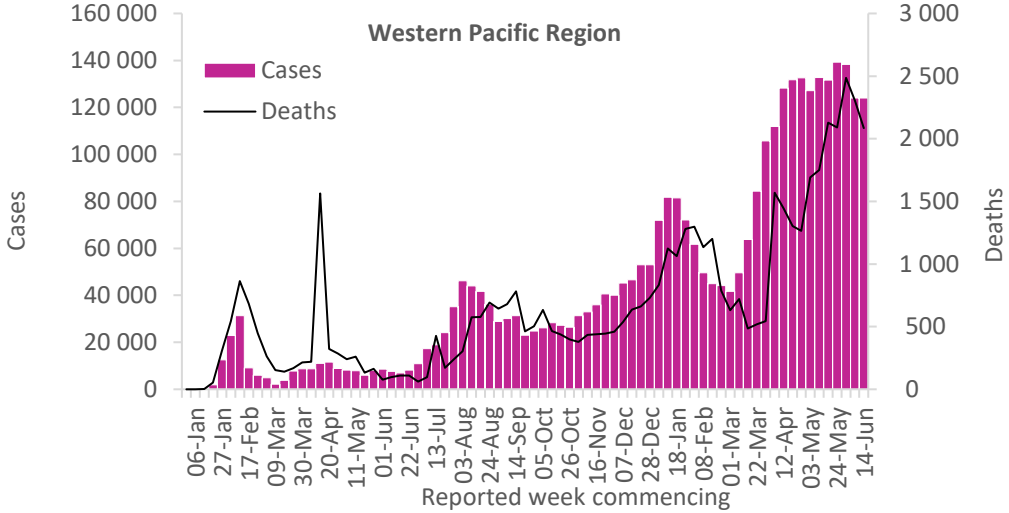
Updates from South-East Asia Region

Western Pacific Region

The Western Pacific Region reported just under 124 000 new cases, a similar number to the previous week, and just over 2000 new deaths, a 9% increase compared to the previous week. While the Region reported a decreasing trend in the last couple of weeks, some countries, including Fiji, Mongolia and Singapore recorded increases in the numbers of cases this week compared to the previous week.

The highest numbers of new cases were reported from the Philippines (44 875 new cases; 41.0 new cases per 100 000; a 3% decrease), Malaysia (38 911 new cases; 120.2 new cases per 100 000; a 7% decrease), and Mongolia (17 255 new cases; 526.3 new cases per 100 000; a 74% increase).

The highest numbers of new deaths were reported from the Philippines (886 new deaths; 0.8 new deaths per 100 000; a 4% decrease), Malaysia (504 new deaths; 1.6 new deaths per 100 000; a 9% decrease), and Japan (367 new deaths; 0.3 new deaths per 100 000; a 28% decrease).



Updates from Western Pacific Region

Key weekly updates

WHO Director-General's key messages

- In his opening remarks at the media briefing on COVID-19 – 21 June 2021, the Director-General highlighted how the COVID-19 pandemic has shown that relying on a few companies to supply global public goods is limiting, and dangerous. To boost manufacturing, WHO has continued to call for the sharing of know-how, technology and licenses, and the waiving of intellectual property rights.
- He announced that WHO is in discussions with a consortium of companies and institutions to establish a technology transfer hub in South Africa for COVID-19 mRNA vaccines. Tech-transfer hubs are training facilities where manufacturers from low- and lower-middle income countries can receive training in how to produce certain vaccines, and the relevant licenses to do so.
- In his opening remarks at World Local Production Forum: Enhancing access to medicines and other health technologies - 21 June 2021, the Director-General emphasized that WHO is fully committed to supporting a landmark resolution, which was adopted by the World Health Assembly just a few weeks ago and co-sponsored by over 100 countries, on strengthening local production of medicines and other health technologies to improve access – specifically to strengthen production capacity where it exists, and to build it where it is lacking.

Updates and publications

- Considerations for implementing and adjusting public health and social measures in the context of COVID-19 – 14 June 2021
- Interim recommendations for use of the Moderna mRNA-1273 vaccine against COVID-19 – Interim guidance – 15 June 2021 (update)
- Interim recommendations for the use of the Janssen Ad26.COV2.S (COVID-19) vaccine – Interim guidance – 15 June 2021 (update)
- Interim recommendations for use of the Pfizer–BioNTech COVID-19 vaccine, BNT162b2, under Emergency Use Listing – Interim guidance – 15 June 2021 (update)
- IPA-UNICEF Scientific Brief: Do no harm – Maternal, Newborn and Infant Care during COVID-19
- A family toolbox for managing health and happiness during COVID-19
- Managing family risk: A facilitator's toolbox for empowering families to manage risks during COVID-19
- Hypertension and COVID-19
- WHO carries on supporting the COVID-19 response in countries around the world
- Preparing and responding to COVID-19 surges: Communication and engagement resources

Annex

COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 22 June 2021**

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Afghanistan	●	-	-	-	-
Albania	●	-	-	-	-
Algeria	●	-	-	●	-
Angola	●	●	-	-	-
Argentina	●	●	●	●*	-
Armenia	○	-	-	-	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	-	-
Bahrain	●	●	-	●	-
Bangladesh	●	●	-	●	-
Barbados	●	-	●*	●*	-
Belarus	●	-	-	-	-
Belgium	●	●	●	●	-
Belize	●	-	-	-	-
Bermuda	●*	●*	-	-	-
Bhutan	●*	●*	-	●*	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	-	-	-
Bosnia and Herzegovina	○	-	-	-	-
Botswana	-	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	-	-
Brunei Darussalam	●	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Bulgaria	●	-	-	●	-
Burkina Faso	●	-	-	-	-
Cabo Verde	●	-	-	-	-
Cambodia	●	-	-	●	-
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	-	-	-	-
Central African Republic	●	-	-	-	-
Chile	●	●	●	-	-
China	●	●	●	○	-
Colombia	●	-	●	-	-
Comoros	●	●	-	-	-
Congo	●	-	-	-	-
Costa Rica	●	●	●	-	-
Croatia	●	●	-	-	○
Cuba	●	●	-	-	-
Curaçao	●	-	●	-	●
Cyprus	●	●	-	-	●
Czechia	●	●	-	●	-
Côte d'Ivoire	●	●	-	-	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●*	●*	-	-	-
Dominica	●	-	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Dominican Republic	●	-	●	-	-
Ecuador	●	-	●	-	-
Egypt	●	-	-	-	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	-	○
Eswatini	-	●	-	-	-
Ethiopia	○	-	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	-	-
French Polynesia	●	●*	●	●*	-
Gabon	●	○	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	-	-
Greece	●	●	●	●	-
Grenada	●	-	-	-	-
Guadeloupe	●	●	●	●*	-
Guam	●	-	●*	●	-
Guatemala	●*	-	-	-	-
Guinea	●	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Guinea-Bissau	●	●	-	-	-
Guyana	-	-	●	-	-
Haiti	●	-	●	-	-
Hungary	●	○	-	○*	-
Iceland	●	-	-	-	-
India	●	●	●	●	-
Indonesia	●	●	-	●	-
Iran (Islamic Republic of)	●	●	-	●	-
Iraq	●	●	-	-	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	-	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	○	○	-	-	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	-	-
Kuwait	●	-	-	●	-
Kyrgyzstan	●	●	-	-	●
Lao People's Democratic Republic	●	-	-	-	-
Latvia	●	●	●	-	○
Lebanon	●	-	-	-	-
Lesotho	-	●	-	-	-
Liberia	●	-	-	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	-	-
Lithuania	●	●	●	○*	-
Luxembourg	●	●	●	●	-
Madagascar	-	●	-	-	-
Malawi	●	●	-	-	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	-	-
Mauritania	●	●	-	●	-
Mauritius	○	●	-	-	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	○	-	-	-
Montenegro	●	-	-	-	-
Montserrat	●*	-	-	-	-
Morocco	●	-	-	●	-
Mozambique	-	●	-	-	-
Myanmar	●*	-	-	-	-
Namibia	-	●	-	-	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	-	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	-	-	●	-
North Macedonia	●	●	-	-	●
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	-	-
Oman	●	-	-	○	-
Pakistan	●	●	●	●	-
Panama	●	●	●	-	●
Paraguay	-	-	●	-	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	○	-	-	-	-
Romania	●	●	●	●	-
Russian Federation	●	●	-	●	-
Rwanda	●	○	-	-	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	-	-
Saint Lucia	●	-	-	-	-
Saint Martin	●	●	-	-	-
Sao Tome and Principe	●	-	-	-	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	-	-
Serbia	●	-	-	-	-
Seychelles	-	●	-	-	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	-	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●*	-	-	-	-
South Africa	●	●	-	●	-
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-
Suriname	●	●	●	-	-
Sweden	●	●	●	●	-
Switzerland	●	●	○	●	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	-	-
Togo	●	●	-	-	-
Trinidad and Tobago	●	-	●	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Tunisia	●	●	-	-	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●*	-	-
Uganda	●	●	-	●	-
Ukraine	●	○	-	-	-
United Arab Emirates	●	●	●	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-
United States of America	●	●	●	●	-
Uruguay	●	-	●	-	-
Uzbekistan	●	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Venezuela (Bolivarian Republic of)	●	-	●	-	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Zambia	-	●	-	●	-
Zimbabwe	-	○	-	●	-

**Newly reported in this update.*

reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

WHO from official sources.

ation become available.

***Variant Alpha for Comoros and Delta for Afghanistan were excluded this week based on further information received.*

****Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Efforts are ongoing to differentiate these in future reports. Excludes countries, territories, and areas that have never reported the detection of a variant of concern.*

See also Annex 2: Data, table and figure notes.

Annex 2. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

COVID-19 Weekly Epidemiological Update

Edition 44, published 15 June 2021

In this edition:

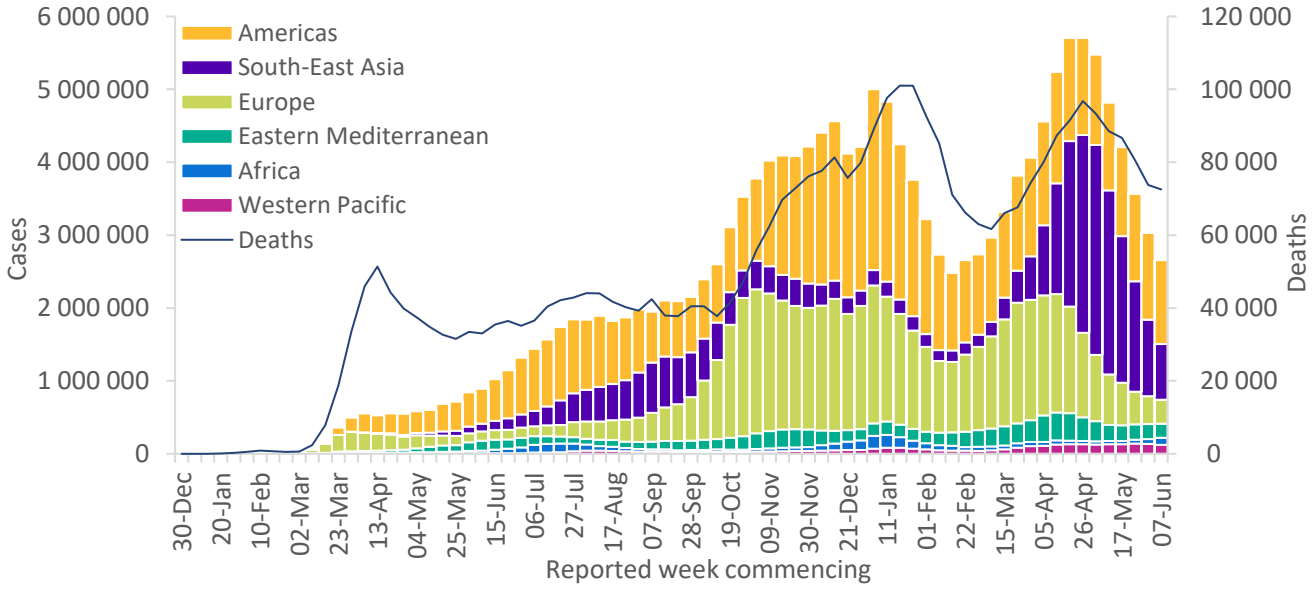
- Global overview
- Special focus: Strengthening public health intelligence through event-based surveillance – learning from the COVID-19 pandemic
- Special focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern
- WHO regional overviews
- Key weekly updates

Global overview

Data as of 13 June 2021

Global numbers of cases and deaths continued to decrease over the past week (7-13 June 2021) with over 2.6 million new weekly cases and over 72 000 deaths, a 12% and a 2% decrease respectively, compared to the previous week (Figure 1). While the number of cases reported globally now exceeds 175 million, last week saw the lowest weekly case incidence since February 2021. Declines in the number of new weekly cases were reported across all Regions except for the African Region. The South-East Asia, European and Western Pacific Regions reported marked declines in the number of new cases in the past week, whereas the Region of the Americas and the Eastern Mediterranean Region reported similar numbers as compared to the previous week (Table 1). While the number of new deaths reported in the past week decreased across all Regions except for the African and the South-East Asia Regions, globally mortality remains high with more than 10 000 deaths reported each day. While the epidemics in some of the most affected countries have started to show signs of slowing down, and the global weekly mortality rate continues to decline for a sixth consecutive week, many countries across all WHO Regions continue to struggle with access to vaccines, the spread of emerging SARS-CoV-2 variants, and overburdened healthcare systems.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 13 June 2021**



**See *Annex 3: Data, table and figure notes*

The highest numbers of new cases were reported from India (630 650 new cases; 31% decrease), Brazil (454 710 new cases; similar to the previous week), Argentina (177 693 new cases; 17% decrease), Colombia (176 661 new cases; similar to the previous week) and the United States of America (105 019 new cases; 6% increase).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 13 June 2021**

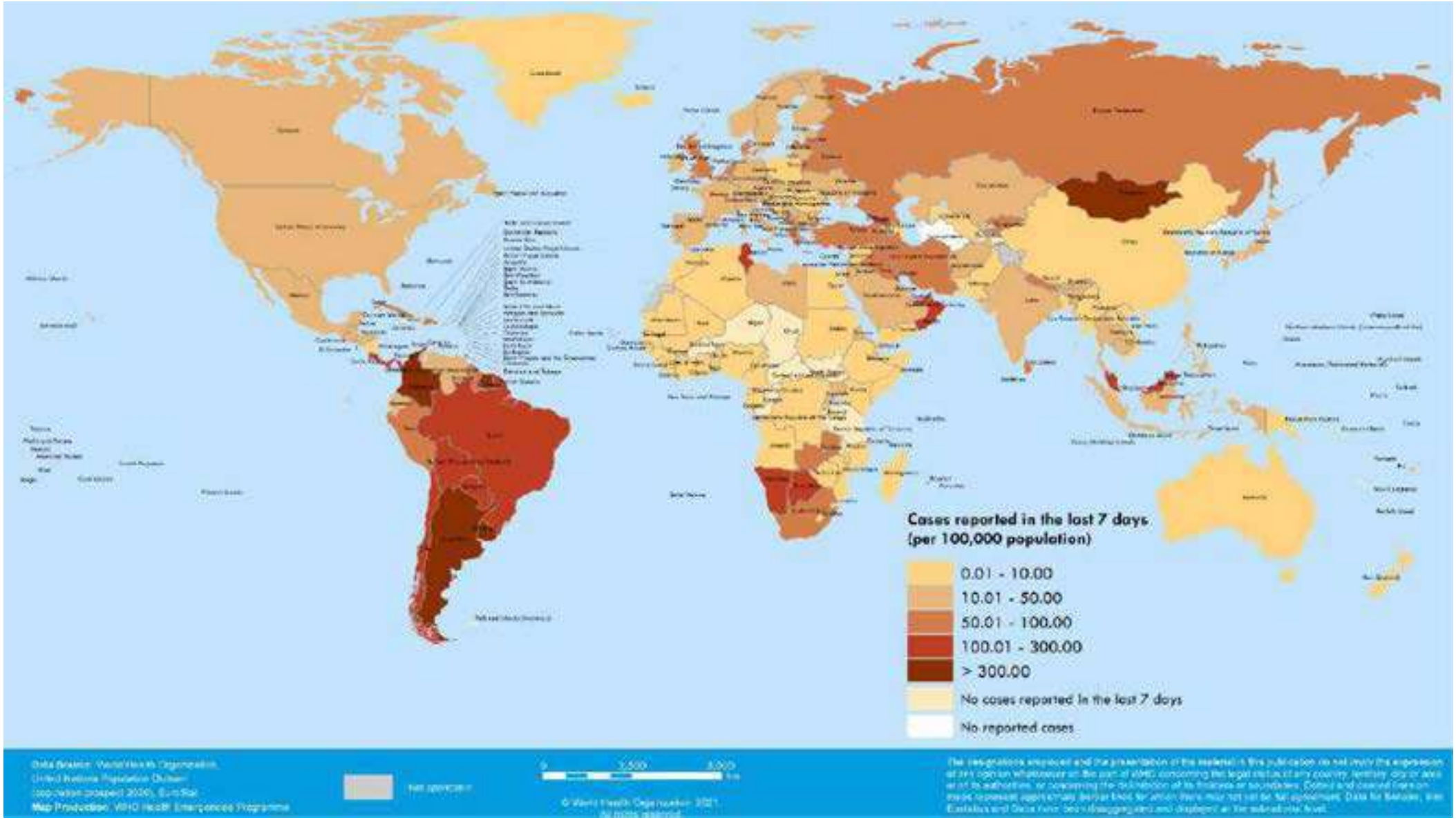
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 148 857 (43%)	-4%	69 519 254 (40%)	31 902 (44%)	-7%	1 826 772 (48%)
Europe	332 656 (13%)	-13%	54 988 102 (31%)	7 248 (10%)	-17%	1 166 500 (31%)
South-East Asia	763 305 (29%)	-27%	33 432 290 (19%)	26 324 (36%)	12%	451 838 (12%)
Eastern Mediterranean	191 794 (7%)	-5%	10 470 698 (6%)	3 353 (5%)	-4%	208 498 (5%)
Africa	95 151 (4%)	44%	3 658 976 (2%)	1 400 (2%)	20%	89 674 (2%)
Western Pacific	124 019 (5%)	-10%	3 263 070 (2%)	2 301 (3%)	-7%	49 935 (1%)
Global	**2 655 782 (100%)**	**-12%**	**175 333 154 (100%)**	**72 528 (100%)**	**-2%**	**3 793 230 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
**See *Annex 3: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 7 – 13 June 2021**



**See *Annex 3: Data, table and figure notes*

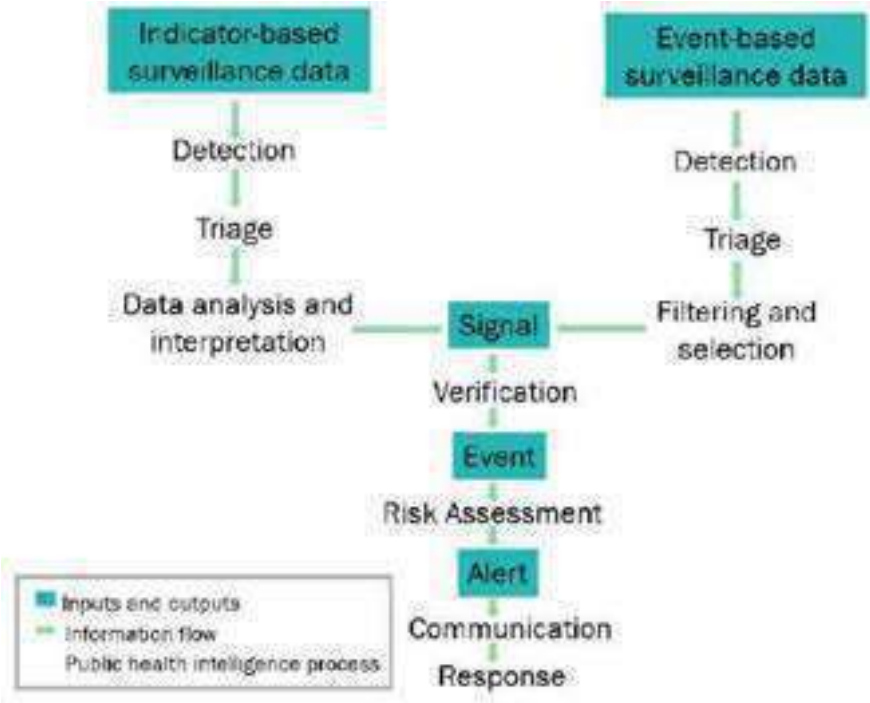
Special focus: Strengthening public health intelligence through event-based surveillance – learning from the COVID-19 pandemic

Public health intelligence and event-based surveillance

Public health intelligence (PHI) is a conceptual framework that encompasses all activities that relate to the detection, verification, assessment, investigation and communication of information on events that pose a potential risk to human health (e.g., disease, natural disaster, chemical exposure). PHI serves as an early warning and response system, which is informed by indicator-based surveillance (IBS), which uses structured data from formal sources, and event-based surveillance (EBS) which uses informal sources such as media articles, hotlines and community reports, in order to detect acute public health events and/or risks.

EBS aims to rapidly collect, monitor, assess and interpret information in an organized manner and complement information derived from IBS. EBS involves the detection, triaging (filtering and selection) and verification of new public health threats as well as relevant changes in ongoing events. It also triggers risk assessments that may consequently lead to a response (Figure 3). Successful EBS depends on efficient networks, timely information sharing, diverse sources, collaboration and buy-in of stakeholders. A signal is information that is collected and triaged as a potential public health risk and can include changes in an ongoing event. Signals are rapidly detected from media and community sources to complement IBS data, demonstrating the importance of systematic integration of EBS in PHI. EBS can more readily be established in limited-resource settings compared to IBS, where surveillance structures may be limited or absent.

Figure 3. Processes and information flow for public health intelligence



Modified from Early detection, assessment and response to acute public health events: Implementation of Early Warning and Response with a focus on Event-Based Surveillance Epidemic Intelligence process.

EBS informs the COVID-19 response

In the context of COVID-19, EBS has informed WHO's COVID-19 response by providing important contextualization of epidemiological data in a timely manner. Media monitoring in multiple languages has been the main method for EBS. Signals of interest from around the world are identified, assessed and documented daily based on predefined criteria. These criteria consider changes in epidemiology, virus mutations/variants, testing, impact on vulnerable populations, clusters related to various settings (e.g., workplaces, schools,

prisons and long-term care homes), as well as the implementation of public health and social measures (PHSM), changes in travel patterns and restrictions, social gatherings and events. Criteria are adapted over time depending on emerging knowledge and are tailored to specific needs at global and regional levels. EBS is also used to identify potential areas of concern, by monitoring reports of health system capacity, and to inform estimates of disease dynamics in areas where surveillance or reporting are limited.

The Epidemic Intelligence from Open Sources (EIOS) system is one of the main tools used by WHO to conduct monitoring of publicly available information, including for COVID-19. It is a fit-for-purpose but constantly evolving web-based system designed to augment and accelerate global public health intelligence activities. The core of the EIOS system is developed by the Joint Research Centre of the European Commission based on a long-standing collaboration with WHO. The EIOS system is the technological centerpiece of the broader EIOS initiative, a unique collaboration between various public health stakeholders around the globe. EIOS brings together new and existing initiatives, networks and systems to create a unified all-hazards, One Health approach to early detection, verification, assessment and communication of public health threats using publicly available information.

Evolution of COVID-19 EBS

Since the beginning of the COVID-19 pandemic, the scope and processes for EBS has evolved to reflect the changing response priorities. Early in 2020, during the early weeks and months of the pandemic, EBS media monitoring complemented official reporting of case and death counts through the International Health Regulations (IHR 2005) mechanism. As the pandemic evolved, EBS more regularly identified epidemiological trends in COVID-19 disease patterns, sometimes unusual, that were not readily captured by global indicator-based surveillance. Topics of interest have also evolved over time, such as health systems capacity, the introduction of vaccines, emergence of new variants, unusual clinical presentations and manifestations as well as upsurges in case and deaths in localized areas and among population groups at risk; for example, health care workers, rapid response teams, indigenous populations, children, pregnant women and the elderly.

Consistent and systematic media monitoring, however, has been challenging due to the unprecedentedly high volume of reports and media articles, and the rapid evolution of risks and response needs. In response to these challenges, WHO strengthened the collaboration across all regions throughout 2020 through the shared use of the EIOS system to maximize the use of resources and to jointly address challenges. This collaboration has facilitated information sharing and increased efficiency of work, particularly around detection and assessment of SARS-CoV-2 variants and supported a rapid response.

The COVID-19 pandemic has highlighted an opportunity for new and strengthened collaborations among WHO, Member States and partners, as well as strengthened communication between WHO offices. EBS has provided critical public health intelligence during the COVID-19 pandemic and can continue adapting to align with evolving needs of this pandemic. Sustained, multi-level collaboration is needed to enable continuous adaptation to the changing surveillance landscape and to further improve geographical representativeness of EBS sources. Best practices and lessons learned in EBS during the COVID-19 pandemic can also be applied to strengthen and optimize non-COVID-19 surveillance.

Additional resources

- A Guide to Establishing Event-based Surveillance
- Epidemic Intelligence from Open Sources
- Early detection, assessment and response to acute public health events: Implementation of Early Warning and Response with a focus on Event-Based Surveillance Epidemic Intelligence process

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assess if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics, or public health and social measures (PHSM) applied by national authorities to control disease spread. Systems have been established to detect "signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) and assess these based on the risk posed to global public health. As these risks evolve, WHO will update lists of global VOIs and VOCs (Table 2) to support setting priorities for surveillance and research, and ultimately guide response strategies.

National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants. Here we provide updates on classifications of VOCs and VOIs, including a newly designated global VOI – Lambda (lineage C.37) – as well as the updated countries/territories/areas reporting the detection of VOCs.

Table 2: SARS-CoV-2 Variants of Concern (VOCs) and Variants of Interest (VOIs), as of 15 June 2021

WHO label	Pango lineage	GISAID clade	Nextstrain clade	Earliest documented samples	Date of designation
Variants of Concern (VOCs):					
Alpha	B.1.1.7	GRY (formerly GR/501Y.V1)	20I (V1)	United Kingdom, Sep-2020	18-Dec-2020
Beta	B.1.351	GH/501Y.V2	20H (V2)	South Africa, May-2020	18-Dec-2020
Gamma	P.1	GR/501Y.V3	20J (V3)	Brazil, Nov-2020	11-Jan-2021
Delta	B.1.617.2	G/478K.V1	21A	India, Oct-2020	VOI: 4-Apr-2021 VOC: 11-May-2021
Variants of Interest (VOIs):					
Epsilon	B.1.427/ B.1.429	GH/452R.V1	21C	United States of America, Mar-2020	5-Mar-2021
Zeta	P.2	GR/484K.V2	20B/S.484K	Brazil, Apr-2020	17-Mar-2021
Eta	B.1.525	G/484K.V3	21D	Multiple countries, Dec-2020	17-Mar-2021
Theta	P.3	GR/1092K.V1	21E	Philippines, Jan-2021	24-Mar-2021
Iota	B.1.526	GH/253G.V1	21F	United States of America, Nov-2020	24-Mar-2021
Kappa	B.1.617.1	G/452R.V3	21B	India, Oct-2020	4-Apr-2021
Lambda	C.37	GR/452Q.V1	20D	Peru, Aug-2020	14-Jun-2021

VOI Lambda

On 14 June 2021, a variant assigned to Pango lineage C.37, GISAID clade GR/452Q.V1, NextStrain clade 20D, was designated as a global VOI, and assigned the WHO label "Lambda". This variant has been monitored as an alert for an extended period, and upon more information and updated assessments, is now considered as meeting the VOI working definition based upon evidence of continued emergence and suspected phenotypic implications.

Lambda has been associated with substantive rates of community transmission in multiple countries, with rising prevalence over time concurrent with increased COVID-19 incidence. The earliest sequenced samples were reported from Peru in August 2020. As of 15 June 2021, over 1730 sequences have been uploaded to GISAID from 29 countries/territories/areas in five WHO regions.[1] Elevated prevalence has been noted particularly in South America in countries such as Chile (31% overall prevalence among submitted sequences

since first detected in this location to date), Peru (9%), Ecuador (8%), and Argentina (3%).[2] Authorities in Peru reported that 81% of COVID-19 cases sequenced since April 2021 were associated with Lambda.[3] Argentina reported increasing prevalence of Lambda since the third week of February 2021, and between 2 April and 19 May 2021, the variant accounted for 37% of the COVID-19 cases sequenced.[4] In Chile, prevalence of Lambda has increased over time, accounting for 32% of sequenced cases reported in the last 60 days – co-circulating at similar rates to variant Gamma (33%), but outcompeting variant Alpha (4%) over the same period.[5]

Lambda carries a number of mutations with suspected phenotypic implications, such as a potential increased transmissibility or possible increased resistance to neutralizing antibodies.[6] It is characterised by mutations in the spike protein, including G75V, T76I, del247/253, L452Q, F490S, D614G and T859N; however, there is currently limited evidence on the full extent of the impact associated with these genomic changes, and further robust studies into the phenotypic impacts are needed to better understand the impact on countermeasures and to control the spread. Further studies are also required to validate the continued effectiveness of vaccines.

Geographic distribution of VOCs

As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing and the sharing of sequences and supporting meta-data, the number of countries/areas/territories reporting VOCs has continued to increase (Figure 4). This distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

WHO recommendations

Virus evolution continues to be expected, and the more SARS-CoV-2 circulates, the more opportunities it has to evolve. Reducing transmission through established and proven disease control methods such as those outlined in the COVID-19 Strategic Preparedness and Response Plan, as well as avoiding introductions into animal populations, are fundamental to and crucial aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critical to curb the spread of SARS-CoV-2, including all variants that evolve.

Evidence from multiple countries with extensive transmission of VOCs has indicated that PHSM, including infection prevention and control (IPC) measures in health facilities, have been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities. Authorities are also encouraged to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and to detect unusual events.

Additional resources

- Tracking SARS-CoV-2 variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19
- COVID-19 Situation Reports from WHO Regional Offices and partners: AFRO, AMRO/PAHO, EMRO, EURO/ECDC, SEARO, WPRO
- ACT accelerator diagnostic pillar, FIND test directory

References

1. GISAID. Tracking of variants. www.gisaid.org/hcov19-variants.
2. Latif AA, et al. C.37 Lineage Report. https://outbreak.info/situation-reports?pango=C.37.
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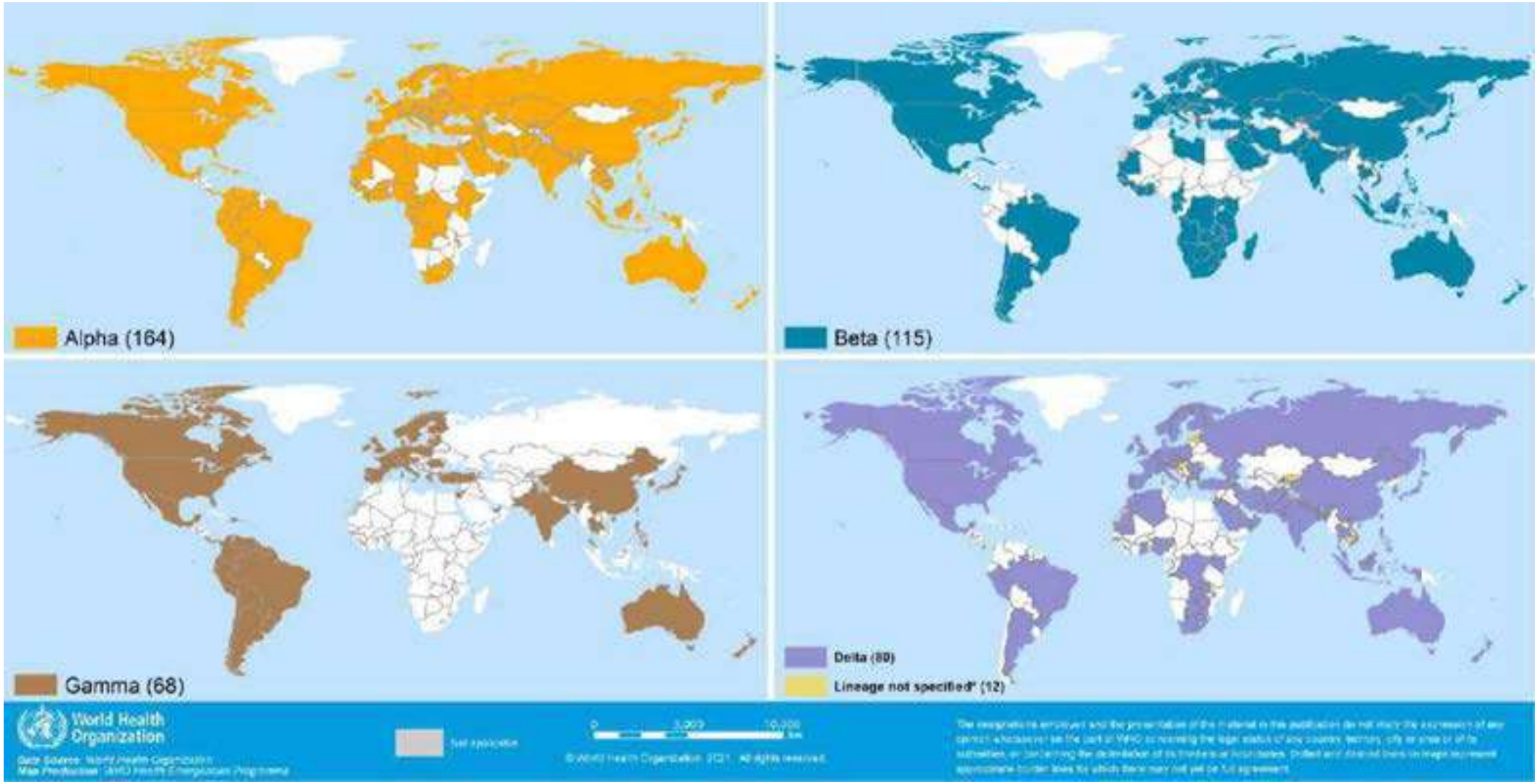
4. Argentina.gob.ar. Vigilancia de variantes de SARS-CoV-2 en CABA, Provincia de Buenos Aires, Córdoba, Entre Ríos, Neuquén y Santa Fe. https://www.argentina.gob.ar/noticias/vigilancia-de-variantes-de-sars-cov-2-en-caba-provincia-de-buenos-aires-cordoba-entre-rios
5. Latif AA, et al. Chile Mutation Report. https://outbreak.info/location-reports?loc=CHL&pango=C.37.
6. Romero PE. et al. (2021). Novel sublineage within B.1.1.1 currently expanding in Peru and Chile, with a convergent deletion in the ORF1a gene (Δ3675-3677) and a novel deletion in the Spike gene (Δ246-252, G75V, T76I, L452Q, F490S, T859N). Virologica.org, 24 Apr 2021.

Figure 4. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 15 June 2021**



**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details*

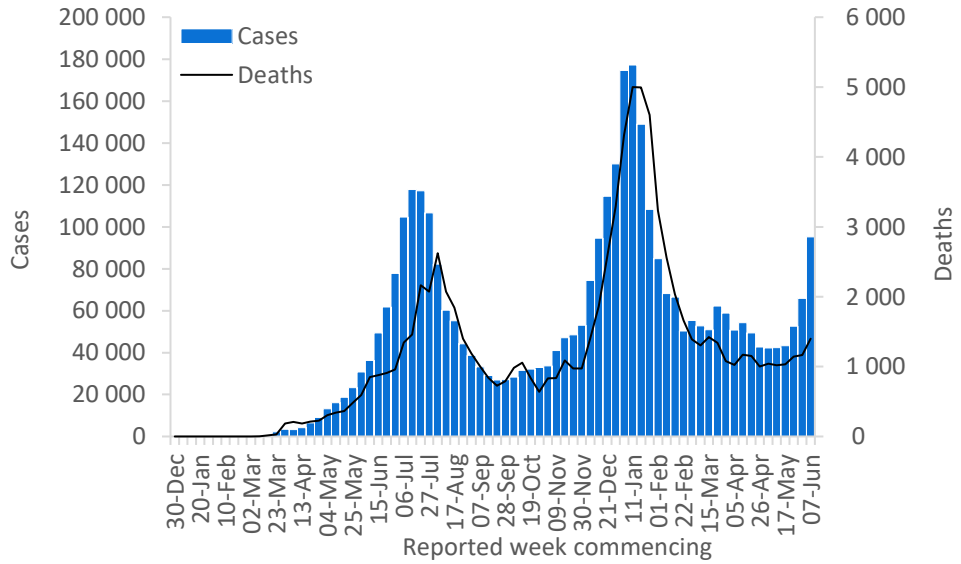
WHO regional overviews

Epidemiological week 7-13 June 2021

African Region

The African Region reported over 95 000 new cases and over 1400 new deaths, a 44% and a 20% increase respectively compared to the previous week. The region reported a marked increase in weekly case incidence for the third consecutive week, with the largest increases in countries in the Southern, Eastern and Northern parts of Africa. The highest numbers of new cases were reported from South Africa (47 934 new cases; 80.8 new cases per 100 000 population; a 48% increase), Zambia (10 792 new cases; 58.7 new cases per 100 000; a 125% increase), and Uganda (8574 new cases; 18.7 new cases per 100 000; a 49% increase).

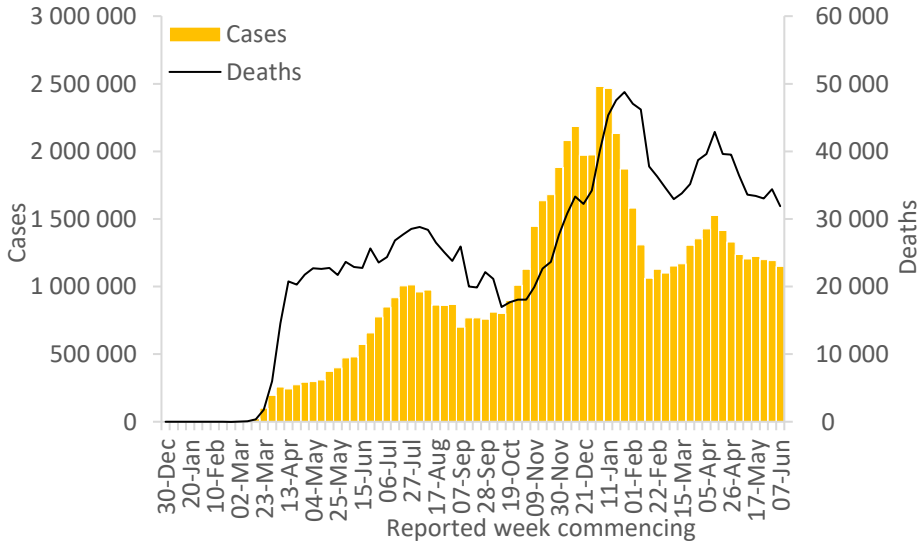
The highest numbers of new deaths were reported from South Africa (724 new deaths; 1.2 new deaths per 100 000 population; a 28% increase), Kenya (132 new deaths; 0.2 new deaths per 100 000; a 7% increase) and Namibia (88 new deaths; 3.5 new deaths per 100 000; a 1% increase).



Region of the Americas

The Region of the Americas reported over 1.1 million new cases, a similar number to the previous week, and just under 32 000 new deaths, a 7% decrease compared to the previous week. Despite this decrease, high levels of transmission and mortality are still being recorded in many countries in South and Central America. The highest numbers of new cases were reported from Brazil (454 710 new cases; 213.9 new cases per 100 000; similar to the previous week), Argentina (177 693 new cases; 393.2 new cases per 100 000; a 17% decrease), and Colombia (176 661 new cases; 347.2 new cases per 100 000; a 1% increase).

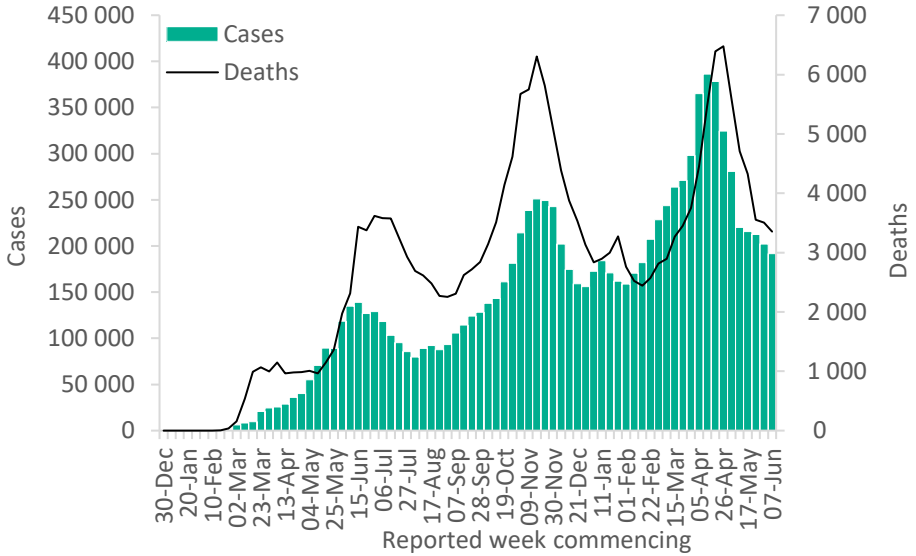
The highest numbers of new deaths were also reported from Brazil (13 393 new deaths; 6.3 new deaths per 100 000; a 14% increase), Argentina (4217 new deaths; 9.3 new deaths per 100 000; a 13% increase), and Colombia (3725 new deaths; 7.3 new deaths per 100 000; similar to the previous week).



Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 191 000 new cases and over 3300 new deaths, a 5% and a 4% decrease respectively compared to the previous week. While declining weekly case incidence trends have been recorded for the eighth consecutive week, a number of countries across the region are starting to report increasing case and death incidence, including Oman, Tunisia and Afghanistan. The highest numbers of new cases were reported from the Islamic Republic of Iran (59 771 new cases; 71.2 new cases per 100 000; an 11% decrease), Iraq (29 013 new cases; 72.1 new cases per 100 000; a 3% increase), and the United Arab Emirates (14 820 new cases; 149.8 new cases per 100 000; a 6% increase).

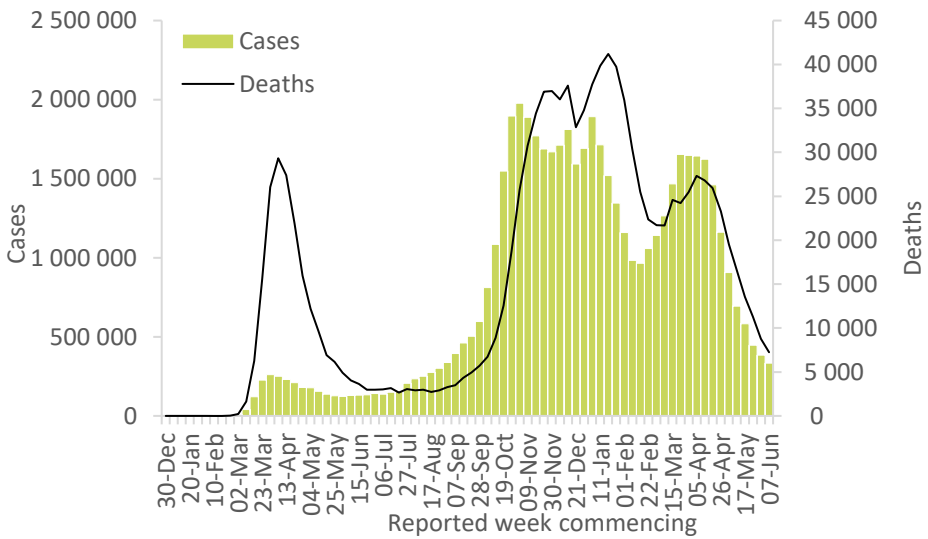
The highest numbers of new deaths were reported from the Islamic Republic of Iran (970 new deaths; 1.2 new deaths per 100 000; a 19% decrease), Tunisia (488 new deaths; 4.1 new deaths per 100 000; a 30% increase), and Pakistan (444 new deaths; 0.2 new deaths per 100 000; a 13% decrease).



European Region

The European Region reported over 332 000 new cases, a 13% decrease when compared to the previous week and a declining trend for the ninth consecutive week. The Region reported over 7200 new deaths, a 17% decrease when compared to the previous week. While most countries across the Region continue to see decreasing or stabilizing trends, some countries, such as the Russian Federation, the United Kingdom and Kyrgyzstan have reported increases in case incidence this week compared to the previous week. The highest numbers of new cases were reported from Russian Federation (82 250 new cases; 56.4 new cases per 100 000; a 31% increase), The United Kingdom (46 825 new cases; 69.0 new cases per 100 000; a 52% increase), and Turkey (42 841 new cases; 50.8 new cases per 100 000; an 8% decrease).

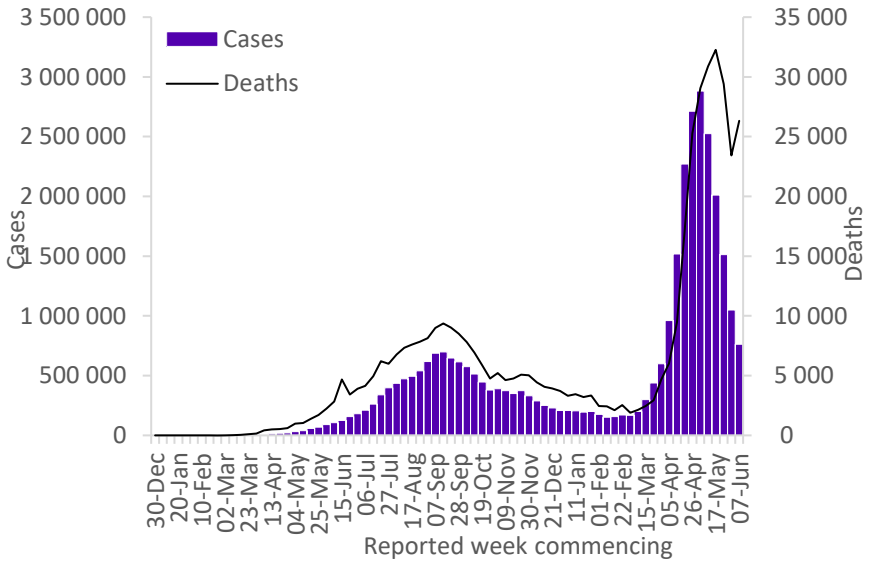
The highest numbers of new deaths were reported from Russian Federation (2643 new deaths; 1.8 new deaths per 100 000; a 1% increase), Germany (612 new deaths; 0.7 new deaths per 100 000; a 25% decrease), and Turkey (600 new deaths; 0.7 new deaths per 100 000; a 25% decrease).



South-East Asia Region

The South-East Asia Region reported over 763 000 new cases, a 27% decrease compared to the previous week. Weekly case incidence has been decreasing sharply for five consecutive weeks, largely driven by decreases in the number of cases in a small number of countries. While the number of newly reported cases continues to decrease in India, Bangladesh has reported an increasing trend in cases for the past four weeks. The Region reported over 26 000 new deaths a 12% increase when compared to the previous week. The highest numbers of new cases were reported from India (630 650 new cases; 45.7 new cases per 100 000; a 31% decrease), Indonesia (55 320 new cases; 20.2 new cases per 100 000; a 38% increase), and Nepal (20 348 new cases; 69.8 new cases per 100 000; a 34% decrease).

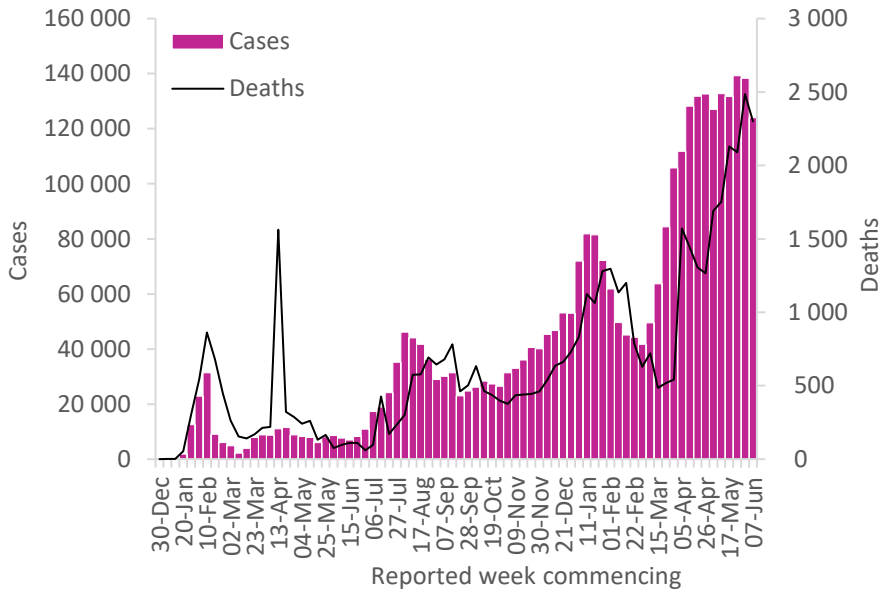
The highest numbers of new deaths were also reported from India (23 625 new deaths; 1.7 new deaths per 100 000; a 14% increase), Indonesia (1267 new deaths; 0.5 new deaths per 100 000; a 5% increase), and Nepal (514 new deaths; 1.8 new deaths per 100 000; an 18% decrease).



Western Pacific Region

The Western Pacific Region reported over 124 000 new cases and over 2300 new deaths, a 10% and a 7% decrease respectively compared to the previous week. While the region has an overall decreasing trend in cases, some countries, including Fiji, Vietnam and Mongolia are reporting increases and peak numbers of cases. The highest numbers of new cases were reported from the Philippines (46 087 new cases; 42.1 new cases per 100 000; a 1% increase), Malaysia (41 630 new cases; 128.6 new cases per 100 000; a 20% decrease), and Japan (13 499 new cases; 10.7 new cases per 100 000; a 28% decrease).

The highest numbers of new deaths were also reported from the Philippines (920 new deaths; 0.8 new deaths per 100 000; a 9% decrease), Malaysia (553 new deaths; 1.7 new deaths per 100 000; a 14% decrease), and Japan (510 new deaths; 0.4 new deaths per 100 000; a 15% decrease).



Key weekly updates

WHO Director-General's key messages

- In his opening remarks at the media briefing on COVID-19 – 14 June 2021, the Director-General highlighted that the global decline in cases of COVID-19 reported to WHO masks a worrying increase in cases and deaths in many countries, and that the steep increase in Africa is especially concerning because it is the region with the least access to vaccines, diagnostics and therapeutic oxygen.
- The emergence of more transmissible variants means public health and social measures (PHSM) may need to be more stringent and applied for longer, particularly in areas where vaccination rates remain low. To improve the evidence base on the effectiveness of PHSM, WHO is collecting data globally on which measures are used and the level at which they are applied. WHO has also established a new working group, with the support of Norway, to study the impact of PHSM during COVID-19 and other health emergencies.
- In his opening remarks at the G7 Summit – 12 June 2021, the Director-General said that to end the pandemic, our shared goal must be to vaccinate at least 70% of the world's population by the time the G7 meets again in Germany in 2022. He welcomed the announcement that the G7 countries will donate 870 million vaccine doses, primarily through COVAX. "This is a big help, but we need more, and we need them faster. More than 10 000 people are dying every day."

Updates and publications

- Young people and COVID-19: Behavioural considerations for promoting safe behaviours
- COVID-19 Vaccine Introduction and deployment Costing tool (CVIC tool)
- Update on WHO Interim recommendations on COVID-19 vaccination of pregnant and lactating women
- Statement for healthcare professionals: How COVID-19 vaccines are regulated for safety and effectiveness
- G7 announces pledges of 870 million COVID-19 vaccine doses, of which at least half to be delivered by the end of 2021
- The ACT Accelerator partnership welcomes commitment of 870 million vaccine doses and calls for more investment in all tools to end the pandemic

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 13 June 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**95 151**	**3 658 976**	**326.1**	**1 400**	**89 674**	**8.0**	
South Africa	47 934	1 739 425	2 932.8	724	57 653	97.2	Community transmission
Zambia	10 792	110 332	600.2	62	1 365	7.4	Community transmission
Uganda	8 574	60 250	131.7	49	423	0.9	Community transmission
Namibia	6 148	64 205	2 526.9	88	993	39.1	Community transmission
Botswana	3 276	62 040	2 638.2	30	896	38.1	Community transmission
Kenya	2 851	175 176	325.8	132	3 396	6.3	Community transmission
Algeria	2 389	133 070	303.5	55	3 565	8.1	Community transmission
Democratic Republic of the Congo	2 153	34 949	39.0	37	834	0.9	Community transmission
Ethiopia	1 223	274 028	238.4	36	4 237	3.7	Community transmission
Seychelles	1 176	13 414	13 639.5	1	43	43.7	Community transmission
Angola	1 006	36 600	111.4	31	825	2.5	Community transmission
Cameroon	975	79 904	301.0	27	1 302	4.9	Community transmission
Zimbabwe	684	39 852	268.1	27	1 632	11.0	Community transmission
Cabo Verde	568	31 571	5 678.4	6	273	49.1	Community transmission
Rwanda	498	27 660	213.6	7	366	2.8	Community transmission
Eritrea	387	4 848	136.7	2	16	0.5	Community transmission
Mozambique	379	71 461	228.6	3	840	2.7	Community transmission
Senegal	321	41 952	250.6	6	1 151	6.9	Community transmission
Ghana	305	94 493	304.1	3	789	2.5	Community transmission
Nigeria	303	167 059	81.0	0	2 117	1.0	Community transmission
Madagascar	263	41 894	151.3	23	882	3.2	Community transmission
Mauritania	255	20 040	431.0	9	475	10.2	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Liberia	233	2 484	49.1	7	93	1.8	Community transmission
Côte d'Ivoire	186	47 662	180.7	0	306	1.2	Community transmission
Gabon	145	24 736	1 111.4	2	156	7.0	Community transmission
Sierra Leone	144	4 312	54.1	3	82	1.0	Community transmission
Guinea	134	23 389	178.1	5	167	1.3	Community transmission
Mauritius	114	1 572	123.6	0	18	1.4	Clusters of cases
Burundi	108	5 013	42.2	0	8	0.1	Community transmission
Malawi	101	34 485	180.3	3	1 159	6.1	Community transmission
Eswatini	96	18 732	1 614.6	3	676	58.3	Community transmission
Togo	64	13 597	164.2	1	126	1.5	Community transmission
Mali	53	14 349	70.9	5	523	2.6	Community transmission
Benin	27	8 109	66.9	0	102	0.8	Community transmission
Equatorial Guinea	24	8 650	616.5	2	120	8.6	Community transmission
Lesotho	22	10 859	506.9	0	326	15.2	Community transmission
Guinea-Bissau	15	3 802	193.2	1	69	3.5	Community transmission
Gambia	9	6 008	248.6	1	180	7.4	Community transmission
Comoros	8	3 964	455.8	0	146	16.8	Community transmission
Niger	8	5 446	22.5	0	192	0.8	Community transmission
Burkina Faso	7	13 459	64.4	0	167	0.8	Community transmission
Sao Tome and Principe	4	2 357	1 075.5	0	37	16.9	Community transmission
Chad	3	4 942	30.1	0	174	1.1	Community transmission
Central African Republic	0	7 101	147.0	0	98	2.0	Community transmission
Congo	0	11 920	216.0	0	155	2.8	Community transmission
South Sudan	0	10 688	95.5	0	115	1.0	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories[iii]							
Réunion	1 160	27 235	3 042.0	9	212	23.7	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Mayotte	26	19 373	7 101.1	0	173	63.4	Community transmission
Americas	**1 148 857**	**69 519 254**	**6 797.1**	**31 902**	**1 826 772**	**178.6**	
Brazil	454 710	17 296 118	8 137.1	13 393	484 235	227.8	Community transmission
Argentina	177 693	4 093 090	9 056.4	4 217	84 628	187.2	Community transmission
Colombia	176 661	3 694 707	7 261.2	3 725	94 615	185.9	Community transmission
United States of America	105 019	33 120 623	10 006.2	2 996	594 272	179.5	Community transmission
Chile	48 726	1 468 992	7 684.5	763	30 579	160.0	Community transmission
Uruguay	24 994	333 484	9 600.2	390	4 906	141.2	Community transmission
Peru	21 890	1 998 056	6 059.9	2 287	188 100	570.5	Community transmission
Bolivia (Plurinational State of)	19 834	403 291	3 454.9	517	15 417	132.1	Community transmission
Paraguay	19 504	387 687	5 435.5	952	10 561	148.1	Community transmission
Mexico	19 189	2 448 820	1 899.3	1 255	229 823	178.3	Community transmission
Costa Rica	11 921	339 900	6 672.4	169	4 322	84.8	Community transmission
Canada	10 208	1 399 716	3 708.6	207	25 886	68.6	Community transmission
Venezuela (Bolivarian Republic of)	9 568	248 820	875.0	99	2 797	9.8	Community transmission
Cuba	8 407	156 238	1 379.4	54	1 057	9.3	Community transmission
Dominican Republic	8 166	307 847	2 837.8	53	3 705	34.2	Community transmission
Guatemala	7 916	269 308	1 503.2	136	8 416	47.0	Community transmission
Ecuador	5 692	437 121	2 477.6	224	20 997	119.0	Community transmission
Panama	5 147	386 269	8 952.3	38	6 427	149.0	Community transmission
Honduras	4 656	245 695	2 480.6	145	6 599	66.6	Community transmission
Trinidad and Tobago	2 305	28 106	2 008.3	88	644	46.0	Community transmission
Suriname	1 790	17 799	3 034.1	58	390	66.5	Community transmission
El Salvador	1 210	75 351	1 161.7	26	2 292	35.3	Community transmission
Guyana	629	18 088	2 299.7	16	419	53.3	Community transmission
Haiti	475	16 079	141.0	18	346	3.0	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Jamaica	331	49 232	1 662.6	32	996	33.6	Community transmission
Nicaragua	136	6 085	91.9	1	188	2.8	Community transmission
Belize	77	12 938	3 253.8	0	325	81.7	Community transmission
Bahamas	65	12 052	3 064.8	2	234	59.5	Clusters of cases
Saint Lucia	60	5 168	2 814.4	0	80	43.6	Community transmission
Saint Kitts and Nevis	41	119	223.7	0	0	0.0	Clusters of cases
Saint Vincent and the Grenadines	33	2 101	1 893.8	0	12	10.8	Community transmission
Barbados	4	4 033	1 403.4	0	47	16.4	Community transmission
Dominica	1	189	262.5	0	0	0.0	Clusters of cases
Antigua and Barbuda	0	1 263	1 289.7	0	42	42.9	Clusters of cases
Grenada	0	161	143.1	0	1	0.9	Sporadic cases
Territories[iii]							
French Guiana	781	25 506	8 539.5	12	133	44.5	Community transmission
Puerto Rico	374	139 323	4 870.0	14	2 530	88.4	Community transmission
Guadeloupe	180	17 288	4 320.7	5	265	66.2	Community transmission
United States Virgin Islands	130	3 690	3 533.6	0	28	26.8	Community transmission
Saint Martin	115	2 228	5 763.2	3	25	64.7	Community transmission
Martinique	70	12 130	3 232.4	2	99	26.4	Community transmission
Sint Maarten	63	2 511	5 855.6	3	31	72.3	Community transmission
Aruba	51	11 069	10 367.5	0	107	100.2	Community transmission
Curaçao	15	12 291	7 490.3	1	123	75.0	Community transmission
British Virgin Islands	6	295	975.6	0	1	3.3	Clusters of cases
Cayman Islands	5	592	900.8	0	2	3.0	Sporadic cases
Bermuda	3	2 497	4 009.8	0	33	53.0	Community transmission
Saint Barthélemy	3	1 032	10 440.1	0	1	10.1	Clusters of cases
Bonaire	2	1 591	7 607.0	0	17	81.3	Community transmission
Turks and Caicos Islands	1	2 421	6 252.9	1	18	46.5	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Anguilla	0	109	726.6	0	0	0.0	Clusters of cases
Falkland Islands (Malvinas)	0	63	1 808.8	0	0	0.0	Sporadic cases
Montserrat	0	20	400.1	0	1	20.0	No cases
Saba	0	7	362.1	0	0	0.0	No cases
Saint Pierre and Miquelon	0	25	431.4	0	0	0.0	No cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	**191 794**	**10 470 698**	**1 432.7**	**3 353**	**208 498**	**28.5**	
Iran (Islamic Republic of)	59 771	3 020 522	3 596.2	970	81 911	97.5	Community transmission
Iraq	29 013	1 250 691	3 109.4	172	16 690	41.5	Community transmission
United Arab Emirates	14 820	596 017	6 026.2	28	1 724	17.4	Community transmission
Tunisia	13 265	367 047	3 105.7	488	13 436	113.7	Community transmission
Afghanistan	10 637	89 861	230.8	382	3 527	9.1	Community transmission
Kuwait	10 551	326 451	7 644.2	23	1 817	42.5	Community transmission
Oman	10 353	233 152	4 565.7	88	2 489	48.7	Community transmission
Pakistan	9 420	939 931	425.5	444	21 633	9.8	Community transmission
Bahrain	8 270	257 852	15 153.7	115	1 206	70.9	Community transmission
Saudi Arabia	8 218	464 780	1 335.0	113	7 553	21.7	Community transmission
Egypt	5 320	272 491	266.3	273	15 582	15.2	Clusters of cases
Jordan	3 512	742 831	7 280.4	66	9 582	93.9	Community transmission
Morocco	2 425	523 620	1 418.6	34	9 207	24.9	Community transmission
Libya	1 809	188 762	2 747.1	21	3 158	46.0	Community transmission
Qatar	1 158	219 613	7 622.7	10	576	20.0	Community transmission
Lebanon	1 100	542 523	7 948.5	36	7 794	114.2	Community transmission
Sudan	300	36 304	82.8	35	2 732	6.2	Clusters of cases
Syrian Arab Republic	150	24 789	141.6	18	1 808	10.3	Community transmission
Yemen	77	6 857	23.0	22	1 347	4.5	Community transmission
Somalia	50	14 779	93.0	1	774	4.9	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Djibouti	16	11 572	1 171.3	0	154	15.6	Clusters of cases
Territories[iii]							
occupied Palestinian territory	1 559	340 253	6 669.8	14	3 798	74.4	Community transmission
Europe	**332 656**	**54 988 102**	**5 893.3**	**7 248**	**1 166 500**	**125.0**	
Kosovo [1]	85	107 528		5	2 239		Community transmission
Russian Federation	82 250	5 208 687	3 569.2	2 643	126 430	86.6	Clusters of cases
The United Kingdom	46 825	4 558 498	6 714.9	60	127 896	188.4	Community transmission
Turkey	42 841	5 325 435	6 314.3	600	48 668	57.7	Community transmission
France	27 792	5 632 993	8 660.9	403	109 499	168.4	Community transmission
Germany	14 602	3 714 969	4 466.9	612	89 834	108.0	Community transmission
Spain	13 768	3 729 458	7 879.3	69	80 465	170.0	Community transmission
Italy	13 329	4 243 482	7 115.0	504	126 976	212.9	Clusters of cases
Netherlands	10 491	1 671 678	9 603.2	34	17 708	101.7	Community transmission
Ukraine	9 041	2 223 558	5 084.3	497	51 679	118.2	Community transmission
Kazakhstan	7 584	458 452	2 441.6	121	7 586	40.4	Clusters of cases
Belarus	5 831	404 740	4 283.3	69	2 969	31.4	Community transmission
Greece	5 824	414 613	3 868.2	152	12 405	115.7	Community transmission
Belgium	5 203	1 076 337	9 341.2	52	25 088	217.7	Community transmission
Georgia	4 867	353 965	8 873.1	138	5 048	126.5	Community transmission
Portugal	4 706	856 740	8 321.2	13	17 045	165.6	Clusters of cases
Sweden	4 215	1 083 456	10 490.9	5	14 574	141.1	Community transmission
Denmark	3 923	289 559	4 972.9	7	2 525	43.4	Community transmission
Kyrgyzstan	3 397	110 370	1 691.7	43	1 890	29.0	Clusters of cases
Ireland	2 347	266 489	5 368.0	0	4 941	99.5	Community transmission
Poland	2 333	2 877 469	7 580.6	421	74 573	196.5	Community transmission
Austria	1 932	644 361	7 239.1	23	10 396	116.8	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Uzbekistan	1 788	103 510	309.3	12	708	2.1	Clusters of cases
Switzerland	1 766	696 934	8 052.7	11	10 246	118.4	Community transmission
Czechia	1 580	1 665 097	15 570.5	66	30 225	282.6	Community transmission
Norway	1 507	127 676	2 378.7	5	789	14.7	Clusters of cases
Lithuania	1 293	277 746	9 940.5	32	4 339	155.3	Community transmission
Latvia	1 263	135 940	7 126.0	44	2 451	128.5	Community transmission
Serbia	1 191	714 753	10 318.8	49	6 958	100.5	Community transmission
Slovenia	1 131	256 352	12 231.3	9	4 721	225.3	Clusters of cases
Croatia	998	358 563	8 835.6	53	8 139	200.6	Community transmission
Romania	915	1 079 657	5 585.7	108	31 825	164.7	Community transmission
Bulgaria	868	420 294	6 046.1	85	17 898	257.5	Clusters of cases
Hungary	782	806 790	8 258.2	50	29 820	305.2	Community transmission
Finland	616	93 774	1 697.2	5	964	17.4	Clusters of cases
Slovakia	590	391 026	7 164.4	35	12 439	227.9	Clusters of cases
Armenia	502	223 682	7 548.6	26	4 484	151.3	Community transmission
Azerbaijan	479	335 126	3 305.3	17	4 953	48.9	Clusters of cases
Cyprus	407	73 157	8 238.4	10	373	42.0	Clusters of cases
Estonia	391	130 510	9 820.3	3	1 266	95.3	Clusters of cases
Republic of Moldova	326	255 758	6 340.1	20	6 152	152.5	Community transmission
Bosnia and Herzegovina	283	204 643	6 237.6	93	9 488	289.2	Community transmission
Luxembourg	224	70 406	11 245.0	0	818	130.6	Community transmission
Montenegro	121	99 947	15 913.6	6	1 598	254.4	Clusters of cases
North Macedonia	121	155 528	7 465.2	23	5 471	262.6	Sporadic cases
Israel	97	839 663	9 700.9	12	6 430	74.3	Community transmission
Albania	75	132 449	4 602.4	2	2 453	85.2	Clusters of cases
Andorra	55	13 813	17 877.4	0	127	164.4	Community transmission
Monaco	16	2 524	6 431.6	0	33	84.1	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Malta	13	30 581	5 943.1	0	419	81.4	Clusters of cases
Iceland	12	6 616	1 816.9	0	30	8.2	Community transmission
Liechtenstein	4	3 117	8 044.5	1	58	149.7	Sporadic cases
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
San Marino	0	5 090	14 997.9	0	90	265.2	Community transmission
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Jersey	31	3 274	3 037.2	0	69	64.0	Community transmission
Faroe Islands	14	755	1 545.1	0	1	2.0	Sporadic cases
Gibraltar	8	4 308	12 786.8	0	94	279.0	Clusters of cases
Isle of Man	2	1 599	1 880.5	0	29	34.1	No cases
Greenland	1	44	77.5	0	0	0.0	No cases
Guernsey	0	823	1 276.6	0	17	26.4	Community transmission
South-East Asia	**763 305**	**33 432 290**	**1 653.9**	**26 324**	**451 838**	**22.4**	
India	630 650	29 439 989	2 133.3	23 625	370 384	26.8	Clusters of cases
Indonesia	55 320	1 911 358	698.8	1 267	52 879	19.3	Community transmission
Nepal	20 348	608 472	2 088.3	514	8 412	28.9	Community transmission
Thailand	18 442	195 909	280.7	213	1 449	2.1	Clusters of cases
Sri Lanka	18 305	223 638	1 044.4	394	2 136	10.0	Clusters of cases
Bangladesh	15 932	826 922	502.1	279	13 118	8.0	Community transmission
Maldives	2 351	70 301	13 005.6	12	197	36.4	Clusters of cases
Myanmar	1 286	145 603	267.6	19	3 244	6.0	Clusters of cases
Timor-Leste	545	8 285	628.4	1	18	1.4	Community transmission
Bhutan	126	1 813	235.0	0	1	0.1	Clusters of cases
Western Pacific	**124 019**	**3 263 070**	**166.1**	**2 301**	**49 935**	**2.5**	
Philippines	46 087	1 308 337	1 193.9	920	22 652	20.7	Community transmission
Malaysia	41 630	652 204	2 015.1	553	3 844	11.9	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Japan	13 499	773 822	611.8	510	14 033	11.1	Clusters of cases
Mongolia	9 918	73 896	2 254.1	44	351	10.7	Clusters of cases
Cambodia	4 346	37 959	227.0	68	320	1.9	Sporadic cases
Republic of Korea	3 724	147 874	288.4	12	1 985	3.9	Clusters of cases
China	1 998	116 103	7.9	187	5 257	0.4	Clusters of cases
Viet Nam	1 757	10 337	10.6	5	58	0.1	Clusters of cases
Fiji	409	1 013	113.0	0	4	0.4	Sporadic cases
Papua New Guinea	353	16 727	187.0	1	165	1.8	Community transmission
Singapore	87	62 263	1 064.3	1	34	0.6	Sporadic cases
Australia	79	30 237	118.6	0	910	3.6	Clusters of cases
Lao People's Democratic Republic	33	1 990	27.4	0	3	0.0	Sporadic cases
New Zealand	26	2 352	48.8	0	26	0.5	Sporadic cases
Brunei Darussalam	5	249	56.9	0	3	0.7	Sporadic cases
Solomon Islands	0	20	2.9	0	0	0.0	No cases
Territories[iii]							
French Polynesia	41	18 930	6 738.9	0	142	50.6	Sporadic cases
Guam	27	7 984	4 730.6	0	139	82.4	Clusters of cases
Marshall Islands	0	4	6.8	0	0	0.0	No cases
New Caledonia	0	128	44.8	0	0	0.0	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	0	183	317.9	0	2	3.5	Pending
Samoa	0	1	0.5	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Wallis and Futuna	0	454	4 037.0	0	7	62.2	Sporadic cases
Global	**2 655 782**	**175 333 154**		**72 528**	**3 793 230**		

*See *Annex 3: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting Variants of Concern as of 15 June 2021**

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Afghanistan	●	-	-	○*	-
Albania	●	-	-	-	-
Algeria	●	-	-	●	-
Angola	●	●	-	-	-
Argentina	●	●	●	●	-
Armenia	○	-	-	-	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	-	-
Bahrain	●	●	-	●	-
Bangladesh	●	●	-	●	-
Barbados	●	-	-	-	-
Belarus	●	-	-	-	-
Belgium	●	●	●	●	-
Belize	●	-	-	-	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	-	-	-
Bosnia and Herzegovina	○	-	-	-	-
Botswana	-	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●*	-	●*	-	-
Brunei Darussalam	●	●	-	-	-
Bulgaria	●	-	-	●	-
Burkina Faso	●	-	-	-	-
Cabo Verde	●	-	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Cambodia	●	-	-	●*	●
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	-	-	-	-
Central African Republic	●	-	-	-	-
Chile	●	●	●	-	-
China	●	●	●	○	-
Colombia	●	-	●	-	-
Comoros	●	●	-	-	-
Congo	●	-	-	-	-
Costa Rica	●	●	●	-	-
Croatia	●	●	-	-	○
Cuba	●	●	-	-	-
Curaçao	●	-	●	-	●
Cyprus	●	●	-	-	●
Czechia	●	●	-	●	-
Côte d'Ivoire	●	●	-	-	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Dominica	●	-	-	-	-
Dominican Republic	●	-	●	-	-
Ecuador	●	-	●	-	-
Egypt	●	-	-	-	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	-	○
Eswatini	-	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Ethiopia	○	-	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	-	-
French Polynesia	●	-	●	-	-
Gabon	●	○	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	-	-
Greece	●	●	●*	●	-
Grenada	●	-	-	-	-
Guadeloupe	●	●	●*	-	●
Guam	●	-	-	●	-
Guinea	●	●	-	-	-
Guinea-Bissau	●	●	-	-	-
Guyana	-	-	●	-	-
Haiti	●	-	●	-	-
Hungary	●	○	-	-	○
Iceland	●	-	-	-	-
India	●	●	●	●	-
Indonesia	●	●	-	●	-
Iran (Islamic Republic of)	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Iraq	●	●*	-	-	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	-	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	○	○	-	-	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	-	-
Kuwait	●	-	-	●*	-
Kyrgyzstan	●	●	-	-	●
Lao People's Democratic Republic	●	-	-	-	-
Latvia	●	●	●	-	○
Lebanon	●	-	-	-	-
Lesotho	-	●	-	-	-
Liberia	●	-	-	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	-	-
Lithuania	●	●	●	-	-
Luxembourg	●	●	●	●	-
Madagascar	-	●	-	-	-
Malawi	●	●	-	-	●
Malaysia	●	●	-	●	-
Maldives	●*	-	-	●*	-
Malta	●	○	●	○	-
Martinique	●	●	●*	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Mauritania	●	●	-	●	-
Mauritius	○	●	-	-	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	○	-	-	-
Montenegro	●	-	-	-	-
Morocco	●	-	-	●	-
Mozambique	-	●	-	-	-
Namibia	-	●	-	-	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	-	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	-	-	●	-
North Macedonia	●	●	-	-	●
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	-	-
Oman	●	-	-	○*	-
Pakistan	●	●	●	●	-
Panama	●	●	●	-	●
Paraguay	-	-	●	-	-
Peru	●	-	●	●*	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	○	-
Puerto Rico	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●*	-
Republic of Moldova	○	-	-	-	-
Romania	●	●	●	●	-
Russian Federation	●	●	-	●	-
Rwanda	●	○	-	-	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	-	-
Saint Lucia	●	-	-	-	-
Saint Martin	●	●	-	-	-
Sao Tome and Principe	●	-	-	-	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	-	-
Serbia	●	-	-	-	-
Seychelles	-	●	-	-	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	-	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
South Africa	●	●	-	●	-
Spain	●	●	●	●	-
Sri Lanka	●	●	-	○	-
Suriname	●	●	●	-	-
Sweden	●	●	●	●	-
Switzerland	●	●	○	●	-
Thailand	●	●	●	●	-
Timor-Leste	●*	-	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Togo	●	●	-	-	-
Trinidad and Tobago	●	-	●	-	-
Tunisia	●	●	-	-	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	-	-	-
Uganda	●	●	-	●	-
Ukraine	●	○	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
United Arab Emirates	●	●	●	-	-
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-
United States of America	●	●	●	●	-
Uruguay	●	-	●	-	-
Uzbekistan	●	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Venezuela (Bolivarian Republic of)	●	-	●	-	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Zambia	-	●	-	●	-
Zimbabwe	-	○	-	●	-

**Newly reported in this update.*

reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

from official sources.

ation become available.

Variant Beta for Ecuador was excluded this week based on further information received.

***Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Efforts are ongoing to differentiate these in future reports. See also Annex 3: Data, table and figure notes.*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

Global totals include 758 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Edition 43, published 8 June 2021

In this edition:

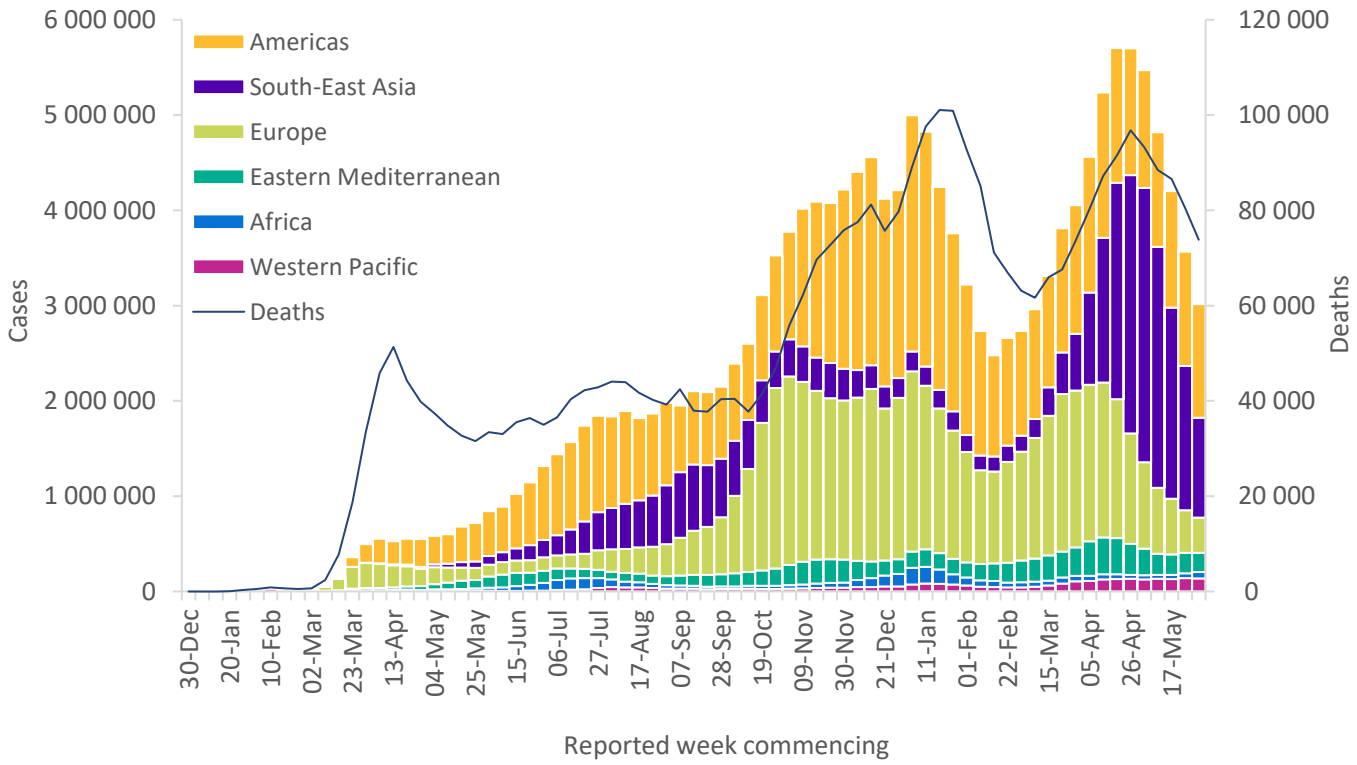
- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest (VOIs) and Variants of Concern (VOCs)
- WHO regional overviews
- Key weekly updates

Global overview

Data as of 6 June 2021

Global case and death incidences continued to decrease with over 3 million new weekly cases and over 73 000 new deaths, a 15% and an 8% decrease respectively, compared to the previous week (Figure 1). The European and South-East Asia Regions reported marked declines in the number of new cases in the past week, whereas the African Region reported an increase compared to the previous week (Table 1). The Region of the Americas as well as the Eastern Mediterranean and the Western Pacific Regions reported similar numbers compared to the previous week. The number of new deaths reported in the past week decreased in the European and South-East Asia Regions and increased in the Western Pacific Region. Death incidences remained stable in the Region of the Americas as well as the Eastern Mediterranean and African Regions. Despite the downward trend in global case and death incidences for a sixth and fifth consecutive week respectively, many countries across all six regions have reported rises in the number of cases and deaths.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 6 June 2021**



**See *Annex 3: Data, table and figure notes*

The highest numbers of new cases were reported from India (914 539 new cases; 33% decrease), Brazil (449 478 new cases; 7% increase), Argentina (212 975 new cases; 3% decrease), Colombia (175 479 new cases; 17% increase), and the United States of America (99 103 new cases; 35% decrease).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 6 June 2021**

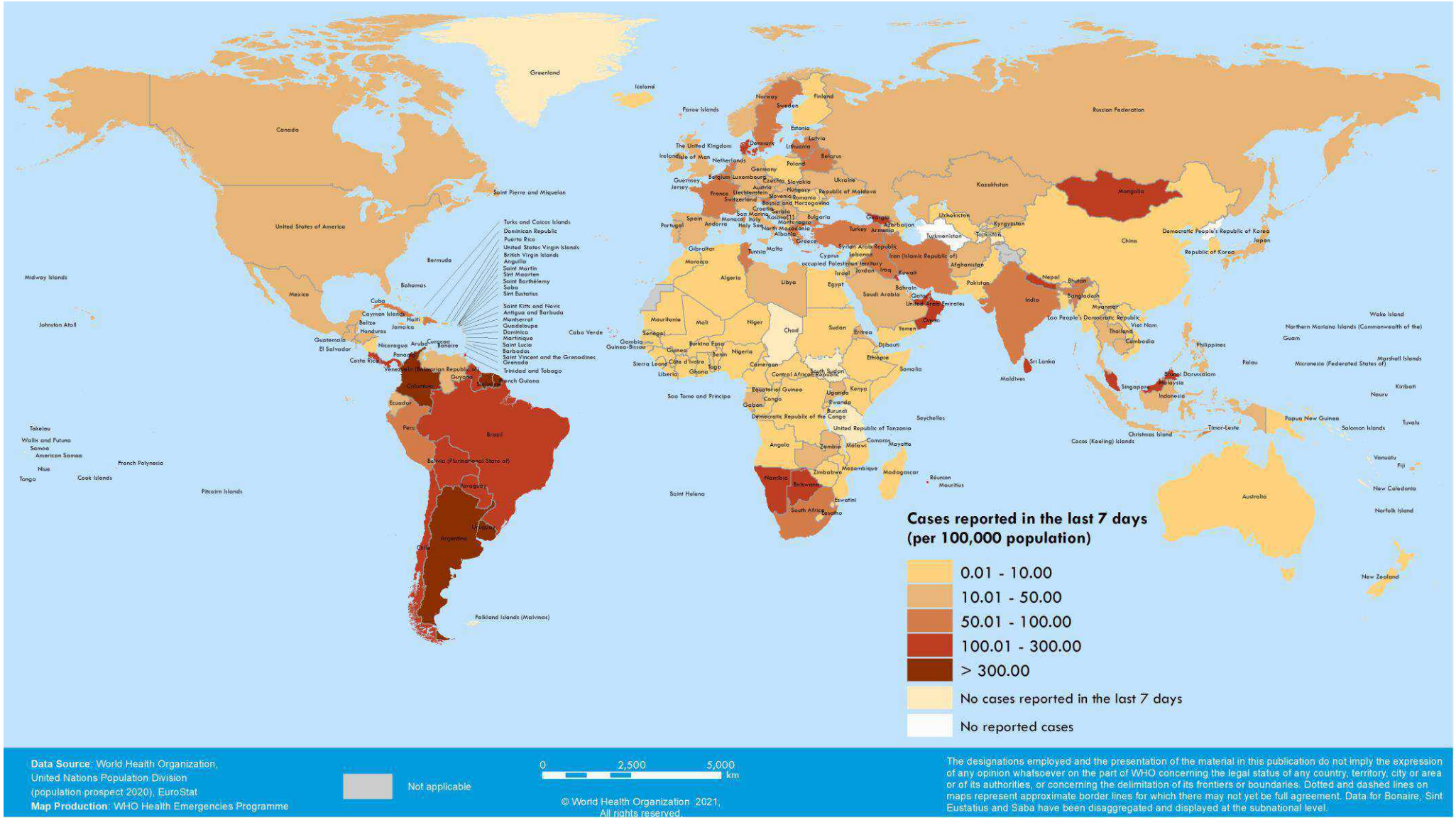
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 191 047 (39%)	-1%	68 370 018 (40%)	34 392 (47%)	4%	1 794 865 (48%)
Europe	368 874 (12%)	-17%	54 629 665 (32%)	8 890 (12%)	-21%	1 157 890 (31%)
South-East Asia	1 049 694 (35%)	-31%	32 654 915 (19%)	23 369 (32%)	-21%	425 123 (11%)
Eastern Mediterranean	202 208 (7%)	-5%	10 278 904 (6%)	3 503 (5%)	-1%	205 145 (6%)
Africa	65 943 (2%)	25%	3 563 825 (2%)	1 167 (2%)	2%	88 274 (2%)
Western Pacific	138 239 (5%)	-1%	3 139 006 (2%)	2 486 (3%)	19%	47 634 (1%)
Global	**3 016 005 (100%)**	**-15%**	**172 637 097 (100%)**	**73 807 (100%)**	**-8%**	**3 718 944 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
**See *Annex 3: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 31 May – 6 June 2021**



**See *Annex 3: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest (VOIs) and Variants of Concern (VOCs)

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 result in changes in transmissibility, clinical presentation and severity, or if they result in changes in the implementation of public health and social measures (PHSM) by national health authorities. Systems have been established to detect "signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) and assess these based on the risk posed to global public health. Table 2 lists currently designated global VOIs and VOCs. National authorities may choose to designate other variants of local interest/concern. Here we provide an update on emerging evidence surrounding phenotypic characteristics and the geographical distribution of designated VOCs.

On 31 May 2021, WHO announced new easy-to-say/easy-to-remember VOI and VOC labels to facilitate public communication about SARS-CoV-2 variants and the 1 June 2021 edition of the WEU outlined the changes in labelling of the VOCs and VOIs, as well as updates to the classifications of variants B.1.617.1, B.1.617.3 and B.1.616.

Table 2: SARS-CoV-2 Variants of Concern (VOCs) and Variants of Interest (VOIs), as of 8 June 2021

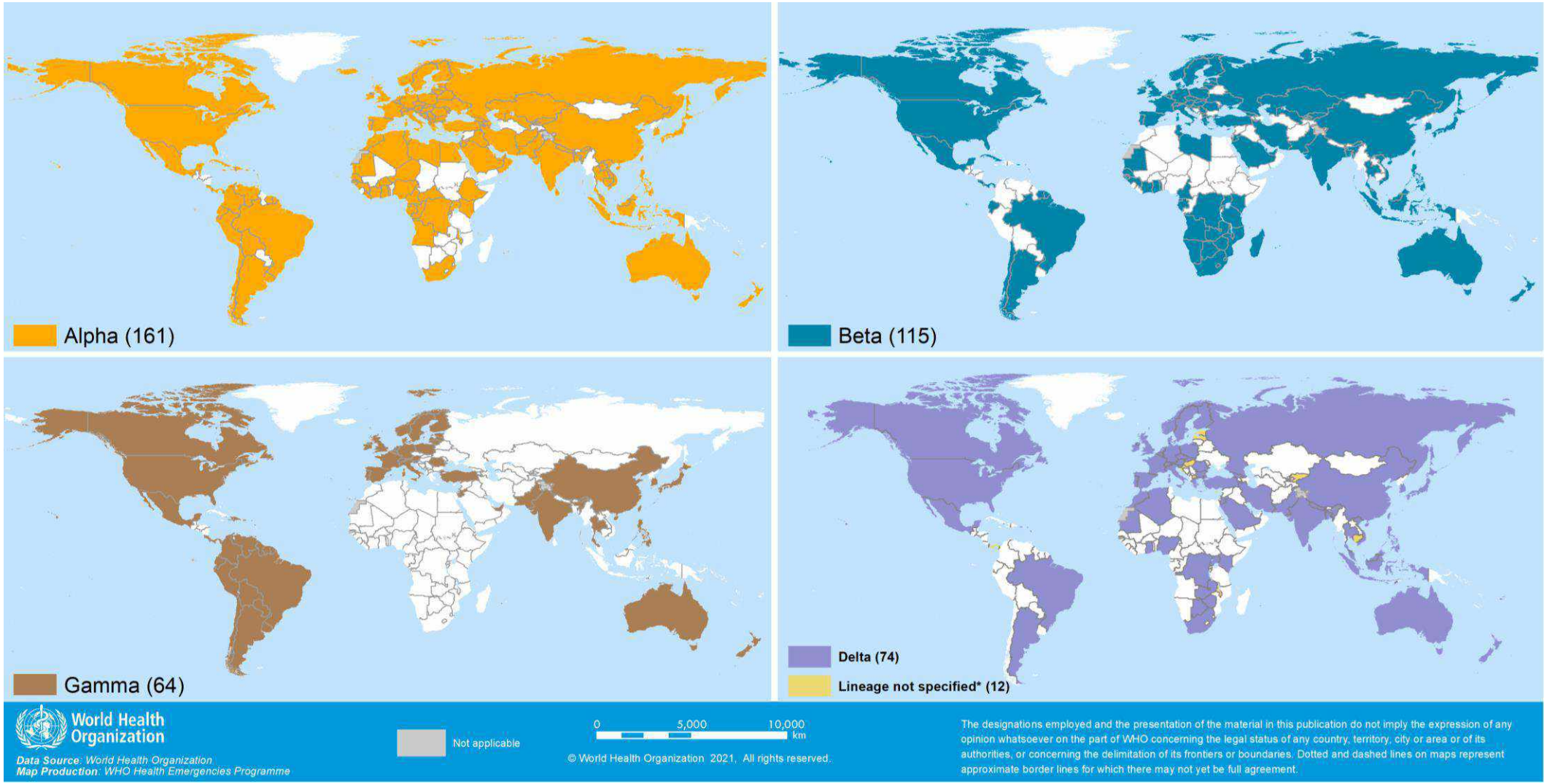
WHO label	Pango lineage	GISAID clade	Nextstrain clade	Earliest documented samples	Date of designation
Variants of Concern (VOCs)					
Alpha	B.1.1.7	GRY (formerly GR/501Y.V1)	20I/501Y.V1	United Kingdom, Sep-2020	18-Dec-2020
Beta	B.1.351	GH/501Y.V2	20H/501Y.V2	South Africa, May-2020	18-Dec-2020
Gamma	P.1	GR/501Y.V3	20J/501Y.V3	Brazil, Nov-2020	11-Jan-2021
Delta	B.1.617.2	G/452R.V3	21A/S:478K	India, Oct-2020	VOI: 4-Apr-2021 VOC: 11-May-2021
Variants of Interest (VOIs)					
Epsilon	B.1.427/ B.1.429	GH/452R.V1	20C/S.452R	United States of America, Mar-2020	5-Mar-2021
Zeta	P.2	GR	20B/S.484K	Brazil, Apr-2020	17-Mar-2021
Eta	B.1.525	G/484K.V3	20A/S484K	Multiple countries, Dec-2020	17-Mar-2021
Theta	P.3	GR	20B/S:265C	Philippines, Jan-2021	24-Mar-2021
Iota	B.1.526	GH	20C/S:484K	United States of America, Nov-2020	24-Mar-2021
Kappa	B.1.617.1	G/452R.V3	21A/S:154K	India, Oct-2020	4-Apr-2021

Table 3: Summary of phenotypic impacts* of Variants of Concern (VOCs)

WHO label	Alpha	Beta	Gamma	Delta
Transmissibility	Increased transmissibility and secondary attack rate[1]	Increased transmissibility[2]	Increased transmissibility[1]	Increased transmissibility and secondary attack rate[3,4,5]
Disease severity	Not confirmed, possible increased risk of hospitalization[6], severity and mortality[7]	Not confirmed, possible increased risk of in-hospital mortality[8,9]	Not confirmed, possible increased risk of hospitalization[10]	Not confirmed, possible increased risk of hospitalization[5]
Risk of reinfection	Neutralizing activity retained,[11] risk of reinfection remain similar[12,13]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[14–17]	Moderate reduction in neutralizing activity reported[18,19]	Reduction in neutralizing activity reported[20]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF); no impact on overall result from multiple target RT-PCR, No impact on Ag RDTs observed[21]	No impact on RT-PCR or Ag RDTs observed[16]	None reported to date	None reported to date
Impacts on vaccine efficacy/effectiveness	Protection retained against disease • Severe disease: No/minimal loss: Pfizer BioNTech-Comirnaty[22–27] • Symptomatic disease: No/minimal loss: AstraZeneca-Vaxzevria, Novavax-Covavax, PfizerBioNTech-Comirnaty[23,24,27–30] • Infection: No/minimal loss: Pfizer BioNTech-Comirnaty[31] • Asymptomatic infection: No/minimal loss: Pfizer BioNTech-Comirnaty.[23,32] Inconclusive/moderate-substantial loss, limited sample size: AstraZeneca-Vaxzevria[29]	Reduced protection against disease; limited evidence • Severe disease: No/minimal loss: Janssen Ad26.COV 2.5, PfizerBioNTech-Comirnaty[24,33] • Mild-moderate disease: No/minimal loss: Janssen-Ad26. COV 2.5.[33] Moderate loss: Novavax-Covavax.[34] Inconclusive/ substantial loss, limited sample size: AstraZeneca-Vaxzevria[35] • Infection: Moderate loss: PfizerBioNTech-Comirnaty[24] • Asymptomatic infection: No evidence	Protection likely against disease; very limited evidence, on only one vaccine • Symptomatic Disease: No/minimal loss: Sinovac-CoronaVac[36,37] • Infection: No/minimal loss: Sinovac-CoronaVac[37]	Protection likely against disease; very limited evidence on only two vaccines • Symptomatic Disease: No/minimal loss: Pfizer BioNTech-Comirnaty, AstraZeneca- Vaxzevria.[38] Minimal/modest loss: *single dose* of PfizerBioNTech-Comirnaty, AstraZeneca-Vaxzevria[38]
Impacts on neutralization by vaccine	• No/minimal loss: Bharat-Covaxin, Gamaleya-Sputnik V, Moderna-mRNA-1273, Novavax-Covavax, Pfizer BioNTech-Comirnaty, BeijingCNBG-BBIBP-CorV, Sinovac-CoronaVac[17,38–63] • Minimal/moderate loss: AstraZeneca-Vaxzevria[29,53]	• Minimal/modest loss: Beijing CNBG-BBIBP-CorV, Sinovac-CoronaVac, Anhui ZL - Recombinant[64–66] • Minimal to substantial loss: Moderna-mRNA-1273, Pfizer BioNTech-Comirnaty[17,40,44,46–48,50,52–54,60,62,63,67–73] • Moderate to substantial loss: AstraZeneca-Vaxzevria, Gamaleya- Sputnik V, Janssen-Ad26.COV 2.5, Novavax-Covavax[46,55,70,70,74]	• No/minimal loss:AstraZeneca-Vaxzevria,Sinovac-CoronaVac[53,75] • Minimal/moderate loss: Moderna-mRNA-1273, Pfizer BioNTech-Comirnaty[17,40,41,50,52,53,59,62,76,77]	• Modest/moderate loss: Pfizer BioNTech Comirnaty, Bharat-Covaxin[60,78,79] (Note: sublineage of B.1.617 not specified in Bharat-Covaxin study) • Substantial loss: *single dose* of AstraZeneca-Vaxzevria[78]

**Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.*

Figure 3. Countries, territories and areas reporting variants Alpha (B.1.1.7), Beta (B.1.351), Gamma (P.1) and Delta (B.1.617.2), as of 8 June 2021**



**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*

***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details.*

Phenotypic characteristics

Available evidence on phenotypic impacts of VOCs and vaccine performance against VOCs are summarised in Tables 3, as well as in previous editions of the WEU.

Recent studies of the Delta variant in the United Kingdom of Great Britain and Northern Ireland suggest a possible increased risk of severe disease, and support previous observations of increased transmissibility.[5] An analysis comparing Delta and Alpha variant confirmed cases in the United Kingdom from 29 March to 20 May 2021 showed the Delta variant was associated with a possible increased risk of hospitalization (hazard ratio 2.61, 95%CI 1.56-4.36), and an increased risk of emergency care attendance or hospitalization (hazard ratio 1.67, 1.25-2.23) within 14 days of specimen collection, as compared to the Alpha variant. A second analysis based on cases reported in the United Kingdom from 29 March to 11 May 2021 (variant data as of 25 May 2021) found that the secondary attack rate was higher among contacts of Delta cases compared to contacts of Alpha cases (2.6% vs. 1.6% among contacts of cases that have travelled; 8.2% vs. 12.4% among contacts of cases that have not travelled). Further analyses are required to better understand and confirm these findings.

VOC impacts on vaccines

Since the update on VOC impacts on vaccines on 25 May, two studies have provided further evidence of the effectiveness of Pfizer BioNTech-Comirnaty vaccine against VOCs. A study from Canada found two doses of the vaccine to be 90% (95% CI: 85-94%) and 88% (95% CI: 61-96%) effective against symptomatic disease ≥7 days post second dose caused by variants Alpha and Beta/Gamma, respectively, among adults 16 years and older. Vaccine effectiveness (VE) against hospitalization/death ≥0 days post second dose was 94% (95%CI: 55-99%) for Alpha and 100% (95% CI not available) for Beta/Gamma. VE of a single dose of Pfizer BioNTech-Comirnaty against symptomatic disease (≥14 days after immunization) was 61% (95% CI: 59-66%), 43% (95% CI: 22-59%), and 61% (95% CI: 53-67%) for Alpha, Beta, and for Gamma, respectively, underscoring the importance of two doses of vaccine in preventing symptomatic disease. Samples bearing the 501Y mutation without the E484K mutation were assumed to be Alpha while samples bearing the 501Y mutation with the E484K mutation were assumed to be either Beta or Gamma.[27] Samples bearing the 501Y mutation without the E484K mutation were assumed to be Alpha while samples bearing the 501Y mutation with the E484K mutation were assumed to be either Beta or Gamma.[27] Samples bearing the 501Y mutation without the E484K mutation were assumed to be Alpha while samples bearing the 501Y mutation with the E484K mutation were assumed to be either Beta or Gamma.[27]

A previously highlighted study from Qatar found two doses of Pfizer BioNTech-Comirnaty to be highly effective against Alpha infection (VE 89.5%) and severe disease (VE 100%); the vaccine was also highly effective against severe disease caused by Beta with a VE of 100% but somewhat reduced against infection (VE 75%) due to this variant.[24] A follow-up analysis (not yet peer-reviewed) to this study evaluated the effectiveness of one dose of Pfizer BioNTech-Comirnaty against infection and severe disease caused by Alpha and Beta variants. At 1-7 days and 8-14 days post vaccination, low to no effectiveness against infection and severe disease was observed for disease events caused by these variants. At 15-21 days post vaccination, VE estimates against infection and severe disease due to Alpha were 65.5% (95% CI: 58.2-71.5%) and 72.0% (95% CI: 32.0-90.0%), respectively. VE estimates against infection and severe disease due to Beta were 46.5% (95% CI: 38.7-53.3%) and 56.5% (95% CI: 0.0-82.8%), respectively. These findings underscore the importance of two doses in preventing infection and severe disease caused by Alpha and Beta. Of note, infections that were not due to Alpha were assumed to be caused by Beta variant as national surveillance did not detect any other strains circulating during much of the study period.[80]

Two recent studies provide evidence of reduced neutralization capacity of COVID-19 vaccines against variant Delta. One study found a 5.8-fold reduction in neutralization against Delta compared to a reference strain in 159 samples from individuals who received two doses of Pfizer BioNTech-Comirnaty [median time after second dose: 28 days (IQR: 21-37)]; 2.6- and 4.9-fold reductions were observed against Alpha and Beta variants, respectively, relative to the reference strain.[60] Findings from a second study (not yet peer-reviewed)

show a 3-fold reduction in neutralization capacity against Delta relative to Alpha among sera collected from 16 individuals five weeks after receipt of second dose of Pfizer BioNTech-Comirnaty; a 16-fold reduction was observed against Beta relative to Alpha. Most samples (81-100%) were able to neutralize Alpha, Beta and Delta five weeks after receipt of the second dose; findings remained consistent at 13 weeks after second dose with the exception of the Beta strain whereby only 46% of samples were able to neutralize the variant. Authors also found that a single dose of AstraZeneca-Vaxzevria, while able to neutralize Alpha, was less effective at neutralizing Beta or Delta.[78]

Two recent studies (not yet peer reviewed) provide evidence of the impact of heterologous vaccination on neutralization capacity against variants. In both studies, individuals received AstraZeneca-Vaxzevria as a first dose followed by a Pfizer BioNTech-Comirnaty booster. The first of these studies compared 26 individuals receiving heterologous vaccination to 14 individuals receiving two doses of Pfizer BioNTech-Comirnaty. Overall, authors report a strong neutralization response in heterologous vaccinated individuals against Alpha, Beta and B.1.617 (lineage not specified) exceeding neutralization titers of the homologous vaccination group, though the difference for B.1.617 was not statistically significant. Results also show that, among the heterologous group, a two-fold reduction in neutralization capacity was observed against Beta relative to Alpha, though neutralization was still achieved; no such reduction was observed for B.1.617. In addition, CD4+ or CD8+ T cells were detected two weeks after heterologous vaccination, with results similar to those from studies evaluating a single dose of AstraZeneca-Vaxzevria and homologous Pfizer BioNTech-Comirnaty vaccination.[81] The second study compared the AstraZeneca-Vaxzevria/Pfizer BioNTech-Comirnaty heterologous group to a homologous group receiving two doses of AstraZeneca-Vaxzevria and found higher neutralization against Alpha, Beta and Gamma in the heterologous group. Increased CD4+ and CD8+ T cell reactivity was also observed in the heterologous group.[82] Together, these studies provide evidence that a heterologous vaccination regimen is at least as protective as homologous vaccinations.

Geographic distribution

As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing, the number of countries/areas/territories (hereafter countries) reporting VOCs has continued to increase (Figure 3, Annex 2). This distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries

Public health authorities are encouraged to continue to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and in the investigation of unusual epidemiological events. Environmental surveillance has the potential to support other early warning surveillance systems for monitoring the spread of SARS-CoV-2 infections, including variants. A recent study in the United Kingdom demonstrated the ability to detect co-circulating SARS-CoV-2 variants and identify changes in viral RNA sequences in wastewater.[83] In Spain, weekly wastewater estimates of the proportion of variant Alpha in 32 different locations reflected the trends in reported sequenced clinical cases in most regions. Moreover, wastewater surveillance allowed the identification of variant Alpha circulation in new areas within Spain before detection by the public health authorities using clinical specimens.[84]

WHO recommendations

Virus evolution is expected, and the more SARS-CoV-2 circulates, the more opportunities it has to evolve. Reducing transmission through established and proven disease control methods such as those outlined in the COVID-19 Strategic Preparedness and Response Plan, as well as avoiding introductions into animal populations, are crucial aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critical to curb the spread of SARS-CoV-2 and its variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that PHSM, including infection prevention and control (IPC) measures in health facilities, have been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. National

and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities. Authorities are also encouraged to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and to detect unusual events.

Additional resources

- Tracking SARS-CoV-2 variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19
- COVID-19 Situation Reports from WHO Regional Offices and partners: AFRO, AMRO/PAHO, EMRO, EURO/ECDC, SEARO, WPRO
- ACT accelerator diagnostic pillar, FIND test directory

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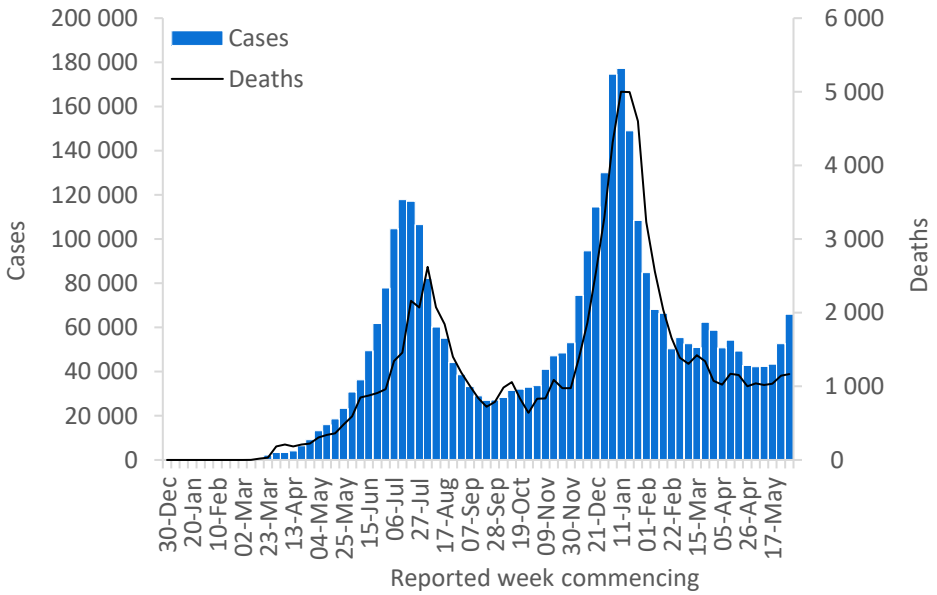
WHO regional overviews

African Region

The African Region reported just under 66 000 new cases, a 25% increase compared to the previous week, and over 1100 new deaths, a number similar to that of the previous week. The region reported an increase in weekly case incidence by over 20% for a second consecutive week, while death incidence increased for a third consecutively, though by a lower rate. The highest numbers of new cases were reported from South Africa (32 421 new cases; 54.7 new cases per 100 000 population; a 22% increase), Uganda (5745 new cases; 12.6 new cases per 100 000; a 137% increase), and Zambia (4789 new cases; 26.0 new cases per 100 000; a 191% increase).

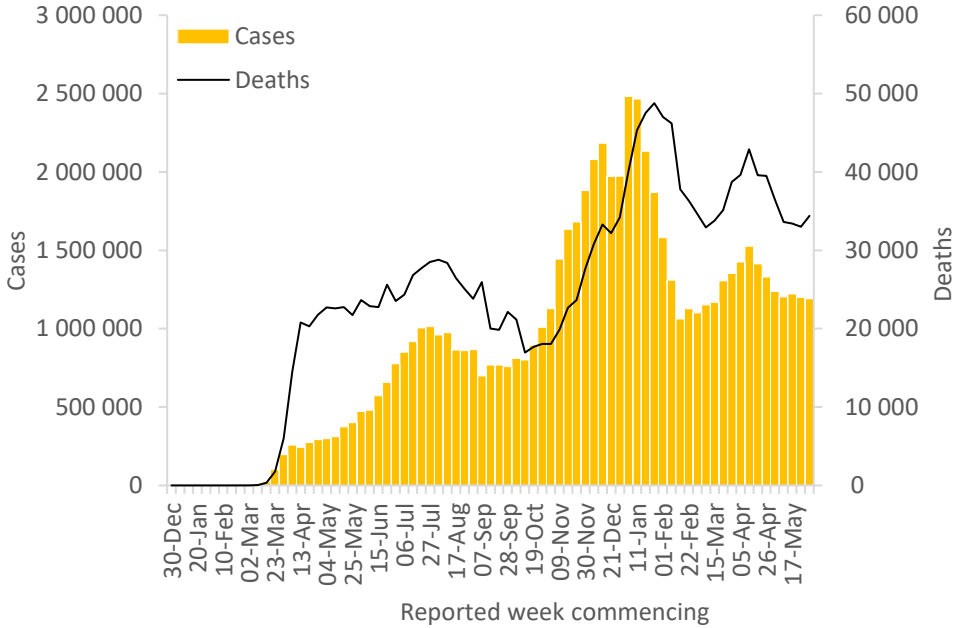
The highest numbers of new deaths were reported from South Africa (566 new deaths; 1.0 new deaths per 100 000 population; a 4% decrease), Kenya (123 new deaths; 0.2 new deaths per 100 000; a 34% increase), and Namibia (87 new deaths; 3.4 new deaths per 100 000; a 58% increase).



Region of the Americas

The Region of the Americas reported just under 1.2 million new cases and over 34 000 new deaths, both figures similar to those of the previous week. Case incidence overall continued to decrease since mid-April 2021; however, high numbers in both cases and deaths continue to be observed in many countries, most notably in parts of South and Central America. The highest numbers of new cases were reported from Brazil (449 478 new cases; 211.5 new cases per 100 000; a 7% increase), Argentina (212 975 new cases; 471.2 new cases per 100 000; a 3% decrease), and Colombia (175 479 new cases; 344.9 new cases per 100 000; a 17% increase).

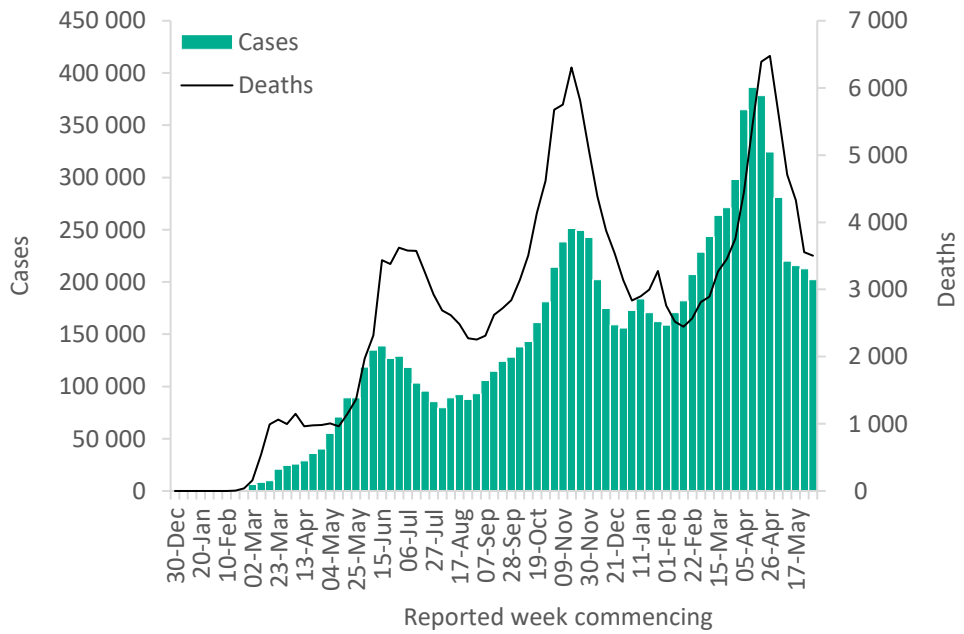
The highest numbers of new deaths were reported from Brazil (11 797 new deaths; 5.5 new deaths per 100 000; a 7% decrease), Mexico (5496 new deaths; 4.3 new deaths per 100 000; a 203% increase), and Argentina (3718 new deaths; 8.2 new deaths per 100 000; a 13% increase).



Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 202 000 new cases and over 3500 new deaths. Overall, weekly case and death incidence has continued a general downward trend; however, surges in transmission have been observed in several countries. The highest numbers of new cases were reported from the Islamic Republic of Iran (67 533 new cases; 80.4 new cases per 100 000; a 3% decrease), Iraq (28 070 new cases; 69.8 new cases per 100 000; a 5% decrease), and Pakistan (14 272 new cases; 6.5 new cases per 100 000; a 24% decrease).

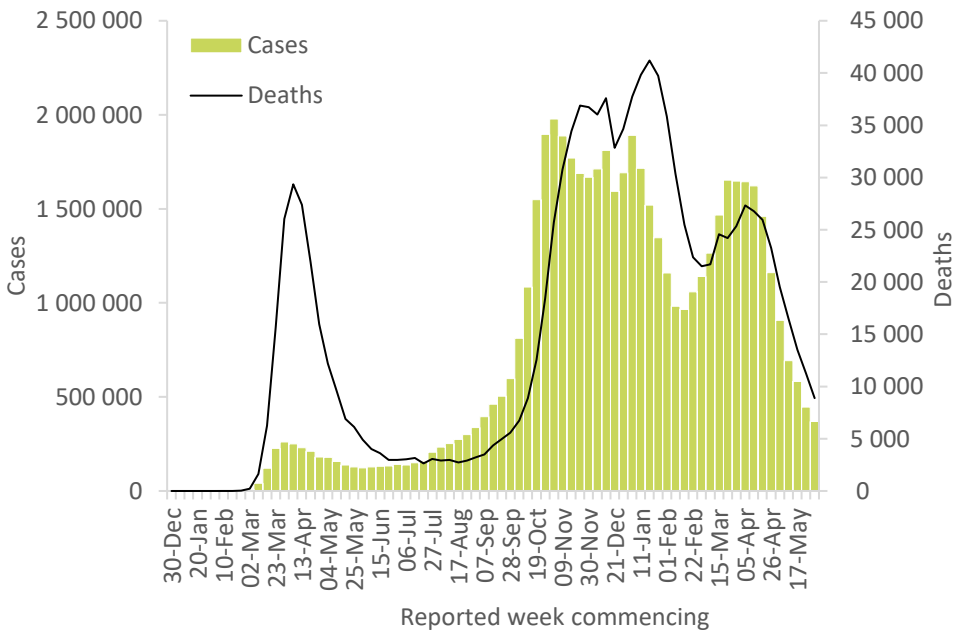
The highest numbers of new deaths were reported from the Islamic Republic of Iran (1200 new deaths; 1.4 new deaths per 100 000; a 12% decrease), Pakistan (509 new deaths; 0.2 new deaths per 100 000; similar to the previous week), and Tunisia (374 new deaths; 3.2 new deaths per 100 000; a 5% decrease).



European Region

The European Region reported over 368 000 new cases and just under 8900 new deaths, a 17% and a 21% decrease respectively compared to the previous week. Steep declines in both case and death incidences continued for a tenth and eighth consecutive week, respectively. The highest numbers of new cases were reported from the Russian Federation (62 995 new cases; 43.2 new cases per 100 000; a 2% increase), France (47 528 new cases; 73.1 new cases per 100 000; a 22% decrease), and Turkey (46 616 new cases; 55.3 new cases per 100 000; a 19% decrease).

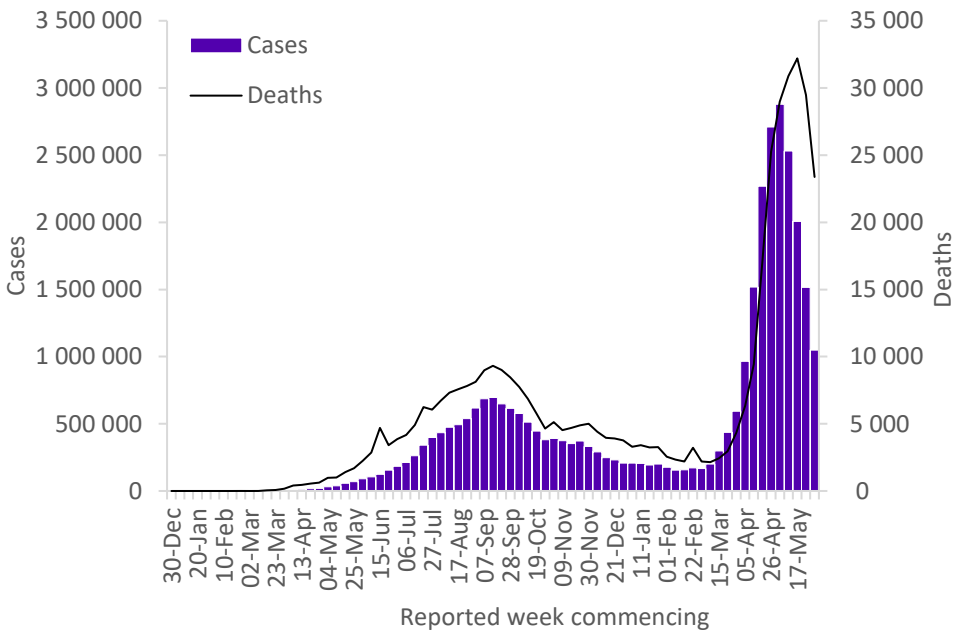
The highest numbers of new deaths were reported from the Russian Federation (2625 new deaths; 1.8 new deaths per 100 000; a number similar to that of the previous week), Germany (816 new deaths; 1.0 new deaths per 100 000; a 20% decrease), and Turkey (797 new deaths; 0.9 new deaths per 100 000; a 34% decrease).



South-East Asia Region

The South-East Asia Region reported over 1.0 million new cases and over 23 000 new deaths, a 31% and a 21% decrease respectively compared to the previous week. Overall, case and death incidences continued to sharply decline in line with trends in India; however, marked increases have been observed elsewhere in the region. The highest numbers of new cases were reported from India (914 539 new cases; 66.3 new cases per 100 000; a 33% decrease), Indonesia (40 280 new cases; 14.7 new cases per 100 000; similar to the previous week), and Nepal (31 678 new cases; 108.7 new cases per 100 000; a 34% decrease).

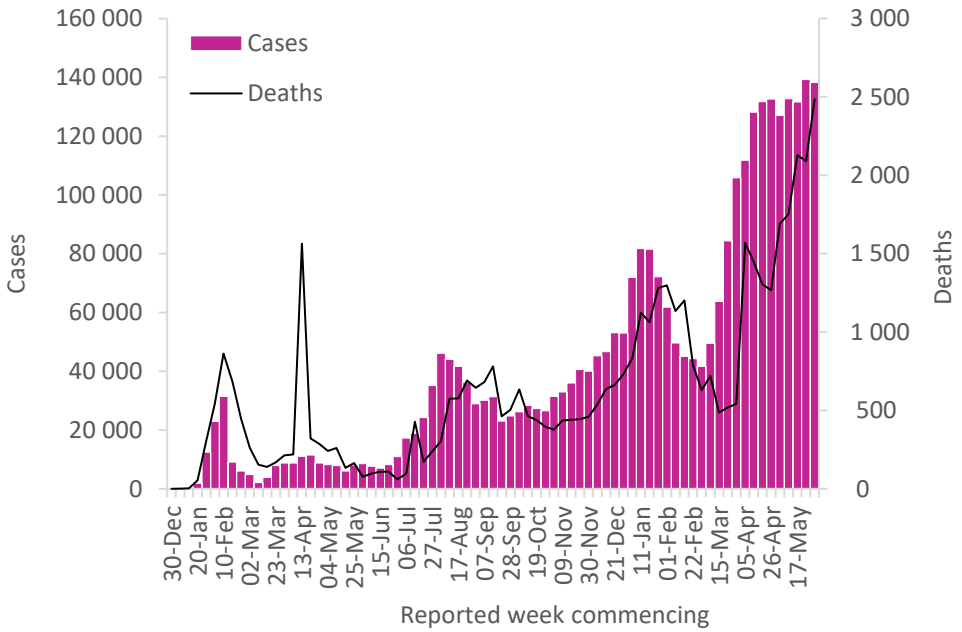
The highest numbers of new deaths were reported from India (20 787 new deaths; 1.5 new deaths per 100 000; a 22% decrease), Indonesia (1187 new deaths; 0.4 new deaths per 100 000; a 12% increase), and Nepal (636 new deaths; 2.2 new deaths per 100 000; a 37% decrease).



Western Pacific Region

The Western Pacific Region reported over 138 000 new cases, a number similar to that of the previous week, and over 2400 new deaths, a 19% increase compared to the previous week. During the past week, the region recorded its highest incidence of deaths and second highest cases incidence to date. The highest numbers of new cases were reported from Malaysia (52 040 new cases; 160.8 new cases per 100 000; a 3% decrease), the Philippines (45 681 new cases; 41.7 new cases per 100 000; a 19% increase), and Japan (18 649 new cases; 14.7 new cases per 100 000; a 32% decrease).

The highest numbers of new deaths were reported from the Philippines (1010 new deaths; 0.9 new deaths per 100 000; a 30% increase), Malaysia (641 new deaths; 2.0 new deaths per 100 000; a 42% increase), and Japan (603 new deaths; 0.5 new deaths per 100 000; a 12% decrease).



Key weekly updates

WHO Director-General's key messages

- In his opening remarks at the media briefing on COVID-19 – 7 June 2021, the Director-General reminded us that although the number of cases and deaths have been decreasing for over a month, we are increasingly seeing a two-track pandemic: where many countries still face an extremely dangerous situation, while some of those with the highest vaccination rates are starting to talk about ending restrictions.
- On 12 June, leaders of G7 countries will meet for their annual summit. The Director-General urges the G7 not just to commit to sharing doses, but to commit to sharing them in June and July. The inequitable distribution of vaccines has allowed the virus to continue spreading, increasing the chances of a variant emerging that renders vaccines less effective and the biggest barrier to ending the pandemic remains sharing: of doses, of resources, of technology.

Upcoming meetings

- 10 June 2021, 1pm CEST: Global Consultation on SARS-CoV-2 Variants of Concern and their Impact on Public Health Interventions – register here.

Updates and publications

- The Sinovac COVID-19 vaccine: What you need to know
- Background document on the inactivated vaccine Sinovac-CoronaVac against COVID-19
- Interim recommendations for use of the inactivated COVID-19 vaccine, CoronaVac, developed by Sinovac
- Guidance on developing a national deployment and vaccination plan for COVID-19 vaccines
- Use of medical and non-medical/fabric masks for community outreach activities during the COVID-19 pandemic
- How to manage COVID-19 vaccines without Vaccine Viral Monitors (VVM) at vaccination service points?
- Revised scope and direction for the Smart Vaccination Certificate and WHO's role in the Global Health Trust Framework
- Statement on protection of health care in complex humanitarian emergencies
- Developing guidelines for fighting COVID-19: Fascinating to merge local and global expertise

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 6 June 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**65 943**	**3 563 825**	**317.7**	**1 167**	**88 274**	**7.9**	
South Africa	32 421	1 691 491	2 852.0	566	56 929	96.0	Community transmission
Uganda	5 745	51 676	113.0	12	374	0.8	Community transmission
Zambia	4 789	99 540	541.5	27	1 303	7.1	Community transmission
Namibia	3 398	58 057	2 284.9	87	905	35.6	Community transmission
Botswana	2 451	58 764	2 498.9	35	866	36.8	Community transmission
Algeria	2 225	130 681	298.0	50	3 510	8.0	Community transmission
Kenya	1 840	172 325	320.5	123	3 264	6.1	Community transmission
Ethiopia	1 605	272 805	237.3	58	4 201	3.7	Community transmission
Angola	1 414	35 594	108.3	37	794	2.4	Community transmission
Democratic Republic of the Congo	1 380	32 796	36.6	15	797	0.9	Community transmission
Cameroon	947	78 929	297.3	5	1 275	4.8	Community transmission
Seychelles	865	12 238	12 443.7	2	42	42.7	Community transmission
Cabo Verde	730	31 003	5 576.2	4	267	48.0	Community transmission
Nigeria	471	166 756	80.9	46	2 117	1.0	Community transmission
Ghana	413	94 188	303.1	2	786	2.5	Community transmission
Eritrea	400	4 461	125.8	0	14	0.4	Community transmission
Madagascar	397	41 631	150.3	30	859	3.1	Community transmission
Rwanda	382	27 162	209.7	10	359	2.8	Community transmission
Mozambique	358	71 082	227.4	1	837	2.7	Community transmission
Mauritania	322	19 785	425.5	3	466	10.0	Community transmission
Senegal	300	41 631	248.6	7	1 145	6.8	Community transmission
Côte d'Ivoire	281	47 476	180.0	5	306	1.2	Community transmission
Congo	262	11 920	216.0	2	155	2.8	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Zimbabwe	235	39 168	263.5	11	1 605	10.8	Community transmission
Gabon	226	24 591	1 104.8	4	154	6.9	Community transmission
Burundi	151	4 905	41.3	2	8	0.1	Community transmission
Togo	101	13 533	163.5	0	125	1.5	Community transmission
Equatorial Guinea	97	8 626	614.8	0	118	8.4	Community transmission
Guinea	83	23 255	177.1	1	162	1.2	Community transmission
Liberia	72	2 251	44.5	0	86	1.7	Community transmission
Mauritius	65	1 458	114.6	1	18	1.4	Clusters of cases
Malawi	55	34 384	179.7	2	1 156	6.0	Community transmission
Eswatini	47	18 636	1 606.3	1	673	58.0	Community transmission
Mali	31	14 296	70.6	1	518	2.6	Community transmission
Niger	28	5 438	22.5	0	192	0.8	Community transmission
Sierra Leone	28	4 168	52.3	0	79	1.0	Community transmission
Guinea-Bissau	26	3 787	192.4	0	68	3.5	Community transmission
Benin	24	8 082	66.7	1	102	0.8	Community transmission
Burkina Faso	22	13 452	64.4	1	167	0.8	Community transmission
Central African Republic	16	7 101	147.0	0	98	2.0	Community transmission
Lesotho	12	10 837	505.9	0	326	15.2	Community transmission
Chad	11	4 939	30.1	1	174	1.1	Community transmission
Sao Tome and Principe	8	2 353	1 073.6	0	37	16.9	Community transmission
Comoros	7	3 956	454.9	0	146	16.8	Community transmission
Gambia	6	5 999	248.2	0	179	7.4	Community transmission
South Sudan	0	10 688	95.5	0	115	1.0	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories[iii]							
Réunion	1 174	26 075	2 912.4	14	203	22.7	Community transmission
Mayotte	22	19 347	7 091.6	0	173	63.4	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Americas	**1 191 047**	**68 370 018**	**6 684.8**	**34 392**	**1 794 865**	**175.5**	
Brazil	449 478	16 841 408	7 923.2	11 797	470 842	221.5	Community transmission
Argentina	212 975	3 915 397	8 663.2	3 718	80 411	177.9	Community transmission
Colombia	175 479	3 518 046	6 914.0	3 683	90 890	178.6	Community transmission
United States of America	99 103	33 015 604	9 974.4	2 984	591 276	178.6	Community transmission
Chile	50 510	1 420 266	7 429.6	769	29 816	156.0	Community transmission
Peru	28 611	1 976 166	5 993.5	2 770	185 813	563.6	Community transmission
Uruguay	26 292	308 490	8 880.7	398	4 516	130.0	Community transmission
Mexico	20 853	2 429 631	1 884.4	5 496	228 568	177.3	Community transmission
Paraguay	19 999	368 183	5 162.0	717	9 609	134.7	Community transmission
Bolivia (Plurinational State of)	18 887	383 457	3 285.0	523	14 900	127.6	Community transmission
Canada	15 233	1 389 508	3 681.6	239	25 679	68.0	Community transmission
Costa Rica	13 877	327 979	6 438.4	191	4 153	81.5	Community transmission
Dominican Republic	9 155	299 681	2 762.6	24	3 652	33.7	Community transmission
Venezuela (Bolivarian Republic of)	9 105	239 252	841.4	103	2 698	9.5	Community transmission
Cuba	7 744	147 831	1 305.2	60	1 003	8.9	Community transmission
Guatemala	7 555	261 392	1 459.0	159	8 280	46.2	Community transmission
Ecuador	6 688	431 429	2 445.3	288	20 773	117.7	Community transmission
Honduras	4 588	241 039	2 433.6	170	6 454	65.2	Community transmission
Panama	4 268	381 122	8 833.0	24	6 389	148.1	Community transmission
Trinidad and Tobago	3 181	25 801	1 843.6	98	556	39.7	Community transmission
Suriname	1 704	16 009	2 729.0	50	332	56.6	Community transmission
Haiti	1 024	15 282	134.0	16	323	2.8	Community transmission
El Salvador	895	74 141	1 143.1	25	2 266	34.9	Community transmission
Guyana	735	17 459	2 219.7	23	403	51.2	Community transmission
Jamaica	527	48 901	1 651.4	22	964	32.6	Community transmission
Bahamas	170	11 930	3 033.7	2	232	59.0	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Nicaragua	116	5 949	89.8	1	187	2.8	Community transmission
Saint Lucia	73	5 108	2 781.7	3	80	43.6	Community transmission
Belize	70	12 861	3 234.4	1	325	81.7	Community transmission
Saint Vincent and the Grenadines	41	2 068	1 864.1	0	12	10.8	Community transmission
Barbados	20	4 029	1 402.0	0	47	16.4	Community transmission
Saint Kitts and Nevis	10	78	146.6	0	0	0.0	Clusters of cases
Antigua and Barbuda	4	1 263	1 289.7	0	42	42.9	Clusters of cases
Dominica	0	188	261.1	0	0	0.0	Clusters of cases
Grenada	0	161	143.1	0	1	0.9	Sporadic cases
Territories[iii]							
French Guiana	962	24 725	8 278.0	5	121	40.5	Community transmission
Puerto Rico	464	138 949	4 856.9	17	2 516	87.9	Community transmission
Guadeloupe	234	17 108	4 275.7	5	260	65.0	Community transmission
Saint Martin	104	2 113	5 465.7	7	22	56.9	Community transmission
United States Virgin Islands	95	3 560	3 409.1	1	28	26.8	Community transmission
Martinique	81	12 060	3 213.7	2	97	25.8	Community transmission
Aruba	61	11 018	10 319.8	0	107	100.2	Community transmission
Sint Maarten	44	2 448	5 708.7	0	28	65.3	Community transmission
Turks and Caicos Islands	8	2 420	6 250.3	0	17	43.9	Clusters of cases
Cayman Islands	6	587	893.2	0	2	3.0	Sporadic cases
Saint Barthélemy	6	1 029	10 409.7	0	1	10.1	Clusters of cases
Curaçao	5	12 276	7 481.1	0	122	74.3	Community transmission
Bonaire	4	1 589	7 597.4	0	17	81.3	Community transmission
Bermuda	3	2 494	4 004.9	1	33	53.0	Community transmission
Anguilla	0	109	726.6	0	0	0.0	Clusters of cases
British Virgin Islands	0	289	955.8	0	1	3.3	Clusters of cases
Falkland Islands (Malvinas)	0	63	1 808.8	0	0	0.0	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Montserrat	0	20	400.1	0	1	20.0	No cases
Saba	0	7	362.1	0	0	0.0	Sporadic cases
Saint Pierre and Miquelon	0	25	431.4	0	0	0.0	No cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	**202 208**	**10 278 904**	**1 406.5**	**3 503**	**205 145**	**28.1**	
Iran (Islamic Republic of)	67 533	2 960 751	3 525.0	1 200	80 941	96.4	Community transmission
Iraq	28 070	1 221 678	3 037.3	184	16 518	41.1	Community transmission
Pakistan	14 272	930 511	421.3	509	21 189	9.6	Community transmission
United Arab Emirates	13 934	581 197	5 876.4	23	1 696	17.1	Community transmission
Bahrain	13 883	249 582	14 667.7	152	1 091	64.1	Community transmission
Tunisia	10 408	353 782	2 993.4	374	12 948	109.6	Community transmission
Kuwait	9 183	315 900	7 397.1	30	1 794	42.0	Community transmission
Afghanistan	8 463	79 224	203.5	226	3 145	8.1	Community transmission
Saudi Arabia	8 278	456 562	1 311.4	106	7 440	21.4	Community transmission
Oman	7 433	222 799	4 362.9	80	2 401	47.0	Community transmission
Egypt	6 512	267 171	261.1	308	15 309	15.0	Clusters of cases
Jordan	4 180	739 319	7 246.0	73	9 516	93.3	Community transmission
Morocco	2 327	521 195	1 412.0	35	9 173	24.9	Community transmission
Libya	2 138	186 953	2 720.8	21	3 137	45.7	Community transmission
Qatar	1 414	218 455	7 582.5	12	566	19.6	Community transmission
Lebanon	1 291	541 423	7 932.4	40	7 758	113.7	Community transmission
Sudan	525	36 004	82.1	69	2 697	6.2	Clusters of cases
Syrian Arab Republic	199	24 639	140.8	27	1 790	10.2	Community transmission
Somalia	76	14 729	92.7	5	773	4.9	Community transmission
Yemen	45	6 780	22.7	5	1 325	4.4	Community transmission
Djibouti	29	11 556	1 169.6	0	154	15.6	Clusters of cases
Territories[iii]							

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
occupied Palestinian territory	2 015	338 694	6 639.2	24	3 784	74.2	Community transmission
Europe	**368 874**	**54 629 665**	**5 854.8**	**8 890**	**1 157 890**	**124.1**	
Kosovo [1]	104	107 443		1	2 234		Community transmission
Russian Federation	62 995	5 126 437	3 512.8	2 625	123 787	84.8	Clusters of cases
France	47 528	5 605 201	8 618.2	553	109 096	167.7	Community transmission
Turkey	46 616	5 282 594	6 263.5	797	48 068	57.0	Community transmission
The United Kingdom	30 724	4 511 673	6 646.0	61	127 836	188.3	Community transmission
Germany	21 219	3 700 367	4 449.3	816	89 222	107.3	Community transmission
Italy	17 098	4 230 153	7 092.6	470	126 472	212.1	Clusters of cases
Netherlands	17 048	1 661 454	9 544.4	60	17 675	101.5	Community transmission
Spain	16 219	3 693 012	7 802.3	68	80 099	169.2	Community transmission
Ukraine	13 045	2 214 517	5 063.6	710	51 182	117.0	Community transmission
Sweden	9 355	1 078 062	10 438.7	8	14 523	140.6	Community transmission
Kazakhstan	9 067	450 868	2 401.2	144	7 465	39.8	Clusters of cases
Belgium	8 899	1 070 801	9 293.2	95	25 033	217.3	Community transmission
Greece	8 394	408 789	3 813.8	229	12 253	114.3	Community transmission
Belarus	7 272	398 909	4 221.6	79	2 900	30.7	Community transmission
Denmark	6 202	285 636	4 905.5	2	2 518	43.2	Community transmission
Georgia	5 495	349 098	8 751.1	153	4 910	123.1	Community transmission
Portugal	3 821	852 034	8 275.5	9	17 032	165.4	Clusters of cases
Poland	3 186	2 875 136	7 574.5	414	74 152	195.4	Community transmission
Switzerland	2 699	694 181	8 020.9	4	10 215	118.0	Community transmission
Ireland	2 532	263 689	5 311.6	0	4 941	99.5	Community transmission
Kyrgyzstan	2 418	106 973	1 639.6	44	1 847	28.3	Clusters of cases
Czechia	2 358	1 663 517	15 555.7	55	30 159	282.0	Community transmission
Austria	2 267	642 429	7 217.4	39	10 373	116.5	Community transmission
Lithuania	2 254	276 453	9 894.2	50	4 307	154.1	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Norway	2 140	126 169	2 350.6	2	785	14.6	Clusters of cases
Hungary	1 976	806 008	8 250.2	146	29 770	304.7	Community transmission
Latvia	1 759	134 677	7 059.7	37	2 407	126.2	Community transmission
Slovenia	1 721	255 218	12 177.2	9	4 707	224.6	Clusters of cases
Uzbekistan	1 598	101 722	303.9	6	696	2.1	Clusters of cases
Serbia	1 516	713 562	10 301.6	65	6 909	99.7	Community transmission
Croatia	1 424	357 565	8 811.0	72	8 086	199.3	Community transmission
Romania	1 316	1 078 742	5 581.0	478	30 725	159.0	Community transmission
Bulgaria	1 205	419 426	6 033.6	156	17 813	256.2	Clusters of cases
Azerbaijan	924	334 647	3 300.5	33	4 936	48.7	Clusters of cases
Slovakia	746	390 436	7 153.6	65	12 404	227.3	Clusters of cases
Estonia	633	130 119	9 790.9	12	1 263	95.0	Clusters of cases
Armenia	544	223 180	7 531.6	26	4 458	150.4	Community transmission
Bosnia and Herzegovina	422	204 360	6 228.9	173	9 395	286.4	Community transmission
Finland	401	92 770	1 679.0	11	959	17.4	Community transmission
Cyprus	387	72 750	8 192.5	3	363	40.9	Clusters of cases
Republic of Moldova	327	255 432	6 332.0	32	6 132	152.0	Community transmission
Luxembourg	293	70 182	11 209.2	4	818	130.6	Community transmission
Montenegro	188	99 804	15 890.8	8	1 591	253.3	Clusters of cases
North Macedonia	161	155 407	7 459.4	50	5 448	261.5	Clusters of cases
Israel	112	839 566	9 699.8	10	6 418	74.1	Community transmission
Albania	77	132 374	4 599.8	2	2 451	85.2	Clusters of cases
Andorra	65	13 758	17 806.3	0	127	164.4	Community transmission
Malta	39	30 568	5 940.6	0	419	81.4	Clusters of cases
Iceland	28	6 604	1 813.6	0	30	8.2	Community transmission
Liechtenstein	10	3 111	8 029.0	0	57	147.1	Sporadic cases
Monaco	5	2 508	6 390.8	1	33	84.1	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
San Marino	0	5 090	14 997.9	0	90	265.2	Community transmission
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Faroe Islands	29	741	1 516.4	0	1	2.0	Sporadic cases
Gibraltar	7	4 300	12 763.1	0	94	279.0	Clusters of cases
Isle of Man	5	1 597	1 878.1	0	29	34.1	No cases
Guernsey	1	823	1 276.6	3	17	26.4	Community transmission
Greenland	0	40	70.5	0	0	0.0	No cases
Jersey	0	3 243	3 008.5	0	69	64.0	Community transmission
South-East Asia	**1 049 694**	**32 654 915**	**1 615.5**	**23 369**	**425 123**	**21.0**	
India	914 539	28 809 339	2 087.6	20 787	346 759	25.1	Clusters of cases
Indonesia	40 280	1 850 206	676.4	1 187	51 449	18.8	Community transmission
Nepal	31 678	585 100	2 008.1	636	7 799	26.8	Community transmission
Thailand	23 160	177 467	254.3	224	1 236	1.8	Clusters of cases
Sri Lanka	21 764	202 357	945.0	251	1 656	7.7	Clusters of cases
Bangladesh	11 928	809 314	491.4	252	12 801	7.8	Community transmission
Maldives	4 632	67 538	12 494.5	24	182	33.7	Clusters of cases
Timor-Leste	907	7 659	580.9	1	17	1.3	Community transmission
Myanmar	727	144 253	265.1	7	3 223	5.9	Clusters of cases
Bhutan	79	1 682	218.0	0	1	0.1	Clusters of cases
Western Pacific	**138 239**	**3 139 006**	**159.8**	**2 486**	**47 634**	**2.4**	
Malaysia	52 040	610 574	1 886.5	641	3 291	10.2	Community transmission
Philippines	45 681	1 262 250	1 151.9	1 010	21 732	19.8	Community transmission
Japan	18 649	760 323	601.2	603	13 523	10.7	Clusters of cases
Mongolia	7 357	63 978	1 951.6	39	307	9.4	Clusters of cases
Republic of Korea	4 242	144 152	281.2	16	1 973	3.8	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Cambodia	4 209	33 613	201.0	43	252	1.5	Sporadic cases
China	3 341	114 105	7.8	125	5 070	0.3	Clusters of cases
Viet Nam	1 672	8 580	8.8	6	53	0.1	Clusters of cases
Papua New Guinea	426	16 327	182.5	2	164	1.8	Community transmission
Fiji	244	604	67.4	0	4	0.4	Sporadic cases
Singapore	173	62 176	1 062.8	1	33	0.6	Sporadic cases
Australia	75	30 158	118.3	0	910	3.6	Clusters of cases
Lao People's Democratic Republic	49	1 957	26.9	0	3	0.0	Sporadic cases
New Zealand	10	2 326	48.2	0	26	0.5	Sporadic cases
Brunei Darussalam	3	244	55.8	0	3	0.7	Sporadic cases
Solomon Islands	0	20	2.9	0	0	0.0	No cases
Territories[iii]							
Guam	39	7 957	4 714.6	0	139	82.4	Clusters of cases
French Polynesia	29	18 889	6 724.3	0	142	50.6	Sporadic cases
Marshall Islands	0	4	6.8	0	0	0.0	No cases
New Caledonia	0	128	44.8	0	0	0.0	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	0	183	317.9	0	2	3.5	Pending
Samoa	0	1	0.5	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Wallis and Futuna	0	454	4 037.0	0	7	62.2	Sporadic cases
Global	**3 016 005**	**172 637 097**		**73 807**	**3 718 944**		

*See *Annex 3: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting Variants of Concern as of 8 June 2021**

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Afghanistan	●	-	-	-	-
Albania	●	-	-	-	-
Algeria	●	-	-	●	-
Angola	●	●	-	-	-
Argentina	●	●	●	●	-
Armenia	○	-	-	-	-
Aruba	●	●	●	●	-
Australia	●	●	●	○	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	-	-
Bahrain	●	●	-	●	-
Bangladesh	●	●	-	●	-
Barbados	●	-	-	-	-
Belarus	●	-	-	-	-
Belgium	●	●	●	●	-
Belize	●	-	-	-	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	-	-	-
Bosnia and Herzegovina	○	-	-	-	-
Botswana	-	●	-	●	-
Brazil	●	●	●	●	-
Brunei Darussalam	●	●	-	-	-
Bulgaria	●	-	-	●*	-
Burkina Faso	●	-	-	-	-
Cabo Verde	●	-	-	-	-
Cambodia	●	-	-	-	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	-	-	-	-
Central African Republic	●	-	-	-	-
Chile	●	●	●	-	-
China	●	●	●	○	-
Colombia	●	-	●	-	-
Comoros	●	●	-	-	-
Congo	●	-	-	-	-
Costa Rica	●	●	●	-	-
Croatia	●	●	-	-	○*
Cuba	●	●	-	-	-
Curaçao	●	-	●	-	●*
Cyprus	●	●	-	-	●
Czechia	●	●	-	●	-
Côte d'Ivoire	●	●	-	-	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Dominica	●	-	-	-	-
Dominican Republic	●	-	●	-	-
Ecuador	●	●	●	-	-
Egypt	●	-	-	-	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	-	○
Eswatini	-	●	-	-	-
Ethiopia	○	-	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●*	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	-	-
French Polynesia	●	-	●	-	-
Gabon	●	○	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○*	-	●*	-
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	-	-
Greece	●	●	-	●	-
Grenada	●	-	-	-	-
Guadeloupe	●	●	-	-	●*
Guam	●	-	-	●*	-
Guinea	●	●	-	-	-
Guinea-Bissau	●	●	-	-	-
Guyana	-	-	●	-	-
Haiti	●	-	●	-	-
Hungary	●	○	-	-	○
Iceland	●	-	-	-	-
India	●	●	●	●	-
Indonesia	●	●	-	●	-
Iran (Islamic Republic of)	●	●	-	●*	-
Iraq	●	-	-	-	-
Ireland	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	-	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	○	○	-	-	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○*	-	-	-
Kuwait	●	-	-	-	-
Kyrgyzstan	●	●	-	-	●
Lao People's Democratic Republic	●	-	-	-	-
Latvia	●	●	●	-	○
Lebanon	●	-	-	-	-
Lesotho	-	●	-	-	-
Liberia	●	-	-	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	-	-
Lithuania	●	●	●	-	-
Luxembourg	●	●	●	●	-
Madagascar	-	●	-	-	-
Malawi	●	●	-	-	●*
Malaysia	●	●	-	●	-
Malta	●	○	●	○*	-
Martinique	●	●	-	-	-
Mauritania	●	●	-	●	-
Mauritius	○	●	-	-	-
Mayotte	●	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Mexico	●	●	●	●	-
Monaco	●	○	-	-	-
Montenegro	●	-	-	-	-
Morocco	●	-	-	●*	-
Mozambique	-	●	-	-	-
Namibia	-	●	-	-	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	-	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	-	-	●	-
North Macedonia	●	●	-	-	●*
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	-	-
Oman	●	-	-	-	-
Pakistan	●	●	●	●*	-
Panama	●	●	●	-	●
Paraguay	-	-	●	-	-
Peru	●	-	●	-	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	○	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	○	-
Republic of Moldova	○	-	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Romania	●	●	●	●	-
Russian Federation	●	●	-	●	-
Rwanda	●	○	-	-	-
Réunion	●	●	●	○	-
Saba	-	-	-	●*	-
Saint Barthélemy	●	-	-	-	-
Saint Lucia	●	-	-	-	-
Saint Martin	●	●	-	-	-
Sao Tome and Principe	●	-	-	-	-
Saudi Arabia	●	●	-	●*	-
Senegal	●	●	-	-	-
Serbia	●	-	-	-	-
Seychelles	-	●	-	-	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	-	●*	-
Slovakia	●	●	-	●*	-
Slovenia	●	●	●	●	-
South Africa	●	●	-	●	-
Spain	●	●	●	●	-
Sri Lanka	●	●	-	○	-
Suriname	●	●	●	-	-
Sweden	●	●	●	●	-
Switzerland	●	●	○	●	-
Thailand	●	●	●	●	-
Togo	●	●	-	-	-
Trinidad and Tobago	●	-	●	-	-
Tunisia	●	●	-	-	-
Turkey	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Turks and Caicos Islands	●	-	-	-	-
Uganda	●	●	-	●	-
Ukraine	●	○	-	-	-
United Arab Emirates	●	●	●	-	-
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
United States of America	●	●	●	●	-
Uruguay	●	-	●	-	-
Uzbekistan	●	●	-	-	-
Venezuela (Bolivarian Republic of)	●*	-	●	-	-
Viet Nam	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Wallis and Futuna	●	-	-	-	-
Zambia	-	●	-	●	-
Zimbabwe	-	○	-	●	-

**Newly reported in this update.*

reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

ation become available.

***Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Efforts are ongoing to differentiate these in future reports. See also Annex 3: Data, table and figure notes.*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

Global totals include 758 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Edition 42, published 1 June 2021

In this edition:

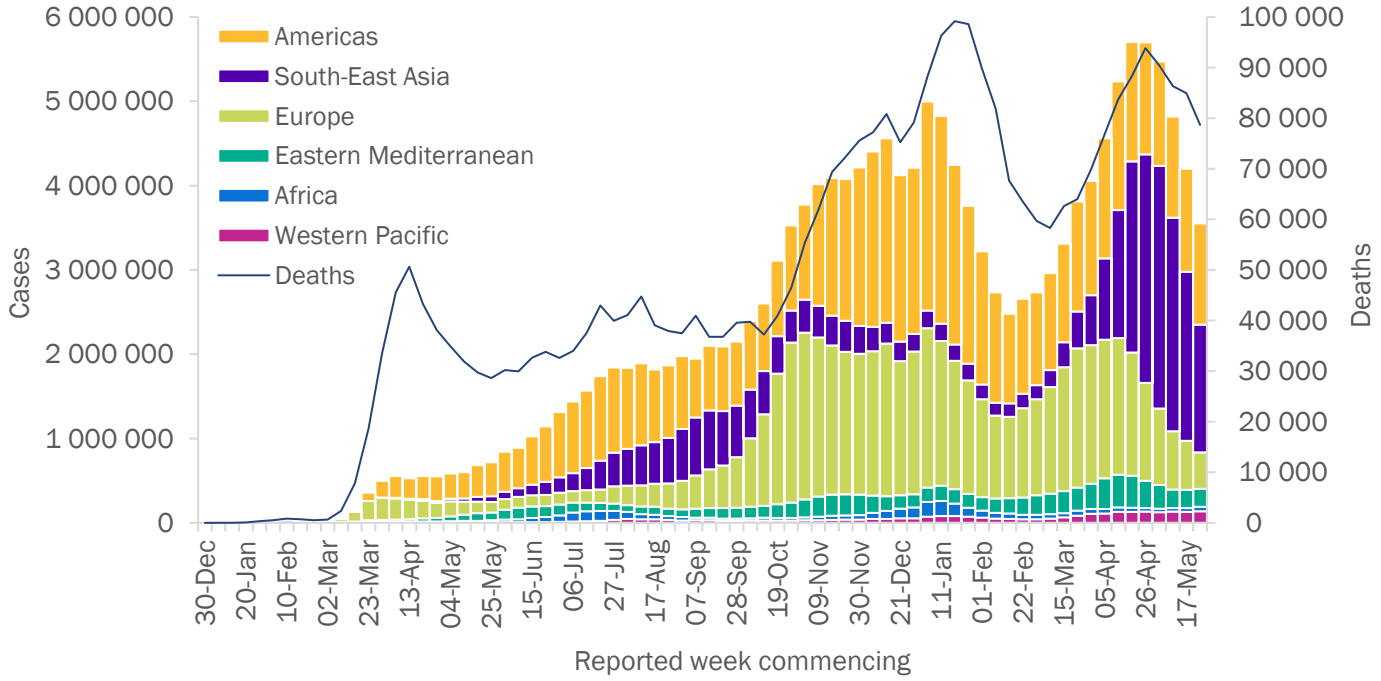
- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest (VOIs) and Variants of Concern (VOCs)
- Special focus: Early lessons from country implementation of COVID-19 vaccination
- WHO regional overviews
- Key weekly updates

Global overview

Data as of 30 May 2021

The number of new COVID-19 cases and deaths continues to decrease, with over 3.5 million new cases and 78 000 new deaths reported globally in the past week; a 15% and 7% decrease respectively, compared to the previous week (Figure 1). The European and South-East Asia Regions reported the largest decline in new cases and deaths in the past week, while case incidence increased in the African and Western Pacific regions (Table 1). The numbers of cases reported by the Americas and Eastern Mediterranean Regions were similar to those reported in the previous week. An increase in death incidence was reported in the African Region, whereas the Europe and the Eastern Mediterranean Regions reported decreases, and the reported death incidence in the Western Pacific and the Americas Regions was similar to the death incidence in the previous week. Although the number of global cases and deaths continued to decrease for a fifth and fourth consecutive week respectively, case and death incidences remain at high levels and significant increases have been reported in many countries in all regions.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 30 May 2021**



**See *Annex 3: Data, table and figure notes*

The highest numbers of new cases were reported from India (1 364 668 new cases; 26% decrease), Brazil (420 981 new cases; 7% decrease), Argentina (219 910 new cases; 3% increase), the United States of America (153 587 new cases; 18% decrease), and Colombia (150 517 new cases; 40% increase).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 30 May 2021**

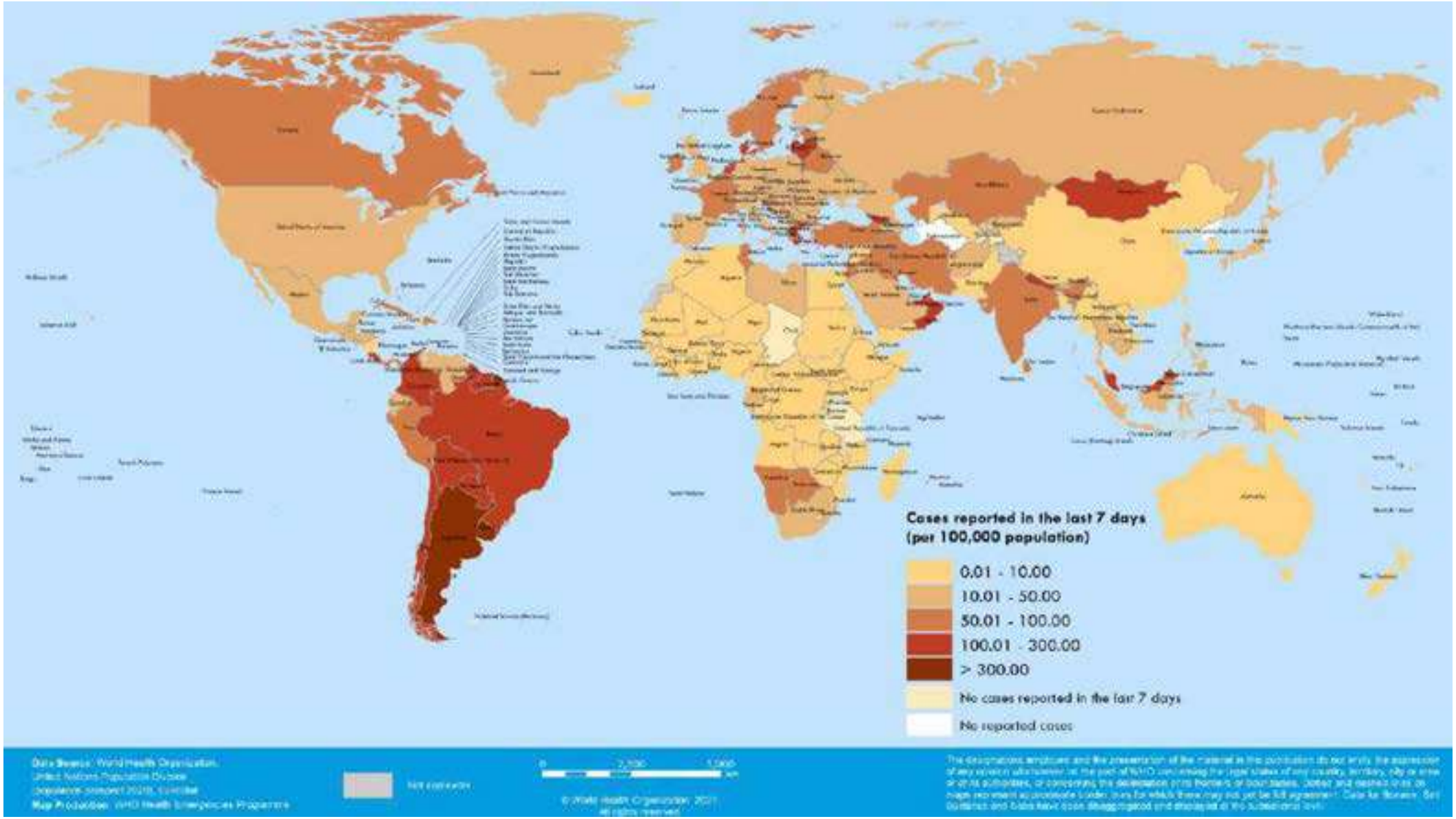
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 198 427 (34%)	-2%	67 178 933 (40%)	31 286 (40%)	-1%	1 646 407 (47%)
Europe	430 945 (12%)	-26%	54 244 552 (32%)	11 113 (14%)	-17%	1 148 766 (33%)
South-East Asia	1 516 572 (43%)	-24%	31 605 221 (19%)	29 477 (37%)	-8%	401 754 (11%)
Eastern Mediterranean	212 568 (6%)	-1%	10 076 696 (6%)	3 556 (5%)	-18%	201 642 (6%)
Africa	52 710 (1%)	22%	3 497 924 (2%)	1 143 (1%)	11%	87 107 (2%)
Western Pacific	139 234 (4%)	6%	3 000 768 (2%)	2 090 (3%)	-2%	45 148 (1%)
Global	**3 550 456 (100%)**	**-15%**	**169 604 858 (100%)**	**78 665 (100%)**	**-7%**	**3 530 837 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
**See *Annex 3: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 24 May – 30 May 2021**



**See *Annex 3: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest (VOIs) and Variants of Concern (VOCs)

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter clinical presentation and severity, or if they show increases in transmissibility that require national health authorities to implement strengthened public health and social measures (PHSM) to control disease spread. Systems have been established in WHO to detect "signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) and assess these based on the risk posed to global public health. Here we provide updates on new WHO labels and classifications of VOCs and VOIs, as well as the updated geographical distribution of VOCs. National authorities may choose to designate other variants of local interest/concern.

New easy-to-say VOI and VOCs labels for public communication

On 31 May 2021, WHO announced new easy-to-say/easy-to-remember VOI and VOC labels to facilitate public communication about SARS-CoV-2 variants. The need for easy-to-say labels of SARS-CoV-2 VOI and VOC arose for several reasons, including:

- the existence of different genomic nomenclature systems, which serve important scientific purposes but complicate public communication around variants due to the complexities of the labels assigned (e.g., B.1.617.2, 21A/S:478K),
- the common but potentially stigmatizing use of the name of the country or area of first detection of a variant as an easily recognizable label.

WHO has now assigned labels based upon the Greek alphabet to globally classified VOCs and VOIs (Table 2), and will sequentially assign new labels for newly-designated global VOCs and VOIs in the future. If all 24 letters become assigned, other lists of labels will be announced by WHO. As VOIs and VOCs are reclassified based on the evolving situation, it is expected that these will retain their label, and labels of formed VOIs/VOCs will not be reused for labeling new emerging variants.

We recommend Member States, health authorities, media and others communicating on SARS-CoV-2 variants to adopt the WHO labels in public communication as soon as practical. Importantly, these labels do not replace the three current nomenclature systems for tracking and scientific reporting of SARS-CoV-2 genetic evolution: GISAID, Nextstrain, and Pango – these systems remain critical and will continue to be used in scientific communications.

Recent changes to the VOIs and VOCs classifications

As the global public health risks posed by specific SARS-CoV-2 variants becomes better understood and evolves, WHO will continue to update the list of global VOIs and VOCs. This is necessary to adjust to the emergence of new variants, their changing epidemiology (e.g., the incidence of some variants is rapidly declining), and our understanding of their phenotypic impacts as new evidence becomes available and is shared.

First, available information allows for the delineation of VOC B.1.617. B.1.617 viruses are divided in three lineages: B.1.617.1, B.1.617.2 and B.1.617.3. Available findings for lineages B.1.617.1 and B.1.617.2 were initially used to designate B.1.617 a global VOC on 11 May 2021. Since then, it has become evident that greater public health risks are currently associated with B.1.617.2, while lower rates of transmission of other lineages have been observed. To reflect this updated information, B.1.617 has been delineated as follows:

- B.1.617.2 remains a VOC and labelled variant Delta – we continue to observe significantly increased transmissibility and a growing number of countries reporting outbreaks associated with this variant. Further studies into the impact of this variant remain a high priority for WHO.
- B.1.617.1 has been reclassified to a VOI and labelled variant Kappa – while also demonstrating increased transmissibility (in specified locations), global prevalence appears to be declining. This variant will continue to be monitored and reassessed regularly.
- B.1.617.3 is no longer classified as either a VOI or VOC – relatively few reports of this variant have been submitted to date.

Second, variant B.1.616, which was first detected in France following investigations into an unusual cluster of cases in a hospital, is no longer classified as a VOI. Local authorities have reported that the outbreak has been controlled, and no further detections within or outside of France have been reported since late-April 2021.[1] Further local and regional monitoring remains prudent, given B.1.616 was associated with potential increased disease severity and reduced detections via nasopharyngeal samples.[2]

Variants no longer classified as VOCs or VOIs will continue to be monitored as part of the overall evolution of SARS-CoV-2, and may be reassessed pending new evidence indicating an increased public health risk.

Table 2: SARS-CoV-2 Variants of Concern (VOCs) and Variants of Interest (VOIs), as of 31 May 2021

WHO label	Pango lineage	GISAID clade	Nextstrain clade	Earliest documented samples	Date of designation
Variants of Concern (VOCs)					
Alpha	B.1.1.7	GRY (formerly GR/501Y.V1)	20I/501Y.V1	United Kingdom, Sep-2020	18-Dec-2020
Beta	B.1.351	GH/501Y.V2	20H/501Y.V2	South Africa, May-2020	18-Dec-2020
Gamma	P.1	GR/501Y.V3	20J/501Y.V3	Brazil, Nov-2020	11-Jan-2021
Delta	B.1.617.2	G/452R.V3	21A/S:478K	India, Oct-2020	VOI: 4-Apr-2021 VOC: 11-May-2021
Variants of Interest (VOIs)					
Epsilon	B.1.427/ B.1.429	GH/452R.V1	20C/S.452R	United States of America, Mar-2020	5-Mar-2021
Zeta	P.2	GR	20B/S.484K	Brazil, Apr-2020	17-Mar-2021
Eta	B.1.525	G/484K.V3	20A/S484K	Multiple countries, Dec-2020	17-Mar-2021
Theta	P.3	GR	20B/S:265C	Philippines, Jan-2021	24-Mar-2021
Iota	B.1.526	GH	20C/S:484K	United States of America, Nov-2020	24-Mar-2021
Kappa	B.1.617.1	G/452R.V3	21A/S:154K	India, Oct-2020	4-Apr-2021

[1] Santé publique France, COVID-19 : point épidémiologique du 27 mai 2021. https://www.santepubliquefrance.fr/maladies-et-traumatismes/maladies-et-infections-respiratoires/infection-a-coronavirus/documents/bulletin-national/covid-19-point-epidemiologique-du-27-mai-2021

[2] Fillatre et al. A new SARS-CoV-2 variant poorly detected by RT-PCR on nasopharyngeal samples, with high lethality (preprint). https://www.medrxiv.org/content/10.1101/2021.05.05.21256690v1

Geographic distribution

As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing, the number of countries/areas/territories (hereafter countries) reporting VOCs has continued to increase (Figures 3, Annex 2). This distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

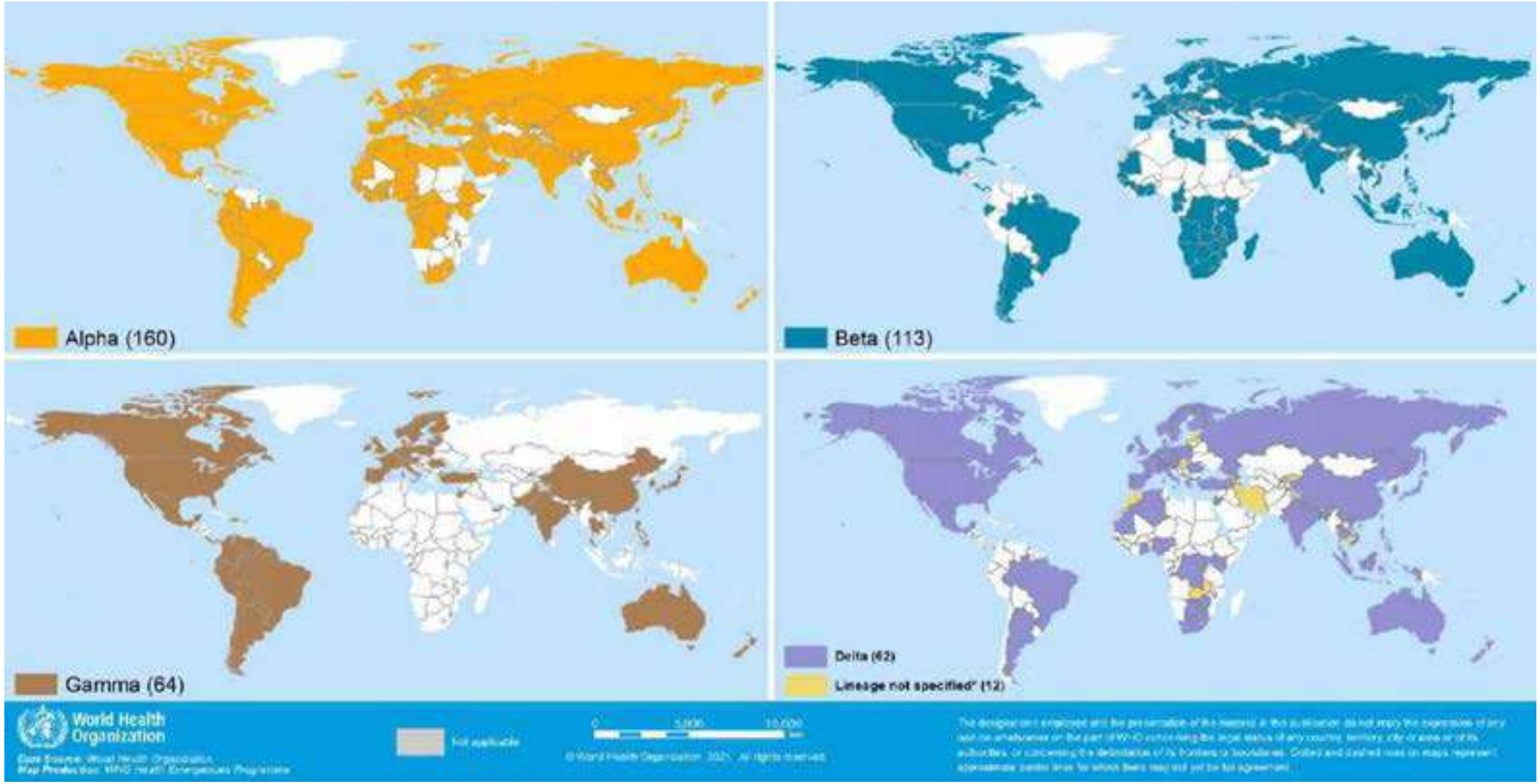
WHO recommendations

Virus evolution is expected, and the more SARS-CoV-2 circulates, the more opportunities it has to evolve. Reducing transmission through established and proven disease control methods such as those outlined in the COVID-19 Strategic Preparedness and Response Plan, as well as avoiding introductions into animal populations are crucial aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critical to curb the spread of SARS-CoV-2 and its variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the PHSM, including infection prevention and control (IPC) measures in health facilities has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities. Authorities are also encouraged to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and to detect unusual events.

Additional resources

- Tracking SARS-CoV-2 variants
- Working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19
- COVID-19 Situation Reports from WHO Regional Offices and partners: AFRO, AMRO/PAHO, EMRO, EURO/ECDC, SEARO, WPRO
- ACT accelerator diagnostic pillar, FIND test directory

Figure 3. Countries, territories and areas reporting variants Alpha (B.1.1.7), Beta (B.1.351), Gamma (P.1) and Delta (B.1.617.2), as of 1 June 2021**



**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details.*

Special focus: Early lessons from country implementation of COVID-19 vaccination

Safe and effective vaccines, together with non-pharmaceutical interventions are a game-changing tool in the response to the COVID-19 pandemic. As of 26 May 2021, over 1.5 billion vaccine doses have been administered globally, and over 736 million individuals have received at least one dose (see the WHO COVID-19 Dashboard for the latest figures). However, vaccination rates are not uniform across countries. The lowest-income countries had access to vaccines later than higher-income countries, and have vaccinated a substantially lower proportion of their target populations.[3] We briefly summarize early lessons learned by thematic areas and share qualitative insights gained during the early phases of rolling out COVID-19 vaccines, based on anecdotal reports from regional early learning webinars and discussions with countries, particularly in low-and-middle-income countries (LMICs).

Planning and coordination

Most LMICs prepared National Deployment and Vaccination Plans in anticipation of vaccine supply becoming available. They also established governance structures and coordination processes for planning and overseeing deployment of vaccination activities as part of national response plans. In several countries, engaging with the offices of heads of state facilitated collaboration across health programmes and sectors, which enabled coordinated vaccination.

Identifying and prioritizing groups at the highest risk of exposure or severe outcomes facilitated operational planning. While many countries were able to roughly estimate the size of their priority target groups, information on who they are and where they resided was often unknown. Several countries established digital platforms and used community mobilizers to identify and pre-register priority target groups to facilitate vaccine delivery.

The findings from scenario-based simulation exercises or drills helped identify unanticipated operational bottlenecks, and were used to update operational plans. At the subnational level, micro plans facilitated vaccine roll-out and session planning, through estimation of the target population size at each administrative level, requisite resources including vaccine doses, supplies and human resources. When such micro plans did not exist or were inadequately prepared at the district and lower administrative levels, it contributed to delayed or slower vaccine roll-out.

Costing and financing

While costing tools were developed to assist countries in estimating vaccine and operational costs, these tools were complex, and many countries lacked the capacity to use them to develop timely and robust cost estimates. Some LMICs were quickly able to mobilize domestic resources to support vaccine rollout, whereas other LMIC governments did not allocate adequate domestic resources. In the past, vaccination for epidemics was accompanied by external support to partially cover operational costs. This was not the case with the COVID-19 vaccine roll-out. The dependency on donors and failure to secure funds in time led to delays in conducting health worker training, compromise on the quality of these trainings, or lowered motivation among health workers due to delayed payment of salaries. In addition, disbursement and distribution of funds to the lowest administrative levels was not streamlined in some countries, leading to a lack of funds, even though funds were available at the national level.

[3] pandem-ic. 2021.Vaccination by income. Available from: https://pandem-ic.com/vaccination-trackers/

Supply chain and logistics

Most LMICs utilized findings from national Effective Vaccine Management (EVM) assessments and benefited from support by Gavi, the Vaccine Alliance, to optimize their cold chain equipment. Therefore, most had sufficient cold chain capacity to handle the initial shipment of vaccines. Several countries also successfully managed vaccines requiring ultra-cold chain storage and transport; some of them using equipment procured for Ebola vaccines.

Several countries had multiple vaccine products through donations, the COVAX facility, and direct procurement from manufacturers. Managing multiple vaccines with different cold chain requirements without vaccine vial monitors led to logistical challenges. A few of these products had not received WHO Emergency Use Listing and countries did not have the requisite information on product characteristics to enable logistical planning. The initial doses of vaccines that countries received had a relatively short shelf-life of six months at the time of release, often with a shorter shelf-life at the time of delivery to countries. Where there was slow roll-out of vaccines, it was challenging to use them in a timely manner. On occasion, vaccines were re-distributed to other countries to avoid wastage.

Vaccine delivery

While most LMICs had experience with conducting mass vaccination campaigns, Infection Prevention and Control (IPC) at vaccination sites added some challenges to maintain a smooth workflow. Countries provided safe spaces for observation of vaccinees for severe allergic reactions following vaccination, and trained personnel and provided supplies to manage such reactions. Several countries reported lower than expected turn-out at sessions due to vaccine hesitancy, resulting in a high volume of open vials to be wasted.

Demand creation and hesitancy

Early communication to create awareness and prepare communities for the vaccine roll-out, as well as public vaccination of the political and religious leaders improved vaccine uptake. Several countries also successfully utilized social media to heighten public awareness. However, not all countries had the capacity to cope with the magnitude of misinformation or disinformation being disseminated on media platforms and to mount a timely and comprehensive response.

Hesitancy, especially among health and care workers, driven by fear of adverse effects of specific products reported in the media, further fuelled by suspension of some vaccines in high-income countries contributed to low vaccine uptake. Hesitancy among health and care workers was reported to have a ripple effect in other priority groups.

Digital monitoring

Digital registration and data monitoring systems played a key role in monitoring vaccination, generating digital vaccination certificates in several countries, and sending reminders for follow-up vaccination. Digital pre-registration systems, where established, also improved operational flow and enabled the achievement of vaccination targets for each session. However, the lack of digital tools for data entry at the service delivery points impeded data collection in a few countries. In at least one country where hybrid paper-based and digital platforms were used, the lack of proper planning led to inadequate numbers of data entry clerks and delayed data entry and transmission. Several countries reported delayed and incomplete reporting from the lower administrative levels and the limited granular and timely data may have prohibited operational decisions.

Safety monitoring

Most countries leveraged the existing safety surveillance system for immunization to establish reporting of adverse events following vaccination and regularly reported data to WHO and global pharmacovigilance

databases. A few countries lacked the capacity to investigate and conduct causality assessments of serious adverse events and in some, key information was not collected to enable adequate investigation. In other instances, decisions to halt vaccination following a reported death contributed to misperceptions about the safety of the vaccine.

Lessons learned

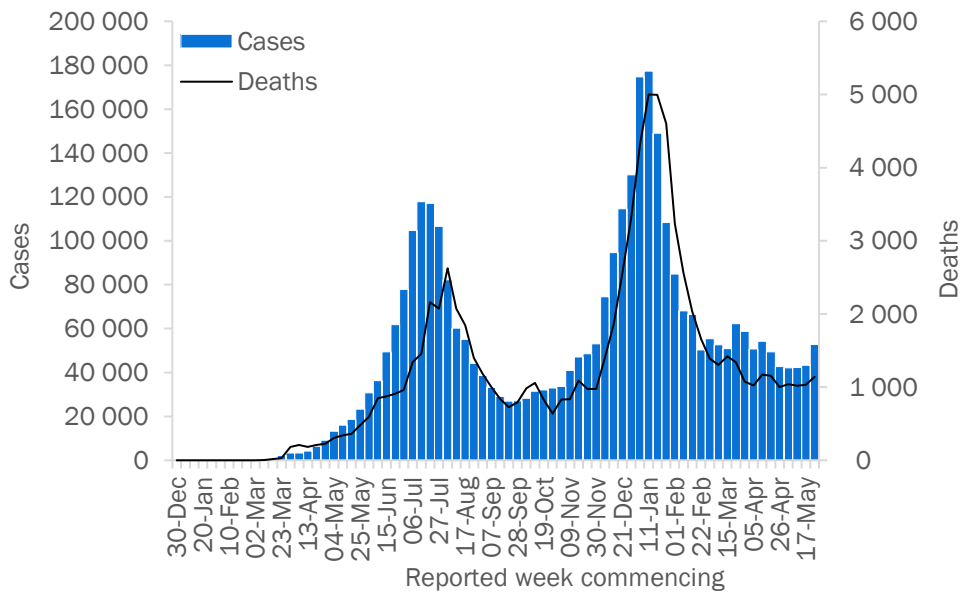
Lessons learned from the early phases of vaccine introduction will inform ongoing vaccination activities. Sharing early lessons through periodic webinars and peer-to-peer exchanges allowed countries to adopt best practices or successfully implement solutions to operational challenges. Additionally, WHO and partner agencies have used these insights to develop or update guidance and information notes to support countries. In the area of costing and financing, the COVID-19 Vaccine Introduction and deployment Tool (CVIC) was updated and a mechanism to provide direct technical support to countries was established to help improve operational cost estimates. New sources of funding are being developed to support LMICs with filling budgetary gaps to meet immediate operational needs and longer-term financing. Insights from the early introduction of COVID-19 vaccination can further be leveraged to create more resilient immunization systems, foster greater integration in primary health care delivery, and accelerate the implementation of the life-course approach to deliver a package of primary health care interventions.

WHO regional overviews

African Region

The African Region reported over 52 000 new cases and over 1100 new deaths, a 22% and an 11% increase respectively compared to the previous week. Case incidence increased after four consecutive weeks of a plateau in new weekly cases. The highest numbers of new cases were reported from South Africa (26 498 new cases; 44.7 new cases per 100 000 population; a 24% increase), Uganda (2424 new cases; 5.3 new cases per 100 000; a 191% increase), and Kenya (2377 new cases; 4.4 new cases per 100 000; a 13% decrease).

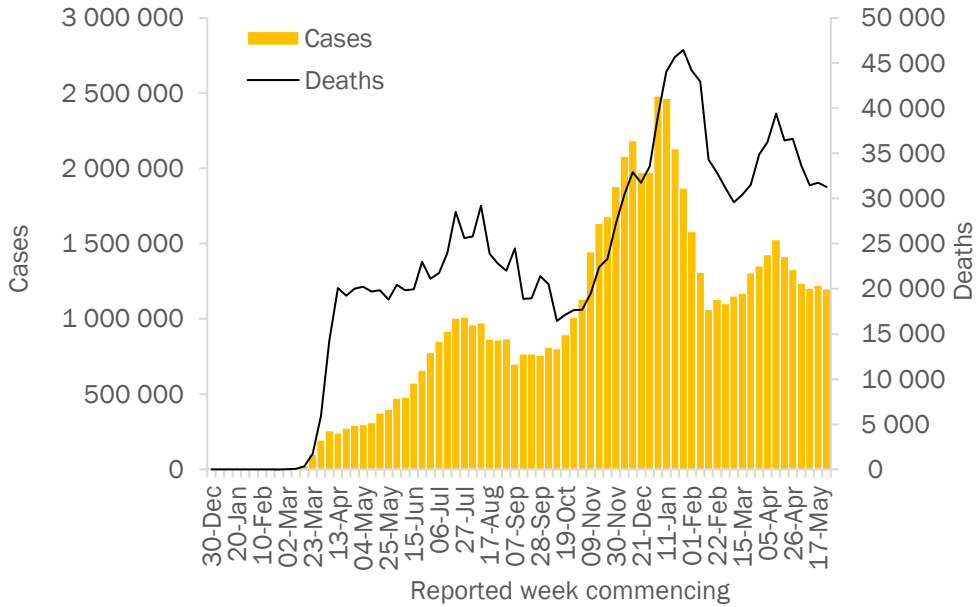
The highest numbers of new deaths were reported from South Africa (591 new deaths; 1.0 new deaths per 100 000 population; similar to the number reported in the previous week), Kenya (92 new deaths; 0.2 new deaths per 100 000; a 92% increase), and Ethiopia (75 new deaths; 0.1 new deaths per 100 000; an 18% decrease).



Region of the Americas

The Region of the Americas reported just under 1.2 million new cases and over 31 000 new deaths, figures similar to those of the previous week. The number of new cases has remained relatively stable for a fourth consecutive week, while the number of deaths has remained stable for a third consecutive week. The highest numbers of new cases were reported from Brazil (420 981 new cases; 198.1 new cases per 100 000; a 7% decrease), Argentina (219 910 new cases; 486.6 new cases per 100 000; a 3% increase), and the United States of America (153 587 new cases; 46.4 new cases per 100 000; an 18% decrease).

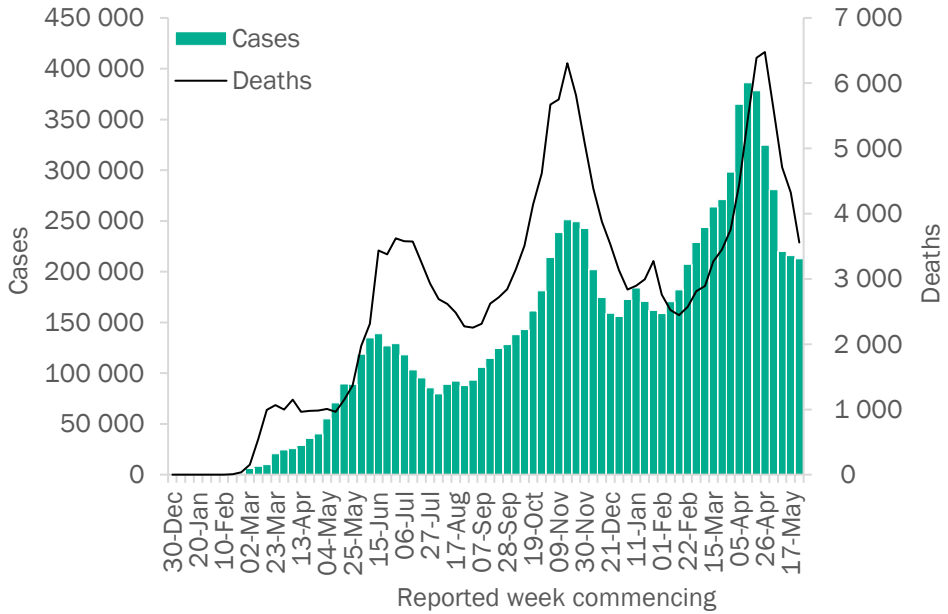
The highest numbers of new deaths were reported from Brazil (12 736 new deaths; 6.0 new deaths per 100 000; a 7% decrease), the United States of America (4596 new deaths; 1.4 new deaths per 100 000; a 14% increase), and Colombia (3488 new deaths; 6.9 new deaths per 100 000; similar to the number reported in the previous week).



Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 212 000 new cases, similar to the number reported in the previous week, and over 3500 new deaths, an 18% decrease compared to the previous week. While small decreases have been seen in case incidence for the past three weeks, death incidence continued a steep decline for a fifth consecutive week. The highest numbers of new cases were reported from the Islamic Republic of Iran (69 331 new cases; 82.5 new cases per 100 000; a 17% decrease), Iraq (29 459 new cases; 73.2 new cases per 100 000; an 8% increase), and Bahrain (20 829 new cases; 1224.1 new cases per 100 000; a 32% increase).

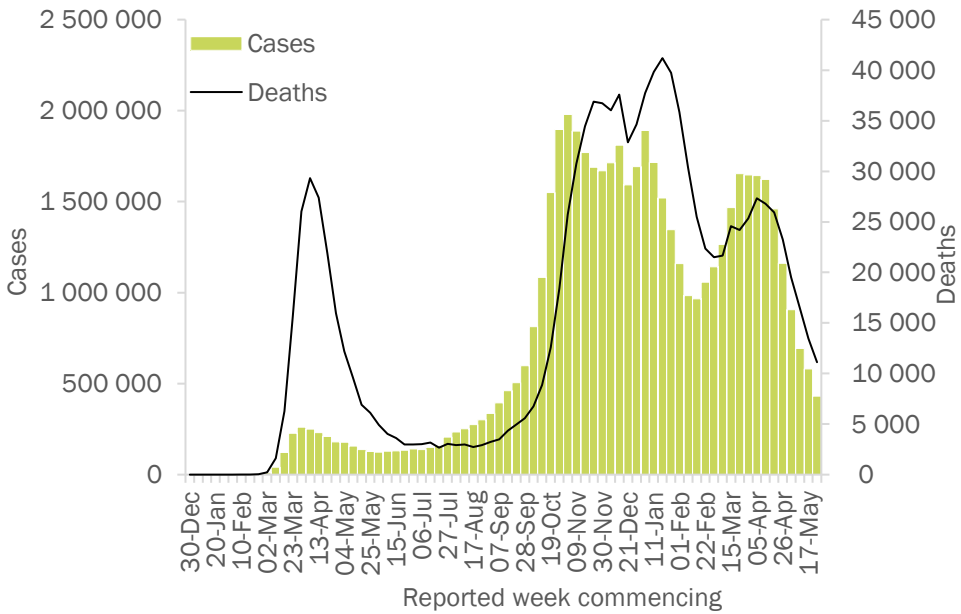
The highest numbers of new deaths were reported from the Islamic Republic of Iran (1360 new deaths; 1.6 new deaths per 100 000; a 22% decrease), Pakistan (503 new deaths; 0.2 new deaths per 100 000; a 29% decrease), and Tunisia (392 new deaths; 3.3 new deaths per 100 000; a 3% decrease).



European Region

The European Region reported just under 431 000 new cases and over 11 000 new deaths, a 26% and a 17% decrease respectively compared to the previous week. The number of cases and deaths have steeply decreased for the past six and seven weeks respectively. The highest numbers of new cases were reported from the Russian Federation (61 937 new cases; 42.4 new cases per 100 000; similar to the number reported in the previous week), France (60 600 new cases; 93.2 new cases per 100 000; a 26% decrease), and Turkey (57 330 new cases; 68.0 new cases per 100 000; a 20% decrease).

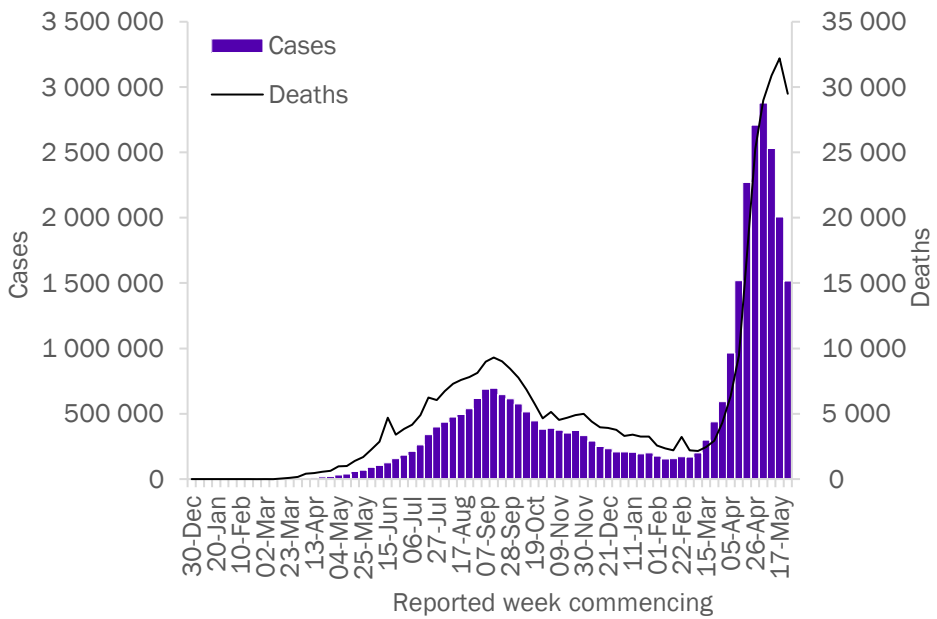
The highest numbers of new deaths were reported from the Russian Federation (2680 new deaths; 1.8 new deaths per 100 000; a 3% increase), Turkey (1200 new deaths; 1.4 new deaths per 100 000; a 22% decrease), and Ukraine (1104 new deaths; 2.5 new deaths per 100 000; a 15% decrease).



South-East Asia Region

The South-East Asia Region reported over 1.5 million new cases and over 29 000 new deaths, a 24% and an 8% decrease respectively compared to the previous week. Case incidence continued to follow a sharp decline for a third consecutive week, and death incidence decreased for the first time since early March 2021, primarily driven by trends reported in India. The highest numbers of new cases were reported from India (1 364 668 new cases; 98.9 new cases per 100 000; a 26% decrease), Nepal (47 779 new cases; 164.0 new cases per 100 000; an 18% decrease), and Indonesia (39 986 new cases; 14.6 new cases per 100 000; a 20% increase).

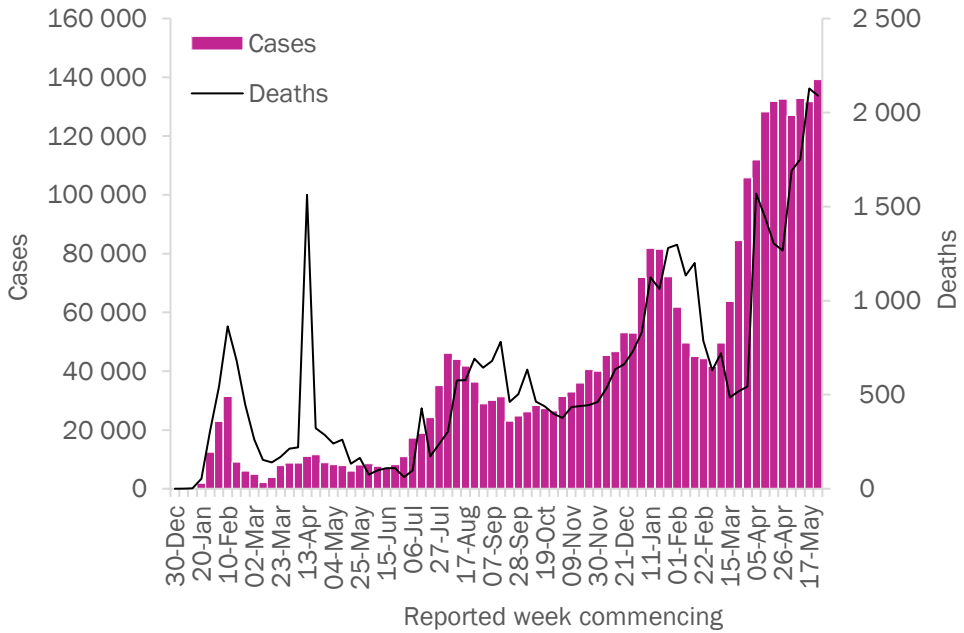
The highest numbers of new deaths were reported from India (26 706 new deaths; 1.9 new deaths per 100 000; an 8% decrease), Indonesia (1057 new deaths; 0.4 new deaths per 100 000; a 15% decrease), and Nepal (1010 new deaths; 3.5 new deaths per 100 000; a 22% decrease).



Western Pacific Region

The Western Pacific Region reported over 139 000 new cases, a 6% increase compared to the previous week and just under 2100 new deaths, a similar number to the previous week. The numbers of both cases and deaths remain at the highest levels since the beginning of the pandemic. The highest numbers of new cases were reported from Malaysia (53 419 new cases; 165.0 new cases per 100 000; a 38% increase), the Philippines (38 362 new cases; 35.0 new cases per 100 000; a 4% decrease), and Japan (27 400 new cases; 21.7 new cases per 100 000; a 24% decrease).

The highest numbers of new deaths were reported from the Philippines (776 new deaths; 0.7 new deaths per 100 000; a 13% decrease), Japan (684 new deaths; 0.5 new deaths per 100 000; a 12% decrease), and Malaysia (451 new deaths; 1.4 new deaths per 100 000; a 35% increase).



Key weekly updates

WHO Director-General's key messages

- In his opening remarks at the media briefing on COVID-19 – 28 May 2021, the Director-General called on world leaders to support a massive push to vaccinate at least 10% of the population of every country by September, and 30% by the end of the year. If countries immediately share doses with COVAX, and if manufacturers prioritize COVAX, this target can be reached and lives saved.
- Ultimately, the fastest way to bring this pandemic to an end is to dramatically increase global manufacturing of vaccines, tests, treatments and other medical supplies, and ensure equitable access. A year ago, more than 40 Heads of State joined WHO to form C-TAP, the COVID-19 Technology Access Pool.
- In his closing remarks at the 74th World Health Assembly, the Director-General reminded that the theme of this Assembly was "Ending this pandemic, preventing the next: building together a healthier, safer and fairer world" while stressing that we still have a lot of work to do to end this pandemic. The tailored and consistent use of public health measures, in combination with equitable vaccination, remains the way out.

Updates and publications

- COVAX Joint Statement: Call to action to equip COVAX to deliver 2 billion doses in 2021
- Technical note on delayed shipments for theChAdOx1-S [recombinant] vaccines: what are the implications for the administration of second doses?
- Critical preparedness, readiness and response actions for COVID-19
- Operational guide for engaging communities in contact tracing
- World Health Assembly recommends reinforcement of measures to protect mental health during public health emergencies
- Improving family medicine in China and battling COVID-19 with smart systems
- A New Commitment for Vaccine Equity and Defeating the Pandemic

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 30 May 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**52 710**	**3 497 924**	**311.8**	**1 143**	**87 107**	**7.8**	
South Africa	26 498	1 659 070	2 797.3	591	56 363	95.0	Community transmission
Uganda	2 424	45 931	100.4	12	362	0.8	Community transmission
Kenya	2 377	170 485	317.1	92	3 141	5.8	Community transmission
Ethiopia	2 299	271 200	235.9	75	4 143	3.6	Community transmission
Botswana	2 162	56 313	2 394.6	47	831	35.3	Community transmission
Angola	2 031	34 180	104.0	42	757	2.3	Community transmission
Namibia	1 947	54 659	2 151.2	55	818	32.2	Community transmission
Algeria	1 805	128 456	292.9	49	3 460	7.9	Community transmission
Zambia	1 645	94 751	515.4	9	1 276	6.9	Community transmission
Cameroon	1 226	77 982	293.8	40	1 270	4.8	Community transmission
Cabo Verde	1 075	30 273	5 444.9	7	263	47.3	Community transmission
Seychelles	982	11 415	11 606.9	2	40	40.7	Community transmission
Democratic Republic of the Congo	553	31 416	35.1	3	782	0.9	Community transmission
Madagascar	454	41 234	148.9	36	829	3.0	Community transmission
Rwanda	356	26 780	206.8	1	349	2.7	Community transmission
Mauritania	349	19 463	418.6	5	463	10.0	Community transmission
Senegal	308	41 331	246.8	9	1 138	6.8	Community transmission
Nigeria	306	166 285	80.7	4	2 071	1.0	Community transmission
Burundi	260	4 754	40.0	0	6	0.1	Community transmission
Gabon	258	24 365	1 094.7	3	150	6.7	Community transmission
Zimbabwe	254	38 933	261.9	8	1 594	10.7	Community transmission
Côte d'Ivoire	253	47 195	178.9	3	301	1.1	Community transmission
Ghana	192	93 775	301.8	1	784	2.5	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Guinea	184	23 172	176.4	3	161	1.2	Community transmission
Congo	182	11 658	211.3	3	153	2.8	Community transmission
Mozambique	156	70 724	226.3	5	836	2.7	Community transmission
Eritrea	129	4 061	114.5	0	14	0.4	Community transmission
Equatorial Guinea	93	8 529	607.9	5	118	8.4	Community transmission
Togo	80	13 432	162.2	0	125	1.5	Community transmission
Central African Republic	75	7 085	146.7	2	98	2.0	Community transmission
Mauritius	71	1 393	109.5	0	17	1.3	Clusters of cases
Malawi	55	34 329	179.5	1	1 154	6.0	Community transmission
Niger	46	5 410	22.3	0	192	0.8	Community transmission
Eswatini	39	18 589	1 602.3	0	672	57.9	Community transmission
Liberia	37	2 179	43.1	1	86	1.7	Community transmission
Benin	33	8 058	66.5	0	101	0.8	Community transmission
Mali	29	14 265	70.4	5	517	2.6	Community transmission
Sierra Leone	23	4 140	51.9	0	79	1.0	Community transmission
Lesotho	19	10 825	505.3	6	326	15.2	Community transmission
South Sudan	18	10 688	95.5	0	115	1.0	Community transmission
Burkina Faso	16	13 430	64.2	1	166	0.8	Community transmission
Gambia	15	5 993	248.0	1	179	7.4	Community transmission
Guinea-Bissau	12	3 761	191.1	0	68	3.5	Community transmission
Sao Tome and Principe	11	2 345	1 070.0	1	37	16.9	Community transmission
Comoros	9	3 949	454.1	0	146	16.8	Community transmission
Chad	5	4 928	30.0	0	173	1.1	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories[iii]							
Réunion	1 335	24 901	2 781.3	13	189	21.1	Community transmission
Mayotte	24	19 325	7 083.6	2	173	63.4	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Americas	**1 198 427**	**67 178 933**	**6 568.3**	**31 286**	**1 646 407**	**161.0**	
Brazil	420 981	16 391 930	7 711.7	12 736	459 045	216.0	Community transmission
Argentina	219 910	3 702 422	8 192.0	3 302	76 693	169.7	Community transmission
United States of America	153 587	32 916 501	9 944.5	4 596	588 292	177.7	Community transmission
Colombia	150 517	3 342 567	6 569.1	3 488	87 207	171.4	Community transmission
Chile	46 343	1 369 756	7 165.4	661	29 047	151.9	Community transmission
Peru	31 989	1 947 555	5 906.7	1 409	68 978	209.2	Community transmission
Uruguay	23 658	282 198	8 123.8	358	4 118	118.5	Community transmission
Canada	22 154	1 374 275	3 641.2	278	25 440	67.4	Community transmission
Paraguay	20 955	348 184	4 881.6	777	8 892	124.7	Community transmission
Bolivia (Plurinational State of)	18 500	364 570	3 123.2	520	14 377	123.2	Community transmission
Mexico	16 034	2 408 778	1 868.2	1 816	223 072	173.0	Community transmission
Costa Rica	14 883	314 102	6 166.0	197	3 962	77.8	Community transmission
Venezuela (Bolivarian Republic of)	9 105	230 147	809.4	112	2 595	9.1	Community transmission
Cuba	8 255	140 087	1 236.8	80	943	8.3	Community transmission
Dominican Republic	7 841	290 526	2 678.2	22	3 628	33.4	Community transmission
Ecuador	6 901	424 741	2 407.4	305	20 485	116.1	Community transmission
Guatemala	6 731	253 837	1 416.9	125	8 121	45.3	Community transmission
Honduras	4 891	236 451	2 387.3	151	6 284	63.4	Community transmission
Trinidad and Tobago	3 685	22 620	1 616.3	110	458	32.7	Community transmission
Panama	3 546	376 854	8 734.1	44	6 365	147.5	Community transmission
Suriname	1 563	14 305	2 438.5	39	282	48.1	Community transmission
El Salvador	1 026	73 246	1 129.3	30	2 241	34.6	Community transmission
Guyana	981	16 724	2 126.2	31	380	48.3	Community transmission
Haiti	523	14 258	125.0	27	307	2.7	Community transmission
Jamaica	475	48 374	1 633.6	30	942	31.8	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Bahamas	246	11 745	2 986.7	4	229	58.2	Clusters of cases
Nicaragua	102	5 833	88.1	1	186	2.8	Community transmission
Saint Lucia	100	5 035	2 742.0	0	77	41.9	Community transmission
Saint Vincent and the Grenadines	54	2 027	1 827.1	0	12	10.8	Community transmission
Belize	27	12 791	3 216.8	1	324	81.5	Community transmission
Barbados	24	4 009	1 395.0	0	47	16.4	Community transmission
Saint Kitts and Nevis	22	68	127.8	0	0	0.0	Clusters of cases
Antigua and Barbuda	4	1 259	1 285.6	0	42	42.9	Clusters of cases
Dominica	4	188	261.1	0	0	0.0	Clusters of cases
Grenada	0	161	143.1	0	1	0.9	Sporadic cases
Territories[iii]							
French Guiana	983	23 763	7 956.0	4	116	38.8	Community transmission
Puerto Rico	875	138 485	4 840.7	28	2 499	87.4	Community transmission
Guadeloupe	357	16 874	4 217.2	0	255	63.7	Community transmission
Martinique	190	11 979	3 192.1	2	95	25.3	Community transmission
Saint Martin	114	2 009	5 196.7	0	15	38.8	Community transmission
United States Virgin Islands	96	3 442	3 296.1	0	27	25.9	Community transmission
Aruba	65	10 957	10 262.6	1	107	100.2	Community transmission
Sint Maarten	58	2 404	5 606.1	1	28	65.3	Community transmission
British Virgin Islands	41	289	955.8	0	1	3.3	Clusters of cases
Cayman Islands	7	581	884.1	0	2	3.0	Sporadic cases
Saint Barthélemy	7	1 023	10 349.0	0	1	10.1	Clusters of cases
Bonaire	5	1 585	7 578.3	0	17	81.3	Community transmission
Curaçao	5	12 271	7 478.1	0	122	74.3	Community transmission
Turks and Caicos Islands	4	2 412	6 229.7	0	17	43.9	Clusters of cases
Bermuda	3	2 491	4 000.1	0	32	51.4	Community transmission
Anguilla	0	109	726.6	0	0	0.0	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Falkland Islands (Malvinas)	0	63	1 808.8	0	0	0.0	Sporadic cases
Montserrat	0	20	400.1	0	1	20.0	No cases
Saba	0	7	362.1	0	0	0.0	Sporadic cases
Saint Pierre and Miquelon	0	25	431.4	0	0	0.0	No cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	**212 568**	**10 076 696**	**1 378.8**	**3 556**	**201 642**	**27.6**	
Iran (Islamic Republic of)	69 331	2 893 218	3 444.6	1 360	79 741	94.9	Community transmission
Iraq	29 459	1 193 608	2 967.5	176	16 334	40.6	Community transmission
Bahrain	20 829	235 699	13 851.8	130	939	55.2	Community transmission
Pakistan	18 771	916 239	414.8	503	20 680	9.4	Community transmission
United Arab Emirates	12 747	567 263	5 735.5	25	1 673	16.9	Community transmission
Tunisia	9 275	343 374	2 905.4	392	12 574	106.4	Community transmission
Kuwait	8 494	306 717	7 182.1	40	1 764	41.3	Community transmission
Saudi Arabia	8 437	448 284	1 287.7	97	7 334	21.1	Community transmission
Egypt	7 969	260 659	254.7	331	15 001	14.7	Clusters of cases
Oman	5 442	215 366	4 217.4	65	2 321	45.5	Community transmission
Jordan	5 433	735 139	7 205.0	86	9 443	92.5	Community transmission
Afghanistan	5 033	70 761	181.8	117	2 919	7.5	Community transmission
Morocco	2 056	518 868	1 405.7	19	9 138	24.8	Community transmission
Libya	1 916	184 815	2 689.7	11	3 116	45.3	Community transmission
Lebanon	1 914	540 132	7 913.5	48	7 718	113.1	Community transmission
Qatar	1 881	217 041	7 533.4	11	554	19.2	Community transmission
Sudan	408	35 479	80.9	60	2 628	6.0	Clusters of cases
Syrian Arab Republic	388	24 440	139.7	34	1 763	10.1	Community transmission
Yemen	82	6 735	22.6	15	1 320	4.4	Community transmission
Djibouti	36	11 527	1 166.7	2	154	15.6	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Somalia	30	14 653	92.2	1	768	4.8	Community transmission
Territories[iii]							
occupied Palestinian territory	2 637	336 679	6 599.7	33	3 760	73.7	Community transmission
Europe	**430 945**	**54 244 552**	**5 813.6**	**11 113**	**1 148 766**	**123.1**	
Kosovo [1]	169	107 339		4	2 233		Community transmission
Russian Federation	61 937	5 063 442	3 469.7	2 680	121 162	83.0	Clusters of cases
France	60 600	5 557 673	8 545.1	811	108 543	166.9	Community transmission
Turkey	57 330	5 235 978	6 208.2	1 200	47 271	56.0	Community transmission
Germany	30 190	3 679 148	4 423.8	1 026	88 406	106.3	Community transmission
Italy	24 865	4 213 055	7 064.0	849	126 002	211.3	Clusters of cases
Netherlands	22 068	1 644 633	9 447.8	81	17 615	101.2	Community transmission
The United Kingdom	20 499	4 480 949	6 600.7	59	127 775	188.2	Community transmission
Ukraine	18 951	2 201 472	5 033.8	1 104	50 472	115.4	Community transmission
Spain	16 066	3 663 176	7 739.2	78	79 888	168.8	Community transmission
Kazakhstan	12 081	441 801	2 352.9	172	7 321	39.0	Clusters of cases
Belgium	11 493	1 061 196	9 209.8	91	24 935	216.4	Community transmission
Greece	11 466	400 395	3 735.5	290	12 024	112.2	Community transmission
Sweden	7 831	1 068 473	10 345.8	5	14 451	139.9	Community transmission
Belarus	6 864	391 637	4 144.6	60	2 821	29.9	Community transmission
Denmark	6 775	279 434	4 799.0	9	2 516	43.2	Community transmission
Poland	6 328	2 871 950	7 566.1	810	73 738	194.3	Community transmission
Georgia	6 030	343 603	8 613.4	135	4 757	119.2	Community transmission
Switzerland	3 670	689 924	7 971.7	12	10 196	117.8	Community transmission
Portugal	3 402	848 213	8 238.3	6	17 023	165.3	Clusters of cases
Lithuania	3 350	274 199	9 813.5	72	4 257	152.4	Community transmission
Austria	3 301	640 162	7 192.0	54	10 334	116.1	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Norway	3 275	124 029	2 310.7	2	783	14.6	Clusters of cases
Czechia	3 266	1 661 159	15 533.6	84	30 104	281.5	Community transmission
Ireland	2 899	261 157	5 260.6	0	4 941	99.5	Community transmission
Serbia	2 373	712 046	10 279.7	78	6 844	98.8	Community transmission
Hungary	2 360	804 032	8 230.0	149	29 624	303.2	Community transmission
Latvia	2 206	132 918	6 967.5	47	2 370	124.2	Community transmission
Romania	2 190	1 077 426	5 574.2	362	30 247	156.5	Community transmission
Croatia	2 155	356 141	8 775.9	111	8 014	197.5	Community transmission
Kyrgyzstan	2 044	104 555	1 602.6	52	1 803	27.6	Clusters of cases
Slovenia	1 967	253 496	12 095.1	8	4 692	223.9	Clusters of cases
Uzbekistan	1 673	100 124	299.2	10	690	2.1	Clusters of cases
Bulgaria	1 656	418 221	6 016.3	170	17 657	254.0	Clusters of cases
Azerbaijan	1 488	333 723	3 291.4	52	4 903	48.4	Clusters of cases
Estonia	894	129 486	9 743.3	11	1 251	94.1	Clusters of cases
Slovakia	855	389 690	7 140.0	47	12 339	226.1	Clusters of cases
Finland	839	92 244	1 669.5	16	948	17.2	Community transmission
Armenia	688	222 636	7 513.3	40	4 432	149.6	Community transmission
Bosnia and Herzegovina	685	203 938	6 216.1	105	9 222	281.1	Community transmission
Republic of Moldova	504	255 105	6 323.9	28	6 100	151.2	Community transmission
Luxembourg	344	69 889	11 162.5	4	814	130.0	Community transmission
Cyprus	323	72 159	8 126.0	4	357	40.2	Clusters of cases
Montenegro	314	99 597	15 857.8	9	1 583	252.0	Clusters of cases
North Macedonia	218	155 246	7 451.6	102	5 398	259.1	Clusters of cases
Israel	141	839 454	9 698.5	4	6 408	74.0	Community transmission
Albania	121	132 297	4 597.2	7	2 449	85.1	Clusters of cases
Andorra	84	13 693	17 722.1	0	127	164.4	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Malta	30	30 529	5 933.0	2	419	81.4	Clusters of cases
Iceland	20	6 576	1 805.9	1	30	8.2	Community transmission
Liechtenstein	9	3 099	7 998.0	0	57	147.1	Sporadic cases
Monaco	2	2 503	6 378.0	0	32	81.5	Sporadic cases
San Marino	1	5 090	14 997.9	0	90	265.2	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Faroe Islands	36	712	1 457.1	0	1	2.0	Sporadic cases
Gibraltar	7	4 293	12 742.3	0	94	279.0	Clusters of cases
Greenland	6	40	70.5	0	0	0.0	No cases
Jersey	5	3 243	3 008.5	0	69	64.0	Community transmission
Isle of Man	1	1 592	1 872.2	0	29	34.1	No cases
Guernsey	0	822	1 275.1	0	14	21.7	Community transmission
South-East Asia	**1 516 572**	**31 605 221**	**1 563.5**	**29 477**	**401 754**	**19.9**	
India	1 364 668	27 894 800	2 021.4	26 706	325 972	23.6	Clusters of cases
Nepal	47 779	553 422	1 899.4	1 010	7 163	24.6	Community transmission
Indonesia	39 986	1 809 926	661.7	1 057	50 262	18.4	Community transmission
Thailand	24 807	154 307	221.1	236	1 012	1.4	Clusters of cases
Sri Lanka	19 351	180 593	843.4	227	1 405	6.6	Clusters of cases
Bangladesh	9 660	797 386	484.2	201	12 549	7.6	Community transmission
Maldives	8 541	62 906	11 637.5	35	158	29.2	Clusters of cases
Timor-Leste	1 271	6 752	512.1	5	16	1.2	Community transmission
Myanmar	298	143 526	263.8	0	3 216	5.9	Clusters of cases
Bhutan	211	1 603	207.7	0	1	0.1	Clusters of cases
Western Pacific	**139 234**	**3 000 768**	**152.7**	**2 090**	**45 148**	**2.3**	
Malaysia	53 419	558 534	1 725.7	451	2 650	8.2	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Philippines	38 362	1 216 569	1 110.2	776	20 722	18.9	Community transmission
Japan	27 400	741 674	586.4	684	12 920	10.2	Clusters of cases
Mongolia	4 690	56 621	1 727.2	24	268	8.2	Clusters of cases
Cambodia	4 199	29 404	175.9	33	209	1.3	Sporadic cases
China	4 052	110 765	7.5	82	4 945	0.3	Clusters of cases
Republic of Korea	3 989	139 910	272.9	26	1 957	3.8	Clusters of cases
Viet Nam	1 789	6 908	7.1	6	47	0.0	Clusters of cases
Papua New Guinea	714	15 901	177.7	6	162	1.8	Community transmission
Singapore	204	62 003	1 059.8	0	32	0.5	Sporadic cases
Fiji	154	360	40.2	0	4	0.4	Sporadic cases
Lao People's Democratic Republic	126	1 908	26.2	1	3	0.0	Sporadic cases
Australia	79	30 083	118.0	0	910	3.6	Clusters of cases
New Zealand	9	2 316	48.0	0	26	0.5	Sporadic cases
Brunei Darussalam	5	241	55.1	0	3	0.7	Sporadic cases
Solomon Islands	0	20	2.9	0	0	0.0	No cases
Territories[iii]							
Guam	22	7 918	4 691.5	0	139	82.4	Clusters of cases
French Polynesia	16	18 860	6 713.9	1	142	50.6	Sporadic cases
New Caledonia	3	128	44.8	0	0	0.0	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	2	183	317.9	0	2	3.5	Pending
Marshall Islands	0	4	6.8	0	0	0.0	No cases
Samoa	0	1	0.5	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Wallis and Futuna	0	454	4 037.0	0	7	62.2	Sporadic cases
Global	**3 550 456**	**169 604 858**		**78 665**	**3 530 837**		

*See *Annex 3: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting Variants of Concern as of 1 June 2021**

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Afghanistan	●	-	-	-	-
Albania	●	-	-	-	-
Algeria	●	-	-	●	-
Angola	●	●	-	-	-
Argentina	●	●	●	●	-
Armenia	○	-	-	-	-
Aruba	●	●	●	●	-
Australia	●	●	●	○	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	-	-
Bahrain	●	●	-	●	-
Bangladesh	●	●	-	●	-
Barbados	●	-	-	-	-
Belarus	●	-	-	-	-
Belgium	●	●	●	●	-
Belize	●	-	-	-	-
Bolivia (Plurinational State of)	●	-	●*	-	-
Bonaire	●	-	-	-	-
Bosnia and Herzegovina	○	-	-	-	-
Botswana	-	●	-	●	-
Brazil	●	●	●	●	-
Brunei Darussalam	●	●	-	-	-
Bulgaria	●	-	-	-	-
Burkina Faso	●*	-	-	-	-
Cabo Verde	●	-	-	-	-
Cambodia	●	-	-	-	●*

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Cameroon	●	●	-	-	-
Canada	●	●	●	●	-
Cayman Islands	●	-	-	-	-
Central African Republic	●	-	-	-	-
Chile	●	●	●	-	-
China	●	●	●	○	-
Colombia	●	-	●	-	-
Comoros	●*	●	-	-	-
Congo	●	-	-	-	-
Costa Rica	●	●	●	-	-
Croatia	●	●	-	-	-
Cuba	●	●	-	-	-
Curaçao	●	-	●	-	-
Cyprus	●	●	-	-	●
Czechia	●	●	-	●*	-
Côte d'Ivoire	●	●	-	-	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Dominica	●	-	-	-	-
Dominican Republic	●	-	●*	-	-
Ecuador	●	●	●	-	-
Egypt	●	-	-	-	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○*	-	○*
Eswatini	-	●	-	-	-
Ethiopia	○	-	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Faroe Islands	●*	-	●	-	-
Fiji	-	-	-	-	●
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	-	-
French Polynesia	●	-	●	-	-
Gabon	●	○	-	-	-
Gambia	●	-	-	●*	-
Georgia	●	-	-	-	○*
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	-	-
Greece	●	●	-	●	-
Grenada	●	-	-	-	-
Guadeloupe	●	●	-	-	-
Guam	●	-	-	-	-
Guinea	●	●	-	-	-
Guinea-Bissau	●	●	-	-	-
Guyana	-	-	●	-	-
Haiti	●	-	●	-	-
Hungary	●	○	-	-	○*
Iceland	●	-	-	-	-
India	●	●	●	●	-
Indonesia	●	●	-	●	-
Iran (Islamic Republic of)	●	●	-	-	●
Iraq	●	-	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	-	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	○	○	-	-	-
Kenya	●	●	-	●	-
Kosovo[1]	●	-	-	-	-
Kuwait	●	-	-	-	-
Kyrgyzstan	●	●	-	-	●
Lao People's Democratic Republic	●	-	-	-	-
Latvia	●	●	●	-	○*
Lebanon	●	-	-	-	-
Lesotho	-	●	-	-	-
Liberia	●	-	-	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	-	-
Lithuania	●	●	●	-	-
Luxembourg	●	●	●	●	-
Madagascar	-	●	-	-	-
Malawi	●	●	-	-	-
Malaysia	●	●	-	○	-
Malta	●	○	●	-	-
Martinique	●	●	-	-	-
Mauritania	●*	●*	-	●*	-
Mauritius	○	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	○	-	-	-
Montenegro	●	-	-	-	-
Morocco	●	-	-	-	●
Mozambique	-	●	-	-	-
Namibia	-	●	-	-	-
Nepal	●	-	-	●*	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	-	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	-	-	●*	-
North Macedonia	●	●	-	-	-
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	-	-
Oman	●	-	-	-	-
Pakistan	●	●	●	-	-
Panama	●	●	●	-	●*
Paraguay	-	-	●	-	-
Peru	●	-	●	-	-
Philippines	●	●	●	○	-
Poland	●	○	●	●	-
Portugal	●	●	●	○	-
Puerto Rico	●	●	●	●*	-
Qatar	●	●	-	●*	-
Republic of Korea	●	●	●	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Republic of Moldova	○	-	-	-	-
Romania	●	●	●	●	-
Russian Federation	●	●	-	●	-
Rwanda	●	○	-	-	-
Réunion	●	●	●	○	-
Saint Barthélemy	●	-	-	-	-
Saint Lucia	●	-	-	-	-
Saint Martin	●	●	-	-	-
Sao Tome and Principe	●*	-	-	-	-
Saudi Arabia	●	●	-	-	-
Senegal	●	●*	-	-	-
Serbia	●	-	-	-	-
Seychelles	-	●	-	-	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	-	-	-
Slovakia	●	●	-	-	-
Slovenia	●	●	●	●	-
South Africa	●	●	-	●	-
Spain	●	●	●	●	-
Sri Lanka	●	●	-	○	-
Suriname	●	●	●	-	-
Sweden	●	●	●	●	-
Switzerland	●	●	○	●	-
Thailand	●	●	●	●	-
Togo	●	●	-	-	-
Trinidad and Tobago	●	-	●	-	-
Tunisia	●	●	-	-	-
Turkey	●	●	●	●*	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Turks and Caicos Islands	●	-	-	-	-
Uganda	●	●	-	●	-
Ukraine	●	○	-	-	-
United Arab Emirates	●	●	●	-	-
United Kingdom	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
United Republic of Tanzania	-	●	-	-	-
United States of America	●	●	●	●	-
Uruguay	●	-	●	-	-
Uzbekistan	●	●	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Venezuela (Bolivarian Republic of)	-	-	●	-	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Zambia	-	●	-	●*	○
Zimbabwe	-	○	-	●	-

**Newly reported in this update. Columns for B.1.617.1 (Kappa) and B.1.617.3 were removed this week according to changes in VOC designation.*

reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

that information for this variant was received by WHO from official sources.

indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available.

Variants Gamma for Bangladesh and Delta for Panama were excluded this week based on further information received.

***Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Efforts are ongoing to differentiate these in future reports. See also Annex 3: Data, table and figure notes.*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

Global totals include 758 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Edition 41, published 25 May 2021

In this edition:

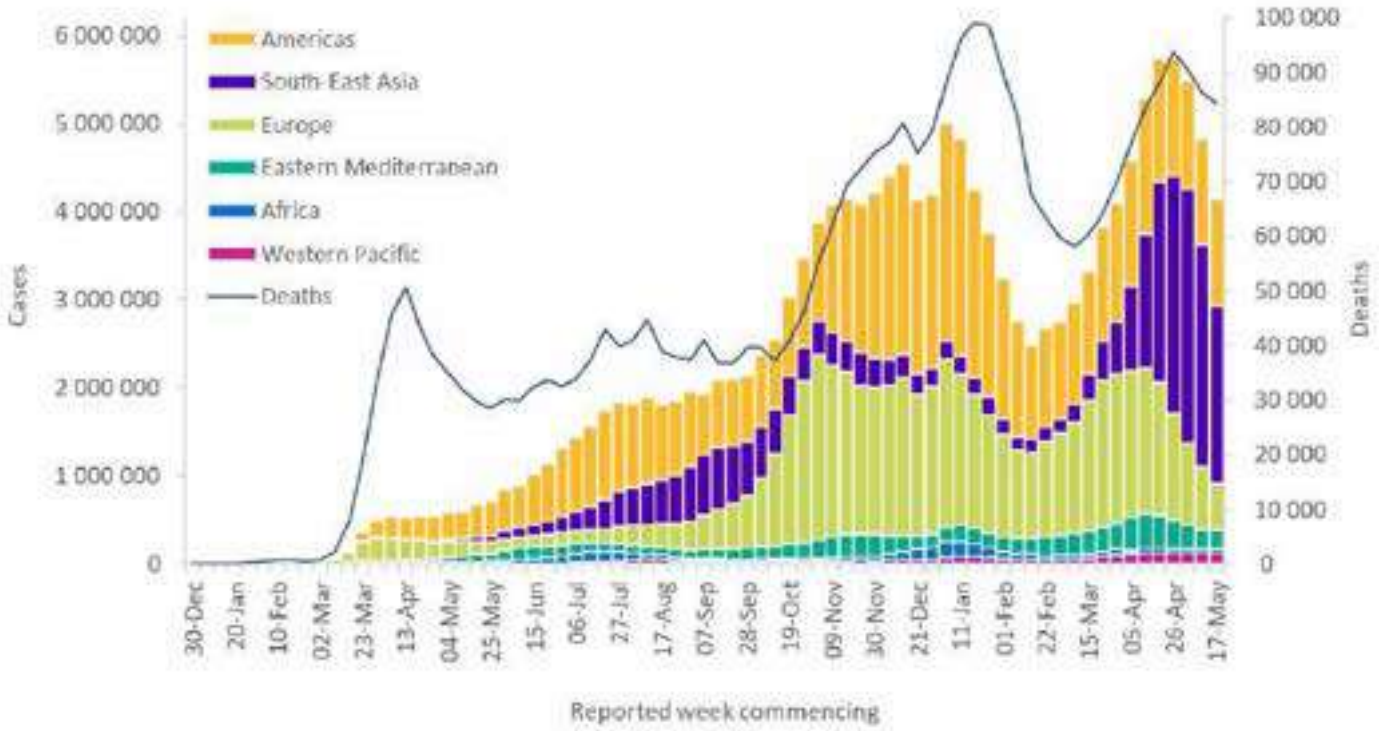
- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest (VOIs) and Variants of Concern (VOCs)
- WHO regional overviews
- Key weekly updates

Global overview

Data as of 23 May 2021

Over the past week, the number of new cases and deaths continued to decrease, with over 4.1 million new cases and 84 000 new deaths reported; a 14% and 2% decrease, respectively, compared to the previous week (Figure 1). The European Region reported the largest decline in new cases and deaths in the past week, followed by the South-East Asia Region (Table 1). The numbers of cases reported by the Americas, Eastern Mediterranean, African, and Western Pacific Regions were similar to those reported in the previous week. The Western Pacific Region reported the largest increase in the number of deaths, while other regions reported decreases or similar numbers to the previous week. Despite a declining global trend over the past four weeks, incidence of COVID-19 cases and deaths remain high, and substantial increases have been observed in many countries throughout the world.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 23 May 2021**



**See *Annex 3: Data, table and figure notes*

The highest numbers of new cases in the last seven days were reported from India (1 846 055 new cases; 23% decrease), Brazil (451 424 new cases; 3% increase), Argentina (213 046 new cases; 41% increase), the United States of America (188 410 new cases; 20% decrease), and Colombia (107 590 new cases; 7% decrease).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 23 May 2021**

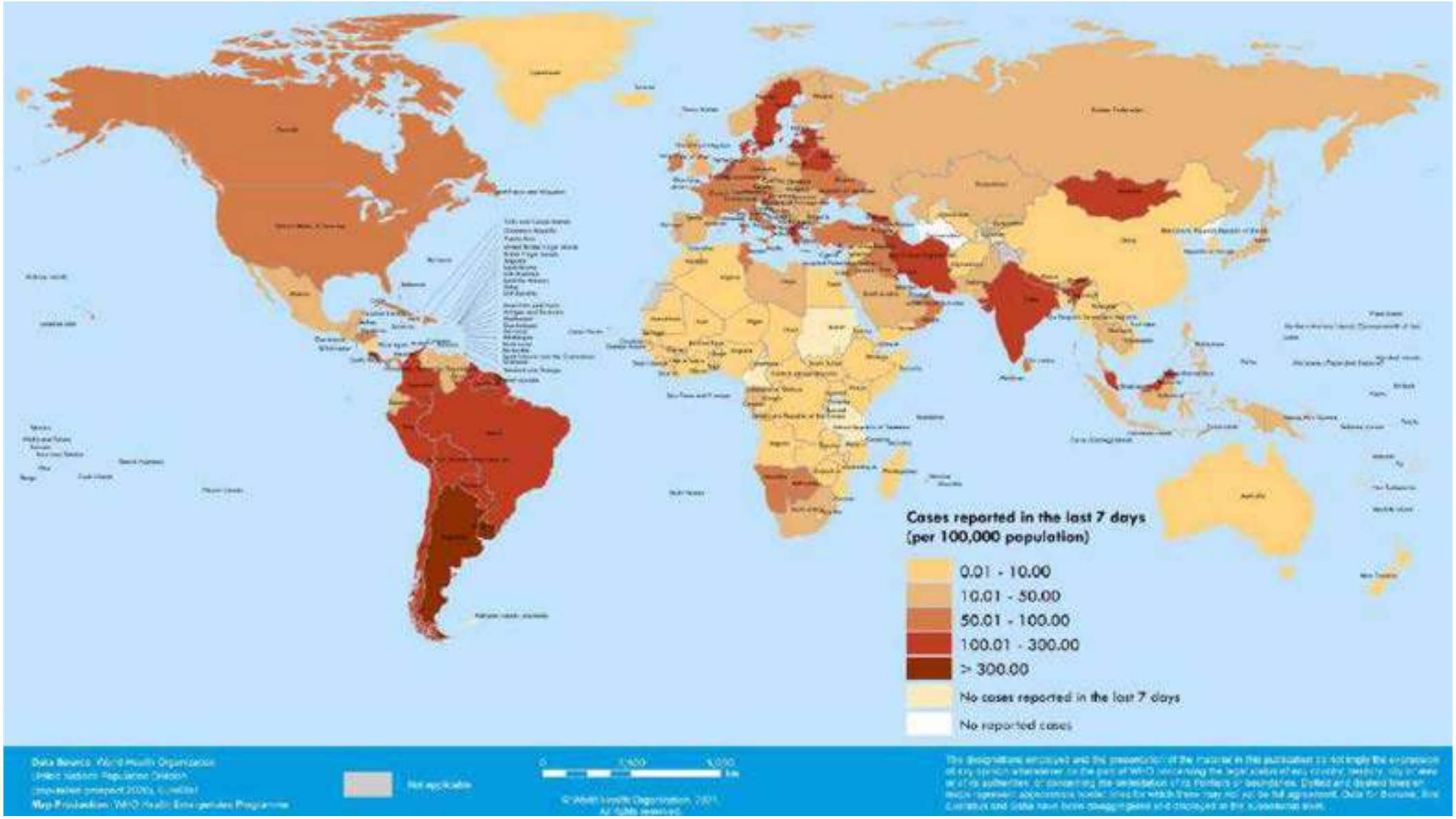
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 222 225 (29%)	2%	65 980 739 (40%)	31 759 (38%)	1%	1 615 127 (47%)
Europe	524 944 (13%)	-25%	54 110 276 (33%)	12 983 (15%)	-21%	1 134 786 (33%)
South-East Asia	2 006 085 (48%)	-21%	30 088 649 (18%)	32 199 (38%)	4%	372 277 (11%)
Eastern Mediterranean	215 536 (5%)	-2%	9 863 946 (6%)	4 203 (5%)	-11%	197 964 (6%)
Africa	44 207 (1%)	4%	3 446 089 (2%)	1 034 (1%)	2%	85 964 (2%)
Western Pacific	131 655 (3%)	-1%	2 861 544 (2%)	2 128 (3%)	22%	43 058 (1%)
Global	**4 144 658 (100%)**	**-14%**	**166 352 007 (100%)**	**84 306 (100%)**	**-2%**	**3 449 189 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
**See *Annex 3: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 17 May – 23 May 2021**



**See *Annex 3: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest (VOIs) and Variants of Concern (VOCs)

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 result in changes in transmissibility, clinical presentation and severity, or if they result in changes in public health and social measures (PHSM) implementation by national health authorities. Globally, systems have been established and are being strengthened to detect "signals" of potential Variants of Interest (VOIs) or Variants of Concern (VOCs) and assess these based on the risk posed to global public health. Table 2 lists currently designated global VOCs and VOIs. National authorities may choose to designate other variants of local interest/concern. Here we provide an update on emerging evidence surrounding phenotypic characteristics (Table 3) and the geographical distribution of designated VOCs.

Table 2: SARS-CoV-2 Variants of Concern (VOCs) and Variants of Interest (VOIs), as of 25 May 2021

PANGO lineage Nextstrain clade GISAID clade	Alternate name	First detected in	Earliest samples	Characteristic spike mutations
Variants of Concern (VOCs)				
B.1.1.7 20I/501Y.V1 GR/501Y.V1	VOC 202012/01	United Kingdom	Sep 2020	69/70del, 144del, N501Y, A570D, D614G, P681H, T716I, S982A, D1118H
B.1.351 20H/501Y.V2[†] GH/501Y.V2	VOC 202012/02	South Africa	May 2020	D80A, D215G, 241/243del, K417N, E484K, N501Y, D614G, A701V
B.1.1.28.1, alias P.1 20J/501Y.V3 GR/501Y.V3	VOC 202101/02	Brazil	Nov 2020	L18F, T20N, P26S, D138Y, R190S, K417T, E484K, N501Y, D614G H655Y, T1027I, V1176F
B.1.617* - G/452R.V3	-	India	Oct 2020	L452R, D614G, P681R, ± (E484Q, Q107H, T19R, del157/158, T478K, D950N)
Variants of Interest (VOIs)				
B.1.525 20A/S.484K G/484K.V3	-	Multiple countries	Dec 2020	Q52R, A67V, 69/70del, 144del, E484K, D614G, Q677H, F888L
B.1.427/B.1.429 20C/S.452R GH/452R.V1	CAL.20C/L452R	United States of America	Mar 2020	S13I, W152C, L452R, D614G
B.1.1.28.2, alias P.2 20B/S.484K GR	-	Brazil	Apr 2020	E484K, D614G, V1176F
B.1.1.28.3, alias P.3 - -	PHL-B.1.1.28	Philippines	Jan 2021	141/143del, E484K, N501Y, D614G, P681H, E1092K, H1101Y, V1176F
B.1.526 (+E484K/S477N) 20C GH	-	United States of America	Nov 2020	L5F, T95I, D253G, D614G, A701V, + (E484K or S477N)
B.1.616 - GH	-	France	Feb 2021	H66D, G142V, 144del, D215G, V483A, D614G, H655Y, G669S, Q949R, N1187D

** B.1.617 viruses are divided in three lineages (B.1.617.1, B.1.617.2 and B.1.617.3). Findings for lineages B.1.617.1 and B.1.617.2 were mainly used to designate B.1.617 a global VOC. Once more information becomes available, specific lineages may be designated.*

Phenotypic characteristics

Available evidence on phenotypic impacts of VOCs and vaccine performance against VOCs are summarised in Tables 3 and 4. Further discussion on impacts is also provided in previous editions of our COVID-19 Weekly Epidemiological Update.

Table 3: Summary of phenotypic impacts* of Variants of Concern (VOCs), as of 25 May 2021

VOC (lineage)	B.1.1.7	B.1.351	P.1	B.1.617
Transmissibility	Increased transmissibility[1], Increased secondary attack rate[1]	Increased transmissibility[2]	Increased transmissibility[1]	Increased transmissibility[3,4]
Disease severity	Not confirmed; possible increased risk of hospitalization[5], severity and mortality[6]	Not confirmed, possible increased risk of in-hospital mortality[7,8]	Not confirmed, possible increased risk of hospitalization[9]	Under investigation
Risk of reinfection	Neutralizing activity retained[10], risk of reinfection remain similar[11,12]	Reduction in neutralizing activity reported. T cell response elicited by D614G prototype virus remains effective against B.1.351[13–15]	Moderate reduction in neutralizing activity reported[16,17]	Under investigation, possible modest reduction in neutralization activity (B.1.617.1)[4]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF; no impact on overall result from multiple target RT-PCR, No impact on Ag RDTs observed. [18]	No impact on RT-PCR or Ag RDTs observed[16]	None reported to date	None reported to date

**Generalized findings as compared to wildtype/non-VOC viruses. Based on emerging evidence, including nonpeer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.*

Further to our last detailed update published two weeks ago, new evidence is emerging that secondary attack rates for variant B.1.617.2 reported in the United Kingdom from 29 March to 28 April 2021 were higher than that of B.1.1.7, among travellers and non-travellers.[19] Secondary attack rates for B.1.617.2 and B.1.1.7 were measured by the proportion of positive tests among contacts of confirmed or probable cases infected with variants.

A pre-print study of three outbreaks among kindergarten-aged children in Germany suggested that children aged 1 to 5 years who were infected with variant B.1.1.7 were as susceptible and infectious as adults infected with B.1.1.7 (measured by secondary attack rates) in both kindergarten (23% vs. 30%; p=0.15) and household (32% vs. 39%; p=0.27) settings.[20]

A study of seven European countries assessing disease severity of cases reported from 13 September 2020 to 13 March 2021 (n=23 343) reported that a significantly higher proportion of cases infected with one of the three VOCs: B.1.1.7, B.1.351 and P.1-were admitted to the hospital (11% for B.1.1.7/SGTF; 19% for B.1.351; 20% for P.1) compared to those infected with non-VOCs (7.5%, $p < 0.01$ for all VOCs). Similarly, a higher proportion of cases infected with these VOCs were admitted to the ICU (1.4% for B.1.1.7/SGTF, $p < 0.01$; 2.3% for B.1.351, $p < 0.01$; 2.1% for P.1, $p < 0.01$) compared to those infected with non-VOCs (0.6%).[9]

Table 4. Summary of vaccine performance against Variants of Concern (VOC) relative to previously circulating (non-VOC) variants

B.1.1.7	B.1.351	P.1	B.1.617
Efficacy/effectiveness against disease or infection			
Protection retained against disease Severe disease: No/minimal loss: Pfizer BioNTech-Comirnaty[21–25] Symptomatic Disease & Infection: No/minimal loss: AstraZeneca- Vaxzevria, Novavax-Covavax, Pfizer BioNTech-Comirnaty[6–15] Asymptomatic infection: No/minimal loss: Pfizer BioNTech-Comirnaty[22,36] Inconclusive/Moderate-substantial loss, limited sample size:AstraZeneca-Vaxzevria[27]	Reduced protection against disease,limited evidence Severe disease: No/minimal loss: Janssen Ad26.COV 2.5, PfizerBioNTech-Comirnaty[23,37] Mild-moderate disease: Moderate loss: Janssen-Ad26.COV 2.5,Novavax-Covavax[37,38] Inconclusive/substantial loss, limitedsample size: AstraZeneca-Vaxzevria[39] Infection: Moderate loss: PfizerBioNTech-Comirnaty[23] Asymptomatic infection: No evidence	Protection likely against disease, very limited evidence on only one vaccine Symptomatic Disease: No/minimal loss: Sinovac-CoronaVac[40,41] Infection: No/minimal loss: Sinovac-CoronaVac[41]	Protection likely against disease (for B.1.617.2), very limited evidence on only two vaccines Symptomatic Disease: B.1.617.2: No/minimal loss: AstraZeneca- Vaxzevria after one dose and Pfizer BioNTech-Comirnaty after two doses[42] Minimal/modest loss: AstraZeneca- Vaxzevria after two doses[42]
Neutralization			
No/minimal loss: Bharat-Covaxin, Gamaleya-Sputnik V, Moderna- mRNA-1273, Novavax-Covavax, Pfizer BioNTech-Comirnaty, BeijingCNBG-BBIBP-CorV, Sinovac-CoronaVac[43–64] Minimal/moderate loss: AstraZeneca-Vaxzevria[27,58]	Minimal/modest loss: Beijing CNBG-BBIBP-CorV, Sinovac-CoronaVac, Anhui ZL-Recombinant[65–67] Minimal to substantial loss: Moderna-mRNA-1273, Pfizer BioNTech-Comirnaty[44,48,50–55,57–59,68–73] Moderate to substantial loss: AstraZeneca-Vaxzevria, Gamaleya-Sputnik V, Novavax-Covavax[50,60,70,70]	No/minimal loss: AstraZeneca-Vaxzevria, Sinovac-CoronaVac [58,74] Minimal/moderate loss: Moderna-mRNA-1273, Pfizer BioNTech-Comirnaty[44,45,55,57,58,64,75,76]	B.1.617 (sublineage unspecified) Minimal/modest loss: Bharat-Covaxin[77] B.1.617.1: Minimal/modest loss: SII-Covishield[78] Modest/moderate loss: Moderna- mRNA-1273, Pfizer BioNTech-Comirnaty[73,79,80] B.1.617.2, B.1.617.3: No sublineage-specific evidence

Further to our last update on vaccine performance against VOCs, new Phase III efficacy results from the United Kingdom have been made available and provide evidence that Novavax-Covavax is highly efficacious at preventing COVID-19 disease due to B.1.1.7. Efficacy against B.1.1.7 symptomatic disease ≥ 7 days after the second dose was 86.3% (95% CI: 71.3%-93.5%), similar to that against non-B.1.1.7 disease: 96.4% (95% CI: 73.8%-99.5%).[26]

In addition, two new preprint studies (not yet peer-reviewed) estimated vaccine effectiveness (VE) of Pfizer BioNTech-Comirnaty and AstraZeneca-Vaxzevria vaccines against COVID-19 mortality and hospitalization among older adults in the United Kingdom. Both studies were conducted between December 2020 and April 2021 when B.1.1.7 accounted for the vast majority of sequenced viruses in the United Kingdom. The first study evaluated VE against mortality within 28 days of a positive PCR test among individuals ≥ 70 years who

developed symptomatic disease and is the first peer-reviewed publication to estimate the effectiveness of AstraZeneca-Vaxzevria against mortality. Results show a single dose of AstraZeneca-Vaxzevria offers levels of protection against mortality among people who develop disease (VE: 55%, 95% CI: 41-66%) similar to a single dose of Pfizer BioNTech-Comirnaty (VE: 44%, 95% CI: 3-53%). VE of two doses of Pfizer BioNTech-Comirnaty against death among people who develop disease was 69% (95% CI: 31-86%). Data were insufficient to estimate effectiveness of two doses of AstraZeneca-Vaxzevria. This study estimates the protection of vaccination against death (in addition to protection against symptomatic disease), and, taken together with VE estimates against symptomatic disease in the same age group, suggest approximately 80% protection of a single dose of either vaccine and approximately 97% protection for two doses of Pfizer BioNTech-Comirnaty against mortality in older adults.[24] A second study estimated overall VE against hospitalization ≥ 28 post first dose to be 73% (95% CI: 60-81%) for the AstraZeneca-Vaxzevria and 81% (95% CI: 76-85%) for Pfizer BioNTech-Comirnaty among individuals ≥ 80 years; VE against hospitalization ≥ 14 days post second dose of Pfizer BioNTech-Comirnaty was 93% (89-95%).[25] These studies provide real-world evidence that AstraZeneca-Vaxzevria and Pfizer BioNTech-Comirnaty vaccine provide good protection against severe disease in settings where B.1.1.7 are prevalent.

A test-negative, case-control pre-print study in Sao Paulo state, Brazil, among adults ≥ 70 years of age from mid-January through April 2021 found a VE of 41.6% (95% CI: 26.9-53.3%) against symptomatic COVID-19 ≥ 14 days after the second dose of Sinovac- CoronaVac[41] during a period of widespread P.1 circulation (P.1 comprised 83% of genotyped isolates in March and April 2021). VE was reported as 49.4% (95% CI: 26.9-65.0%) at ≥ 21 days after the second dose. These findings are consistent with clinical trial results conducted in health workers in Brazil when P.1 was not yet widespread.[74]

A new pre-print study from the United Kingdom suggested slightly lower effectiveness for Pfizer BioNTech-Comirnaty and AstraZeneca-Vaxzevria vaccines against symptomatic disease caused by B.1.617.2 compared to symptomatic diseased caused by B.1.1.7. VE of two doses of Pfizer BioNTech-Comirnaty was 93.4% (95% CI: 90.4-95.5%) against B.1.1.7 and 87.9% (95% CI: 78.2-93.2%) against B.1.617.2. VE of two doses of AstraZeneca-Vaxzevria was 66.1% (95% CI: 54.0-75.0%) against B.1.1.7 and 59.8% (95% CI: 28.9-77.3%) against B.1.617.2.[42] In a clinical trial conducted in the United Kingdom between June and December 2020, efficacy of two doses of AstraZeneca-Vaxzevria against symptomatic disease was 81.5% (67.9-89.4%) for non-B.1.1.7 lineages and 70.4% (43.6-84.5%) for B.1.1.7, a comparable result to that of the effectiveness study.[27] Differences in point estimates for efficacy and effectiveness for AstraZeneca-Vaxzevria were not statistically significant, and therefore should not be over-interpreted.

Recent studies provide evidence of some loss of neutralization capacity of COVID-19 vaccines against B.1.617.1. One study found a two-fold reduction in neutralization capacity against B.1.617.1 after two doses of SII - Covishield compared to the prototype B.1 lineage (n=21).[78] These findings excluded ten samples that did not show neutralizing antibody titer against B.1 nor B.1.617.1, and 12 samples that showed neutralizing antibody titer only against B.1. Another study found a seven-fold reduction in neutralization of B.1.617.1 among sera from vaccinees receiving two doses of Moderna- mRNA-1273 (n=15) or Pfizer BioNTech-Comirnaty (n=10); however, a majority of sera were still able to neutralize the variant.[80] Two additional studies provided further evidence of modest to moderate loss of neutralization by Pfizer BioNTech-Comirnaty and Moderna- mRNA-1273 vaccines against the pseudotype virus bearing B.1.617.1 spike mutations that are shared with B.1.617.3.[73,79] Finally, a fifth study showed a two-fold loss of neutralization against B.1.617 for Bharat – Covaxin vaccine, a loss comparable to that seen with VOC 202012/01 (B.1.1.7); however, no information was available on the B.1.617 sublineages included in this study.[77] Taken together, these early studies suggest some loss of neutralization capacity against B.1.617; however, it is unclear whether this loss translates into decreased vaccine efficacy/effectiveness. Vaccine efficacy and real-world effectiveness evidence for B.1.617.1, B.1.617.2 or B.1.617.3 is limited.

Geographic distribution

As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing, the number of countries/areas/territories (hereafter countries) reporting VOCs has continued to increase (Figures 3 and 4, Annex 2). This distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities, sharing of sequencing data to publicly available platforms and sampling strategies between countries.

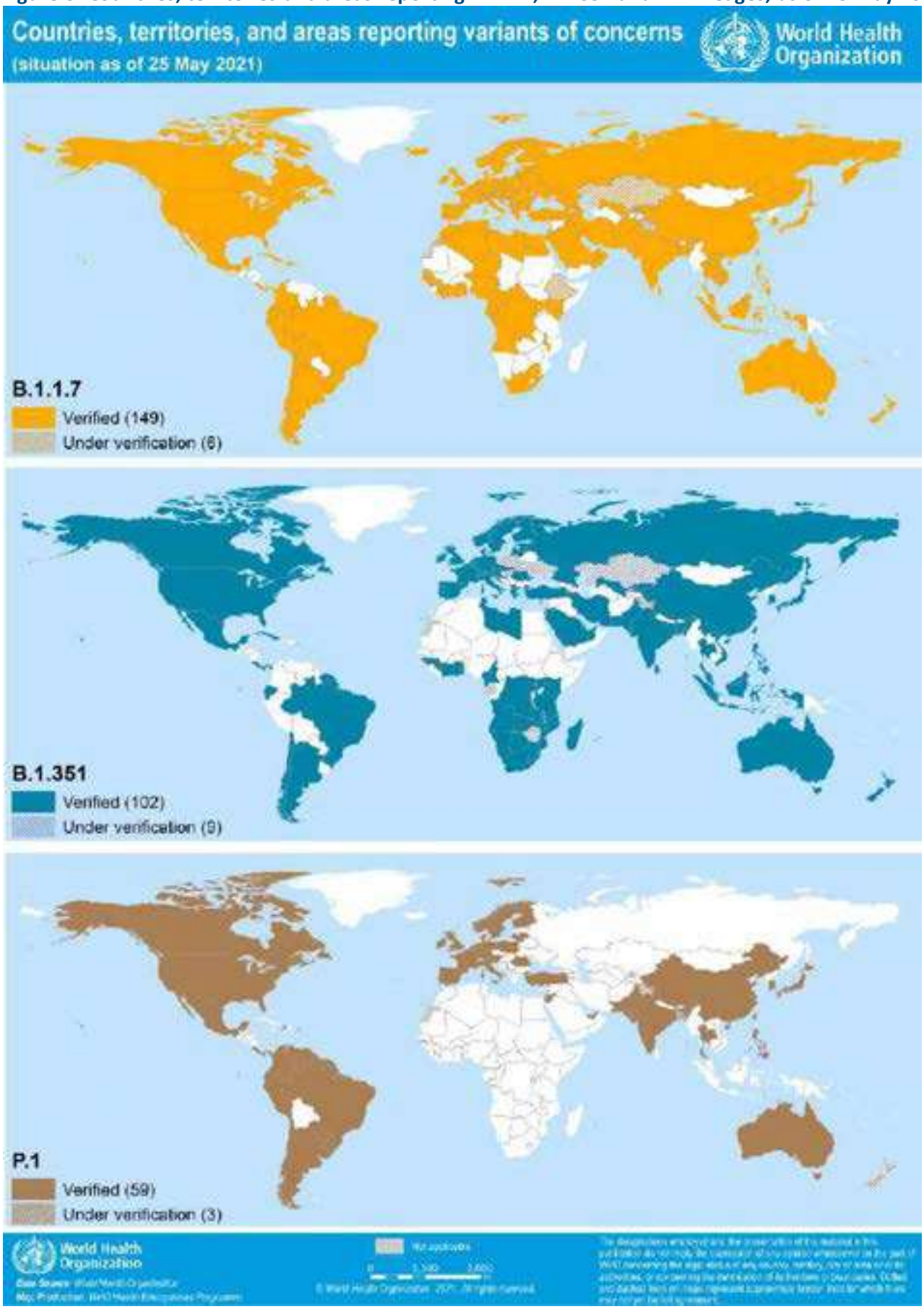
WHO recommendations

Virus evolution is expected, and the more SARS-CoV-2 circulates, the more opportunities it has to evolve. Reducing transmission through established and proven disease control methods, such as those outlined in the COVID-19 Strategic Preparedness and Response Plan, as well as avoiding introductions into animal populations are crucial aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critical to curb the spread of SARS-CoV-2 and its variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the PHSM, including infection prevention and control (IPC) measures in health facilities has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities. Authorities are also encouraged to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and to detect unusual events.

Additional resources

- Working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19
- COVID-19 Situation Reports from WHO Regional Offices and partners: AFRO, AMRO/PAHO, EMRO, EURO/ECDC, SEARO, WPRO
- ACT accelerator diagnostic pillar, FIND test directory

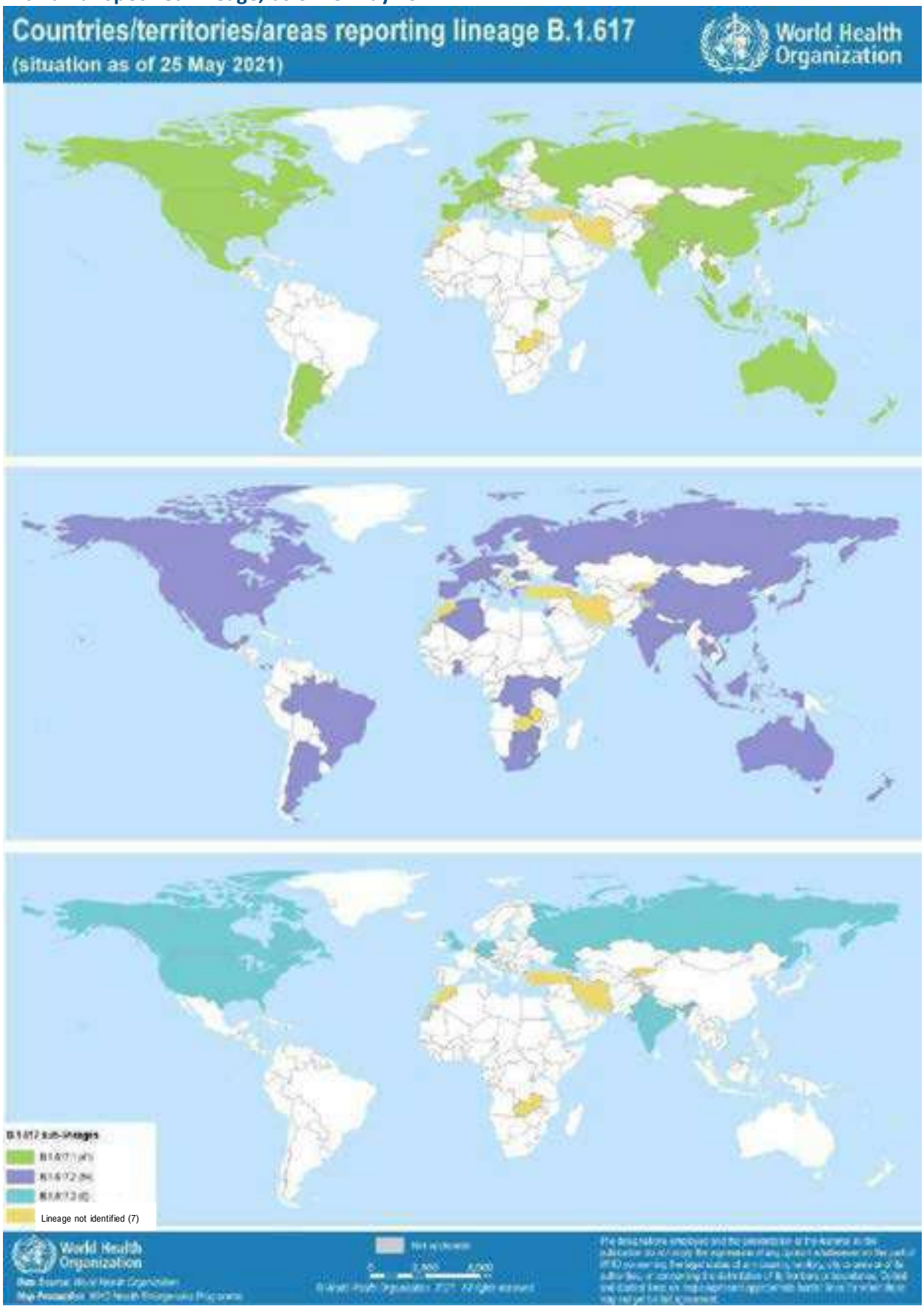
Figure 3. Countries, territories and areas reporting B.1.1.7, B.1.351 and P.1 lineages, as of 25 May 2021



**Countries/territories/areas listed include both official and unofficial reports of VOC detections pending verification. Please see Annex 2 for details.*

***Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Efforts are ongoing to differentiate these in future reports.*

Figure 4. Countries, territories and areas reporting B.1.617.1, B.1.617.2 and B.1.617.3 lineages, or B.1.617 with an unspecified lineage, as of 25 May 2021*



**Countries/territories/areas listed in include both official and unofficial of VOC detection pending verification. Please see Annex 2 for details.*
***Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Efforts are ongoing to differentiate these in future reports.*

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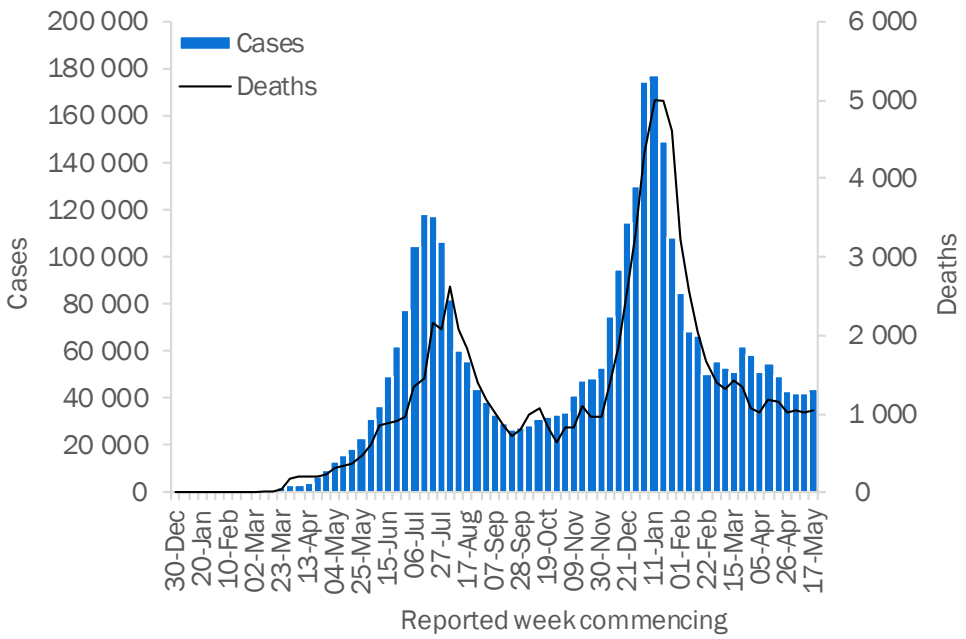
WHO regional overviews

African Region

The African Region reported over 44 000 new cases and over 1000 new deaths, a 4% and a 2% increase respectively compared to the previous week. The incidences of cases and deaths remain at similar rates to the previous four weeks. The highest numbers of new cases were reported from South Africa (21 429 new cases; 36.1 new cases per 100 000 population; a 31% increase), Ethiopia (3069 new cases; 2.7 new cases per 100 000; a 15% decrease), and Kenya (2729 new cases; 5.1 new cases per 100 000; a 27% increase).

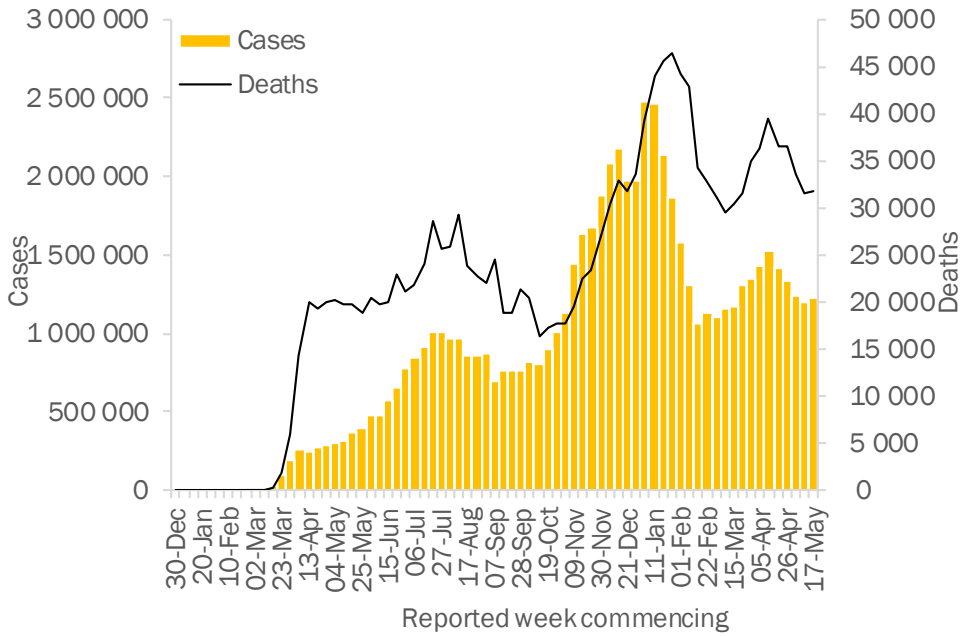
The highest numbers of new deaths were reported from South Africa (589 new deaths; 1.0 new deaths per 100 000 population; a 28% increase), Ethiopia (92 new deaths; 0.1 new deaths per 100 000; a 12% decrease), and Angola (60 new deaths; 0.2 new deaths per 100 000; a 140% increase).



Region of the Americas

The Region of the Americas reported over 1.2 million new cases and over 31 000 new deaths. Overall case and death incidence has remained stable in recent weeks; however, sizeable increases have been observed in several countries. The highest numbers of new cases were reported from Brazil (451 424 new cases; 212.4 new cases per 100 000; a 3% increase), Argentina (213 046 new cases; 471.4 new cases per 100 000; a 41% increase), and the United States of America (188 410 new cases; 56.9 new cases per 100 000; a 20% decrease).

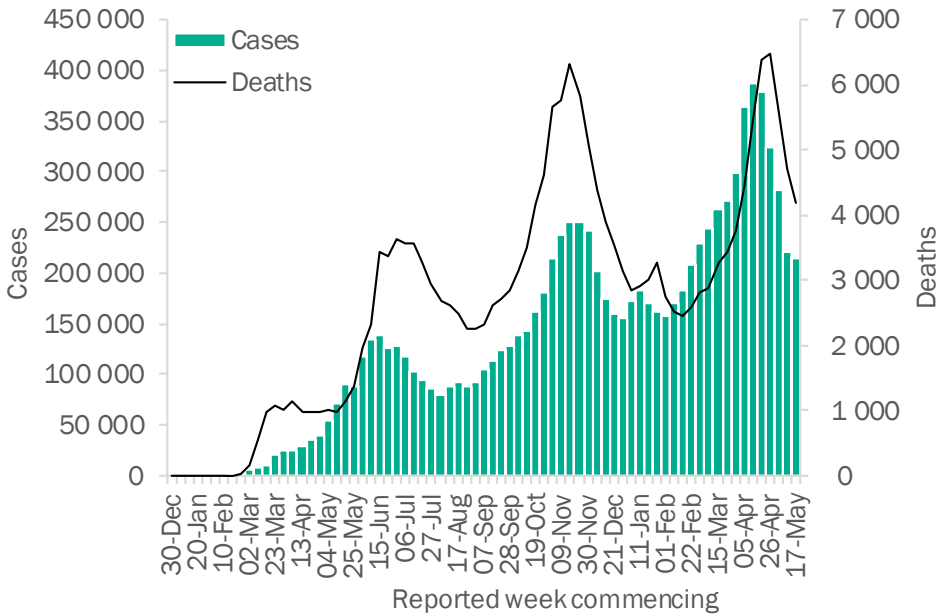
The highest numbers of new deaths were reported from Brazil (13 681 new deaths; 6.4 new deaths per 100 000; similar to the previous week), the United States of America (4032 new deaths; 1.2 new deaths per 100 000; a 3% decrease), and Argentina (3538 new deaths; 7.8 new deaths per 100 000; a 19% increase).



Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 215 000 new cases and over 4200 new deaths, a 2% and an 11% decrease respectively compared to the previous week. Overall case incidence has remained stable following sizeable increases observed in several countries in the region. Death incidence has decreased steeply for the past four weeks. The highest numbers of new cases were reported from the Islamic Republic of Iran (84 012 new cases; 100.0 new cases per 100 000; a 15% decrease), Iraq (27 232 new cases; 67.7 new cases per 100 000; a 4% decrease), and Pakistan (22 717 new cases; 10.3 new cases per 100 000; an 11% increase).

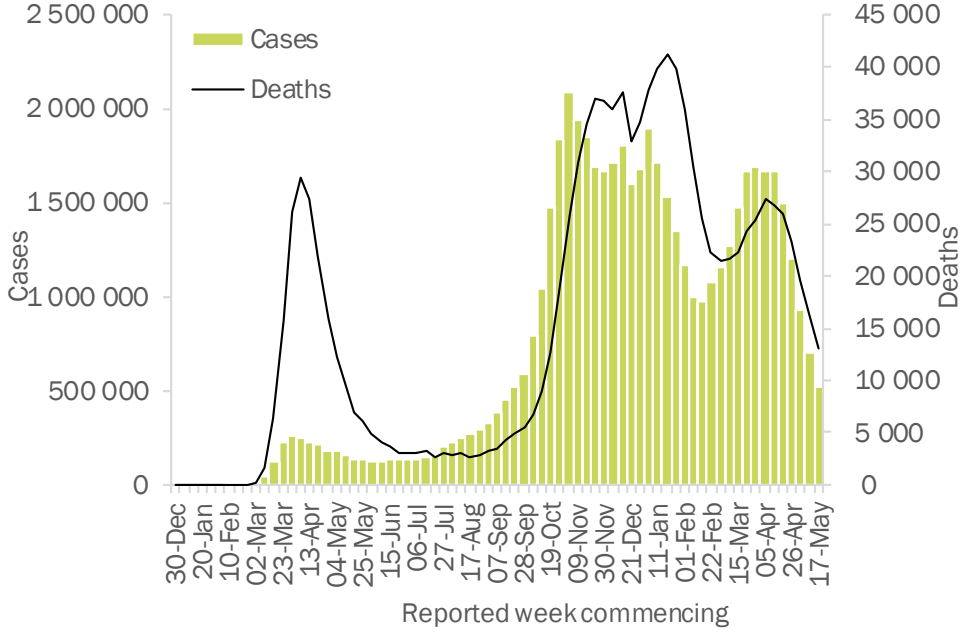
The highest numbers of new deaths were reported from the Islamic Republic of Iran (1748 new deaths; 2.1 new deaths per 100 000; a 17% decrease), Pakistan (710 new deaths; 0.3 new deaths per 100 000; a 6% increase), and Tunisia (403 new deaths; 3.4 new deaths per 100 000; a 6% decrease).



European Region

The European Region reported just under 525 000 new cases and just under 13 000 new deaths, a 25% and a 21% decrease respectively compared to the previous week. A sharp downward trend in cases and deaths has been observed over the last five weeks. The highest numbers of new cases were reported from Turkey (71 786 new cases; 85.1 new cases per 100 000; a 21% decrease), the Russian Federation (61 260 new cases; 42.0 new cases per 100 000; a 2% increase), and Germany (55 524 new cases; 66.8 new cases per 100 000; a 24% decrease).

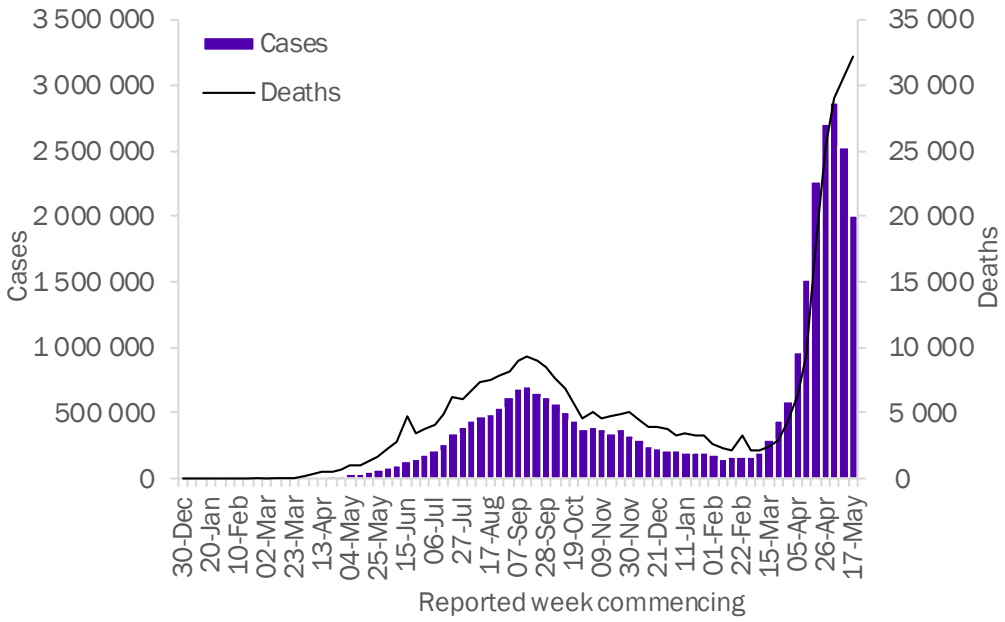
The highest numbers of new deaths were reported from the Russian Federation (2611 new deaths; 1.8 new deaths per 100 000; a 3% increase), Turkey (1534 new deaths; 1.8 new deaths per 100 000; a 14% decrease), and Ukraine (1293 new deaths; 3.0 new deaths per 100 000; a 23% decrease).



South-East Asia Region

The South-East Asia Region reported over 2 million new cases and over 32 000 new deaths, a 21% decrease and a 4% increase respectively compared to the previous week. While the overall incidence of cases continues to decrease (driven primarily by trends in India), death incidence continued to increase for a tenth consecutive week, and sizeable increases have been observed in other countries in the region. The highest numbers of new cases were reported from India (1 846 055 new cases; 133.8 new cases per 100 000; a 23% decrease), Nepal (57 939 new cases; 198.9 new cases per 100 000; a 6% decrease), and Indonesia (33 270 new cases; 12.2 new cases per 100 000; a 24% increase).

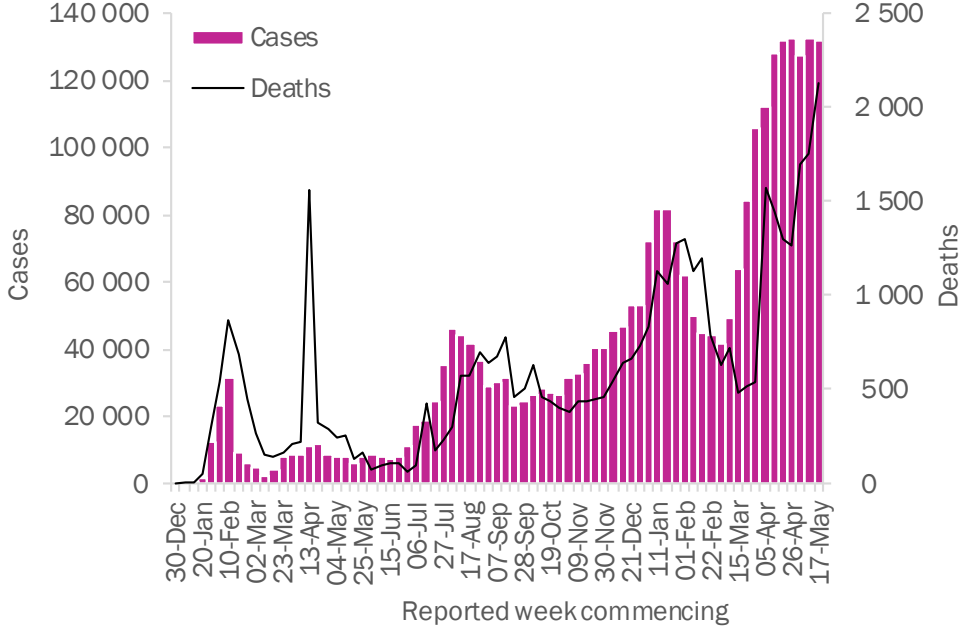
The highest numbers of new deaths were reported from India (28 982 new deaths; 2.1 new deaths per 100 000; a 4% increase), Nepal (1297 new deaths; 4.5 new deaths per 100 000; a 6% increase), and Indonesia (1238 new deaths; 0.5 new deaths per 100 000; a 10% increase).



Western Pacific Region

The Western Pacific Region reported over 131 000 new cases (similar to the previous week) and over 2100 new deaths (a 22% increase). The absolute numbers of cases and deaths remain the highest reported since the beginning of the pandemic. The highest numbers of new cases were reported from the Philippines (40 034 new cases; 36.5 new cases per 100 000; an 8% decrease), Malaysia (38 785 new cases; 119.8 new cases per 100 000; a 32% increase), and Japan (36 286 new cases; 28.7 new cases per 100 000; a 19% decrease).

The highest numbers of new deaths were reported from the Philippines (895 new deaths; 0.8 new deaths per 100 000; a 14% increase), Japan (773 new deaths; 0.6 new deaths per 100 000; a 21% increase), and Malaysia (333 new deaths; 1.0 new deaths per 100 000; a 59% increase).



Key weekly updates

WHO Director-General's key messages

Opening remarks at the World Health Assembly – 24 May 2021:

- Although we have lost so many health and care workers already, we will lose many more as long as the pandemic rages. Almost 18 months into the defining health crisis of our age, the world remains in a very fragile and dangerous situation.
- No country should assume it is out of the woods, no matter its vaccination rate.
- WHO's Strategic Preparedness and Response Plan sets out the ten pillars that every country must apply in a tailored and dynamic way to reduce exposure, prevent infections, limit the spread, and save lives. Every country can do more:
  - Increase surveillance, testing, sequencing, and sharing information;
  - Surge supplies needed to protect health workers;
  - Fight misinformation and disinformation;
  - Empower people and communities to play their part;
  - Support businesses and workplaces to take steps to open up safely, where appropriate;
  - Implement national vaccination strategies, vaccinate those most at risk, and donate vaccines to COVAX.
- We must be very clear: the pandemic is not over, and it will not be over until and unless transmission is controlled in every last country.

Additional updates

On 21 May, World leaders met at the Global Health Summit, co-hosted by the European Commission and Italy as part of its G20 presidency, to adopt an agenda to overcome the COVID-19 pandemic, and develop and endorse a Rome Declaration of Principles.

Upcoming events

- Science in 5: WHO's series on science and COVID-19

Updates and publications

- Preventing and mitigating COVID-19 at work
- Statement of the COVID-19 subcommittee of the WHO Global Advisory Committee on Vaccine Safety (GACVS) on safety signals related to the Johnson & Johnson/Janssen COVID-19 vaccine
- Support to countries' equitable and resilient recovery from the pandemic towards the health SDGs: The 2021 SDG3 GAP progress report
- Programmatic innovations to address challenges in tuberculosis prevention and care during the COVID-19 pandemic
- The impact of COVID-19 on global health goals
- Fighting infection with information
- Preparing for the next human influenza pandemic: Celebrating 10 years of the Pandemic Influenza Preparedness Framework
- WHO and Switzerland launch global BioHub for pathogen storage, sharing and analysis
- New international expert panel to address the emergence and spread of zoonotic diseases

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 23 May 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**44 207**	**3 446 089**	**307.2**	**1 034**	**85 964**	**7.7**	
South Africa	21 429	1 632 572	2 752.7	589	55 772	94.0	Community transmission
Ethiopia	3 069	268 901	233.9	92	4 068	3.5	Community transmission
Kenya	2 729	168 108	312.6	48	3 049	5.7	Community transmission
Botswana	1 989	54 151	2 302.7	23	784	33.3	Community transmission
Angola	1 795	32 149	97.8	60	715	2.2	Community transmission
Namibia	1 599	52 712	2 074.5	53	763	30.0	Community transmission
Algeria	1 457	126 651	288.8	45	3 411	7.8	Community transmission
Cabo Verde	1 247	29 198	5 251.6	10	256	46.0	Community transmission
Uganda	833	43 507	95.1	3	350	0.8	Community transmission
Madagascar	775	40 780	147.3	39	793	2.9	Community transmission
Seychelles	772	10 433	10 608.4	8	38	38.6	Community transmission
Equatorial Guinea	742	8 436	601.3	1	113	8.1	Community transmission
Zambia	697	93 106	506.5	7	1 267	6.9	Community transmission
Rwanda	490	26 424	204.0	6	348	2.7	Community transmission
Ghana	340	93 583	301.2	0	783	2.5	Community transmission
Côte d'Ivoire	323	46 942	178.0	1	298	1.1	Community transmission
Democratic Republic of the Congo	317	30 863	34.5	3	779	0.9	Community transmission
Gabon	308	24 107	1 083.1	4	147	6.6	Community transmission
Mauritania	308	19 114	411.1	1	458	9.9	Community transmission
Nigeria	277	165 979	80.5	1	2 067	1.0	Community transmission
Guinea	254	22 988	175.0	7	158	1.2	Community transmission
Senegal	195	41 023	245.0	5	1 129	6.7	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Burundi	165	4 494	37.8	0	6	0.1	Community transmission
Mozambique	158	70 568	225.8	5	831	2.7	Community transmission
Central African Republic	144	7 010	145.1	1	96	2.0	Community transmission
Congo	133	11 476	208.0	2	150	2.7	Community transmission
Zimbabwe	125	38 679	260.2	4	1 586	10.7	Community transmission
Togo	108	13 352	161.3	0	125	1.5	Community transmission
Eritrea	88	3 932	110.9	2	14	0.4	Community transmission
Malawi	64	34 274	179.2	0	1 153	6.0	Community transmission
Mali	60	14 236	70.3	1	512	2.5	Community transmission
Benin	41	8 025	66.2	0	101	0.8	Community transmission
Mauritius	34	1 322	103.9	0	17	1.3	Clusters of cases
Niger	34	5 364	22.2	0	192	0.8	Community transmission
Gambia	32	5 978	247.4	3	178	7.4	Community transmission
Eswatini	31	18 550	1 598.9	0	672	57.9	Community transmission
Chad	22	4 923	30.0	0	173	1.1	Community transmission
Burkina Faso	19	13 414	64.2	1	165	0.8	Community transmission
South Sudan	18	10 670	95.3	0	115	1.0	Community transmission
Lesotho	16	10 806	504.4	0	320	14.9	Community transmission
Liberia	14	2 142	42.4	0	85	1.7	Community transmission
Sierra Leone	14	4 117	51.6	0	79	1.0	Community transmission
Comoros	10	3 940	453.1	0	146	16.8	Community transmission
Sao Tome and Principe	7	2 334	1 065.0	1	36	16.4	Community transmission
Guinea-Bissau	3	3 749	190.5	1	68	3.5	Community transmission
Cameroon	0	76 756	289.1	0	1 230	4.6	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories[iii]							
Réunion	922	23 566	2 632.2	7	176	19.7	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Mayotte	0	20 176	7 395.5	0	171	62.7	Community transmission
Americas	**1 222 225**	**65 980 739**	**6 451.1**	**31 759**	**1 615 127**	**157.9**	
Brazil	451 424	15 970 949	7 513.6	13 681	446 309	210.0	Community transmission
Argentina	213 046	3 482 512	7 705.4	3 538	73 391	162.4	Community transmission
United States of America	188 410	32 762 914	9 898.1	4 032	583 696	176.3	Community transmission
Colombia	107 590	3 192 050	6 273.3	3 469	83 719	164.5	Community transmission
Chile	43 161	1 323 413	6 923.0	652	28 386	148.5	Community transmission
Peru	36 517	1 915 566	5 809.7	1 961	67 569	204.9	Community transmission
Canada	33 722	1 352 121	3 582.5	293	25 162	66.7	Community transmission
Uruguay	23 334	258 540	7 442.7	391	3 760	108.2	Community transmission
Paraguay	17 591	327 229	4 587.8	633	8 115	113.8	Community transmission
Costa Rica	16 478	299 219	5 873.8	218	3 765	73.9	Community transmission
Bolivia (Plurinational State of)	16 337	346 070	2 964.7	406	13 857	118.7	Community transmission
Mexico	14 749	2 392 744	1 855.8	1 097	221 256	171.6	Community transmission
Cuba	8 611	131 832	1 163.9	67	863	7.6	Community transmission
Ecuador	8 320	417 840	2 368.3	488	20 180	114.4	Community transmission
Venezuela (Bolivarian Republic of)	8 044	221 042	777.3	117	2 483	8.7	Community transmission
Guatemala	6 936	247 106	1 379.3	151	7 996	44.6	Community transmission
Dominican Republic	6 413	282 685	2 605.9	37	3 606	33.2	Community transmission
Honduras	6 304	231 560	2 337.9	196	6 133	61.9	Community transmission
Trinidad and Tobago	3 556	18 935	1 353.0	83	348	24.9	Community transmission
Panama	3 265	373 308	8 651.9	29	6 321	146.5	Community transmission
El Salvador	1 305	72 220	1 113.4	29	2 211	34.1	Community transmission
Suriname	1 035	12 742	2 172.1	20	243	41.4	Community transmission
Guyana	1 026	16 014	2 036.0	20	355	45.1	Community transmission
Jamaica	666	47 899	1 617.6	69	912	30.8	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Haiti	342	13 735	120.5	9	280	2.5	Community transmission
Bahamas	315	11 499	2 924.1	5	225	57.2	Clusters of cases
Saint Lucia	147	4 935	2 687.5	2	77	41.9	Community transmission
Nicaragua	82	5 731	86.5	1	185	2.8	Community transmission
Belize	50	12 764	3 210.0	0	323	81.2	Community transmission
Saint Vincent and the Grenadines	41	1 973	1 778.4	0	12	10.8	Community transmission
Barbados	24	3 985	1 386.7	1	47	16.4	Community transmission
Dominica	6	184	255.6	0	0	0.0	Clusters of cases
Antigua and Barbuda	4	1 255	1 281.5	0	42	42.9	Clusters of cases
Saint Kitts and Nevis	1	46	86.5	0	0	0.0	Sporadic cases
Grenada	0	161	143.1	0	1	0.9	Sporadic cases
Territories[iii]							
French Guiana	1 315	22 780	7 626.8	4	112	37.5	Community transmission
Puerto Rico	1 184	137 610	4 810.1	40	2 471	86.4	Community transmission
Guadeloupe	438	16 517	4 128.0	10	255	63.7	
Martinique	120	11 789	3 141.5	3	93	24.8	Community transmission
Sint Maarten	74	2 346	5 470.8	0	27	63.0	Community transmission
Aruba	66	10 892	10 201.7	2	106	99.3	Community transmission
Saint Martin	56	1 895	4 901.8	1	15	38.8	Community transmission
United States Virgin Islands	41	3 308	3 167.8	0	27	25.9	Community transmission
Bermuda	22	2 488	3 995.3	0	32	51.4	Community transmission
Curaçao	22	12 266	7 475.0	4	122	74.3	Community transmission
Bonaire	16	1 580	7 554.4	0	17	81.3	Community transmission
Cayman Islands	9	574	873.4	0	2	3.0	Sporadic cases
Saint Barthélemy	6	1 016	10 278.2	0	1	10.1	Clusters of cases
Turks and Caicos Islands	4	2 408	6 219.3	0	17	43.9	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Anguilla	0	109	726.6	0	0	0.0	Clusters of cases
British Virgin Islands	0	248	820.2	0	1	3.3	Clusters of cases
Falkland Islands (Malvinas)	0	63	1 808.8	0	0	0.0	Sporadic cases
Montserrat	0	20	400.1	0	1	20.0	No cases
Saba	0	7	362.1	0	0	0.0	Sporadic cases
Saint Pierre and Miquelon	0	25	431.4	0	0	0.0	No cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	**215 536**	**9 863 946**	**1 349.7**	**4 203**	**197 964**	**27.1**	
Iran (Islamic Republic of)	84 012	2 823 887	3 362.1	1 748	78 381	93.3	Community transmission
Iraq	27 232	1 164 149	2 894.3	228	16 158	40.2	Community transmission
Pakistan	22 717	897 468	406.3	710	20 177	9.1	Community transmission
Bahrain	15 777	214 870	12 627.7	72	809	47.5	Community transmission
United Arab Emirates	9 585	554 516	5 606.6	19	1 648	16.7	Clusters of cases
Tunisia	8 267	334 099	2 826.9	403	12 182	103.1	Community transmission
Egypt	8 170	252 690	246.9	401	14 670	14.3	Clusters of cases
Saudi Arabia	7 578	439 847	1 263.4	90	7 237	20.8	Community transmission
Kuwait	7 422	298 223	6 983.2	37	1 724	40.4	Community transmission
Jordan	6 361	729 706	7 151.8	114	9 357	91.7	Community transmission
Oman	5 011	209 924	4 110.8	72	2 256	44.2	Community transmission
Lebanon	2 985	538 218	7 885.5	85	7 670	112.4	Community transmission
Afghanistan	2 244	65 728	168.8	60	2 802	7.2	Community transmission
Qatar	2 233	215 160	7 468.1	17	543	18.8	Community transmission
Morocco	1 995	516 812	1 400.2	21	9 119	24.7	Community transmission
Libya	1 720	182 899	2 661.8	20	3 105	45.2	Community transmission
Syrian Arab Republic	359	24 052	137.4	36	1 729	9.9	Community transmission
Somalia	137	14 623	92.0	14	767	4.8	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Yemen	111	6 653	22.3	19	1 305	4.4	Community transmission
Djibouti	77	11 491	1 163.1	1	152	15.4	Community transmission
Sudan	0	34 889	79.6	0	2 446	5.6	Clusters of cases
Territories[iii]							
occupied Palestinian territory	1 543	334 042	6 548.0	36	3 727	73.1	Community transmission
Europe	**524 944**	**54 110 276**	**5 799.2**	**12 983**	**1 134 786**	**121.6**	
Kosovo [1]	370	107 170		16	2 229		Community transmission
Turkey	71 786	5 178 648	6 140.3	1 534	46 071	54.6	Community transmission
Russian Federation	61 260	5 001 505	3 427.2	2 611	118 482	81.2	Clusters of cases
Germany	55 524	3 648 958	4 387.5	1 284	87 380	105.1	Community transmission
France	51 986	5 820 918	8 949.8	637	107 403	165.1	Community transmission
Italy	34 816	4 188 190	7 022.3	1 090	125 153	209.8	Clusters of cases
Netherlands	29 215	1 622 761	9 322.1	100	17 536	100.7	Community transmission
Ukraine	28 657	2 182 521	4 990.5	1 293	49 368	112.9	Community transmission
Sweden	18 717	1 058 341	10 247.7	10	14 366	139.1	Community transmission
Spain	17 740	3 631 661	7 672.6	98	79 601	168.2	Community transmission
Belgium	16 164	1 048 880	9 102.9	131	24 841	215.6	Community transmission
Greece	13 098	388 929	3 628.6	369	11 734	109.5	Community transmission
The United Kingdom	12 466	4 460 450	6 570.5	41	127 716	188.1	Community transmission
Poland	11 543	2 865 622	7 549.4	1 264	72 928	192.1	Community transmission
Belarus	10 059	384 773	4 072.0	70	2 761	29.2	Community transmission
Kazakhstan	8 848	423 193	2 253.8	0	4 933	26.3	Clusters of cases
Georgia	7 198	337 573	8 462.2	180	4 622	115.9	Community transmission
Denmark	7 120	272 659	4 682.6	5	2 507	43.1	Community transmission
Switzerland	5 536	684 265	7 906.4	21	10 169	117.5	Community transmission
Lithuania	5 313	270 849	9 693.6	82	4 185	149.8	Community transmission
Czechia	5 053	1 657 893	15 503.1	119	30 020	280.7	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Austria	4 463	636 861	7 154.9	73	10 280	115.5	Community transmission
Romania	3 902	1 075 236	5 562.9	400	29 885	154.6	Community transmission
Serbia	3 783	709 673	10 245.5	102	6 766	97.7	Community transmission
Croatia	3 596	353 986	8 722.8	195	7 903	194.7	Community transmission
Hungary	3 525	801 672	8 205.8	300	29 475	301.7	Community transmission
Latvia	3 115	130 712	6 851.9	66	2 323	121.8	Community transmission
Ireland	3 033	258 258	5 202.2	0	4 941	99.5	Community transmission
Portugal	2 963	844 811	8 205.3	11	17 017	165.3	Clusters of cases
Azerbaijan	2 864	332 235	3 276.7	83	4 851	47.8	Clusters of cases
Bulgaria	2 524	416 565	5 992.5	237	17 487	251.6	Clusters of cases
Slovenia	2 513	251 531	12 001.3	19	4 675	223.1	Clusters of cases
Norway	2 479	120 754	2 249.7	7	781	14.6	Clusters of cases
Kyrgyzstan	2 038	102 511	1 571.2	48	1 751	26.8	Clusters of cases
Uzbekistan	1 781	98 451	294.2	12	680	2.0	Clusters of cases
Estonia	1 539	128 592	9 676.0	18	1 240	93.3	Clusters of cases
Slovakia	1 312	388 835	7 124.3	68	12 292	225.2	Clusters of cases
Finland	1 279	91 157	1 649.8	3	932	16.9	Community transmission
Armenia	1 088	221 948	7 490.1	69	4 392	148.2	Community transmission
Bosnia and Herzegovina	940	203 253	6 195.2	110	9 117	277.9	Community transmission
Cyprus	937	71 836	8 089.6	7	353	39.8	Clusters of cases
Republic of Moldova	865	254 601	6 311.4	56	6 072	150.5	Community transmission
Luxembourg	623	69 545	11 107.5	4	810	129.4	Community transmission
North Macedonia	392	155 028	7 441.2	99	5 296	254.2	Clusters of cases
Montenegro	350	99 240	15 801.0	11	1 572	250.3	Clusters of cases
Albania	198	132 176	4 593.0	13	2 442	84.9	Clusters of cases
Israel	198	839 316	9 696.9	17	6 398	73.9	Community transmission
Andorra	99	13 609	17 613.4	0	127	164.4	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Malta	26	30 504	5 928.1	0	417	81.0	Clusters of cases
Iceland	19	6 556	1 800.4	0	29	8.0	Community transmission
Liechtenstein	9	3 088	7 969.6	0	57	147.1	Sporadic cases
Monaco	8	2 501	6 372.9	0	32	81.5	Sporadic cases
San Marino	2	5 089	14 995.0	0	90	265.2	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Faroe Islands	6	676	1 383.4	0	1	2.0	Sporadic cases
Greenland	3	34	59.9	0	0	0.0	No cases
Jersey	2	3 238	3 003.8	0	69	64.0	Community transmission
Isle of Man	1	1 591	1 871.1	0	29	34.1	No cases
Gibraltar	0	4 286	12 721.5	0	94	279.0	Clusters of cases
Guernsey	0	822	1 275.1	0	14	21.7	Community transmission
South-East Asia	**2 006 085**	**30 088 649**	**1 488.5**	**32 199**	**372 277**	**18.4**	
India	1 846 055	26 530 132	1 922.5	28 982	299 266	21.7	Clusters of cases
Nepal	57 939	505 643	1 735.4	1 297	6 153	21.1	Community transmission
Indonesia	33 270	1 769 940	647.1	1 238	49 205	18.0	Community transmission
Thailand	28 053	129 500	185.5	187	776	1.1	Clusters of cases
Sri Lanka	20 771	161 242	753.0	237	1 178	5.5	Clusters of cases
Maldives	10 583	54 365	10 057.5	27	123	22.8	Clusters of cases
Bangladesh	7 930	787 726	478.3	224	12 348	7.5	Community transmission
Timor-Leste	1 202	5 481	415.7	3	11	0.8	Community transmission
Myanmar	169	143 228	263.2	4	3 216	5.9	Clusters of cases
Bhutan	113	1 392	180.4	0	1	0.1	Clusters of cases
Western Pacific	**131 655**	**2 861 544**	**145.7**	**2 128**	**43 058**	**2.2**	
Philippines	40 034	1 178 207	1 075.2	895	19 946	18.2	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Malaysia	38 785	505 115	1 560.6	333	2 199	6.8	Community transmission
Japan	36 286	714 274	564.7	773	12 236	9.7	Clusters of cases
Republic of Korea	4 259	135 929	265.1	31	1 931	3.8	Clusters of cases
Mongolia	3 830	51 931	1 584.1	39	244	7.4	Clusters of cases
Cambodia	3 021	25 205	150.8	26	176	1.1	Sporadic cases
China	2 524	106 715	7.3	5	4 863	0.3	Clusters of cases
Papua New Guinea	1 259	15 187	169.7	20	156	1.7	Community transmission
Viet Nam	1 007	5 119	5.3	5	41	0.0	Clusters of cases
Singapore	263	61 799	1 056.3	1	32	0.5	Sporadic cases
Lao People's Democratic Republic	212	1 782	24.5	0	2	0.0	Sporadic cases
Fiji	38	206	23.0	0	4	0.4	Sporadic cases
Australia	37	30 004	117.7	0	910	3.6	Clusters of cases
New Zealand	17	2 307	47.8	0	26	0.5	Sporadic cases
Brunei Darussalam	4	236	53.9	0	3	0.7	Sporadic cases
Solomon Islands	0	20	2.9	0	0	0.0	No cases
Territories[iii]							
Guam	41	7 896	4 678.4	0	139	82.4	Clusters of cases
French Polynesia	29	18 844	6 708.2	0	141	50.2	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	8	181	314.5	0	2	3.5	Pending
New Caledonia	1	125	43.8	0	0	0.0	Sporadic cases
Marshall Islands	0	4	6.8	0	0	0.0	No cases
Samoa	0	1	0.5	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Wallis and Futuna	0	454	4 037.0	0	7	62.2	Sporadic cases
Global	**4 144 658**	**166 352 007**		**84 306**	**3 449 189**		

*See *Annex 3: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting variants of concern as of 25 May 2021**

Country/Territory/ Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Afghanistan	●	-	-	-	-	-	-
Albania	●	-	-	-	-	-	-
Algeria	●	-	-	-	●*	-	-
Angola	●	●	-	-	-	-	-
Argentina	●	●	●	●	●	-	-
Armenia	○	-	-	-	-	-	-
Aruba	●	●	●	-	●	-	-
Australia	●	●	●	○	○	-	-
Austria	●	●	●	●	●	-	-
Azerbaijan	●	-	-	-	-	-	-
Bahrain	●	●	-	●	●	-	-
Bangladesh	●	●	○	-	●	-	-
Barbados	●	-	-	-	-	-	-
Belarus	●	-	-	-	-	-	-
Belgium	●	●	●	●	●	-	-
Belize	●	-	-	-	-	-	-
Bolivia (Plurinational State of)	●	-	-	-	-	-	-
Bonaire	●	-	-	-	-	-	-
Bosnia and Herzegovina	○	-	-	-	-	-	-
Botswana	-	●	-	-	●*	-	-
Brazil	●	●	●	-	●*	-	-
Brunei Darussalam	●	●	-	-	-	-	-
Bulgaria	●	-	-	-	-	-	-
Cabo Verde	●	-	-	-	-	-	-
Cambodia	●	-	-	○	-	-	-
Cameroon	●	●	-	-	-	-	-

Country/Territory/ Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Canada	●	●	●	●	●	●	-
Cayman Islands	●	-	-	-	-	-	-
Central African Republic	●	-	-	-	-	-	-
Chile	●	●	●	-	-	-	-
China	●	●	●	○	○	-	-
Colombia	●	-	●	-	-	-	-
Comoros	-	●	-	-	-	-	-
Congo	●	-	-	-	-	-	-
Costa Rica	●	●	●	-	-	-	-
Croatia	●	●	-	-	-	-	-
Cuba	●	●	-	-	-	-	-
Curaçao	●	-	●*	●*	-	-	-
Cyprus	●	●*	-	-	-	-	-
Czechia	●	●	-	●	-	-	-
Côte d'Ivoire	●	●	-	-	-	-	-
Democratic Republic of the Congo	●	●	-	-	●	-	-
Denmark	●	●	●	●	●	-	-
Dominica	●	-	-	-	-	-	-
Dominican Republic	●	-	-	-	-	-	-
Ecuador	●	●*	●	-	-	-	-
Egypt	●	-	-	-	-	-	-
Equatorial Guinea	●	●	-	-	-	-	-
Estonia	●	●	-	-	-	-	-
Eswatini	-	●	-	-	-	-	-
Ethiopia	○	-	-	-	-	-	-
Faroe Islands	-	-	●	-	-	-	-

Country/Territory/ Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Fiji	-	-	-	-	-	-	-
Finland	●	●	●	-	●*	-	-
France	●	●	●	●	●	-	-
French Guiana	●	●	●	-	-	-	-
French Polynesia	●	-	●	-	-	-	-
Gabon	●	○	-	-	-	-	-
Gambia	●	-	-	-	-	-	-
Georgia	●	-	-	-	-	-	-
Germany	●	●	●	●	●	●*	-
Ghana	●	●	-	-	●*	-	-
Gibraltar	●	-	-	-	-	-	-
Greece	●	●	-	●	●	-	-
Grenada	●	-	-	-	-	-	-
Guadeloupe	●	●	-	●	-	-	-
Guam	●	-	-	-	-	-	-
Guinea	●	●*	-	-	-	-	-
Guinea-Bissau	●*	●*	-	-	-	-	-
Guyana	-	-	●	-	-	-	-
Haiti	●	-	●	-	-	-	-
Hungary	●	○	-	-	-	-	-
Iceland	●	-	-	-	-	-	-
India	●	●	●	●	●	●	-
Indonesia	●	●	-	●	●	-	-
Iran (Islamic Republic of)	●	●	-	-	-	-	-
Iraq	●	-	-	-	-	-	-
Ireland	●	●	●	●	●	-	-
Israel	●	●	●	●	●	-	-

Country/Territory/ Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Italy	●	●	●	●	●	-	-
Jamaica	●	-	-	-	-	-	-
Japan	●	●	●	●	●	-	-
Jordan	●	●	●	●	●	-	-
Kazakhstan	○	○	-	-	-	-	-
Kenya	●	●	-	-	●*	-	-
Kosovo[1]	●	-	-	-	-	-	-
Kuwait	●	-	-	-	-	-	-
Kyrgyzstan	●	●	-	-	-	-	-
Lao People's Democratic Republic	●	-	-	-	-	-	-
Latvia	●	●	●	-	-	-	-
Lebanon	●	-	-	-	-	-	-
Lesotho	-	●	-	-	-	-	-
Liberia	●*	-	-	-	-	-	-
Libya	●	●	-	-	-	-	-
Liechtenstein	●	-	-	-	-	-	-
Lithuania	●	●	●	-	-	-	-
Luxembourg	●	●	●	●	●	-	-
Madagascar	-	●	-	-	-	-	-
Malawi	●	●	-	-	-	-	-
Malaysia	●	●	-	●	○	-	-
Malta	●	○	●	-	-	-	-
Martinique	●	●	-	-	-	-	-
Mauritius	○	●	-	-	-	-	-
Mayotte	●	●	-	-	-	-	-
Mexico	●	●	●	●	●	-	-
Monaco	●	○	-	-	-	-	-
Montenegro	●	-	-	-	-	-	-
Morocco	●	-	-	-	-	-	-

Country/Territory/ Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Mozambique	-	●	-	-	-	-	-
Namibia	-	●	-	-	-	-	-
Nepal	●	-	-	●	-	-	-
Netherlands	●	●	●	●	●	-	-
New Caledonia	●	-	-	-	-	-	-
New Zealand	●	●	○	○	○	-	-
Niger	●	-	-	-	-	-	-
Nigeria	●	-	-	-	-	-	-
North Macedonia	●	●	-	-	-	-	-
Norway	●	●	●	●	●	-	-
Occupied Palestinian Territory	●	●	-	-	-	-	-
Oman	●	-	-	-	-	-	-
Pakistan	●	●	●	-	-	-	-
Panama	●	●	●	-	●	-	-
Paraguay	-	-	●	-	-	-	-
Peru	●	-	●	-	-	-	-
Philippines	●	●	●	-	○	-	-
Poland	●	○	●	-	●	-	-
Portugal	●	●	●	●	○	-	-
Puerto Rico	●	●	●	-	-	-	-
Qatar	●	●	-	-	-	-	-
Republic of Korea	●	●	●	○	○	-	-
Republic of Moldova	○	-	-	-	-	-	-
Romania	●	●	●	-	●	-	-
Russian Federation	●	●	-	●	●*	●	-
Rwanda	●	○	-	-	-	-	-
Réunion	●	●	●	-	○	-	-
Saint Barthélemy	●	-	-	-	-	-	-
Saint Lucia	●	-	-	-	-	-	-

Country/Territory/ Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Saint Martin	●	●	-	-	-	-	-
Saudi Arabia	●	●*	-	-	-	-	-
Senegal	●	-	-	-	-	-	-
Serbia	●	-	-	-	-	-	-
Seychelles	-	●	-	-	-	-	-
Singapore	●	●	●	●	●	-	-
Sint Maarten	●	●	-	●	-	-	-
Slovakia	●	●	-	-	-	-	-
Slovenia	●	●	●	-	●	-	-
South Africa	●	●	-	-	●	-	-
Spain	●	●	●	●	●	-	-
Sri Lanka	●	●	-	-	●	-	-
Suriname	●	●	●	-	-	-	-
Sweden	●	●	●	●	●	-	-
Switzerland	●	●	○	●	●	-	-
Thailand	●	●	●	●	○*	-	-
Togo	●	●	-	-	-	-	-
Trinidad and Tobago	●	-	●	-	-	-	-
Tunisia	●	●	-	-	-	-	-
Turkey	●	●	●	-	-	-	-
Turks and Caicos Islands	●	-	-	-	-	-	-
Uganda	●	●	-	○	●	-	-
Ukraine	●	○	-	-	-	-	-
United Arab Emirates	●	●	●	-	-	-	-
United Kingdom	●	●	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-	-	-

Country/Territory/ Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
United States of America	●	●	●	●	●	●	-
Uruguay	●	-	●	-	-	-	-
Uzbekistan	●	●	-	-	-	-	-

Country/Territory/ Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Venezuela (Bolivarian Republic of)	-	-	●	-	-	-	-
Viet Nam	●	●	-	-	●	-	-

Country/Territory/ Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Wallis and Futuna	●	-	-	-	-	-	-
Zambia	-	●	-	-	-	-	-
Zimbabwe	-	○	-	-	●*	-	-

*Newly reported in this update.

"●" indicates that information for this variant was received by WHO from official sources.

"○" indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available.

Variant B.1.617.1 for Angola was excluded this week based on further information received.

**Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Efforts are ongoing to differentiate these in future reports.

**See also *Annex 3: Data, table and figure notes*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 758 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.

- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorizations are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 16 May 2021, 10 am CET

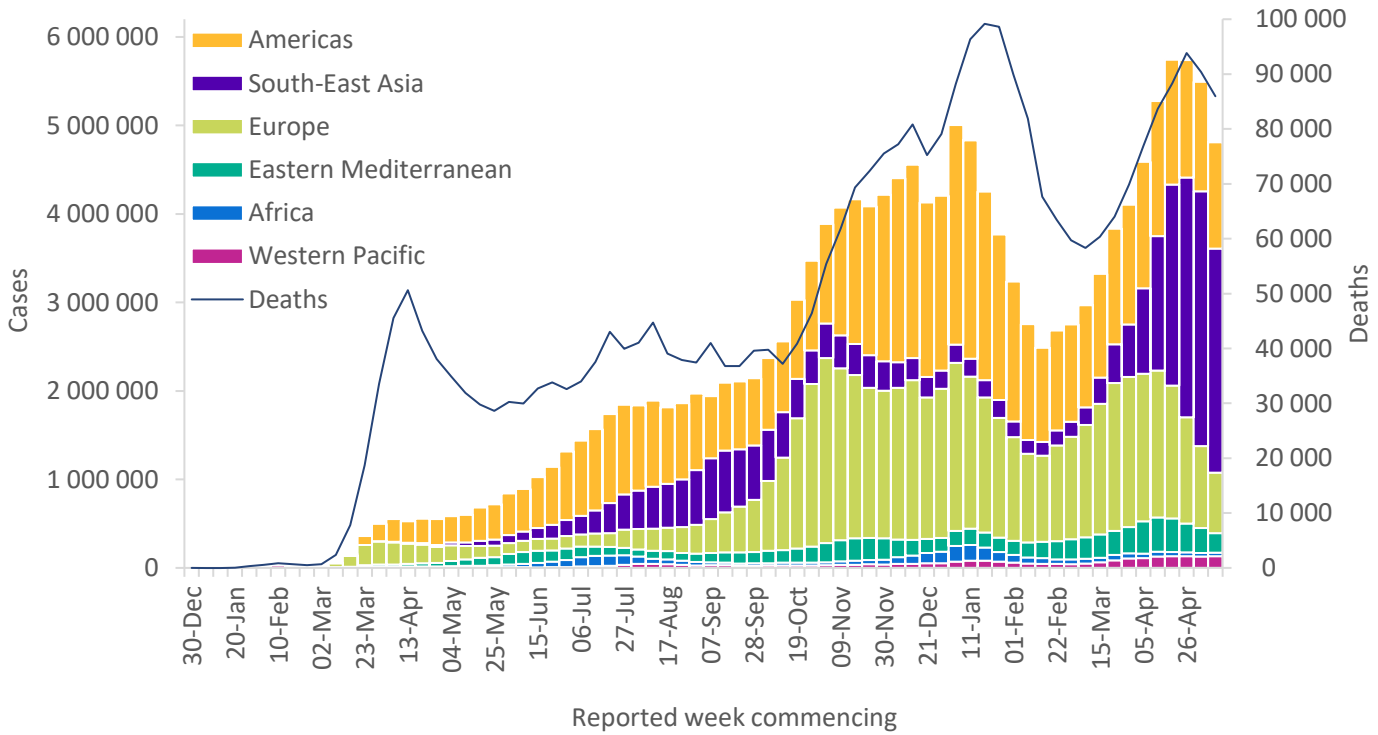
In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest (VOIs) and Variants of Concern (VOCs)
- WHO regional overviews
- Key weekly updates

Global overview

Globally, in the past week, the number of new cases and deaths continued to decrease with just over 4.8 million new cases and just under 86 000 new deaths reported; a 12% and 5% decrease respectively compared to the previous week (Figure 1). Despite a declining trend over the past three weeks, the incidence of cases remains at some of the highest levels since the start of the pandemic. All regions reported a decline in new cases this week apart from the Western Pacific Region, where the incidence of new cases was similar to the previous week (Table 1). The European Region reported the largest decline in new cases this week, followed by the Eastern Mediterranean. These regions also reported the largest decline in new deaths over the past week. South-East Asia and Western Pacific regions reported a similar number of new deaths as the previous week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 16 May 2021**



**See *Annex 3: Data, table and figure notes*

The highest numbers of new cases were reported from India (2 387 663 new cases; 13% decrease), Brazil (437 076 new cases; 3% increase), the United States of America (235 638 new cases; 21% decrease), Argentina (151 332 new cases; 8% increase), and Colombia (115 834 new cases; 6% increase).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 16 May 2021**

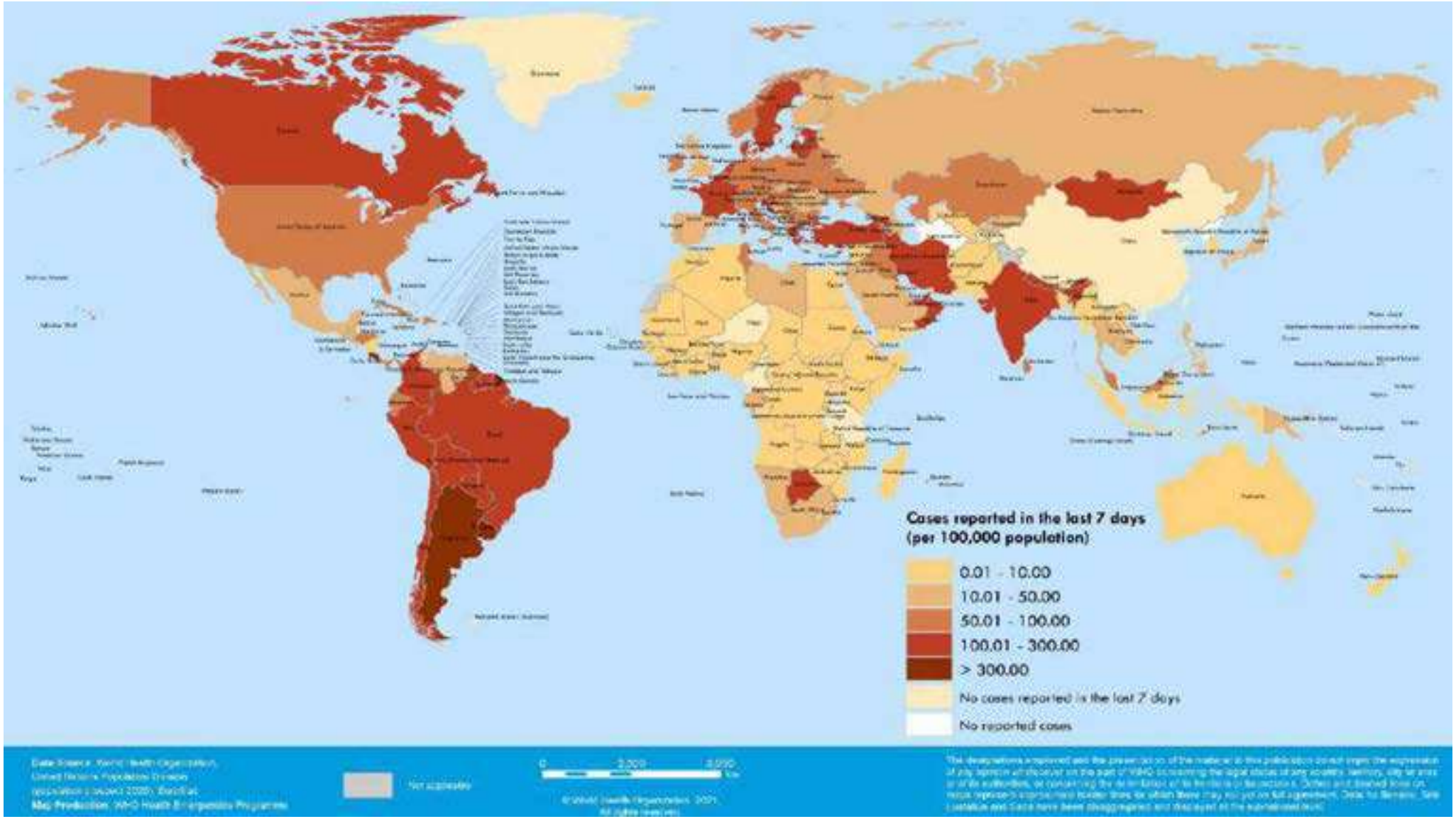
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 201 726 (25%)	-3%	64 757 485 (40%)	31 439 (37%)	-7%	1 583 343 (47%)
Europe	684 903 (14%)	-26%	53 565 774 (33%)	16 255 (19%)	-16%	1 121 477 (33%)
South-East Asia	2 529 924 (53%)	-12%	28 082 564 (17%)	30 881 (36%)	7%	340 078 (10%)
Eastern Mediterranean	220 035 (5%)	-22%	9 648 410 (6%)	4 709 (5%)	-16%	193 761 (6%)
Africa	40 175 (1%)	-4%	3 399 382 (2%)	940 (1%)	-9%	84 844 (3%)
Western Pacific	132 757 (3%)	4%	2 729 890 (2%)	1 751 (2%)	4%	40 930 (1%)
Global	**4 809 520 (100%)**	**-12%**	**162 184 263 (100%)**	**85 975 (100%)**	**-5%**	**3 364 446 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
**See *Annex 3: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 10 May – 16 May 2021**



**See *Annex 3: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest (VOIs) and Variants of Concern (VOCs)

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 result in changes in transmissibility, clinical presentation and severity, or if they result in changes in public health and social measures (PHSM) implementation by national health authorities. Systems have been established to detect "signals" of potential variants of concern (VOCs) or variants of interest (VOIs) and assess these based on the risk posed to global public health (see also working definitions). National authorities may choose to designate other variants of local interest/concern. Detailed information on currently circulating VOCs and VOIs is available in previously published editions of the Weekly Epidemiological Update. Here we provide a brief update on the geographical distribution of the four VOCs as of 18 May 2021, as well as an update on detected VOIs (Table 2).

Table 2: SARS-CoV-2 Variants of Concern and Variants of Interest, as of 18 May 2021

PANGO lineage Nextstrain clade GISAID clade	Alternate name	First detected in	Earliest samples	Characteristic spike mutations
Variants of Concern (VOCs)				
B.1.1.7 20I/501Y.V1 GR/501Y.V1	VOC 202012/01	United Kingdom	Sep 2020	69/70del, 144del, N501Y, A570D, D614G, P681H, T716I, S982A, D1118H
B.1.351 20H/501Y.V2[†] GH/501Y.V2	VOC 202012/02	South Africa	May 2020	D80A, D215G, 241/243del, K417N, E484K, N501Y, D614G, A701V
B.1.1.28.1, alias P.1 20J/501Y.V3 GR/501Y.V3	VOC 202101/02	Brazil	Nov 2020	L18F, T20N, P26S, D138Y, R190S, K417T, E484K, N501Y, D614G H655Y, T1027I, V1176F
B.1.617* - G/452R.V3	-	India	Oct 2020	L452R, D614G, P681R, ± (E484Q, Q107H, T19R, del157/158, T478K, D950N)
Variants of Interest (VOIs)				
B.1.525 20A/S.484K G/484K.V3	-	Multiple countries	Dec 2020	Q52R, A67V, 69/70del, 144del, E484K, D614G, Q677H, F888L
B.1.427/B.1.429 20C/S.452R GH/452R.V1	CAL.20C/L452R	United States of America	Mar 2020	S13I, W152C, L452R, D614G
B.1.1.28.2, alias P.2 20B/S.484K GR	-	Brazil	Apr 2020	E484K, D614G, V1176F
B.1.1.28.3, alias P.3 - -	PHL-B.1.1.28	Philippines	Jan 2021	141/143del, E484K, N501Y, D614G, P681H, E1092K, H1101Y, V1176F
B.1.526 (+E484K/S477N) 20C GH	-	United States of America	Nov 2020	L5F, T95I, D253G, D614G, A701V, + (E484K or S477N)
B.1.616 - GH	-	France	Feb 2021	H66D, G142V, 144del, D215G, V483A, D614G, H655Y, G669S, Q949R, N1187D

** B.1.617 lineage is divided in three sublineages (B.1.617.1, B.1.617.2 and B.1.617.3). Findings for sublineages B.1.617.1 and B.1.617.2 were mainly used to declare B.1.617 a global VOC. Once more information becomes available, specific sublineages may be declared as a global VOI/VOC.*

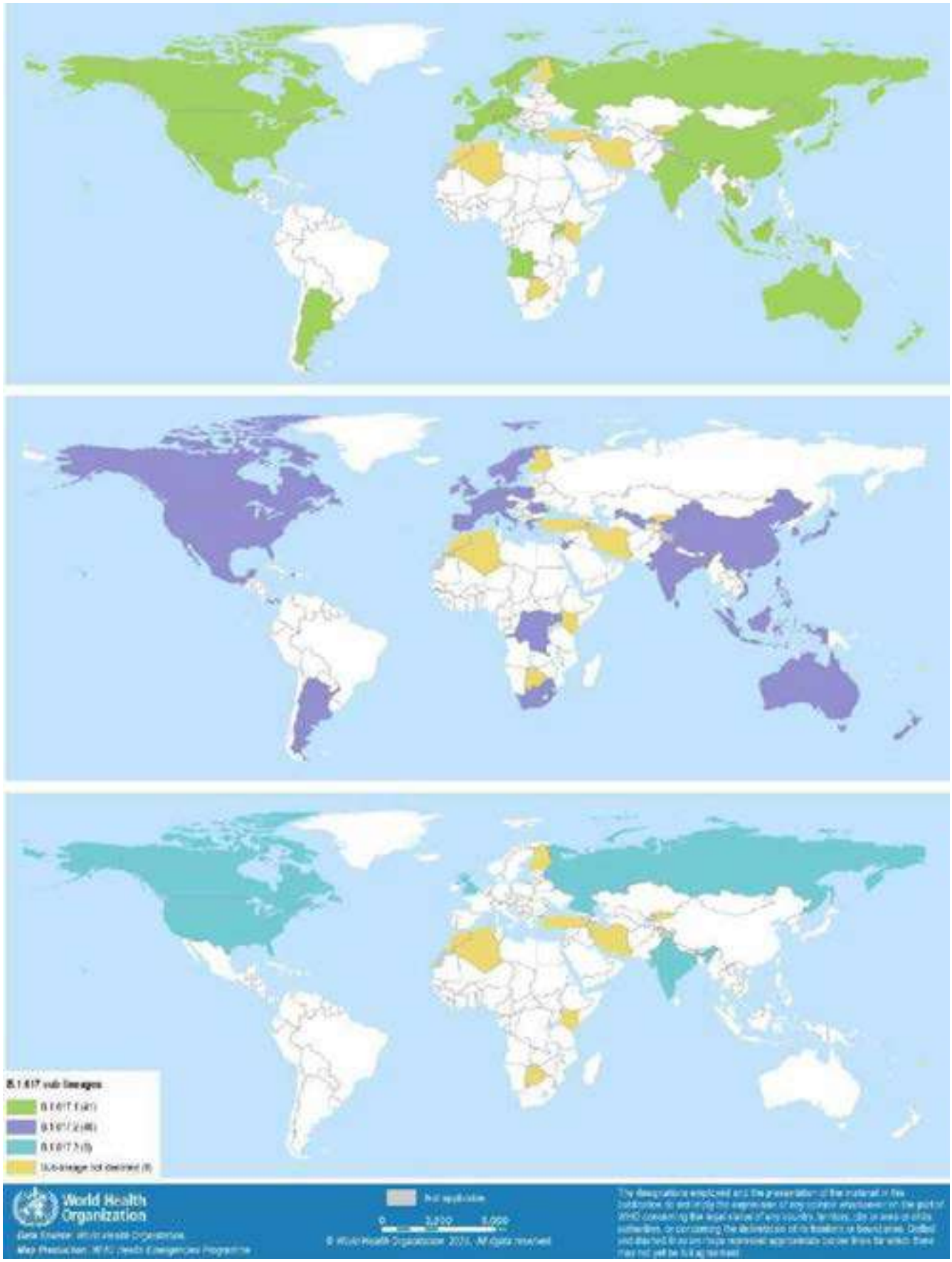
As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing, the number of countries/areas/territories (hereafter countries) reporting VOCs and VOIs has continued to increase (Figures 3 - 6, Annex 2). This distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

Figure 3. Countries, territories and areas reporting B.1.1.7 lineage, as of 18 May 2021

Figure 4. Countries, territories and areas reporting B.1.351 lineage, as of 18 May 2021

Figure 5. Countries, territories and areas reporting P.1 lineage, as of 18 May 2021

Figure 6. Countries, territories and areas reporting B.1.617.1, B.1.617.2 and B.1.617.3 sublineages, or B.1.617 with an unspecified sublineage, as of 18 May 2021*



**Countries/territories/areas listed in this figure include both official and unofficial reports of B.1.617 detection pending verification. Please see Annex 2 for details.*

WHO recommendations

Virus evolution is expected, and the more SARS-CoV-2 circulates, the more opportunities it has to evolve. Reducing transmission through established and proven disease control methods such as those outlined in the COVID-19 Strategic Preparedness and Response Plan, as well as avoiding introductions into animal populations are crucial aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critical to curb the spread of SARS-CoV-2 and its variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the PHSM, including infection prevention and control (IPC) measures in health facilities has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities. Authorities are also encouraged to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and to detect unusual events.

Additional resources

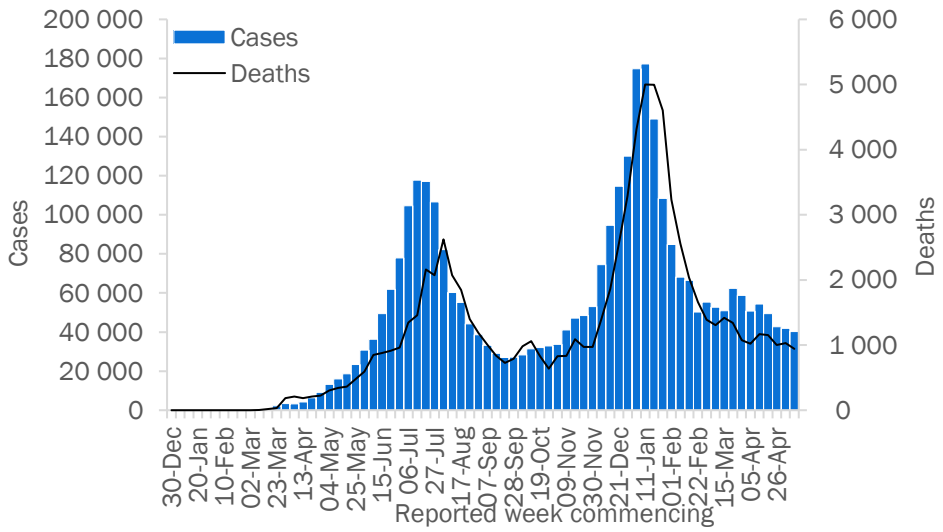
- Working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19
- COVID-19 Situation Reports from WHO Regional Offices and partners: AFRO, AMRO/PAHO, EMRO, EURO/ECDC, SEARO, WPRO

WHO regional overviews

African Region

The African Region reported over 40 000 new cases and over 900 new deaths, a 4% and a 9% decrease respectively compared to the previous week. Case incidence continued to decrease for a fourth consecutive week while the number of deaths has reflected similar trends during this period. The highest numbers of new cases were reported from South Africa (16 326 new cases; 27.5 new cases per 100 000 population; a 36% increase), Botswana (3745 new cases; 159.3 new cases per 100 000; a 153% increase), and Ethiopia (3615 new cases; 3.1 new cases per 100 000; a 13% decrease). Cases in South Africa comprised 41% of cases reported in the Region.

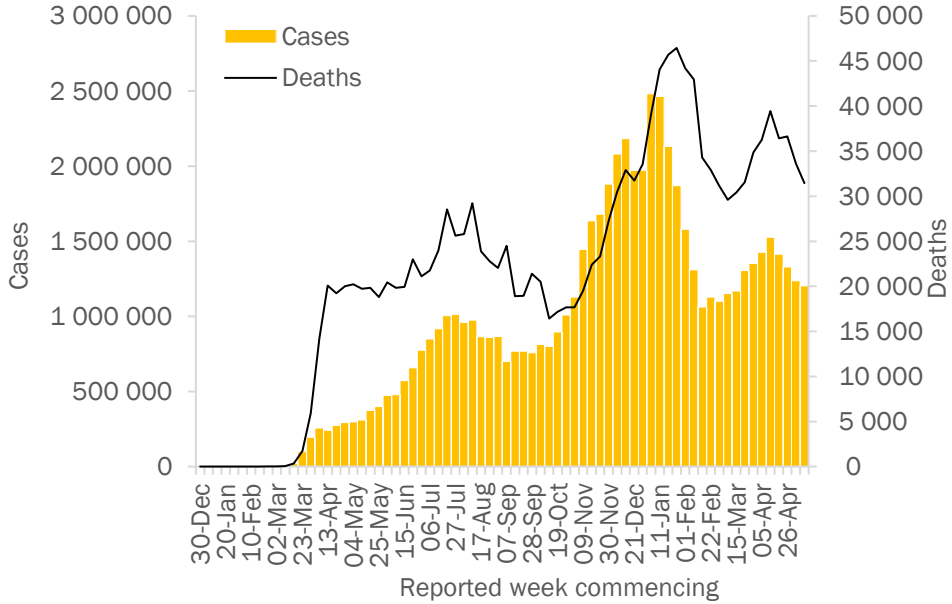
The highest numbers of new deaths were reported from South Africa (459 new deaths; 0.8 new deaths per 100 000 population; a 44% increase), Kenya (118 new deaths; 0.2 new deaths per 100 000; a 15% decrease), and Ethiopia (105 new deaths; 0.1 new deaths per 100 000; a 35% decrease).



Region of the Americas

The Region of the Americas reported over 1.2 million new cases and over 31 000 new deaths, a 3% and a 7% decrease respectively compared to the previous week. The number of cases decreased for a fourth consecutive week, and the number of deaths decreased for a second consecutive week. The highest numbers of new cases were reported from Brazil (437 076 new cases; 205.6 new cases per 100 000; a 3% increase), the United States of America (235 638 new cases; 71.2 new cases per 100 000; a 21% decrease), and Argentina (151 332 new cases; 334.8 new cases per 100 000; an 8% increase).

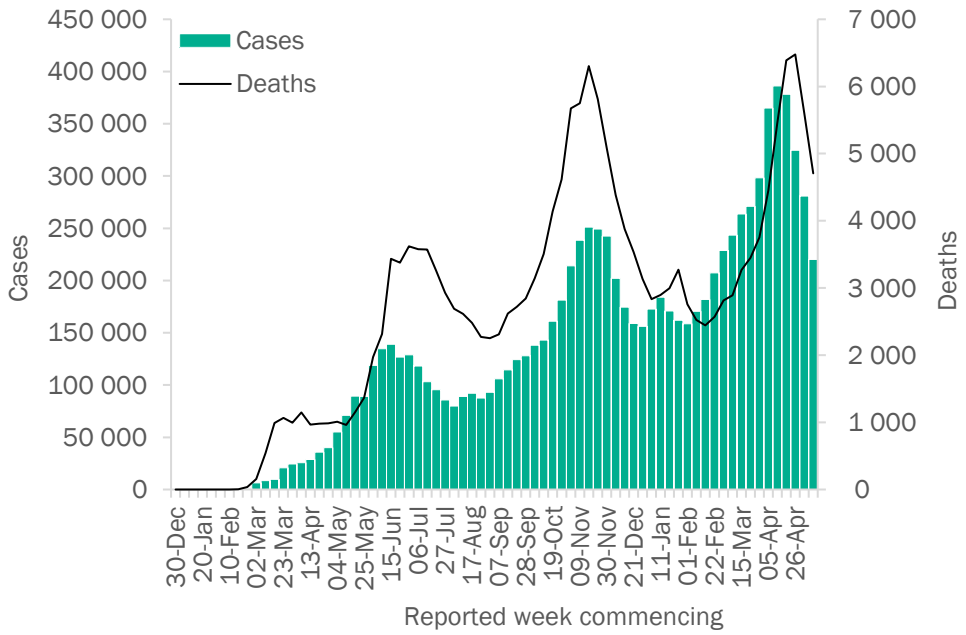
The highest numbers of new deaths were reported from Brazil (13 514 new deaths; 6.4 new deaths per 100 000; a 12% decrease), the United States of America (4143 new deaths; 1.3 new deaths per 100 000; a 12% decrease), and Colombia (3383 new deaths; 6.6 new deaths per 100 000; an 8% increase).



Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 220 000 new cases and over 4700 new deaths, a 22% and a 16% decrease respectively compared to the previous week. Case and death incidences have decreased steeply for the past four and two weeks respectively. The highest numbers of new cases were reported from the Islamic Republic of Iran (99 205 new cases; 118.1 new cases per 100 000; a 20% decrease), Iraq (28 359 new cases; 70.5 new cases per 100 000; a 26% decrease), and Pakistan (20 511 new cases; 9.3 new cases per 100 000; a 29% decrease).

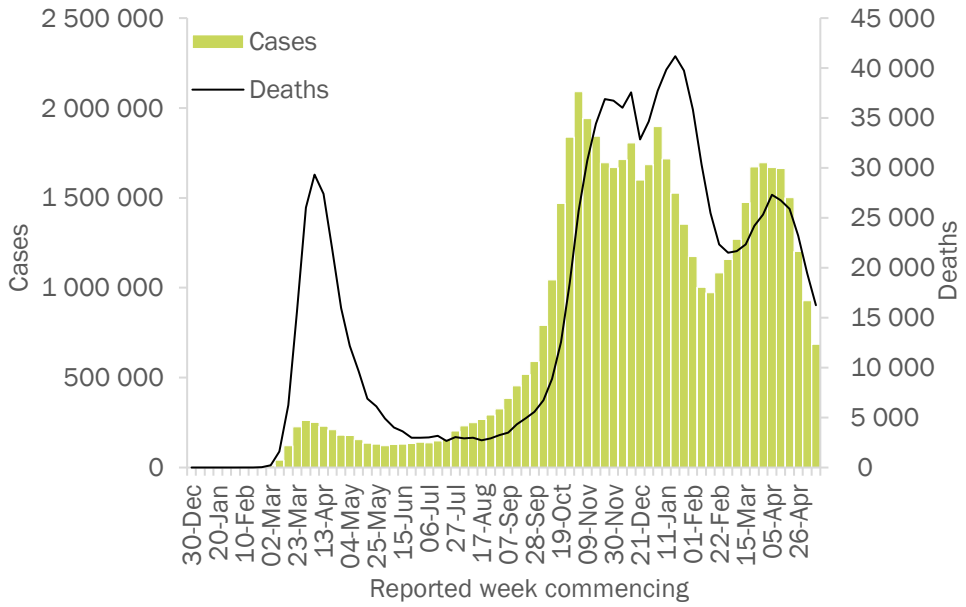
The highest numbers of new deaths were reported from the Islamic Republic of Iran (2109 new deaths; 2.5 new deaths per 100 000; a 13% decrease), Pakistan (670 new deaths; 0.3 new deaths per 100 000; a 20% decrease), and Tunisia (429 new deaths; 3.6 new deaths per 100 000; a 21% decrease).



European Region

The European Region reported just under 685 000 new cases and over 16 000 new deaths, a 26% and a 16% decrease respectively compared to the previous week. The number new of cases and deaths continued their downward trend for a sixth and fifth consecutive week respectively. The highest numbers of new cases were reported from France (93 546 new cases; 143.8 new cases per 100 000; a 24% decrease), Turkey (90 721 new cases; 107.6 new cases per 100 000; a 46% decrease), and Germany (73 105 new cases; 87.9 new cases per 100 000; a 29% decrease).

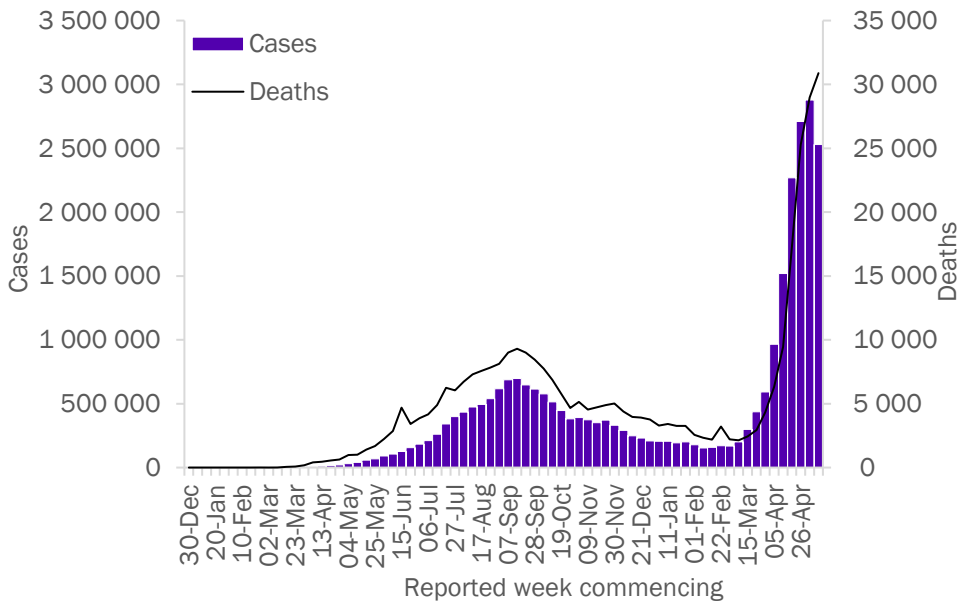
The highest numbers of new deaths were reported from Russian Federation (2545 new deaths; 1.7 new deaths per 100 000; a 3% increase), Turkey (1791 new deaths; 2.1 new deaths per 100 000; a 20% decrease), and Ukraine (1682 new deaths; 3.8 new deaths per 100 000; a 6% decrease).



South-East Asia Region

The South-East Asia Region reported over 2.5 million new cases and over 30 000 new deaths, a 12% decrease and a 7% increase respectively compared to the previous week. Case incidence decreased after nine consecutive weeks of increases, although the absolute number remains at its highest level since the beginning of the pandemic. Death incidence continued to increase for a ninth consecutive week. The highest numbers of new cases were reported from India (2 387 663 new cases; 173.0 new cases per 100 000; a 13% decrease), Nepal (61 814 new cases; 212.2 new cases per 100 000; an 8% increase), and Indonesia (26 908 new cases; 9.8 new cases per 100 000; a 27% decrease).

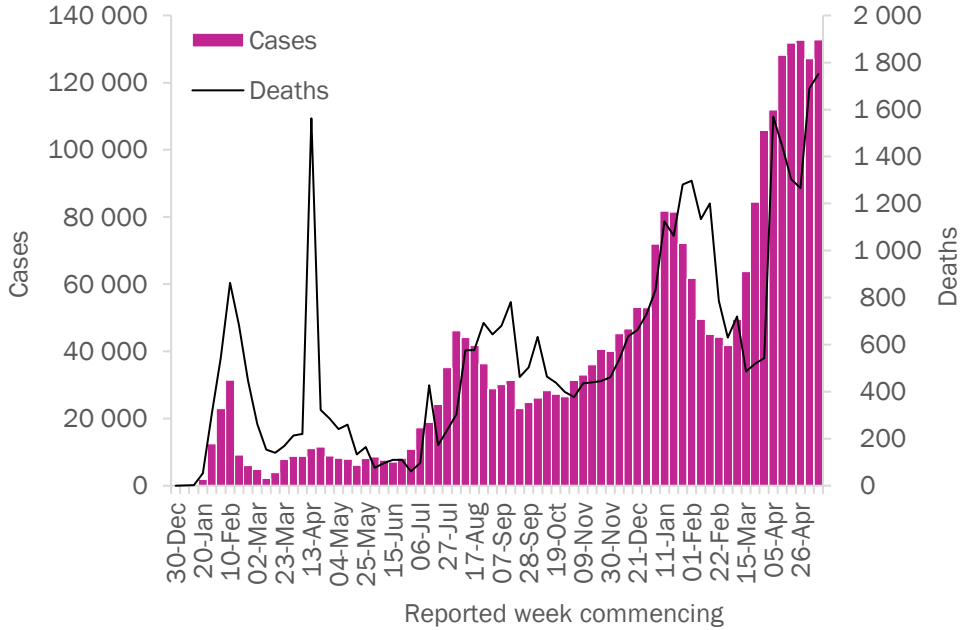
The highest numbers of new deaths were reported from India (27 922 new deaths; 2.0 new deaths per 100 000; a 4% increase), Nepal (1224 new deaths; 4.2 new deaths per 100 000; a 266% increase), and Indonesia (1125 new deaths; 0.4 new deaths per 100 000; a 5% decrease).



Western Pacific Region

The Western Pacific Region reported over 132 000 new cases and over 1700 new deaths, both increasing by 4% compared to the previous week. Both weekly case and death incidences were the highest reported in the Region since the beginning of the pandemic. The highest numbers of new cases were reported from Japan (44 961 new cases; 35.5 new cases per 100 000; a 26% increase), the Philippines (43 339 new cases; 39.5 new cases per 100 000; a 10% decrease), and Malaysia (29 386 new cases; 90.8 new cases per 100 000; a 16% increase). These three countries comprised 89% of all cases reported in the Region in the past week.

The highest numbers of new deaths were reported from the Philippines (782 new deaths; 0.7 new deaths per 100 000; a 15% decrease), Japan (640 new deaths; 0.5 new deaths per 100 000; a 21% increase), and Malaysia (209 new deaths; 0.6 new deaths per 100 000; a 54% increase).



Key weekly updates

WHO Director-General's key messages

Opening remarks at the media briefing on COVID-19 – 17 May 2021:

- WHO Director-General Dr Tedros urged Member States to continue donating vaccines to COVAX in an effort to increase vaccine-supply to low-income countries, which are presently receiving only about 0.3% of all supply. UNICEF Executive Director Henrietta Fore also called vaccine equity, warning of a huge shortfall in the vaccine supply to COVAX, in a statement released by UNICEF.
- This week marks UN Global Road Safety, with the aim to lower speeds to significantly reduce the risk of death and injury. Although increased public health and social measures during the pandemic has meant more people have been working from home and overall there has been less road traffic, the number of traffic-related deaths did not decrease to the same degree.

Updates and publications

- Continuity of essential health services: Facility assessment tool
- Health systems for health security – Strengthening prevention, preparedness and response to health emergencies
- Programmatic innovations to address challenges in tuberculosis prevention and care during the COVID-19 pandemic
- Health worker communication for COVID-19 vaccination flow diagram
- COVID-19 vaccine explainer: AstraZeneca ChAdOx1-S/nCoV-19 [recombinant], COVID-19 vaccine
- COVID-19 vaccine introduction and deployment Costing tool (CVIC tool)
- WHO COVID-19 infection prevention and control (IPC) pillar achievements. February 2020 – January 2021
- WHO and UNICEF launch new tools for the promotion of adolescent mental health
- Using COVID-19 lockdown road-crash data to inform transport safety policy, Cali, Colombia

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 16 May 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**40 175**	**3 399 382**	**303.0**	**940**	**84 844**	**7.6**	
South Africa	16 326	1 611 143	2 716.5	459	55 183	93.0	Community transmission
Botswana	3 745	52 162	2 218.1	27	761	32.4	Community transmission
Ethiopia	3 615	265 832	231.2	105	3 976	3.5	Community transmission
Kenya	2 141	165 379	307.6	118	3 001	5.6	Community transmission
Angola	1 877	30 354	92.4	25	655	2.0	Community transmission
Cabo Verde	1 840	27 951	5 027.3	14	246	44.2	Community transmission
Algeria	1 294	125 194	285.5	45	3 366	7.7	Community transmission
Namibia	1 220	51 113	2 011.6	27	710	27.9	Community transmission
Madagascar	1 131	40 005	144.5	38	754	2.7	Community transmission
Seychelles	1 012	9 184	9 338.4	2	30	30.5	Community transmission
Ghana	387	93 243	300.1	0	783	2.5	Community transmission
Gabon	367	23 799	1 069.3	0	143	6.4	Community transmission
Uganda	366	42 674	93.3	1	347	0.8	Community transmission
Zambia	352	92 409	502.7	3	1 260	6.9	Community transmission
Rwanda	348	25 934	200.2	4	342	2.6	Community transmission
Nigeria	320	165 702	80.4	1	2 066	1.0	Community transmission
Côte d'Ivoire	275	46 619	176.7	6	297	1.1	Community transmission
Democratic Republic of the Congo	261	30 546	34.1	4	776	0.9	Community transmission
Mozambique	244	70 410	225.3	5	826	2.6	Community transmission
Congo	196	11 343	205.6	0	148	2.7	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Central African Republic	192	6 866	142.2	2	95	2.0	Community transmission
Mauritania	170	18 806	404.5	1	457	9.8	Community transmission
Senegal	163	40 828	243.8	7	1 124	6.7	Community transmission
Burundi	152	4 329	36.4	0	6	0.1	Community transmission
Zimbabwe	140	38 554	259.4	6	1 582	10.6	Community transmission
Togo	103	13 244	160.0	1	125	1.5	Community transmission
Eritrea	102	3 844	108.4	0	12	0.3	Community transmission
Guinea	101	22 734	173.1	1	151	1.1	Community transmission
Benin	100	7 984	65.9	1	101	0.8	Community transmission
Mali	94	14 176	70.0	12	511	2.5	Community transmission
Malawi	44	34 210	178.8	0	1 153	6.0	Community transmission
Eswatini	42	18 519	1 596.2	1	672	57.9	Community transmission
Mauritius	42	1 288	101.3	0	17	1.3	Clusters of cases
Sierra Leone	35	4 103	51.4	0	79	1.0	Community transmission
Chad	27	4 901	29.8	2	173	1.1	Community transmission
Burkina Faso	18	13 395	64.1	2	164	0.8	Community transmission
Gambia	17	5 946	246.0	0	175	7.2	Community transmission
Lesotho	17	10 790	503.7	1	320	14.9	Community transmission
South Sudan	15	10 652	95.2	- 1	115	1.0	Community transmission
Liberia	14	2 128	42.1	0	85	1.7	Community transmission
Niger	11	5 330	22.0	0	192	0.8	Community transmission
Sao Tome and Principe	9	2 327	1 061.8	0	35	16.0	Community transmission
Comoros	8	3 930	451.9	0	146	16.8	Community transmission
Guinea-Bissau	7	3 746	190.3	0	67	3.4	Community transmission
Cameroon	0	74 733	281.5	0	1 144	4.3	Community transmission
Equatorial Guinea	0	7 694	548.4	0	112	8.0	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories[iii]							
Réunion	1 193	22 644	2 529.2	19	169	18.9	Community transmission
Mayotte	42	20 176	7 395.5	1	171	62.7	Community transmission
Americas	**1 201 726**	**64 757 485**	**6 331.5**	**31 439**	**1 583 343**	**154.8**	
Brazil	437 076	15 519 525	7 301.3	13 514	432 628	203.5	Community transmission
United States of America	235 638	32 574 504	9 841.2	4 143	579 664	175.1	Community transmission
Argentina	151 332	3 269 466	7 234.0	2 981	69 853	154.6	Community transmission
Colombia	115 834	3 084 460	6 061.9	3 383	80 250	157.7	Community transmission
Canada	45 230	1 318 399	3 493.2	340	24 869	65.9	Community transmission
Peru	39 584	1 879 049	5 698.9	2 089	65 608	199.0	Community transmission
Chile	38 276	1 280 252	6 697.2	633	27 734	145.1	Community transmission
Uruguay	19 060	235 206	6 771.0	337	3 369	97.0	Community transmission
Costa Rica	17 255	282 741	5 550.3	182	3 547	69.6	Community transmission
Mexico	16 121	2 377 995	1 844.4	1 502	220 159	170.8	Community transmission
Paraguay	15 405	309 638	4 341.2	508	7 482	104.9	Community transmission
Bolivia (Plurinational State of)	13 580	329 733	2 824.7	269	13 451	115.2	Community transmission
Ecuador	10 599	409 520	2 321.1	555	19 692	111.6	Community transmission
Cuba	8 309	123 221	1 087.9	74	796	7.0	Community transmission
Venezuela (Bolivarian Republic of)	7 817	212 998	749.0	103	2 366	8.3	Community transmission
Honduras	6 926	225 256	2 274.3	352	5 937	59.9	Community transmission
Dominican Republic	5 672	276 272	2 546.8	46	3 569	32.9	Community transmission
Guatemala	5 287	240 170	1 340.6	128	7 845	43.8	Community transmission
Panama	3 281	370 043	8 576.2	34	6 292	145.8	Community transmission
Trinidad and Tobago	2 659	15 379	1 098.9	69	265	18.9	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Guyana	951	14 988	1 905.5	21	335	42.6	Community transmission
Suriname	774	11 707	1 995.6	9	223	38.0	Community transmission
El Salvador	660	70 915	1 093.3	32	2 182	33.6	Community transmission
Jamaica	645	47 233	1 595.1	40	843	28.5	Community transmission
Bahamas	300	11 073	2 815.8	5	217	55.2	Clusters of cases
Haiti	229	13 393	117.5	8	271	2.4	Community transmission
Saint Lucia	134	4 788	2 607.5	0	75	40.8	Community transmission
Nicaragua	74	5 649	85.3	1	184	2.8	Community transmission
Barbados	30	3 961	1 378.3	1	46	16.0	Community transmission
Belize	28	12 714	3 197.5	0	323	81.2	Community transmission
Saint Vincent and the Grenadines	20	1 932	1 741.5	0	12	10.8	Community transmission
Antigua and Barbuda	3	1 240	1 266.2	0	32	32.7	Clusters of cases
Dominica	3	178	247.3	0	0	0.0	Clusters of cases
Grenada	0	161	143.1	0	1	0.9	Sporadic cases
Saint Kitts and Nevis	0	45	84.6	0	0	0.0	Sporadic cases
Territories[iii]							
Puerto Rico	1 538	136 426	4 768.7	64	2 431	85.0	Community transmission
French Guiana	1 099	21 465	7 186.6	4	108	36.2	Community transmission
Aruba	89	10 826	10 139.9	4	104	97.4	Community transmission
United States Virgin Islands	57	3 267	3 128.6	0	27	25.9	Community transmission
Bermuda	32	2 466	3 960.0	2	32	51.4	Community transmission
British Virgin Islands	29	248	820.2	0	1	3.3	Clusters of cases
Curaçao	22	12 244	7 461.6	5	118	71.9	Community transmission
Sint Maarten	22	2 272	5 298.3	0	27	63.0	Community transmission
Bonaire	17	1 564	7 477.9	1	17	81.3	Community transmission
Cayman Islands	17	565	859.7	0	2	3.0	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Anguilla	10	109	726.6	0	0	0.0	Clusters of cases
Turks and Caicos Islands	2	2 404	6 209.0	0	17	43.9	Clusters of cases
Falkland Islands (Malvinas)	0	63	1 808.8	0	0	0.0	Sporadic cases
Guadeloupe	0	15 429	3 856.1	0	236	59.0	Community transmission
Martinique	0	11 490	3 061.8	0	87	23.2	Community transmission
Montserrat	0	20	400.1	0	1	20.0	No cases
Saba	0	7	362.1	0	0	0.0	Sporadic cases
Saint Barthélemy	0	994	10 055.6	0	1	10.1	Clusters of cases
Saint Martin	0	1 777	4 596.6	0	14	36.2	Community transmission
Saint Pierre and Miquelon	0	25	431.4	0	0	0.0	No cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	**220 035**	**9 648 410**	**1 320.2**	**4 709**	**193 761**	**26.5**	
Iran (Islamic Republic of)	99 205	2 739 875	3 262.0	2 109	76 633	91.2	Community transmission
Iraq	28 359	1 136 917	2 826.6	189	15 930	39.6	Community transmission
Pakistan	20 511	874 751	396.0	670	19 467	8.8	Community transmission
Bahrain	11 188	199 093	11 700.5	59	737	43.3	Community transmission
United Arab Emirates	10 486	544 931	5 509.7	19	1 629	16.5	Clusters of cases
Egypt	8 248	244 520	238.9	424	14 269	13.9	Clusters of cases
Saudi Arabia	6 827	432 269	1 241.7	88	7 147	20.5	Community transmission
Kuwait	6 725	290 801	6 809.4	52	1 687	39.5	Community transmission
Tunisia	6 320	325 832	2 756.9	429	11 779	99.7	Community transmission
Oman	5 569	204 913	4 012.7	101	2 184	42.8	Community transmission
Jordan	4 112	723 345	7 089.4	167	9 243	90.6	Community transmission
Lebanon	2 964	535 233	7 841.7	125	7 585	111.1	Community transmission
Qatar	2 324	212 927	7 390.6	24	526	18.3	Community transmission
Afghanistan	1 642	63 484	163.1	56	2 742	7.0	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Libya	1 482	181 179	2 636.8	22	3 085	44.9	Community transmission
Morocco	1 189	514 817	1 394.8	34	9 098	24.6	Community transmission
Syrian Arab Republic	374	23 693	135.4	45	1 693	9.7	Community transmission
Djibouti	79	11 414	1 155.3	2	151	15.3	Community transmission
Yemen	76	6 542	21.9	15	1 286	4.3	Community transmission
Somalia	71	14 486	91.1	6	753	4.7	Community transmission
Sudan	63	34 889	79.6	1	2 446	5.6	Clusters of cases
Territories[iii]							
occupied Palestinian territory	2 221	332 499	6 517.8	72	3 691	72.4	Community transmission
Europe	**684 903**	**53 565 774**	**5 740.8**	**16 255**	**1 121 477**	**120.2**	
Kosovo [1]	498	106 800		20	2 213		Community transmission
France	93 546	5 769 839	8 871.3	1 234	106 778	164.2	Community transmission
Turkey	90 721	5 106 862	6 055.2	1 791	44 537	52.8	Community transmission
Germany	73 105	3 593 434	4 320.8	1 321	86 096	103.5	Community transmission
Russian Federation	59 983	4 940 245	3 385.2	2 545	115 871	79.4	Clusters of cases
Italy	50 453	4 153 374	6 963.9	1 369	124 063	208.0	Clusters of cases
Netherlands	40 506	1 593 670	9 155.0	118	17 436	100.2	Community transmission
Ukraine	34 354	2 153 864	4 924.9	1 682	48 075	109.9	Community transmission
Sweden	24 139	1 037 126	10 042.3	20	14 275	138.2	Community transmission
Poland	21 027	2 854 079	7 519.0	1 652	71 664	188.8	Community transmission
Spain	19 524	3 598 452	7 602.5	154	79 281	167.5	Community transmission
Kazakhstan	16 050	414 345	2 206.7	173	4 933	26.3	Clusters of cases
The United Kingdom	15 761	4 448 855	6 553.4	72	127 675	188.1	Community transmission
Greece	15 254	375 831	3 506.4	387	11 365	106.0	Community transmission
Belgium	13 972	1 031 922	8 955.8	158	24 707	214.4	Community transmission
Georgia	8 456	330 375	8 281.8	161	4 442	111.4	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Czechia	7 779	1 652 840	15 455.9	234	29 901	279.6	Community transmission
Lithuania	7 709	265 536	9 503.5	69	4 103	146.8	Community transmission
Denmark	7 357	265 539	4 560.4	5	2 502	43.0	Community transmission
Belarus	7 040	374 714	3 965.5	69	2 691	28.5	Community transmission
Hungary	6 438	798 147	8 169.8	573	29 175	298.6	Community transmission
Austria	6 331	632 398	7 104.7	97	10 207	114.7	Community transmission
Serbia	6 316	705 890	10 190.8	125	6 664	96.2	Community transmission
Romania	6 080	1 071 334	5 542.7	582	29 485	152.5	Community transmission
Croatia	5 896	350 390	8 634.2	239	7 708	189.9	Community transmission
Switzerland	5 668	676 437	7 815.9	14	10 122	117.0	Community transmission
Latvia	4 266	127 597	6 688.6	49	2 257	118.3	Community transmission
Bulgaria	4 080	414 041	5 956.2	348	17 250	248.1	Clusters of cases
Azerbaijan	3 315	329 371	3 248.5	102	4 768	47.0	Clusters of cases
Slovenia	3 221	249 018	11 881.4	26	4 649	221.8	Clusters of cases
Norway	2 865	118 275	2 203.5	7	774	14.4	Clusters of cases
Portugal	2 590	841 848	8 176.5	15	17 006	165.2	Clusters of cases
Ireland	2 567	254 870	5 133.9	20	4 941	99.5	Community transmission
Uzbekistan	2 273	96 670	288.8	6	668	2.0	Clusters of cases
Kyrgyzstan	2 073	100 473	1 540.0	48	1 703	26.1	Clusters of cases
Slovakia	2 048	387 523	7 100.3	205	12 224	224.0	Clusters of cases
Estonia	1 927	127 053	9 560.2	21	1 222	92.0	Clusters of cases
Cyprus	1 736	70 899	7 984.1	12	346	39.0	Clusters of cases
Armenia	1 590	220 860	7 453.3	89	4 323	145.9	Community transmission
Bosnia and Herzegovina	1 324	202 313	6 166.5	196	9 007	274.5	Community transmission
Finland	1 317	89 878	1 626.7	9	931	16.8	Community transmission
Republic of Moldova	1 132	253 736	6 290.0	73	6 016	149.1	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
North Macedonia	745	154 636	7 422.4	118	5 197	249.5	Clusters of cases
Luxembourg	631	68 922	11 008.0	4	806	128.7	Community transmission
Montenegro	485	98 844	15 737.9	20	1 560	248.4	Clusters of cases
Albania	312	131 978	4 586.1	18	2 429	84.4	Clusters of cases
Israel	231	839 118	9 694.6	5	6 381	73.7	Community transmission
Andorra	104	13 510	17 485.3	0	127	164.4	Community transmission
Malta	40	30 478	5 923.1	0	417	81.0	Clusters of cases
Iceland	31	6 537	1 795.2	0	29	8.0	Community transmission
Monaco	14	2 493	6 352.6	0	32	81.5	Sporadic cases
Liechtenstein	11	3 073	7 930.9	0	57	147.1	Sporadic cases
San Marino	8	5 087	14 989.1	0	90	265.2	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Faroe Islands	2	670	1 371.1	0	1	2.0	Sporadic cases
Jersey	2	3 236	3 002.0	0	69	64.0	Community transmission
Gibraltar	0	4 286	12 721.5	0	94	279.0	Clusters of cases
Greenland	0	31	54.6	0	0	0.0	No cases
Guernsey	0	822	1 275.1	0	14	21.7	Community transmission
Isle of Man	0	1 590	1 869.9	0	29	34.1	No cases
South-East Asia	**2 529 924**	**28 082 564**	**1 389.3**	**30 881**	**340 078**	**16.8**	
India	2 387 663	24 684 077	1 788.7	27 922	270 284	19.6	Clusters of cases
Nepal	61 814	447 704	1 536.6	1 224	4 856	16.7	Community transmission
Indonesia	26 908	1 736 670	634.9	1 125	47 967	17.5	Community transmission
Thailand	18 072	101 447	145.3	190	589	0.8	Clusters of cases
Sri Lanka	17 237	140 471	656.0	155	941	4.4	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Maldives	9 058	43 782	8 099.6	13	96	17.8	Clusters of cases
Bangladesh	7 669	779 796	473.5	246	12 124	7.4	Community transmission
Timor-Leste	1 314	4 279	324.5	4	8	0.6	Community transmission
Myanmar	112	143 059	262.9	2	3 212	5.9	Clusters of cases
Bhutan	77	1 279	165.8	0	1	0.1	Clusters of cases
Western Pacific	**132 757**	**2 729 890**	**139.0**	**1 751**	**40 930**	**2.1**	
Japan	44 961	677 988	536.1	640	11 463	9.1	Clusters of cases
Philippines	43 339	1 138 173	1 038.7	782	19 051	17.4	Community transmission
Malaysia	29 386	466 330	1 440.8	209	1 866	5.8	Community transmission
Republic of Korea	4 362	131 671	256.8	26	1 900	3.7	Clusters of cases
Mongolia	4 085	48 101	1 467.3	45	205	6.3	Clusters of cases
Cambodia	2 947	22 184	132.7	30	150	0.9	Sporadic cases
Papua New Guinea	1 702	13 928	155.7	15	136	1.5	Community transmission
Viet Nam	867	4 112	4.2	1	36	0.0	Clusters of cases
China	396	104 191	7.1	0	4 858	0.3	Clusters of cases
Lao People's Democratic Republic	337	1 570	21.6	2	2	0.0	Sporadic cases
Singapore	205	61 536	1 051.8	0	31	0.5	Sporadic cases
Australia	61	29 967	117.5	0	910	3.6	Clusters of cases
Fiji	32	168	18.7	1	4	0.4	Sporadic cases
New Zealand	4	2 290	47.5	0	26	0.5	Sporadic cases
Brunei Darussalam	2	232	53.0	0	3	0.7	Sporadic cases
Solomon Islands	0	20	2.9	0	0	0.0	No cases
Territories[iii]							
Guam	42	7 855	4 654.1	0	139	82.4	Clusters of cases
French Polynesia	25	18 815	6 697.9	0	141	50.2	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Northern Mariana Islands (Commonwealth of the)	4	173	300.6	0	2	3.5	Pending
Marshall Islands	0	4	6.8	0	0	0.0	No cases
New Caledonia	0	124	43.4	0	0	0.0	Sporadic cases
Samoa	0	1	0.5	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Wallis and Futuna	0	454	4 037.0	0	7	62.2	Sporadic cases
Global	**4 809 520**	**162 184 263**		**85 975**	**3 364 446**		

*See *Annex 3: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting variants of concern as of 18 May 2021**

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Afghanistan	●	-	-	-	-	-	-
Albania	●	-	-	-	-	-	-
Algeria	●	-	-	-	-	-	●
Angola	●	●	-	○	-	-	-
Argentina	●	●*	●	●	●	-	-
Armenia	○	-	-	-	-	-	-
Aruba	●	●	●	-	●	-	-
Australia	●	●	●	○	○	-	-
Austria	●	●	●	●	●	-	-
Azerbaijan	●	-	-	-	-	-	-
Bahrain	●	●	-	●	●	-	-
Bangladesh	●	●	○	-	●	-	-
Barbados	●	-	-	-	-	-	-
Belarus	●	-	-	-	-	-	-
Belgium	●	●	●	●	●	-	-
Belize	●	-	-	-	-	-	-
Bolivia (Plurinational State of)	●	-	-	-	-	-	-
Bonaire	●	-	-	-	-	-	-
Bosnia and Herzegovina	○	-	-	-	-	-	-
Botswana	-	●	-	-	-	-	●
Brazil	●	●	●	-	-	-	-
Brunei Darussalam	●	●	-	-	-	-	-
Bulgaria	●	-	-	-	-	-	-

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Cabo Verde	●	-	-	-	-	-	-
Cambodia	●	-	-	○	-	-	-
Cameroon	●	●	-	-	-	-	-
Canada	●	●	●	●	●	●	-
Cayman Islands	●	-	-	-	-	-	-
Central African Republic	●	-	-	-	-	-	-
Chile	●	●	●	-	-	-	-
China	●	●	●	○	○	-	-
Colombia	●	-	●	-	-	-	-
Comoros	-	●	-	-	-	-	-
Congo	●*	-	-	-	-	-	-
Costa Rica	●	●	●	-	-	-	-
Côte d'Ivoire	●	●	-	-	-	-	-
Croatia	●	●	-	-	-	-	-
Cuba	●	●	-	-	-	-	-
Curaçao	●	-	-	-	-	-	-
Cyprus	●	-	-	-	-	-	-
Czechia	●	●	-	●	-	-	-
Democratic Republic of the Congo	●	●	-	-	●	-	-
Denmark	●	●	●	●	●	-	-
Dominica	-	-	-	-	●	-	-
Dominican Republic	●	-	-	-	-	-	-
Ecuador	●	-	●	-	-	-	-

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Egypt	●	-	-	-	-	-	-
Equatorial Guinea	●	●	-	-	-	-	-
Estonia	●	●	-	-	-	-	-
Eswatini	-	●	-	-	-	-	-
Ethiopia	○	-	-	-	-	-	-
Faroe Islands	-	-	●	-	-	-	-
Fiji	-	-	-	-	-	-	●
Finland	●	●	●	-	-	-	●
France	●	●	●	●	●	-	-
French Guiana	●	●	●	-	-	-	-
French Polynesia	●	-	●	-	-	-	-
Gabon	●	○	-	-	-	-	-
Gambia	●	-	-	-	-	-	-
Georgia	●	-	-	-	-	-	-
Germany	●	●	●	●	●	-	-
Ghana	●	●	-	-	-	-	-
Gibraltar	●	-	-	-	-	-	-
Greece	●	●	-	●	●	-	-
Grenada	●	-	-	-	-	-	-
Guadeloupe	●	●	-	●	-	-	-
Guam	●	●*	-	-	-	-	-
Guinea	●	-	-	-	-	-	-
Guyana	-	-	●	-	-	-	-
Haiti	-	-	●*	-	●	-	-
Hungary	●	○	-	-	-	-	-
Iceland	●	-	-	-	-	-	-

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
India	●	●	●	●	●	●	-
Indonesia	●	●	-	●	●	-	-
Iran (Islamic Republic of)	●	●	-	-	-	-	●
Iraq	●	-	-	-	-	-	-
Ireland	●	●	●	●	●	-	-
Israel	●	●	●	●	●	-	-
Italy	●	●	●	●	●	-	-
Jamaica	●	-	-	-	-	-	-
Japan	●	●	●	○	○	-	-
Jordan	●	●	●	●	●	-	-
Kazakhstan	○	○	-	-	-	-	-
Kenya	○	●	-	-	-	-	●
Kosovo[1]	●	-	-	-	-	-	-
Kuwait	●	-	-	-	-	-	-
Kyrgyzstan	●	●	-	-	-	-	●
Lao People's Democratic Republic	●	-	-	-	-	-	-
Latvia	●	●	●	-	-	-	-
Lebanon	●	-	-	-	-	-	-
Lesotho	-	●	-	-	-	-	-
Libya	●	●	-	-	-	-	-
Liechtenstein	●	-	-	-	-	-	-
Lithuania	●	●	●	-	-	-	-
Luxembourg	●	●	●	●	●	-	-
Madagascar	-	●	-	-	-	-	-
Malawi	●	●	-	-	-	-	-

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Malaysia	●	●	-	●	○	-	-
Malta	●	○	●	-	-	-	-
Martinique	●	●	-	-	-	-	-
Mauritius	○	●	-	-	-	-	-
Mayotte	●	●	-	-	-	-	-
Mexico	●	●	●	●	●	-	-
Monaco	●	○	-	-	-	-	-
Montenegro	●	-	-	-	-	-	-
Morocco	●	-	-	-	-	-	●
Mozambique	-	●	-	-	-	-	-
Namibia	-	●	-	-	-	-	-
Nepal	●	-	-	●	-	-	-
Netherlands	●	●	●	●	●	-	-
New Caledonia	●	-	-	-	-	-	-
New Zealand	●	●	○	○	○	-	-
Niger	●	-	-	-	-	-	-
Nigeria	●	-	-	-	-	-	-
North Macedonia	●	●	-	-	-	-	-
Norway	●	●	●	●	●	-	-
occupied Palestinian territory	●	●	-	-	-	-	-
Oman	●	-	-	-	-	-	-
Pakistan	●	●	●	-	-	-	-
Panama	●	●	●	-	●	-	-
Paraguay	-	-	●	-	-	-	-
Peru	●	-	●	-	-	-	-
Philippines	●	●	●	-	●	-	-

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Poland	●	○	●	-	●	-	-
Portugal	●	●	●	●	○	-	-
Puerto Rico	●	●	●	-	-	-	-
Qatar	●	●	-	-	-	-	-
Republic of Korea	●	●	●	○	○	-	-
Republic of Moldova	○	-	-	-	-	-	-
Réunion	●	●	●	-	○	-	-
Romania	●	●	●	-	●	-	-
Russian Federation	●	●	-	●	-	●	-
Rwanda	○	○	-	-	-	-	-
Saint Barthélemy	●	-	-	-	-	-	-
Saint Lucia	●	-	-	-	-	-	-
Saint Martin	●	●	-	-	-	-	-
Saudi Arabia	●	-	-	-	-	-	-
Senegal	●	-	-	-	-	-	-
Serbia	●	-	-	-	-	-	-
Seychelles	-	●	-	-	-	-	-
Singapore	●	●	●	○	●	-	-
Sint Maarten	●	●*	-	●	-	-	-
Slovakia	●	●	-	-	-	-	-
Slovenia	●	●	●	-	●	-	-
South Africa	●	●	-	-	●	-	-
Spain	●	●	●	●	●	-	-
Sri Lanka	●	●	-	-	●	-	-
Suriname	●	●	●	-	-	-	-
Sweden	●	●	●	●	●	-	-

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Switzerland	●	●	○	●	●	-	-
Thailand	●	●	●	●	-	-	-
Togo	●	●	-	-	-	-	-
Trinidad and Tobago	●	-	●	-	-	-	-
Tunisia	●	●	-	-	-	-	-
Turkey	●	●	●	-	-	-	●
Turks and Caicos Islands	●	-	-	-	-	-	-

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Uganda	●*	●*	-	○	○	-	-
Ukraine	●	○	-	-	-	-	-
United Arab Emirates	●	●	●	-	-	-	-
United Kingdom	●	●	●	●	●	●	-
United Republic of Tanzania	-	○	-	-	-	-	-
United States of America	●	●	●	●	●	●	-

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Uruguay	●	-	●	-	-	-	-
Uzbekistan	●	●	-	-	●	-	-
Venezuela (Bolivarian Republic of)	-	-	●	-	-	-	-
Viet Nam	●	●	-	-	●	-	-
Wallis and Futuna	●	-	-	-	-	-	-
Zambia	-	●	-	-	-	-	-
Zimbabwe	-	○	-	-	-	-	-

*Newly reported in this update. Columns B.1.617.1, B.1.617.2, B.1.617.3, B.1.617x were newly added this week.

"●" indicates that information for this variant was received by WHO from official sources.

"○" indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available.

**See also *Annex 3: Data, table and figure notes*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 758 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.

- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorizations are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 9 May 2021, 10 am CET

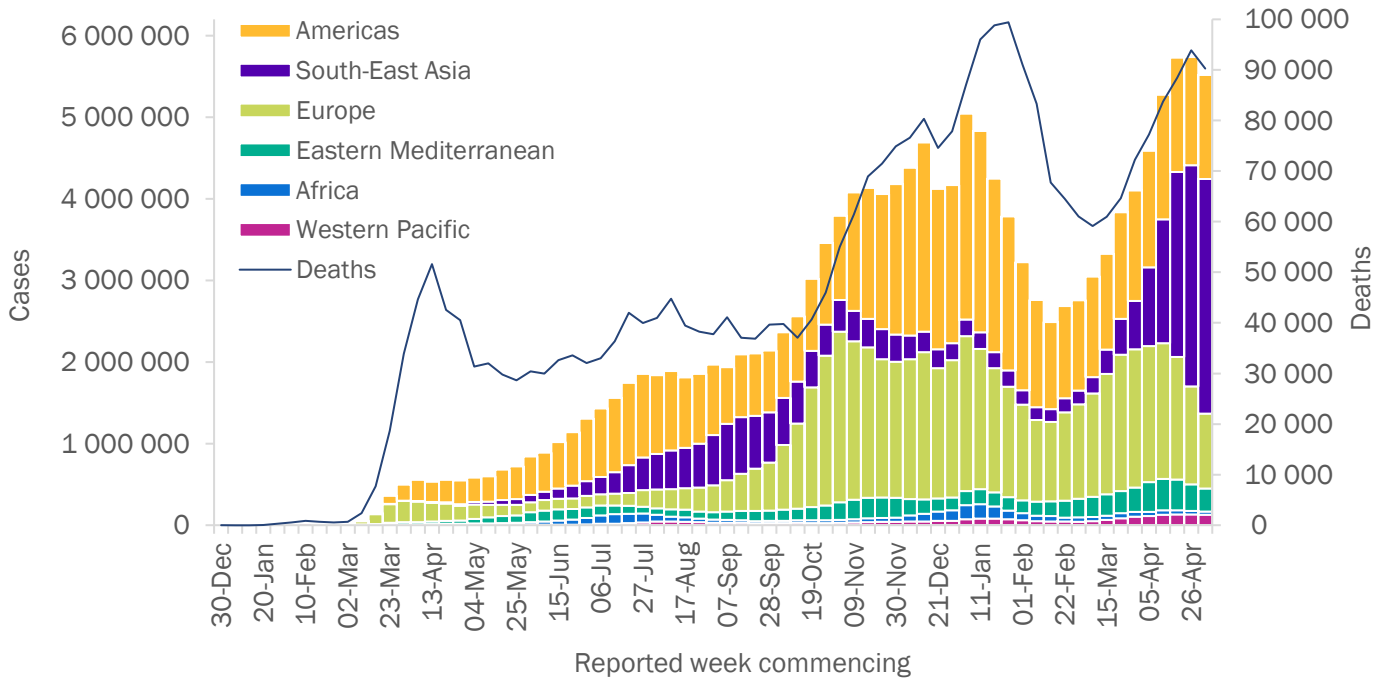
In this edition:

- Global overview
- Special focus: SARS-CoV-2 variants
- WHO regional overviews
- Key weekly updates

Global overview

The number of new COVID-19 cases and deaths globally decreased slightly this week, with over 5.5 million cases and over 90 000 deaths (Figure 1). Case and death incidence, however, remains at the highest level since the beginning of the pandemic. New weekly cases decreased in the regions of Europe and Eastern Mediterranean, while the South-East Asia Region continued an upward trajectory for 9 weeks and reported a further 6% increase last week (Table 1). Death incidence increased in the South-East Asia and Western Pacific regions. While India continues to account for 95% of cases and 93% of deaths in the South-East Asia Region, as well as 50% of global cases and 30% of global deaths, worrying trends have been observed in neighbouring countries. In all WHO Regions there are countries which have been showing a sustained upward trend in cases and deaths over several weeks.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 9 May 2021**



**See *Annex: Data, table and figure notes*

The highest numbers of new cases were reported from India (2 738 957 new cases; 5% increase), Brazil (423 438 new cases; similar to previous week), the United States of America (334 784 new cases; 3% decrease), Turkey (166 733 new cases; 35% decrease), and Argentina (140 771 new cases; 8% decrease).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 9 May 2021**

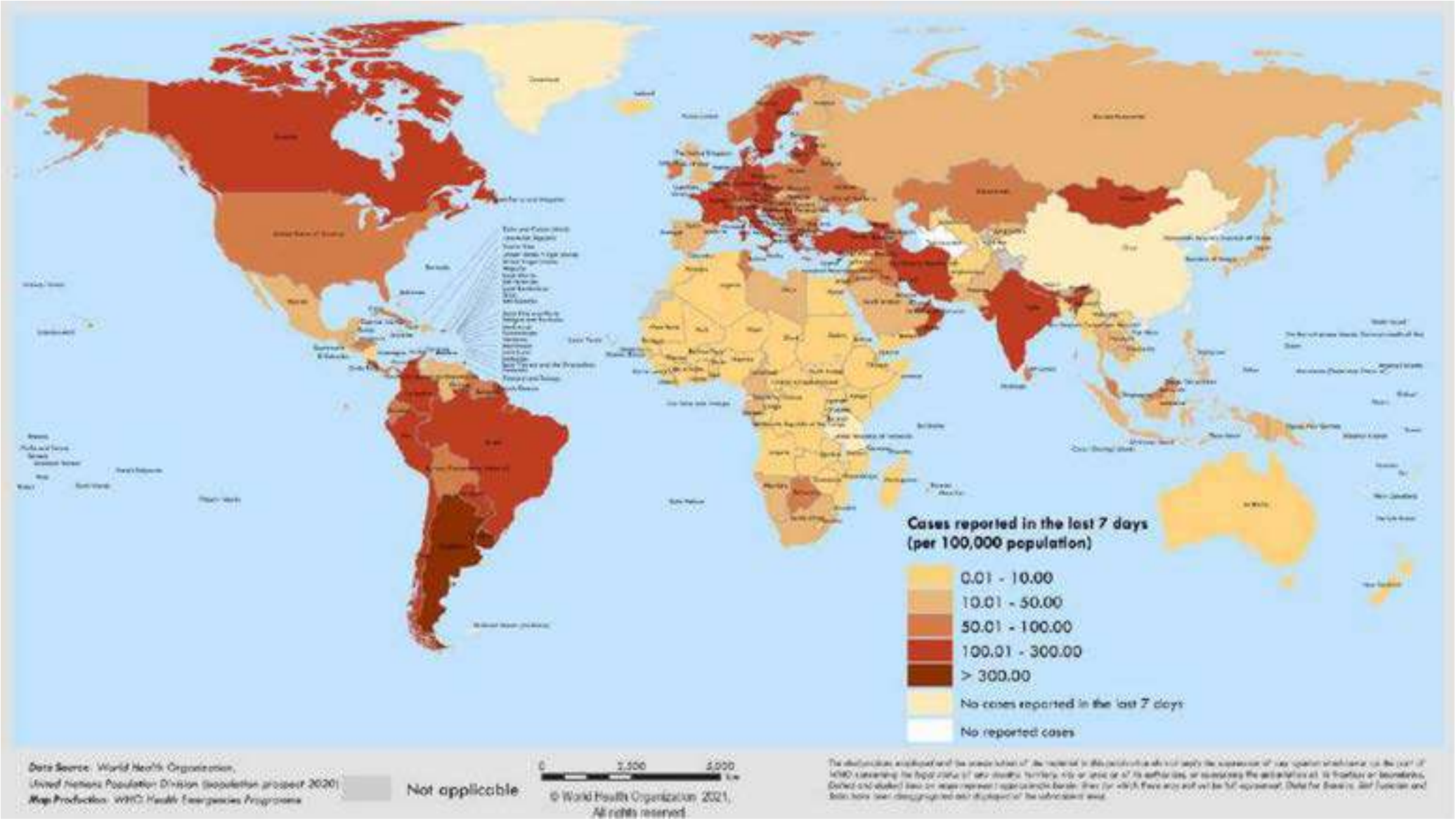
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 272 491 (23%)	-4%	63 554 005 (40%)	33 879 (38%)	-8%	1 551 860 (47%)
Europe	919 119 (17%)	-23%	52 871 662 (34%)	19 056 (21%)	-18%	1 104 629 (34%)
South-East Asia	2 877 410 (52%)	6%	25 552 640 (16%)	28 977 (32%)	15%	309 197 (9%)
Eastern Mediterranean	280 853 (5%)	-13%	9 428 375 (6%)	5 605 (6%)	-13%	189 052 (6%)
Africa	40 656 (1%)	-5%	3 357 846 (2%)	1 034 (1%)	3%	83 904 (3%)
Western Pacific	127 073 (2%)	-4%	2 597 134 (2%)	1 691 (2%)	34%	39 179 (1%)
Global	**5 517 602 (100%)**	**-4%**	**157 362 408 (100%)**	**90 242 (100%)**	**-4%**	**3 277 834 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
**See *Annex: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 27 April – 9 May 2021**



**See *Annex: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 variants

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 result in changes in transmissibility, clinical presentation and severity, or if they result in changes in public health and social measures (PHSM) implementation by national health authorities. Systems have been established to detect "signals" of potential variants of concern (VOCs) or variants of interest (VOIs) and assess these based on the risk posed to global public health (see also working definitions). National authorities may choose to designate other variants of local interest/concern. Detailed information on currently circulating VOCs and VOIs is available in previously published editions of the Weekly Epidemiological Update. Here we provide information on a newly designated VOC within lineage B.1.617, and provide an update on the geographical distribution, and emerging evidence surrounding phenotypic characteristics of all designated VOIs and VOCs.

Newly designated VOC within lineage B.1.617

In consultation with the WHO SARS-CoV-2 Virus Evolution Working Group, WHO has determined that viruses within the lineage B.1.617 have been characterized as a VOC. B.1.617 contains three sub-lineages (Table 2), which differ by few but potentially relevant mutations in the spike protein as well as prevalence of detection globally. As of 11 May, over 4500 sequences have been uploaded to GISAID and assigned to B.1.617 from 44 countries in all six WHO regions, and WHO has received reports of detections from five additional countries (Figure 3). Though there may be important differences among the three sublineages, currently available evidence is too limited for VOI/VOC characterization by sublineage. Future delineation of sublineages as VOIs/VOCs may be possible as our understanding by sublineage and relative importance of their epidemiology increases. At the present time, WHO has designated B.1.617 as a VOC based on early evidence of phenotypic impacts compared to other circulating virus variants, namely:

- B.1.617 sublineages appear to have higher rates of transmission, including observed rapid increases in prevalence in multiple countries (moderate evidence available for B.1.617.1 and B.1.617.2), and
- Preliminary evidence suggests potential reduced effectiveness of Bamlanivimab, a monoclonal antibody used for COVID-19 treatment, and potentially slightly reduced susceptibility to neutralisation antibodies (limited evidence available for B.1.617.1).

Table 2: Overview of B.1.617 sublineages, as of 11 May 2021

Sublineage	B.1.617.1	B.1.617.2	B.1.617.3
Sequences in GISAID	2001	2507	67
Number of countries reporting detections	34 (in 6 WHO regions)	31 (in 5 WHO regions)	4 (in 3 WHO regions)
Number of lineage-defining spike mutations*	7	8	6
Characteristic spike mutations*	G142D, E154K, L452R, E484Q, D614G, P681R, Q1071H	T19R, G142D, del157/158, L452R, T478K, D614G, P681R, D950N	T19R, L452R, E484Q, D614G, P681R, D950N

**Mutations found in >60% of sequences*

Figure 3. Countries, territories and areas with B.1.617.1, B.1.617.2 or B.1.617.3 sequences uploaded to GISAID and/or reported to WHO as of 11 May 2021*

** Unverified detections based primarily on GISAID, subject to change as WHO validates detection with Member States.*

Viruses in the B.1.617 lineage were first reported in India in October 2020. The resurgence in COVID-19 cases and deaths in India has raised questions on the potential role of B.1.617 and other variants (e.g., B.1.1.7) in circulation. A recent risk assessment of the situation in India conducted by WHO found that resurgence and acceleration of COVID-19 transmission in India had several potential contributing factors, including increase in the proportion of cases of SARS-CoV-2 variants with potentially increased transmissibility; several religious and political mass gathering events which increased social mixing; and, under use of and reduced adherence to public health and social measures (PHSM). The exact contributions of these each of these factors on increased transmission in India are not well understood.

Approximately 0.1% of positive samples in India have been sequenced and uploaded to GISAID to identify SARS-CoV-2 variants. The prevalence of several VOCs including B.1.1.7 and B.1.612 sublineages increased concurrent to the surge in COVID-19 cases reported in India. While B.1.1.7 and B.1.612.1 variants have begun to wane in recent weeks, a marked increase in the proportion of viruses sequenced as B.1.612.2 has been observed over the same period. Since the identification of these variants through late April 2021, B.1.617.1 and B.1.617.2 accounted for 21% and 7% of sequenced samples from India, respectively.[a]

Preliminary analyses conducted by WHO using sequences submitted to GISAID suggests that B.1.617.1 and B.1.617.2 have a substantially higher growth rate than other circulating variants in India, suggesting potential increased transmissibility compared. Too few sequences of B.1.617.3 have been detected to date to assess its relative transmissibility.

Other studies suggest that the case numbers increased more rapidly during the most recent surge when variants B.1.1.7 and B.1.617 were circulating, compared to the first surge (June to October 2020).[b] A structural analysis of B.1.617 receptor binding domain (RBD) mutations (L452R and E484Q, along with P681R in the furin cleavage site) suggest that mutations in these variants may result in increased ACE2 binding and rate of S1-S2 cleavage resulting in better transmissibility, and possibly capacity to escape binding and neutralization by some monoclonal antibodies.[c] In a preliminary study on hamsters, infection with B.1.617.1 resulted in increased body weight loss, higher viral load in lungs and pronounced lung lesions as compared to B.1 variants (D614G).[d]

Potential impacts of B.1.617 lineage on effectiveness of vaccines or therapeutics, or reinfection risks, remain uncertain. Preliminary laboratory studies awaiting peer review suggest a limited reduction in neutralisation by antibodies; however, real-world impacts may be limited.[e] One study found a seven-fold reduction in neutralization effectiveness against B.1.617.1 of antibodies generated by vaccination with Moderna - mRNA-1273 and Pfizer BioNTech-Comirnaty vaccines.[f] A second study also found a reduction in neutralization against virus carrying the E484Q mutation (contained in B.1.617.1 and B.1.617.3) for Pfizer BioNTech - Comirnaty vaccine, similar to that found with the E484K mutation.[g] A third study reviewing a limited sample of convalescent sera of COVID-19 cases (n=17) and sera from recipients of the Bharat - Covaxin vaccine (n=23) concluded that most neutralizing activity against B.1.617 was retained.[e] A fourth study reported an approximately three-fold decrease in neutralization activity by plasma from recipients of Pfizer BioNTech - Comirnaty vaccine (n=15) against B.1.617, and a limited two-fold decrease by convalescent sera from cases with severe COVID-19 (n=15). The same study showed that B.1.617.1 (with additional spike mutations R21T, and Q218H) mediates increased entry into certain human and intestinal cell lines, and was resistant to the monoclonal antibody Bamlanivimab; however, it was efficiently inhibited by Imdevimab and by a cocktail of Casirivimab and Imdevimab.[e]

Outside of India, the United Kingdom has reported the largest number of cases sequenced as B.1.617 sub-lineages, and recently designated B.1.617.2 as a national variant of concern. This follows a recent steep increase in the number of cases sequenced as B.1.617 sublineages, and a national assessment that characterized B.1.617.2 as at least equivalent in terms of transmissibility as VOC B.1.1.7; however, they noted insufficient data to assess the potential for immune escape.[h] As of 5 May, the United Kingdom has reported 520 genomically confirmed B.1.617.2 cases (of which approximately two-thirds were domestically acquired), 261 confirmed B.1.617 cases (without further delineation), and nine confirmed B.1.617.3 cases.[i]

Further robust studies into the phenotypic impacts of these variants, including impacts on epidemiological characteristics (transmissibility, severity, re-infection risk, etc.) and impact on countermeasures, are urgently needed.

References

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[d] Yadav, P.D., Mohandas, S., Shete, A.M., et al 2021. SARS CoV-2 variant B.1.617.1 is highly pathogenic in hamsters than B.1 variant. bioRxiv 2021.05.05.442760. https://doi.org/10.1101/2021.05.05.442760

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Other VOCs

As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing, the number of countries/areas/territories (hereafter countries) reporting VOCs and VOIs has continued to increase. Since our last update on 4 May, VOC 202012/01 has been detected in seven additional countries, variant 501Y.V2 in five additional countries, and variant P.1 in four additional countries. As of 11 May, a total 149 countries have reported VOC 202012/01 (Figure 4), 102 countries variant 501Y.V2 (Figure 5), and 60 countries variant P.1 (Figure 6) – see also Annex 2. The information presented here should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and prioritization of samples for sequencing between countries.

Table 3: SARS-CoV-2 Variants of Concern and Variants of Interest, as of 11 May 2021

PANGO lineage Nextstrain clade GISAID clade	Alternate name	First detected in	Earliest samples	Characteristic spike mutations
Variants of Concern (VOCs)				
B.1.1.7 20I/501Y.V1 GR/501Y.V1	**VOC 202012/01**[†]	United Kingdom	Sep 2020	69/70del, 144del, N501Y, A570D, D614G, P681H, T716I, S982A, D1118H
B.1.351 20H/**501Y.V2**[†] GH/501Y.V2	VOC 202012/02	South Africa	May 2020	D80A, D215G, 241/243del, K417N, E484K, N501Y, D614G, A701V
B.1.1.28.1, alias **P.1**[†] 20J/501Y.V3 GR/501Y.V3	VOC 202101/02	Brazil	Nov 2020	L18F, T20N, P26S, D138Y, R190S, K417T, E484K, N501Y, D614G H655Y, T1027I, V1176F
B.1.617*[†] - G/452R.V3	-	India	Oct 2020	L452R, D614G, P681R, ± (E484Q, Q107H, T19R, del157/158, T478K, D950N)
Variants of Interest (VOIs)				
B.1.525 20A/S.484K G/484K.V3	-	Multiple countries	Dec 2020	Q52R, A67V, 69/70del, 144del, E484K, D614G, Q677H, F888L
B.1.427/B.1.429 20C/S.452R GH/452R.V1	CAL.20C/L452R	United States of America	Mar 2020	S13I, W152C, L452R, D614G
B.1.1.28.2, alias P.2 20B/S.484K GR	-	Brazil	Apr 2020	E484K, D614G, V1176F
B.1.1.28.3, alias P.3 - -	PHL-B.1.1.28	Philippines	Jan 2021	141/143del, E484K, N501Y, D614G, P681H, E1092K, H1101Y, V1176F
B.1.526 (+E484K/S477N) 20C GH	-	United States of America	Nov 2020	L5F, T95I, D253G, D614G, A701V, + (E484K or S477N)
B.1.616 - GH	-	France	Feb 2021	H66D, G142V, 144del, D215G, V483A, D614G, H655Y, G669S, Q949R, N1187D

[†]*While work is ongoing to establish standardized nomenclature for key variants, these are the names we will use in this publication.*
** B.1.617 is divided in three sublineages (B.1.617.1, B.1.617.2 and B.1.617.3), which differ in mutations and phenotypic characteristics. Current available data is too limited to make clear distinctions between sublineage at this time.*

Figure 4. Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01, as of 11 May 2021

Figure 5. Countries, territories and areas reporting SARS-CoV-2 variant 501Y.V2, as of 11 May 2021

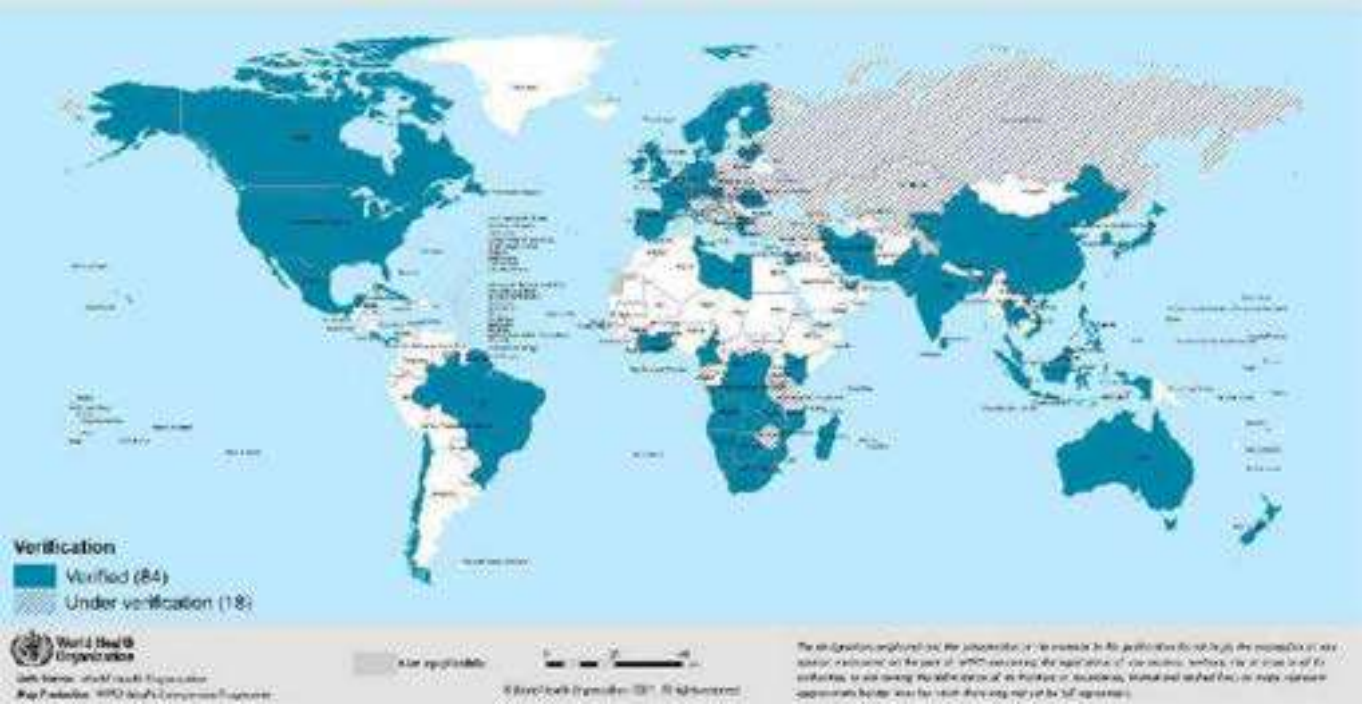
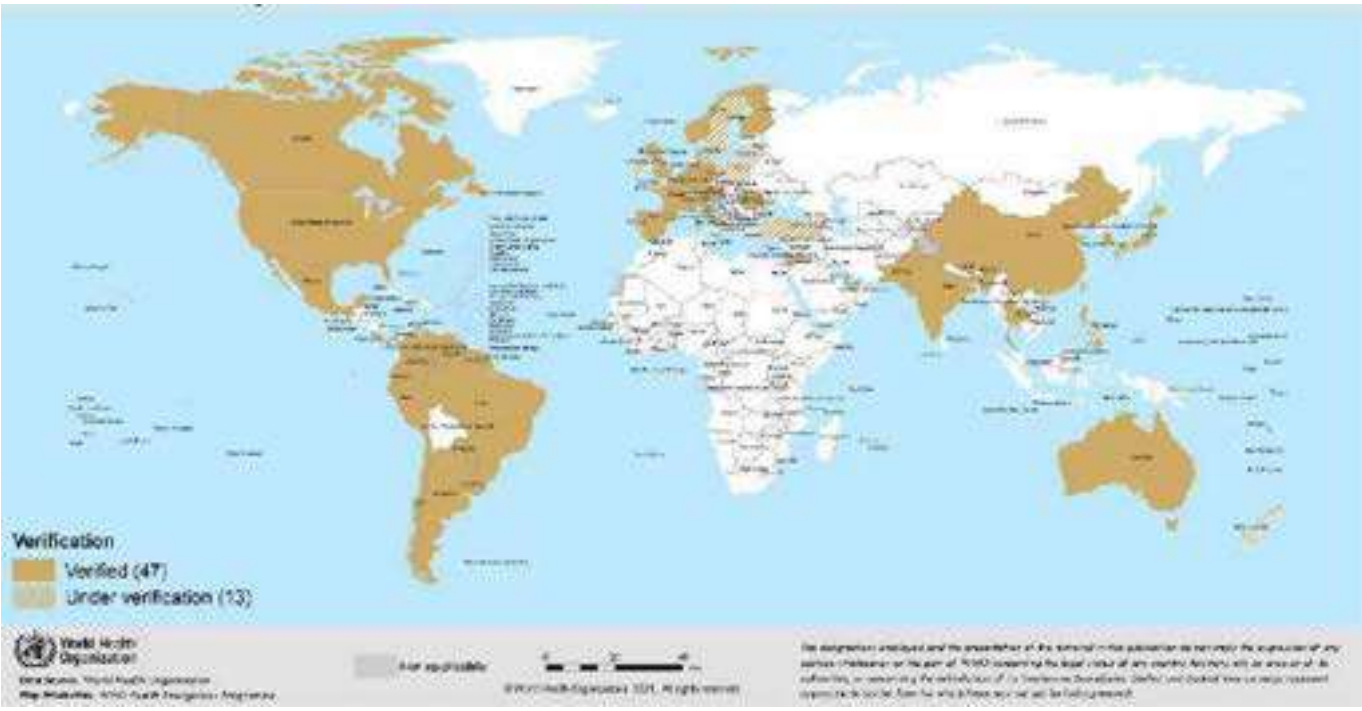


Figure 6. Countries, territories and areas reporting SARS-CoV-2 variant P.1, as of 11 May 2021



Vaccine performance against VOCs

Available evidence on vaccine performance against VOCs has been highlighted in previous editions of the Weekly Epidemiological Update, most recently 27 April, and is summarised in Table 4.

Table 4. Summary of vaccine performance against variants of concern (VOC) relative to ancestral stains

VOC 202012/01 (B.1.1.7)	501Y.V2 (B.1.351)	P.1 (B.1.1.28.1)
Efficacy/effectiveness against disease or infection		
Protection retained against disease • Severe disease: No/minimal loss: Pfizer BioNTech-Comirnaty[1-3] • Infection & symptomatic disease: ○ No/minimal loss: AstraZeneca-Vaxzevria, Novavax-Covavax, Pfizer BioNTech-Comirnaty[2-13] • Asymptomatic infection: ○ No/minimal loss: Pfizer BioNTech-Comirnaty[2,14] ○ Inconclusive/moderate/substantial loss, limited sample size: AstraZeneca-Vaxzevria[5]	Reduced protection against disease, limited evidence • Severe disease: No/minimal loss: Janssen Ad26.COV 2.5, PfizerBioNTech-Comirnaty[3,35] • Mild-moderate disease: ○ Moderate loss: Janssen-Ad26.COV 2.5, Novavax-Covavax[35,36] ○ Inconclusive/substantial loss, limited sample size: AstraZeneca-Vaxzevria[37] • Infection: Moderate loss: Pfizer BioNTech-Comirnaty[3] • Asymptomatic infection: No evidence	Limited evidence • No/minimal loss: Sinovac-CoronaVac [44]
Neutralization		
• No/minimal loss: Bharat-Covaxin, Gamaleya-Sputnik V, Moderna-mRNA-1273, Novavax-Covavax, Pfizer BioNTech-Comirnaty, Beijing CNBG-BBIBP-CorV, Sinovac-CoronaVac[16-35] • Minimal/moderate loss: AstraZeneca-Vaxzevria[5,31]	• Minimal/modest loss: Beijing CNBG-BBIBP-CorV, Sinovac-CoronaVac[39,40] • Minimal to large loss: Moderna-mRNA-1273, Pfizer BioNTech-Comirnaty[15,16,20-22,24-27,29-32,38,40-43] • Moderate to substantial loss: AstraZeneca-Vaxzevria, Gamaleya-Sputnik V, Novavax-Covavax[22,30,33,42]	• No/Minimal reduction: AstraZeneca-Vaxzevria, Sinovac-CoronaVac[30,45] • Minimal/moderate reduction: Moderna-mRNA-1273, Pfizer BioNTech-Comirnaty [16,17,24,27,29,30,41,43,45,46]

Since the update on 27 April, two studies from Israel and another from Qatar offer further evidence that Pfizer BioNTech-Comirnaty vaccine provides similar protection against B.1.1.7 disease as that reported in clinical trials.[47] Both studies from Israel (one published and one preprint) used national surveillance data and found high vaccine effectiveness after the second dose. The published study estimated a vaccine effectiveness of 98.1% (95% CI: 97.6-98.5), 98.0% (97.7-98.3), 97.7% (97.5-97.9), 96.5% (96.3-96.8), and 93.8% (93.3-94.2) against death, hospitalization, symptomatic disease, infection, and asymptomatic infection ≥ 14 days post second dose, respectively, in a setting where B.1.1.7 accounted for 95% of documented SARS-CoV-2 cases.[2] The preprint from Israel reported similar findings.[1]

In addition, the study from Qatar reports effectiveness of the vaccine to be 89.5% (95% CI: 85.9-92.3) against documented B.1.1.7 infection and 100% (95% CI: 81.7-100.0) against documented B.1.1.7 severe disease ≥ 14 days post second dose.[3] The study also evaluated effectiveness of the Pfizer BioNTech-Comirnaty vaccine against B.1351-specific disease, finding somewhat reduced effectiveness of 75.0% (70.5-78.9%) against B.1.351 infection ≥ 14 days post second dose. However, effectiveness against B.1.351 severe disease ≥ 14 days post second dose was retained: 100% (73.7-100.0).[3]

A study from the United States of America conducted during a period when B.1.1.7 was circulating found that the Janssen - Ad26.COV 2.5 vaccine was 76.7% (95%CI: 30.3-95.3) effective against SARS-CoV-2 infection, similar to clinical trial efficacy findings conducted in a non-B.1.1.7 setting.[47] While this estimate is an average estimate across all circulating viruses during the study, B.1.1.7 was the most predominant variant in the region represented by the vast majority of participants (B.1.1.7 ranged from ~25-70% of sequenced viruses reported by the US Centers for Disease Control and Prevention during the study period in this region).[48]

WHO recommendations

Virus evolution is an expected phenomenon, and the more SARS-CoV-2 circulates, the more opportunities it has to evolve. Reducing transmission through established and proven disease control methods such as those outlined in the COVID-19 Strategic Preparedness and Response Plan, as well as avoiding introductions into animal populations are crucial aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critical to curb the spread of SARS-CoV-2 and its variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the PHSM, including infection prevention and control (IPC) measures in health facilities has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities. Authorities are also encouraged to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and to detect unusual events.

Additional resources

- Working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern
- COVID-19 new variants: Knowledge gaps and research
- COVID-19 Situation Reports from WHO Regional Offices and partners: AFRO, AMRO/PAHO, EMRO, EURO/ECDC, SEARO, WPRO
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19

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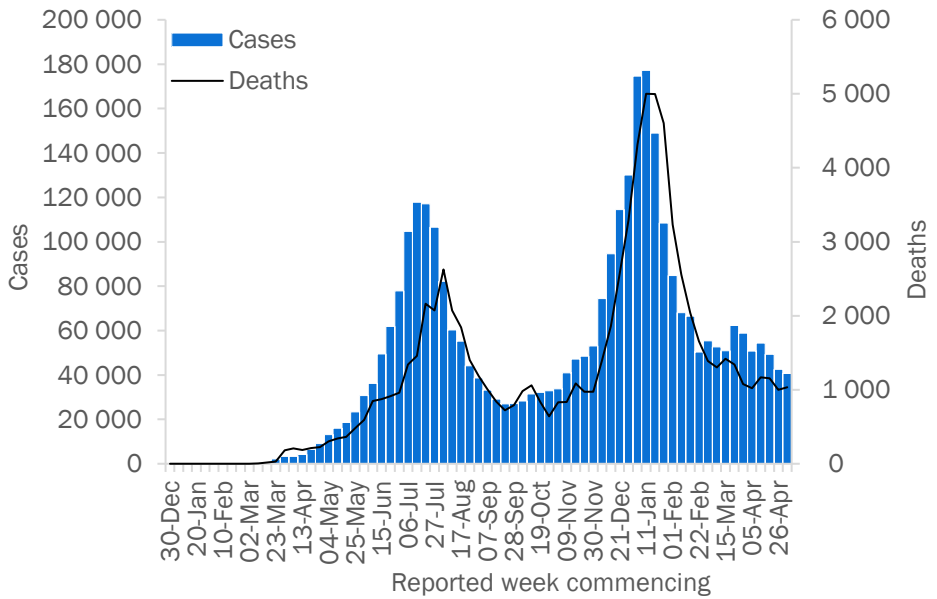
WHO regional overviews

African Region

The African Region reported over 40 000 new cases and over 1000 new deaths, a 5% decrease and 3% increase respectively compared to the previous week. This follows a long-term downward trend in case and death incidence; however, this trend may soon reverse with cases and deaths beginning to climb again in some countries. The highest numbers of new cases were reported from South Africa (11 975 new cases; 20.2 new cases per 100 000 population; a 41% increase), Ethiopia (4155 new cases; 3.6 new cases per 100 000; a 42% decrease), and Cameroon (4126 new cases; 15.5 new cases per 100 000; a 10% decrease).

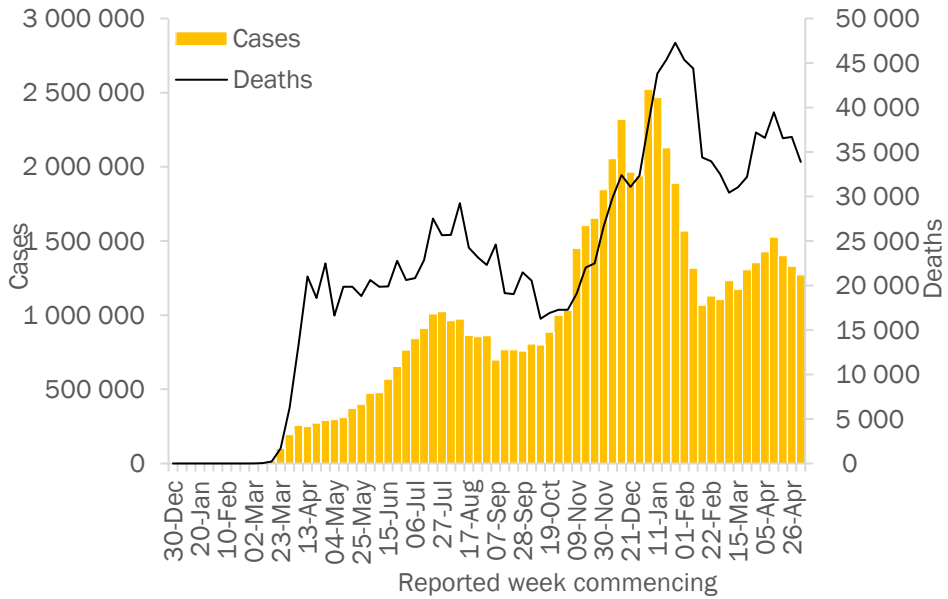
The highest numbers of new deaths were reported from South Africa (318 new deaths; 0.5 new deaths per 100 000 population; a 13% increase), Ethiopia (162 new deaths; 0.1 new deaths per 100 000; a 9% decrease), and Kenya (139 new deaths; 0.3 new deaths per 100 000; a 1% decrease).



Region of the Americas

The Americas reported over 1.2 million new cases and 33 000 new deaths, decreasing by 4% and 8% respectively compared to the previous week. This is the third consecutive week of decreasing case incidence across the region; however, cases and deaths continue to climb in some countries. The highest numbers of new cases were reported from Brazil (423 438 new cases; 199.2 new cases per 100 000; similar to previous week), the United States of America (334 784 new cases; 101.1 new cases per 100 000; a 3% decrease), and Argentina (140 771 new cases; 311.5 new cases per 100 000; an 8% decrease).

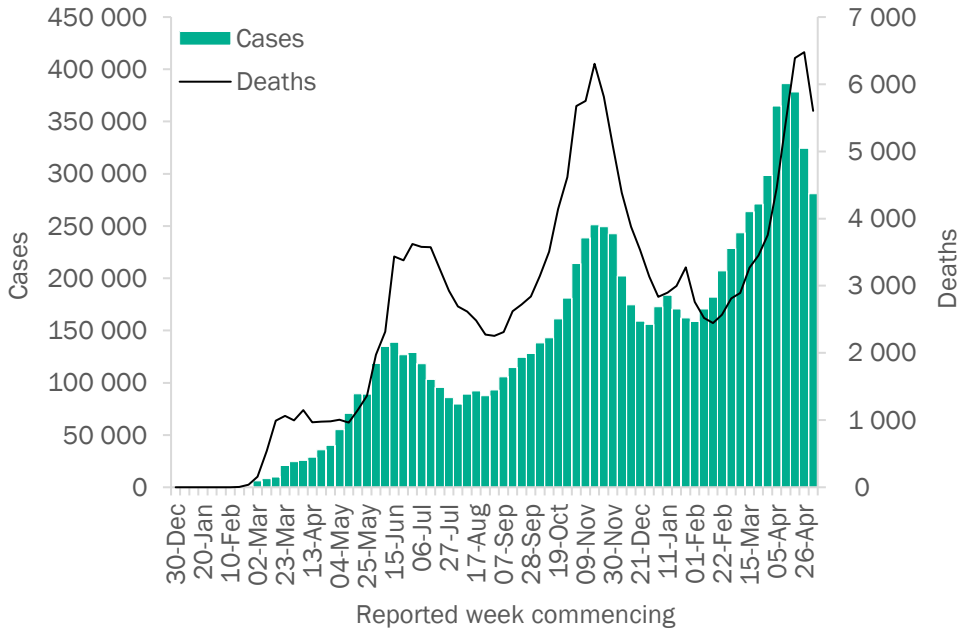
The highest numbers of new deaths were reported from Brazil (15 333 new deaths; 7.2 new deaths per 100 000; a 12% decrease), the United States of America (4940 new deaths; 1.5 new deaths per 100 000; a 4% increase), and Colombia (3147 new deaths; 6.2 new deaths per 100 000; a 4% decrease).



Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 280 000 new cases and over 5600 new deaths, both rates decreasing by 13% compared to the previous week. This is the first week a marked decrease in reported deaths has been reported following 11 weeks of rising numbers. The highest numbers of new cases were reported from the Islamic Republic of Iran (124 513 new cases; 148.2 new cases per 100 000; a 10% decrease), Iraq (38 192 new cases; 95.0 new cases per 100 000; a 15% decrease), and Pakistan (28 721 new cases; 13.0 new cases per 100 000; a 19% decrease).

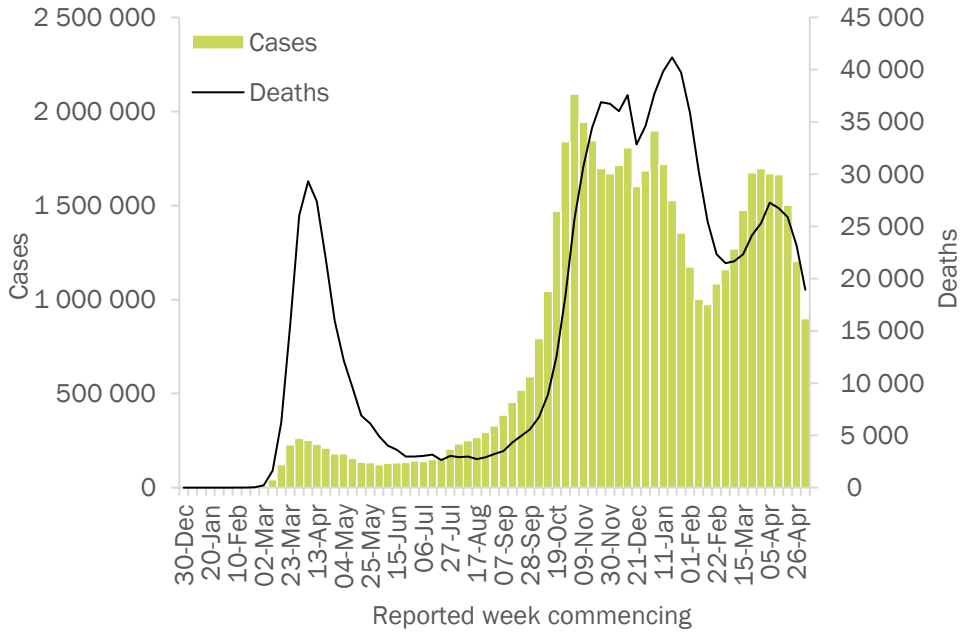
The highest numbers of new deaths were reported from the Islamic Republic of Iran (2434 new deaths; 2.9 new deaths per 100 000; an 18% decrease), Pakistan (840 new deaths; 0.4 new deaths per 100 000; a 12% decrease), and Tunisia (542 new deaths; 4.6 new deaths per 100 000; a 6% decrease).



European Region

The European Region reported over 897 000 new cases and just under 19 000 new deaths, a 25% and an 18% decrease respectively compared to the previous week. Cases and deaths in the region have been decreasing for the past month. The highest numbers of new cases were reported from Turkey (166 733 new cases; 197.7 new cases per 100 000; a 35% decrease), France (122 487 new cases; 188.3 new cases per 100 000; a 26% decrease), and Germany (103 507 new cases; 124.5 new cases per 100 000; a 20% decrease).

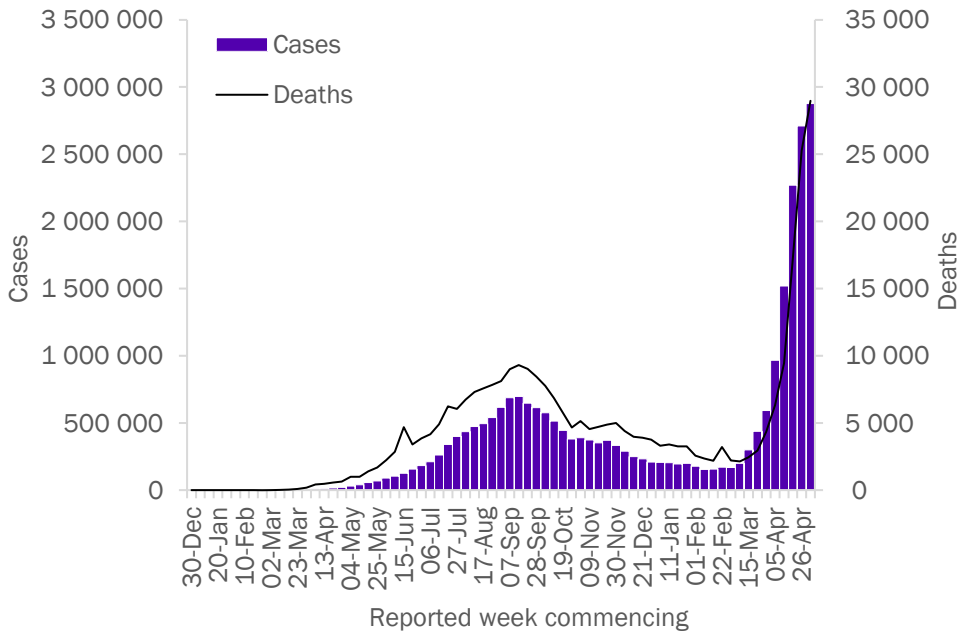
The highest numbers of new deaths were reported from Russian Federation (2464 new deaths; 1.7 new deaths per 100 000; a 6% decrease), Turkey (2242 new deaths; 2.7 new deaths per 100 000; a 10% decrease), and Poland (1944 new deaths; 5.1 new deaths per 100 000; a 27% decrease).



South-East Asia Region

The South-East Asia Region reported over 2.8 million new cases and just under 29 000 new deaths, a 6% and a 15% increase respectively compared to the previous week. This marks the ninth consecutive week the incidences of cases and deaths have been increasing in the region. The highest numbers of new cases were reported from India (2 738 957 new cases; 198.5 new cases per 100 000; a 5% increase), Nepal (56 997 new cases; 195.6 new cases per 100 000; a 79% increase), and Indonesia (36 882 new cases; 13.5 new cases per 100 000; a 2% increase).

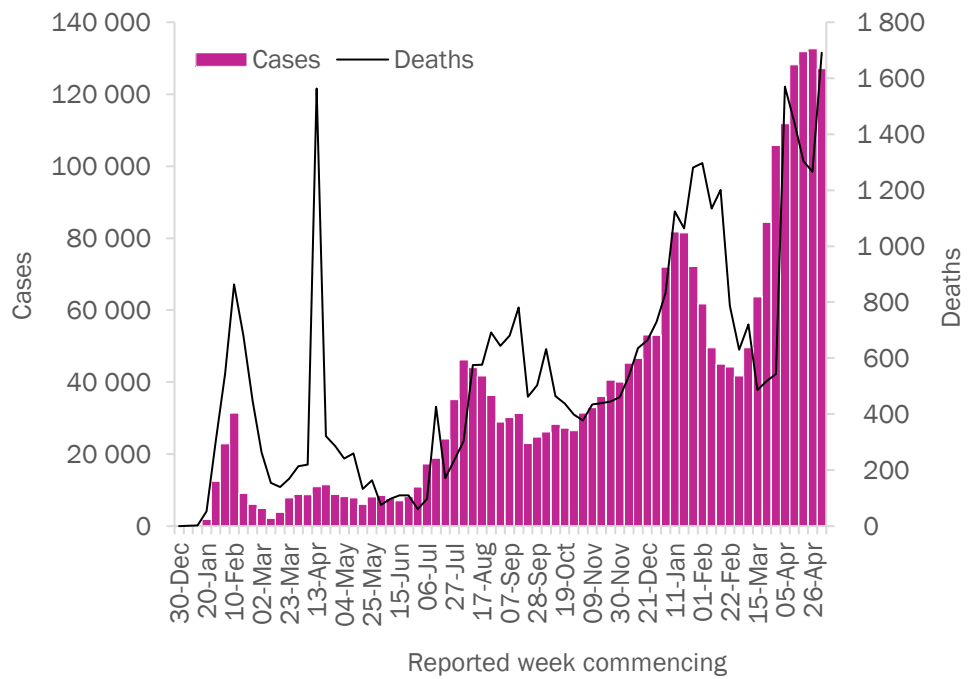
The highest numbers of new deaths were reported from India (26 820 new deaths; 1.9 new deaths per 100 000; a 15% increase), Indonesia (1190 new deaths; 0.4 new deaths per 100 000; a 3% increase), and Bangladesh (368 new deaths; 0.2 new deaths per 100 000; a 34% decrease).



Western Pacific Region

The Western Pacific Region reported over 127 000 new cases and just under 1700 new deaths, a 4% decrease and a 34% increase respectively compared to the previous week. The highest numbers of new cases were reported from the Philippines (48 197 new cases; 44.0 new cases per 100 000; a 16% decrease), Japan (35 802 new cases; 28.3 new cases per 100 000; a 2% increase), and Malaysia (25 350 new cases; 78.3 new cases per 100 000; a 19% increase).

The highest numbers of new deaths were reported from the Philippines (915 new deaths; 0.8 new deaths per 100 000; a 35% increase), Japan (527 new deaths; 0.4 new deaths per 100 000; a 38% increase), and Malaysia (136 new deaths; 0.4 new deaths per 100 000; a 43% increase).



Key weekly updates

WHO Director-General's key messages

Opening remarks at the media briefing on COVID-19 – 7 May 2021:

- The announcement on 5 May by the United States of America that it will support a temporary waiver of intellectual property protections for COVID-19 vaccines is a significant statement of solidarity and support for vaccine equity.
- On 7 May, WHO listed Beijing CNBG (Sinopharm) - BBIBP-CorV COVID-19 vaccine for emergency use, making it the sixth vaccine to receive WHO validation for safety, efficacy and quality. The Strategic Advisory Group of Experts on Immunization (SAGE) has also reviewed the available data, and recommends the vaccine for adults 18 years and older, with a two-dose schedule.
- The WHO Director-General announced the establishment of the WHO Council on the Economics of Health for All to identify new ways to shape the global economy, and to build societies that are healthy, inclusive, equitable and sustainable.

Updates and publications

- WHO, Germany launch new global hub for pandemic and epidemic intelligence
- Scientific Brief on COVID-19 natural immunity
- WHO's work in health emergencies – Strengthening preparedness for health emergencies: implementation of the International Health Regulations (2005)
- Estimating COVID-19 vaccine effectiveness against severe acute respiratory infections (SARI) hospitalizations associated with laboratory-confirmed SARS-CoV-2: an evaluation using the test-negative design
- The Partnership for Healthy Cities supports COVID-19 Vaccine Outreach in 18 Cities
- Joint Statement on transparency and data integrity International Coalition of Medicines Regulatory Authorities (ICMRA) and WHO
- WHO calls for better hand hygiene and other infection control practices
- COVID-19 home care bundle for health care workers
- COVID-19 considerations for tuberculosis (TB) care

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 9 May 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**40 656**	**3 357 846**	**299.3**	**1 034**	**83 904**	**7.5**	
South Africa	11 975	1 594 817	2 689.0	318	54 724	92.3	Community transmission
Ethiopia	4 155	262 217	228.1	162	3 871	3.4	Community transmission
Cameroon	4 126	74 733	281.5	80	1 144	4.3	Community transmission
Kenya	3 185	163 238	303.6	139	2 883	5.4	Community transmission
Cabo Verde	1 984	26 111	4 696.3	12	232	41.7	Community transmission
Angola	1 662	28 477	86.6	30	630	1.9	Community transmission
Algeria	1 589	123 900	282.5	60	3 321	7.6	Community transmission
Madagascar	1 578	38 874	140.4	62	716	2.6	Community transmission
Botswana	1 483	48 417	2 058.9	22	734	31.2	Community transmission
Namibia	1 239	49 893	1 963.6	40	683	26.9	Community transmission
Seychelles	870	6 811	6 925.5	1	28	28.5	Community transmission
Congo	469	11 147	202.0	4	148	2.7	Community transmission
Uganda	401	42 308	92.5	3	346	0.8	Community transmission
Zambia	387	92 057	500.7	6	1 257	6.8	Community transmission
Guinea	386	22 633	172.3	6	150	1.1	Community transmission
Democratic Republic of the Congo	381	30 285	33.8	4	772	0.9	Community transmission
Rwanda	361	25 586	197.5	3	338	2.6	Community transmission
Gabon	357	23 432	1 052.8	4	143	6.4	Community transmission
Senegal	277	40 665	242.9	8	1 117	6.7	Community transmission
Central African Republic	263	6 674	138.2	5	93	1.9	Community transmission
Ghana	255	92 856	298.8	4	783	2.5	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Mauritania	234	18 636	400.8	1	456	9.8	Community transmission
Côte d'Ivoire	230	46 344	175.7	5	291	1.1	Community transmission
Nigeria	229	165 382	80.2	2	2 065	1.0	Community transmission
Mozambique	201	70 166	224.5	7	821	2.6	Community transmission
Mali	186	14 082	69.5	14	499	2.5	Community transmission
Zimbabwe	154	38 414	258.5	8	1 576	10.6	Community transmission
Togo	149	13 141	158.7	1	124	1.5	Community transmission
Burundi	139	4 177	35.1	0	6	0.1	Community transmission
Niger	91	5 319	22.0	1	192	0.8	Community transmission
Eritrea	71	3 742	105.5	2	12	0.3	Community transmission
Malawi	71	34 166	178.6	5	1 153	6.0	Community transmission
Benin	63	7 884	65.0	1	100	0.8	Community transmission
Burkina Faso	58	13 377	64.0	5	162	0.8	Community transmission
South Sudan	54	10 637	95.0	1	116	1.0	Community transmission
Chad	50	4 874	29.7	1	171	1.0	Community transmission
Lesotho	42	10 773	502.9	3	319	14.9	Community transmission
Mauritius	40	1 246	98.0	1	17	1.3	Clusters of cases
Gambia	31	5 929	245.3	1	175	7.2	Community transmission
Eswatini	19	18 477	1 592.6	0	671	57.8	Community transmission
Liberia	15	2 114	41.8	0	85	1.7	Community transmission
Comoros	14	3 922	451.0	0	146	16.8	Community transmission
Sierra Leone	11	4 068	51.0	0	79	1.0	Community transmission
Sao Tome and Principe	8	2 318	1 057.7	0	35	16.0	Community transmission
Guinea-Bissau	3	3 739	190.0	0	67	3.4	Community transmission
Equatorial Guinea	0	7 694	548.4	0	112	8.0	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Territories[iii]							
Réunion	1 070	21 451	2 395.9	2	150	16.8	Community transmission
Mayotte	40	20 134	7 380.1	0	170	62.3	Community transmission
Americas	**1 272 491**	**63 554 005**	**6 213.9**	**33 879**	**1 551 860**	**151.7**	
Brazil	423 438	15 082 449	7 095.6	15 333	419 114	197.2	Community transmission
United States of America	334 784	32 337 112	9 769.4	4 940	575 477	173.9	Community transmission
Argentina	140 771	3 118 134	6 899.2	3 007	66 872	148.0	Community transmission
Colombia	108 902	2 968 626	5 834.2	3 147	76 867	151.1	Community transmission
Canada	53 744	1 273 169	3 373.3	310	24 529	65.0	Community transmission
Peru	40 020	1 839 465	5 578.9	2 042	63 519	192.6	Community transmission
Chile	37 221	1 241 976	6 497.0	644	27 101	141.8	Community transmission
Uruguay	17 718	216 146	6 222.3	416	3 032	87.3	Community transmission
Mexico	17 119	2 361 874	1 831.9	1 750	218 657	169.6	Community transmission
Paraguay	15 156	294 233	4 125.2	589	6 974	97.8	Community transmission
Costa Rica	14 495	265 486	5 211.6	134	3 365	66.1	Community transmission
Ecuador	14 332	398 921	2 261.1	413	19 137	108.5	Community transmission
Bolivia (Plurinational State of)	10 559	316 153	2 708.4	207	13 182	112.9	Community transmission
Venezuela (Bolivarian Republic of)	7 498	205 181	721.6	127	2 263	8.0	Community transmission
Cuba	7 290	114 912	1 014.5	68	722	6.4	Community transmission
Guatemala	6 406	234 883	1 311.1	174	7 717	43.1	Community transmission
Honduras	5 997	218 330	2 204.3	304	5 585	56.4	Community transmission
Dominican Republic	3 739	270 600	2 494.5	36	3 523	32.5	Community transmission
Panama	2 186	366 762	8 500.2	26	6 258	145.0	Community transmission
Trinidad and Tobago	1 896	12 720	908.9	27	196	14.0	Community transmission
El Salvador	1 057	70 255	1 083.1	22	2 150	33.1	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Jamaica	811	46 588	1 573.3	24	803	27.1	Community transmission
Guyana	754	14 037	1 784.6	18	314	39.9	Community transmission
Suriname	570	10 933	1 863.7	10	214	36.5	Clusters of cases
Bahamas	320	10 773	2 739.5	13	212	53.9	Clusters of cases
Saint Lucia	102	4 654	2 534.5	1	75	40.8	Community transmission
Nicaragua	77	5 575	84.2	1	183	2.8	Community transmission
Haiti	70	13 164	115.4	9	263	2.3	Community transmission
Barbados	68	3 931	1 367.9	1	45	15.7	Community transmission
Saint Vincent and the Grenadines	48	1 912	1 723.5	1	12	10.8	Community transmission
Belize	18	12 686	3 190.4	0	323	81.2	Community transmission
Antigua and Barbuda	8	1 237	1 263.2	0	32	32.7	Clusters of cases
Dominica	1	175	243.1	0	0	0.0	Clusters of cases
Grenada	0	161	143.1	0	1	0.9	Sporadic cases
Saint Kitts and Nevis	0	45	84.6	0	0	0.0	Sporadic cases
Territories[iii]							
Puerto Rico	2 932	134 888	4 715.0	57	2 367	82.7	Community transmission
French Guiana	823	20 366	6 818.6	3	104	34.8	Community transmission
Guadeloupe	795	15 429	3 856.1	8	236	59.0	Community transmission
Martinique	351	11 490	3 061.8	8	87	23.2	Community transmission
Aruba	129	10 737	10 056.6	2	100	93.7	Community transmission
United States Virgin Islands	85	3 210	3 074.0	0	27	25.9	Community transmission
Bermuda	41	2 434	3 908.6	2	30	48.2	Community transmission
Curaçao	41	12 222	7 448.2	5	113	68.9	Community transmission
Saint Martin	28	1 777	4 596.6	0	14	36.2	Community transmission
British Virgin Islands	25	219	724.3	0	1	3.3	Clusters of cases
Sint Maarten	20	2 250	5 247.0	0	27	63.0	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Bonaire	16	1 547	7 396.6	0	16	76.5	Community transmission
Turks and Caicos Islands	12	2 402	6 203.8	0	17	43.9	Clusters of cases
Anguilla	6	99	659.9	0	0	0.0	Clusters of cases
Saint Barthélemy	6	994	10 055.6	0	1	10.1	Clusters of cases
Cayman Islands	5	548	833.8	0	2	3.0	Sporadic cases
Saba	1	7	362.1	0	0	0.0	Sporadic cases
Falkland Islands (Malvinas)	0	63	1 808.8	0	0	0.0	Sporadic cases
Montserrat	0	20	400.1	0	1	20.0	No cases
Saint Pierre and Miquelon	0	25	431.4	0	0	0.0	Sporadic cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	**280 853**	**9 428 375**	**1 290.1**	**5 605**	**189 052**	**25.9**	
Iran (Islamic Republic of)	124 513	2 640 670	3 143.9	2 434	74 524	88.7	Community transmission
Iraq	38 192	1 108 558	2 756.1	243	15 741	39.1	Community transmission
Pakistan	28 721	854 240	386.7	840	18 797	8.5	Community transmission
United Arab Emirates	12 497	534 445	5 403.7	19	1 610	16.3	Clusters of cases
Bahrain	9 908	187 905	11 043.0	30	678	39.8	Community transmission
Kuwait	8 806	284 076	6 651.9	66	1 635	38.3	Community transmission
Tunisia	8 778	319 512	2 703.5	542	11 350	96.0	Community transmission
Egypt	7 688	236 272	230.9	443	13 845	13.5	Clusters of cases
Jordan	7 156	719 233	7 049.1	205	9 076	89.0	Community transmission
Saudi Arabia	7 031	425 442	1 222.0	91	7 059	20.3	Community transmission
Oman	6 091	199 344	3 903.6	73	2 083	40.8	Community transmission
Lebanon	4 761	532 269	7 798.3	158	7 460	109.3	Community transmission
Qatar	4 301	210 603	7 309.9	37	502	17.4	Community transmission
Libya	2 189	179 697	2 615.2	34	3 063	44.6	Community transmission
Morocco	2 066	513 628	1 391.5	38	9 064	24.6	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Afghanistan	1 720	61 842	158.9	49	2 686	6.9	Community transmission
Sudan	772	34 826	79.4	80	2 445	5.6	Clusters of cases
Syrian Arab Republic	501	23 319	133.2	50	1 648	9.4	Community transmission
Somalia	500	14 415	90.7	34	747	4.7	Community transmission
Djibouti	214	11 335	1 147.3	4	149	15.1	Community transmission
Yemen	137	6 466	21.7	41	1 271	4.3	Community transmission
Territories[iii]							
occupied Palestinian territory	4 311	330 278	6 474.2	94	3 619	70.9	Community transmission
Europe	**919 119**	**52 871 662**	**5 666.4**	**19 056**	**1 104 629**	**118.4**	
Kosovo [1]	970	106 302		25	2 193		Community transmission
Turkey	166 733	5 016 141	5 947.6	2 242	42 746	50.7	Community transmission
France	122 487	5 676 293	8 727.5	1 550	105 544	162.3	Community transmission
Germany	103 507	3 520 329	4 232.9	1 583	84 775	101.9	Community transmission
Italy	67 304	4 102 921	6 879.3	1 661	122 694	205.7	Clusters of cases
Russian Federation	57 007	4 880 262	3 344.1	2 464	113 326	77.7	Clusters of cases
Netherlands	51 444	1 553 292	8 923.1	151	17 319	99.5	Community transmission
Spain	41 011	3 577 486	7 558.2	252	78 879	166.6	Community transmission
Ukraine	36 330	2 119 510	4 846.4	1 797	46 393	106.1	Community transmission
Poland	29 819	2 833 052	7 463.6	1 944	70 012	184.4	Community transmission
Sweden	28 799	1 007 792	9 758.3	15	14 173	137.2	Community transmission
Belgium	20 793	1 017 482	8 830.4	260	24 554	213.1	Community transmission
Kazakhstan	15 052	396 130	2 109.7	0	4 542	24.2	Clusters of cases
The United Kingdom	14 560	4 433 094	6 530.2	79	127 603	188.0	Community transmission
Greece	14 155	360 577	3 364.0	525	10 978	102.4	Community transmission
Czechia	10 947	1 645 061	15 383.1	324	29 667	277.4	Community transmission
Switzerland	10 276	670 704	7 749.7	36	10 069	116.3	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Georgia	9 474	321 919	8 069.8	130	4 281	107.3	Community transmission
Austria	9 453	626 067	7 033.6	132	10 110	113.6	Community transmission
Croatia	9 321	344 494	8 488.9	287	7 469	184.0	Community transmission
Hungary	8 817	791 709	8 103.9	800	28 602	292.8	Community transmission
Romania	8 682	1 065 254	5 511.2	709	28 903	149.5	Community transmission
Serbia	8 643	699 574	10 099.7	153	6 539	94.4	Community transmission
Lithuania	8 147	257 827	9 227.6	84	4 034	144.4	Community transmission
Belarus	7 692	367 674	3 891.0	70	2 622	27.7	Community transmission
Denmark	6 137	258 182	4 434.0	8	2 497	42.9	Community transmission
Azerbaijan	5 734	326 056	3 215.8	128	4 666	46.0	Clusters of cases
Bulgaria	5 115	409 961	5 897.5	458	16 902	243.1	Clusters of cases
Slovenia	4 414	245 795	11 727.6	15	4 610	220.0	Clusters of cases
Latvia	3 961	123 331	6 465.0	69	2 208	115.7	Community transmission
Norway	2 870	115 410	2 150.1	11	767	14.3	Clusters of cases
Ireland	2 866	252 303	5 082.2	15	4 921	99.1	Community transmission
Cyprus	2 791	69 163	7 788.6	21	334	37.6	Clusters of cases
Uzbekistan	2 754	94 397	282.0	10	662	2.0	Clusters of cases
Estonia	2 441	125 126	9 415.2	33	1 201	90.4	Clusters of cases
Armenia	2 407	219 270	7 399.7	95	4 234	142.9	Community transmission
Slovakia	2 377	385 475	7 062.7	253	12 019	220.2	Clusters of cases
Kyrgyzstan	2 340	98 400	1 508.2	36	1 655	25.4	Clusters of cases
Portugal	2 311	839 258	8 151.4	15	16 991	165.0	Clusters of cases
Bosnia and Herzegovina	2 157	200 989	6 126.2	232	8 811	268.6	Community transmission
Finland	1 465	88 561	1 602.8	8	922	16.7	Community transmission
Republic of Moldova	1 444	252 604	6 261.9	117	5 943	147.3	Community transmission
North Macedonia	1 310	153 891	7 386.6	188	5 079	243.8	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Luxembourg	894	68 291	10 907.2	5	802	128.1	Community transmission
Montenegro	647	98 359	15 660.7	35	1 541	245.4	Clusters of cases
Albania	481	131 666	4 575.2	15	2 411	83.8	Clusters of cases
Israel	369	838 887	9 691.9	11	6 376	73.7	Community transmission
Andorra	174	13 406	17 350.7	2	127	164.4	Community transmission
Malta	131	30 438	5 915.3	2	417	81.0	Clusters of cases
Iceland	34	6 506	1 786.7	0	29	8.0	Community transmission
Liechtenstein	27	3 062	7 902.5	1	57	147.1	Sporadic cases
Monaco	22	2 479	6 316.9	0	32	81.5	Sporadic cases
San Marino	13	5 079	14 965.5	0	90	265.2	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Faroe Islands	4	668	1 367.0	0	1	2.0	Sporadic cases
Gibraltar	3	4 286	12 721.5	0	94	279.0	Clusters of cases
Isle of Man	3	1 590	1 869.9	0	29	34.1	No cases
Greenland	0	31	54.6	0	0	0.0	No cases
Guernsey	0	822	1 275.1	0	14	21.7	Community transmission
Jersey	0	3 234	3 000.1	0	69	64.0	Community transmission
South-East Asia	**2 877 410**	**25 552 640**	**1 264.1**	**28 977**	**309 197**	**15.3**	
India	2 738 957	22 296 414	1 615.7	26 820	242 362	17.6	Clusters of cases
Nepal	56 997	385 890	1 324.4	334	3 632	12.5	Community transmission
Indonesia	36 882	1 709 762	625.1	1 190	46 842	17.1	Community transmission
Thailand	14 391	83 375	119.4	154	399	0.6	Clusters of cases
Sri Lanka	13 372	123 234	575.5	99	786	3.7	Clusters of cases
Bangladesh	11 543	772 127	468.8	368	11 878	7.2	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Maldives	4 487	34 724	6 423.9	10	83	15.4	Clusters of cases
Timor-Leste	569	2 965	224.9	1	4	0.3	Clusters of cases
Myanmar	116	142 947	262.7	1	3 210	5.9	Clusters of cases
Bhutan	96	1 202	155.8	0	1	0.1	Clusters of cases
Western Pacific	**127 073**	**2 597 134**	**132.2**	**1 691**	**39 179**	**2.0**	
Philippines	48 197	1 094 834	999.1	915	18 269	16.7	Community transmission
Japan	35 802	633 027	500.5	527	10 823	8.6	Clusters of cases
Malaysia	25 350	436 944	1 350.0	136	1 657	5.1	Community transmission
Mongolia	6 731	44 016	1 342.7	45	160	4.9	Clusters of cases
Cambodia	4 717	19 237	115.1	17	120	0.7	Sporadic cases
Republic of Korea	4 069	127 309	248.3	41	1 874	3.7	Clusters of cases
Papua New Guinea	964	12 226	136.6	6	121	1.4	Community transmission
Lao People's Democratic Republic	412	1 233	16.9	0	0	0.0	Sporadic cases
Viet Nam	303	3 245	3.3	0	35	0.0	Clusters of cases
Singapore	152	61 331	1 048.3	0	31	0.5	Sporadic cases
China	147	103 796	7.1	0	4 858	0.3	Clusters of cases
Australia	94	29 906	117.3	0	910	3.6	Clusters of cases
New Zealand	25	2 286	47.4	0	26	0.5	Sporadic cases
Fiji	17	136	15.2	1	3	0.3	Sporadic cases
Brunei Darussalam	3	230	52.6	0	3	0.7	Clusters of cases
Solomon Islands	0	20	2.9	0	0	0.0	No cases
Territories[iii]							
Guam	56	7 813	4 629.2	3	139	82.4	Clusters of cases
French Polynesia	32	18 790	6 689.0	0	141	50.2	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	1	169	293.6	0	2	3.5	Pending

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Wallis and Futuna	1	454	4 037.0	0	7	62.2	Sporadic cases
Marshall Islands	0	4	6.8	0	0	0.0	No cases
New Caledonia	0	124	43.4	0	0	0.0	Sporadic cases
Samoa	0	1	0.5	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Global	**5 517 602**	**157 362 408**		**90 242**	**3 277 834**		

*See *Annex: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting variants of concern as of 11 May 2021**

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Afghanistan	Verified	-	-
Albania	Under verification	-	-
Algeria	Verified	-	-
Angola	Verified	Verified	-
Argentina	Verified	-	Verified
Armenia	Under verification	-	-
Aruba	Verified	Verified	Verified
Australia	Verified	Verified	Verified
Austria	Verified	Verified	Verified
Azerbaijan	Verified	-	-
Bahrain	Verified	Verified	-
Bangladesh	Verified	Verified	Under verification*
Barbados	Verified	-	-
Belarus	Verified	-	-
Belgium	Verified	Verified	Verified
Belize	Verified	-	-
Bolivia (Plurinational State of)	Verified	-	-
Bonaire	Verified	-	-
Bosnia and Herzegovina	Under verification	-	-
Botswana	-	Verified	-
Brazil	Verified	Verified	Verified
Brunei Darussalam	Verified	Verified	-
Bulgaria	Verified	-	-
Cabo Verde	Verified	-	-
Cambodia	Verified	-	-

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Cameroon	Verified	Verified	-
Canada	Verified	Verified	Verified
Cayman Islands	Verified	-	-
Central African Republic	Verified*	-	-
Chile	Verified	Verified	Verified
China	Verified	Verified	Verified
Colombia	Verified	-	Verified
Comoros	-	Verified	-
Costa Rica	Verified	Verified	Verified
Côte d'Ivoire	Verified*	Verified*	-
Croatia	Verified	Under verification	-
Cuba	Verified	Verified	-
Curaçao	Verified	-	-
Cyprus	Verified	-	-
Czechia	Verified	Under verification	-
Democratic Republic of the Congo	Under verification	Verified	-
Denmark	Verified	Verified	Verified
Dominican Republic	Verified	-	-
Ecuador	Verified	-	Verified
Egypt	Verified*	-	-
Equatorial Guinea	Verified*	Verified*	-
Estonia	Verified	Under verification	-
Eswatini	-	Verified	-

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Ethiopia	Under verification*	-	-
Faroe Islands	-	-	Verified
Finland	Verified	Verified	Verified
France	Verified	Verified	Verified
French Guiana	Verified	Verified	Verified
French Polynesia	Verified	-	Verified
Gabon	Verified	Under verification*	-
Gambia	Verified	-	-
Georgia	Verified	-	-
Germany	Verified	Verified	Verified
Ghana	Verified	Verified	-
Gibraltar	Under verification	-	-
Greece	Verified	Verified	-
Grenada	Verified		-
Guadeloupe	Verified	Verified	-
Guam	Verified*	-	-
Guinea	Verified*	-	-
Guyana	-	-	Verified
Hungary	Verified	Under verification	-
Iceland	Verified	-	-
India	Verified	Verified	Verified
Indonesia	Verified	Verified	-
Iran (Islamic Republic of)	Verified	Verified	-
Iraq	Verified	-	-
Ireland	Verified	Verified	Under verification

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Israel	Verified	Verified	Under verification
Italy	Verified	Under verification	Verified
Jamaica	Verified	-	-
Japan	Verified	Verified	Verified
Jordan	Verified	Verified	Verified
Kazakhstan	Under verification	Under verification	-
Kenya	Under verification	Verified	-
Kosovo[1]	Verified	-	-
Kuwait	Verified	-	-
Kyrgyzstan	Verified	Verified	-
Lao People's Democratic Republic	Verified	-	-
Latvia	Verified	Verified	Under verification
Lebanon	Verified	-	-
Lesotho	-	Verified	-
Libya	Verified	Verified	-
Liechtenstein	Verified	-	-
Lithuania	Verified	Verified	Under verification*
Luxembourg	Verified	Verified	Under verification
Madagascar	-	Verified	-
Malawi	Verified	Verified	-
Malaysia	Verified	Verified	-
Malta	Verified	Under verification	Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Martinique	Verified	Verified	-
Mauritius	Under verification	Verified	-
Mayotte	Verified	Verified	-
Mexico	Verified	Verified	Verified
Monaco	Verified	Under verification	-
Montenegro	Verified	-	-
Morocco	Verified	-	-
Mozambique	-	Verified	-
Namibia	-	Verified	-
Nepal	Verified	-	-
Netherlands	Verified	Verified	Verified
New Caledonia	Verified	-	-
New Zealand	Verified	Verified	Under verification
Niger	Verified	-	-
Nigeria	Verified	-	-
North Macedonia	Verified	Verified	-
Norway	Verified	Verified	Verified
occupied Palestinian territory	Verified	Verified	-
Oman	Verified	-	-
Pakistan	Verified	Verified	Verified
Panama	Verified	Verified	Verified
Paraguay	-	-	Verified
Peru	Verified	-	Verified
Philippines	Verified	Verified	Verified
Poland	Verified	Under verification	Under verification

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Portugal	Verified	Verified	Under verification
Puerto Rico	Verified	Verified	Verified
Qatar	Verified	Verified	-
Republic of Korea	Verified	Verified	Verified
Republic of Moldova	Under verification	-	-
Réunion	Verified	Verified	Verified
Romania	Verified	Verified	Verified
Russian Federation	Verified	Under verification	-
Rwanda	Under verification	Under verification	-
Saint Barthélemy	Verified	-	-
Saint Lucia	Verified	-	-
Saint Martin	Verified	Verified	-
Saudi Arabia	Verified	-	-
Senegal	Verified	-	-
Serbia	Verified	-	-
Seychelles	-	Verified	-
Singapore	Verified	Verified	Verified*
Sint Maarten	Verified	-	-
Slovakia	Verified	Under verification	-
Slovenia	Verified	Verified	Under verification
South Africa	Verified	Verified	-
Spain	Verified	Verified	Verified
Sri Lanka	Verified	Verified	-
Suriname	Verified	Verified	Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Sweden	Verified	Verified	Under verification
Switzerland	Verified	Verified	Under verification
Thailand	Verified	Verified	Verified*
Togo	Verified	Verified*	-
Trinidad and Tobago	Verified	-	Verified
Tunisia	Verified	Verified*	-
Turkey	Verified	Under verification	Under verification
Turks and Caicos Islands	Verified	-	-
Ukraine	Under verification	Under verification	-
United Arab Emirates	Verified	Verified	Verified
United Kingdom	Verified	Verified	Verified
United Republic of Tanzania	-	Under verification	-
United States of America	Verified	Verified	Verified
Uruguay	Verified	-	Verified
Uzbekistan	Verified	Under verification	-
Venezuela (Bolivarian Republic of)	-	-	Verified
Viet Nam	Verified	Verified	-
Wallis and Futuna	Verified	-	-
Zambia	-	Verified	-
Zimbabwe	-	Under verification	-

*Newly reported in this update.

"Verified" indicates that information for this variant was received by WHO from official sources.

"Under verification" indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available.

**See *Annex: Data, table and figure notes*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 746 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.

- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorizations are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 2 May 2021, 10 am CET

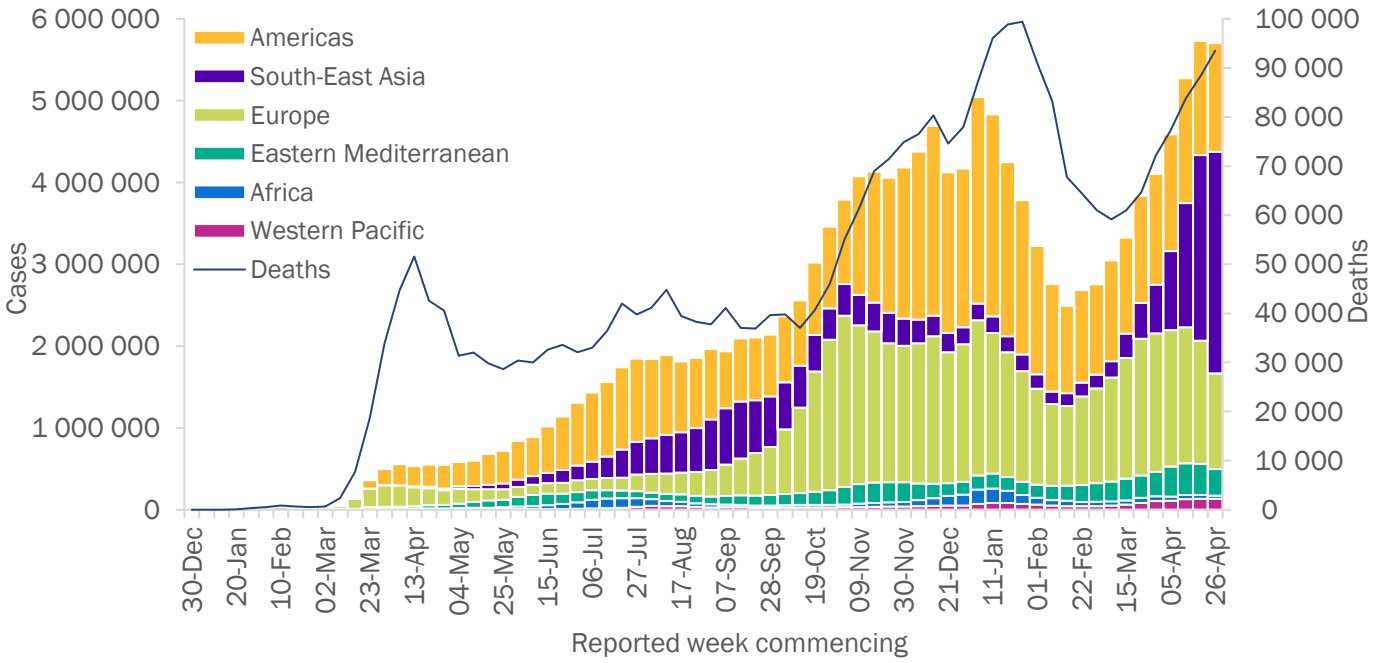
In this edition:

- Global overview
- Special focus: World Hand Hygiene Day, 5 May 2021
- Special focus: WHO partnership with SeroTracker — synthesizing "real-time" seroprevalence data to support global pandemic response
- Special focus: SARS-CoV-2 variants
- WHO regional overviews
- Key weekly updates

Global overview

For the second successive week, the number of COVID-19 cases globally remains at the highest levels since the beginning of the pandemic with over 5.7 million new weekly cases, following nine consecutive weeks of increases (Figure 1). New deaths continue to increase for the seventh consecutive week, with over 93 000 deaths. The South-East Asia Region continues to report marked increases in both case and death incidences (Table 1). India accounts for over 90% of both cases and deaths in the region, as well as 46% of global cases and 25% of global deaths reported in the past week. Case incidence in the regions of Europe, Eastern Mediterranean, Africa and the Americas decreased, while rates in the Western Pacific Region were comparable to the previous week. The number of deaths decreased in Europe, Africa and the Western Pacific region, while slight increases were reported in the Americas and Eastern Mediterranean regions.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 2 May 2021**



**See *Annex: Data, table and figure notes*

The highest numbers of new cases were reported from India (2 597 285 new cases; 20% increase), Brazil (421 933 new cases; 4% increase), the United States of America (345 692 new cases; 15% decrease), Turkey (257 992 new cases; 32% decrease), and France (163 666 new cases; 23% decrease).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 2 May 2021**

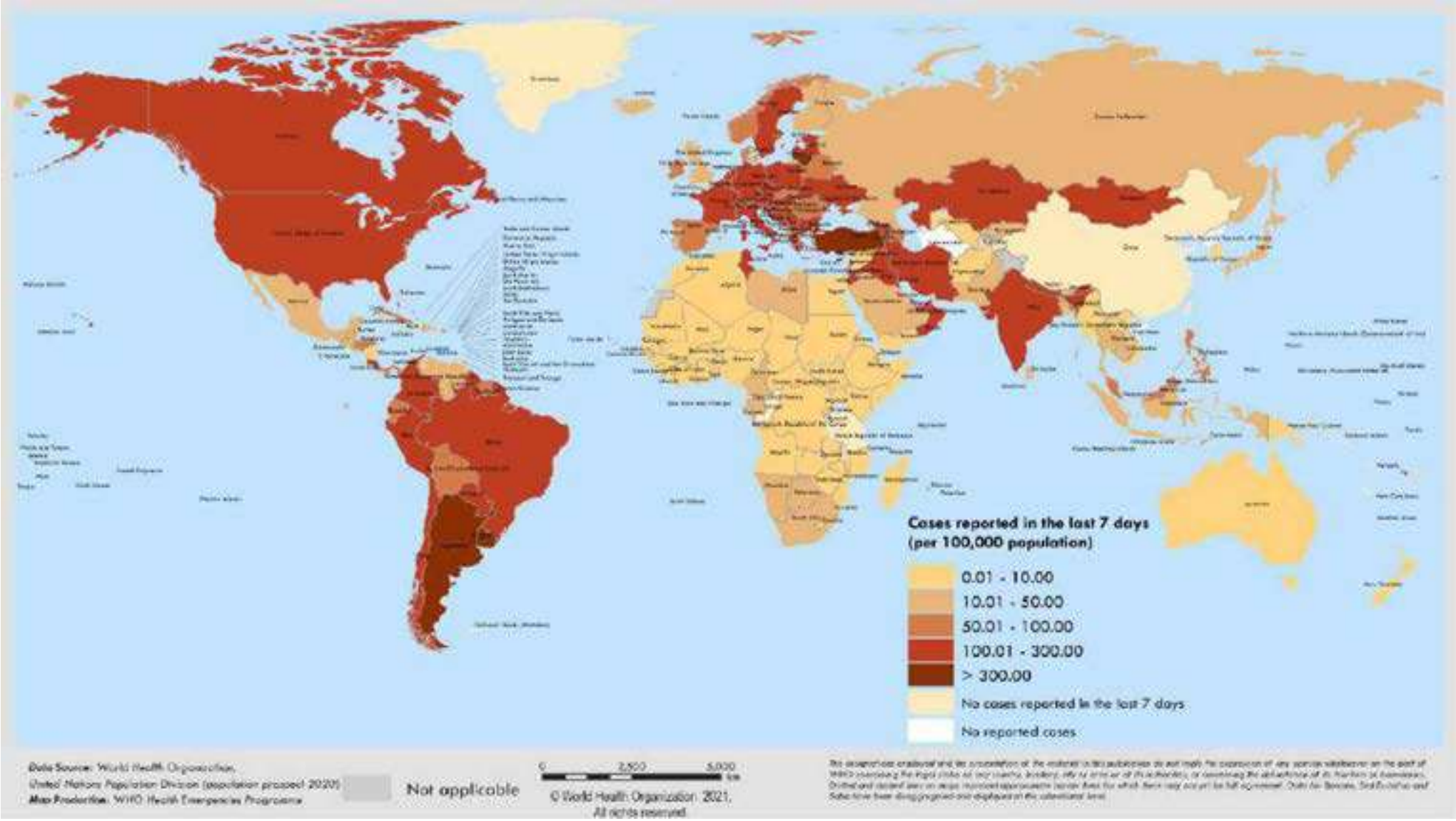
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 330 513 (23%)	-5%	62 281 517 (41%)	36 715 (39%)	1%	1 517 981 (48%)
Europe	1 166 859 (20%)	-22%	51 920 795 (34%)	22 819 (24%)	-12%	1 084 814 (34%)
South-East Asia	2 709 582 (47%)	19%	22 675 230 (15%)	25 262 (27%)	48%	280 220 (9%)
Eastern Mediterranean	324 394 (6%)	-14%	9 147 412 (6%)	6 461 (7%)	1%	183 431 (6%)
Africa	42 090 (1%)	-15%	3 316 851 (2%)	1 000 (1%)	-13%	82 870 (3%)
Western Pacific	132 543 (2%)	1%	2 470 005 (2%)	1 266 (1%)	-3%	37 488 (1%)
Global	**5 705 981 (100%)**	**0%**	**151 812 556 (100%)**	**93 523 (100%)**	**6%**	**3 186 817 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
**See *Annex: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 26 April – 2 May 2021**



**See *Annex: Data, table and figure notes*

Special Focus: World Hand Hygiene Day, 5 May 2021

For many infectious pathogens, including SARS-CoV-2, good hand hygiene practices are tremendously important for reducing the risk of transmission, as part of a wider package of public health and infection prevention and control (IPC) measures. Launched in 2009 and celebrated annually on 5 May, World Hand Hygiene Day (WHHD) aims to promote visibility and sustainability of hand hygiene in healthcare, and to bring people together in support of hand hygiene improvement around the world. This year, in the Year of Health and Care Workers, WHHD 2021 focuses on achieving effective hand hygiene action at the point of care and redouble our efforts to ensure that hand hygiene is a priority for action.

Health workers, patients and families, infection prevention and control practitioners, health facility managers, policy-makers, vaccinators and the general public all have an important role to play and are encouraged to practice good hand hygiene, because:

- Appropriate hand hygiene reduces the risk of infection from many pathogens, including SARS-CoV-2, both in the general population[1] and among health workers.[2]
- Appropriate hand hygiene prevents up to 50% of avoidable infections acquired during health care delivery. [3]
- Investing in hand hygiene yields huge returns – hand hygiene policies can generate economic savings averaging 16 times the cost of their implementation. [4]
- Effective hand hygiene reduces mortality and disabilities due to health care-associated infections. [4]

Effective hand hygiene can be achieved by using the WHO hand hygiene multimodal improvement strategy, which has proved to be highly impactful, leading to a significant improvement in key hand hygiene indicators, a reduction in health care-associated infections and antimicrobial resistance, and substantially helping to stop outbreaks. [5]

Despite overwhelming evidence showing the impact of good hand hygiene practices, many gaps still exist that show inadequate infrastructure and supplies leading to gaps in hand washing behaviour, in particular in health care. For example:

- Globally, 1 in 4 health care facilities do not have access to basic water services. [6]
- 1 in 3 facilities lack hand hygiene resources at the point of care,[6] and in low-income countries only 17% of facilities have continuous availability of alcohol-based hand rub supplies, compared to 75% in high-income countries. [7]
- Compliance with hand hygiene best practices is only around 9% during care of critically ill patients in low-income countries, while levels of hand hygiene compliance for high-income countries rarely exceed 70%.[8,9]

Through the global Hand Hygiene for All initiative, WHO and UNICEF call upon policy and decision makers to invest in hand hygiene improvement as a whole-of-society effort, and show tangible action to strengthen the enabling environment and ensure vital hand hygiene products and WASH services are readily accessible, across the health system, and for everyone in their community.

WHO provides guidance on the resources considerations needed for making such an investment across the health system and WHHD 2021 represents a critical time for everyone to show commitment to hand hygiene improvement.

For more information, see WHHD key facts and figures, and how to get involved in the campaign.

Seconds save lives – Clean your hands!

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Special Focus: WHO partnership with SeroTracker — synthesizing "real-time" seroprevalence data to support global pandemic response

As of 2 May 2021, there have been over 151 million confirmed COVID-19 cases reported to WHO worldwide; however, this does not fully represent the true extent of infection with the SARS-COV-2 virus. This is because current surveillance strategies and testing capacities often do not typically include infected individuals who were asymptomatic, often miss mildly symptomatic cases, those who do not have access to testing. Studies measuring seroprevalence are crucial tools for pandemic surveillance and to provide data to inform public health interventions. These studies are designed to measure antibodies against SARS-CoV-2 in a population at a point in time. They provide a more robust estimate of the true extent of the pandemic, population susceptibility to infection (antibody-mediated immunity), and provide data to estimate other critical parameters (e.g. infection fatality ratios) – all of which are key metrics that inform public health decision-making at local, national and international levels.

To date, more than 950 serosurveys have reported results either through pre-prints or peer-reviewed publications. Most available studies have been conducted in high-income countries and many have not used standardized methods, including the use of standardized protocols or used well-performing antibody tests, making it challenging to compare findings between countries, regions and over time. The WHO is supporting countries through the Unity Studies initiative, which provides technical, operational and financial support for countries around the world, particularly low- and middle-income countries (LMICs), to build research capacity and conduct serosurveys following a standardized protocols and well-performing, easy to use antibody tests protocols, including a population-based, age-stratified seroepidemiological investigation protocol and studies of health care workers.

To support the reporting of available seroprevalence studies, WHO has partnered with SeroTracker – a knowledge hub that tracks, displays, maps and synthesizes SARS-CoV-2 seroprevalence and serosurveillance efforts worldwide.[1–3] Through its partnership with SeroTracker, WHO aims to create the world's largest repository of seroprevalence data, including results from countries performing one or more of the Unity Studies with other SARS-CoV-2 serosurveys. These efforts will help to map COVID-19 infections globally.

Data and information from available SARS-COV-2 seroprevalence studies will be visualized on the SeroTracker digital dashboard and data platform, which will include a webpage dedicated to display research aligned with WHO Unity Studies. The platform will allow users to filter results based on study date, WHO Region, participant demographics; visualize results through maps and graphics; and access study publications.

The WHO-SeroTracker database will additionally be used to regularly synthesize SARS-CoV-2 serosurvey findings to inform public health strategies. Synthesizing findings, through comprehensive meta-analyses across countries and regions, is crucial to understand the global extent of SARS-CoV-2 infection, to better inform decision making, and to identify gaps in knowledge.

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Special Focus: Update on SARS-CoV-2 variants

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 result in changes in transmissibility, clinical presentation and severity, or if they result in changes in public health and social measures (PHSM) implementation by national health authorities. Systems have been established to detect "signals" of potential variants of concern (VOCs) or variants of interest (VOIs) and assess these based on the risk posed to global public health (see also working definitions). National authorities may choose to designate other variants of local interest/concern. Detailed information on currently circulating VOCs and VOIs is available in previously published editions of the Weekly Epidemiological Update. Here we provide a brief update on the geographical distribution of the three VOCs as of 4 May 2021, as well as an update on detected VOIs (Table 2).

As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing, the number of countries/areas/territories (hereafter countries) reporting VOCs and VOIs has continued to increase. Since our last update on 27 April, VOC 202012/01 has been detected in three additional countries, variant 501Y.V2 in ten additional countries, and variant P.1 has been reported in three additional countries. As of 4 May, a total 142 countries have reported VOC 202012/01 (Figure 3), 97 countries variant 501Y.V2 (Figure 4), and 56 countries variant P.1 (Figure 5) – see also Annex 2. The information presented here should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and prioritization of samples for sequencing between countries.

Table 2: SARS-CoV-2 variants of concern (VOC) and variants of interest (VOI), as of 4 May 2021*

	Nextstrain clade	Pango lineage	GISAID clade	Alternate name	First detected in	Earliest samples	Characteristic spike mutations
VOC	20I/501Y.V1	B.1.1.7	GR/501Y.V1	**VOC 202012/01**[†]	United Kingdom	Sep 2020	69/70del, 144del, N501Y, A570D, D614G, P681H, T716I, S982A, D1118H
	20H/**501Y.V2**[†]	B.1.351	GH/**501Y.V2**[†]	VOC 202012/02	South Africa	Aug 2020	D80A, D215G, 241/243del, K417N, E484K, N501Y, D614G, A701V
	20J/501Y.V3	B.1.1.28.1, alias **P.1**[†]	GR/501Y.V3	VOC 202101/02	Brazil and Japan	Dec 2020	L18F, T20N, P26S, D138Y, R190S, K417T, E484K, N501Y, D614G H655Y, T1027I, V1176F
VOI	20A/S.484K	B.1.525	G/484K.V3	-	United Kingdom and Nigeria	Dec 2020	Q52R, A67V, 69/70del, 144del, E484K, D614G, Q677H, F888L
	20C/S.452R	B.1.427/ B.1.429	GH/452R.V1	CAL.20C/L452R	United States of America	Jun 2020	S13I, W152C, L452R, D614G
	20B/S.484K	B.1.1.28.2, alias P.2	GR	-	Brazil	Apr 2020	E484K, D614G, V1176F
	-	B.1.1.28.3, alias P.3	-	PHL-B.1.1.28	Philippines and Japan	Feb 2021	141/143del, E484K, N501Y, D614G P681H, E1092K, H1101Y, V1176F
	20C	B.1.526 with E484K or S477N	GH	-	United States of America	Nov 2020	L5F, T95I, D253G, D614G, A701V, E484K or S477N
	20C	B.1.616	GH	-	France	Jan 2021	H66D, G142V, 144del, D215G, V483A, D614G, H655Y, G669S, Q949R, N1187D
	-	B.1.617	G/452R.V3	-	India	Oct 2020	L452R, D614G, P681R, ±E484Q

[†]*While work is ongoing to establish standardized nomenclature for key variants, these are the names by which WHO will refer to them in this publication.*

Figure 3. Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01, as of 4 May 2021

Figure 4. Countries, territories and areas reporting SARS-CoV-2 variant 501Y.V2, as of 4 May 2021

Figure 5. Countries, territories and areas reporting SARS-CoV-2 variant P.1, as of 4 May 2021

WHO recommendations

Virus evolution is expected and the more SARS-CoV-2 circulates, the more opportunities it has to mutate. Reducing transmission through established and proven disease control methods such as those outlined in the COVID-19 Strategic Preparedness and Response Plan, as well as avoiding introductions into animal populations are crucial aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critical to curb the spread of SARS-CoV-2 and its variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the implementation of PHSM and infection prevention and control (IPC) measures in health facilities has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities. Authorities are also encouraged to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and to detect unusual events.

Additional resources

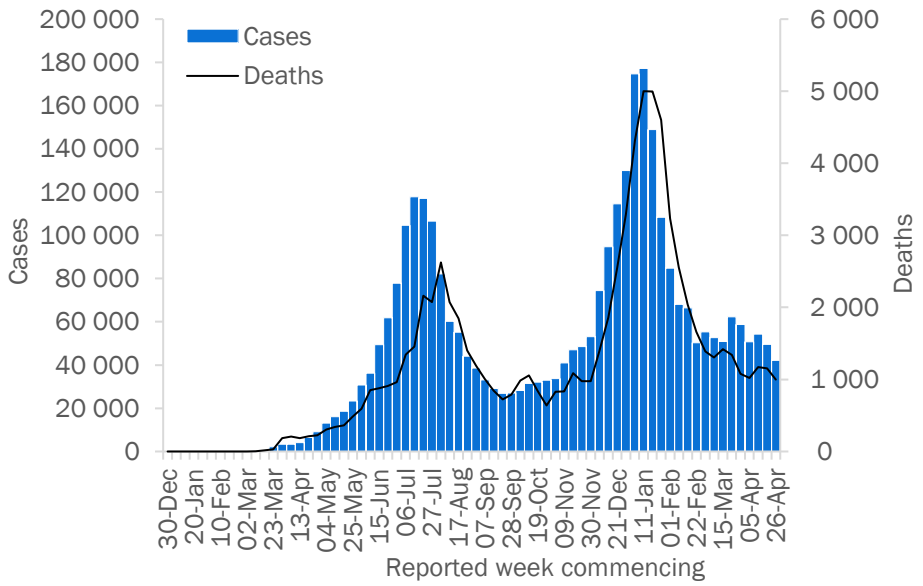
- Working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern
- COVID-19 new variants: Knowledge gaps and research
- COVID-19 Situation Reports from WHO Regional Offices and partners: AFRO, AMRO/PAHO, EMRO, EURO/ECDC, SEARO, WPRO
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19

WHO regional overviews

African Region

The African Region reported over 42 000 new cases and 1000 new deaths, a 15% and a 13% decrease respectively compared to the previous week. Overall, cases and deaths trended downward since peaking in mid-January 2021; however, countries throughout the Region continue to report sustained transmission and increases in some areas. The highest numbers of new cases were reported from South Africa (8472 new cases; 14.3 new cases per 100 000 population; a 3% decrease), Ethiopia (7107 new cases; 6.2 new cases per 100 000; a 34% decrease), and Cameroon (4609 new cases; 17.4 new cases per 100 000; an 8% increase).

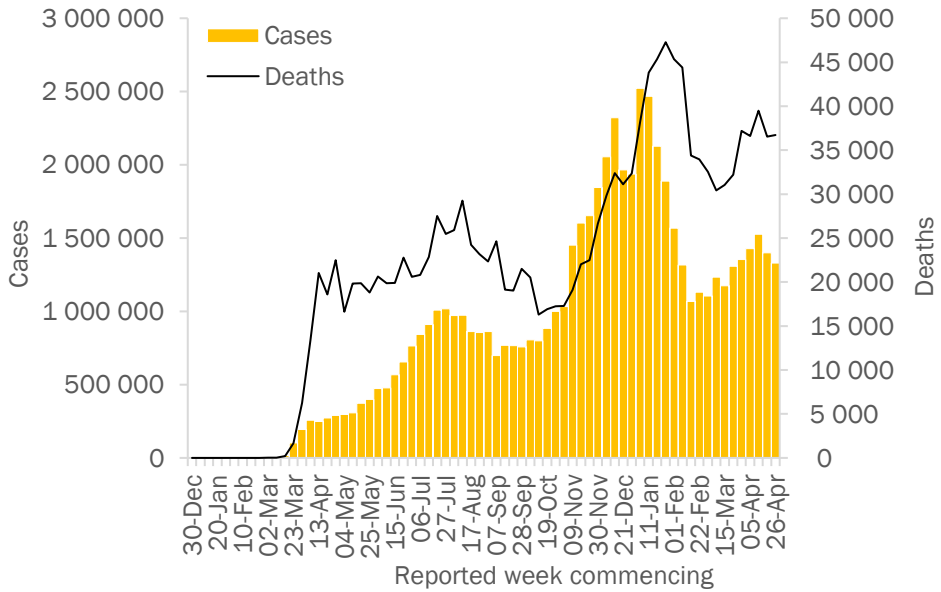
The highest numbers of new deaths were reported from South Africa (281 new deaths; 0.5 new deaths per 100 000 population; a 32% decrease), Ethiopia (178 new deaths; 0.2 new deaths per 100 000; a 12% decrease), and Kenya (141 new deaths; 0.3 new deaths per 100 000; a 1% increase).



Region of the Americas

The Region of the Americas reported over 1.3 million new cases and over 36 000 new deaths, a 5% decrease and a 1% increase respectively compared to the previous week. Case incidence has decreased for a second consecutive week. The highest numbers of new cases were reported from Brazil (421 933 new cases; 198.5 new cases per 100 000; a 4% increase), the United States of America (345 692 new cases; 104.4 new cases per 100 000; a 15% decrease), and Argentina (152 711 new cases; 337.9 new cases per 100 000; an 8% decrease). These three countries account for 69% of cases reported in the region this week.

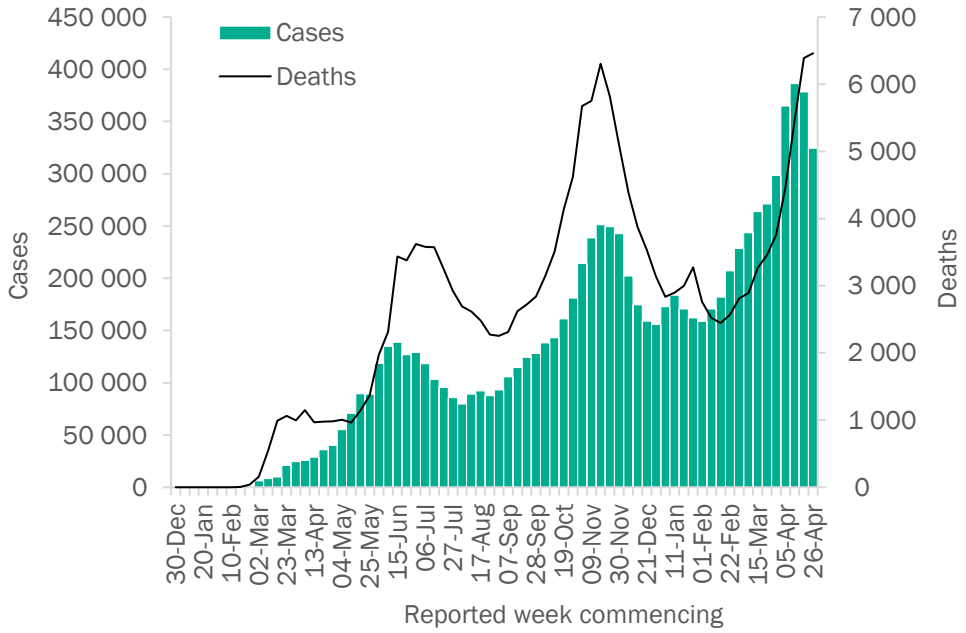
The highest numbers of new deaths were reported from Brazil (17 365 new deaths; 8.2 new deaths per 100 000; a 2% decrease), the United States of America (4728 new deaths; 1.4 new deaths per 100 000; a 5% decrease), and Colombia (3274 new deaths; 6.4 new deaths per 100 000; a 14% increase).



Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 324 000 new cases and over 6400 new deaths, a 14% decrease and a 1% increase respectively compared to the previous week. The number of cases has decreased for a second consecutive week, while deaths continue to increase for a tenth consecutive week. The highest numbers of new cases were reported from the Islamic Republic of Iran (139 118 new cases; 165.6 new cases per 100 000; a 14% decrease), Iraq (45 078 new cases; 112.1 new cases per 100 000; a 17% decrease), and Pakistan (35 503 new cases; 16.1 new cases per 100 000; an 11% decrease).

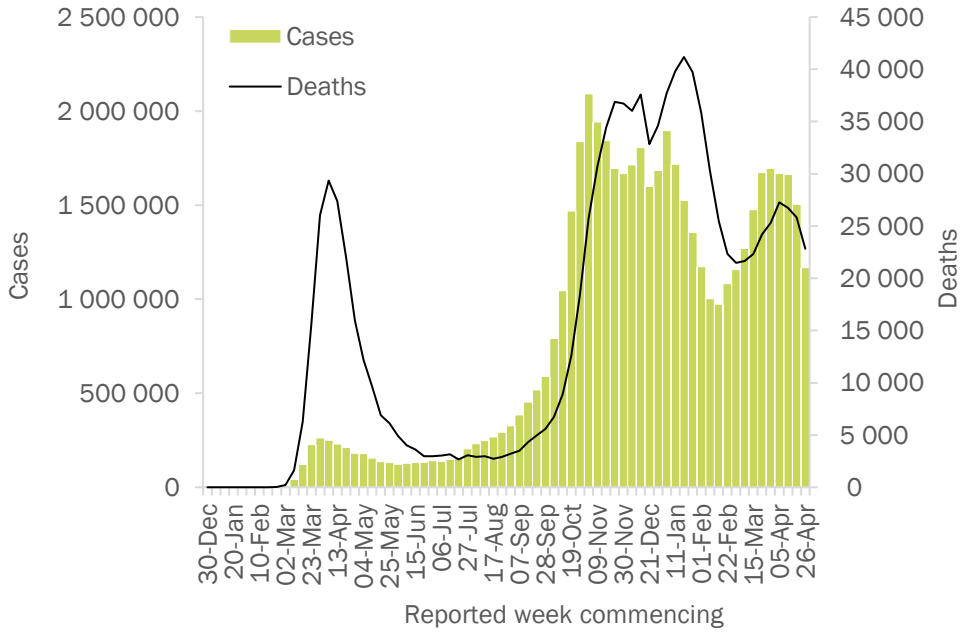
The highest numbers of new deaths were reported from the Islamic Republic of Iran (2970 new deaths; 3.5 new deaths per 100 000; a 6% increase), Pakistan (958 new deaths; 0.4 new deaths per 100 000; a 6% increase), and Tunisia (577 new deaths; 4.9 new deaths per 100 000; a 12% increase).



European Region

The European Region reported over 1.1 million new cases and over 22 000 new deaths, a marked 22% and a 12% decrease respectively compared to the previous week. Cases have decreased for a fourth consecutive week, and deaths have also decreased for a third consecutive week. The highest numbers of new cases were reported from Turkey (257 992 new cases; 305.9 new cases per 100 000; a 32% decrease), France (163 666 new cases; 251.6 new cases per 100 000; a 23% decrease), and Germany (129 404 new cases; 155.6 new cases per 100 000; an 11% decrease).

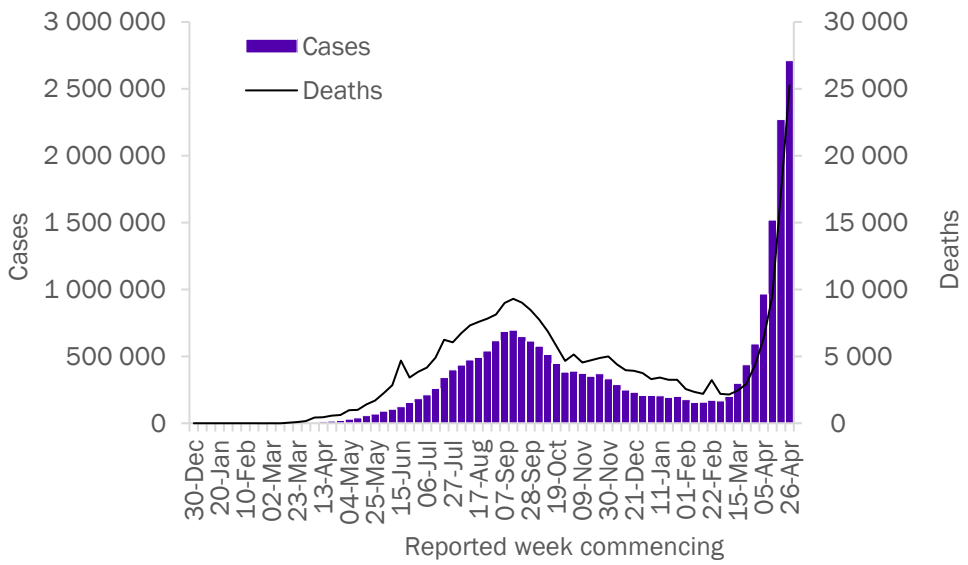
The highest numbers of new deaths were reported from Poland (2653 new deaths; 7.0 new deaths per 100 000; a 22% decrease), the Russian Federation (2630 new deaths; 1.8 new deaths per 100 000; a 1% decrease), and Turkey (2493 new deaths; 3.0 new deaths per 100 000; a 4% increase).



South-East Asia Region

The South-East Asia Region reported over 2.7 million new cases and over 25 000 new deaths, a 19% and a 48% increase respectively compared to the previous week. India is currently driving the vast majority of this upward trend; however, notable increases have also been observed elsewhere in the region, for example in Nepal and Sri Lanka. Among ten countries which have reported cases in this region, eight countries reported an increase in case incidence this week. The highest numbers of new cases were reported from India (2 597 285 new cases; 188.2 new cases per 100 000; a 20% increase), Indonesia (36 088 new cases; 13.2 new cases per 100 000; a 3% decrease), and Nepal (31 806 new cases; 109.2 new cases per 100 000; a 137% increase).

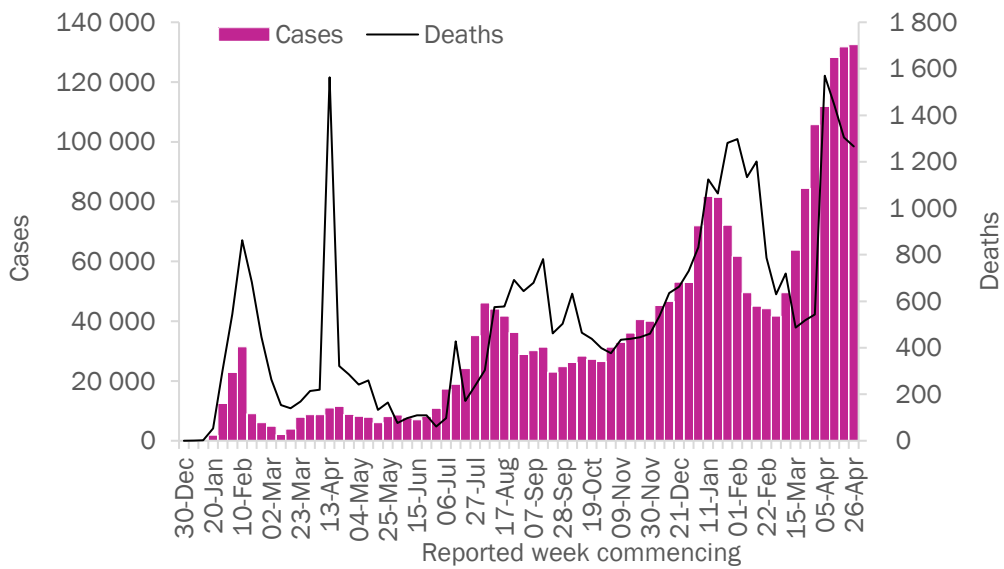
The highest numbers of new deaths were reported from India (23 231 new deaths; 1.7 new deaths per 100 000; a 53% increase), Indonesia (1152 new deaths; 0.4 new deaths per 100 000; a 2% decrease), and Bangladesh (558 new deaths; 0.3 new deaths per 100 000; a 17% decrease).



Western Pacific Region

The Western Pacific Region reported over 132 000 new cases and over 1200 new deaths, a 1% increase and a 3% decrease respectively compared to the previous week. Case incidence continued an upward trend which has been reported for the past eight weeks, while deaths decreased for a third consecutive week. The highest numbers of new cases were reported from the Philippines (57 238 new cases; 52.2 new cases per 100 000; a 10% decrease), Japan (35 084 new cases; 27.7 new cases per 100 000; a 9% increase), and Malaysia (21 342 new cases; 65.9 new cases per 100 000; a 23% increase).

The highest numbers of new deaths were reported from the Philippines (680 new deaths; 0.6 new deaths per 100 000; a 21% decrease), Japan (383 new deaths; 0.3 new deaths per 100 000; a 32% increase), and Malaysia (95 new deaths; 0.3 new deaths per 100 000; a 70% increase).



Key weekly updates

WHO Director-General's key message

Opening remarks at the media briefing on COVID-19 – 3 May 2021:

- More cases of COVID-19 have been reported globally in the past two weeks than during the first six months of the pandemic.
- Sweden will donate 1 million doses of AstraZeneca - Vaxzevria vaccines to COVAX, which follows similar donations by France, New Zealand and Norway, with positive signs from some other countries.
- The Access to COVID-19 Tools Accelerator currently faces a funding gap of 19 billion US dollars, and we estimate that we will need a further 35 to 45 billion dollars next year to vaccinate most adults around the world. The G7 countries could mobilize a substantial portion of these funds themselves and lead a global effort to accelerate vaccination around the world.

COVID-19 Infodemic

- WHO and UN Global Pulse are building a social listening radio tool to aid the COVID-19 infodemic response
- Fighting misinformation in the time of COVID-19, one click at a time

COVID-19 Solidarity Response Fund

- Partner highlights: Young refugees in South Sudan raise awareness of COVID-19 through song
- Partner highlights: Saving lives–helping refugees access health care in Uganda during the COVID-19 lockdown

COVID-19 Vaccines

- COVID-19 Vaccination Financing and Budgeting Q&A
- WHO lists Moderna - mRNA 1273 vaccine for emergency use
- WHO welcomes Sweden's announcement to share COVID-19 vaccine doses with COVAX
- Disability considerations for COVID-19 vaccination: WHO and UNICEF policy brief, 19 April 2021
- COVID-19 Exercise Programme - Drills for Vaccine Deployment

Intra-action Reviews

- Conducting safe onsite COVID-19 intra-action reviews during the pandemic
- Conducting effective online COVID-19 intra-action reviews during the pandemic

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 2 May 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**42 090**	**3 316 851**	**295.6**	**1 000**	**82 870**	**7.4**	
South Africa	8 472	1 582 842	2 668.8	281	54 406	91.7	Community transmission
Ethiopia	7 107	258 062	224.5	178	3 709	3.2	Community transmission
Cameroon	4 609	70 607	266.0	73	1 064	4.0	Community transmission
Kenya	3 735	160 053	297.7	141	2 744	5.1	Community transmission
Cabo Verde	2 343	24 127	4 339.5	19	220	39.6	Community transmission
Madagascar	2 034	37 296	134.7	61	654	2.4	Community transmission
Algeria	1 575	122 311	278.9	63	3 261	7.4	Community transmission
Angola	1 323	26 815	81.6	23	600	1.8	Community transmission
Botswana	1 079	46 934	1 995.8	21	712	30.3	Community transmission
Namibia	983	48 654	1 914.8	19	643	25.3	Community transmission
Rwanda	690	25 225	194.8	7	335	2.6	Community transmission
Ghana	673	92 601	298.0	2	779	2.5	Community transmission
Gabon	642	23 075	1 036.7	1	139	6.2	Community transmission
Nigeria	469	165 153	80.1	2	2 063	1.0	Community transmission
Guinea	444	22 247	169.4	5	144	1.1	Community transmission
Seychelles	432	5 602	5 696.2	1	27	27.5	Community transmission
Democratic Republic of the Congo	406	29 904	33.4	12	768	0.9	Community transmission
Zambia	353	91 670	498.6	6	1 251	6.8	Community transmission
Mali	336	13 896	68.6	23	485	2.4	Community transmission
Uganda	332	41 907	91.6	2	343	0.7	Community transmission
Mozambique	322	69 965	223.8	7	814	2.6	Community transmission
Senegal	306	40 388	241.2	10	1 109	6.6	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Côte d'Ivoire	294	46 114	174.8	5	286	1.1	Community transmission
Mauritania	210	18 402	395.8	1	455	9.8	Community transmission
Togo	205	12 992	156.9	2	123	1.5	Community transmission
Zimbabwe	196	38 260	257.4	12	1 568	10.5	Community transmission
Central African Republic	187	6 411	132.7	3	88	1.8	Community transmission
Burundi	185	4 038	34.0	0	6	0.1	Community transmission
Equatorial Guinea	135	7 694	548.4	5	112	8.0	Community transmission
Benin	101	7 821	64.5	2	99	0.8	Community transmission
Burkina Faso	88	13 319	63.7	1	157	0.8	Community transmission
Malawi	84	34 095	178.2	1	1 148	6.0	Community transmission
Comoros	79	3 908	449.4	0	146	16.8	Community transmission
Gambia	78	5 898	244.1	1	174	7.2	Community transmission
Chad	72	4 824	29.4	1	170	1.0	Community transmission
Niger	70	5 228	21.6	0	191	0.8	Community transmission
South Sudan	68	10 583	94.5	1	115	1.0	Community transmission
Eritrea	66	3 671	103.5	0	10	0.3	Community transmission
Eswatini	18	18 458	1 591.0	0	671	57.8	Community transmission
Liberia	13	2 099	41.5	0	85	1.7	Community transmission
Sierra Leone	13	4 057	50.9	0	79	1.0	Community transmission
Guinea-Bissau	12	3 736	189.8	0	67	3.4	Community transmission
Sao Tome and Principe	12	2 310	1 054.0	0	35	16.0	Community transmission
Lesotho	3	10 731	500.9	0	316	14.8	Community transmission
Congo	0	10 678	193.5	0	144	2.6	Community transmission
Mauritius	0	1 206	94.8	0	16	1.3	Clusters of cases
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories[iii]							

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Réunion	1 038	20 381	2 276.4	7	148	16.5	Community transmission
Mayotte	198	20 094	7 365.4	1	170	62.3	Community transmission
Americas	**1 330 513**	**62 281 517**	**6 089.5**	**36 715**	**1 517 981**	**148.4**	
Brazil	421 933	14 659 011	6 896.4	17 365	403 781	190.0	Community transmission
United States of America	345 692	32 002 328	9 668.3	4 728	570 537	172.4	Community transmission
Argentina	152 711	2 977 363	6 587.7	2 689	63 865	141.3	Community transmission
Colombia	119 180	2 859 724	5 620.2	3 274	73 720	144.9	Community transmission
Canada	54 844	1 219 425	3 230.9	336	24 219	64.2	Community transmission
Peru	53 790	1 799 445	5 457.5	2 465	61 477	186.5	Community transmission
Chile	41 944	1 204 755	6 302.3	715	26 457	138.4	Community transmission
Mexico	21 325	2 344 755	1 818.6	2 403	216 907	168.2	Community transmission
Uruguay	18 891	198 428	5 712.2	389	2 616	75.3	Community transmission
Paraguay	15 943	279 077	3 912.7	670	6 385	89.5	Community transmission
Costa Rica	14 061	250 991	4 927.1	95	3 231	63.4	Community transmission
Ecuador	11 835	384 589	2 179.8	566	18 724	106.1	Community transmission
Bolivia (Plurinational State of)	9 702	305 594	2 618.0	192	12 975	111.2	Community transmission
Venezuela (Bolivarian Republic of)	8 302	197 683	695.2	127	2 136	7.5	Community transmission
Cuba	7 304	107 622	950.2	73	654	5.8	Community transmission
Guatemala	7 170	228 477	1 275.3	148	7 543	42.1	Community transmission
Honduras	6 637	212 333	2 143.8	186	5 281	53.3	Community transmission
Dominican Republic	2 917	266 861	2 460.0	36	3 487	32.1	Community transmission
Panama	2 218	364 576	8 449.5	32	6 232	144.4	Community transmission
Trinidad and Tobago	1 337	10 824	773.4	12	169	12.1	Community transmission
Jamaica	910	45 777	1 545.9	23	779	26.3	Community transmission
El Salvador	880	69 198	1 066.8	30	2 128	32.8	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Guyana	835	13 283	1 688.8	19	296	37.6	Community transmission
Suriname	431	10 363	1 766.5	11	204	34.8	Clusters of cases
Bahamas	403	10 453	2 658.1	3	199	50.6	Clusters of cases
Haiti	136	13 094	114.8	3	254	2.2	Community transmission
Saint Lucia	89	4 552	2 478.9	4	74	40.3	Community transmission
Belize	69	12 668	3 185.9	2	323	81.2	Community transmission
Nicaragua	48	5 498	83.0	1	182	2.7	Community transmission
Barbados	43	3 863	1 344.2	0	44	15.3	Community transmission
Saint Vincent and the Grenadines	34	1 864	1 680.2	1	11	9.9	Community transmission
Antigua and Barbuda	10	1 232	1 258.1	1	32	32.7	Clusters of cases
Grenada	2	161	143.1	0	1	0.9	Sporadic cases
Dominica	1	174	241.7	0	0	0.0	Clusters of cases
Saint Kitts and Nevis	1	45	84.6	0	0	0.0	No cases
Territories[iii]							
Puerto Rico	4 506	131 956	4 612.5	47	2 310	80.7	Community transmission
Guadeloupe	1 707	14 634	3 657.4	34	228	57.0	Community transmission
Martinique	1 381	11 139	2 968.3	13	79	21.1	Community transmission
French Guiana	717	19 543	6 543.1	3	101	33.8	Community transmission
Curaçao	159	12 181	7 423.2	9	108	65.8	Community transmission
Aruba	139	10 608	9 935.7	3	98	91.8	Community transmission
Bermuda	78	2 393	3 842.8	5	28	45.0	Community transmission
United States Virgin Islands	45	3 125	2 992.6	0	27	25.9	Community transmission
Saint Martin	39	1 749	4 524.2	1	14	36.2	Community transmission
Anguilla	35	93	619.9	0	0	0.0	Clusters of cases
Saint Barthélemy	34	988	9 994.9	0	1	10.1	Clusters of cases
Sint Maarten	18	2 230	5 200.3	0	27	63.0	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Turks and Caicos Islands	14	2 390	6 172.8	0	17	43.9	Clusters of cases
Cayman Islands	9	543	826.2	0	2	3.0	Sporadic cases
Bonaire	4	1 531	7 320.1	1	16	76.5	Community transmission
British Virgin Islands	0	194	641.6	0	1	3.3	Clusters of cases
Falkland Islands (Malvinas)	0	63	1 808.8	0	0	0.0	Sporadic cases
Montserrat	0	20	400.1	0	1	20.0	No cases
Saba	0	6	310.4	0	0	0.0	No cases
Saint Pierre and Miquelon	0	25	431.4	0	0	0.0	Sporadic cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	**324 394**	**9 147 412**	**1 251.7**	**6 461**	**183 431**	**25.1**	
Iran (Islamic Republic of)	139 118	2 516 157	2 995.7	2 970	72 090	85.8	Community transmission
Iraq	45 078	1 070 366	2 661.1	281	15 498	38.5	Community transmission
Pakistan	35 503	825 519	373.7	958	17 957	8.1	Community transmission
United Arab Emirates	13 023	521 948	5 277.3	22	1 591	16.1	Clusters of cases
Tunisia	12 162	310 734	2 629.2	577	10 808	91.4	Community transmission
Jordan	11 654	712 077	6 979.0	308	8 871	86.9	Community transmission
Kuwait	9 866	275 270	6 445.7	58	1 569	36.7	Community transmission
Oman	7 975	193 253	3 784.4	68	2 010	39.4	Community transmission
Lebanon	7 893	527 508	7 728.6	186	7 302	107.0	Community transmission
Bahrain	7 662	177 997	10 460.7	28	648	38.1	Community transmission
Saudi Arabia	7 148	418 411	1 201.9	81	6 968	20.0	Community transmission
Egypt	7 014	228 584	223.4	404	13 402	13.1	Clusters of cases
Qatar	4 806	206 302	7 160.6	47	465	16.1	Community transmission
Libya	2 756	177 508	2 583.3	82	3 029	44.1	Community transmission
Morocco	2 525	511 562	1 386.0	38	9 026	24.5	Community transmission
Afghanistan	1 279	60 122	154.4	55	2 637	6.8	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Syrian Arab Republic	819	22 818	130.4	72	1 598	9.1	Community transmission
Somalia	456	13 915	87.6	24	713	4.5	Community transmission
Djibouti	375	11 121	1 125.6	13	145	14.7	Community transmission
Yemen	220	6 329	21.2	54	1 230	4.1	Community transmission
Sudan	195	33 944	77.4	29	2 349	5.4	Clusters of cases
Territories[iii]							
occupied Palestinian territory	6 867	325 967	6 389.7	106	3 525	69.1	Community transmission
Europe	**1 166 859**	**51 920 795**	**5 564.5**	**22 819**	**1 084 814**	**116.3**	
Kosovo [1]	1 560	105 332		60	2 168		Community transmission
Turkey	257 992	4 849 408	5 749.9	2 493	40 504	48.0	Community transmission
France	163 666	5 553 806	8 539.1	1 963	103 994	159.9	Community transmission
Germany	129 404	3 416 822	4 108.4	1 628	83 192	100.0	Community transmission
Italy	86 100	4 035 617	6 766.5	2 012	121 033	202.9	Clusters of cases
Russian Federation	60 686	4 823 255	3 305.1	2 630	110 862	76.0	Clusters of cases
Ukraine	57 909	2 083 180	4 763.3	2 273	44 596	102.0	Community transmission
Netherlands	49 169	1 502 081	8 628.9	131	17 169	98.6	Community transmission
Poland	44 377	2 803 233	7 385.1	2 653	68 068	179.3	Community transmission
Spain	30 950	3 514 942	7 426.0	169	78 080	165.0	Community transmission
Sweden	29 792	973 604	9 427.2	19	14 048	136.0	Community transmission
Belgium	19 669	995 559	8 640.2	260	24 284	210.8	Community transmission
Kazakhstan	19 503	381 078	2 029.5	197	4 542	24.2	Clusters of cases
Czechia	16 038	1 634 114	15 280.7	397	29 343	274.4	Community transmission
The United Kingdom	15 360	4 418 534	6 508.8	107	127 524	187.9	Community transmission
Greece	14 692	346 422	3 232.0	503	10 453	97.5	Community transmission
Hungary	13 374	782 892	8 013.6	1 177	27 802	284.6	Community transmission
Austria	13 195	616 614	6 927.4	157	9 978	112.1	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Serbia	12 959	690 931	9 974.9	190	6 386	92.2	Community transmission
Croatia	12 547	335 173	8 259.2	328	7 182	177.0	Community transmission
Romania	11 850	1 056 572	5 466.3	927	28 194	145.9	Community transmission
Azerbaijan	8 857	320 322	3 159.3	196	4 538	44.8	Clusters of cases
Switzerland	8 763	656 952	7 590.8	36	9 971	115.2	Community transmission
Georgia	8 694	312 445	7 832.3	126	4 151	104.1	Community transmission
Lithuania	8 383	249 680	8 936.0	102	3 950	141.4	Community transmission
Belarus	8 308	359 982	3 809.6	69	2 552	27.0	Community transmission
Bulgaria	7 746	404 846	5 823.9	585	16 444	236.6	Clusters of cases
Denmark	5 035	252 045	4 328.6	15	2 489	42.7	Community transmission
Cyprus	4 796	66 372	7 474.3	15	313	35.2	Clusters of cases
Slovenia	4 696	241 311	11 513.7	33	4 567	217.9	Clusters of cases
Latvia	4 415	119 370	6 257.4	38	2 139	112.1	Community transmission
Armenia	3 575	216 863	7 318.5	121	4 139	139.7	Community transmission
Bosnia and Herzegovina	3 361	198 832	6 060.4	337	8 579	261.5	Community transmission
Ireland	3 233	249 437	5 024.5	34	4 906	98.8	Community transmission
Slovakia	3 187	383 098	7 019.2	271	11 766	215.6	Clusters of cases
Portugal	2 983	836 947	8 128.9	17	16 976	164.9	Clusters of cases
Norway	2 959	112 540	2 096.7	20	756	14.1	Clusters of cases
Uzbekistan	2 616	91 643	273.8	9	652	1.9	Clusters of cases
Estonia	2 470	122 685	9 231.5	25	1 168	87.9	Clusters of cases
North Macedonia	2 307	152 581	7 323.7	241	4 891	234.8	Community transmission
Republic of Moldova	2 262	251 160	6 226.1	117	5 826	144.4	Community transmission
Kyrgyzstan	2 229	96 060	1 472.4	37	1 619	24.8	Clusters of cases
Finland	1 271	86 808	1 571.1	11	914	16.5	Community transmission
Luxembourg	1 195	67 397	10 764.4	7	797	127.3	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Montenegro	839	97 613	15 541.9	38	1 503	239.3	Clusters of cases
Albania	776	131 185	4 558.5	24	2 396	83.3	Clusters of cases
Israel	561	838 535	9 687.8	15	6 365	73.5	Community transmission
Andorra	208	13 232	17 125.5	1	125	161.8	Community transmission
Malta	158	30 307	5 889.8	3	415	80.7	Clusters of cases
Iceland	82	6 472	1 777.4	0	29	8.0	Community transmission
Liechtenstein	51	3 022	7 799.3	0	56	144.5	Sporadic cases
Monaco	28	2 457	6 260.8	1	32	81.5	Sporadic cases
San Marino	19	5 066	14 927.2	1	90	265.2	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Isle of Man	2	1 587	1 866.4	0	29	34.1	No cases
Faroe Islands	1	664	1 358.8	0	1	2.0	Sporadic cases
Jersey	1	3 234	3 000.1	0	69	64.0	Community transmission
Gibraltar	0	4 283	12 712.6	0	94	279.0	Clusters of cases
Greenland	0	31	54.6	0	0	0.0	No cases
Guernsey	0	822	1 275.1	0	14	21.7	Community transmission
South-East Asia	**2 709 582**	**22 675 230**	**1 121.8**	**25 262**	**280 220**	**13.9**	
India	2 597 285	19 557 457	1 417.2	23 231	215 542	15.6	Clusters of cases
Indonesia	36 088	1 672 880	611.6	1 152	45 652	16.7	Community transmission
Nepal	31 806	328 893	1 128.8	162	3 298	11.3	Clusters of cases
Bangladesh	18 184	760 584	461.8	558	11 510	7.0	Community transmission
Thailand	13 524	68 984	98.8	105	245	0.4	Clusters of cases
Sri Lanka	9 276	109 862	513.1	49	687	3.2	Clusters of cases
Maldives	2 616	30 237	5 593.8	2	73	13.5	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Timor-Leste	588	2 396	181.7	0	3	0.2	Clusters of cases
Myanmar	127	142 831	262.5	3	3 209	5.9	Clusters of cases
Bhutan	88	1 106	143.3	0	1	0.1	Sporadic cases
Western Pacific	**132 543**	**2 470 005**	**125.7**	**1 266**	**37 488**	**1.9**	
Philippines	57 238	1 046 637	955.1	680	17 354	15.8	Community transmission
Japan	35 084	597 225	472.2	383	10 296	8.1	Clusters of cases
Malaysia	21 342	411 594	1 271.7	95	1 521	4.7	Community transmission
Mongolia	8 066	37 285	1 137.3	41	115	3.5	Clusters of cases
Cambodia	4 545	14 520	86.8	29	103	0.6	Sporadic cases
Republic of Korea	4 353	123 240	240.4	20	1 833	3.6	Clusters of cases
Lao People's Democratic Republic	574	821	11.3	0	0	0.0	Sporadic cases
Papua New Guinea	536	11 206	125.2	13	115	1.3	Community transmission
Singapore	213	61 179	1 045.7	1	31	0.5	Sporadic cases
China	185	103 649	7.0	2	4 858	0.3	Clusters of cases
Australia	154	29 812	116.9	0	910	3.6	Clusters of cases
Viet Nam	109	2 942	3.0	0	35	0.0	Clusters of cases
Fiji	32	119	13.3	0	2	0.2	Sporadic cases
New Zealand	16	2 261	46.9	0	26	0.5	Clusters of cases
Brunei Darussalam	4	227	51.9	0	3	0.7	Sporadic cases
Solomon Islands	0	20	2.9	0	0	0.0	No cases
Territories[iii]							
Guam	60	7 757	4 596.1	0	136	80.6	Clusters of cases
French Polynesia	24	18 758	6 677.6	0	141	50.2	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	4	168	291.9	0	2	3.5	Pending
Wallis and Futuna	4	453	4 028.1	2	7	62.2	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Marshall Islands	0	4	6.8	0	0	0.0	No cases
New Caledonia	0	124	43.4	0	0	0.0	Sporadic cases
Samoa	0	1	0.5	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Global	**5 705 981**	**151 812 556**		**93 523**	**3 186 817**		

*See *Annex: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting variants of concern as of 4 May 2021**

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Afghanistan	Verified	-	-
Albania	Under verification	-	-
Algeria	Verified	-	-
Angola	Verified	Verified	-
Argentina	Verified	-	Verified
Armenia	Under verification	-	-
Aruba	Verified	Verified	Verified
Australia	Verified	Verified	Verified
Austria	Verified	Verified	Verified
Azerbaijan	Verified	-	-
Bahrain	Verified	Verified*	-
Bangladesh	Verified	Verified	-
Barbados	Verified	-	-
Belarus	Verified	-	-
Belgium	Verified	Verified	Verified
Belize	Verified	-	-
Bolivia (Plurinational State of)	Verified	-	-
Bonaire	Verified	-	-
Bosnia and Herzegovina	Under verification	-	-
Botswana	-	Verified	-
Brazil	Verified	Verified	Verified
Brunei Darussalam	Verified	Verified	-
Bulgaria	Verified	-	-
Cabo Verde	Verified	-	-
Cambodia	Verified	-	-

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Cameroon	Under verification*	Verified	-
Canada	Verified	Verified	Verified
Cayman Islands	Verified	-	-
Chile	Verified	Verified	Verified
China	Verified	Verified	Verified
Colombia	Verified	-	Verified
Comoros	-	Verified	-
Costa Rica	Verified	Verified	Verified
Croatia	Verified	Under verification	-
Cuba	Verified	Verified	-
Curaçao	Verified	-	-
Cyprus	Verified	-	-
Czechia	Verified	Under verification	-
Democratic Republic of the Congo	Under verification	Verified	-
Denmark	Verified	Verified	Verified
Dominican Republic	Verified	-	-
Ecuador	Verified	-	Verified
Estonia	Verified	Under verification	-
Eswatini	-	Verified	-
Faroe Islands	-	-	Verified
Finland	Verified	Verified	Verified
France	Verified	Verified	Verified
French Guiana	Verified	Verified	Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
French Polynesia	Verified	-	Verified
Gabon	Under verification*	-	-
Gambia	Verified	-	-
Georgia	Verified	-	-
Germany	Verified	Verified	Verified
Ghana	Verified	Verified	-
Gibraltar	Under verification	-	-
Greece	Verified	Verified	-
Grenada	Verified	-	-
Guadeloupe	Verified	Verified*	-
Guyana	-	-	Verified
Hungary	Verified	Under verification	-
Iceland	Verified	-	-
India	Verified	Verified	Verified
Indonesia	Verified	Verified*	-
Iran (Islamic Republic of)	Verified	Verified*	-
Iraq	Verified	-	-
Ireland	Verified	Verified	Under verification
Israel	Verified	Verified	Under verification*
Italy	Verified	Under verification	Verified
Jamaica	Verified	-	-
Japan	Verified	Verified	Verified
Jordan	Verified	Verified	Verified
Kazakhstan	Under verification	Under verification	-

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Kenya	Under verification	Verified	-
Kosovo[1]	Verified	-	-
Kuwait	Verified	-	-
Kyrgyzstan	Verified	Verified	-
Lao People's Democratic Republic	Verified	-	-
Latvia	Verified	Verified	Under verification*
Lebanon	Verified	-	-
Lesotho	-	Verified	-
Libya	Verified	Verified	-
Liechtenstein	Verified	-	-
Lithuania	Verified	Verified	-
Luxembourg	Verified	Verified	Under verification
Madagascar	-	Verified*	-
Malawi	Verified	Verified	-
Malaysia	Verified	Verified	-
Malta	Verified	Under verification	Verified
Martinique	Verified	Verified*	-
Mauritius	Under verification	Under verification*	-
Mayotte	Verified	Verified	-
Mexico	Verified	Verified*	Verified
Monaco	Verified	Under verification	-
Montenegro	Verified	-	-
Morocco	Verified	-	-
Mozambique	-	Verified	-

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Namibia	-	Verified	-
Nepal	Verified	-	-
Netherlands	Verified	Verified	Verified
New Caledonia	Verified	-	-
New Zealand	Verified	Verified	Under verification
Niger	Under verification*	-	-
Nigeria	Verified	-	-
North Macedonia	Verified	Verified	-
Norway	Verified	Verified	Verified
occupied Palestinian territory	Verified	Verified	-
Oman	Verified	-	-
Pakistan	Verified	Under verification*	Under verification*
Panama	Verified	Verified	Verified
Paraguay	-	-	Verified
Peru	Verified	-	Verified
Philippines	Verified	Verified	Verified
Poland	Verified	Under verification	Under verification
Portugal	Verified	Verified	Under verification
Puerto Rico	Verified	Verified	Verified
Qatar	Verified	Verified	-
Republic of Korea	Verified	Verified	Verified
Republic of Moldova	Under verification	-	-
Réunion	Verified	Verified	Verified
Romania	Verified	Verified	Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Russian Federation	Verified	Under verification	-
Rwanda	Under verification	Under verification	-
Saint Barthélemy	Verified	-	-
Saint Lucia	Verified	-	-
Saint Martin	Verified	Verified	-
Saudi Arabia	Verified	-	-
Senegal	Verified	-	-
Serbia	Verified	-	-
Seychelles	-	Under verification*	-
Singapore	Verified	Verified	-
Sint Maarten	Verified	-	-
Slovakia	Verified	Under verification	-
Slovenia	Verified	Verified	Under verification
South Africa	Verified	Verified	-
Spain	Verified	Verified	Verified
Sri Lanka	Verified	Verified	-
Suriname	Verified	Verified	Verified
Sweden	Verified	Verified	Under verification
Switzerland	Verified	Verified	Under verification
Thailand	Verified	Verified	-
The United Kingdom	Verified	Verified	Verified
Togo	Verified	-	-
Trinidad and Tobago	Verified	-	Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Tunisia	Verified	-	-
Turkey	Verified	Under verification	Under verification
Turks and Caicos Islands	Verified	-	-
Ukraine	Under verification	Under verification	-
United Arab Emirates	Verified	Verified	Verified
United Republic of Tanzania	-	Under verification	-
United States of America	Verified	Verified	Verified
Uruguay	Verified	-	Verified
Uzbekistan	Verified	Under verification	-
Venezuela (Bolivarian Republic of)	-	-	Verified
Viet Nam	Verified	Verified	-
Wallis and Futuna	Verified	-	-
Zambia	-	Verified	-
Zimbabwe	-	Verified	-

*Newly reported in this update.
"Verified" indicates that information for this variant was received by WHO from official sources.
"Under verification" indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available.
Variant P.1 for Saint Martin was excluded this week based on further information received.
**See *Annex: Data, table and figure notes*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 746 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.

- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorizations are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 25 April 2021, 10 am CET

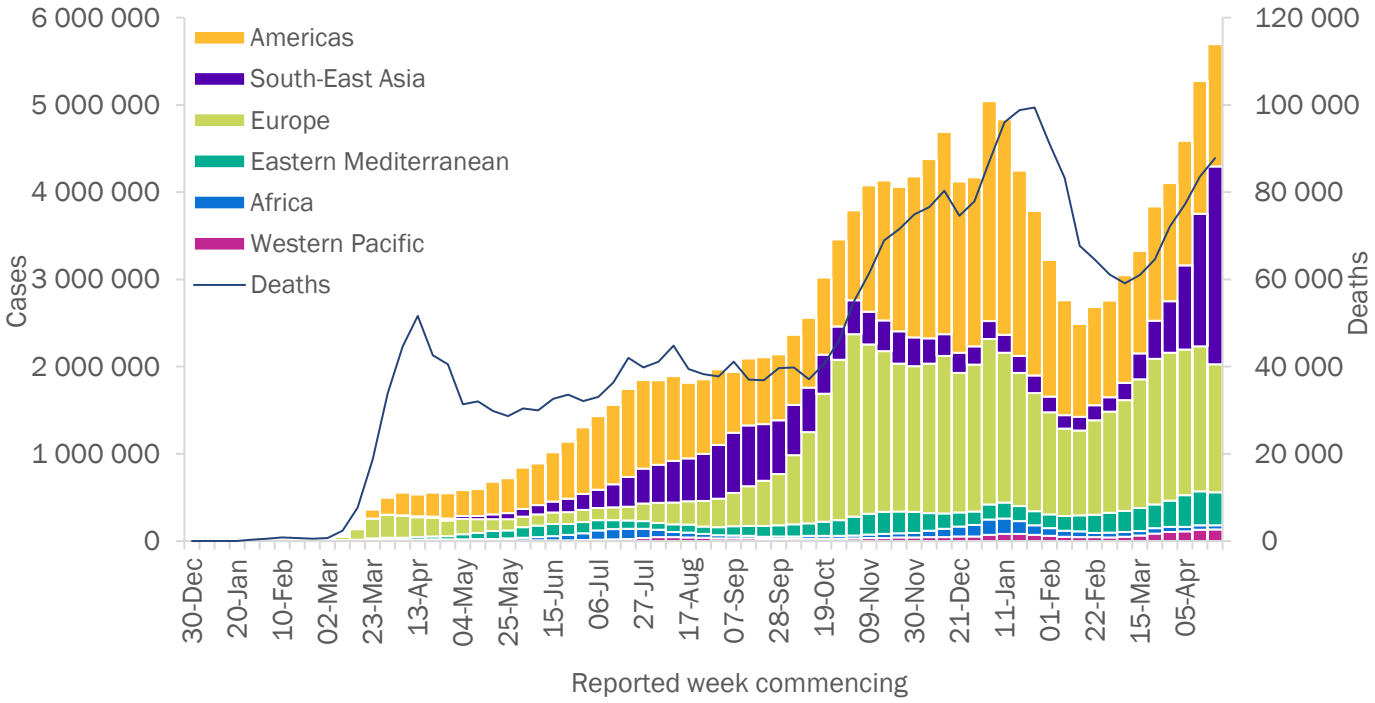
In this edition:

- Global overview
- Special focus: SARS-CoV-2 variants
- WHO regional overviews
- Key weekly updates

Global overview

Globally, new COVID-19 cases increased for the ninth consecutive week, with nearly 5.7 million new cases reported in the last week – surpassing previous peaks (Figure 1). The number of new deaths increased for the sixth consecutive week, with over 87 000 new deaths reported. This week, all regions are reporting decreases in case incidence apart from the South-East Asia and Western Pacific regions. For the third consecutive week, the South-East Asia region reported the highest relative increases in both case and death incidences (Table 1). While a number of countries in the region are reporting upward trends, India accounts for the vast majority of cases from this regional trend and 38% of global cases reported in the past week. Similarly, all but two regions, South-East Asia and Eastern Mediterranean, reported declines in new deaths this week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 25 April 2021**



**See *Annex: Data, table and figure notes*

The highest numbers of new cases were reported from India (2 172 063 new cases; 52% increase), the United States of America (406 001 new cases; 15% decrease), Brazil (404 623 new cases; 12% decrease), Turkey (378 771 new cases; 9% decrease), and France (211 674 new cases; 9% decrease).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 25 April 2021**

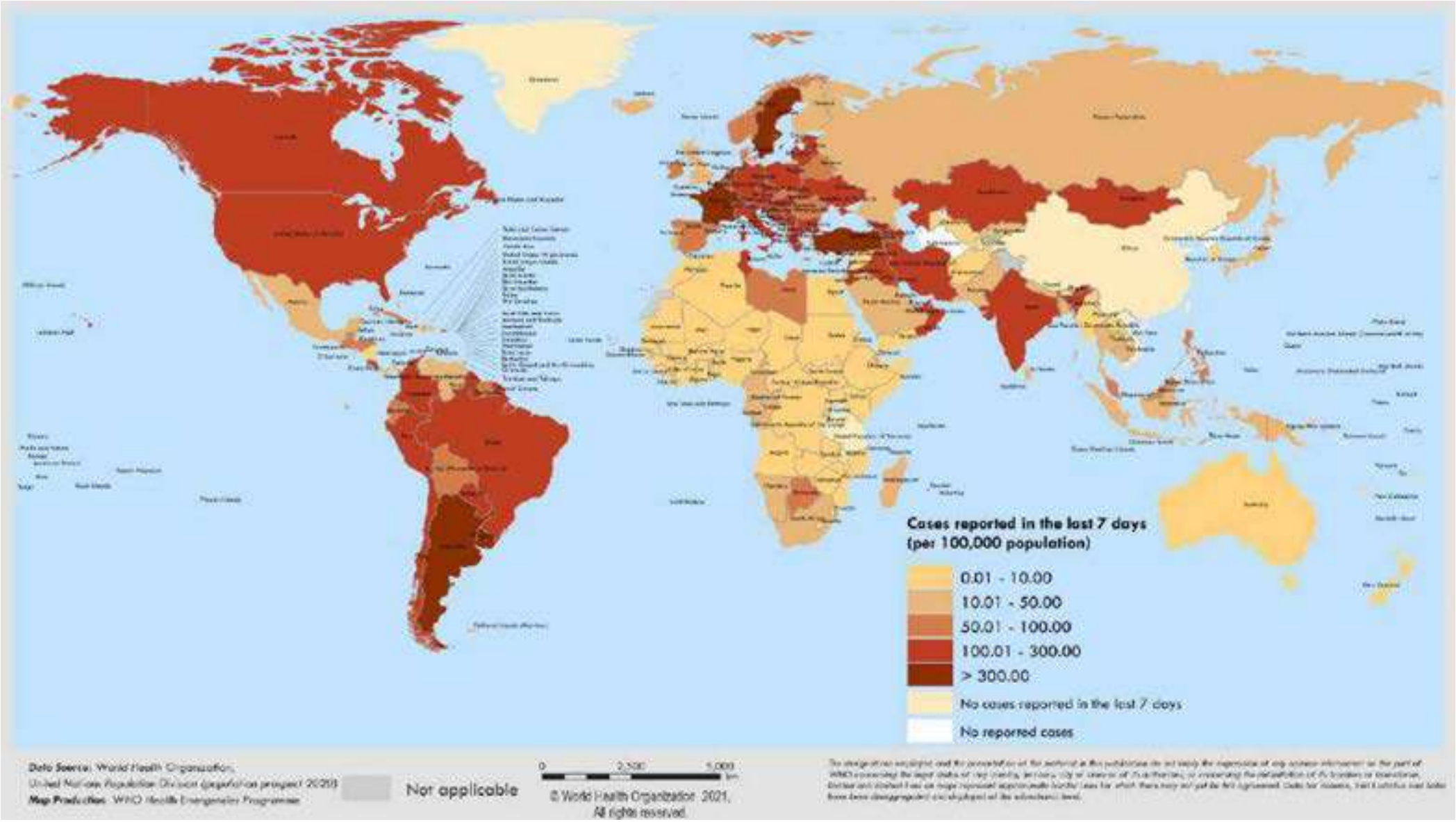
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days*	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days*	Cumulative deaths (%)
Americas	1 400 004 (25%)	-8%	60 951 004 (42%)	36 530 (42%)	-7%	1 481 266 (48%)
Europe	1 466 680 (26%)	-12%	50 714 995 (35%)	25 341 (29%)	-5%	1 061 218 (34%)
South-East Asia	2 269 114 (40%)	49%	19 965 648 (14%)	17 126 (19%)	81%	254 958 (8%)
Eastern Mediterranean	378 248 (7%)	-2%	8 822 942 (6%)	6 370 (7%)	17%	176 950 (6%)
Africa	49 453 (1%)	-9%	3 274 714 (2%)	1 155 (1%)	-1%	81 870 (3%)
Western Pacific	131 777 (2%)	3%	2 337 462 (2%)	1 304 (1%)	-10%	36 222 (1%)
Global	**5 695 277 (100%)**	**8%**	**146 067 511 (100%)**	**87 826 (100%)**	**5%**	**3 092 497 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
**See *Annex: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 19-25 April 2021**



**See *Annex: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 variants

WHO, in collaboration with national authorities, institutions and researchers, continues to monitor SARS-CoV-2 variants of interest (VOIs) and variants of concern (VOCs), and assess these and other emerging variants based on the risk posed to global public health, including impacts on epidemiology and public health and social measures (PHSM). Here we provide an update on the geographical distribution, and emerging evidence surrounding phenotypic characteristics of designated VOIs and VOCs (Tables 2).

As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing and sharing full genome sequences with publicly available platforms such as GISAID, the number of countries/areas/territories (hereafter countries) reporting VOCs continues to increase. Since our last update on 20 April, VOC 202012/01 has been detected in three additional countries, variant 501Y.V2 in three additional countries, and variant P.1 in two additional countries. As of 27 April, a total 139 countries have reported VOC 202012/01 (Figure 3), 87 countries VOC 501Y.V2 (Figure 4), and 54 countries VOC P.1 (Figure 5) – see also Annex 2. These distributions should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and prioritization of samples for sequencing between countries.

Table 2: SARS-CoV-2 variants of interest (VOI) and variants of concern (VOC), as of 27 April 2021

	Nextstrain clade	Pango lineage	GISAID clade	Alternate name	First detected in	Earliest samples	Characteristic spike mutations
VOC	20I/501Y.V1	B.1.1.7	GR/501Y.V1	**VOC 202012/01**[†]	United Kingdom	Sep 2020	69/70del, 144del, N501Y, A570D, D614G, P681H, T716I, S982A, D1118H
	20H/**501Y.V2**[†]	B.1.351	GH/**501Y.V2**[†]	VOC 202012/02	South Africa	Aug 2020	D80A, D215G, 241/243del, K417N, E484K, N501Y, D614G, A701V
	20J/501Y.V3	B.1.1.28.1, alias **P.1**[†]	GR/501Y.V3	VOC 202101/02	Brazil and Japan	Dec 2020	L18F, T20N, P26S, D138Y, R190S, K417T, E484K, N501Y, D614G H655Y, T1027I, V1176F
VOI	20A/S.484K	B.1.525	G/484K.V3	-	United Kingdom and Nigeria	Dec 2020	Q52R, A67V, 69/70del, 144del, E484K, D614G, Q677H, F888L
	20C/S.452R	B.1.427/ B.1.429	GH/452R.V1	CAL.20C/L452R	United States of America	Jun 2020	S13I, W152C, L452R, D614G
	20B/S.484K	B.1.1.28.2, alias P.2	GR	-	Brazil	Apr 2020	E484K, D614G, V1176F
	-	B.1.1.28.3, alias P.3	-	PHL-B.1.1.28	Philippines and Japan	Feb 2021	141/143del, E484K, N501Y, D614G P681H, E1092K, H1101Y, V1176F
	20C	B.1.526 with E484K or S477N	GH	-	United States of America	Nov 2020	L5F, T95I, D253G, D614G, A701V, E484K or S477N
	20C	B.1.616	GH	-	France	Jan 2021	H66D, G142V, 144del, D215G, V483A, D614G, H655Y, G669S, Q949R, N1187D
	-	**B.1.617**[†]	G/452R.V3	-	India	Oct 2020	L452R, D614G, P681R, ±E484Q

[†]*While work is ongoing to establish standardized nomenclature for key variants, these are the names by which WHO will refer to them in this publication.*

Figure 3. Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01, as of 27 April 2021

Figure 4. Countries, territories and areas reporting SARS-CoV-2 variant 501Y.V2, as of 27 April 2021

Figure 5. Countries, territories and areas reporting SARS-CoV-2 variant P.1, as of 27 April 2021

Vaccine performance against VOCs

Available evidence on vaccine performance against VOCs have been highlighted in previous editions of the Weekly Epidemiological Update, most recently 13 April, and are summarised in Table 3.

Table 3: Summary of vaccine performance against variants of concern (VOC) relative to ancestral stains

VOC 202012/01 (B.1.1.7)	501Y.V2 (B.1.351)	P.1 (B.1.1.28.1)
Efficacy/effectiveness against disease or infection		
Protection retained against disease: • No/minimal loss: AstraZeneca-Vaxzevria, Novavax-Covavax, Pfizer BioNTech-Comirnaty[1-10] Asymptomatic infection: • No/minimal loss: Pfizer BioNTech-Comirnaty[11,12] • Moderate/substantial loss (inconclusive, limited sample size): AstraZeneca-Vaxzevria[2]	Reduced protection against disease, limited evidence Severe disease: • No/minimal loss: Janssen Ad26.COV 2.5[33] Mild-moderate disease: • Moderate loss: Janssen-Ad26.COV 2.5, Novavax-Covavax[33,34] • Substantial loss (Inconclusive, limited sample size): AstraZeneca-Vaxzevria[35] Asymptomatic infection: • No evidence	Limited evidence • No/minimal loss: Sinovac-CoronaVac [42]
Neutralization		
• No/minimal loss: Bharat-Covaxin, Gamaleya-Sputnik V, Moderna-mRNA-1273, Novavax-Covavax, Pfizer BioNTech-Comirnaty, Beijing CNBG-BBIBP-CorV, Sinovac-CoronaVac[13-32] • Minimal/moderate loss: AstraZeneca-Vaxzevria[2,28]	• Minimal/modest loss: Beijing CNBG-BBIBP-CorV, Sinovac-CoronaVac[36,37] • Minimal to large loss: Moderna-mRNA-1273, Pfizer BioNTech-Comirnaty[13,14,18-20,22-25,27-30,36,38-41] • Moderate to substantial loss: AstraZeneca-Vaxzevria, Gamaleya-Sputnik V, Novavax-Covavax[20,28,31,40]	• No/Minimal reduction: AstraZeneca-Vaxzevria, Sinovac-CoronaVac[28,43] • Minimal/moderate reduction: Moderna-mRNA-1273, Pfizer BioNTech-Comirnaty [14,15,22,25,27,28,39,41,43,44]

Further to this, there is growing real-world evidence of the effectiveness of Pfizer BioNTech-Comirnaty vaccine against symptomatic disease as well as severe disease in health workers and adults in the United Kingdom and Israel during times when VOC 202012/01 was circulating or dominant, providing support for neutralization and vaccine efficacy (VE) results. Real-world evidence also points to high effectiveness against asymptomatic infection.[3-11] Analysis of nationwide surveillance data in Israel reported a VE of 94.1% (93.5-94.6) against asymptomatic infection ≥14 days post second dose among a large cohort of adults 16 years and older.[11] A second study reported a four-fold decrease in the risk of asymptomatic infection ≥12 days post dose one among health workers in the United Kingdom.[12]

Two effectiveness studies conducted in the United Kingdom have reported VOC 202012/01-specific VE estimates for two doses of Pfizer BioNTech-Comirnaty, and found no difference in effectiveness of the vaccine against disease caused by VOC 202012/01 as compared to other variants.[3, 9]

There is also growing real-world evidence showing a single dose of AstraZeneca-Vaxzevria is effective against symptomatic disease and infection in VOC 202012/01 settings.[3,6-8] Data is currently lacking on the effectiveness of two doses of AstraZeneca. Although moderate to substantial loss was observed with the AstraZeneca-Vaxzevria vaccine, the confidence intervals are broad and caution should be taken interpreting the results, given the limited sample size.[2]

Phase III clinical trial results from South Africa show vaccine efficacy of Janssen-Ad26.COV 2.5 vaccine to be 52% (95% CI: 30.3-67.4) against moderate to severe/critical disease when variant 501Y.V2 made up 95% of sequenced virus. Efficacy against severe critical disease was 73.1% (40.0-89.4), comparable to that found in the USA.[33] Although moderate to substantial loss was observed with the AstraZeneca-Vaxzevria vaccine, the confidence intervals are broad and caution should be taken interpreting the results, given the limited sample size.[35]

Variants of interest B.1.617

Emerging SARS-CoV-2 variants within Pango lineage B.1.617 were recently reported as a VOI from India and has recently been designated as VOIs by WHO. As of 27 April, over 1200 sequences have been uploaded to GISAID and assigned to lineage B.1.617 (collectively) from at least 17 countries; most sequences were uploaded from India, the United Kingdom, USA and Singapore.[45] However, this lineage comprises several sub-lineages, including B.1.617.1, B.1.617.2 and B.1.617.3, which slightly differ by their characteristic mutations. Both B.1.617.1 and B.1.617.2 were first identified in India in December 2020, and have been detected at increasing prevalence concurrent to the major upsurge observed in the country. B.1.617.3 was first detected in India in October 2020, but relatively fewer viruses matching this sub-lineage have been reported to date.

B.1.617 includes several mutations present in other VOIs / VOCs that have been associated with phenotypic impacts. Three characteristic mutations of this variant include L452R, P681R, and E484Q (the latter observed in sub-lineages B.1.617.1 and B.1.617.3). L452R has been identified in another VOI, B.1.427/ B.1.429, which has been associated with increased transmissibility, a reduction in neutralization by some (but not all) monoclonal antibody treatments, and a moderate reduction in neutralization in post-vaccination sera in the USA.[46] P681R is adjacent to the furin cleavage site, and (together with other mutations) may enhance binding and subsequent cleavage of the spike protein and enhances systemic infection and membrane fusion; potentially resulting in enhanced transmission.[47] Laboratory studies suggest that convalescent samples from individuals who had natural infection may have reduced neutralization against variants with an E484Q mutation.[48] Preliminary laboratory studies of a small number of convalescent sera samples of COVID-19 cases (n=17) and recipients of Novavax-Covaxin (n=28) were able to neutralize B.1.617.[49]

In India, heterogeneity in B.1.617 geographic distribution is observed across regions, with co-circulation of other VOCs (including VOC 202012/01 and 501Y.V2) and other variants (e.g., B.1.618), which collectively may be playing a role in the current resurgence in this country. Indeed, studies have highlighted that the spread of

the second wave has been much faster than the first.[50] Preliminary modelling by WHO based on sequences submitted to GISAID suggest that B.1.617 has a higher growth rate than other circulating variants in India, suggesting potential increased transmissibility, with other co-circulating variants also demonstrating increased transmissibility. Other drivers may include challenges around the implementation and adherence to public health and social measures (PHSM), and social gatherings (including mass gatherings during cultural and religious celebrations, and elections). Further investigation is needed to understand the relative contribution of these factors.

It remains unclear how generalizable laboratory-based studies of limited sample sizes, as well as studies of other variants with similar key mutations, are to the wider circulating B.1.617 variants. Further robust studies into the phenotypic impacts of these variants, including impacts on epidemiological characteristics (transmissibility, severity, reinfection risk, etc.) and impact on countermeasures, are urgently needed.

WHO recommendations

Virus evolution is expected and the more SARS-CoV-2 circulates, the more opportunities it has to mutate. Reducing transmission through established and proven disease control methods such as those outlined in the COVID-19 Strategic Preparedness and Response Plan, as well as avoiding introductions into animal populations are crucial aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critical to curb the spread of SARS-CoV-2 and its variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the implementation of PHSM and infection prevention and control (IPC) measures in health facilities has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities. Authorities are also encouraged to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and to detect unusual events.

Additional resources

- Working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern
- COVID-19 new variants: Knowledge gaps and research
- COVID-19 Situation Reports from WHO Regional Offices and partners: AFRO, AMRO/PAHO, EMRO, EURO/ECDC, SEARO, WPRO
- PAHO COVID-19 Situation Reports
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19

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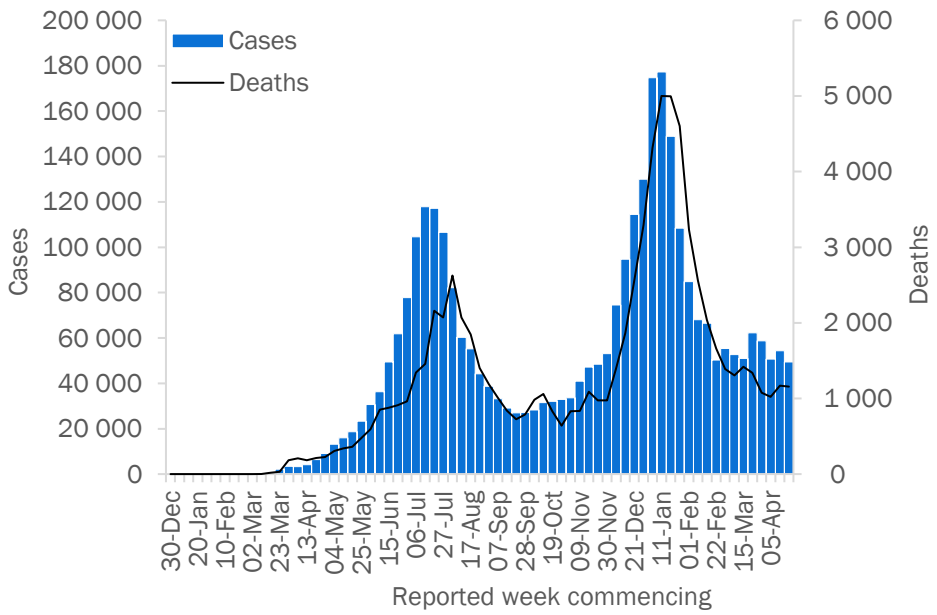
WHO regional overviews

African Region

The African Region reported over 49 000 new cases and over 1100 new deaths, a 9% and a 1% decrease respectively compared to the previous week. The number of weekly cases continues to oscillate over the last nine weeks, with an overall decreasing trend in deaths observed since the peak in mid-January. The highest numbers of new cases were reported from Ethiopia (10 719 new cases; 9.3 new cases per 100 000 population; a 17% decrease), South Africa (8690 new cases; 14.7 new cases per 100 000; a 7% increase), and Kenya (5031 new cases; 9.4 new cases per 100 000; an 18% decrease).

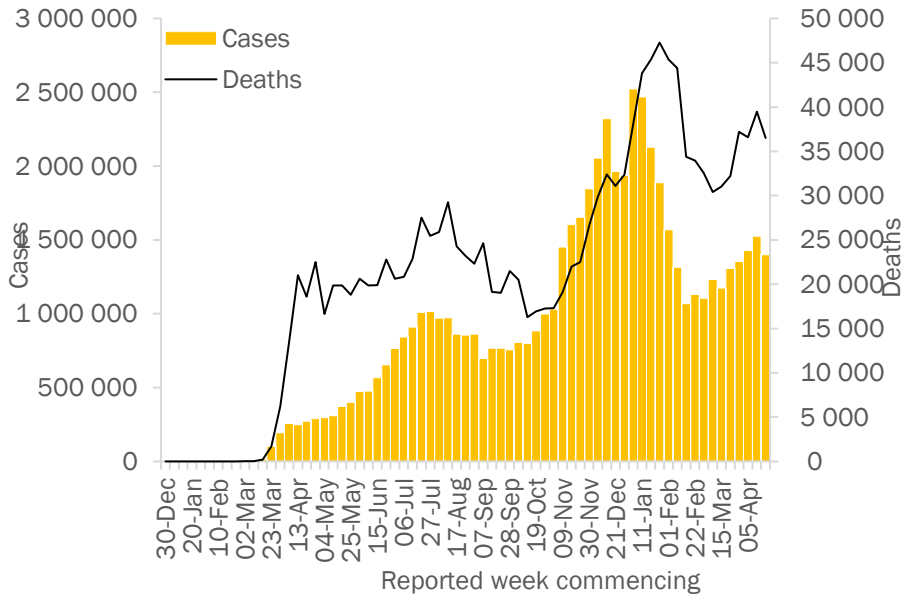
The highest numbers of new deaths were reported from South Africa (414 new deaths; 0.7 new deaths per 100 000 population; a 9% decrease), Ethiopia (203 new deaths; 0.2 new deaths per 100 000; a 12% increase), and Kenya (140 new deaths; 0.3 new deaths per 100 000; a 5% increase).



Region of the Americas

The Region of the Americas reported over 1.4 million new cases and over 36 000 new deaths, an 8% and a 7% decrease respectively compared to the previous week. The region has reported a decreasing trend in new cases in the last week after eight weeks of a gradual increase, the trend in new deaths also decreased in the last week. The highest numbers of new cases were reported from the United States of America (406 001 new cases; 122.7 new cases per 100 000; a 15% decrease), Brazil (404 623 new cases; 190.4 new cases per 100 000; a 12% decrease), and Argentina (166 024 new cases; 367.3 new cases per 100 000; a 3% increase).

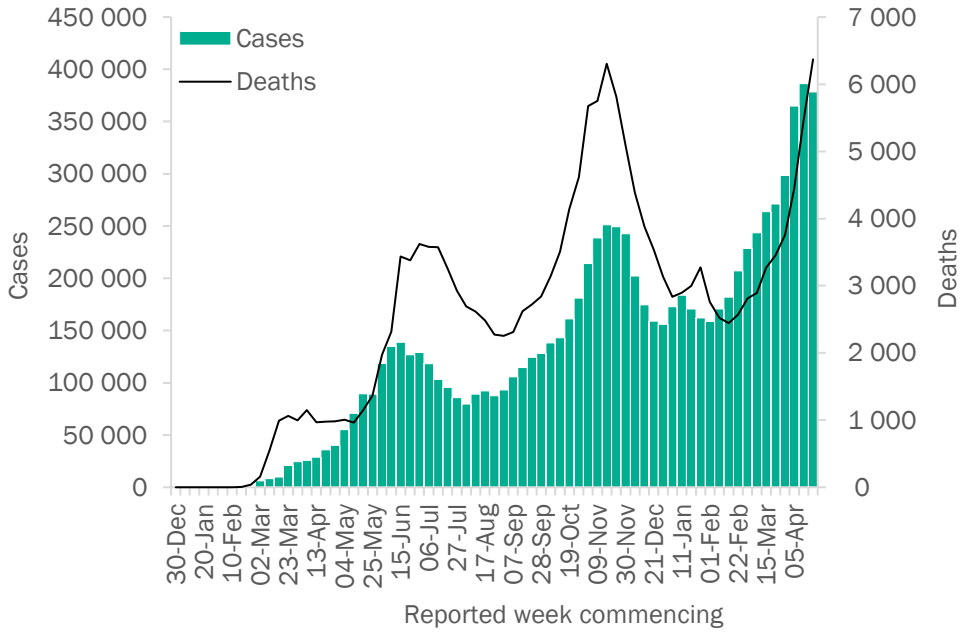
The highest numbers of new deaths were reported from Brazil (17 667 new deaths; 8.3 new deaths per 100 000; a 12% decrease), the United States of America (4951 new deaths; 1.5 new deaths per 100 000; a 4% decrease), and Colombia (2882 new deaths; 5.7 new deaths per 100 000; a 26% increase).



Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 378 000 new cases and over 6300 new deaths, a 2% decrease and a 17% increase respectively compared to the previous week. The trend in new cases has plateaued after ten weeks of an increase, whereas the trend in new deaths continues to increase sharply for the ninth consecutive week. The highest numbers of new cases were reported from the Islamic Republic of Iran (161 594 new cases; 192.4 new cases per 100 000; a 3% decrease), Iraq (54 301 new cases; 135.0 new cases per 100 000; a 3% increase), and Pakistan (39 858 new cases; 18.0 new cases per 100 000; a 17% increase).

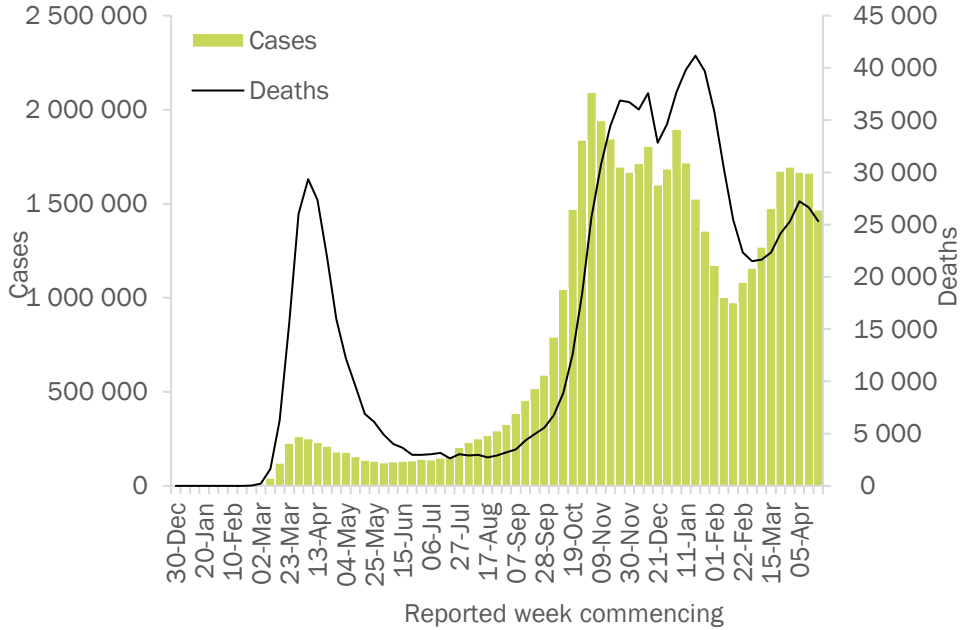
The highest numbers of new deaths were reported from the Islamic Republic of Iran (2793 new deaths; 3.3 new deaths per 100 000; a 33% increase), Pakistan (905 new deaths; 0.4 new deaths per 100 000; an 18% increase), and Tunisia (514 new deaths; 4.3 new deaths per 100 000; a 7% increase).



European Region

The European Region reported over 1.4 million new cases and over 25 000 new deaths, a 12% and a 5% decrease respectively compared to the previous week. The trend in both new cases and deaths is decreasing in the last two weeks. The highest numbers of new cases were reported from Turkey (378 771 new cases; 449.1 new cases per 100 000; a 9% decrease), France (211 674 new cases; 325.5 new cases per 100 000; a 9% decrease), and Germany (145 156 new cases; 174.5 new cases per 100 000; a 1% increase).

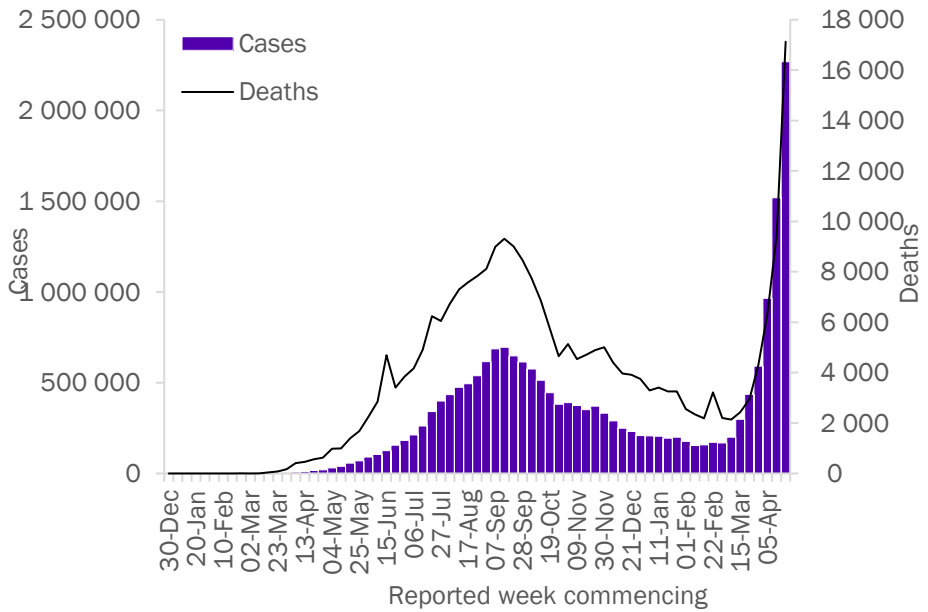
The highest numbers of new deaths were reported from Poland (3383 new deaths; 8.9 new deaths per 100 000; a 6% decrease), the Russian Federation (2650 new deaths; 1.8 new deaths per 100 000; a 2% increase), and Ukraine (2537 new deaths; 5.8 new deaths per 100 000; an 8% decrease).



South-East Asia Region

The South-East Asia Region reported over 2.2 million new cases and over 17 000 new deaths, a 49% and an 81% increase respectively compared to the previous week. A very sharp rise in new cases and new deaths reported since early in March continues. The main driver of this increase in the region is the high numbers of new cases reported from India (2 172 063 new cases; 157.4 new cases per 100 000; a 52% increase). Additionally, high numbers of new cases were reported from Indonesia (37 029 new cases; 13.5 new cases per 100 000; similar to previous week), and Bangladesh (27 148 new cases; 16.5 new cases per 100 000; a 25% decrease).

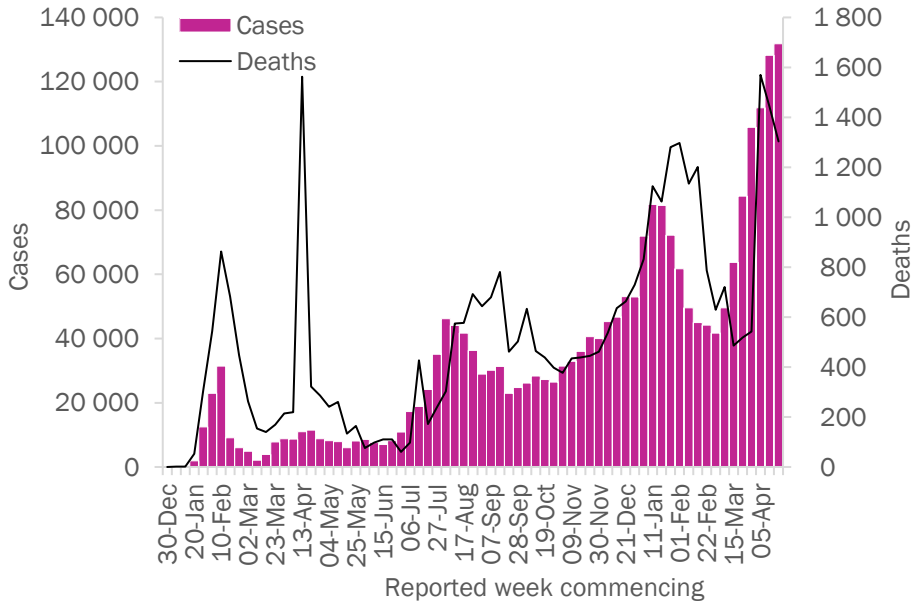
The highest numbers of new deaths were reported from India (15 161 new deaths; 1.1 new deaths per 100 000; a 93% increase), Indonesia (1172 new deaths; 0.4 new deaths per 100 000; a 32% increase), and Bangladesh (669 new deaths; 0.4 new deaths per 100 000; an 8% increase).



Western Pacific Region

The Western Pacific Region reported nearly 132 000 new cases and over 1300 new deaths, a 3% increase and a 10% decrease respectively compared to the previous week. New weekly cases continue to increase for the seventh consecutive week while new deaths have decreased in the last two weeks following a peak in early April. The highest numbers of new cases were reported from the Philippines (63 364 new cases; 57.8 new cases per 100 000; a 13% decrease), Japan (32 312 new cases; 25.5 new cases per 100 000; a 22% increase), and Malaysia (17 393 new cases; 53.7 new cases per 100 000; a 27% increase).

The highest numbers of new deaths were reported from the Philippines (864 new deaths; 0.8 new deaths per 100 000; a 19% decrease), Japan (291 new deaths; 0.2 new deaths per 100 000; a 21% increase), and Malaysia (56 new deaths; 0.2 new deaths per 100 000; a 14% increase).



Key weekly updates

WHO Director-General's key message

Opening remarks at the media briefing on COVID-19 – 23 April 2021:

- One year ago, WHO and many partners came together to launch the Access to COVID-19 Tools (ACT) Accelerator. The ACT Accelerator was conceived to rapidly develop vaccines, diagnostics and therapeutics; and to provide equitable access to those tools. The first objective has been achieved, though we have a long way to go on the second objective.
- We need countries and companies to:
    - share financial resources, to fully fund the ACT Accelerator;
    - share vaccine doses to protect the most at-risk, not just the most-rich;
    - share technology, know-how and intellectual property to scale up production; and
    - be transparent about their bilateral dose donations, so we know who has what.
- The ACT Accelerator needs 19 billion US dollars this year.

Updates and publications

- COVID-19 vaccines: Knowledge gaps and research priorities - WHO ad hoc consultation
- Draft landscape and tracker of COVID-19 candidate vaccines
- COVID-19 and mandatory vaccination: Ethical considerations and caveats – Policy brief
- ACT now, ACT together 2020-2021 Impact Report
- Second round of the national pulse survey on continuity of essential health services during the COVID-19 pandemic: January-March 2021 – Interim report
- WHO COVID-19 Clinical care bundle
- Expanding our understanding of post COVID-19 condition: report of a WHO webinar, 9 February 2021 – 24 April 2021
- Asthma and COVID-19: Scientific brief
- Disability considerations for COVID-19 vaccination: WHO & UNICEF Policy Brief
- WHO COVID-19 Essential Supplies Forecasting Tool (COVID-ESFT)
- COVID-19 News updates: Latest news from WHO on COVID-19 and other breaking health stories

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 25 April 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**49 453**	**3 274 714**	**291.9**	**1 155**	**81 870**	**7.3**	
Ethiopia	10 719	250 955	218.3	203	3 531	3.1	Community transmission
South Africa	8 690	1 574 370	2 654.5	414	54 125	91.3	Community transmission
Kenya	5 031	156 318	290.7	140	2 603	4.8	Community transmission
Cameroon	4 267	65 998	248.6	72	991	3.7	Community transmission
Madagascar	3 645	35 262	127.3	55	593	2.1	Community transmission
Cabo Verde	1 809	21 784	3 918.1	12	201	36.2	Community transmission
Botswana	1 780	45 855	1 949.9	20	691	29.4	Community transmission
Algeria	1 250	120 736	275.3	46	3 198	7.3	Community transmission
Angola	1 192	25 492	77.6	16	577	1.8	Community transmission
Namibia	1 156	47 671	1 876.1	22	624	24.6	Community transmission
Rwanda	669	24 535	189.4	6	328	2.5	Community transmission
Democratic Republic of the Congo	604	29 498	32.9	11	756	0.8	Community transmission
Congo	594	10 678	193.5	7	144	2.6	Community transmission
Mali	580	13 560	67.0	33	462	2.3	Community transmission
Gabon	575	22 433	1 007.9	5	138	6.2	Community transmission
Nigeria	537	164 684	79.9	0	2 061	1.0	Community transmission
Mozambique	509	69 643	222.8	9	807	2.6	Community transmission
Zambia	473	91 317	496.7	11	1 245	6.8	Community transmission
Central African Republic	437	6 224	128.9	10	85	1.8	Community transmission
Zimbabwe	395	38 064	256.1	4	1 556	10.5	Community transmission
Senegal	351	40 082	239.4	9	1 099	6.6	Community transmission
Guinea	343	21 803	166.0	1	139	1.1	Community transmission
Seychelles	336	5 170	5 256.9	1	26	26.4	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Côte d'Ivoire	301	45 820	173.7	7	281	1.1	Community transmission
Equatorial Guinea	300	7 559	538.8	1	107	7.6	Community transmission
Togo	291	12 787	154.5	2	121	1.5	Community transmission
Ghana	265	91 928	295.8	6	777	2.5	Community transmission
Burundi	241	3 853	32.4	0	6	0.1	Community transmission
Uganda	235	41 575	90.9	3	341	0.7	Community transmission
Burkina Faso	117	13 231	63.3	2	156	0.7	Community transmission
Eritrea	114	3 605	101.7	0	10	0.3	Community transmission
Benin	109	7 720	63.7	1	97	0.8	Community transmission
Gambia	87	5 820	240.8	3	173	7.2	Community transmission
South Sudan	83	10 515	93.9	0	114	1.0	Community transmission
Malawi	77	34 011	177.8	9	1 147	6.0	Community transmission
Mauritania	71	18 192	391.3	2	454	9.8	Community transmission
Chad	61	4 752	28.9	1	169	1.0	Community transmission
Niger	44	5 158	21.3	1	191	0.8	Community transmission
Eswatini	25	18 440	1 589.4	0	671	57.8	Community transmission
Sierra Leone	24	4 044	50.7	0	79	1.0	Community transmission
Sao Tome and Principe	23	2 298	1 048.6	0	35	16.0	Community transmission
Lesotho	19	10 728	500.8	1	316	14.8	Community transmission
Liberia	15	2 086	41.2	0	85	1.7	Community transmission
Comoros	14	3 829	440.3	0	146	16.8	Community transmission
Guinea-Bissau	14	3 724	189.2	1	67	3.4	Community transmission
Mauritius	3	1 206	94.8	1	16	1.3	Clusters of cases
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories[iii]							
Réunion	918	19 343	2 160.5	6	141	15.7	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Mayotte	60	19 849	7 275.6	1	169	61.9	Community transmission
Americas	**1 400 004**	**60 951 004**	**5 959.4**	**36 530**	**1 481 266**	**144.8**	
United States of America	406 001	31 656 636	9 563.9	4 951	565 809	170.9	Community transmission
Brazil	404 623	14 237 078	6 697.9	17 667	386 416	181.8	Community transmission
Argentina	166 024	2 824 652	6 249.8	2 092	61 176	135.4	Community transmission
Colombia	121 122	2 740 544	5 386.0	2 882	70 446	138.4	Community transmission
Canada	58 519	1 164 581	3 085.6	342	23 883	63.3	Community transmission
Peru	56 604	1 745 655	5 294.4	2 558	59 012	179.0	Community transmission
Chile	45 463	1 162 811	6 082.9	687	25 742	134.7	Community transmission
Mexico	23 491	2 323 430	1 802.0	2 811	214 504	166.4	Community transmission
Uruguay	19 968	179 537	5 168.4	439	2 227	64.1	Community transmission
Paraguay	16 328	263 134	3 689.2	538	5 715	80.1	Community transmission
Ecuador	14 597	372 754	2 112.8	517	18 158	102.9	Community transmission
Guatemala	9 000	221 307	1 235.3	205	7 395	41.3	Community transmission
Venezuela (Bolivarian Republic of)	8 772	189 381	666.0	139	2 009	7.1	Community transmission
Bolivia (Plurinational State of)	8 532	295 892	2 534.8	158	12 783	109.5	Community transmission
Costa Rica	8 353	236 930	4 651.1	65	3 136	61.6	Community transmission
Cuba	7 844	100 318	885.7	69	581	5.1	Community transmission
Honduras	6 014	205 696	2 076.8	161	5 095	51.4	Community transmission
Dominican Republic	3 317	263 944	2 433.1	37	3 451	31.8	Community transmission
Panama	2 109	362 358	8 398.1	15	6 200	143.7	Community transmission
Jamaica	1 183	44 867	1 515.2	35	756	25.5	Community transmission
El Salvador	914	68 318	1 053.3	26	2 098	32.3	Community transmission
Guyana	806	12 448	1 582.6	10	277	35.2	Clusters of cases
Trinidad and Tobago	745	9 487	677.9	7	157	11.2	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Suriname	436	9 932	1 693.1	6	193	32.9	Clusters of cases
Bahamas	354	10 050	2 555.7	2	196	49.8	Clusters of cases
Saint Lucia	65	4 463	2 430.5	5	70	38.1	Community transmission
Belize	61	12 599	3 168.5	3	321	80.7	Community transmission
Barbados	47	3 820	1 329.3	0	44	15.3	Community transmission
Nicaragua	43	5 450	82.3	1	181	2.7	Community transmission
Haiti	40	12 958	113.6	0	251	2.2	Community transmission
Saint Vincent and the Grenadines	11	1 830	1 649.5	0	10	9.0	Community transmission
Antigua and Barbuda	9	1 222	1 247.8	0	31	31.7	Clusters of cases
Dominica	1	173	240.3	0	0	0.0	Clusters of cases
Grenada	0	159	141.3	0	1	0.9	Sporadic cases
Saint Kitts and Nevis	0	44	82.7	0	0	0.0	No cases
Territories[iii]							
Puerto Rico	6 879	127 450	4 455.0	69	2 263	79.1	Community transmission
French Guiana	745	18 826	6 303.0	3	98	32.8	Community transmission
Curaçao	348	12 022	7 326.3	19	99	60.3	Community transmission
Bermuda	255	2 315	3 717.5	6	23	36.9	Community transmission
Aruba	250	10 469	9 805.6	3	95	89.0	Community transmission
United States Virgin Islands	52	3 080	2 949.5	1	27	25.9	Community transmission
Anguilla	29	58	386.6	0	0	0.0	Sporadic cases
Bonaire	16	1 527	7 301.0	1	15	71.7	Community transmission
Sint Maarten	10	2 212	5 158.3	0	27	63.0	Community transmission
Cayman Islands	9	534	812.5	0	2	3.0	Sporadic cases
British Virgin Islands	7	194	641.6	0	1	3.3	Clusters of cases
Turks and Caicos Islands	7	2 376	6 136.7	0	17	43.9	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Falkland Islands (Malvinas)	1	63	1 808.8	0	0	0.0	Sporadic cases
Guadeloupe	0	12 927	3 230.7	0	194	48.5	Community transmission
Martinique	0	9 758	2 600.3	0	66	17.6	Community transmission
Montserrat	0	20	400.1	0	1	20.0	No cases
Saba	0	6	310.4	0	0	0.0	No cases
Saint Barthélemy	0	954	9 651.0	0	1	10.1	Clusters of cases
Saint Martin	0	1 710	4 423.3	0	13	33.6	Community transmission
Saint Pierre and Miquelon	0	25	431.4	0	0	0.0	Sporadic cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	**378 248**	**8 822 942**	**1 207.3**	**6 370**	**176 950**	**24.2**	
Iran (Islamic Republic of)	161 594	2 377 039	2 830.0	2 793	69 120	82.3	Community transmission
Iraq	54 301	1 025 288	2 549.0	269	15 217	37.8	Community transmission
Pakistan	39 858	790 016	357.6	905	16 999	7.7	Community transmission
Jordan	16 957	700 423	6 864.8	385	8 563	83.9	Community transmission
Tunisia	14 596	298 572	2 526.3	514	10 231	86.6	Community transmission
United Arab Emirates	13 701	508 925	5 145.6	19	1 569	15.9	Clusters of cases
Lebanon	11 112	519 615	7 612.9	230	7 116	104.3	Community transmission
Kuwait	9 544	265 404	6 214.7	71	1 511	35.4	Community transmission
Oman	8 610	185 278	3 628.2	121	1 942	38.0	Community transmission
Bahrain	7 222	170 335	10 010.4	32	620	36.4	Community transmission
Saudi Arabia	7 209	411 263	1 181.3	77	6 887	19.8	Community transmission
Egypt	6 086	221 570	216.5	304	12 998	12.7	Community transmission
Qatar	5 739	201 496	6 993.8	42	418	14.5	Community transmission
Libya	3 621	174 752	2 543.2	65	2 947	42.9	Community transmission
Morocco	3 590	509 037	1 379.1	44	8 988	24.4	Community transmission
Afghanistan	1 050	58 843	151.2	43	2 582	6.6	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Syrian Arab Republic	995	21 999	125.7	89	1 526	8.7	Community transmission
Sudan	651	33 673	76.8	92	2 300	5.2	Clusters of cases
Somalia	622	13 459	84.7	33	689	4.3	Community transmission
Yemen	335	6 109	20.5	56	1 176	3.9	Community transmission
Djibouti	334	10 746	1 087.7	18	132	13.4	Community transmission
Territories[iii]							
occupied Palestinian territory	10 521	319 100	6 255.1	168	3 419	67.0	Community transmission
Europe	**1 466 680**	**50 714 995**	**5 435.3**	**25 341**	**1 061 218**	**113.7**	
Kosovo [1]	2 662	103 772		57	2 108		Community transmission
Turkey	378 771	4 591 416	5 444.0	2 403	38 011	45.1	Community transmission
France	211 674	5 390 187	8 287.6	2 110	102 031	156.9	Community transmission
Germany	145 156	3 287 418	3 952.8	1 650	81 564	98.1	Community transmission
Italy	92 074	3 949 517	6 622.1	2 345	119 021	199.6	Clusters of cases
Ukraine	78 761	2 025 271	4 630.9	2 537	42 323	96.8	Community transmission
Poland	70 831	2 758 856	7 268.2	3 383	65 415	172.3	Community transmission
Russian Federation	60 468	4 762 569	3 263.5	2 650	108 232	74.2	Clusters of cases
Netherlands	57 991	1 453 058	8 347.3	135	17 038	97.9	Community transmission
Spain	32 476	3 456 886	7 303.4	214	77 496	163.7	Community transmission
Sweden	31 748	938 343	9 085.8	31	13 923	134.8	Community transmission
Belgium	23 086	974 417	8 456.7	270	24 017	208.4	Community transmission
Kazakhstan	19 976	361 575	1 925.7	0	4 157	22.1	Clusters of cases
Hungary	19 010	769 518	7 876.7	1 441	26 625	272.5	Community transmission
Greece	18 286	331 730	3 094.9	553	9 950	92.8	Community transmission
Czechia	17 729	1 618 076	15 130.8	520	28 946	270.7	Community transmission
Romania	17 683	1 044 722	5 405.0	1 195	27 267	141.1	Community transmission
Serbia	17 673	677 972	9 787.8	242	6 196	89.5	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
The United Kingdom	17 232	4 403 174	6 486.1	157	127 417	187.7	Community transmission
Austria	15 318	603 419	6 779.2	205	9 821	110.3	Community transmission
Croatia	14 836	322 626	7 950.0	292	6 854	168.9	Community transmission
Azerbaijan	12 943	311 465	3 071.9	235	4 342	42.8	Clusters of cases
Bulgaria	11 137	397 100	5 712.5	721	15 859	228.1	Clusters of cases
Switzerland	9 750	643 562	7 436.1	28	9 899	114.4	Community transmission
Belarus	8 751	351 674	3 721.7	70	2 483	26.3	Community transmission
Georgia	8 393	303 751	7 614.4	86	4 025	100.9	Community transmission
Lithuania	7 666	241 297	8 636.0	88	3 848	137.7	Community transmission
Cyprus	6 169	61 576	6 934.2	10	298	33.6	Clusters of cases
Denmark	5 279	247 010	4 242.1	22	2 474	42.5	Community transmission
Bosnia and Herzegovina	5 175	195 471	5 958.0	405	8 242	251.2	Community transmission
Slovenia	4 943	236 612	11 289.5	38	4 523	215.8	Clusters of cases
Armenia	4 768	213 288	7 197.8	140	4 018	135.6	Community transmission
Latvia	3 958	114 955	6 025.9	53	2 101	110.1	Community transmission
Slovakia	3 937	379 911	6 960.8	389	11 495	210.6	Clusters of cases
North Macedonia	3 541	150 274	7 213.0	231	4 650	223.2	Community transmission
Portugal	3 404	833 964	8 100.0	17	16 959	164.7	Clusters of cases
Republic of Moldova	3 404	248 898	6 170.1	161	5 709	141.5	Community transmission
Norway	3 358	109 581	2 041.5	28	736	13.7	Community transmission
Ireland	2 966	246 204	4 959.4	37	4 872	98.1	Community transmission
Estonia	2 661	120 215	9 045.7	51	1 143	86.0	Clusters of cases
Uzbekistan	2 347	89 027	266.0	6	643	1.9	Clusters of cases
Kyrgyzstan	1 948	93 831	1 438.2	33	1 582	24.2	Clusters of cases
Finland	1 904	85 537	1 548.1	16	903	16.3	Community transmission
Luxembourg	1 456	66 202	10 573.6	5	790	126.2	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Israel	1 077	837 974	9 681.4	20	6 350	73.4	Community transmission
Albania	953	130 409	4 531.6	32	2 372	82.4	Clusters of cases
Montenegro	649	96 342	15 339.6	22	1 451	231.0	Clusters of cases
Andorra	253	13 024	16 856.3	1	124	160.5	Community transmission
Malta	222	30 149	5 859.1	3	412	80.1	Clusters of cases
Iceland	104	6 390	1 754.8	0	29	8.0	Community transmission
Liechtenstein	40	2 947	7 605.8	0	56	144.5	Sporadic cases
San Marino	37	5 047	14 871.2	3	89	262.2	Community transmission
Monaco	34	2 429	6 189.5	0	31	79.0	Sporadic cases
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Isle of Man	10	1 585	1 864.0	0	29	34.1	No cases
Faroe Islands	1	663	1 356.8	0	1	2.0	Sporadic cases
Jersey	1	3 233	2 999.2	0	69	64.0	Community transmission
Gibraltar	0	4 283	12 712.6	0	94	279.0	Clusters of cases
Greenland	0	31	54.6	0	0	0.0	No cases
Guernsey	0	822	1 275.1	0	14	21.7	Community transmission
South-East Asia	**2 269 114**	**19 965 648**	**987.7**	**17 126**	**254 958**	**12.6**	
India	2 172 063	16 960 172	1 229.0	15 161	192 311	13.9	Clusters of cases
Indonesia	37 029	1 636 792	598.4	1 172	44 500	16.3	Community transmission
Bangladesh	27 148	742 400	450.8	669	10 952	6.7	Community transmission
Nepal	13 429	297 087	1 019.6	61	3 136	10.8	Clusters of cases
Thailand	13 108	55 460	79.5	39	140	0.2	Clusters of cases
Sri Lanka	4 147	100 586	469.7	21	638	3.0	Clusters of cases
Maldives	1 476	27 621	5 109.9	2	71	13.1	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Timor-Leste	572	1 808	137.1	1	3	0.2	Clusters of cases
Myanmar	76	142 704	262.3	0	3 206	5.9	Clusters of cases
Bhutan	66	1 018	131.9	0	1	0.1	Sporadic cases
Western Pacific	**131 777**	**2 337 462**	**119.0**	**1 304**	**36 222**	**1.8**	
Philippines	63 364	989 399	902.9	864	16 674	15.2	Community transmission
Japan	32 312	562 141	444.5	291	9 913	7.8	Clusters of cases
Malaysia	17 393	390 252	1 205.7	56	1 426	4.4	Community transmission
Mongolia	8 564	29 219	891.3	33	74	2.3	Clusters of cases
Republic of Korea	4 773	118 887	231.9	16	1 813	3.5	Clusters of cases
Cambodia	3 586	9 975	59.7	31	74	0.4	Sporadic cases
Papua New Guinea	932	10 670	119.3	13	102	1.1	Community transmission
China	191	103 464	7.0	0	4 856	0.3	Clusters of cases
Lao People's Democratic Republic	189	247	3.4	0	0	0.0	Sporadic cases
Singapore	158	60 966	1 042.1	0	30	0.5	Sporadic cases
Australia	153	29 658	116.3	0	910	3.6	Clusters of cases
Viet Nam	52	2 833	2.9	0	35	0.0	Clusters of cases
Fiji	15	87	9.7	0	2	0.2	Sporadic cases
New Zealand	7	2 245	46.6	0	26	0.5	Clusters of cases
Brunei Darussalam	2	223	51.0	0	3	0.7	Sporadic cases
Solomon Islands	0	20	2.9	0	0	0.0	No cases
Territories[iii]							
Guam	43	7 697	4 560.5	0	136	80.6	Clusters of cases
French Polynesia	38	18 734	6 669.1	0	141	50.2	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	2	164	284.9	0	2	3.5	Pending
Wallis and Futuna	2	449	3 992.5	0	5	44.5	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
New Caledonia	1	124	43.4	0	0	0.0	Sporadic cases
Marshall Islands	0	4	6.8	0	0	0.0	No cases
Samoa	0	1	0.5	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Global	**5 695 277**	**146 067 511**		**87 826**	**3 092 497**		

*See *Annex: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting variants of concern as of 27 April 2021**

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Afghanistan	Verified	-	-
Albania	Under verification	-	-
Algeria	Verified	-	-
Angola	Verified	Verified	-
Argentina	Verified	-	Verified
Armenia	Under verification	-	-
Aruba	Verified	Verified	Verified
Australia	Verified	Verified	Verified
Austria	Verified	Verified	Verified
Azerbaijan	Verified	-	-
Bahrain	Verified	-	-
Bangladesh	Verified	Verified	-
Barbados	Verified	-	-
Belarus	Verified	-	-
Belgium	Verified	Verified	Verified
Belize	Verified	-	-
Bolivia (Plurinational State of)	Verified*	-	-
Bonaire	Verified	-	-
Bosnia and Herzegovina	Under verification	-	-
Botswana	-	Verified	-
Brazil	Verified	Verified	Verified
Brunei Darussalam	Verified	Verified	-
Bulgaria	Verified	-	-
Cabo Verde	Verified	-	-
Cambodia	Verified	-	-
Cameroon	-	Verified	-

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Canada	Verified	Verified	Verified
Cayman Islands	Verified	-	-
Chile	Verified	Verified	Verified
China	Verified	Verified	Verified
Colombia	Verified	-	Verified
Comoros	-	Verified	-
Costa Rica	Verified	Verified	Verified
Croatia	Verified	Under verification	-
Cuba	Verified	Verified	-
Curaçao	Verified	-	-
Cyprus	Verified	-	-
Czechia	Verified	Under verification	-
Democratic Republic of the Congo	Under verification	Verified	-
Denmark	Verified	Verified	Verified
Dominican Republic	Verified	-	-
Ecuador	Verified	-	Verified
Estonia	Verified	Under verification	-
Eswatini	-	Verified	-
Faroe Islands	-	-	Verified
Finland	Verified	Verified	Verified
France	Verified	Verified	Verified
French Guiana	Verified	Verified	Verified
French Polynesia	Verified	-	Verified
Gambia	Verified	-	-

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Georgia	Verified	-	-
Germany	Verified	Verified	Verified
Ghana	Verified	Verified	-
Gibraltar	Under verification	-	-
Greece	Verified	Verified	-
Grenada	Verified	-	-
Guadeloupe	Verified	-	-
Guyana	-	-	Verified
Hungary	Verified	Under verification	-
Iceland	Verified	-	-
India	Verified	Verified	Verified
Indonesia	Verified	-	-
Iran (Islamic Republic of)	Verified	-	-
Iraq	Verified	-	-
Ireland	Verified	Verified	Under verification
Israel	Verified	Verified	-
Italy	Verified	Under verification	Verified
Jamaica	Verified	-	-
Japan	Verified	Verified	Verified
Jordan	Verified	Verified	Verified
Kazakhstan	Under verification	Under verification	-
Kenya	Under verification	Verified	-
Kosovo[1]	Verified	-	-
Kuwait	Verified	-	-
Kyrgyzstan	Verified*	Verified*	-

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Lao People's Democratic Republic	Verified*	-	-
Latvia	Verified	Verified	-
Lebanon	Verified	-	-
Lesotho	-	Verified	-
Libya	Verified	Verified	-
Liechtenstein	Verified	-	-
Lithuania	Verified	Verified	-
Luxembourg	Verified	Verified	Under verification
Malawi	Verified	Verified	-
Malaysia	Verified	Verified	-
Malta	Verified	Under verification	Verified*
Martinique	Verified	-	-
Mauritius	Under verification	-	-
Mayotte	Verified	Verified	-
Mexico	Verified	-	Verified
Monaco	Verified	Under verification	-
Montenegro	Verified	-	-
Morocco	Verified	-	-
Mozambique	-	Verified	-
Namibia	-	Verified	-
Nepal	Verified	-	-
Netherlands	Verified	Verified	Verified
New Caledonia	Verified	-	-
New Zealand	Verified	Verified	Under verification

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Nigeria	Verified	-	-
North Macedonia	Verified	Verified*	-
Norway	Verified	Verified	Verified
occupied Palestinian territory	Verified	Verified	-
Oman	Verified	-	-
Pakistan	Verified	-	-
Panama	Verified	Verified	Verified
Paraguay	-	-	Verified
Peru	Verified	-	Verified
Philippines	Verified	Verified	Verified
Poland	Verified	Under verification	Under verification
Portugal	Verified	Verified	Under verification
Puerto Rico	Verified	Under verification*	Verified
Qatar	Verified	Verified	-
Republic of Korea	Verified	Verified	Verified
Republic of Moldova	Under verification	-	-
Réunion	Verified	Verified	Verified
Romania	Verified	Verified	Verified
Russian Federation	Verified	Under verification	-
Rwanda	Under verification	Under verification	-
Saint Barthélemy	Verified	-	-
Saint Lucia	Verified	-	-
Saint Martin	Verified	Verified	Verified
Saudi Arabia	Verified	-	-

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Senegal	Verified	-	-
Serbia	Verified	-	-
Singapore	Verified	Verified	-
Sint Maarten	Verified	-	-
Slovakia	Verified	Under verification	-
Slovenia	Verified	Verified	Under verification
South Africa	Verified	Verified	-
Spain	Verified	Verified	Verified
Sri Lanka	Verified	Verified	-
Suriname	Verified	Verified	Verified
Sweden	Verified	Verified	Under verification
Switzerland	Verified	Verified	Under verification
Thailand	Verified	Verified	-
The United Kingdom	Verified	Verified	Verified
Togo	Verified	-	-
Trinidad and Tobago	Verified	-	Verified*
Tunisia	Verified	-	-
Turkey	Verified	Under verification	Under verification
Turks and Caicos Islands	Verified	-	-
Ukraine	Under verification	Under verification	-
United Arab Emirates	Verified	Verified	Verified
United Republic of Tanzania	-	Under verification	-
United States of America	Verified	Verified	Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Uruguay	Verified	-	Verified
Uzbekistan	Verified	Under verification	-
Venezuela (Bolivarian Republic of)	-	-	Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Viet Nam	Verified	Verified	-
Wallis and Futuna	Verified	-	-
Zambia	-	Verified	-
Zimbabwe	-	Verified	-

*Newly reported in this update.
"Verified" indicates that information for this variant was received by WHO from official sources.
"Under verification" indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available.
Variants VOC 202012/01 for Syrian Arab Republic, and 501Y.V2 for Uganda, were excluded this week based on further information received.
**See *Annex: Data, table and figure notes*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 746 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.

- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorizations are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 18 April 2021, 10 am CET

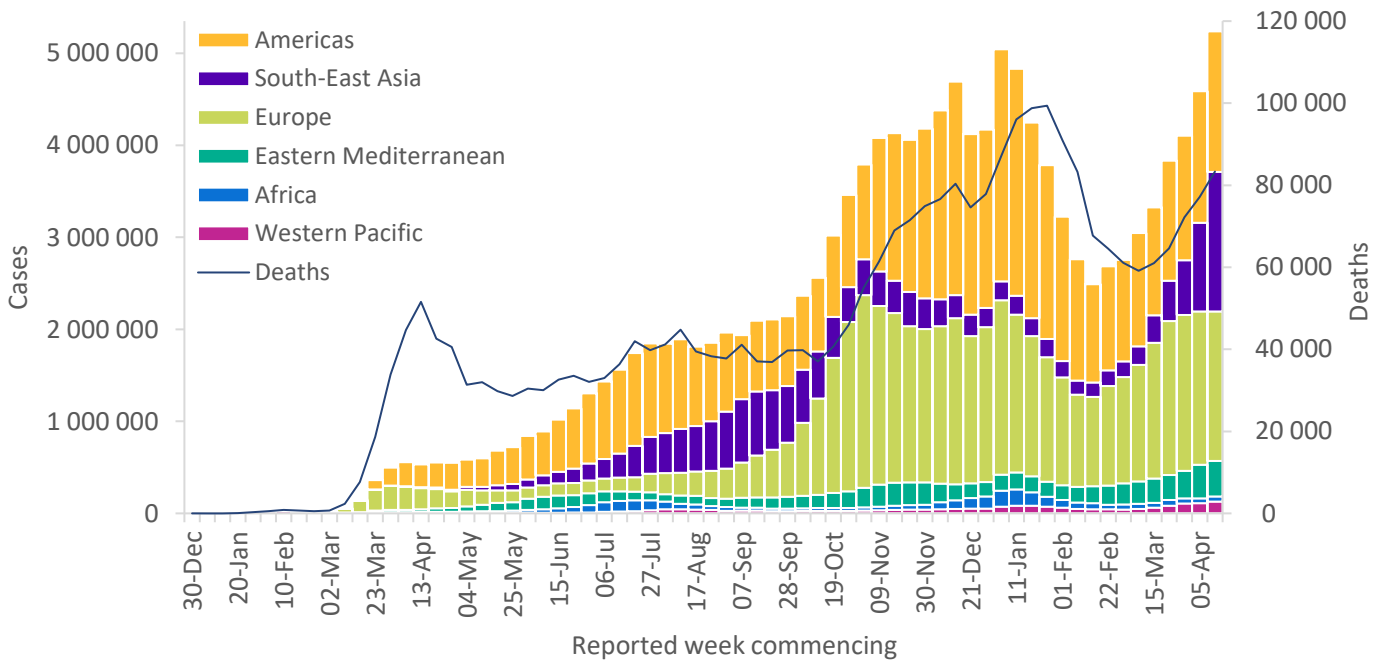
In this edition:

- Global overview
- Special focus: Update on WHO COVID-19 global rapid risk assessment
- Special focus: Pandemic influenza surveillance – drawing a parallel with the COVID-19 pandemic
- Special focus: SARS-CoV-2 variants
- WHO regional overviews
- Key weekly updates

Global overview

Globally, new COVID-19 cases increased for the eighth consecutive week, with more than 5.2 million new cases reported in the last week – surpassing the previous peak in early January 2021 (Figure 1). The number of new deaths increased for the fifth consecutive week, an 8% increase as compared to the previous with over 83 000 new deaths reported. Last week the reported cumulative COVID-19 death toll surpassed 3 million lives; the pace of deaths is accelerating, it took nine months to reach 1 million deaths, another four to surpass 2 million, and just three to reach 3 million deaths.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 18 April 2021**



**See *Annex: Data, table and figure notes*

While all regions except the European Region reported an increase in incident cases in the last week, the largest increase continues to be reported by the South-East Asia Region, largely driven by India, followed by the Western Pacific Region (Table 1). All regions except the European and Western Pacific regions reported an increase in the number of weekly deaths, with the largest increase in the South-East Asia Region due to an

increase in deaths in India, followed by the Eastern Mediterranean Region, largely due to an increase in new deaths in the Islamic Republic of Iran.

The countries reporting the highest number of new cases represent three of the six WHO regions: India (1 429 304 new cases; 64% increase), the United States of America (477 778 new cases; 2% increase), Brazil (459 281 new cases; 1% decrease), Turkey (414 312 new cases; 17% increase), and France (233 275 new cases; 12% decrease).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 18 April 2021**

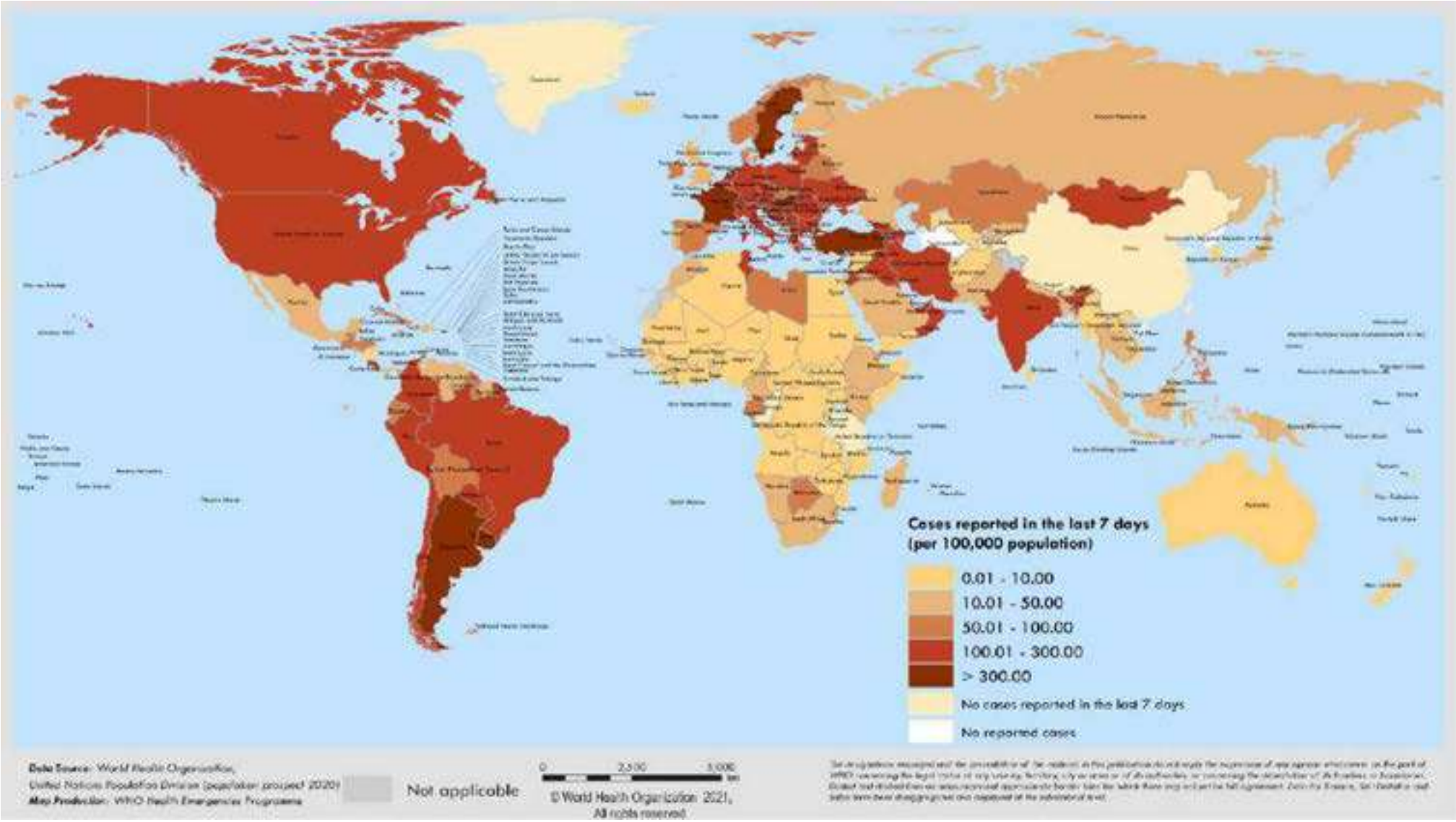
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 525 505 (29%)	7%	59 551 000 (42%)	39 482 (47%)	8%	1 444 736 (48%)
Europe	1 624 060 (31%)	-3%	49 208 464 (35%)	26 302 (32%)	-3%	1 035 294 (34%)
South-East Asia	1 518 708 (29%)	57%	17 696 534 (13%)	9 447 (11%)	49%	237 832 (8%)
Eastern Mediterranean	386 176 (7%)	6%	8 444 694 (6%)	5 460 (7%)	23%	170 580 (6%)
Africa	54 297 (1%)	7%	3 225 261 (2%)	1 170 (1%)	14%	80 715 (3%)
Western Pacific	128 176 (2%)	15%	2 205 688 (2%)	1 444 (2%)	-8%	34 918 (1%)
Global	**5 236 922 (100%)**	**14%**	**140 332 386 (100%)**	**83 305 (100%)**	**8%**	**3 004 088 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*
**See *Annex: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 12-18 April 2021**



**See *Annex: Data, table and figure notes*

Special Focus: Update on WHO COVID-19 global rapid risk assessment, 13 April 2021

As the COVID-19 pandemic, response and our understanding of the SARS-CoV-2 virus continue to evolve, WHO's most recent assessment is that the global public health risk remains very high. Under the Emergency Response Framework, WHO undertakes risk assessments and situation analyses on a regular basis to inform our response to emerging issues. In addition, WHO periodically formally reviews the current risk status of risks through an in-depth hazard, exposure and context assessment; as well as a review of the vulnerabilities and capacities to respond and to investigate the current risk to human health, risks of ongoing spread globally, and risk of insufficient control capacities. Such assessments are used as an internal-WHO decision- making tool, but they also additionally to support independent deliberations, including (but not limited to) meetings of the IHR Emergency Committee. Ten COVID-19 rapid risk assessments have been undertaken to date, and additional assessments have been completed for specific events surrounding the emergence of SARS-CoV-2 variants of concern (VOCs). Here, we provide a synopsis of the most recent in-depth global rapid risk assessment.

The COVID-19 pandemic shows no signs of easing, with global case and death incidence increasing at a concerning rate since mid-February 2021; a third of the global cumulative COVID-19 cases and deaths has been reported in the last three months alone, with weekly cases reaching similar levels as the previous peak in January 2021. Marked geographical variation in the pandemic trajectory continues to be observed at regional and country levels, with sharp rises observed in the South-East Asia, Eastern Mediterranean and Western Pacific regions in recent weeks. The global infection fatality ratio (IFR) was estimated between 0.1% to 1.0%, an increase from January largely driven by an increase in the Region of the Americas. Globally mortality rates continue to be higher for those over 40 years as well as for males as compared to females.

The resurgences in the last four months have likely been driven in part by both the emergence of SARS-CoV-2 VOCs and inconsistent use/early easing of public health and social measures (PHSM). As surveillance and sequencing activities to detect SARS-CoV-2 variant cases are strengthened, the number of countries reporting the three variants designated as global VOCs has increased. All three VOCs are associated with increased transmission. Additionally, some have been associated with increased disease severity (VOC 202012/01 and 501Y.V2), increased risk of immune escape (501Y.V2 and P.1), and/or significant reductions in neutralization (501Y.V2 and P.1) by convalescent or post-vaccine sera compared to wild-type/non-VOC variants, suggesting increased risk of vaccine failure or reinfection. In addition to the VOCs, six variants have thus far been designated as SARS-CoV-2 variants of interest (VOIs), and a further 19 variants are currently under investigation, highlighting that especially as global incidence remains high, there is continued risk of emergence of more variants with phenotypic implications and global importance in the coming months.

The high burden of COVID-19 globally has continued to challenge surveillance systems, leading to a large gap in the completeness of demographic information shared for reported cases. In line with the WHO surveillance guidelines, efforts are being made to strengthen surveillance and reporting, however, many challenges persist especially for low-income countries. The ongoing pandemic also continues to challenge public health and healthcare capacities in most countries, as often the same human resources are spread across clinical management and outbreak response activities including vaccine rollout. The recent increase in cases reported in most regions has added to the healthcare workload and aggravated shortages of resources and the capacity to care for both those with COVID-19 and patients with other illnesses; over 90% of countries have reported some level of service disruptions and almost 40% have reported disruptions to essential primary health care services.

Infection prevention and control (IPC) and PHSM have proven to be critical in mitigating and limiting transmission and deaths due to COVID-19. The use of PHSM must be continuously monitored and adjusted, especially in the context of VOCs, to account for the intensity of transmission as well as the capacity of the health system at both national and sub-national levels. While reports confirm that most people continue to support PHSM as part of national COVID-19 response strategies, pandemic fatigue is occurring, undermining the impact of PHSM on transmission. In some countries, a lack of trust in government responses and increasing

frustration and uncertainty about the duration of the pandemic, coupled with the economic impacts of the response to COVID-19, have led to protests against PHSM.

The cornerstone of treatment for COVID-19 remains early detection and clinical assessment along with the use of oxygen and systemic corticosteroid therapy for those with severe or critical COVID-19. Markets for personal protective equipment (PPE), PCR tests, and medical oxygen equipment have begun to adjust to the higher demand, and the Biomedical Consortium (part of the UN Supply Chain) continues to support the scale-up of oxygen supply in under-resourced settings, where supply chains remain vulnerable to manufacturing and transport shutdowns/restrictions. The supply chain network, however, continues to face constraints in the availability of containers and ships, adding challenges in maintaining the cold-chain requirements of COVID-19 vaccines from production to administration.

As of 12 April 2021, four vaccines have received Emergency Use Listing by WHO. A total of 781 million doses of COVID-19 vaccines have been administered in 196 economies. However, 24 economies (including 12 from the African Region and seven from the Western Pacific Region) have not yet started vaccination. The current uneven and inequitable access and distribution of COVID-19 vaccines is exacerbating global inequalities, which coupled with the emergence of VOCs, risks prolonging the pandemic.

With a COVAX target of 20-30% population coverage with a single vaccine dose by the end of the year, and considering that the proportion of the population with immunity acquired through infection is likely less than 25%, much of the global population is still susceptible to infection. Additionally, the degree and duration of immunity conferred by natural infection, COVID-19 vaccination or the combination of both are still being investigated, and some studies suggest that those who receive vaccines may still transmit SARS-CoV2 infection to susceptible contacts. While global vaccine acceptance generally remains high, country variations have been observed due to a multitude of reasons, including exposure to misinformation as well as the attitudes of local healthcare professionals, who can play an important role in building or undermining vaccine confidence.

While our understanding of the SARS-CoV-2 virus and the complex immune response triggered by it continues to grow, much still remains unknown including the effectiveness of vaccination in reducing transmission; the duration of immunity; the role of children in transmission; and the frequency and nature of post-COVID-19 condition ("long COVID"). The emergence of VOCs introduces further unknowns such as the potential for immune escape and as to how these changes in the virus affect the global epidemiology.

Additional resources

- Further information about WHO risk assessment process

Special Focus: Pandemic influenza surveillance – drawing a parallel with the COVID-19 pandemic

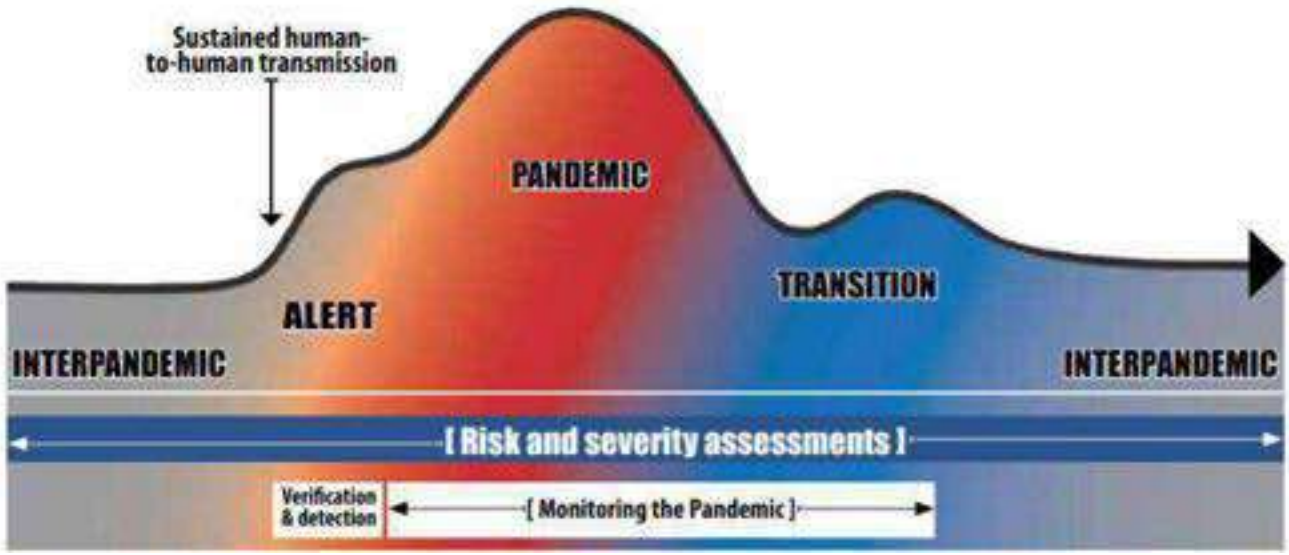
Surveillance approaches for the COVID-19 pandemic have combined the use and adaptation of existing systems as well as the establishment of new systems to meet the surveillance objectives. The Global Influenza Surveillance and Response System (GISRS) is an example of this, and has been leveraged to support the critical need to monitor trends in concurrent community circulation of both SARS-CoV-2 and seasonal influenza (see 9 March 2021 Special Focus for background information). Here, we look at parallels between surveillance approaches to influenza and the COVID-19 pandemic.

Critically, under both influenza and COVID-19 pandemic scenarios, surveillance relies upon multiple systems to:

- Verify and detect emergence and transmission,
- Monitor the geographic spread and related morbidity and mortality, and
- Assess the severity and inform development and update of vaccines and other control measures.

The WHO guidance on public health surveillance during an influenza pandemic highlight the different surveillance objectives and components needed at different phases before, during and after a pandemic (Figure 3).

Figure 3: The continuum of pandemic influenza phases (Source: WHO, 2017)



Alert Phase

In the alert phase, surveillance objectives are focused on the detection of all cases and the verification of human-to-human transmission, with an aim to interrupt virus transmission and its geographic spread and understand the virus. Event-based surveillance, active case finding and routine influenza and other respiratory virus surveillance systems (e.g., GISRS), are useful in this phase.

Event-based surveillance (EBS) is undertaken routinely by public health authorities globally to support the rapid detection and early response to signals of outbreaks of influenza and other respiratory viruses with the potential to spread from animals to humans or cause human-to-human transmission. EBS can be used for example to detect signals of clusters/outbreaks of severe respiratory disease, infections among healthcare workers, unexpected changes in routine surveillance data trends, unusually high sales of pharmaceuticals used for respiratory disease treatment, illnesses in humans linked to animal outbreaks, etc. EBS is used routinely to support COVID-19 surveillance – supporting epidemic intelligence activities for the detection and investigation of unusual epidemiological trends or changes, which combined with surveillance from other formal and informal sources, support ongoing COVID-19 situation awareness, risk assessment and an evidence-based response.

Active case finding through contact tracing and cluster/outbreak investigation are recommended for interrupting SARS-CoV-2 transmission and are similarly recommended for finding new suspected cases, documenting potential human-to-human transmission, and providing targeted interventions to decrease the risk of illness and interrupt further transmission of pandemic influenza viruses.

Pandemic Phase

Once it is clear community transmission is occurring, monitoring the situation remains critical to inform risk assessments and adjust public health interventions. During this phase, it is important to understand the virus evolution and its geographic spread, severity of disease and groups at high risk for severe disease. Surveillance activities would focus on obtaining high quality data and favour specificity over sensitivity (i.e., would not necessarily attempt to identify all cases). Wherever possible, the use and strengthening of existing surveillance systems should be favoured. Often different systems capture information for mild illness, severe illness requiring hospitalization, and mortality, which collectively provide a foundation for surveillance during the pandemic phase.

A healthcare-based surveillance approach serves as the primary approach for year-round influenza surveillance and is considered an essential surveillance approach for COVID-19 as well. During periods of heightened surveillance, other community-based case investigation and surveillance activities serve to provide additional epidemiological information.

- *Sentinel surveillance*: Existing influenza surveillance systems that use a sentinel approach emphasize collecting quality data for epidemiological and virological surveillance from a limited number of surveillance sites. Sentinel healthcare facilities are chosen based on representativeness, feasibility, and sustainability**.** The use of strict case definitions and testing all or a subset of cases is for surveillance purposes and not for case management or outbreak investigation. During a pandemic, ongoing sentinel surveillance aids in tracking trends; geographical spread; impact of response measures; transmission and virus characteristics, including the evolution and emergence of variants; and vaccine effectiveness. A sentinel approach to monitoring COVID-19 is recommended as a complementary approach to comprehensive surveillance at present and many countries use existing sentinel influenza surveillance systems to monitor trends in COVID-19 activity and virus characteristics.
- *Non-sentinel surveillance:* Influenza virological surveillance also relies on non-sentinel surveillance, where specimens may be collected from non-sentinel sites and where the results are more often used for clinical management and diagnostics. Compared to sentinel surveillance, information coming from non-sentinel surveillance is often not as detailed, and the cases selected for testing may not meet standard case definitions.
- *Universal surveillance*: Many countries perform universal surveillance for influenza and other respiratory pathogens, often relying on electronic health record data to collect information on all patients seeking care for an influenza-like illnesses (ILI) or severe acute respiratory illness (SARI), or individuals with a suspected or confirmed laboratory diagnosis of a notifiable respiratory pathogen (including influenza or COVID-19), to either supplement or replace sentinel surveillance. Currently COVID-19 surveillance aims to capture data from any and all COVID-19 cases, no matter where they are diagnosed.
- *Mortality surveillance:* Many countries monitor influenza-related mortality through surveillance of influenza-related deaths (using death certificates) or through statistical analysis of excess mortality attributed to influenza. The regular counting of COVID-19 deaths on a daily or weekly basis is currently recommended as part of COVID-19 surveillance mortality monitoring, including through death certificates. While not commonly done during influenza epidemics, more frequent collection and reporting of influenza-related deaths may be warranted during the pandemic phase.

- *Other sources:*
    - It is estimated that around half of individuals infected with influenza do not seek healthcare for their illness.[1] Participatory surveillance for ILI involves the ongoing collection of self-reporting of symptoms from a voluntary cohort of participants who may not seek healthcare for their illness and complements data from healthcare-based surveillance systems. Some countries are also adapting current participatory surveillance systems or developing new ones for monitoring COVID-19.
    - Special studies and modelling can generate information on transmission dynamics, risk and severity during a pandemic. Work done since the 2009 influenza pandemic as part of pandemic influenza preparedness activities have informed the COVID 19 response.
    - Sero-epidemiological and transmission study protocols developed for use in a future influenza pandemic were immediately updated for use in the COVID-19 pandemic.

Reporting of data to WHO

Current public health guidance recommends SARS-CoV-2 infections to be nationally notifiable, with case-based reporting on a voluntary basis, and detailed aggregated data reporting requested on a weekly basis to WHO.

During further influenza pandemics, similar reporting requirements may be recommended initially. As the pandemic continues, countries would shift towards monitoring the situation, and the consistent and timely reporting of routine aggregated influenza data to regional and global WHO platforms may shift to weekly reporting of routine influenza surveillance data. It remains critical to draw lessons and sustain the momentum of the COVID-19 response to further strengthen and standardize both local and global surveillance systems to enable a robust approach to future pandemics caused by influenza and other pathogens.

Additional resources

- Global epidemiological surveillance standards for influenza
- Manual for the laboratory diagnosis and virological surveillance of influenza
- WHO Guidance for Surveillance during an Influenza Pandemic
- Protocol to investigate non-seasonal influenza and other emerging acute respiratory diseases

[1] Ma W, et al. (2018) The healthcare seeking rate of individuals with influenza like illness: a meta-analysis, Infectious Diseases, 50:10, 728-735, https://doi.org/10.1080/23744235.2018.1472805

Special Focus: Update on SARS-CoV-2 Variants

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 result in changes in transmissibility, clinical presentation and severity, or if they impact public health and social measures (PHSM). Systems have been established to detect "signals" of potential variants of concern (VOCs) or variants of interest (VOIs) and assess these based on the risk posed to global public health (see also working definitions). National authorities may choose to designate other variants of local interest/concern. Detailed information on currently circulating VOCs and VOIs is available in previously published editions of the Weekly Epidemiological Update. Here we provide a brief update on the geographical distribution of the three VOCs as of 20 April 2021, as well as an update on detected VOIs (Table 2).

As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing, the number of countries/areas/territories (hereafter countries) reporting VOCs and VOIs has continued to increase. Since our last update on 13 April, VOC 202012/01 has been detected in five additional countries, variant 501Y.V2 in five additional countries, and variant P.1 has been reported in two additional countries. As of 20 April, a total 137 countries have reported VOC 202012/01 (Figure 4), 85 countries variant 501Y.V2 (Figure 5), and 52 countries variant P.1 (Figure 6) – see also Annex 2. The information presented here should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and prioritization of samples for sequencing between countries.

Table 2: SARS-CoV-2 variants of concern (VOC) and variants of interest (VOI), as of 20 April 2021*

	Nextstrain clade	Pango lineage	GISAID clade	Alternate names	First detected in	Earliest samples	Characteristic mutations
VOC	20I/501Y.V1	B.1.1.7	GR	**VOC 202012/01**[†]	United Kingdom	Sep 2020	H69/V70 del, Y144 del, N501Y, A570D, P681H, S106/G107/F108 del
	20H/**501Y.V2**[†]	B.1.351	GH	VOC 202012/02	South Africa	Aug 2020	L242/A243/L244 del, K417N, E484K, N501Y, S106/G107/F108 del
	20J/501Y.V3	B.1.1.28.1, alias **P.1**[†]	GR	VOC 202101/02	Brazil and Japan	Dec 2020	K417T, E484K, N501Y, S106/G107/F108 del
VOI	20C	B.1.525	G/484K.V3	-	United Kingdom and Nigeria	Dec 2020	H69-V70 del, Y144 del, Q52R, E484K, Q677H, D614G, and F888L
	20C/S.452R	B.1.427/ B.1.429	GH/452R.V1	CAL.20C/L452R	United States of America	Jun 2020	L452R, W152C, S13I, D614G
	20B/S.484K	B.1.1.28.2, alias P.2	GR	-	Brazil	Apr 2020	L18F, T20N, P26S, F157L, E484K, D614G, S929I, V1176F
	Not yet assigned	B.1.1.28.3, alias P.3	Not yet assigned	PHL-B.1.1.28	Philippines and Japan	Feb 2021	141-143 del, E484K, N501Y, P681H
	20C	B.1.526 with E484K or S477N	GH	-	United States of America	Nov 2020	L5F, T95I, D253G, D614G, A701V, E484K or S477N
	20C	B.1.616	GH	-	France	Jan 2021	G142 del, D66H, Y144V, D215G, V483A, D614G, H655Y, G669S, Q949R, N1187D

[†]*While work is ongoing to establish standardized nomenclature for key variants, these are the names by which WHO will refer to them in this publication.*

Figure 4. Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01, as of 20 April 2021

Figure 5. Countries, territories and areas reporting SARS-CoV-2 variant 501Y.V2, as of 20 April 2021

Figure 6. Countries, territories and areas reporting SARS-CoV-2 variant P.1, as of 20 April 2021

WHO recommendations

The chances of SARS-CoV-2 mutating increases with its frequency of human and animal infections. Hence, reducing transmission of SARS-CoV-2 through established disease control methods as well as avoiding introductions into animal populations are crucial aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critical to curb the spread of SARS-CoV-2 and its variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the implementation of PHSM and infection prevention and control (IPC) measures in health facilities has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities. Authorities are also encouraged to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and the detection of unusual events.

Additional resources

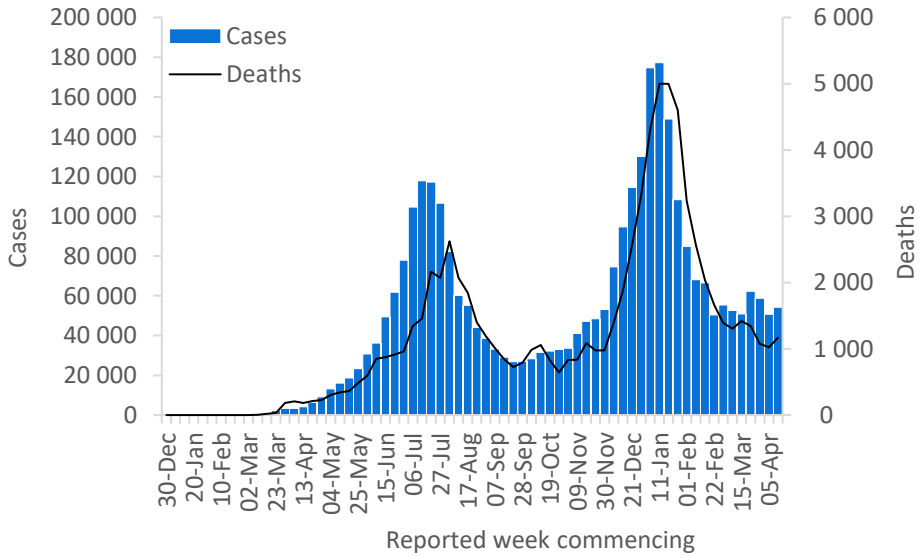
- Proposed working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern
- COVID-19 new variants: Knowledge gaps and research
- PAHO Epidemiological Update: Variants of SARS-CoV-2 in the Americas - 24 March 2021
- PAHO COVID-19 Situation Reports
- WPRO COVID-19 Situation Reports
- SEARO COVID-19 Situation Reports
- EMRO COVID-19 Situation Reports
- Joint ECDC-WHO/EURO weekly surveillance report
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19
- Disease Outbreak News on SARS-CoV-2 Variants, 31 December 2020

WHO regional overviews

African Region

The Africa Region reported over 54 000 new cases and over 1100 new deaths, a 7% and a 14% increase respectively compared to the previous week. The number of weekly cases continues to fluctuate over the last eight weeks, with no clear trend, while weekly deaths increased last week reflecting a large increase in deaths reported by South Africa. The highest numbers of new cases were reported from Ethiopia (12 981 new cases; 11.3 new cases per 100 000 population; a 7% decrease), South Africa (8153 new cases; 13.7 new cases per 100 000; a 35% increase), and Kenya (6103 new cases; 11.3 new cases per 100 000; a 14% decrease).

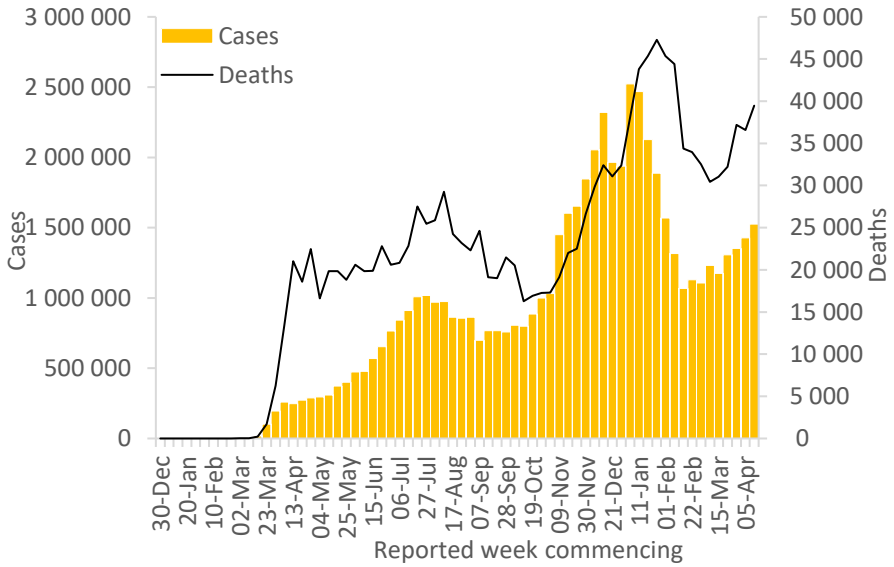
The highest numbers of new deaths were reported from South Africa (455 new deaths; 0.8 new deaths per 100 000 population; a 51% increase), Ethiopia (182 new deaths; 0.2 new deaths per 100 000; a 13% decrease), and Kenya (133 new deaths; 0.2 new deaths per 100 000; a 7% increase).



Region of the Americas

The Region of the Americas reported over 1.5 million new cases and over 39 000 new deaths, a 7% and an 8% increase respectively compared to the previous week. The region has reported an overall increasing trend in new cases for the last eight weeks and new deaths for the last five weeks. The highest numbers of new cases were reported from the United States of America (477 778 new cases; 144.3 new cases per 100 000; a 2% increase), Brazil (459 281 new cases; 216.1 new cases per 100 000; a 1% decrease), and Argentina (160 747 new cases; 355.7 new cases per 100 000; a 29% increase).

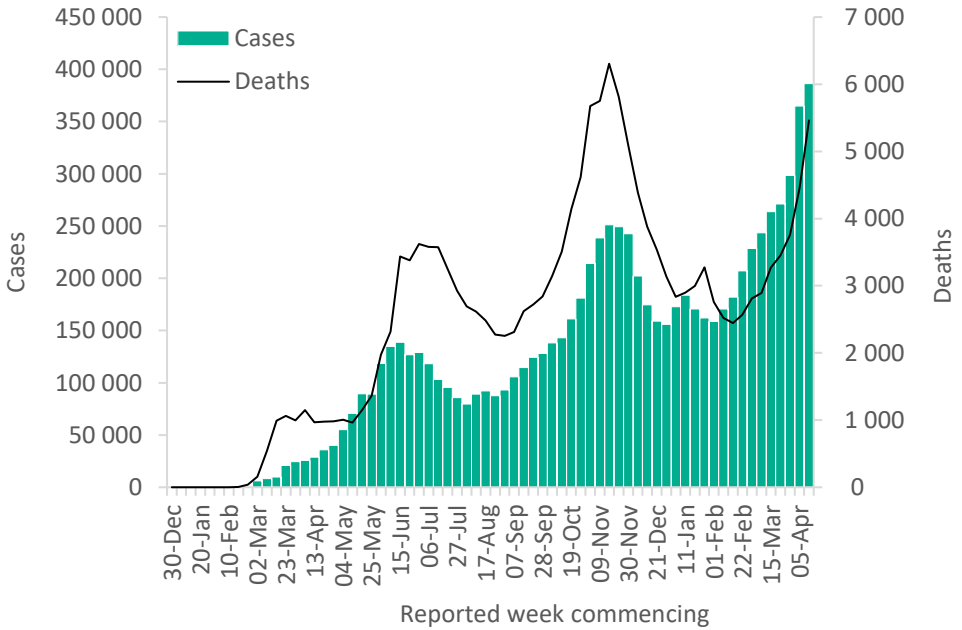
The highest numbers of new deaths were reported from Brazil (20 031 new deaths; 9.4 new deaths per 100 000; a 2% decrease), the United States of America (5146 new deaths; 1.6 new deaths per 100 000; a 1% decrease), and Mexico (4673 new deaths; 3.6 new deaths per 100 000; a 48% increase).



Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 386 000 new cases and over 5400 new deaths, a 6% and a 23% increase respectively compared to the previous week. The upward trend in cases and deaths reported since February 2021 continues, with a sharper increase in new deaths the last two weeks. The highest numbers of new cases were reported from the Islamic Republic of Iran (166 367 new cases; 198.1 new cases per 100 000; a 29% increase), Iraq (52 832 new cases; 131.3 new cases per 100 000; a 6% increase), and Pakistan (34 190 new cases; 15.5 new cases per 100 000; a 3% increase).

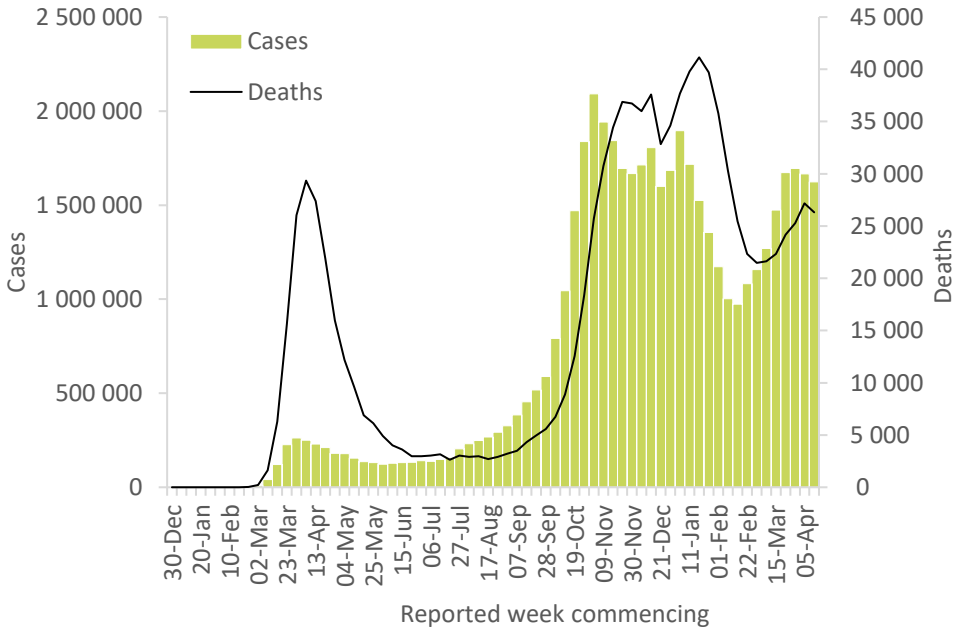
The highest numbers of new deaths were reported from the Islamic Republic of Iran (2095 new deaths; 2.5 new deaths per 100 000; a 70% increase), Pakistan (765 new deaths; 0.3 new deaths per 100 000; a 21% increase), and Tunisia (482 new deaths; 4.1 new deaths per 100 000; a 59% increase).



European Region

The European Region reported over 1.6 million new cases and over 26 000 new deaths. The region reported a slight decrease in new cases (3%) for the second week in a row, a sign that transmission in the region may be slowing as the number of new deaths also decreased (3%) for the first time following a five-week increasing trend. The highest numbers of new cases were reported from Turkey (414 312 new cases; 491.2 new cases per 100 000; a 17% increase), France (233 275 new cases; 358.7 new cases per 100 000; a 12% decrease), and Germany (143 994 new cases; 173.1 new cases per 100 000; a 28% increase).

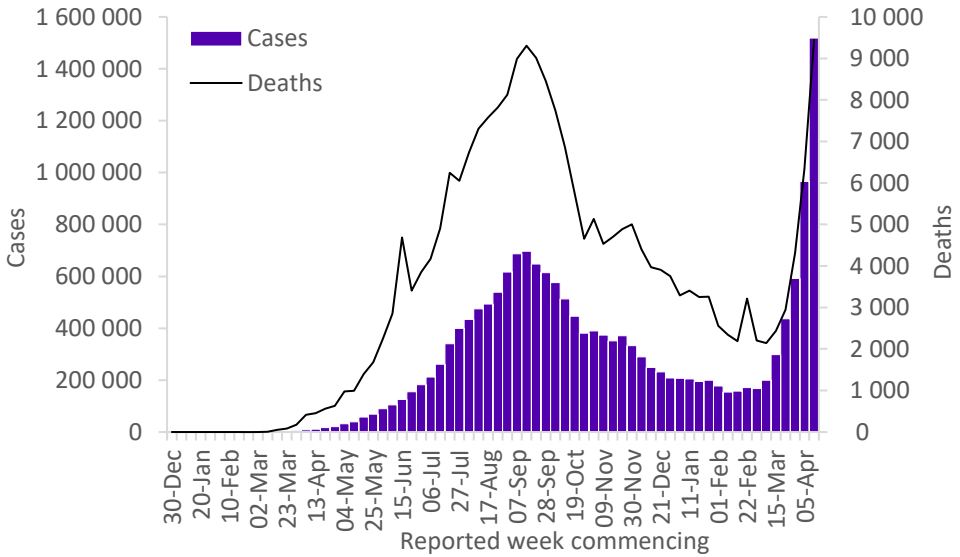
The highest numbers of new deaths were reported from Poland (3611 new deaths; 9.5 new deaths per 100 000; a 4% increase), Ukraine (2772 new deaths; 6.3 new deaths per 100 000; a 3% increase), and Italy (2753 new deaths; 4.6 new deaths per 100 000; a 14% decrease).



South-East Asia Region

The South-East Asia Region reported over 1.5 million new cases and over 9400 new deaths, a 57% and a 49% increase respectively compared to the previous week. The increasing trend in new cases and deaths, which appears to be accelerating, continued last week, with weekly cases rising sharply for the sixth consecutive week while weekly deaths rose for the fifth consecutive week. The trend in the region continues to be driven largely by the trajectory of the outbreak in India which reported the highest numbers of new cases (1 429 304 new cases; 103.6 new cases per 100 000; a 64% increase), followed by Indonesia (36 895 new cases; 13.5 new cases per 100 000; a 4% increase), and Bangladesh (36 315 new cases; 22.1 new cases per 100 000; a 25% decrease).

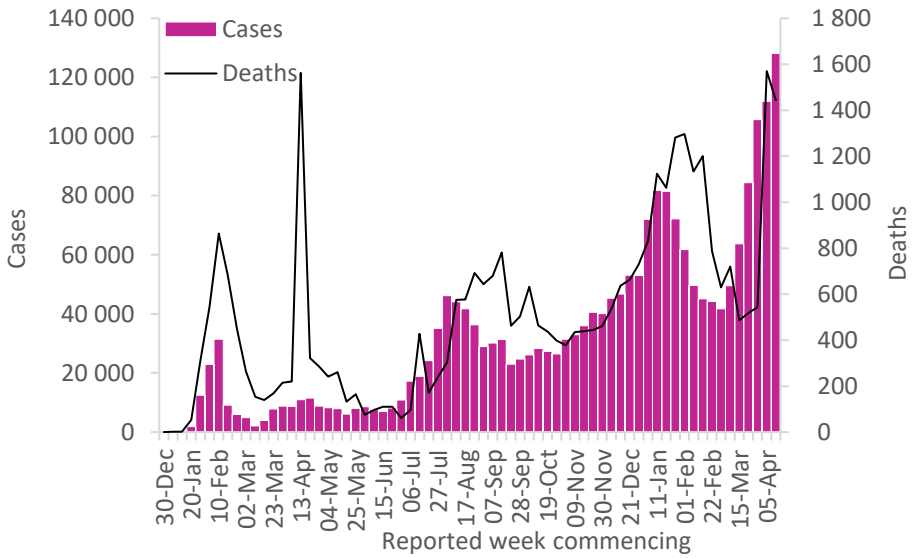
The highest numbers of new deaths were reported from India (7875 new deaths; 0.6 new deaths per 100 000; a 69% increase), Indonesia (885 new deaths; 0.3 new deaths per 100 000; a 26% decrease), and Bangladesh (622 new deaths; 0.4 new deaths per 100 000; a 39% increase).



Western Pacific Region

The Western Pacific Region reported over 128 000 new cases and over 1400 new deaths, a 15% increase and an 8% decrease respectively compared to the previous week. Cases increased for the sixth consecutive week, while deaths decreased after rising for three weeks, continuing to largely reflect the trajectory of deaths reported by the Philippines, the most affected country in the region. The highest numbers of new cases were reported from the Philippines (72 848 new cases; 66.5 new cases per 100 000; a 5% increase), Japan (26 426 new cases; 20.9 new cases per 100 000; a 29% increase), and Malaysia (13 742 new cases; 42.5 new cases per 100 000; a 45% increase).

The highest numbers of new deaths were reported from the Philippines (1066 new deaths; 1.0 new deaths per 100 000; a 19% decrease), Japan (240 new deaths; 0.2 new deaths per 100 000; a 49% increase), and Malaysia (49 new deaths; 0.2 new deaths per 100 000; a 40% increase).



Key weekly updates

WHO Director-General's key message

Opening remarks at the media briefing on COVID-19 – 19 April 2021:

- More than 3 million deaths have been reported to WHO. It took 9 months to reach 1 million deaths; 4 months to reach 2 million, and 3 months to reach 3 million. Big numbers can make us numb, but each one of these deaths is a tragedy for families, communities and nations.
- Greta Thunberg has become the powerful voice of a younger generation demanding climate action. Greta announced a donation of 100 000 Euros from the Greta Thunberg Foundation in support of COVAX to provide vaccines to people in need.
- WHO has partnered with an alliance of the six largest youth development organizations in the world to form the Global Youth Mobilization, to empower young people to respond to the challenges created by the pandemic in their local communities.

Updates and publications

- Statement on the seventh meeting of the International Health Regulations (2005) Emergency Committee regarding the coronavirus disease (COVID-19) pandemic
- Global Advisory Committee on Vaccine Safety (GACVS) review of latest evidence of rare adverse blood coagulation events with AstraZeneca COVID-19 Vaccine (Vaxzevria and Covishield)
- Pfizer BioNTech COVID-19 vaccine: What you need to know
- COVID-19 News updates: Latest news from WHO on COVID-19 and other breaking health stories

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 18 April 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**54 297**	**3 225 261**	**287.5**	**1 170**	**80 715**	**7.2**	
Ethiopia	12 981	240 236	209.0	182	3 328	2.9	Community transmission
South Africa	8 153	1 565 680	2 639.9	455	53 711	90.6	Community transmission
Kenya	6 103	151 287	281.4	133	2 463	4.6	Community transmission
Cameroon	4 394	61 731	232.5	68	919	3.5	Community transmission
Madagascar	4 069	31 617	114.2	45	538	1.9	Community transmission
Botswana	1 401	44 075	1 874.2	35	671	28.5	Community transmission
Cabo Verde	1 346	19 975	3 592.7	12	189	34.0	Community transmission
Mali	1 275	12 980	64.1	24	429	2.1	Community transmission
Gabon	1 222	21 858	982.1	6	133	6.0	Community transmission
Namibia	1 192	46 515	1 830.6	38	602	23.7	Community transmission
Algeria	1 108	119 486	272.5	26	3 152	7.2	Community transmission
Eswatini	1 042	18 415	1 587.3	2	671	57.8	Community transmission
Angola	969	24 300	73.9	11	561	1.7	Community transmission
Zambia	926	90 844	494.1	8	1 234	6.7	Community transmission
Guinea	653	21 460	163.4	5	138	1.1	Community transmission
Mozambique	556	69 134	221.2	9	798	2.6	Community transmission
Togo	549	12 496	150.9	3	119	1.4	Community transmission
Rwanda	523	23 866	184.3	8	322	2.5	Community transmission
Burundi	458	3 612	30.4	0	6	0.1	Community transmission
Nigeria	411	164 147	79.6	1	2 061	1.0	Community transmission
Ghana	403	91 663	295.0	17	771	2.5	Community transmission
Zimbabwe	396	37 669	253.4	14	1 552	10.4	Community transmission
Côte d'Ivoire	374	45 519	172.6	13	274	1.0	Community transmission
Senegal	367	39 731	237.3	13	1 090	6.5	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Democratic Republic of the Congo	352	28 894	32.3	0	745	0.8	Community transmission
Seychelles	344	4 834	4 915.2	1	25	25.4	Community transmission
Central African Republic	322	5 787	119.8	1	75	1.6	Community transmission
Uganda	227	41 340	90.4	1	338	0.7	Community transmission
Burkina Faso	158	13 114	62.7	2	154	0.7	Community transmission
Gambia	131	5 733	237.2	2	170	7.0	Community transmission
Malawi	129	33 934	177.4	11	1 138	5.9	Community transmission
Mauritania	116	18 121	389.7	2	452	9.7	Community transmission
Benin	96	7 611	62.8	3	96	0.8	Community transmission
South Sudan	92	10 432	93.2	0	114	1.0	Community transmission
Mauritius	91	1 203	94.6	3	15	1.2	Clusters of cases
Chad	75	4 691	28.6	1	168	1.0	Community transmission
Eritrea	44	3 491	98.4	0	10	0.3	Community transmission
Niger	42	5 114	21.1	2	190	0.8	Community transmission
Equatorial Guinea	40	7 259	517.4	0	106	7.6	Community transmission
Guinea-Bissau	32	3 710	188.5	0	66	3.4	Community transmission
Sierra Leone	27	4 020	50.4	0	79	1.0	Community transmission
Comoros	26	3 815	438.7	0	146	16.8	Community transmission
Sao Tome and Principe	12	2 275	1 038.1	0	35	16.0	Community transmission
Liberia	5	2 071	40.9	0	85	1.7	Community transmission
Lesotho	2	10 709	499.9	0	315	14.7	Community transmission
Congo	0	10 084	182.7	0	137	2.5	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories[iii]							
Réunion	917	18 425	2 057.9	12	135	15.1	Community transmission
Mayotte	146	19 789	7 253.6	1	168	61.6	Community transmission
Americas	**1 525 505**	**59 551 000**	**5 822.5**	**39 482**	**1 444 736**	**141.3**	
United States of America	477 778	31 250 635	9 441.2	5 146	560 858	169.4	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Brazil	459 281	13 832 455	6 507.6	20 031	368 749	173.5	Community transmission
Argentina	160 747	2 658 628	5 882.5	1 734	59 084	130.7	Community transmission
Colombia	115 216	2 619 422	5 147.9	2 281	67 564	132.8	Community transmission
Canada	60 784	1 106 062	2 930.6	290	23 541	62.4	Community transmission
Peru	60 532	1 689 051	5 122.7	2 169	56 454	171.2	Community transmission
Chile	48 826	1 117 348	5 845.0	842	25 055	131.1	Community transmission
Mexico	27 875	2 299 939	1 783.8	4 673	211 693	164.2	Community transmission
Uruguay	21 623	159 569	4 593.6	425	1 788	51.5	Community transmission
Paraguay	14 664	246 806	3 460.3	479	5 177	72.6	Community transmission
Ecuador	13 280	358 157	2 030.0	366	17 641	100.0	Community transmission
Guatemala	9 667	212 307	1 185.0	189	7 190	40.1	Community transmission
Venezuela (Bolivarian Republic of)	8 148	180 609	635.1	131	1 870	6.6	Community transmission
Cuba	6 902	92 474	816.4	59	512	4.5	Community transmission
Bolivia (Plurinational State of)	6 711	287 360	2 461.7	197	12 625	108.2	Community transmission
Costa Rica	6 033	228 577	4 487.1	53	3 071	60.3	Community transmission
Honduras	5 134	199 682	2 016.1	168	4 934	49.8	Community transmission
Dominican Republic	3 441	260 627	2 402.6	29	3 414	31.5	Community transmission
Panama	2 151	360 249	8 349.2	29	6 185	143.3	Community transmission
El Salvador	1 913	67 404	1 039.2	24	2 072	31.9	Community transmission
Jamaica	1 565	43 684	1 475.2	52	721	24.3	Community transmission
Guyana	684	11 642	1 480.1	15	267	33.9	Clusters of cases
Trinidad and Tobago	419	8 742	624.7	5	150	10.7	Community transmission
Bahamas	279	9 696	2 465.6	5	194	49.3	Clusters of cases
Suriname	231	9 496	1 618.7	9	187	31.9	Clusters of cases
Haiti	78	12 918	113.3	0	251	2.2	Community transmission
Saint Lucia	69	4 398	2 395.1	1	65	35.4	Community transmission
Barbados	65	3 773	1 312.9	0	44	15.3	Community transmission
Belize	51	12 538	3 153.2	0	318	80.0	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Nicaragua	41	5 407	81.6	1	180	2.7	Community transmission
Antigua and Barbuda	31	1 213	1 238.7	1	31	31.7	Clusters of cases
Saint Vincent and the Grenadines	29	1 819	1 639.6	0	10	9.0	Community transmission
Dominica	7	172	238.9	0	0	0.0	Clusters of cases
Grenada	2	159	141.3	0	1	0.9	Sporadic cases
Saint Kitts and Nevis	0	44	82.7	0	0	0.0	Sporadic cases
Territories[iii]							
Puerto Rico	7 371	120 571	4 214.5	42	2 194	76.7	Community transmission
Curaçao	1 042	11 674	7 114.3	20	80	48.8	Community transmission
Martinique	871	9 758	2 600.3	7	66	17.6	Community transmission
Guadeloupe	623	12 927	3 230.7	5	194	48.5	Community transmission
French Guiana	532	18 081	6 053.6	1	95	31.8	Community transmission
Aruba	323	10 219	9 571.4	0	92	86.2	Community transmission
Bermuda	287	2 060	3 308.0	3	17	27.3	Community transmission
United States Virgin Islands	57	3 028	2 899.7	0	26	24.9	Community transmission
Bonaire	36	1 511	7 224.5	0	14	66.9	Community transmission
Sint Maarten	28	2 202	5 135.0	0	27	63.0	Community transmission
Saint Barthélemy	26	954	9 651.0	0	1	10.1	Clusters of cases
Turks and Caicos Islands	25	2 369	6 118.6	0	17	43.9	Clusters of cases
British Virgin Islands	9	187	618.4	0	1	3.3	Clusters of cases
Cayman Islands	9	525	798.8	0	2	3.0	Sporadic cases
Saint Martin	7	1 710	4 423.3	0	13	33.6	Community transmission
Falkland Islands (Malvinas)	2	62	1 780.1	0	0	0.0	Sporadic cases
Anguilla	0	29	193.3	0	0	0.0	Sporadic cases
Montserrat	0	20	400.1	0	1	20.0	No cases
Saba	0	6	310.4	0	0	0.0	No cases
Saint Pierre and Miquelon	0	25	431.4	0	0	0.0	Sporadic cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Eastern Mediterranean	**386 176**	**8 444 694**	**1 155.5**	**5 460**	**170 580**	**23.3**	
Iran (Islamic Republic of)	166 367	2 215 445	2 637.7	2 095	66 327	79.0	Community transmission
Iraq	52 832	970 987	2 414.0	270	14 948	37.2	Community transmission
Pakistan	34 190	750 158	339.6	765	16 094	7.3	Community transmission
Jordan	21 071	683 466	6 698.6	470	8 178	80.2	Community transmission
Lebanon	13 870	508 503	7 450.1	256	6 886	100.9	Community transmission
Tunisia	13 679	283 976	2 402.8	482	9 717	82.2	Community transmission
United Arab Emirates	13 287	495 224	5 007.1	21	1 550	15.7	Clusters of cases
Kuwait	10 156	255 860	5 991.2	37	1 440	33.7	Community transmission
Oman	8 663	176 668	3 459.6	74	1 821	35.7	Community transmission
Bahrain	7 711	163 113	9 586.0	34	588	34.6	Community transmission
Qatar	6 693	195 757	6 794.6	45	376	13.1	Community transmission
Saudi Arabia	6 418	404 054	1 160.6	63	6 810	19.6	Community transmission
Egypt	5 807	215 484	210.6	289	12 694	12.4	Community transmission
Libya	4 243	171 131	2 490.5	75	2 882	41.9	Community transmission
Morocco	3 759	505 447	1 369.4	53	8 944	24.2	Community transmission
Syrian Arab Republic	886	21 004	120.0	69	1 437	8.2	Community transmission
Djibouti	690	10 412	1 053.8	21	114	11.5	Community transmission
Afghanistan	633	57 793	148.5	18	2 539	6.5	Community transmission
Somalia	566	12 837	80.8	51	656	4.1	Community transmission
Yemen	494	5 774	19.4	88	1 120	3.8	Community transmission
Sudan	221	33 022	75.3	35	2 208	5.0	Clusters of cases
Territories[iii]							
occupied Palestinian territory	13 940	308 579	6 048.9	149	3 251	63.7	Community transmission
Europe	**1 624 060**	**49 208 464**	**5 273.8**	**26 302**	**1 035 294**	**111.0**	
Kosovo[1]	3 686	101 110		85	2 051		Community transmission
Turkey	414 312	4 212 645	4 994.9	1 906	35 608	42.2	Community transmission
France	233 275	5 178 513	7 962.1	1 965	99 921	153.6	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Germany	143 994	3 142 262	3 778.3	1 561	79 914	96.1	Community transmission
Poland	113 394	2 688 025	7 081.6	3 611	62 032	163.4	Community transmission
Italy	103 366	3 857 443	6 467.7	2 753	116 676	195.6	Clusters of cases
Ukraine	93 261	1 946 510	4 450.8	2 772	39 786	91.0	Community transmission
Russian Federation	60 711	4 702 101	3 222.1	2 596	105 582	72.3	Clusters of cases
Netherlands	52 986	1 395 233	8 015.1	152	16 904	97.1	Community transmission
Sweden	35 133	900 138	8 715.9	28	13 788	133.5	Community transmission
Spain	31 084	3 396 685	7 176.2	176	76 882	162.4	Community transmission
Hungary	30 344	750 508	7 682.1	1 767	25 184	257.8	Community transmission
Romania	24 174	1 027 039	5 313.5	1 066	26 072	134.9	Community transmission
Belgium	23 034	949 994	8 244.7	252	23 741	206.0	Community transmission
Serbia	20 823	660 299	9 532.7	254	5 954	86.0	Community transmission
Czechia	20 158	1 600 347	14 965.0	618	28 426	265.8	Community transmission
Greece	19 681	313 444	2 924.3	564	9 397	87.7	Community transmission
Kazakhstan	18 391	341 599	1 819.3	194	4 157	22.1	Clusters of cases
The United Kingdom	17 893	4 385 942	6 460.7	180	127 260	187.5	Community transmission
Austria	16 296	588 101	6 607.1	223	9 616	108.0	Community transmission
Croatia	15 274	307 790	7 584.5	254	6 562	161.7	Community transmission
Azerbaijan	14 943	298 522	2 944.2	228	4 107	40.5	Clusters of cases
Bulgaria	14 432	385 963	5 552.2	787	15 138	217.8	Clusters of cases
Switzerland	9 883	629 507	7 273.7	20	9 815	113.4	Community transmission
Belarus	8 060	342 923	3 629.1	69	2 413	25.5	Community transmission
Lithuania	7 458	233 631	8 361.6	73	3 760	134.6	Community transmission
Bosnia and Herzegovina	7 171	190 296	5 800.3	479	7 837	238.9	Community transmission
Georgia	6 962	295 358	7 404.0	62	3 939	98.7	Community transmission
Armenia	5 703	208 520	7 036.9	143	3 878	130.9	Community transmission
Slovenia	5 645	231 599	11 050.3	26	4 460	212.8	Clusters of cases
North Macedonia	5 576	146 733	7 043.0	237	4 419	212.1	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Slovakia	4 912	375 974	6 888.7	541	11 106	203.5	Clusters of cases
Denmark	4 630	241 731	4 151.5	13	2 452	42.1	Community transmission
Republic of Moldova	4 608	245 494	6 085.7	179	5 548	137.5	Community transmission
Cyprus	4 372	55 407	6 239.5	16	288	32.4	Clusters of cases
Norway	4 264	106 223	1 979.0	24	708	13.2	Community transmission
Latvia	3 757	110 997	5 818.4	62	2 048	107.4	Community transmission
Portugal	3 632	830 560	8 066.9	32	16 942	164.6	Clusters of cases
Estonia	3 380	117 554	8 845.5	72	1 092	82.2	Clusters of cases
Ireland	2 595	243 238	4 899.6	52	4 835	97.4	Community transmission
Finland	1 926	83 633	1 513.6	19	887	16.1	Community transmission
Uzbekistan	1 758	86 680	259.0	3	637	1.9	Clusters of cases
Kyrgyzstan	1 656	91 883	1 408.3	27	1 549	23.7	Clusters of cases
Albania	1 301	129 456	4 498.4	30	2 340	81.3	Clusters of cases
Montenegro	1 130	95 548	15 213.1	61	1 434	228.3	Clusters of cases
Israel	1 113	836 926	9 669.3	42	6 334	73.2	Community transmission
Luxembourg	1 096	64 746	10 341.0	17	785	125.4	Community transmission
Malta	379	29 927	5 816.0	7	409	79.5	Clusters of cases
Andorra	274	12 771	16 528.8	3	123	159.2	Community transmission
San Marino	54	5 010	14 762.2	1	86	253.4	Community transmission
Liechtenstein	51	2 892	7 463.8	0	54	139.4	Sporadic cases
Iceland	28	6 286	1 726.3	0	29	8.0	Community transmission
Monaco	22	2 395	6 102.8	0	31	79.0	Sporadic cases
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Gibraltar	14	4 291	12 736.3	0	94	279.0	Clusters of cases
Jersey	2	3 232	2 998.3	0	69	64.0	Community transmission
Faroe Islands	1	662	1 354.8	0	1	2.0	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Guernsey	1	822	1 275.1	0	14	21.7	Community transmission
Isle of Man	1	1 575	1 852.2	0	29	34.1	No cases
Greenland	0	31	54.6	0	0	0.0	No cases
South-East Asia	**1 518 708**	**17 696 534**	**875.5**	**9 447**	**237 832**	**11.8**	
India	1 429 304	14 788 109	1 071.6	7 875	177 150	12.8	Clusters of cases
Indonesia	36 895	1 599 763	584.9	885	43 328	15.8	Community transmission
Bangladesh	36 315	715 252	434.3	622	10 283	6.2	Community transmission
Thailand	9 727	42 352	60.7	4	101	0.1	Clusters of cases
Nepal	3 933	283 658	973.5	36	3 075	10.6	Clusters of cases
Sri Lanka	1 591	96 439	450.4	22	617	2.9	Clusters of cases
Maldives	621	26 145	4 836.8	2	69	12.8	Clusters of cases
Timor-Leste	228	1 236	93.7	1	2	0.2	Clusters of cases
Myanmar	52	142 628	262.1	0	3 206	5.9	Clusters of cases
Bhutan	42	952	123.4	0	1	0.1	Sporadic cases
Western Pacific	**128 176**	**2 205 688**	**112.3**	**1 444**	**34 918**	**1.8**	
Philippines	72 848	926 035	845.1	1 066	15 810	14.4	Community transmission
Japan	26 426	529 829	418.9	240	9 622	7.6	Clusters of cases
Malaysia	13 742	372 859	1 152.0	49	1 370	4.2	Community transmission
Mongolia	6 472	20 655	630.1	21	41	1.3	Clusters of cases
Republic of Korea	4 560	114 114	222.6	29	1 797	3.5	Clusters of cases
Cambodia	2 151	6 389	38.2	14	43	0.3	Sporadic cases
Papua New Guinea	1 296	9 738	108.8	21	89	1.0	Community transmission
China	190	103 273	7.0	3	4 856	0.3	Clusters of cases
Singapore	175	60 808	1 039.4	0	30	0.5	Sporadic cases
Australia	109	29 505	115.7	1	910	3.6	Clusters of cases
Viet Nam	89	2 781	2.9	0	35	0.0	Clusters of cases
New Zealand	20	2 238	46.4	0	26	0.5	Clusters of cases
Lao People's Democratic Republic	9	58	0.8	0	0	0.0	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Fiji	4	72	8.0	0	2	0.2	Sporadic cases
Brunei Darussalam	2	221	50.5	0	3	0.7	Sporadic cases
Solomon Islands	0	20	2.9	0	0	0.0	No cases
Territories[iii]							
French Polynesia	44	18 696	6 655.6	0	141	50.2	Sporadic cases
Guam	29	7 654	4 535.0	0	136	80.6	Clusters of cases
Wallis and Futuna	6	447	3 974.7	0	5	44.5	Sporadic cases
New Caledonia	2	123	43.1	0	0	0.0	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	2	162	281.5	0	2	3.5	Pending
Marshall Islands	0	4	6.8	0	0	0.0	No cases
Samoa	0	4	2.0	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Global	**5 236 922**	**140 332 386**		**83 305**	**3 004 088**		

*See *Annex: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting variants of concern as of 20 April 2021**

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Afghanistan	Verified*		
Albania	Not Verified		
Algeria	Verified		
Angola	Verified	Verified	
Argentina	Verified		Verified
Armenia	Not Verified*		
Aruba	Verified	Verified	Verified
Australia	Verified	Verified	Verified
Austria	Verified	Verified	Verified
Azerbaijan	Verified		
Bahrain	Verified		
Bangladesh	Verified	Not Verified	
Barbados	Verified		
Belarus	Verified		
Belgium	Verified	Verified	Verified
Belize	Verified		
Bonaire	Verified		
Bosnia and Herzegovina	Not Verified		
Botswana		Verified	
Brazil	Verified	Verified	Verified
Brunei Darussalam	Verified	Verified	
Bulgaria	Verified		
Cabo Verde	Verified		
Cambodia	Verified		
Cameroon		Verified	
Canada	Verified	Verified	Verified
Cayman Islands	Verified		
Chile	Verified	Verified*	Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
China	Verified	Verified	Verified
Colombia	Verified*		Verified
Comoros		Verified	
Costa Rica	Verified	Verified	Verified
Croatia	Verified	Not Verified	
Cuba	Verified	Verified	
Curaçao	Verified		
Cyprus	Verified		
Czechia	Verified	Not Verified	
Democratic Republic of the Congo	Verified	Verified	
Denmark	Verified	Verified	Verified
Dominican Republic	Verified		
Ecuador	Verified		Verified*
Estonia	Verified	Not Verified	
Eswatini		Verified	
Faroe Islands			Verified
Finland	Verified	Verified	Verified
France	Verified	Verified	Verified
French Guiana	Verified	Verified*	Verified
French Polynesia	Verified		Verified
Gambia	Verified		
Georgia	Verified		
Germany	Verified	Verified	Verified
Ghana	Verified	Verified	
Gibraltar	Not Verified		
Greece	Verified	Verified	
Grenada	Verified		
Guadeloupe†	Verified		

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Guyana			Not Verified
Hungary	Verified	Not Verified	
Iceland	Verified		
India	Verified	Verified	Verified
Indonesia	Verified		
Iran (Islamic Republic of)	Verified		
Iraq	Verified		
Ireland	Verified	Verified	Not Verified
Israel	Verified	Verified	
Italy	Verified	Not Verified	Verified
Jamaica	Verified		
Japan	Verified	Verified	Verified
Jordan	Verified	Verified*	Verified*
Kazakhstan	Not Verified	Not Verified	
Kenya	Not Verified	Verified	
Kosovo[1]	Verified		
Kuwait	Verified		
Latvia	Verified	Verified	
Lebanon	Verified		
Lesotho		Verified	
Libya	Verified	Verified	
Liechtenstein	Verified		
Lithuania	Verified	Verified	
Luxembourg	Verified	Verified	Not Verified
Malawi	Verified	Verified	
Malaysia	Verified	Verified	
Malta	Verified	Not Verified	
Martinique†	Verified		

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Mauritius	Not Verified		
Mayotte	Verified	Verified	
Mexico	Verified		Verified
Monaco	Verified	Not Verified	
Montenegro	Verified		
Morocco	Verified		
Mozambique		Verified	
Namibia		Verified	
Nepal	Verified		
Netherlands	Verified	Verified	Verified
New Caledonia	Verified		
New Zealand	Verified	Verified	Not Verified
Nigeria	Verified		
North Macedonia	Verified		
Norway	Verified	Verified	Verified
occupied Palestinian territory	Verified	Verified	
Oman	Verified		
Pakistan	Verified		
Panama	Verified*	Verified	Verified
Paraguay			Verified
Peru	Verified		Verified
Philippines	Verified	Verified	Verified
Poland	Verified	Not Verified	Not Verified
Portugal	Verified	Verified	Not Verified
Puerto Rico	Verified		Verified
Qatar	Verified	Verified	
Republic of Korea	Verified	Verified	Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Republic of Moldova	Not Verified		
Réunion	Verified	Verified	Verified
Romania	Verified	Verified	Verified
Russian Federation	Verified	Not Verified	
Rwanda	Not Verified	Not Verified	
Saint Barthélemy	Verified		
Saint Lucia	Verified		
Saint Martin	Verified	Verified	Verified
Saudi Arabia	Verified		
Senegal	Verified		
Serbia	Verified		
Singapore	Verified	Not Verified	
Sint Maarten	Verified		
Slovakia	Verified	Not Verified	
Slovenia	Verified	Verified	Not Verified
South Africa	Verified	Verified	
Spain	Verified	Verified	Verified
Sri Lanka	Verified	Verified	
Suriname	Verified	Verified	Verified
Sweden	Verified	Verified	Verified
Switzerland	Verified	Verified	Not Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Syrian Arab Republic	Not Verified*		
Thailand	Verified	Verified	
The United Kingdom	Verified	Verified	Verified
Togo	Verified		
Trinidad and Tobago	Verified		
Tunisia	Verified		
Turkey	Verified	Not Verified	Not Verified
Turks and Caicos Islands	Verified		
Uganda		Not Verified	
Ukraine	Not Verified	Not Verified*	
United Arab Emirates	Verified	Verified	Verified
United Republic of Tanzania		Verified	
United States of America	Verified	Verified	Verified
Uruguay	Verified		Verified
Uzbekistan	Verified	Not Verified*	
Venezuela (Bolivarian Republic of)			Verified
Viet Nam	Verified	Verified	
Wallis and Futuna	Not Verified		
Zambia		Verified	
Zimbabwe		Verified	

*New country added in this update.

†Variants 501Y.V2 and P.1 for Guadeloupe and Martinique were removed based on further information received.

**See *Annex : Data, table and figure notes*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 745 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common

exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.

- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 11 April 2021, 10 am CET

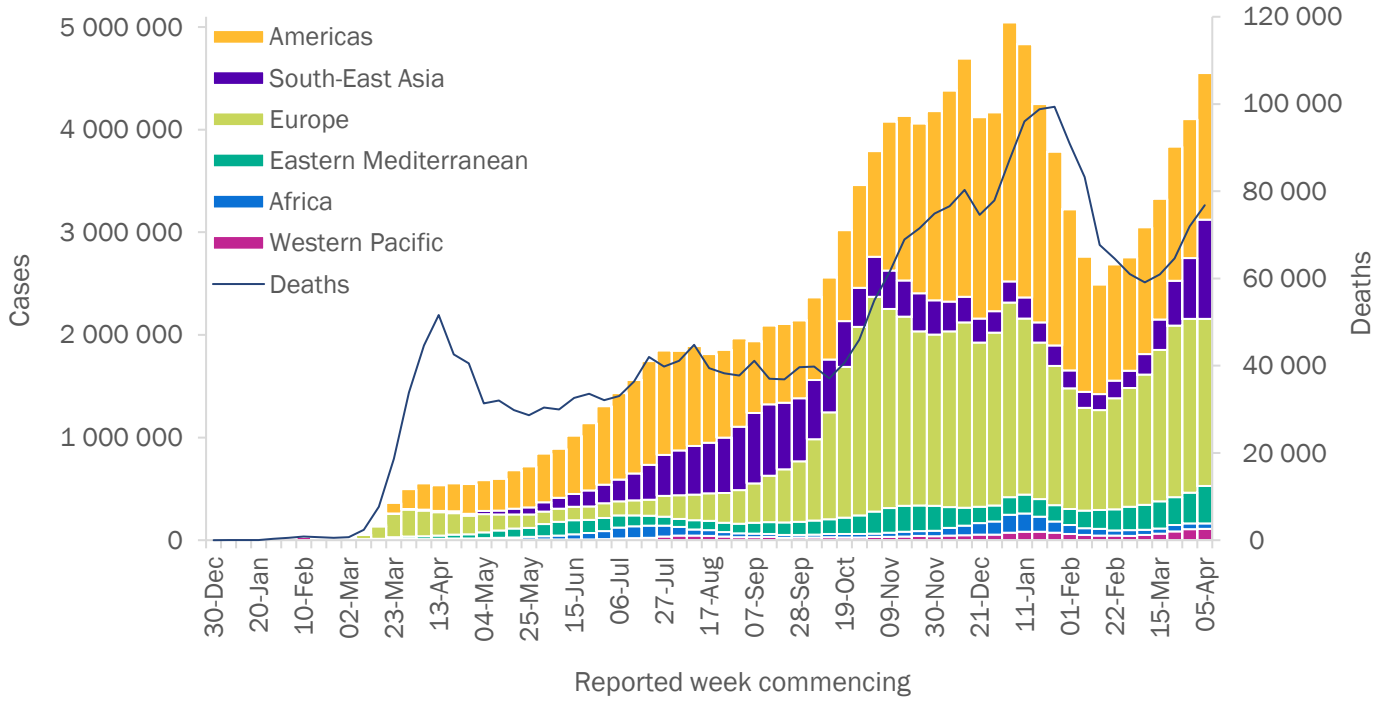
In this edition:

- Global overview
- Special focus: SARS-CoV-2 variants
- WHO regional overviews
- Key weekly updates

Global overview

Globally, new COVID-19 cases rose for a seventh consecutive week, with over 4.5 million new cases reported in the last week (Figure 1). The number of new deaths increased for the fourth consecutive week, increasing by 7% compared to last week, with over 76 000 new deaths reported. The largest increases in case incidence were observed in the South-East Asia (most notably in India) and the Eastern Mediterranean regions (Table 1). All regions, except for the African Region and the Americas, reported increases in the number of deaths, with the largest increase of 189% from the Western Pacific Region (largely driven by a steep increase in new deaths in the Philippines) followed by 47% in South-East Asia.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 11 April 2021**



**See *Annex: Data, table and figure notes*

The highest numbers of new cases were reported from India (873 296 new cases; 70% increase), the United States of America (468 395 new cases; 5% increase), Brazil (463 092 new cases; 8% decrease), Turkey (353 281 new cases; 33% increase), and France (265 444 new cases; 9% increase).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 11 April 2021**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 427 623 (31%)	5%	58 025 495 (43%)	36 599 (48%)	-2%	1 405 254 (48%)
Europe	1 630 624 (36%)	-4%	47 547 449 (35%)	26 853 (35%)	7%	1 008 251 (35%)
South-East Asia	965 591 (21%)	63%	16 177 826 (12%)	6 331 (8%)	47%	228 385 (8%)
Eastern Mediterranean	364 456 (8%)	22%	8 057 550 (6%)	4 398 (6%)	19%	165 010 (6%)
Africa	50 710 (1%)	-14%	3 171 006 (2%)	1 022 (1%)	-5%	79 545 (3%)
Western Pacific	111 833 (2%)	6%	2 077 516 (2%)	1 570 (2%)	189%	33 474 (1%)
Global	**4 550 837 (100%)**	**11%**	**135 057 587 (100%)**	**76 773 (100%)**	**7%**	**2 919 932 (100%)**

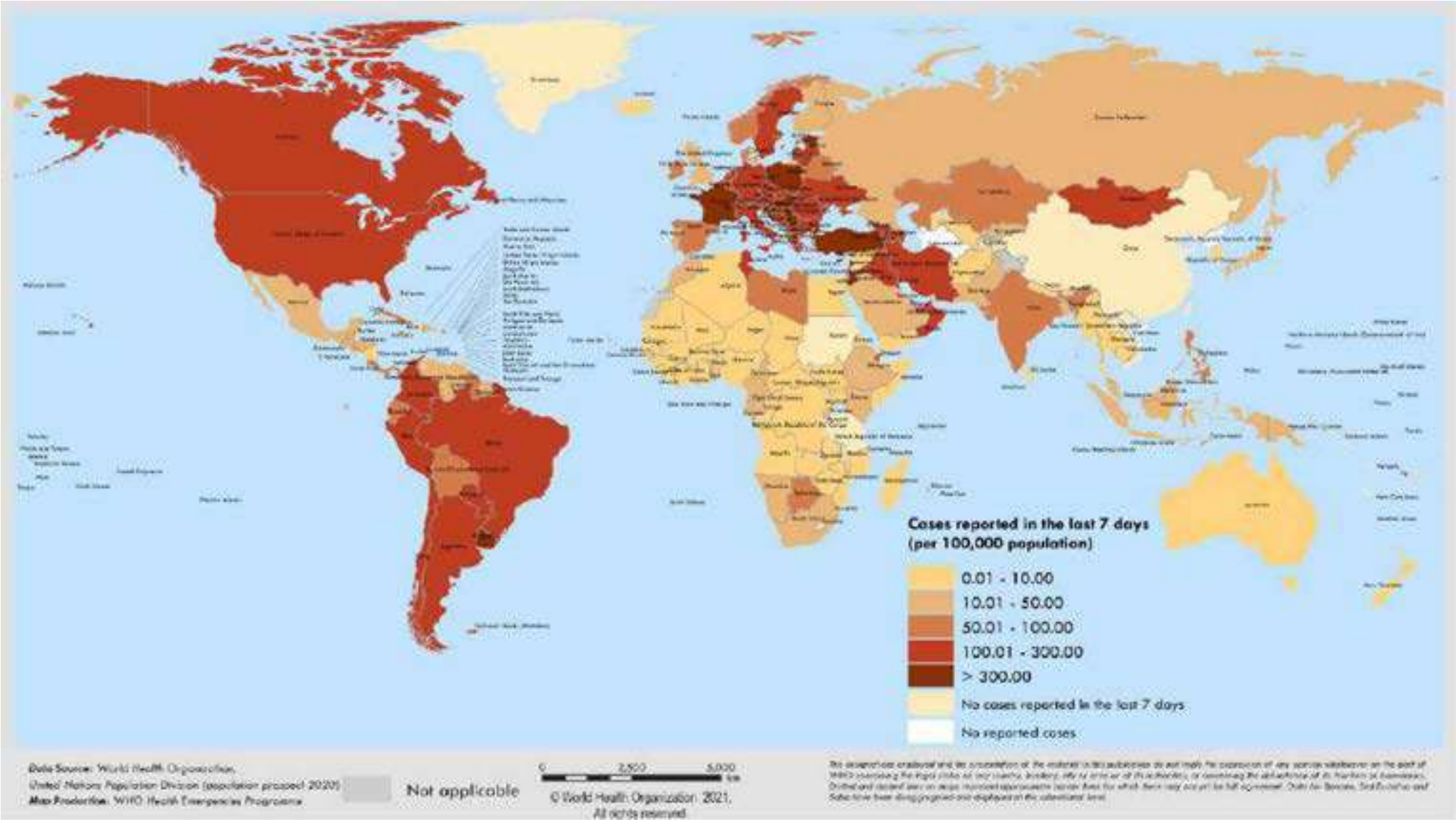
**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*

**See *Annex: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 5-11 April 2021**



**See *Annex: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants

WHO, in collaboration with national authorities, institutions and researchers, continues to monitor the public health events associated with SARS-CoV-2 variants and provides updates as new information becomes available. Further information on the background of the variants of interest (VOIs) and variants of concern (VOCs) is available from previously published editions of the Weekly Epidemiological Update. Here we provide an update on the geographical distribution, and emerging evidence surrounding impacts of VOCs on COVID-19 epidemiology, vaccines and diagnostics. We also update on a recent global consultation, and emerging VOIs.

The number of countries reporting VOCs continue to increase (Table 2, Figures 3, 4 and 6, Annex 2). This information should be interpreted with due consideration of limitations of ongoing surveillance, including but not limited to differences between countries in sequencing capacity and which samples are prioritized for sequencing. WHO continues to advocate for strengthening surveillance and sequencing capacity, and a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants; based on the local epidemiological situation and capacity, and the detection of unusual events.

On 29 March 2021, WHO convened a Global Consultation on a Decision Framework for Assessing the Impact of SARS-CoV-2 VOCs on Public Health Interventions. This was the first global forum of stakeholders to outline the global risk assessment and framework, including critical steps for the detection, monitoring, and assessment of SARS-CoV-2 variants, and to provide an overview of the available evidence on current VOCs and their impact on public health interventions. Using COVID-19 vaccines as an example, WHO and partners reviewed potential decision-making processes with respect to analysing the impact of VOCs, evaluating and modifying vaccines, and issuing policy recommendations. While the existing COVID-19 vaccines are still effective against VOCs, the consultation provided the opportunity to consider the overall process for making changes to vaccines, should they be needed. Following the consultation, WHO is working with partners to further define the global risk monitoring and assessment framework for SARS-CoV-2 variants to fully elaborate decision-making processes, including recommending any changes to vaccine composition, and triggers for such decision making. The meeting report will be published in the coming weeks. A follow up consultation is tentatively planned for June 2021.

Table 2: Overview of emerging information on key variants of concern, as of 13 April 2021*

Nextstrain clade	**20I/501Y.V1**	**20H/501Y.V2**[†]	**20J/501Y.V3**
PANGO lineage	B.1.1.7	B.1.351	B.1.1.28.1, alias **P.1**[†]
GISAID clade	GR	GH	GR
Alternate names	**VOC 202012/01**[†]	VOC 202012/02	VOC 202101/02
First detected by	United Kingdom	South Africa	Brazil / Japan
Earliest sample(s)	20 September 2020	Early August 2020	December 2020
Key spike mutations	H69/V70 deletion; Y144 deletion; N501Y; A570D; and P681H	L242/A243/L244 deletion; K417N; E484K; N501Y	K417T; E484K; N501Y
Common mutation	S106/G107/F108 deletion in non-structural protein 6 (nsp6)		
Transmissibility	Increased (43%-90%)[1], increased secondary attack rate [11% (95%CI: 10.9-11.2%) among closer contacts][2]	Increased [1.50 (95% CI: 1.20-2.13) times more transmissible than previously circulating variant[3, 4]	Increased, more transmissible than previous circulating variants[5]
Severity	Possible increased risk of hospitalization[6], severity and mortality[7]. Other studies showing limited impact/mixed findings [1, 8, 9]	Possible increased risk of in-hospital mortality by 20%[4,10]	Under investigation, limited impact[5]
Assessment of potential reinfection/breakthrough	Slight reduction in neutralization capacity but overall neutralizing titers still remained above the levels expected to confer protection[11]	Decreased neutralization capacity, suggesting potential increased risk of reinfection[3, 12, 13]	Decreased neutralization capacity, reinfections reported[14, 15]
Potential impacts on vaccines	• No or minimal impact on post-vaccine neutralization by Moderna, Pfizer-BioNTech, Oxford-AstraZeneca, Novavax, Bharat, Gamaleya, and Sinopharm vaccines [11, 16-30,31]; however there is some evidence of more substantial loss for AstraZeneca.[32] • Bharat, Gamaleya, Sinopharm, and Sinovac vaccines have each been evaluated by single studies reporting no significant reduction in neutralization.[33, 34] • No significant change in prevention of disease by Oxford-AstraZeneca, Novavax, and Pfizer[35-37] • Evidence for prevention of infection limited. Reduced effect reported for Oxford-AstraZeneca.[32]	• Post-vaccine neutralization reductions from several from studies range from minimal to substantial for Moderna and Pfizer. • Substantial reductions have been found for the Oxford-AstraZeneca product.[29, 40] • Minimal to modest reductions have been found for Sinopharm. • A single study found modest reduction for Sinovac. • Single studies found more substantial reduction for Novavax and Gamaleya. • Efficacy against disease was retained, but somewhat lower, in South Africa for the Novavax and Janssen vaccines when 501Y.V2 was dominant compared to settings without this variant.[41, 42] • In a small study, AstraZeneca vaccine did not demonstrate vaccine efficacy against mild-moderate COVID-19 disease, with wide confidence intervals, while efficacy against severe disease was not assessed and is undetermined.[43, 44] • Information regarding vaccine impact on asymptomatic infection by 501Y.V2 remains a gap.	• Limited to modest reduction in post-vaccine neutralization by Oxford-AstraZeneca, Moderna and Pfizer vaccines; however there is some evidence of more substantial reduction. [18, 21, 28, 29, 38, 45, 46] • Preliminary suggestion of loss of neutralization following vaccination with Sinovac[47] • Preliminary vaccine effectiveness of Sinovac in setting of P.1 was estimated in Brazil[6]
Potential impacts on diagnostics	S gene target failure (SGTF). No impact on Ag RDTs observed[48]	None reported to date	None reported to date
Countries reporting cases (newly reported since the last update**	132 (2)	82 (2)	52(7)

[†]*While work is ongoing to establish standardized nomenclature for key variants, these are the names by which WHO will refer to them in this publication.*
**Generalized findings as compared to non-VOC viruses. Based on emerging evidence from multiple countries, including nonpeer reviewed preprint articles and reports from public health authorities and researchers – all subject to ongoing investigation and continuous revision.*
***Includes official and unofficial reports of VOCs detections in countries/territories/areas.*

Variant VOC 202012/01

Since our last update on 30 March, VOC 202012/01 has been detected in two additional countries. As of 13 April, a total of 132 countries across all six WHO regions have reported cases of this variant (Figure 3).

Several studies have shown increased transmissibility (including secondary attack rates), severity and mortality associated with VOC 202012/01 compared to non-VOC variants.[1, 6-9, 49-53] As mentioned in earlier publications, the likelihood of infection upon contact (secondary attack rate) is higher in people infected with VOC202012/01 than other variants. A recent technical briefing by Public Health England estimated the secondary attack rates to be 11% (95%CI: 10.9%-11.2%) higher among close contacts of cases who have not travelled between 5 January to 7 March 2021. Among the cases who travelled, secondary attack rates were estimated to be 1.9% (95% CI: 1.7%-2.2%); of note this population was not restricted to only close contacts and included several categories such as contacts on a plane linked by additional contact tracing.[2]

A recently published study which used datasets from several European countries and the United States of America estimated that VOC 202012/01 has a 43–93% higher reproduction number (95% CI: 38–130%) than previously circulating variants.[1] The study also assessed the severity of disease, but differing from other studies, suggested no clear evidence increased severity associated with VOC 202012/01; however, these estimates should be interpreted with caution given delays between infection and hospitalization or death (models were fitted through to 24 December 2020). Additionally, it has been shown that higher rates of transmission and case incidence may lead to more hospital admissions and strain on health systems – potentially impacting on patient outcomes. Two other recently published peer reviewed studies (an ecological study and a hospital-based cohort study) found no evidence of an association between VOC202012/01 and severe disease or death [8, 9]; again, the generalizability to these findings require further review against other evidence. Collectively, these studies highlighted the need for further research to better understand the impact of VOC 202012/01.

There is a growing body of evidence on vaccine-induced neutralizing antibody activity against VOC 202012/01, including for AstraZeneca, Moderna, Pfizer, Novavax, Bharat, Gamaleya, and Sinopharm vaccines.[11, 16-30 31] As noted in the Weekly epidemiological Update published on 23 March, the findings support that neutralizing activity is largely sustained against this variant. A recent evaluation of CD8+ T-cell from convalescent sera supports the likelihood of maintaining recognition of this variant; however, vaccine induced T-cell responses were not directly evaluated.[55] Evidence for vaccine protection against disease is available from randomized control trials and observational studies (AstraZeneca and Pfizer vaccines) and early evidence on prevention of infection of this variant by the AstraZeneca vaccine.[55]

Figure 3. Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01 as of 13 April 2021

Variant 501Y.V2

Since the last update on 30 March, 501Y.V2 has been reported from two additional countries – totalling 82 countries across all six WHO regions (Figure 4).

Investigations from a recent study[56] showed five imported cases of variant 501Y.V2 was responsible for 14 transmission chains and a total 36 cases in France. It suggested that epidemiological characteristics, such as incubation period and transmissibility, seemed comparable to those described in China [57-59] before the emergence of the 501Y.V2 variant. This study also established that the secondary attack rate (confirmed or probable cases) was estimated at 76.9% and the tertiary attack rate was estimated at 73.3%. The study highlights that the lack of tertiary transmission outside of the personal sphere suggests that distancing and barrier measures were effective.

Reductions in neutralizing antibody activity against 501Y.V2 induced by vaccines or natural infection compared with wild-type (non-VOC) variants, have been documented in a substantial number of studies.[3, 18, 21, 24, 25, 27-29, 40, 46, 60, 61] Findings from four recent studies report substantial reductions in neutralizing antibody activity for Moderna (9.7-fold reduction), Pfizer-BioNTech (14-fold and 8.8-fold reductions)[30], Novavax (14.5-fold reduction) and Gamaleya (6.8-fold reduction) vaccines.[22, 24, 61] However, some studies report smaller reductions for Moderna and Pfizer-BioNTech vaccines.[21, 26, 40] Another recent study found 2.4 to 3.3-fold reductions in neutralizing activity induced by the Sinovac and Sinopharm vaccines.[34] Adding to the previously cited T-cell analyses from the 30 March update, which suggested a likely maintenance of function, a further analysis of CD8+ T-cell responses from convalescent sera which also support the likely retention of function.[55, 62]

Figure 4. Countries, territories and areas reporting SARS-CoV-2 501Y.V2 as of 13 April 2021

Variant P.1

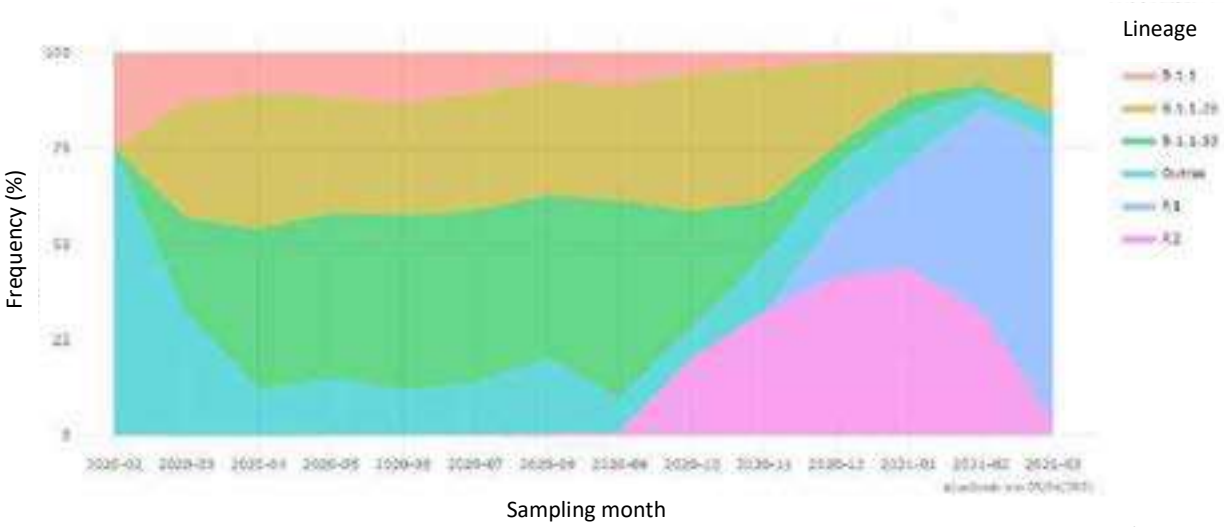
Since our last update, variant P.1 has been reported in seven additional countries. As of 13 April, this variant is reported in 52 countries across all six WHO regions (Figure 5).

Genomic surveillance and modelling studies based in Brazil suggest higher transmissibility of the P.1 variant when compared to Brazilian non-P.1 lineages.[15, 63, 64] Moreover, case fatality rates in Brazil increased in people older than 20 years in February 2021, when compared to January 2021, suggesting a potential association between P.1 and more severe disease.[65] Akin to similar observations with other VOCs elsewhere, it will be important to disentangle changes in disease severity from impacts of increased transmissibility/high incidence adding pressures to health systems and adversely impacting patient outcomes.

A recent study carried out in Italy in settings where both P.1 and VOC 202012/01 were co-circulating at significant levels highlighted that the P.1 variant was outcompeted by VOC 202012/01, which rapidly dominated in the majority of regions. The same study also highlighted potential cross-protection across variants.[66]

In Brazil, the proportion of variant P.1 increased from 28% of specimens collected in January 2021 to 73% in March 2021, based on the data generated from the Fiocruz Genomic Network and GISAID (Figure 5).[67] By geographic region of specimen collection, the proportion of variant P.1 was higher in the South east and North regions, which includes Amazonas State, compared to other regions.

Figure 5. Proportion of lineages of SARS-CoV-2 identified in Brazil by month of sampling, February 2020 – March 2021



(source: Fiocruz [67])

Several studies have measured the neutralization of variant P.1 by sera from those vaccinated with Pfizer, Moderna, AstraZeneca or Sinovac, including a recent report from the phase III randomized control trial of Sinovac in Brazil reporting seroconversion.[17, 21, 25, 26, 28, 29, 46, 68, 69] Based on these findings, the neutralization activity was reduced by 1.7 to 10-fold depending on the vaccine and individuals; for some vaccines, there was substantial variability in results across studies. One T-cell study concluded that responses against this variant were largely preserved and a recent CD8+ T-cell study of convalescent sera also inferred likely retention of activity.[55] Preliminary clinical outcome data are currently limited to a recent matched test-negative case-control study of healthcare workers in Manaus, Brazil at a time when P.1 was prevalent. It found the Sinovac vaccine to be 49.6% effective against symptomatic COVID-19 and 35.1% effective against asymptomatic infection, though these findings have not yet been peer-reviewed.[70]

Figure 6. Countries, territories and areas reporting SARS-CoV-2 P.1 variant as of 13 April 2021

Emerging variants of interest (VOIs)

All viruses, including SARS-CoV-2, change over time resulting in the emergence of new variants, most without a direct benefit to the virus or other public health impacts. WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 result in changes in transmissibility, clinical presentation and severity, or if they impact on public health and social measures (PHSM). Systems have been established to detect "signals" of potential variants of interest or concern, as well as unusual events potentially associated with a variant, and assess these based on the risk posed to global public health (see also working definitions). A number of such signals are currently under assessment, and as new VOIs or VOCs are determined, WHO is committed to highlighting these to support prioritization for further monitoring and assessment. Table 3 summarises assessed and designated VOIs as of 13 April 2021. National authorities may choose to designate other variants of local interest/concern as every local situation is unique, with different variants circulating, requiring surveillance and response systems to adapt to their local epidemiological situation.

Table 3: Overview of variants of interest (VOIs), as of 13 April 2021*

Nextstrain clade	PANGO lineage	GISAID clade	Alternate names	First detected by	Earliest samples	Key spike mutations
20C	B.1.525	G/484K.V3	-	United Kingdom and Nigeria	Dec 2020	H69-V70 deletion; Y144 deletion; Q52R; E484K; Q677H; D614G; and F888L
20C/S.452R	B.1.427/B.1.429	GH/452R.V1	CAL.20C/L452R	United States of America	Jun 2020	L452R; W152C; S13I; and D614G
20B/S.484K	B.1.1.28.2, alias P.2	GR	-	Brazil	Apr 2020	L18F; T20N; P26S; F157L; E484K; D614G; S929I; and V1176F
Not yet assigned	B.1.1.28.3, alias P.3	Not yet assigned	PHL-B.1.1.28	Philippines and Japan	Feb 2021	141-143 deletion E484K; N501Y; and P681H
20C	B.1.526 with E484K or S477N	GH	-	United States of America	Nov 2020	L5F; T95I; D253G; D614G; A701V; and E484K or S477N
20C	B.1.616	GH	-	France	Jan 2021	G142 deletion; D66H; Y144V; D215G; V483A; D614G; H655Y; G669S; Q949R; and N1187D

WHO recommendations

The potential for virus mutation increases with the frequency of human and animal infections. Therefore, reducing transmission of SARS-CoV-2 by using established disease control methods as well as avoiding introductions to animal populations, are critical aspects to the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critically important to curb the spread of SARS-CoV-2, including newly reported variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the implementation of physical distancing and other PHSM, as well as infection prevention and control (IPC) measures in health facilities, has been effective in reducing COVID-19 case incidence, hospitalizations and deaths. Findings from new studies evaluating transmission, severity and impact on medical countermeasures will continue to help inform PHSM and IPC measures employed by Member States. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities, including epidemiological surveillance, strategic testing, and systematic sequencing of SARS-CoV-2 where feasible.

Additional resources

- Proposed working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern
- COVID-19 new variants: Knowledge gaps and research
- PAHO Epidemiological Update: Variants of SARS-CoV-2 in the Americas - 24 March 2021
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19
- Disease Outbreak News on SARS-CoV-2 Variants, 31 December 2020

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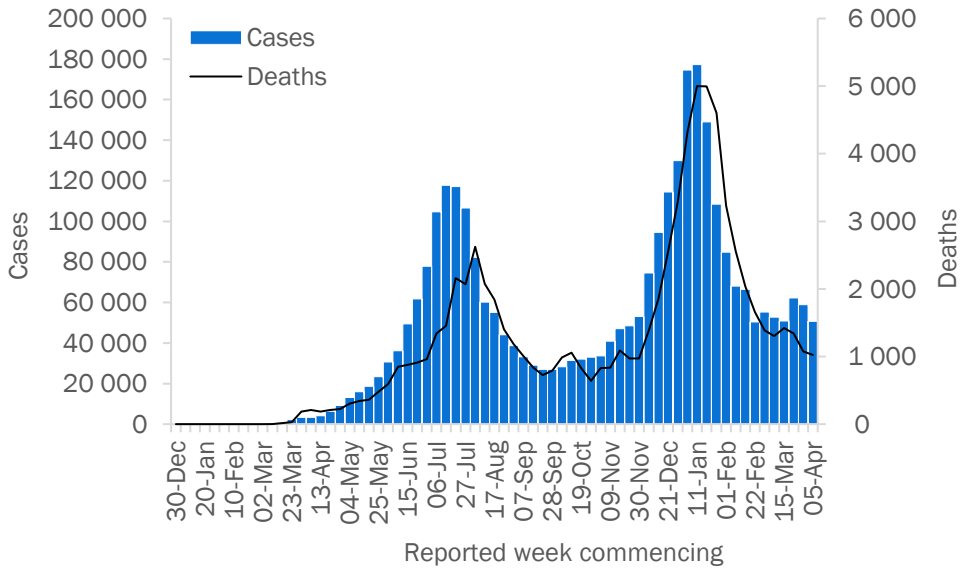
WHO regional overviews

African Region

The African Region reported over 50 000 new cases and over 1000 new deaths, a 14% and a 5% decrease respectively compared to the previous week. Weekly cases incidence has fluctuated since late February 2021; however, deaths have continued an overall downward trend. The highest numbers of new cases were reported from Ethiopia (13 944 new cases; 12.1 new cases per 100 000 population; a 4% decrease), Kenya (7107 new cases; 13.2 new cases per 100 000; a 19% decrease), and South Africa (6026 new cases; 10.2 new cases per 100 000; a 14% decrease).

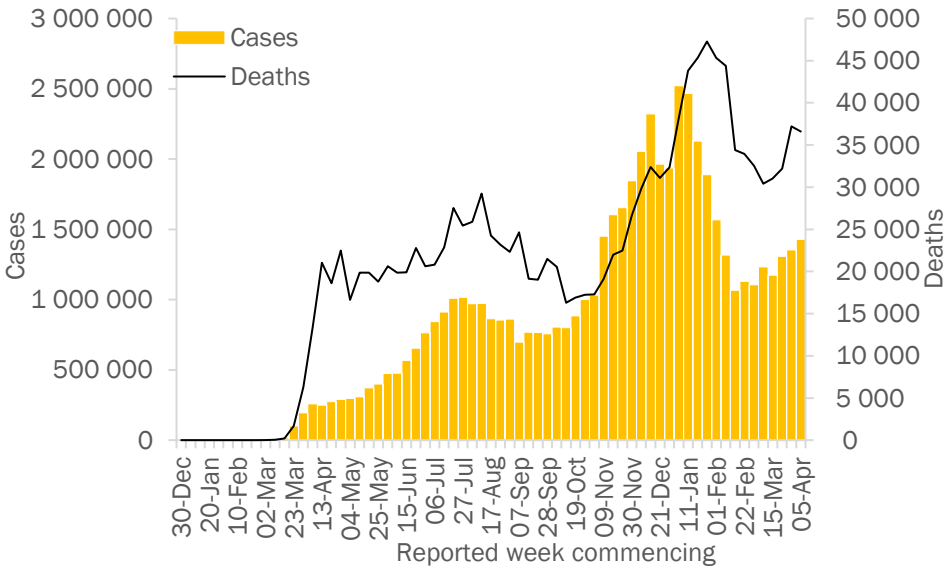
The highest numbers of new deaths were reported from South Africa (302 new deaths; 0.5 new deaths per 100 000 population; a 1% decrease), Ethiopia (210 new deaths; 0.2 new deaths per 100 000; a 38% increase), and Kenya (124 new deaths; 0.2 new deaths per 100 000; a 22% increase).



Region of the Americas

The Region of the Americas reported over 1.4 million new cases and over 36 000 new deaths, a 5% increase and 2% decrease respectively compared to the previous week. Cases have overall gradually increased since mid-February 2021. The highest numbers of new cases were reported from the United States of America (468 395 new cases; 141.5 new cases per 100 000; a 5% decrease), Brazil (463 092 new cases; 217.9 new cases per 100 000; an 8% decrease), and Argentina (124 728 new cases; 276.0 new cases per 100 000; a 52% increase).

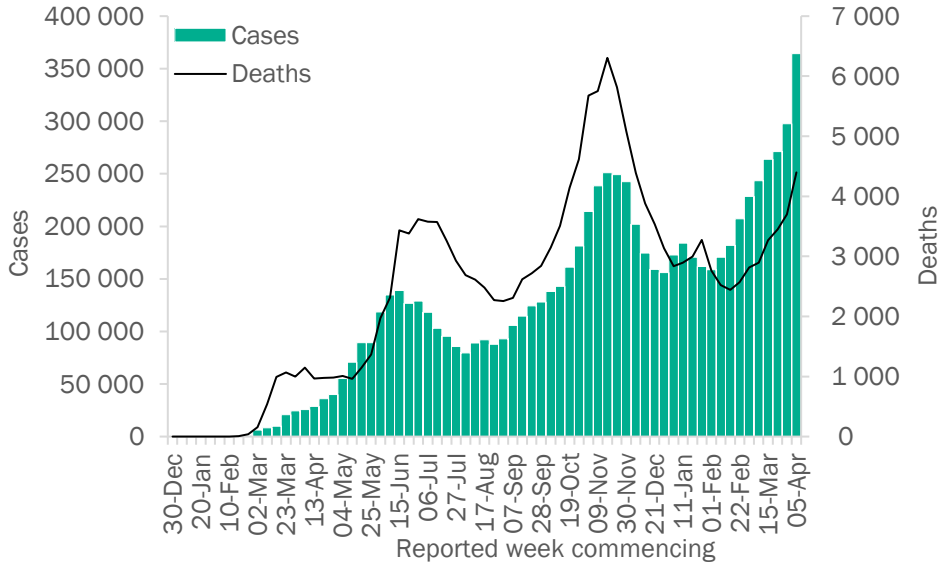
The highest numbers of new deaths were reported from Brazil (20 512 new deaths; 9.7 new deaths per 100 000; a 3% decrease), the United States of America (5173 new deaths; 1.6 new deaths per 100 000; a 31% decrease), and Mexico (3166 new deaths; 2.5 new deaths per 100 000; a 6% increase).



Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 364 000 new cases and just under 4400 new deaths, a 22% and a 19% increase respectively compared to the previous week. Upward trends in cases and deaths reported since February have continued, with steep increases this week compared to the previous week. The highest numbers of new cases were reported from the Islamic Republic of Iran (128 684 new cases; 153.2 new cases per 100 000; a 75% increase), Iraq (49 955 new cases; 124.2 new cases per 100 000; a 22% increase), and Jordan (35 520 new cases; 348.1 new cases per 100 000; a 21% decrease).

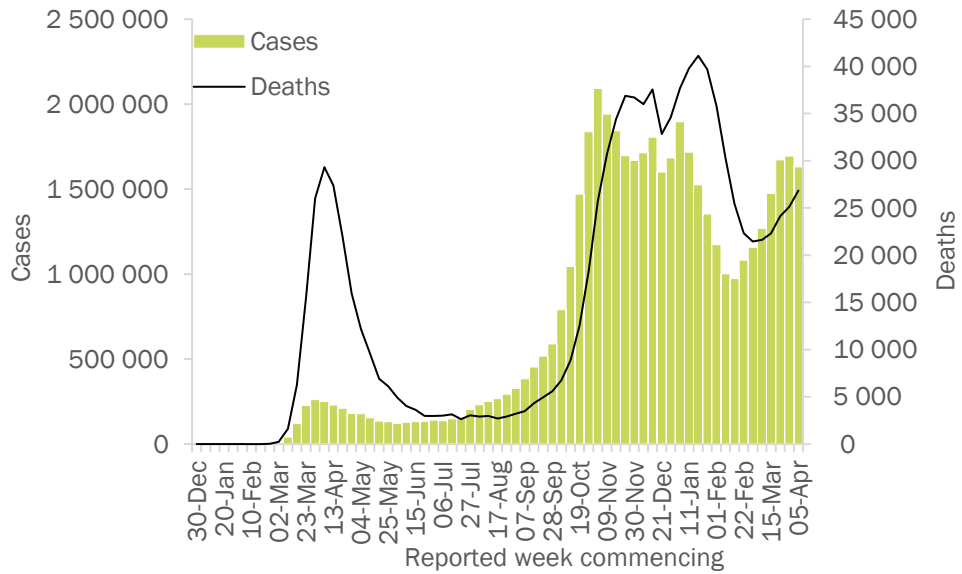
The highest numbers of new deaths were reported from the Islamic Republic of Iran (1233 new deaths; 1.5 new deaths per 100 000; a 78% increase), Pakistan (632 new deaths; 0.3 new deaths per 100 000; a 17% increase), and Jordan (578 new deaths; 5.7 new deaths per 100 000; a 12% decrease).



European Region

The European Region reported over 1.6 million new cases and over 26 000 new deaths, a 4% decrease and a 7% increase respectively compared to the previous week. The decrease in cases this week was reported after six consecutive weeks of increases since late February. Deaths continued to increase for a fifth week. The highest numbers of new cases were reported from Turkey (353 281 new cases; 418.9 new cases per 100 000; a 33% increase), France (265 444 new cases; 408.1 new cases per 100 000; a 9% increase), and Poland (136 089 new cases; 358.5 new cases per 100 000; a 27% decrease).

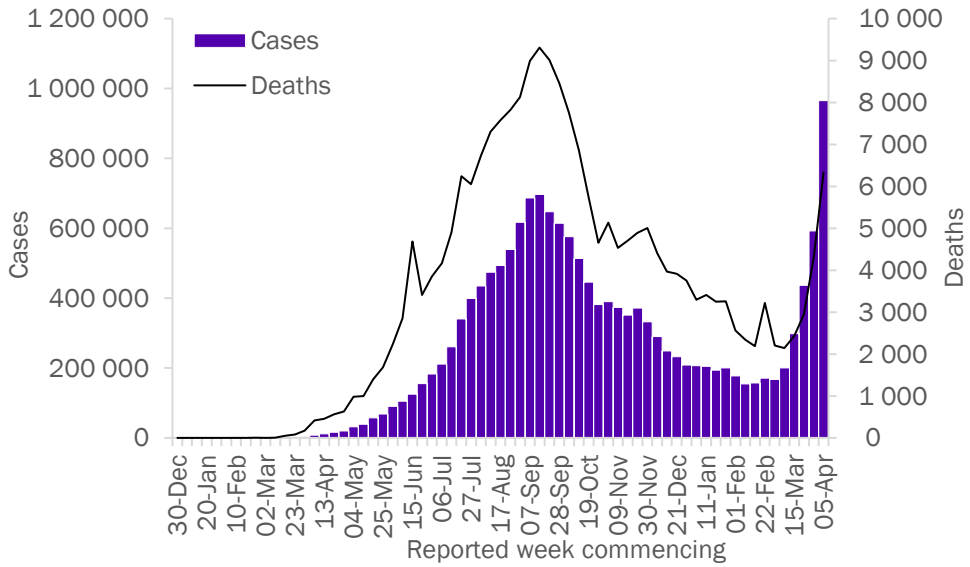
The highest numbers of new deaths were reported from Poland (3480 new deaths; 9.2 new deaths per 100 000; a 14% increase), Italy (3219 new deaths; 5.4 new deaths per 100 000; a 5% increase), and Ukraine (2681 new deaths; 6.1 new deaths per 100 000; a 13% increase).



South-East Asia Region

The South-East Asia Region reported over 965 000 new cases and over 6300 new deaths, a 63% and a 47% increase respectively compared to the previous week. There were steep increases in both cases and deaths, and the highest number of weekly cases was reported in the Region since the beginning of the pandemic. The highest numbers of new cases were reported from India (873 296 new cases; 63.3 new cases per 100 000; a 70% increase), Bangladesh (48 660 new cases; 29.5 new cases per 100 000; a 26% increase), and Indonesia (35 344 new cases; 12.9 new cases per 100 000; a 1% decrease).

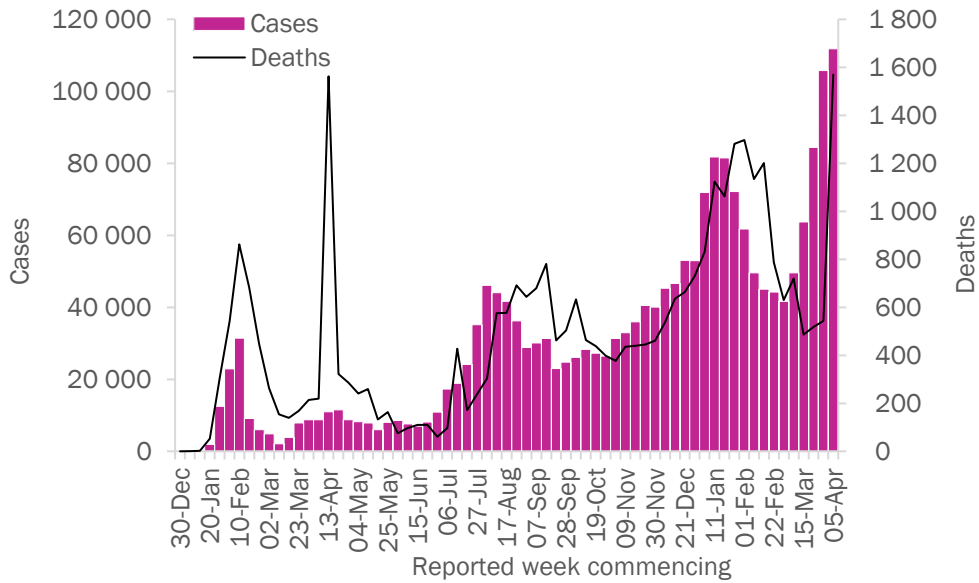
The highest numbers of new deaths were reported from India (4652 new deaths; 0.3 new deaths per 100 000; a 51% increase), Indonesia (1201 new deaths; 0.4 new deaths per 100 000; a 37% increase), and Bangladesh (448 new deaths; 0.3 new deaths per 100 000; a 30% increase).



Western Pacific Region

The Western Pacific Region reported over 111 000 new cases and over 1500 new deaths, a 6% and a 189% increase respectively compared to the previous week. For a fifth consecutive week, the number of cases increased. The sharp rise in deaths were attributed to steep increases in deaths in the Philippines. The highest numbers of new cases were reported from the Philippines (69 164 new cases; 63.1 new cases per 100 000; a 3% decrease), Japan (20 536 new cases; 16.2 new cases per 100 000; a 28% increase), and Malaysia (9507 new cases; 29.4 new cases per 100 000; a 6% increase).

The highest numbers of new deaths were reported from the Philippines (1321 new deaths; 1.2 new deaths per 100 000; a 400% increase), Japan (161 new deaths; 0.1 new deaths per 100 000; a 15% decrease), and Malaysia (35 new deaths; 0.1 new deaths per 100 000; similar to the previous week).



Key weekly updates

WHO Director-General's key message

Opening remarks at the media briefing on COVID-19 – 9 April 2021:

- A total of 196 countries have started vaccination.
- More than 700 million vaccine doses have been administered globally, but over 87% have gone to high income or upper middle-income countries, while low-income countries have received just 0.2%.
- WHO, Gavi, CEPI and other COVAX partners are working on several options for accelerating production and supply.

World Health Day

- World Health Day 2021: Building a fairer, healthier world
- For World Health Day, 7 April 2021, WHO issued five calls for urgent action to improve health for all
- "Give a Breath for Health" campaign launched on World Health Day to kickstart global effort for purchasing oxygen and other life-saving supplies and therapeutics for COVID-19 patients starting in the Americas

Publications

- Interim statement of the COVID-19 subcommittee of the WHO Global Advisory Committee on Vaccine Safety on AstraZeneca COVID-19 vaccine
- COVAX reaches over 100 economies, 42 days after first international delivery
- WHO COVID-19 infection prevention and control (IPC) pillar achievements, Feb 2020 – Jan 2021
- Safe Ramadan practices in the context of COVID-19

Events

- Webinar: Infection prevention and control and public health and social measures in light of the variants of concern, 21 April 2021

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 11 April 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**50 710**	**3 171 006**	**282.6**	**1 022**	**79 545**	**7.1**	
Ethiopia	13 944	227 255	197.7	210	3 146	2.7	Community transmission
Kenya	7 107	145 184	270.0	124	2 330	4.3	Community transmission
South Africa	6 026	1 557 527	2 626.1	302	53 256	89.8	Community transmission
Cameroon	3 417	57 337	216.0	72	851	3.2	Community transmission
Madagascar	2 286	27 548	99.5	44	493	1.8	Community transmission
Botswana	1 796	42 674	1 814.7	45	636	27.0	Community transmission
Mali	1 273	11 705	57.8	14	405	2.0	Community transmission
Zambia	1 118	89 918	489.1	11	1 226	6.7	Community transmission
Rwanda	1 100	23 343	180.2	3	314	2.4	Community transmission
Togo	883	11 947	144.3	6	116	1.4	Community transmission
Algeria	854	118 378	270.0	24	3 126	7.1	Community transmission
Côte d'Ivoire	819	45 145	171.1	14	261	1.0	Community transmission
Cabo Verde	808	18 629	3 350.6	6	177	31.8	Community transmission
Gabon	773	20 636	927.2	8	127	5.7	Community transmission
Angola	752	23 331	71.0	10	550	1.7	Community transmission
Namibia	742	45 323	1 783.7	33	564	22.2	Community transmission
Nigeria	623	163 736	79.4	2	2 060	1.0	Community transmission
Ghana	586	91 260	293.7	10	754	2.4	Community transmission
Mozambique	573	68 578	219.4	7	789	2.5	Community transmission
Guinea	488	20 807	158.4	4	133	1.0	Community transmission
Senegal	411	39 364	235.1	14	1 077	6.4	Community transmission
Congo	403	10 084	182.7	2	137	2.5	Community transmission
Zimbabwe	362	37 273	250.8	14	1 538	10.3	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Democratic Republic of the Congo	250	28 542	31.9	0	745	0.8	Community transmission
Burundi	243	3 154	26.5	0	6	0.1	Community transmission
Central African Republic	220	5 465	113.2	2	74	1.5	Community transmission
Equatorial Guinea	211	7 219	514.5	3	106	7.6	Community transmission
Benin	202	7 515	62.0	0	93	0.8	Community transmission
Seychelles	196	4 490	4 565.5	2	24	24.4	Community transmission
Malawi	166	33 805	176.7	8	1 127	5.9	Community transmission
Burkina Faso	153	12 956	62.0	2	152	0.7	Community transmission
Uganda	151	41 113	89.9	2	337	0.7	Community transmission
Gambia	143	5 602	231.8	3	168	7.0	Community transmission
Eritrea	113	3 447	97.2	0	10	0.3	Community transmission
Mauritania	88	18 005	387.2	1	450	9.7	Community transmission
South Sudan	85	10 340	92.4	2	114	1.0	Community transmission
Mauritius	78	1 112	87.4	0	12	0.9	Community transmission
Comoros	49	3 831	440.5	0	146	16.8	Community transmission
Niger	39	5 072	21.0	0	188	0.8	Community transmission
Chad	27	4 616	28.1	3	167	1.0	Community transmission
Eswatini	26	17 373	1 497.5	1	669	57.7	Community transmission
Sao Tome and Principe	23	2 263	1 032.6	0	35	16.0	Community transmission
Guinea-Bissau	17	3 678	186.9	1	66	3.4	Community transmission
Sierra Leone	6	3 993	50.1	0	79	1.0	Community transmission
Liberia	5	2 066	40.8	0	85	1.7	Community transmission
Lesotho	0	10 707	499.8	0	315	14.7	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territoriesiii							
Réunion	922	17 508	1 955.5	8	123	13.7	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Mayotte	153	19 643	7 200.1	5	167	61.2	Community transmission
Americas	**1 427 623**	**58 025 495**	**5 673.3**	**36 599**	**1 405 254**	**137.4**	
United States of America	468 395	30 772 857	9 296.9	5 173	555 712	167.9	Community transmission
Brazil	463 092	13 373 174	6 291.5	20 512	348 718	164.1	Community transmission
Argentina	124 728	2 497 881	5 526.8	1 327	57 350	126.9	Community transmission
Colombia	76 158	2 504 206	4 921.5	1 506	65 283	128.3	Community transmission
Peru	60 174	1 628 519	4 939.1	1 954	54 285	164.6	Community transmission
Canada	50 442	1 045 278	2 769.5	249	23 251	61.6	Community transmission
Chile	49 044	1 068 522	5 589.6	792	24 213	126.7	Community transmission
Uruguay	26 378	137 946	3 971.1	322	1 363	39.2	Community transmission
Mexico	24 707	2 272 064	1 762.2	3 166	207 020	160.6	Community transmission
Paraguay	14 256	232 142	3 254.7	404	4 698	65.9	Community transmission
Ecuador	11 702	344 877	1 954.7	365	17 275	97.9	Community transmission
Venezuela (Bolivarian Republic of)	9 731	172 461	606.5	110	1 739	6.1	Community transmission
Guatemala	7 604	202 640	1 131.1	126	7 001	39.1	Community transmission
Cuba	7 190	85 572	755.5	22	453	4.0	Community transmission
Bolivia (Plurinational State of)	6 702	280 649	2 404.3	123	12 428	106.5	Community transmission
Honduras	4 822	194 548	1 964.2	144	4 766	48.1	Community transmission
Costa Rica	4 095	222 544	4 368.6	44	3 018	59.2	Community transmission
Dominican Republic	3 405	257 186	2 370.8	51	3 385	31.2	Community transmission
Panama	2 248	358 098	8 299.4	30	6 156	142.7	Community transmission
Jamaica	1 670	42 119	1 422.4	56	669	22.6	Community transmission
El Salvador	1 060	65 491	1 009.7	27	2 048	31.6	Community transmission
Guyana	512	10 958	1 393.2	17	252	32.0	Clusters of cases
Trinidad and Tobago	207	8 323	594.7	0	145	10.4	Community transmission
Bahamas	183	9 417	2 394.7	1	189	48.1	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Suriname	128	9 265	1 579.4	1	178	30.3	Clusters of cases
Haiti	52	12 840	112.6	0	251	2.2	Community transmission
Barbados	43	3 708	1 290.3	2	44	15.3	Community transmission
Nicaragua	40	5 366	81.0	1	179	2.7	Community transmission
Saint Lucia	40	4 329	2 357.5	3	64	34.9	Community transmission
Saint Vincent and the Grenadines	35	1 790	1 613.5	0	10	9.0	Community transmission
Belize	31	12 487	3 140.4	1	318	80.0	Community transmission
Antigua and Barbuda	12	1 182	1 207.0	2	30	30.6	Clusters of cases
Grenada	2	157	139.5	0	1	0.9	Sporadic cases
Dominica	0	165	229.2	0	0	0.0	Clusters of cases
Saint Kitts and Nevis	0	44	82.7	0	0	0.0	Sporadic cases
Territoriesiii							
Puerto Rico	4 339	113 200	3 956.9	26	2 152	75.2	Community transmission
Curaçao	1 798	10 632	6 479.3	22	60	36.6	Community transmission
Martinique	724	8 887	2 368.2	5	59	15.7	Community transmission
French Guiana	417	17 549	5 875.5	- 2	94	31.5	Community transmission
Guadeloupe	414	12 304	3 075.0	6	189	47.2	Community transmission
Bermuda	411	1 773	2 847.1	2	14	22.5	Community transmission
Aruba	393	9 896	9 268.9	6	92	86.2	Community transmission
Bonaire	90	1 475	7 052.4	3	14	66.9	Community transmission
United States Virgin Islands	40	2 971	2 845.1	0	26	24.9	Community transmission
British Virgin Islands	24	178	588.7	0	1	3.3	Clusters of cases
Sint Maarten	23	2 174	5 069.7	0	27	63.0	Community transmission
Saint Barthélemy	18	928	9 388.0	0	1	10.1	Clusters of cases
Saint Martin	16	1 703	4 405.2	0	13	33.6	Community transmission
Cayman Islands	15	516	785.1	0	2	3.0	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Falkland Islands (Malvinas)	8	60	1 722.7	0	0	0.0	Sporadic cases
Anguilla	4	29	193.3	0	0	0.0	Sporadic cases
Saint Pierre and Miquelon	1	25	431.4	0	0	0.0	No cases
Montserrat	0	20	400.1	0	1	20.0	No cases
Saba	0	6	310.4	0	0	0.0	No cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Turks and Caicos Islands	0	2 344	6 054.0	0	17	43.9	Clusters of cases
Eastern Mediterranean	**364 456**	**8 057 550**	**1 102.5**	**4 398**	**165 010**	**22.6**	
Iran (Islamic Republic of)	128 684	2 049 078	2 439.6	1 233	64 232	76.5	Community transmission
Iraq	49 955	918 155	2 282.7	248	14 678	36.5	Community transmission
Jordan	35 520	662 395	6 492.1	578	7 708	75.5	Community transmission
Pakistan	33 080	715 968	324.1	632	15 329	6.9	Community transmission
Lebanon	17 520	494 633	7 246.9	251	6 630	97.1	Community transmission
United Arab Emirates	13 914	481 937	4 872.8	25	1 529	15.5	Clusters of cases
Tunisia	11 962	270 297	2 287.0	304	9 235	78.1	Community transmission
Kuwait	9 715	245 704	5 753.4	64	1 403	32.9	Community transmission
Oman	7 987	168 005	3 289.9	66	1 747	34.2	Community transmission
Bahrain	7 632	155 402	9 132.8	23	554	32.6	Community transmission
Qatar	6 516	189 064	6 562.3	30	331	11.5	Community transmission
Libya	5 800	166 888	2 428.8	123	2 807	40.9	Community transmission
Saudi Arabia	5 627	397 636	1 142.2	57	6 747	19.4	Community transmission
Egypt	5 421	209 677	204.9	282	12 405	12.1	Community transmission
Morocco	3 856	501 688	1 359.2	49	8 891	24.1	Clusters of cases
Djibouti	1 213	9 722	984.0	21	93	9.4	Community transmission
Syrian Arab Republic	834	20 118	115.0	69	1 368	7.8	Community transmission
Somalia	648	12 271	77.2	59	605	3.8	Community transmission
Yemen	579	5 280	17.7	99	1 032	3.5	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Afghanistan	484	57 160	146.8	24	2 521	6.5	Community transmission
Sudan	0	31 833	72.6	0	2 063	4.7	Clusters of cases
Territories[iii]							
occupied Palestinian territory	17 509	294 639	5 775.6	161	3 102	60.8	Community transmission
Europe	**1 630 624**	**47 547 449**	**5 095.8**	**26 853**	**1 008 251**	**108.1**	
Kosovo [1]	4 492	97 424		70	1 966		Community transmission
Turkey	353 281	3 798 333	4 503.6	1 624	33 702	40.0	Community transmission
France	265 444	4 945 238	7 603.5	2 087	97 956	150.6	Community transmission
Poland	136 089	2 574 631	6 782.8	3 480	58 421	153.9	Community transmission
Germany	112 882	2 998 268	3 605.1	1 390	78 353	94.2	Community transmission
Ukraine	107 540	1 853 249	4 237.6	2 681	37 014	84.6	Community transmission
Italy	103 830	3 754 077	6 294.4	3 219	113 923	191.0	Clusters of cases
Russian Federation	60 496	4 641 390	3 180.5	2 612	102 986	70.6	Clusters of cases
Netherlands	47 307	1 342 329	7 711.2	150	16 754	96.2	Community transmission
Hungary	34 185	720 164	7 371.5	1 702	23 417	239.7	Community transmission
Romania	32 641	1 002 865	5 188.4	1 033	25 006	129.4	Community transmission
Sweden	30 382	857 401	8 302.0	22	13 621	131.9	Community transmission
Czechia	28 293	1 580 189	14 776.5	863	27 808	260.0	Community transmission
Spain	28 102	3 336 637	7 049.3	189	76 179	160.9	Community transmission
Serbia	25 111	639 476	9 232.0	278	5 700	82.3	Community transmission
Belgium	23 931	926 640	8 042.0	304	23 470	203.7	Community transmission
Greece	20 304	293 763	2 740.7	531	8 833	82.4	Community transmission
Austria	19 309	571 805	6 424.0	228	9 393	105.5	Community transmission
Bulgaria	19 272	371 531	5 344.6	844	14 351	206.4	Clusters of cases
Kazakhstan	17 348	323 208	1 721.3	151	3 963	21.1	Clusters of cases
The United Kingdom	16 290	4 368 049	6 434.4	254	127 080	187.2	Community transmission
Azerbaijan	14 865	283 579	2 796.9	231	3 879	38.3	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Switzerland	13 820	619 477	7 157.8	51	9 764	112.8	Community transmission
Croatia	12 490	292 516	7 208.1	250	6 308	155.4	Community transmission
Belarus	8 798	334 863	3 543.8	68	2 344	24.8	Community transmission
Bosnia and Herzegovina	8 279	183 125	5 581.7	555	7 358	224.3	Community transmission
North Macedonia	8 233	141 157	6 775.4	322	4 182	200.7	Community transmission
Slovenia	6 525	225 952	10 780.9	26	4 407	210.3	Clusters of cases
Republic of Moldova	6 492	240 886	5 971.4	277	5 369	133.1	Community transmission
Lithuania	6 462	226 173	8 094.7	78	3 687	132.0	Community transmission
Armenia	6 183	202 817	6 844.4	143	3 735	126.0	Community transmission
Slovakia	5 820	371 062	6 798.7	540	10 565	193.6	Clusters of cases
Norway	5 189	101 959	1 899.5	11	684	12.7	Community transmission
Estonia	4 775	114 174	8 591.1	79	1 020	76.8	Clusters of cases
Georgia	4 563	288 396	7 229.5	66	3 877	97.2	Community transmission
Denmark	4 383	237 101	4 072.0	11	2 439	41.9	Community transmission
Portugal	4 066	826 928	8 031.6	42	16 910	164.2	Clusters of cases
Cyprus	3 753	51 035	5 747.2	11	272	30.6	Clusters of cases
Latvia	3 373	107 240	5 621.5	63	1 986	104.1	Community transmission
Ireland	2 948	240 643	4 847.3	68	4 783	96.3	Community transmission
Finland	2 613	81 707	1 478.8	22	868	15.7	Community transmission
Albania	1 972	128 155	4 453.2	54	2 310	80.3	Clusters of cases
Israel	1 776	835 813	9 656.4	57	6 292	72.7	Community transmission
Montenegro	1 675	94 417	15 033.1	68	1 373	218.6	Clusters of cases
Luxembourg	1 545	63 650	10 166.0	18	768	122.7	Community transmission
Uzbekistan	1 299	84 922	253.7	3	634	1.9	Clusters of cases
Kyrgyzstan	1 213	90 227	1 383.0	16	1 522	23.3	Clusters of cases
Malta	359	29 548	5 742.3	5	402	78.1	Clusters of cases
Andorra	323	12 497	16 174.2	3	120	155.3	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
San Marino	151	4 956	14 603.1	1	85	250.5	Community transmission
Liechtenstein	64	2 842	7 334.8	0	54	139.4	Sporadic cases
Monaco	48	2 373	6 046.8	2	31	79.0	Sporadic cases
Iceland	33	6 258	1 718.6	0	29	8.0	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territoriesiii							
Isle of Man	4	1 574	1 851.1	0	29	34.1	No cases
Gibraltar	2	4 277	12 694.8	0	94	279.0	Clusters of cases
Jersey	1	3 230	2 996.4	0	69	64.0	Community transmission
Faroe Islands	0	661	1 352.7	0	1	2.0	Sporadic cases
Greenland	0	31	54.6	0	0	0.0	No cases
Guernsey	0	821	1 273.5	0	14	21.7	Community transmission
South-East Asia	**965 591**	**16 177 826**	**800.3**	**6 331**	**228 385**	**11.3**	
India	873 296	13 358 805	968.0	4 652	169 275	12.3	Clusters of cases
Bangladesh	48 660	678 937	412.3	448	9 661	5.9	Community transmission
Indonesia	35 344	1 562 868	571.4	1 201	42 443	15.5	Community transmission
Thailand	3 498	32 625	46.7	2	97	0.1	Clusters of cases
Nepal	1 957	279 725	960.0	7	3 039	10.4	Clusters of cases
Sri Lanka	1 553	94 848	442.9	20	595	2.8	Clusters of cases
Maldives	873	25 524	4 721.9	0	67	12.4	Clusters of cases
Timor-Leste	294	1 008	76.5	1	1	0.1	Clusters of cases
Myanmar	97	142 576	262.0	0	3 206	5.9	Clusters of cases
Bhutan	19	910	117.9	0	1	0.1	Sporadic cases
Western Pacific	**111 833**	**2 077 516**	**105.7**	**1 570**	**33 474**	**1.7**	
Philippines	69 164	853 187	778.6	1 321	14 744	13.5	Community transmission
Japan	20 536	503 403	398.0	161	9 382	7.4	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Malaysia	9 507	359 117	1 109.6	35	1 321	4.1	Clusters of cases
Mongolia	4 585	14 183	432.6	9	20	0.6	Clusters of cases
Republic of Korea	4 280	109 559	213.7	24	1 768	3.4	Clusters of cases
Papua New Guinea	1 585	8 442	94.4	7	68	0.8	Community transmission
Cambodia	1 549	4 238	25.3	10	29	0.2	Sporadic cases
China	216	103 083	7.0	2	4 853	0.3	Clusters of cases
Singapore	165	60 633	1 036.4	0	30	0.5	Sporadic cases
New Zealand	67	2 218	46.0	0	26	0.5	Clusters of cases
Viet Nam	63	2 692	2.8	0	35	0.0	Clusters of cases
Australia	55	29 396	115.3	0	909	3.6	Clusters of cases
Brunei Darussalam	5	219	50.1	0	3	0.7	Sporadic cases
Fiji	1	68	7.6	0	2	0.2	Sporadic cases
Lao People's Democratic Republic	0	49	0.7	0	0	0.0	Sporadic cases
Solomon Islands	0	19	2.8	0	0	0.0	No cases
Territoriesiii							
French Polynesia	19	18 652	6 639.9	0	141	50.2	Sporadic cases
Guam	19	7 625	4 517.8	0	136	80.6	Clusters of cases
Wallis and Futuna	16	441	3 921.4	1	5	44.5	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	1	160	278.0	0	2	3.5	Pending
Marshall Islands	0	4	6.8	0	0	0.0	No cases
New Caledonia	0	121	42.4	0	0	0.0	Sporadic cases
Samoa	0	4	2.0	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Global	**4 550 837**	**135 057 587**		**76 773**	**2 919 932**		

*See *Annex: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting variants of concern as of 13 April 2021**

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Albania			
Algeria	Verified		
Angola	Verified	Verified	
Argentina	Verified		Verified
Aruba	Verified		
Australia	Verified	Verified	
Austria	Verified	Verified	Verified
Azerbaijan	Verified		
Bahrain			
Bangladesh	Verified	Not Verified	
Barbados	Verified		
Belarus			
Belgium	Verified	Verified	Verified
Belize	Verified		
Bonaire	Verified		
Bosnia and Herzegovina	Not Verified		
Botswana		Verified	
Brazil	Verified		Verified
Brunei Darussalam	Verified	Verified	
Bulgaria	Verified		
Cabo Verde	Verified		
Cambodia	Verified		
Cameroon		Verified	
Canada	Verified	Verified	Verified
Cayman Islands	Verified		
Chile	Verified		Verified
China	Verified	Verified	Not Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Colombia			Verified
Comoros		Verified	
Costa Rica	Verified	Verified	
Croatia	Verified	Not Verified	
Cuba		Verified	
Curaçao	Verified		
Cyprus	Verified		
Czechia	Verified	Not Verified	
Democratic Republic of the Congo	Verified	Verified	
Denmark	Verified	Verified	Verified
Dominican Republic	Verified		
Ecuador	Verified		
Estonia	Verified	Not Verified	
Eswatini		Verified	
Faroe Islands			Verified
Finland	Verified	Verified	Verified
France	Verified	Verified	Verified
French Guiana	Verified		Verified
French Polynesia	Verified		
Gambia	Verified		
Georgia	Verified		
Germany	Verified	Verified	Verified
Ghana	Verified	Verified	
Gibraltar	Not Verified		
Greece	Verified	Verified	
Grenada			
Guadeloupe	Verified		

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Guyana			
Hungary	Verified	Not Verified	
Iceland	Verified		
India	Verified	Verified	Verified
Indonesia	Verified		
Iran (Islamic Republic of)	Verified		
Iraq	Verified		
Ireland	Verified	Verified	Not Verified
Israel	Verified	Verified	
Italy	Verified	Not Verified	Verified
Jamaica	Verified		
Japan	Verified	Verified	Verified
Jordan	Verified		
Kazakhstan			
Kenya		Verified	
Kosovo[1]	Verified		
Kuwait	Verified		
Latvia	Verified	Verified	
Lebanon	Verified		
Lesotho		Verified	
Libya	Verified		
Liechtenstein	Verified		
Lithuania	Verified	Verified	
Luxembourg	Verified	Verified	Not Verified
Malawi	Verified	Verified	
Malaysia	Verified		
Malta	Verified	Not Verified	
Martinique	Verified		

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Mauritius			
Mayotte	Verified	Verified	
Mexico	Verified		Verified
Monaco			
Montenegro	Verified		
Morocco	Verified		
Mozambique		Verified	
Namibia		Verified	
Nepal	Verified		
Netherlands	Verified	Verified	Verified
New Caledonia			
New Zealand	Verified	Verified	
Nigeria	Verified		
North Macedonia	Verified		
Norway	Verified	Verified	Verified
occupied Palestinian territory	Verified		
Oman	Verified		
Pakistan	Verified		
Panama		Verified	
Paraguay			Verified
Peru	Verified		Verified
Philippines	Verified	Verified	Verified
Poland	Verified	Not Verified	Not Verified
Portugal	Verified	Verified	Not Verified
Puerto Rico	Verified		Verified
Qatar			
Republic of Korea	Verified	Verified	Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Republic of Moldova			
Réunion	Verified	Verified	Verified
Romania	Verified	Verified	Verified
Russian Federation	Verified		
Rwanda			
Saint Barthélemy	Verified		
Saint Lucia	Verified		
Saint Martin	Verified		
Saudi Arabia	Verified		
Senegal	Verified		
Serbia	Verified		
Singapore	Verified		
Sint Maarten			
Slovakia	Verified	Not Verified	
Slovenia	Verified	Verified	Not Verified
South Africa	Verified	Verified	
Spain	Verified	Verified	Verified
Sri Lanka	Verified	Verified	
Suriname			
Sweden	Verified	Verified	Verified
Switzerland	Verified	Verified	Not Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Thailand	Verified	Verified	
The United Kingdom	Verified	Verified	Verified
Togo	Verified		
Trinidad and Tobago	Verified		
Tunisia	Verified		
Turkey	Verified	Not Verified	Not Verified
Turks and Caicos Islands	Verified		
Uganda			
Ukraine	Not Verified		
United Arab Emirates	Verified	Verified	Verified
United Republic of Tanzania		Verified	
United States of America	Verified	Verified	Verified
Uruguay	Verified		
Uzbekistan	Verified		
Venezuela (Bolivarian Republic of)			Verified
Viet Nam	Verified	Verified	
Wallis and Futuna			
Zambia		Verified	
Zimbabwe		Verified	

**See *Annex : Data, table and figure notes*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 745 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that

are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.

- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 4 April 2021, 10 am CET

In this edition:

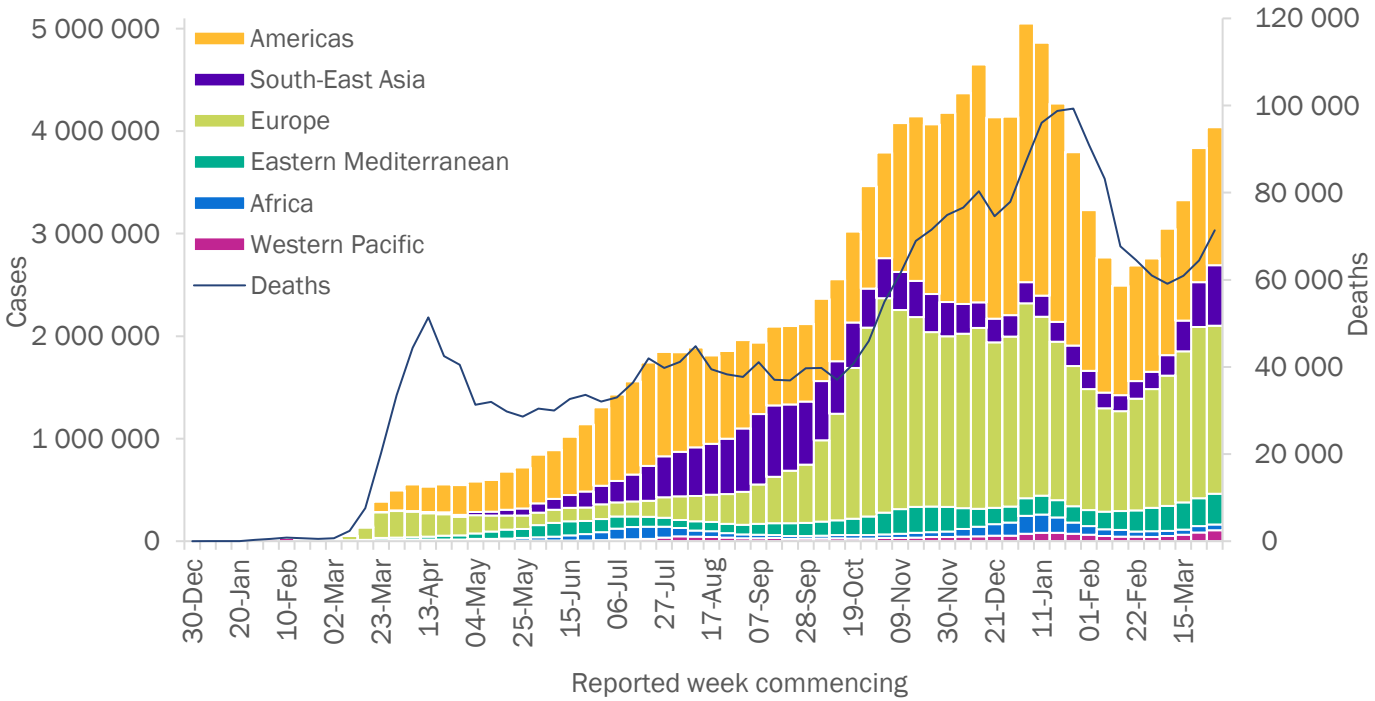
- Global overview
- WHO regional overviews

Erratum: Variants of Concern (VOCs) were incorrectly reported for Mauritania in the previous publications on 23 March and 30 March 2021. The country has not reported any VOCs to date.

Global overview

Globally, new COVID-19 cases rose for a sixth consecutive week, with over 4 million new cases reported in the last week (Figure 1). The number of new deaths also increased by 11% compared to last week, with over 71 000 new deaths reported. The largest increases in case incidence were observed in the South-East Asia (most notably in India) and the Western Pacific regions (Table 1). All regions, except for the African Region, reported increases in the number of deaths, with the largest increase of 46% from the South-East Asia Region.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 4 April 2021**



**See *Annex: Data, table and figure notes*

The highest numbers of new cases were reported from India (513 885 new cases; 38% increase), Brazil (505 668 new cases; 5% decrease), the United States of America (444 756 new cases; 5% increase), Turkey (265 937 new cases; 43% increase), and France (244 607 new cases; 4% decrease).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 4 April 2021**

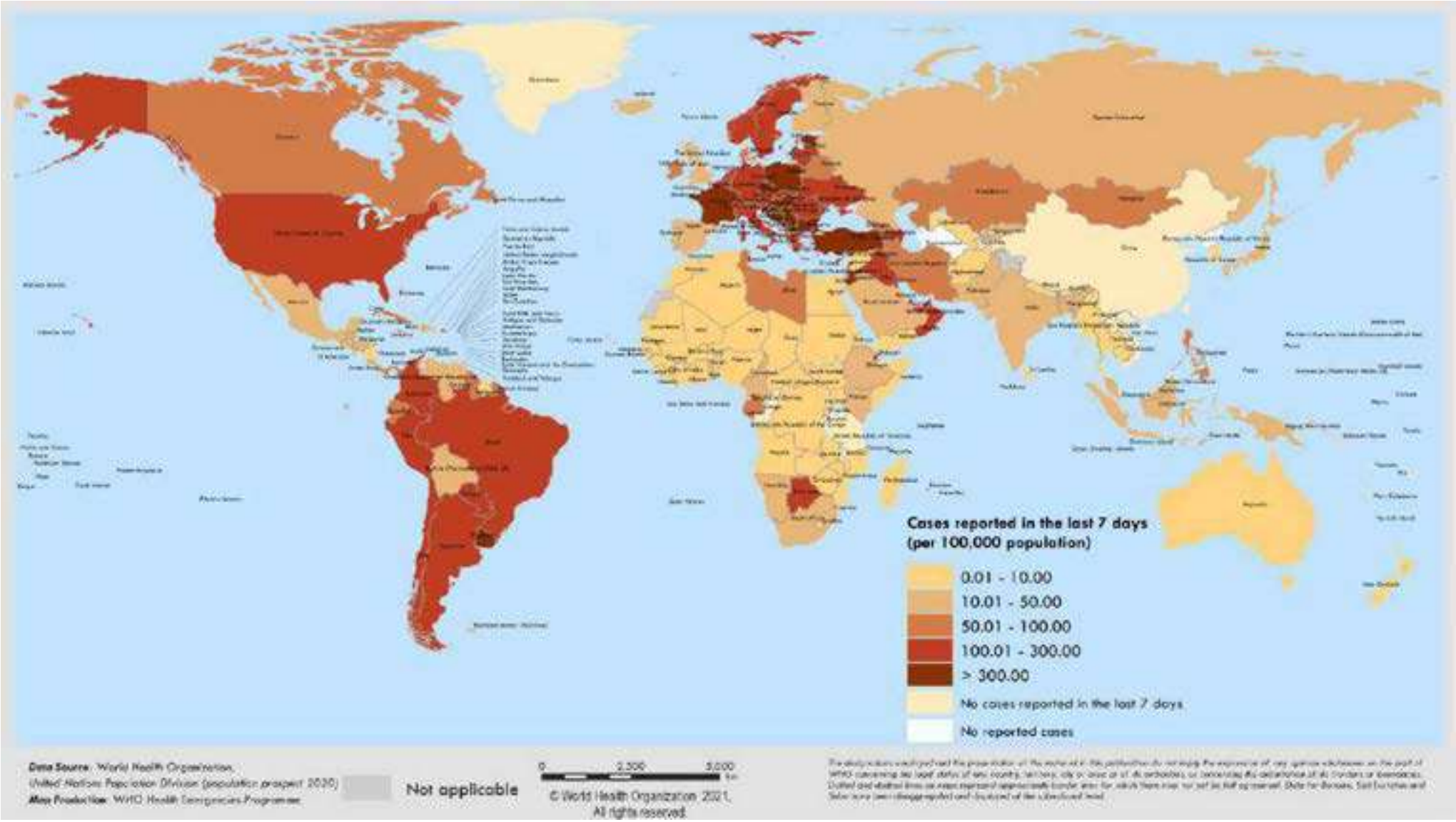
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 344 618 (33%)	3%	56 589 190 (43%)	37 185 (52%)	15%	1 368 633 (48%)
Europe	1 638 947 (40%)	-2%	45 877 941 (35%)	24 534 (34%)	2%	980 586 (34%)
South-East Asia	592 349 (14%)	36%	15 212 235 (11%)	4 317 (6%)	46%	222 054 (7%)
Eastern Mediterranean	297 763 (7%)	10%	7 693 094 (5%)	3 699 (5%)	7%	160 612 (5%)
Africa	58 858 (1%)	-6%	3 120 296 (2%)	1 077 (1%)	-20%	78 523 (2%)
Western Pacific	105 757 (2%)	25%	1 965 683 (1%)	543 (0%)	5%	31 904 (1%)
Global	**4 038 292 (100%)**	**5%**	**130 459 184 (100%)**	**71 355 (100%)**	**11%**	**2 842 325 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior.*
**See *Annex: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 29 March – 4 April 2021**



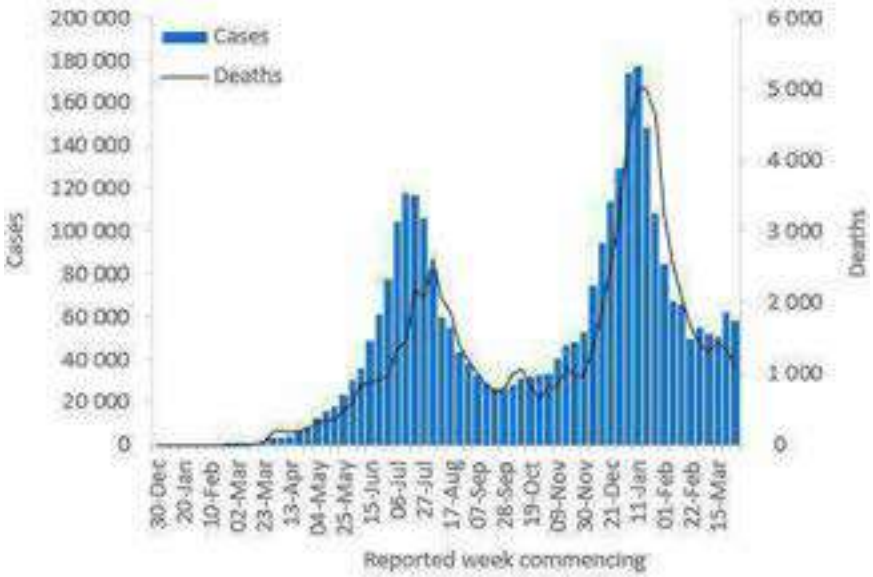
**See *Annex: Data, table and figure notes*

WHO regional overviews

African Region

The Region reported around 59 000 new cases and 1000 new deaths last week, a 6% and 20% decrease respectively compared to the previous week. The highest numbers of new cases were reported from Ethiopia (14 517 new cases; 12.6 new cases per 100 000 population; a 10% increase), Kenya (8747 new cases; 16.3 new cases per 100 000; a 5% decrease), and South Africa (7035 new cases; 11.9 new cases per 100 000; an 8% decrease).

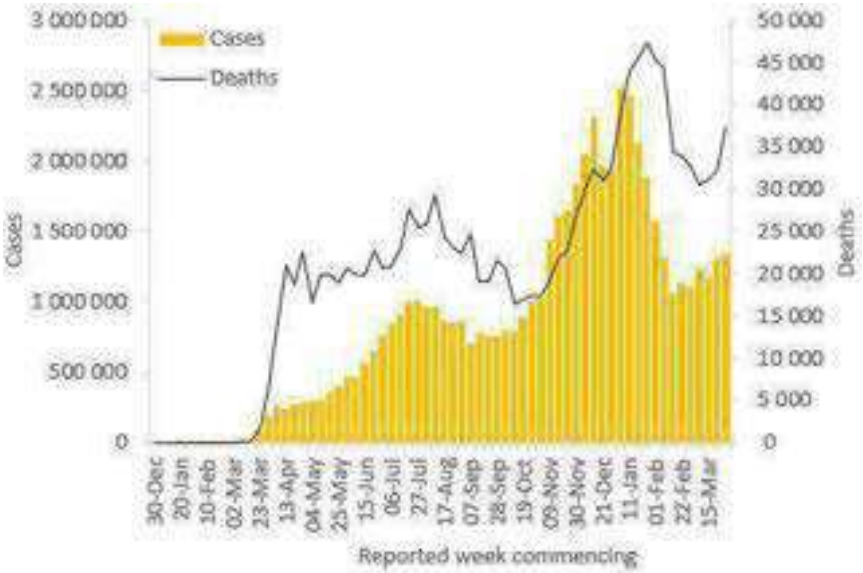
The highest numbers of new deaths were reported from South Africa (306 new deaths; 0.5 new deaths per 100 000 population; a 46% decrease), Ethiopia (152 new deaths; <0.1 new deaths per 100 000; a 11% increase), and Kenya (102 new deaths; 0.2 new deaths per 100 000; a 13% decrease).



Region of the Americas

The Region reported over 1.3 million new cases and over 37 000 new deaths, a 3% and a 15% increase respectively compared to the previous week. Overall, there has been an increasing trend in weekly case incidence over the last six weeks. The highest numbers of new cases were reported from Brazil (505 668 new cases; 237.9 new cases per 100 000; a 5% decrease), the United States of America (444 756 new cases; 134.4 new cases per 100 000; a 5% increase), and Argentina (82 102 new cases; 181.7 new cases per 100 000; a 46% increase).

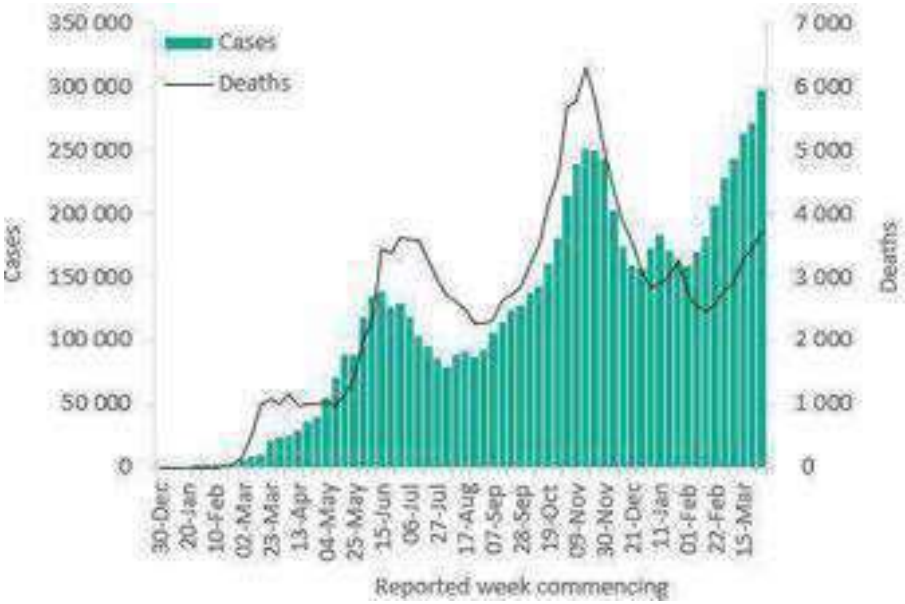
The highest numbers of new deaths were reported from Brazil (21 094 new deaths; 9.9 new deaths per 100 000; a 26% increase), the United States of America (7536 new deaths; 2.3 new deaths per 100 000; an 8% increase), and Mexico (2992 new deaths; 2.3 new deaths per 100 000; an 18% decrease).



Eastern Mediterranean Region

The Region reported over 297 000 new cases and about 3700 new deaths, a 10% and a 7% increase respectively compared to the previous week. Both cases and deaths are on an upward trajectory with new cases increasing for the past eight weeks. The highest numbers of new cases were reported from the Islamic Republic of Iran (73 471 new cases; 87.5 new cases per 100 000; a 38% increase), Jordan (44 742 new cases; 438.5 new cases per 100 000; a 19% decrease), and Iraq (41 043 new cases; 102.0 new cases per 100 000; an 9% increase).

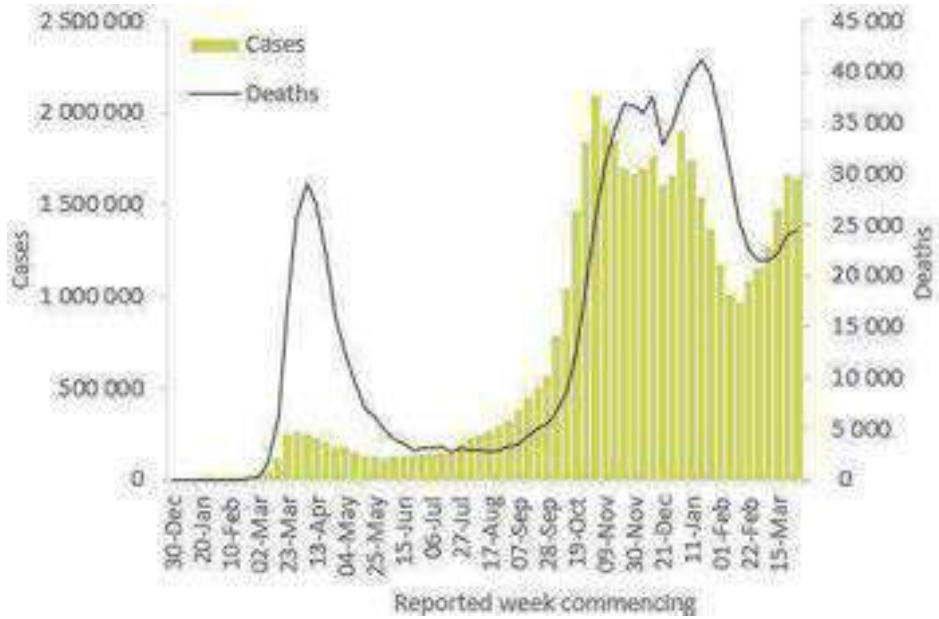
The highest numbers of new deaths were reported from the Islamic Republic of Iran (691 new deaths; 0.8 new deaths per 100 000; an 18% increase), Jordan (658 new deaths; 6.4 new deaths per 100 000; a 4% decrease), and Pakistan (539 new deaths; 0.2 new deaths per 100 000; a 50% increase).



European Region

After reporting a progressive increase in weekly cases for five weeks, the number of new cases reported this past week is similar to that reported in the previous week, with over 6.2 million new cases reported. The number of new deaths, however, has continued to increase for the past four weeks, with 24 000 new deaths reported. The highest numbers of new cases were reported from Turkey (265 937 new cases; 315.3 new cases per 100 000; a 43% increase), France (244 607 new cases; 374.7 new cases per 100 000; a 4% decrease), and Poland (187 551 new cases; 495.6 new cases per 100 000; a 3% decrease).

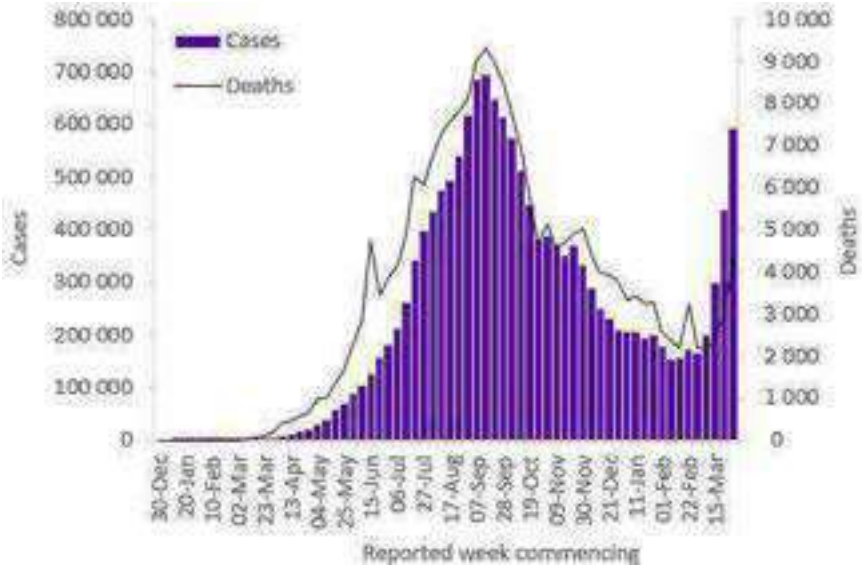
The highest numbers of new deaths were reported from Italy (3068 new deaths; 5.1 new deaths per 100 000; a 2% increase), Poland (3057 new deaths; 8.1 new deaths per 100 000; an 18% increase), and the Russian Federation (2634 new deaths; 1.8 new deaths per 100 000; a 3% decrease).



South-East Asia Region

The Region reported over 592 000 new cases and 4300 new deaths, a 36% and a 46% increase respectively compared to the previous week. Case incidence rates have risen markedly through March, with a sharp increase in the past three weeks. The number of new deaths continued to increase in the past three weeks with a steep increase reported in past one week. India contributed 87% of new cases and 71% of new deaths in the Region in the past week. The highest numbers of new cases were reported from India (513 885 new cases; 37.2 new cases per 100 000; a 38% increase), Bangladesh (38 471 new cases; 23.4 new cases per 100 000; a 67% increase), and Indonesia (35 522 new cases; 13 new cases per 100 000; a 2% decrease).

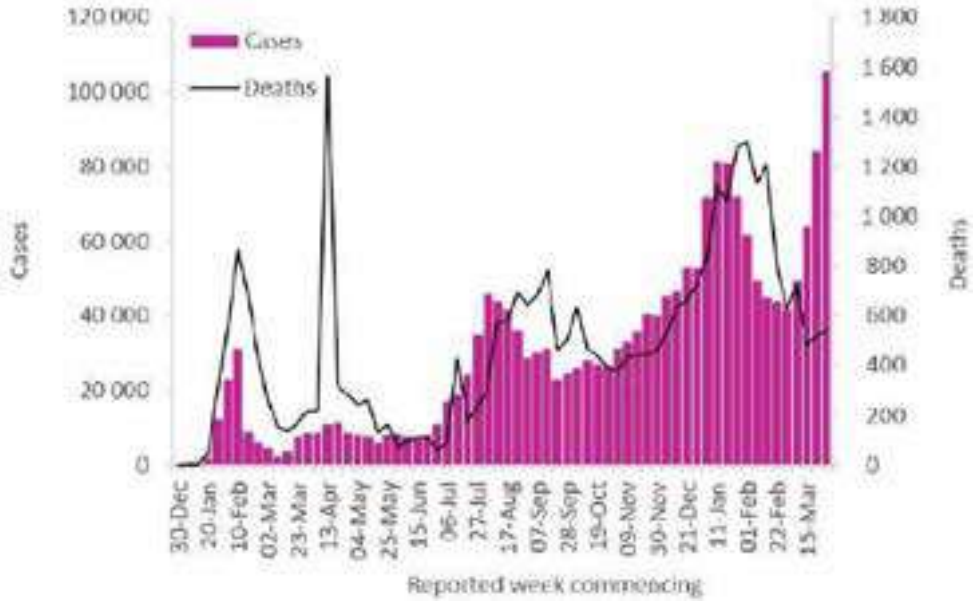
The highest numbers of new deaths were reported from India (3071 new deaths; 0.2 new deaths per 100 000; a 71% increase), Indonesia (878 new deaths; 0.3 new deaths per 100 000; a 4% decrease), and Bangladesh (344 new deaths; 0.2 new deaths per 100 000; a 71% increase).



Western Pacific Region

The Region reported over 106 000 new cases and over 500 new deaths, a 25% and a 5% increase respectively compared to the previous week. A steep increase in the number of new cases has been observed over the past four weeks. The highest numbers of new cases were reported from the Philippines (71 606 new cases; 65.3 new cases per 100 000; a 27% increase), Japan (16 018 new cases; 12.7 new cases per 100 000; a 43% increase), and Malaysia (8968 new cases; 27.7 new cases per 100 000; similar to the previous week).

The highest numbers of new deaths were reported from the Philippines (264 new deaths; 0.2 new deaths per 100 000; a 15% increase), Japan (190 new deaths; 0.2 new deaths per 100 000; a 13% decrease), and Malaysia (35 new deaths; <0.1 new deaths per 100 000; a 59% increase).



Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 4 April 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**58 858**	**3 120 296**	**278.1**	**1 077**	**78 523**	**7.0**	
Ethiopia	14 517	213 311	185.5	152	2 936	2.6	Community transmission
Kenya	8 747	138 077	256.8	102	2 206	4.1	Community transmission
South Africa	7 035	1 551 501	2 616.0	306	52 954	89.3	Community transmission
Cameroon	6 251	53 920	203.1	58	779	2.9	Community transmission
Botswana	2 412	40 878	1 738.3	85	591	25.1	Community transmission
Côte d'Ivoire	1 858	44 326	168.0	18	247	0.9	Community transmission
Madagascar	1 838	25 262	91.2	68	449	1.6	Community transmission
Gabon	1 437	19 863	892.4	10	119	5.3	Community transmission
Togo	1 388	11 064	133.6	3	110	1.3	Community transmission
Namibia	1 082	44 581	1 754.5	23	531	20.9	Community transmission
Zambia	1 073	88 800	483.0	17	1 215	6.6	Community transmission
Mozambique	994	68 005	217.6	20	782	2.5	Community transmission
Rwanda	934	22 243	171.7	11	311	2.4	Community transmission
Guinea	818	20 319	154.7	13	129	1.0	Community transmission
Cabo Verde	803	17 821	3 205.3	6	171	30.8	Community transmission
Algeria	774	117 524	268.0	25	3 102	7.1	Community transmission
Mali	659	10 432	51.5	15	391	1.9	Community transmission
Nigeria	624	163 113	79.1	17	2 058	1.0	Community transmission
Angola	548	22 579	68.7	7	540	1.6	Community transmission
Senegal	497	38 953	232.6	29	1 063	6.3	Community transmission
Democratic Republic of the Congo	406	28 292	31.6	11	745	0.8	Community transmission
Ghana	387	90 674	291.8	4	744	2.4	Community transmission
Seychelles	240	4 294	4 366.2	4	22	22.4	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Benin	213	7 313	60.3	3	93	0.8	Community transmission
South Sudan	207	10 255	91.6	4	112	1.0	Community transmission
Uganda	195	40 962	89.6	0	335	0.7	Community transmission
Malawi	181	33 639	175.8	6	1 119	5.8	Community transmission
Mauritania	172	17 917	385.3	1	449	9.7	Community transmission
Mauritius	164	1 034	81.3	2	12	0.9	Community transmission
Central African Republic	158	5 245	108.6	8	72	1.5	Community transmission
Burundi	154	2 911	24.5	0	6	0.1	Community transmission
Burkina Faso	130	12 803	61.2	5	150	0.7	Community transmission
Eritrea	126	3 334	94.0	1	10	0.3	Community transmission
Equatorial Guinea	106	7 008	499.5	1	103	7.3	Community transmission
Zimbabwe	93	36 911	248.3	5	1 524	10.3	Community transmission
Comoros	92	3 782	434.9	0	146	16.8	Community transmission
Chad	88	4 589	27.9	4	164	1.0	Community transmission
Gambia	58	5 459	225.9	2	165	6.8	Community transmission
Niger	46	5 033	20.8	3	188	0.8	Community transmission
Guinea-Bissau	31	3 661	186.0	4	65	3.3	Community transmission
Sao Tome and Principe	30	2 240	1 022.1	1	35	16.0	Community transmission
Eswatini	29	17 347	1 495.2	2	668	57.6	Community transmission
Sierra Leone	25	3 987	50.0	0	79	1.0	Community transmission
Lesotho	21	10 707	499.8	0	315	14.7	Community transmission
Liberia	8	2 061	40.7	0	85	1.7	Community transmission
Congo	0	9 681	175.4	0	135	2.4	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territoriesiii							
Réunion	1 025	16 586	1 852.5	13	115	12.8	Community transmission
Mayotte	184	19 490	7 144.0	8	162	59.4	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Americas	**1 344 618**	**56 589 190**	**5 532.9**	**37 185**	**1 368 633**	**133.8**	
Brazil	505 668	12 910 082	6 073.6	21 094	328 206	154.4	Community transmission
United States of America	444 756	30 304 462	9 155.4	7 536	550 539	166.3	Community transmission
Argentina	82 102	2 373 153	5 250.8	788	56 023	124.0	Community transmission
Colombia	60 711	2 428 048	4 771.8	1 132	63 777	125.3	Community transmission
Peru	55 961	1 568 345	4 756.6	1 299	52 331	158.7	Community transmission
Chile	49 565	1 019 478	5 333.1	768	23 421	122.5	Community transmission
Canada	31 263	987 918	2 617.5	176	23 002	60.9	Community transmission
Mexico	27 512	2 247 357	1 743.0	2 992	203 854	158.1	Community transmission
Uruguay	19 225	111 568	3 211.8	166	1 041	30.0	Community transmission
Paraguay	13 182	217 886	3 054.8	336	4 294	60.2	Community transmission
Ecuador	10 476	333 175	1 888.4	231	16 910	95.8	Community transmission
Venezuela (Bolivarian Republic of)	7 825	162 730	572.3	86	1 629	5.7	Community transmission
Cuba	6 798	78 382	692.0	17	431	3.8	Community transmission
Bolivia (Plurinational State of)	5 236	273 947	2 346.8	162	12 305	105.4	Community transmission
Honduras	3 389	189 726	1 915.5	86	4 622	46.7	Community transmission
Panama	2 833	355 850	8 247.3	39	6 126	142.0	Community transmission
Jamaica	2 702	40 449	1 366.0	47	613	20.7	Community transmission
Dominican Republic	2 199	253 781	2 339.4	32	3 334	30.7	Community transmission
Guatemala	1 986	195 036	1 088.6	81	6 875	38.4	Community transmission
Costa Rica	1 586	216 764	4 255.2	26	2 957	58.0	Community transmission
El Salvador	665	64 431	993.4	23	2 021	31.2	Community transmission
Guyana	439	10 446	1 328.1	10	235	29.9	Clusters of cases
Trinidad and Tobago	177	8 116	579.9	4	145	10.4	Community transmission
Bahamas	137	9 171	2 332.1	0	188	47.8	Clusters of cases
Saint Lucia	82	4 273	2 327.0	3	61	33.2	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Barbados	62	3 665	1 275.3	1	42	14.6	Community transmission
Haiti	52	12 788	112.2	0	252	2.2	Community transmission
Suriname	49	9 137	1 557.5	0	177	30.2	Clusters of cases
Antigua and Barbuda	48	1 170	1 194.7	0	28	28.6	Clusters of cases
Belize	41	12 456	3 132.6	0	317	79.7	Community transmission
Nicaragua	38	5 326	80.4	1	178	2.7	Community transmission
Saint Vincent and the Grenadines	34	1 755	1 581.9	0	10	9.0	Community transmission
Dominica	4	165	229.2	0	0	0.0	Clusters of cases
Grenada	0	155	137.7	0	1	0.9	Sporadic cases
Saint Kitts and Nevis	0	44	82.7	0	0	0.0	Sporadic cases
Territories[iii]							
Puerto Rico	3 236	108 861	3 805.2	17	2 126	74.3	Community transmission
Curaçao	2 186	8 834	5 383.5	11	38	23.2	Community transmission
Martinique	614	8 163	2 175.3	4	54	14.4	Community transmission
Aruba	430	9 503	8 900.8	4	86	80.5	Community transmission
Bermuda	415	1 362	2 187.1	0	12	19.3	Community transmission
Guadeloupe	378	11 890	2 971.6	4	177	44.2	Community transmission
French Guiana	210	17 132	5 735.9	7	96	32.1	Community transmission
Bonaire, Sint Eustatius and Saba	164	1 411	5 381.2	1	11	42.0	
Saint Barthélemy	53	910	9 205.9	0	1	10.1	Clusters of cases
Sint Maarten	33	2 151	5 016.1	0	27	63.0	Community transmission
Saint Martin	30	1 687	4 363.8	1	13	33.6	Community transmission
United States Virgin Islands	30	2 931	2 806.8	0	26	24.9	Community transmission
Turks and Caicos Islands	19	2 344	6 054.0	0	17	43.9	Clusters of cases
Cayman Islands	14	501	762.3	0	2	3.0	Sporadic cases
Anguilla	2	25	166.6	0	0	0.0	Sporadic cases
Falkland Islands (Malvinas)	1	52	1 493.0	0	0	0.0	No cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
British Virgin Islands	0	154	509.3	0	1	3.3	Clusters of cases
Montserrat	0	20	400.1	0	1	20.0	Sporadic cases
Saint Pierre and Miquelon	0	24	414.2	0	0	0.0	No cases
Eastern Mediterranean	**297 763**	**7 693 094**	**1 052.7**	**3 699**	**160 612**	**22.0**	
Iran (Islamic Republic of)	73 471	1 920 394	2 286.4	691	62 999	75.0	Community transmission
Jordan	44 742	626 875	6 143.9	658	7 130	69.9	Community transmission
Iraq	41 043	868 200	2 158.5	253	14 430	35.9	Community transmission
Pakistan	33 064	682 888	309.1	539	14 697	6.7	Community transmission
Lebanon	18 775	477 113	6 990.2	321	6 379	93.5	Community transmission
United Arab Emirates	14 954	468 023	4 732.1	27	1 504	15.2	Community transmission
Kuwait	8 811	235 989	5 525.9	60	1 339	31.4	Community transmission
Tunisia	8 632	258 335	2 185.8	226	8 931	75.6	Community transmission
Bahrain	6 952	147 770	8 684.3	18	531	31.2	Clusters of cases
Oman	6 180	160 018	3 133.5	31	1 681	32.9	Community transmission
Qatar	5 413	182 548	6 336.2	17	301	10.4	Community transmission
Libya	4 972	161 088	2 344.4	82	2 684	39.1	Community transmission
Egypt	4 892	204 256	199.6	278	12 123	11.8	Clusters of cases
Saudi Arabia	4 215	392 009	1 126.0	47	6 690	19.2	Sporadic cases
Morocco	3 474	497 832	1 348.8	44	8 842	24.0	Clusters of cases
Djibouti	1 260	8 509	861.2	6	72	7.3	Community transmission
Syrian Arab Republic	928	19 284	110.2	72	1 299	7.4	Community transmission
Somalia	785	11 623	73.1	58	546	3.4	Community transmission
Yemen	728	4 701	15.8	100	933	3.1	Community transmission
Afghanistan	382	56 676	145.6	27	2 497	6.4	Sporadic cases
Sudan	180	31 833	72.6	13	2 063	4.7	Community transmission
Territories[iii]							
occupied Palestinian territory	13 910	277 130	5 432.4	131	2 941	57.7	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Europe	**1 638 947**	**45 877 941**	**4 915.1**	**24 534**	**980 586**	**105.1**	
Turkey	265 937	3 445 052	4 084.8	1 155	32 078	38.0	Community transmission
France	244 607	4 679 794	7 169.5	1 991	95 875	146.9	Community transmission
Poland	187 551	2 438 542	6 443.2	3 057	54 941	145.2	Community transmission
Italy	137 794	3 650 247	6 037.3	3 068	110 704	183.1	Clusters of cases
Germany	112 985	2 885 386	3 443.8	1 093	76 963	91.9	Community transmission
Ukraine	101 646	1 745 709	3 991.7	2 379	34 333	78.5	Community transmission
Russian Federation	61 062	4 580 894	3 139.0	2 634	100 374	68.8	Clusters of cases
Netherlands	50 518	1 295 228	7 559.0	160	16 606	96.9	Community transmission
Hungary	45 552	679 413	7 033.0	1 532	21 504	222.6	Community transmission
Romania	38 045	970 224	5 043.3	976	23 973	124.6	Community transmission
Czechia	36 867	1 551 896	14 491.5	1 071	26 945	251.6	Community transmission
Serbia	32 748	614 365	8 822.3	271	5 422	77.9	Community transmission
Belgium	28 276	900 995	7 774.2	241	23 162	199.9	Community transmission
The United Kingdom	27 911	4 357 095	6 418.3	253	126 826	186.8	Community transmission
Sweden	26 914	813 191	8 052.0	22	13 498	133.7	Community transmission
Bulgaria	24 489	352 259	5 069.6	857	13 507	194.4	Clusters of cases
Austria	21 652	552 496	6 134.5	170	9 165	101.8	Community transmission
Greece	20 869	273 459	2 623.6	476	8 302	79.7	Community transmission
Azerbaijan	14 344	268 714	2 650.3	184	3 648	36.0	Clusters of cases
Kazakhstan	13 554	305 860	1 628.9	116	3 812	20.3	Clusters of cases
Croatia	12 804	280 026	6 821.1	165	6 058	147.6	Community transmission
Bosnia and Herzegovina	10 971	174 846	5 329.3	525	6 803	207.4	Community transmission
Spain	9 182	3 291 394	7 039.7	79	75 541	161.6	Community transmission
Switzerland	9 173	602 578	6 962.5	42	9 677	111.8	Community transmission
Republic of Moldova	8 734	234 394	5 810.5	307	5 092	126.2	Community transmission
Belarus	8 434	326 065	3 450.7	65	2 276	24.1	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Slovenia	7 382	219 422	10 554.5	41	4 368	210.1	Clusters of cases
Slovakia	7 332	365 242	6 689.9	529	10 025	183.6	Clusters of cases
North Macedonia	6 694	132 924	6 380.2	218	3 860	185.3	Community transmission
Armenia	6 317	196 634	6 635.8	128	3 592	121.2	Community transmission
Norway	5 836	96 770	1 785.0	17	673	12.4	Community transmission
Lithuania	5 770	219 711	8 070.8	58	3 609	132.6	Community transmission
Estonia	5 769	109 399	8 247.0	94	941	70.9	Clusters of cases
Denmark	5 669	232 718	4 017.8	15	2 428	41.9	Community transmission
Ireland	3 758	237 695	4 813.8	62	4 715	95.5	Community transmission
Georgia	3 532	283 833	7 115.1	60	3 811	95.5	Community transmission
Latvia	3 151	103 867	5 506.7	51	1 923	102.0	Community transmission
Cyprus	2 977	47 282	3 916.2	11	261	21.6	Clusters of cases
Portugal	2 820	822 862	8 069.9	41	16 868	165.4	Clusters of cases
Finland	2 561	78 106	1 409.7	29	846	15.3	Community transmission
Albania	2 542	126 183	4 384.7	52	2 256	78.4	Clusters of cases
Montenegro	2 090	92 517	14 730.5	58	1 303	207.5	Clusters of cases
Israel	1 588	833 200	9 626.2	59	6 231	72.0	Community transmission
Luxembourg	1 350	62 105	9 921.3	12	750	119.8	Community transmission
Uzbekistan	1 283	83 623	249.9	5	631	1.9	Clusters of cases
Kyrgyzstan	922	89 014	1 364.4	11	1 506	23.1	Clusters of cases
Malta	381	29 189	6 610.7	12	397	89.9	Clusters of cases
Andorra	365	12 174	15 756.2	2	117	151.4	Community transmission
San Marino	149	4 775	14 069.8	0	84	247.5	Community transmission
Monaco	72	2 326	5 927.0	1	29	73.9	Sporadic cases
Iceland	62	6 225	1 824.2	0	29	8.5	Community transmission
Liechtenstein	23	2 764	7 247.6	0	54	141.6	Sporadic cases
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Kosovo [1]	5 908	92 932	4 995.3	76	1 896	101.9	Community transmission
Isle of Man	19	1 570	1 846.4	3	29	34.1	No cases
Jersey	4	3 229	2 967.8	0	69	63.4	Community transmission
Gibraltar	2	4 275	12 688.8	0	94	279.0	Clusters of cases
Faroe Islands	0	661	1 352.7	0	1	2.0	Sporadic cases
Greenland	0	31	54.6	0	0	0.0	No cases
Guernsey	0	821	1 299.1	0	14	22.2	Community transmission
South-East Asia	**592 349**	**15 212 235**	**752.6**	**4 317**	**222 054**	**11.0**	
India	513 885	12 485 509	904.7	3 071	164 623	11.9	Clusters of cases
Bangladesh	38 471	630 277	382.7	344	9 213	5.6	Community transmission
Indonesia	35 522	1 527 524	558.5	878	41 242	15.1	Community transmission
Sri Lanka	1 456	93 295	435.7	17	575	2.7	Clusters of cases
Maldives	1 248	24 651	4 560.4	1	67	12.4	Clusters of cases
Nepal	1 018	277 768	953.3	5	3 032	10.4	Clusters of cases
Thailand	393	29 127	41.7	1	95	0.1	Clusters of cases
Timor-Leste	234	714	54.2	0	0	0.0	Clusters of cases
Myanmar	102	142 479	261.9	0	3 206	5.9	Clusters of cases
Bhutan	20	891	115.5	0	1	0.1	Sporadic cases
Western Pacific	**105 757**	**1 965 683**	**100.1**	**543**	**31 904**	**1.6**	
Philippines	71 606	784 023	715.5	264	13 423	12.2	Community transmission
Japan	16 018	482 867	381.8	190	9 221	7.3	Clusters of cases
Malaysia	8 968	349 610	1 080.2	35	1 286	4.0	Clusters of cases
Republic of Korea	3 529	105 279	205.3	22	1 744	3.4	Clusters of cases
Mongolia	2 905	9 598	292.8	5	11	0.3	Clusters of cases
Papua New Guinea	1 652	6 857	76.6	16	61	0.7	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Cambodia	456	2 689	16.1	9	19	0.1	Sporadic cases
China	187	102 867	7.0	0	4 851	0.3	Clusters of cases
Singapore	180	60 468	1 033.6	0	30	0.5	Sporadic cases
Australia	89	29 341	115.1	0	909	3.6	Clusters of cases
Viet Nam	39	2 629	2.7	0	35	0.0	Clusters of cases
New Zealand	25	2 151	44.6	0	26	0.5	Clusters of cases
Brunei Darussalam	8	214	48.9	0	3	0.7	Sporadic cases
Solomon Islands	1	19	2.8	0	0	0.0	No cases
Fiji	0	67	7.5	0	2	0.2	Sporadic cases
Lao People's Democratic Republic	0	49	0.7	0	0	0.0	Sporadic cases
Territories[iii]							
Wallis and Futuna	49	425	3 779.1	0	4	35.6	Sporadic cases
French Polynesia	26	18 633	6 633.1	0	141	50.2	Sporadic cases
Guam	19	7 606	4 506.6	2	136	80.6	Clusters of cases
Marshall Islands	0	4	6.8	0	0	0.0	No cases
New Caledonia	0	121	42.4	0	0	0.0	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	0	159	276.2	0	2	3.5	Pending
Samoa	0	4	2.0	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Global	**4 038 292**	**130 459 184**	**1 673.7**	**71 355**	**2 842 325**	**36.5**	

*See *Annex: Data, table and figure notes*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 745 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that

are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.

- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorizations are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 28 March 2021, 10 am CET

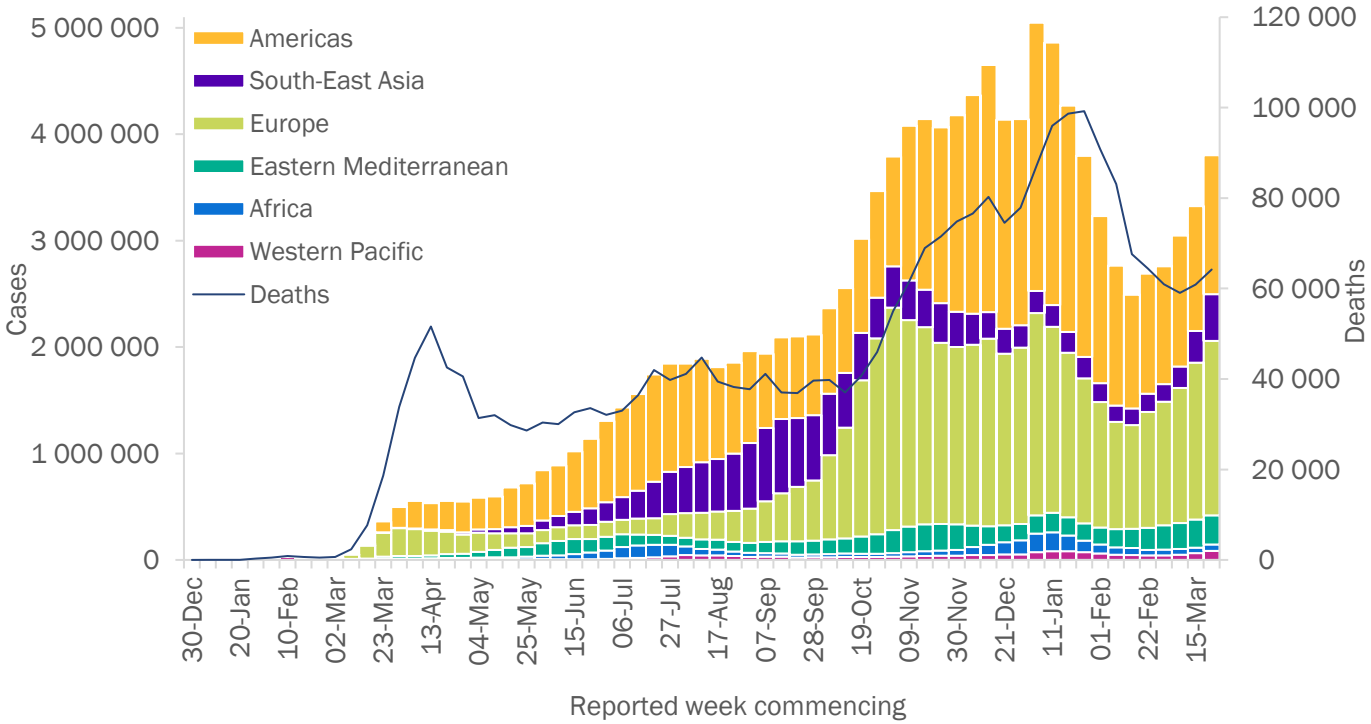
In this edition:

- Global overview
- Special focus: COVID-19 and Health and Care Workers (HCWs)
- Special focus: SARS-CoV-2 variants
- WHO regional overviews
- Key weekly updates

Global overview

Globally, new COVID-19 cases rose for a fifth consecutive week, with just over 3.8 million new cases reported in the last week (Figure 1). The number of new deaths increased for the second consecutive week, increasing by 5% compared to last week, with over 64 000 new deaths reported. All regions reported an increase in the number of cases this week, with the largest increases in the South-East Asia, Western Pacific, and African Regions, all of which have been on an upward trajectory in recent weeks. All regions, except for the African Region, reported an increase in the number of deaths, with the largest increase of 21% from the South-East Asia Region, which is on its third week of an increasing trend. The European Region and the Region of the Americas continue to account for approximately 80% of all new and cumulative cases and deaths.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 28 March 2021**



**See *Annex: Data, table and figure notes*

The highest numbers of new cases were reported from Brazil (533 024 new cases; 5% increase), the United States of America (421 936 new cases; 13% increase), India (372 494 new cases; 55% increase), France (254 228 new cases; 24% increase), and Poland (192 441 new cases; 27% increase).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 28 March 2021**

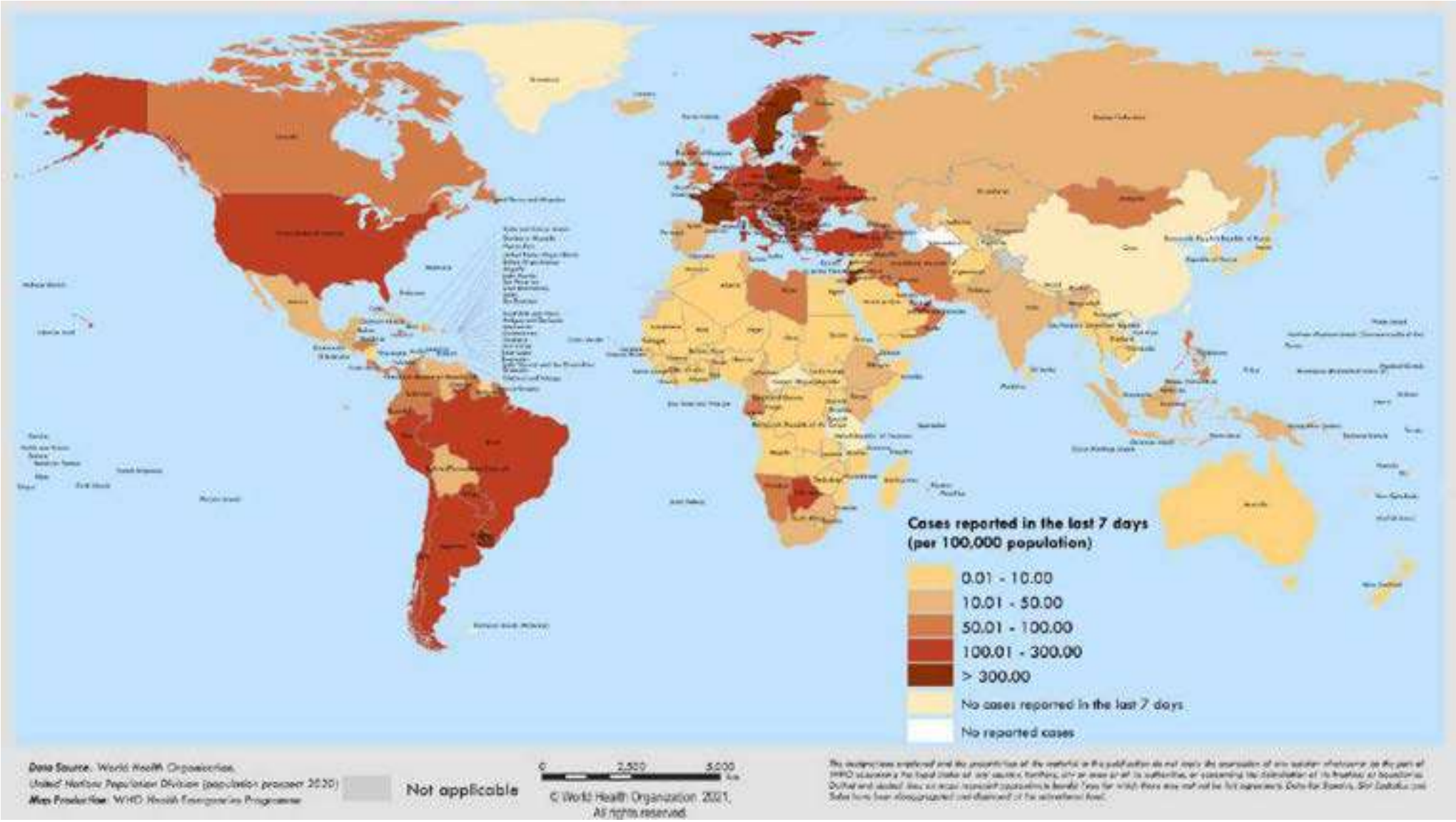
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 306 017 (34%)	11%	55 243 776 (44%)	32 176 (50%)	4%	1 331 419 (48%)
Europe	1 641 672 (43%)	11%	44 191 579 (35%)	23 778 (37%)	7%	954 829 (34%)
South-East Asia	437 060 (11%)	46%	14 619 886 (12%)	2 947 (5%)	21%	217 737 (8%)
Eastern Mediterranean	270 884 (7%)	3%	7 395 085 (6%)	3 428 (5%)	5%	156 891 (6%)
Africa	62 286 (2%)	22%	3 061 438 (2%)	1 340 (2%)	-6%	77 446 (3%)
Western Pacific	84 395 (2%)	32%	1 859 933 (1%)	518 (1%)	7%	31 361 (1%)
Global	**3 802 314 (100%)**	**14%**	**126 372 442 (100%)**	**64 187 (100%)**	**5%**	**2 769 696 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number; global totals may not equal 100%.*
**See *Annex: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 22-28 March 2021**

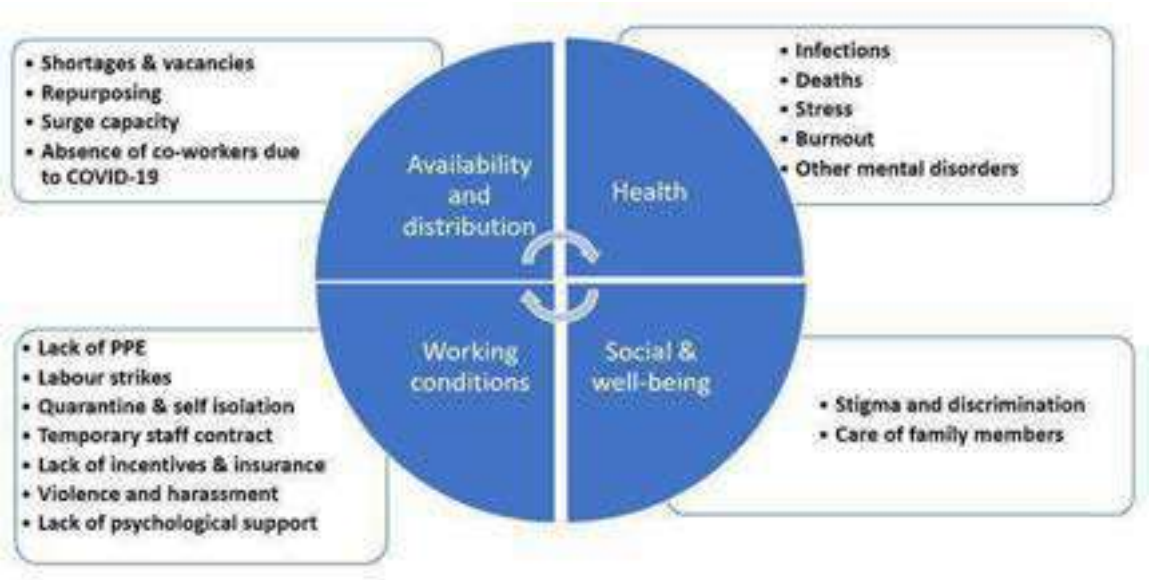


**See *Annex: Data, table and figure notes*

Special Focus: COVID-19 and Health and Care Workers (HCWs)

HCWs have been central to the COVID-19 response since the beginning of the pandemic. Many of their functions and roles put them at risk of exposure to hazards that can impact their working conditions as well as have impact their physical and social well-being. It is therefore critical to monitor the multidimensional factors affecting HCWs as the pandemic continues (Figure 3).

Figure 3. Multidimensional factors related to COVID-19 that impact HCWs



HCWs continue to face a range of interconnected factors that affect their mental health and stress levels which increase with irregular working hours, higher levels of exposure to illness, fear of infection with COVID-19 related to exposure, and/or lack of adequate PPE amongst others. Published studies show that the prevalence of mental health conditions among HCWs was significantly higher than other professional groups. HCWs reported a higher level of anxiety (13.0% vs. 8.5%) and depression (12.2% vs. 9.5%)[1] as compared to other groups, with insomnia as a risk factor for both. A recent study with data from six countries found that insomnia, sleeping disorders and burnout were significant risk factors for COVID-19 infection among HCWs[2].

As the pandemic continues, more evidence has been collected to describe the challenging working and psychosocial conditions HCWs face daily (Table 2).

[1] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7409979/
[2] https://nutrition.bmj.com/content/early/2021/03/03/bmjnph-2021-000228

Table 2. A selective summary of the COVID-19 impact dimension on HCWs

Dimension	Evidence
Stigma and discrimination	HCWs were at increased risk to experience stigma and bullying, adjusted odds ratio: 1.5 (95% CI 1.2 to 2.0).[3]
Violence	Since the beginning of the outbreak, attacks on health care have continuously been reported and now also include incidents linked to the COVID-19 pandemic across the world. [4]
Lack of PPE	Lack of PPE for HCWs has been observed in several countries.[5] [6]
Strike actions	An independent analysis has identified industrial dispute and strike action in 84 Member States since February 2020; of which 38% and 29% of strikes are due to poor working conditions and lack of PPE, respectively.[7]
Quarantine and self-isolation	In a survey of health professionals and allied employees, 24% of HCWs declared that they had to return to work while still having symptoms of COVID-19.[8]
Other working conditions	Role of privatization in delivery of services, managerial practices in nursing homes exacerbated impact of COVID-19.[9]

HCWs continue to play an integral role in the pandemic response. It is crucial that HCWs be adequately supported in order to ensure their physical and mental well-being.

[3] Dye TD, Alcantara L, Siddiqi S, et al. Risk of COVID-19-related bullying, harassment and stigma among healthcare workers: an analytical cross-sectional global study. BMJ Open 2020;10:e046620. doi: 10.1136/bmjopen-2020-046620

[4] https://www.who.int/news-room/feature-stories/detail/attacks-on-health-care-in-the-context-of-covid-19

[5] J Cohena, YM Rodgersc. Contributing factors to personal protective equipment shortages during the COVID-19 pandemic. Prev Med. 2020 Dec; 141: 106263.

[6] https://www.who.int/news/item/03-03-2020-shortage-of-personal-protective-equipment-endangering-health-workers-worldwide

[7] https://www.who.int/campaigns/annual-theme/year-of-health-and-care-workers-2021/facts

[8] Health professionals and allied employees. Exposed and at risk. HPAE white paper July 2020.

[9] Pat Armstrong, Hugh Armstrong, Ivy Lynn Bourgeault, Pat Armstrong. Privatization and COVID-19: A Deadly Combination for Nursing Homes July 2020 In book: Vulnerable: The Policy, Law and Ethics of COVID-19. Publisher: University of Ottawa Press

Special Focus: Update on SARS-CoV-2 Variants

All viruses, including SARS-CoV-2, change over time resulting in the emergence of new variants, most without a direct benefit to the virus or other public health impacts. WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 result in changes in transmissibility, clinical presentation and severity, or if they impact public health and social measures (PHSM). Systems have been established to detect "signals" of potential variants of concern (VOCs) or variants of interest (VOIs), as well as unusual events potentially associated with a variant, and assess these based on the risk posed to global public health (see also working definitions). A number of such signals are currently under assessment, and as new VOCs and VOIs are determined, WHO is committed to highlighting these to support prioritization for further monitoring and assessment. National authorities may choose to designate other variants of local interest/concern as every local situation is unique, with different variants circulating, requiring surveillance and response systems to adapt to their local epidemiological situation.

Further information on the background of the variants of concern (VOCs) and variants of interest (VOIs) is available in previously published editions of the Weekly Epidemiological Update. Here we provide a brief update on the geographical distribution of the three variants classified as VOCs by WHO as of 30 March 2021 as well as an update on emerging VOIs.

As surveillance activities to detect SARS-CoV-2 variant cases are strengthened at local and national levels, including systematic genomic sequencing, the number of countries reporting VOCs has continued to increase (Table 3, Figures 4-6, Annex 2). This information should be interpreted with due consideration of surveillance limitations, including but not limited to differences between countries in sequencing capacity and prioritization of samples for sequencing. WHO continues to advocate for strengthening surveillance and sequencing capacity, and a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local epidemiological situation and capacity, and the detection of unusual events.

Table 3: Overview of emerging information on variants of concern, as of 30 March 2021*

Nextstrain clade	20I/501Y.V1	20H/**501Y.V2**†	20J/501Y.V3
PANGO lineage	B.1.1.7	B.1.351	B.1.1.28.1, alias **P.1**†
GISAID clade	GR	GH	GR
Alternate names	**VOC 202012/01**†	VOC 202012/02	-
First detected by	United Kingdom	South Africa	Brazil / Japan
Earliest sample date	20 September 2020	Early August 2020	December 2020
Key spike mutations	H69/V70 deletion; Y144 deletion; N501Y; A570D; and P681H	L242/A243/L244 deletion; K417N E484K, N501Y	K417T, E484K; N501Y
Key mutation in common	S106/G107/F108 deletion in Non-Structural Protein 6 (NSP6)		
Countries reporting cases (newly reported in last week)**	130 (5)	80 (5)	45(4)

†*While work is ongoing to establish standardized nomenclature for key variants, these are the names by which WHO will refer to them in this publication.*

***Includes official and unofficial reports of VOCs detections in countries among either travellers (imported cases only) or community samples (local transmission).*

Figure 4. Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01 as of 30 March 2021

Figure 5. Countries, territories and areas reporting SARS-CoV-2 variant 501Y.V2 as of 30 March 2021

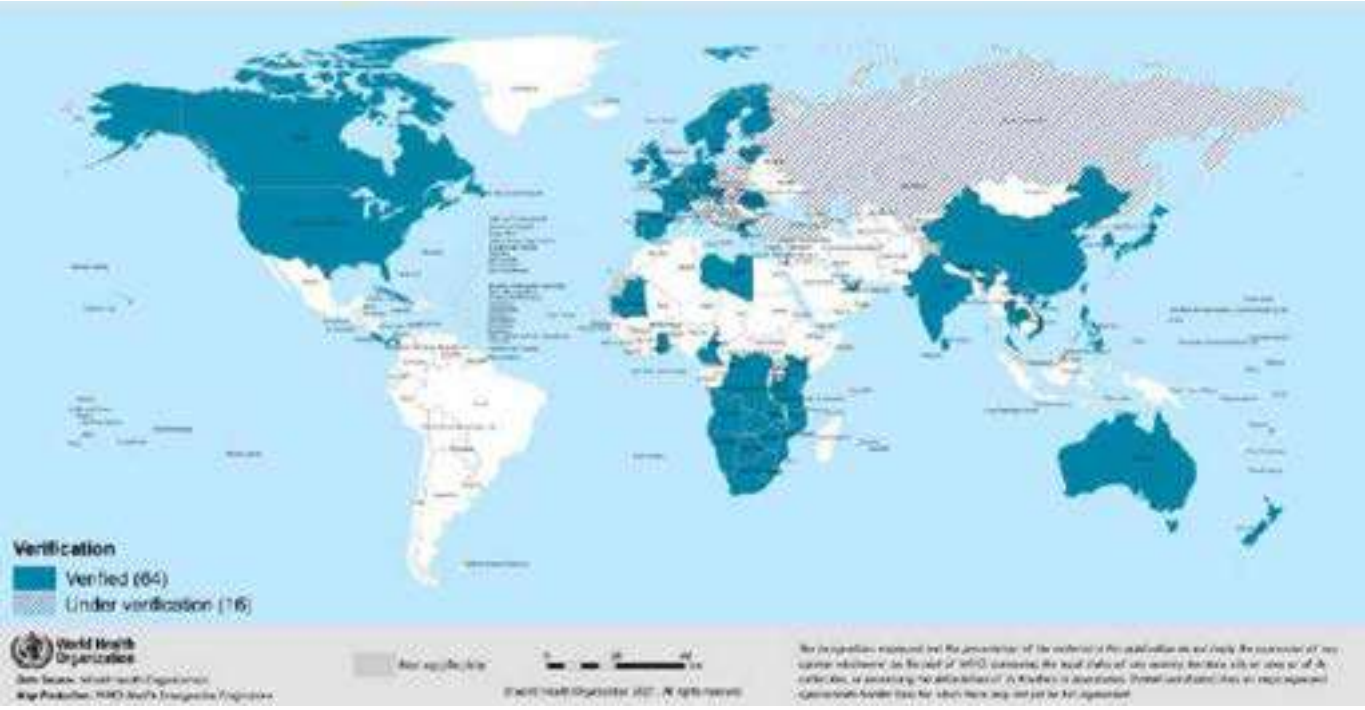


Figure 6. Countries, territories and areas reporting SARS-CoV-2 variant P.1 as of 30 March 2021

Emerging variants of interest (VOIs)

Table 4: Overview of variants of interest (VOIs), as of 30 March 2021*

Nextstrain clade	20C	20C/S.452R	20B/S.484K	Not yet assigned	20C	20C
PANGO lineage	B.1.525	B.1.427/B.1.429	B.1.1.28.2, alias P.2	B.1.1.28.3 alias P.3	B.1.526 (with E484K or S477N)	B.1 descendant with 9 mutations
GISAID clade	G/484K.V3	GH/452R.V1	GR	Not yet assigned	GH	GH
Alternate names		CAL.20C/L452R		PHL-B.1.1.28		
First detected by	United Kingdom and Nigeria	United States of America	Brazil	Philippines and Japan	United States of America	France
First appearance	December 2020	June 2020	April 2020	February 2021	November 2020	January 2021
Key spike mutations	H69-V70 deletion; Y144 deletion; Q52R; E484K; Q677H; D614G; and F888L	L452R; W152C; S13I; and D614G	L18F; T20N; P26S; F157L; E484K; D614G; S929I; and V1176F	141-143 deletion; E484K; N501Y; and P681H	L5F; T95I; D253G; D614G; A701V; and E484K or S477N	G142 deletion; D66H; Y144V; D215G; V483A; D614G; H655Y; G669S; Q949R; and N1187D

WHO recommendations and working definitions of VOI and VOC

The potential for virus mutation increases with the frequency of human and animal infections. Therefore, reducing transmission of SARS-CoV-2 through established disease control methods as well as avoiding introductions to animal populations are crucial aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critical to curb the spread of SARS-CoV-2, including new variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the implementation of PHSM and infection prevention and control (IPC) measures in health facilities has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. Findings from new studies evaluating transmission, severity and impact on medical countermeasures will continue to help inform PHSM and IPC measures employed by Member States. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities, including epidemiological surveillance, strategic testing, and systematic sequencing of SARS-CoV-2 where feasible.

Additional resources

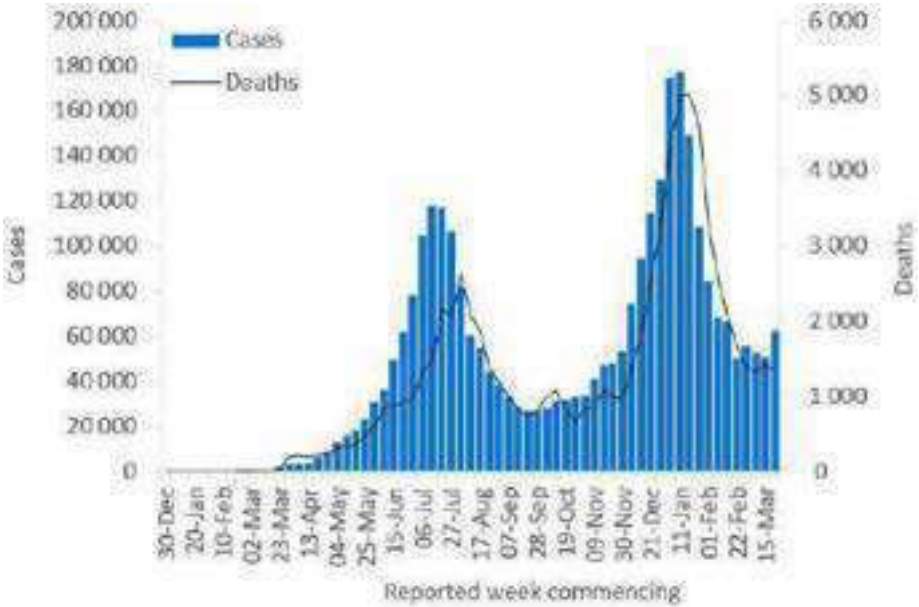
- Proposed working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern
- COVID-19 new variants: Knowledge gaps and research
- PAHO Epidemiological Update: Variants of SARS-CoV-2 in the Americas - 24 March 2021
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19
- Disease Outbreak News on SARS-CoV-2 Variants, 31 December 2020

WHO regional overviews

African Region

After reporting a decline in new cases for two consecutive weeks, the African Region reported a 22% increase in new cases (>62 000 cases) compared to the previous week, and over 1300 new deaths, a 6% decrease. The highest numbers of new cases were reported from Ethiopia (13 153 new cases; 11.4 new cases per 100 000 population; a 14% increase) and Kenya (9167 new cases; 17 new cases per 100 000; a 25% increase).

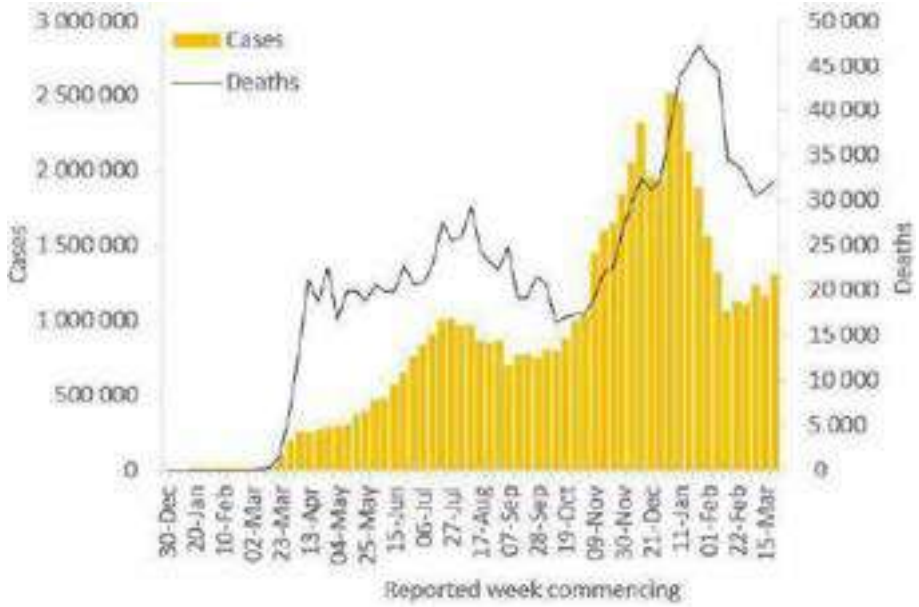
The highest numbers of new deaths were reported from South Africa (566 new deaths; one new death per 100 000 population; a 31% decrease) and Ethiopia (137 new deaths; <0.1 new deaths per 100 000; a 28% increase).



Region of the Americas

The Region of the Americas reported over 1.3 million new cases and over 32 000 new deaths, an 11% and 4% increase respectively compared to the previous week. Overall, there has been an increasing trend in weekly reported cases in the last five weeks. A slight increase in new deaths has been reported in the last two weeks after a decline in deaths for the six prior weeks. The highest numbers of new cases were reported from Brazil (533 024 new cases; 250.8 new cases per 100 000; a 5% increase), the United States of America (421 936 new cases; 127.5 new cases per 100 000; a 13% increase), and Peru (60 739 new cases; 184.2 new cases per 100 000; a 24% increase).

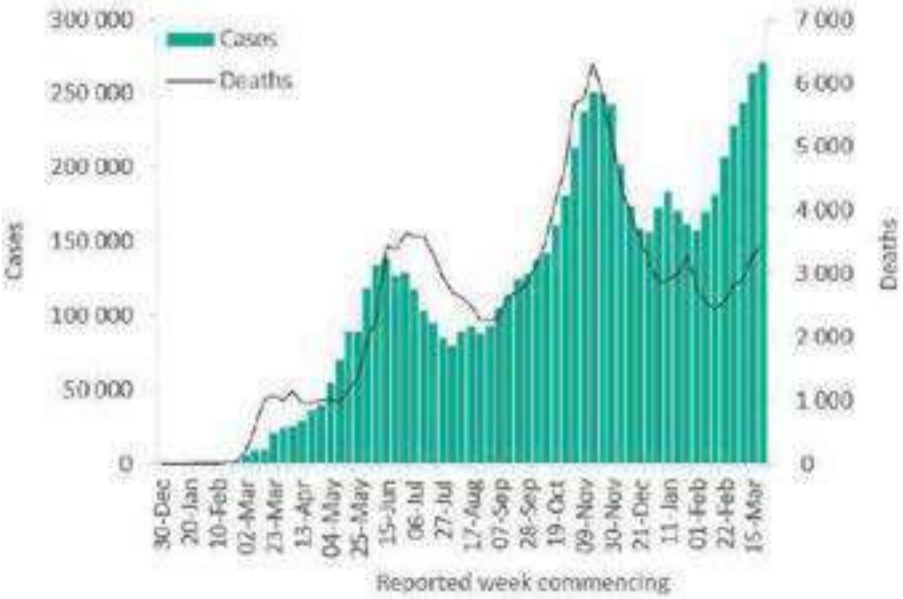
The highest numbers of new deaths were reported from Brazil (16 798 new deaths; 7.9 new deaths per 100 000; a 10% increase), the United States of America (6995 new deaths; 2.1 new deaths per 100 000; a 7% decrease), and Mexico (3643 new deaths; 2.8 new deaths per 100 000; an 8% increase).



Eastern Mediterranean Region

The Eastern Mediterranean Region reported just under 271 000 new cases and over 3400 new deaths, a 3% and a 5% increase respectively compared to the previous week. Both cases and deaths are on an upward trajectory with new cases increasing for the past seven weeks and deaths for the past five weeks. The highest numbers of new cases were reported from Jordan (55 467 new cases; 543.6 new cases per 100 000; a 4% decrease), the Islamic Republic of Iran (53 118 new cases; 63.2 new cases per 100 000; a 2% decrease), and Iraq (37 767 new cases; 93.9 new cases per 100 000; an 8% increase).

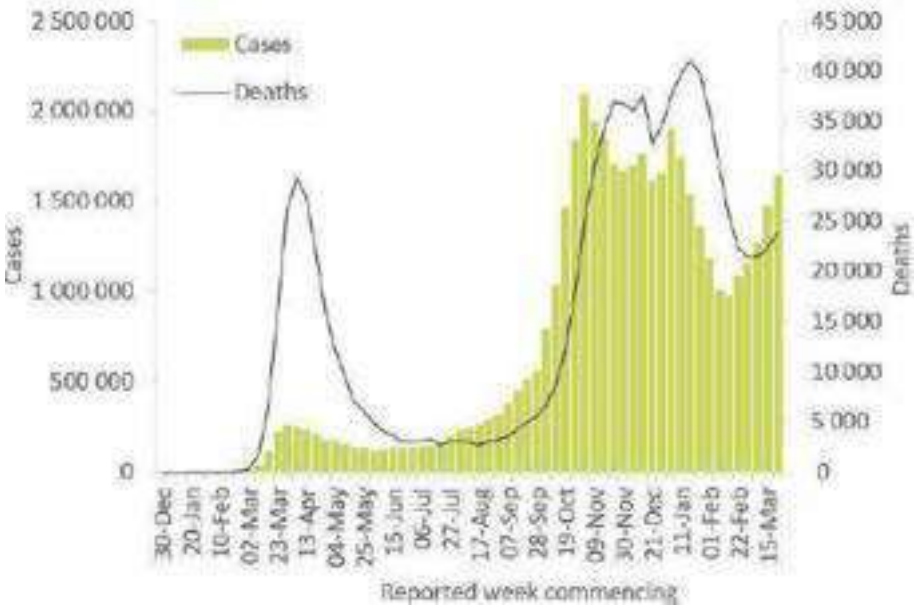
The highest numbers of new deaths were reported from Jordan (684 new deaths; 6.7 new deaths per 100 000; a 36% increase), the Islamic Republic of Iran (584 new deaths; 0.7 new deaths per 100 000; similar to last week), and Pakistan (359 new deaths; 0.2 new deaths per 100 000; an 11% increase).



European Region

The European Region reported over 1.6 million new cases and just under 24 000 new deaths in the past week, an 11% and a 7% increase respectively compared to the previous week. The number of new cases in the Region has been steadily increasing over the past five weeks while the number of new deaths has increased for the past three weeks. The highest numbers of new cases were reported from France (254 228 new cases; 389.5 new cases per 100 000; a 24% increase), Poland (192 441 new cases; 508.5 new cases per 100 000; a 27% increase), and Turkey (186 421 new cases; 221.0 new cases per 100 000; a 47% increase).

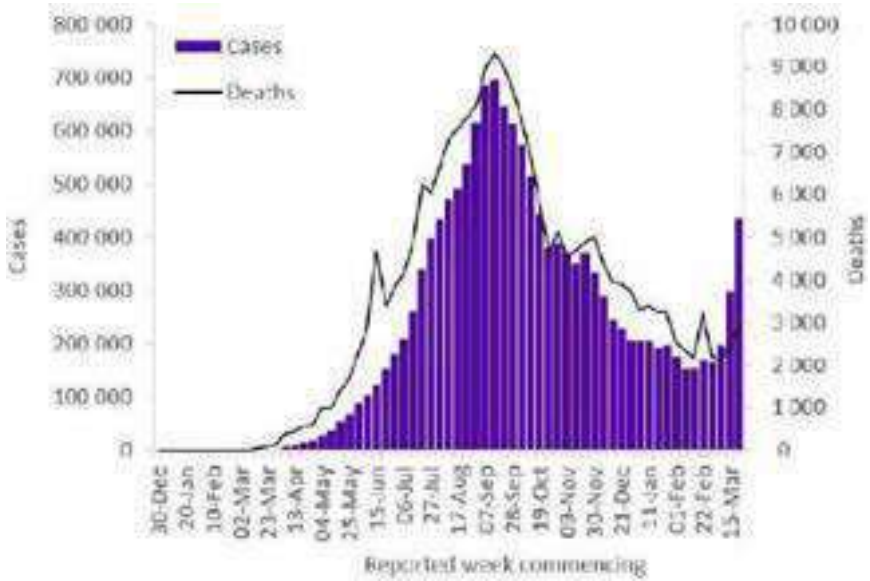
The highest numbers of new deaths were reported from Italy (2994 new deaths; 5.0 new deaths per 100 000; an 8% increase), the Russian Federation (2710 new deaths; 1.9 new deaths per 100 000; an 8% decrease), and Poland (2584 new deaths; 6.8 new deaths per 100 000; a 22% increase).



South-East Asia Region

The South-East Asia Region reported over 437 000 new cases and just under 3000 new deaths, a 46% and a 21% increase respectively compared to the previous week. Cases in the Region have been steadily increasing over the past three weeks, with a sharp increase in the past two weeks. Almost 85% of cases in the Region over the past week were from India which reported 372 494 new cases (27 new cases per 100 000; a 55% increase). The other countries reporting the highest numbers of new cases in the Region were Indonesia (36 214 new cases; 13.2 new cases per 100 000; a 12% decrease) and Bangladesh (23 100 new cases; 14.0 new cases per 100 000; an 85% increase).

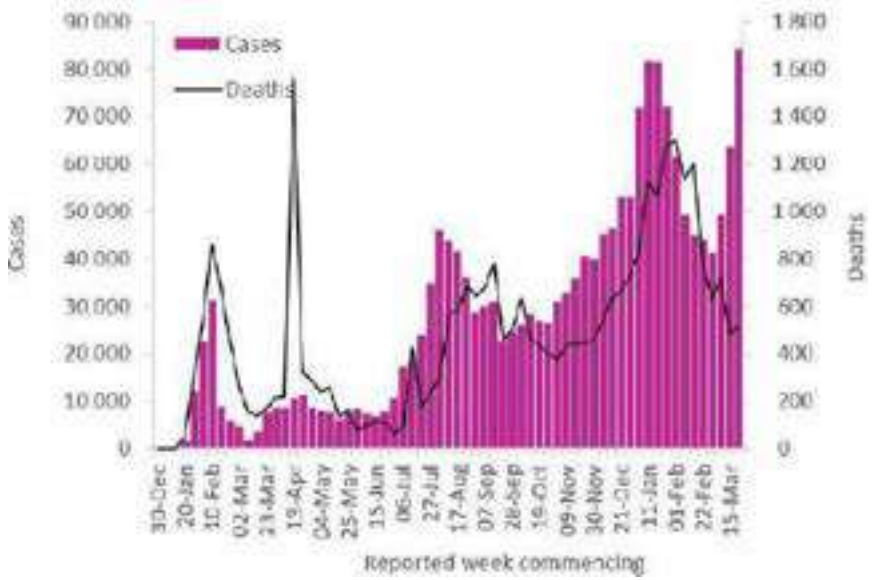
The highest numbers of new deaths were reported from India (1797 new deaths;< 0.1 new deaths per 100 000; a 57% increase), Indonesia (917 new deaths; 0.3 new deaths per 100 000; an 18% decrease), and Bangladesh (201 new deaths; <0.1 new deaths. per 100 000; a 43% increase).



Western Pacific Region

The Western Pacific Region reported over 84 000 new cases and just over 500 new deaths, a 32% and a 7% increase respectively compared to the previous week. The Region has reported a steep increase in the number of new cases over the past three weeks. The highest numbers of new cases were reported from the Philippines (56 380 new cases; 51.5 new cases per 100 000; a 43% increase), Japan (11 211 new cases; 8.9 new cases per 100 000; a 28% increase), and Malaysia (8929 new cases; 27.6 new cases per 100 000; a 4% decrease).

The highest numbers of new deaths were reported from the Philippines (229 new deaths; 0.2 new deaths per 100 000; a 40% increase), Japan (219 new deaths; 0.2 new deaths per 100 000; a 13% decrease), and the Republic of Korea (26 new deaths; <0.1 new deaths per 100 000; a 4% decrease).



Key weekly updates

WHO Director-General's key message

Opening remarks at the media briefing on COVID-19 – 26 March 2021:

- A total of 177 countries and economies have started vaccination. In just one month, COVAX has distributed more than 32 million vaccines to 61 countries.
- Four more vaccines are currently at different stages in the process of being assessed for WHO Emergency Use Listing, with the hope to approve at least one of them by the end of April.

Vaccine publications

- Evaluation of COVID-19 vaccine effectiveness, Interim guidance
- Sample size calculator for evaluation of COVID-19 vaccine effectiveness (Excel)
- COVAX updates participants on delivery delays for vaccines from Serum Institute of India (SII) and AstraZeneca
- Joint Statement on prioritization of COVID-19 vaccination for seafarers and aircrew

Surveillance of SARS-CoV-2

- Operational considerations to expedite genomic sequencing component of GISRS surveillance of SARS-CoV-2
- COVID-19 new variants: Knowledge gaps and research

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 30 March 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**62 286**	**3 061 438**	**272.9**	**1 340**	**77 446**	**6.9**	
Ethiopia	13 153	198 794	172.9	137	2 784	2.4	Community transmission
Kenya	9 167	129 330	240.5	117	2 104	3.9	Community transmission
Cameroon	8 681	47 669	179.6	133	721	2.7	Community transmission
South Africa	7 665	1 544 466	2 604.1	566	52 648	88.8	Community transmission
Botswana	2 973	38 466	1 635.7	48	506	21.5	Community transmission
Côte d'Ivoire	2 555	42 468	161.0	12	229	0.9	Community transmission
Zambia	1 454	87 727	477.2	20	1 198	6.5	Community transmission
Madagascar	1 311	23 424	84.6	41	381	1.4	Community transmission
Namibia	1 296	43 499	1 711.9	16	508	20.0	Community transmission
Mozambique	1 212	67 011	214.4	22	762	2.4	Community transmission
Gabon	1 129	18 426	827.9	4	109	4.9	Community transmission
Ghana	1 011	90 287	290.6	24	740	2.4	Community transmission
Guinea	939	19 501	148.5	8	116	0.9	Community transmission
Nigeria	838	162 489	78.8	11	2 041	1.0	Community transmission
Togo	837	9 676	116.9	5	107	1.3	Community transmission
Senegal	763	38 456	229.7	27	1 034	6.2	Community transmission
Algeria	684	116 750	266.2	22	3 077	7.0	Community transmission
Cabo Verde	578	17 018	3 060.9	6	165	29.7	Community transmission
Rwanda	548	21 309	164.5	13	300	2.3	Community transmission
Mali	503	9 773	48.3	16	376	1.9	Community transmission
Seychelles	438	4 054	4 122.1	2	18	18.3	Community transmission
Democratic Republic of the Congo	419	27 886	31.1	8	734	0.8	Community transmission
Angola	335	22 031	67.0	7	533	1.6	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Benin	282	7 100	58.6	0	90	0.7	Community transmission
Malawi	242	33 458	174.9	20	1 113	5.8	Community transmission
South Sudan	199	10 048	89.8	2	108	1.0	Community transmission
Equatorial Guinea	166	6 902	492.0	2	102	7.3	Community transmission
Mauritania	158	17 745	381.6	2	448	9.6	Community transmission
Burkina Faso	157	12 673	60.6	0	145	0.7	Community transmission
Zimbabwe	156	36 818	247.7	9	1 519	10.2	Community transmission
Lesotho	151	10 686	498.8	6	315	14.7	Community transmission
Gambia	146	5 401	223.5	2	163	6.7	Community transmission
Burundi	144	2 757	23.2	0	6	0.1	Community transmission
Congo	117	9 681	175.4	1	135	2.4	Community transmission
Uganda	116	40 767	89.1	1	335	0.7	Community transmission
Chad	91	4 501	27.4	3	160	1.0	Community transmission
Eritrea	90	3 208	90.5	2	9	0.3	Community transmission
Guinea-Bissau	72	3 630	184.5	6	61	3.1	Community transmission
Niger	69	4 987	20.6	0	185	0.8	Community transmission
Sao Tome and Principe	68	2 210	1 008.4	0	34	15.5	Community transmission
Mauritius	58	870	68.4	0	10	0.8	Clusters of cases
Eswatini	35	17 318	1 492.7	1	666	57.4	Community transmission
Comoros	25	3 690	424.3	0	146	16.8	Community transmission
Sierra Leone	14	3 962	49.7	0	79	1.0	Community transmission
Liberia	11	2 053	40.6	0	85	1.7	Community transmission
Central African Republic	0	5 087	105.3	0	64	1.3	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories[iii]							
Réunion	930	15 561	1 738.1	15	102	11.4	Community transmission
Mayotte	300	19 306	7 076.6	3	154	56.4	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Americas	**1 306 017**	**55 243 776**	**5 401.4**	**32 176**	**1 331 419**	**130.2**	
Brazil	533 024	12 404 414	5 835.7	16 798	307 112	144.5	Community transmission
United States of America	421 936	29 859 706	9 021.0	6 995	543 003	164.0	Community transmission
Peru	60 739	1 512 384	4 586.9	1 135	51 032	154.8	Community transmission
Argentina	56 138	2 291 051	5 069.2	759	55 235	122.2	Community transmission
Chile	44 824	969 913	5 073.8	473	22 653	118.5	Community transmission
Colombia	42 911	2 367 337	4 652.5	874	62 645	123.1	Community transmission
Mexico	31 935	2 219 845	1 721.7	3 643	200 862	155.8	Community transmission
Canada	29 586	956 655	2 534.7	209	22 826	60.5	Community transmission
Paraguay	14 205	204 704	2 870.0	296	3 958	55.5	Community transmission
Uruguay	13 942	92 343	2 658.3	115	875	25.2	Community transmission
Ecuador	11 831	322 699	1 829.0	244	16 679	94.5	Community transmission
Venezuela (Bolivarian Republic of)	5 760	154 905	544.8	68	1 543	5.4	Community transmission
Cuba	5 622	71 584	632.0	22	414	3.7	Community transmission
Honduras	4 980	186 337	1 881.3	114	4 536	45.8	Community transmission
Bolivia (Plurinational State of)	4 903	268 711	2 302.0	102	12 143	104.0	Community transmission
Guatemala	4 474	192 133	1 072.4	90	6 775	37.8	Community transmission
Costa Rica	3 275	215 178	4 224.0	35	2 931	57.5	Community transmission
Jamaica	3 082	37 747	1 274.7	32	556	18.8	Community transmission
Panama	2 797	353 017	8 181.6	52	6 087	141.1	Community transmission
Dominican Republic	2 593	251 582	2 319.2	33	3 302	30.4	Community transmission
El Salvador	1 235	63 766	983.1	23	1 998	30.8	Community transmission
Guyana	521	10 007	1 272.3	13	225	28.6	Clusters of cases
Trinidad and Tobago	118	7 939	567.3	1	141	10.1	Community transmission
Bahamas	116	9 000	2 288.7	2	188	47.8	Clusters of cases
Barbados	91	3 603	1 253.8	2	41	14.3	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Antigua and Barbuda	89	1 122	1 145.7	0	28	28.6	Clusters of cases
Saint Lucia	78	4 191	2 282.3	3	58	31.6	Community transmission
Belize	40	12 440	3 128.6	1	317	79.7	Community transmission
Nicaragua	37	5 288	79.8	1	177	2.7	Community transmission
Suriname	33	9 088	1 549.2	1	177	30.2	Clusters of cases
Saint Vincent and the Grenadines	27	1 721	1 551.3	1	10	9.0	Community transmission
Haiti	22	12 736	111.7	1	252	2.2	Community transmission
Dominica	4	161	223.6	0	0	0.0	Clusters of cases
Grenada	1	155	137.7	0	1	0.9	Sporadic cases
Saint Kitts and Nevis	0	44	82.7	0	0	0.0	Sporadic cases
Territories[iii]							
Puerto Rico	1 734	105 625	3 692.1	17	2 109	73.7	Community transmission
Curaçao	1 128	6 648	4 051.4	4	27	16.5	Community transmission
Aruba	449	9 073	8 498.0	1	82	76.8	Community transmission
Guadeloupe	417	11 512	2 877.1	4	173	43.2	Community transmission
Martinique	415	7 679	2 046.3	3	50	13.3	Community transmission
Bonaire	302	1 221	5 837.9	4	10	47.8	Community transmission
Bermuda	180	947	1 520.7	0	12	19.3	Sporadic cases
French Guiana	158	16 922	5 665.6	2	89	29.8	Community transmission
United States Virgin Islands	87	2 901	2 778.1	1	26	24.9	Community transmission
Saint Barthélemy	81	857	8 669.7	0	1	10.1	Clusters of cases
Turks and Caicos Islands	35	2 325	6 005.0	2	17	43.9	Clusters of cases
Sint Maarten	25	2 118	4 939.1	0	27	63.0	Community transmission
Saint Martin	24	1 657	4 286.2	0	12	31.0	Community transmission
Cayman Islands	12	487	741.0	0	2	3.0	Sporadic cases
Anguilla	1	23	153.3	0	0	0.0	Sporadic cases
British Virgin Islands	0	154	509.3	0	1	3.3	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Falkland Islands (Malvinas)	0	51	1 464.3	0	0	0.0	No cases
Montserrat	0	20	400.1	0	1	20.0	Sporadic cases
Saba	0	6	310.4	0	0	0.0	No cases
Saint Pierre and Miquelon	0	24	414.2	0	0	0.0	No cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	**270 884**	**7 395 085**	**1 011.9**	**3 428**	**156 891**	**21.5**	
Jordan	55 467	582 133	5 705.4	684	6 472	63.4	Community transmission
Iran (Islamic Republic of)	53 118	1 846 923	2 198.9	584	62 308	74.2	Community transmission
Iraq	37 767	827 157	2 056.5	208	14 177	35.2	Community transmission
Pakistan	26 689	649 824	294.2	359	14 158	6.4	Community transmission
Lebanon	21 763	458 338	6 715.1	343	6 058	88.8	Community transmission
United Arab Emirates	14 431	453 069	4 580.9	44	1 477	14.9	Community transmission
Kuwait	9 245	227 178	5 319.6	64	1 279	29.9	Community transmission
Libya	5 775	156 116	2 272.0	115	2 602	37.9	Community transmission
Bahrain	5 492	140 818	8 275.7	15	513	30.1	Clusters of cases
Oman	4 703	153 838	3 012.5	30	1 650	32.3	Community transmission
Egypt	4 593	199 364	194.8	288	11 845	11.6	Clusters of cases
Tunisia	4 298	249 703	2 112.8	179	8 705	73.7	Community transmission
Qatar	3 929	177 135	6 148.3	12	284	9.9	Community transmission
Saudi Arabia	3 141	387 794	1 113.9	41	6 643	19.1	Sporadic cases
Morocco	2 895	494 358	1 339.3	35	8 798	23.8	Clusters of cases
Syrian Arab Republic	1 116	18 356	104.9	74	1 227	7.0	Community transmission
Somalia	870	10 838	68.2	69	488	3.1	Community transmission
Djibouti	731	7 249	733.7	3	66	6.7	Community transmission
Yemen	691	3 973	13.3	95	833	2.8	Community transmission
Afghanistan	191	56 294	144.6	7	2 470	6.3	Sporadic cases
Sudan	180	31 407	71.6	25	2 028	4.6	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Territories[iii]							
occupied Palestinian territory	13 799	263 220	5 159.7	154	2 810	55.1	Community transmission
Europe	**1 641 672**	**44 191 579**	**4 734.4**	**23 778**	**954 829**	**102.3**	
France	254 228	4 435 057	6 794.6	2 271	93 884	143.8	Community transmission
Poland	192 441	2 250 991	5 947.7	2 584	51 884	137.1	Community transmission
Turkey	186 421	3 179 115	3 769.4	964	30 923	36.7	Community transmission
Italy	156 122	3 512 453	5 809.4	2 994	107 636	178.0	Clusters of cases
Germany	112 885	2 772 401	3 309.0	1 206	75 870	90.6	Community transmission
Ukraine	97 700	1 644 063	3 759.3	2 013	31 954	73.1	Community transmission
Russian Federation	62 963	4 519 832	3 097.2	2 710	97 740	67.0	Clusters of cases
Hungary	62 265	633 861	6 561.5	1 710	19 972	206.7	Community transmission
Netherlands	50 622	1 244 924	7 265.4	189	16 450	96.0	Community transmission
Czechia	45 482	1 515 029	14 147.3	1 207	25 874	241.6	Community transmission
Romania	39 331	932 179	4 845.6	865	22 997	119.5	Community transmission
The United Kingdom	37 909	4 329 184	6 377.1	451	126 573	186.4	Community transmission
Serbia	34 721	581 617	8 352.0	251	5 151	74.0	Community transmission
Belgium	31 828	870 757	7 513.2	185	22 897	197.6	Community transmission
Sweden	30 393	780 018	7 723.5	34	13 402	132.7	Community transmission
Bulgaria	25 290	327 770	4 717.2	684	12 650	182.1	Clusters of cases
Austria	22 100	530 844	5 894.1	178	8 995	99.9	Community transmission
Spain	20 139	3 247 738	6 946.3	178	74 420	159.2	Community transmission
Greece	16 979	252 590	2 423.4	405	7 826	75.1	Community transmission
Republic of Moldova	11 457	225 660	5 594.0	254	4 785	118.6	Community transmission
Bosnia and Herzegovina	11 121	163 875	4 994.9	461	6 278	191.4	Community transmission
Croatia	9 583	267 222	6 509.2	120	5 893	143.5	Community transmission
Kazakhstan	9 279	292 306	1 556.7	110	3 696	19.7	Clusters of cases
Slovakia	9 041	357 910	6 555.6	452	9 496	173.9	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Azerbaijan	8 880	254 370	2 508.8	125	3 464	34.2	Clusters of cases
Switzerland	8 395	589 486	6 811.2	31	9 577	110.7	Community transmission
Belarus	8 338	317 631	3 361.4	63	2 211	23.4	Community transmission
Estonia	8 229	103 630	7 812.1	60	847	63.9	Clusters of cases
North Macedonia	7 494	126 230	6 058.9	194	3 642	174.8	Community transmission
Armenia	6 604	190 317	6 422.6	116	3 464	116.9	Community transmission
Slovenia	6 526	212 039	10 199.4	33	4 309	207.3	Clusters of cases
Norway	6 381	90 934	1 677.4	8	656	12.1	Community transmission
Denmark	5 017	227 049	3 919.9	14	2 413	41.7	Community transmission
Lithuania	4 930	213 941	7 858.9	75	3 551	130.4	Community transmission
Finland	4 422	75 545	1 363.5	12	817	14.7	Community transmission
Ireland	4 106	233 937	4 737.7	68	4 653	94.2	Community transmission
Israel	4 008	831 084	9 601.8	81	6 165	71.2	Community transmission
Latvia	3 567	100 716	5 339.6	51	1 872	99.2	Community transmission
Albania	3 100	123 641	4 296.4	71	2 204	76.6	Clusters of cases
Portugal	2 962	820 042	8 042.2	65	16 827	165.0	Clusters of cases
Georgia	2 821	280 301	7 026.6	51	3 751	94.0	Community transmission
Montenegro	2 454	90 081	14 342.6	42	1 241	197.6	Clusters of cases
Cyprus	2 423	44 305	3 669.6	8	250	20.7	Clusters of cases
Luxembourg	1 545	60 755	9 705.6	23	738	117.9	Community transmission
Uzbekistan	1 001	82 340	246.0	4	626	1.9	Clusters of cases
Malta	904	28 808	6 524.4	16	385	87.2	Clusters of cases
Kyrgyzstan	703	88 092	1 350.2	5	1 495	22.9	Clusters of cases
Andorra	328	11 809	15 283.8	2	115	148.8	Community transmission
San Marino	270	4 626	13 630.7	5	84	247.5	Community transmission
Monaco	81	2 254	5 743.6	1	28	71.3	Sporadic cases
Iceland	66	6 163	1 806.0	0	29	8.5	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Liechtenstein	19	2 731	7 161.0	0	54	141.6	Sporadic cases
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Kosovo [1]	5 675	87 024	4 677.8	78	1 820	97.8	Community transmission
Isle of Man	119	1 551	1 824.0	0	26	30.6	No cases
Gibraltar	3	4 273	12 682.9	0	94	279.0	Clusters of cases
Jersey	1	3 225	2 964.2	0	69	63.4	Community transmission
Faroe Islands	0	661	1 352.7	0	1	2.0	Sporadic cases
Greenland	0	31	54.6	0	0	0.0	No cases
Guernsey	0	821	1 299.1	0	14	22.2	Community transmission
South-East Asia	**437 060**	**14 619 886**	**723.3**	**2 947**	**217 737**	**10.8**	
India	372 494	11 971 624	867.5	1 797	161 552	11.7	Clusters of cases
Indonesia	36 214	1 492 002	545.5	917	40 364	14.8	Community transmission
Bangladesh	23 100	591 806	359.3	201	8 869	5.4	Community transmission
Sri Lanka	1 993	91 839	428.9	14	558	2.6	Clusters of cases
Maldives	1 030	23 403	4 329.5	1	66	12.2	Clusters of cases
Thailand	931	28 734	41.2	4	94	0.1	Clusters of cases
Nepal	921	276 750	949.8	11	3 027	10.4	Clusters of cases
Timor-Leste	209	480	36.4	0	0	0.0	Clusters of cases
Myanmar	165	142 377	261.7	2	3 206	5.9	Clusters of cases
Bhutan	3	871	112.9	0	1	0.1	Sporadic cases
Western Pacific	**84 395**	**1 859 933**	**94.7**	**518**	**31 361**	**1.6**	
Philippines	56 380	712 417	650.1	229	13 159	12.0	Community transmission
Japan	11 211	466 849	369.1	219	9 031	7.1	Clusters of cases
Malaysia	8 929	340 642	1 052.5	22	1 251	3.9	Clusters of cases
Republic of Korea	3 100	101 757	198.5	26	1 722	3.4	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Mongolia	1 887	6 693	204.2	1	6	0.2	Clusters of cases
Papua New Guinea	1 846	5 205	58.2	9	45	0.5	Community transmission
Cambodia	553	2 233	13.4	7	10	0.1	Sporadic cases
China	157	102 680	7.0	2	4 851	0.3	Clusters of cases
Singapore	104	60 288	1 030.5	0	30	0.5	Sporadic cases
Australia	60	29 252	114.7	0	909	3.6	Clusters of cases
New Zealand	29	2 126	44.1	0	26	0.5	Clusters of cases
Viet Nam	18	2 590	2.7	0	35	0.0	Clusters of cases
Brunei Darussalam	1	206	47.1	0	3	0.7	Clusters of cases
Fiji	0	67	7.5	0	2	0.2	Sporadic cases
Lao People's Democratic Republic	0	49	0.7	0	0	0.0	Sporadic cases
Solomon Islands	0	18	2.6	0	0	0.0	No cases
Territories[iii]							
Wallis and Futuna	65	376	3 343.4	3	4	35.6	Sporadic cases
French Polynesia	31	18 607	6 623.9	0	141	50.2	Sporadic cases
Guam	17	7 587	4 495.3	0	134	79.4	Clusters of cases
New Caledonia	5	121	42.4	0	0	0.0	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	2	159	276.2	0	2	3.5	Pending
Marshall Islands	0	4	6.8	0	0	0.0	No cases
Samoa	0	4	2.0	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Global	**3 802 314**	**126 372 442**	**1 621.2**	**64 187**	**2 769 696**	**35.5**	

*See *Annex: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting variants of concern as of 30 March 2021**

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Albania	Not Verified		
Algeria	Verified		
Angola	Verified	Verified	
Argentina	Verified		Verified
Aruba	Verified	Verified	Verified
Australia	Verified	Verified	Not Verified
Austria	Verified	Verified	Verified
Azerbaijan	Verified		
Bahrain	Verified		
Bangladesh	Verified		
Barbados	Verified		
Belarus	Verified		
Belgium	Verified	Verified	Verified
Belize	Verified		
Bonaire	Verified		
Bosnia and Herzegovina	Not Verified		
Botswana		Verified	
Brazil	Verified		Verified
Brunei Darussalam	Verified	Verified	
Bulgaria	Verified		
Cabo Verde	Verified		
Cambodia	Verified		
Cameroon		Verified	
Canada	Verified	Verified	Verified
Cayman Islands	Verified		
Chile	Verified		Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
China	Verified	Verified	Not Verified
Colombia			Verified
Comoros		Verified	
Costa Rica	Verified	Verified	
Croatia	Verified	Not Verified	
Cuba		Verified	
Curaçao	Verified		
Cyprus	Verified		
Czechia	Verified	Not Verified	
Democratic Republic of the Congo	Verified	Verified	
Denmark	Verified	Verified	Verified
Dominican Republic	Verified		
Ecuador	Verified		
Estonia	Verified	Not Verified	
Eswatini		Verified	
Faroe Islands			Verified
Finland	Verified	Verified	Verified
France	Verified	Verified	Verified
French Guiana	Verified		Verified
French Polynesia	Verified		
Gambia	Verified		
Georgia	Verified		
Germany	Verified	Verified	Verified
Ghana	Verified	Verified	
Gibraltar	Not Verified		

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Greece	Verified	Verified	
Guadeloupe	Verified	Verified	Verified
Hungary	Verified	Not Verified	
Iceland	Verified		
India	Verified	Verified	Verified
Indonesia	Verified		
Iran (Islamic Republic of)	Verified		
Iraq	Verified		
Ireland	Verified	Verified	Not Verified
Israel	Verified	Verified	
Italy	Verified	Not Verified	Verified
Jamaica	Verified		
Japan	Verified	Verified	Verified
Jordan	Verified		
Kazakhstan	Not Verified	Not Verified	
Kenya	Not Verified	Verified	
Kosovo[1]	Verified		
Kuwait	Verified		
Latvia	Verified	Verified	
Lebanon	Verified		
Lesotho		Verified	
Libya	Verified	Verified	
Liechtenstein	Verified		
Lithuania	Verified	Verified	
Luxembourg	Verified	Verified	
Malawi	Verified	Verified	
Malaysia	Verified	Not Verified	

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Malta	Verified	Not Verified	
Martinique	Verified	Verified	Verified
Mauritania	Verified	Verified	
Mauritius	Not Verified		
Mayotte	Verified	Verified	
Mexico	Verified		Verified
Monaco	Verified	Not Verified	
Montenegro	Verified		
Morocco	Verified		
Mozambique		Verified	
Namibia		Verified	
Nepal	Verified		
Netherlands	Verified	Verified	Verified
New Caledonia	Verified		
New Zealand	Verified	Verified	Not Verified
Nigeria	Verified		
North Macedonia	Verified		
Norway	Verified	Verified	Verified
occupied Palestinian territory	Verified	Verified	
Oman	Verified		
Pakistan	Verified		
Panama		Verified	Verified
Paraguay			Verified
Peru	Verified		Verified
Philippines	Verified	Verified	Verified
Poland	Verified	Not Verified	

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Portugal	Verified	Verified	Not Verified
Puerto Rico	Verified		
Qatar	Verified	Verified	
Republic of Korea	Verified	Verified	Verified
Republic of Moldova	Not Verified		
Réunion	Verified	Verified	Verified
Romania	Verified	Verified	Verified
Russian Federation	Verified	Not Verified	
Rwanda	Not Verified	Not Verified	
Saint Barthélemy	Verified		
Saint Lucia	Verified		
Saint Martin	Verified	Verified	Verified
Saudi Arabia	Verified		
Senegal	Verified		
Serbia	Verified		
Singapore	Verified	Not Verified	
Sint Maarten	Verified		
Slovakia	Verified	Not Verified	
Slovenia	Verified	Verified	Not Verified
South Africa	Verified	Verified	
Spain	Verified	Verified	Verified
Sri Lanka	Verified	Verified	

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Sweden	Verified	Verified	Verified
Switzerland	Verified	Verified	Not Verified
Thailand	Verified	Verified	
The United Kingdom	Verified	Verified	Verified
Togo	Verified		
Trinidad and Tobago	Verified		
Tunisia	Verified		
Turkey	Verified	Not Verified	Not Verified
Turks and Caicos Islands	Verified		
Uganda		Not Verified	
Ukraine	Not Verified		
United Arab Emirates	Verified	Verified	Verified
United Republic of Tanzania		Verified	
United States of America	Verified	Verified	Verified
Uruguay	Verified		Verified
Uzbekistan	Verified		
Venezuela (Bolivarian Republic of)			Verified
Viet Nam	Verified	Verified	
Wallis and Futuna	Not Verified		
Zambia		Verified	
Zimbabwe		Verified	

**See *Annex : Data, table and figure notes*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 745 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that

are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.

- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 21 March 2021, 10 am CET

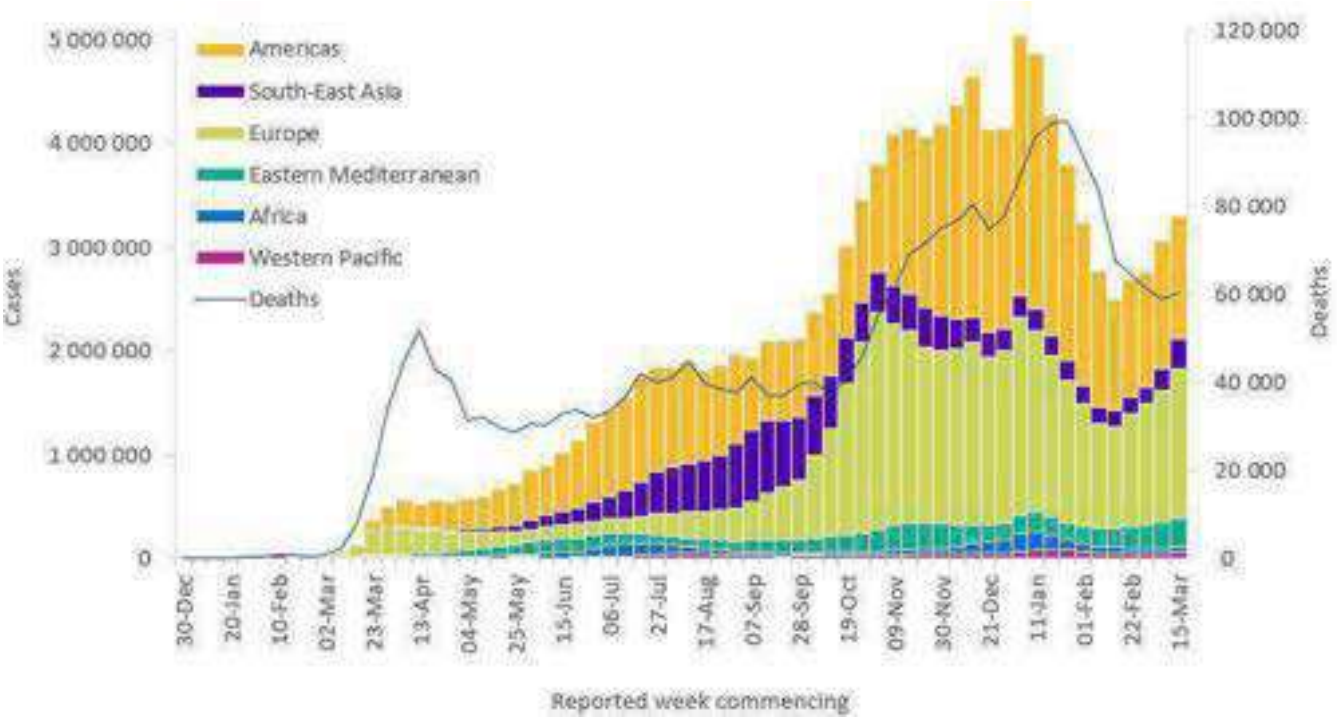
In this edition:

- Global overview
- Special focus: Release of the WHO COVID-19 Detailed Surveillance Dashboard
- Special focus: SARS-CoV-2 variants of concern
- WHO regional overviews
- Key weekly updates

Global overview

Globally, COVID-19 confirmed cases continued to rise for a fourth consecutive week, with just under 3.3 million new cases reported in the last week (Figure 1). At the same time, the number of new deaths reported plateaued after a six week decrease, with just over 60 000 new deaths reported. Marked increases in the number of new cases were reported from the South-East Asia, Western Pacific, European and Eastern Mediterranean regions, all of which have been on an upward trajectory in recent weeks. Case incidence in the African Region and the Region of the Americas has remained stable in recent weeks, notwithstanding concerning trends observed in some countries within these regions. The European Region and the Region of the Americas continue to account for nearly 80% of all the cases and deaths. The only WHO region to report a decline in new deaths this week was the Western Pacific where deaths fell by nearly a third, compared to the previous week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 21 March 2021**



**See *Annex: Data, table and figure notes*

The highest numbers of new cases were reported from Brazil (508 010 new cases; 3% increase), the United States of America (374 369 new cases; 19% decrease), India (240 082 new cases; 62% increase), France (204 840 new cases; 27% increase), and Italy (154 493 new cases; similar to previous week).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 21 March 2021**

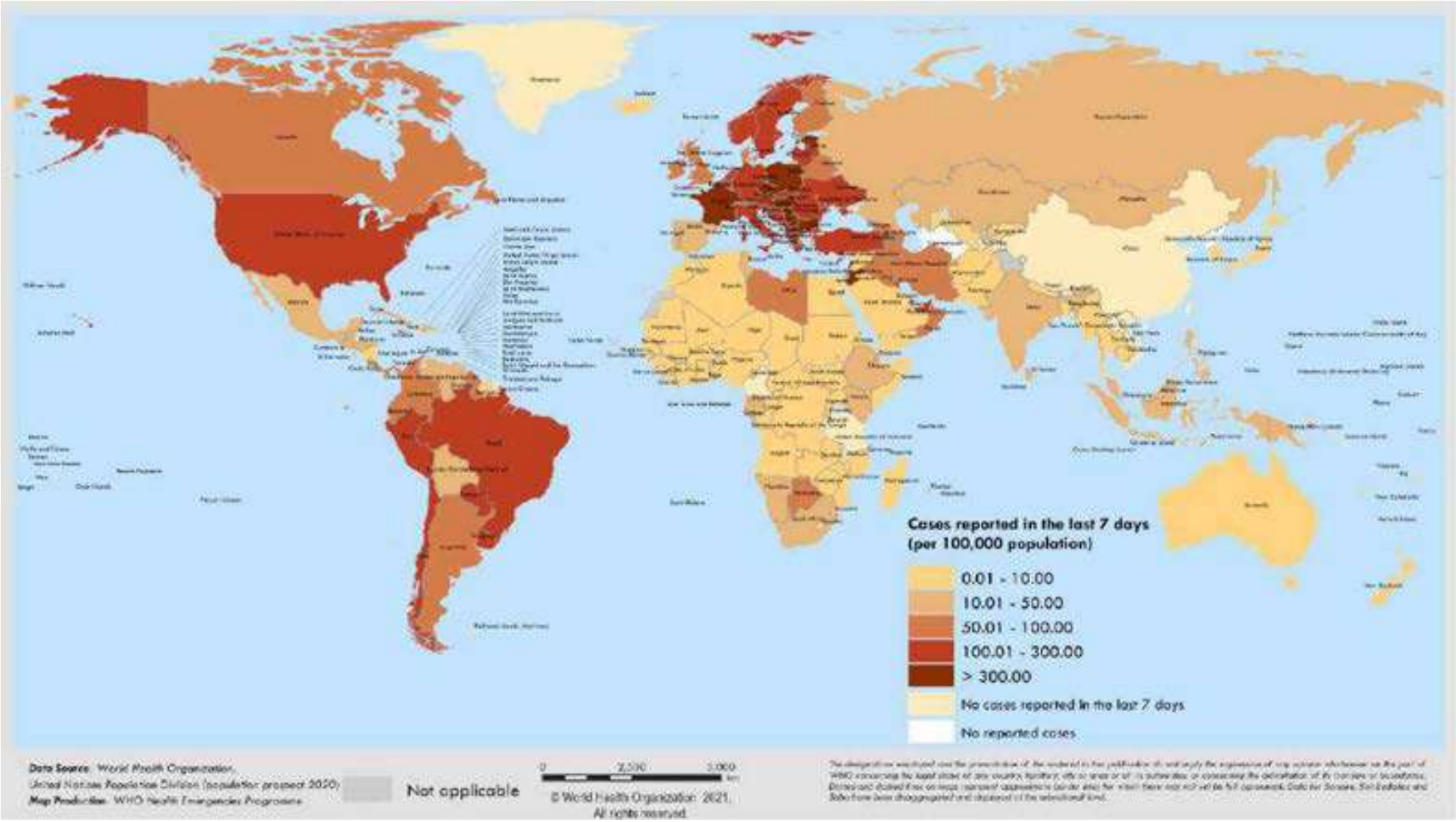
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 173 561 (36%)	-5%	53 937 714 (44%)	31 040 (51%)	2%	1 299 243 (48%)
Europe	1 441 065 (44%)	13%	42 516 762 (35%)	21 772 (36%)	1%	929 332 (34%)
South-East Asia	298 438 (9%)	49%	14 182 826 (12%)	2 435 (4%)	14%	214 790 (8%)
Eastern Mediterranean	263 650 (8%)	8%	7 124 121 (6%)	3 253 (5%)	12%	153 446 (6%)
Africa	50 916 (2%)	-3%	2 999 152 (2%)	1 428 (2%)	10%	76 113 (3%)
Western Pacific	63 730 (2%)	29%	1 775 560 (1%)	486 (1%)	-33%	30 843 (1%)
Global	**3 291 360 (100%)**	**8%**	**122 536 880 (100%)**	**60 414 (100%)**	**3%**	**2 703 780 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number; global totals may not equal 100%.*
**See *Annex: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 15-21 March 2021**



**See *Annex: Data, table and figure notes*

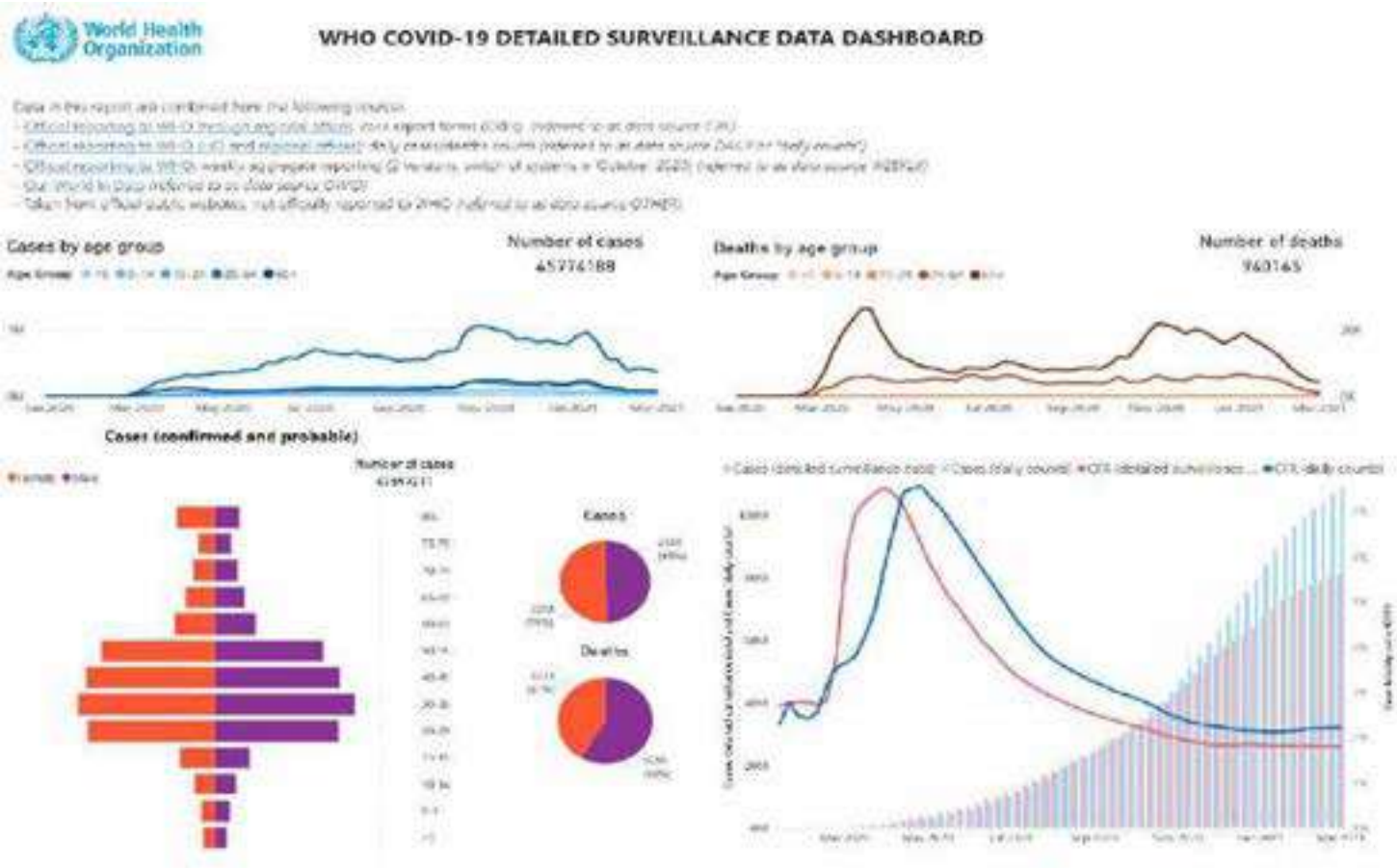
Special Focus: Release of the WHO COVID-19 Detailed Surveillance Dashboard

Over one year into the pandemic, WHO continues to conduct global surveillance of COVID-19 as part of activities on preparedness, readiness and response activities. The need for global surveillance of COVID-19 is greater than ever, as the implementation of vaccination campaigns and the appearance of variants are prone to impact the course of the epidemic, as transmission patterns evolve. Timely and complete surveillance data are key to monitoring these changes.

In addition to the daily count of confirmed cases and deaths of COVID-19, WHO requested all Members States to report a minimal set of information using a case report form or via the weekly aggregated surveillance system as specified in the Public Health Surveillance for COIVD-19 interim guidance. Member States report primarily via one of the systems; some have switched from case report forms to weekly reporting.

The data reported are now publicly available through the WHO COVID-19 detailed surveillance data dashboard (Figure 3), without editing or filtering by WHO. Features include stratification by age and sex, trends over time, case fatality ratios by age, testing, hospitalization, and data on health workers – all visible at country and regional levels. The dashboard provides the ability for users to conduct further analyses by country and selected time period.

Figure 3: Snapshot of the COVID-19 Surveillance dashboard



As of 14 March 2021, a total of 186 countries, territories and areas had shared detailed data, via case report forms or weekly aggregate surveillance with WHO. Of the 119 million cases reported globally at this time, WHO has received information for 86.4 million cases (73%). Sex was reported for over 59 million cases (50%), age reported for 45 million cases (38%), and age and sex combined was reported for 42 million cases (36%). There are also data on COVID-19 cases among health workers, with just over 1.6 million cases, and 25 000 deaths, recorded in the system.

Special Focus: Update on SARS-CoV-2 Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, continues to monitor the public health events associated with SARS-CoV-2 variants and provides updates as new information becomes available. Further information on the background of the variants of interest (VOIs) and variants of concern (VOCs) is available from previously published editions of the Weekly Epidemiological Update. Here we provide an update on the geographical distribution, and emerging evidence surrounding transmissibility and severity, and potential impacts on vaccines and diagnostics. We also update on emerging VOIs, and a recent workshop on enhancing sequencing for SARS-CoV-2.

Table 2: Overview of emerging information on key variants of concern, as of 23 March 2021*

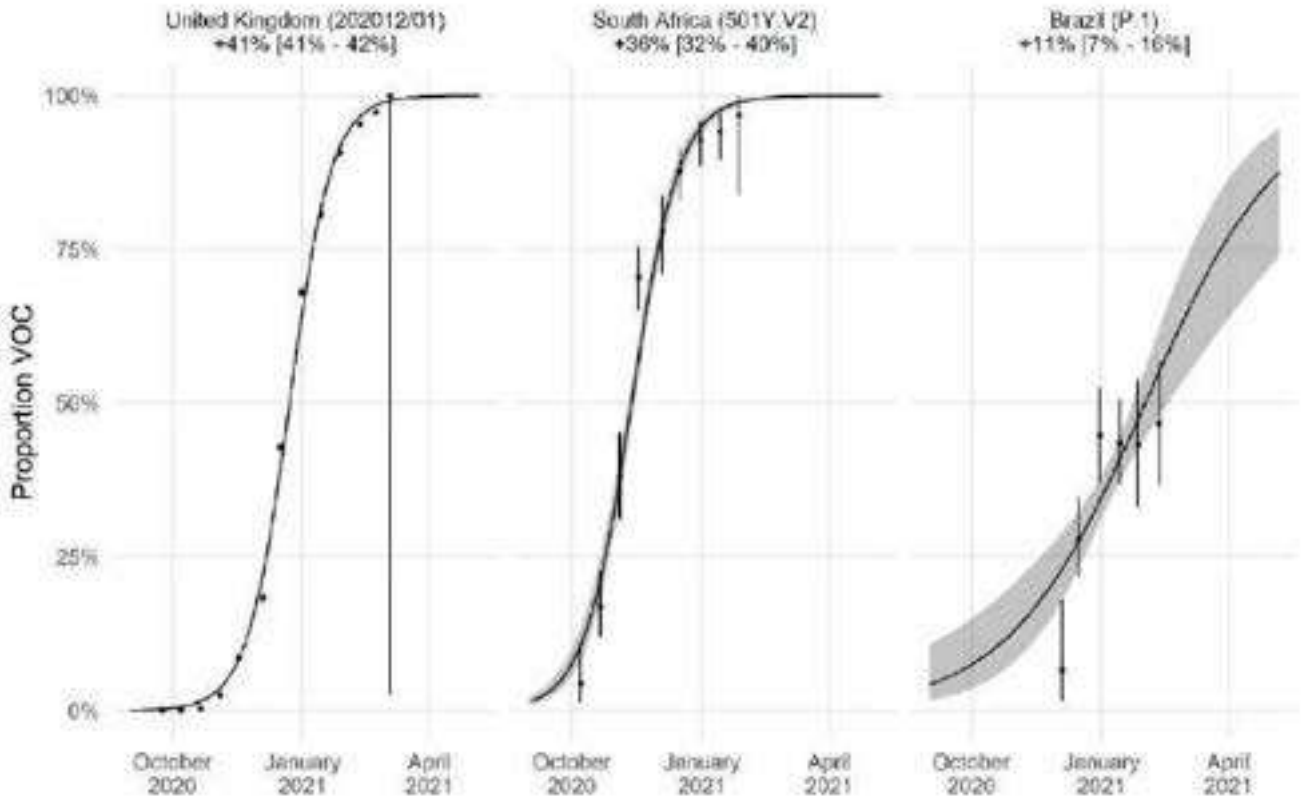
Nextstrain clade	**20I/501Y.V1**	**20H/501Y.V2†**	**20J/501Y.V3**
PANGO lineage	B.1.1.7	B.1.351	B.1.1.28.1, alias **P.1†**
GISAID clade	GR	GH	GR
Alternate names	**VOC 202012/01†**	VOC 202012/02	-
First detected by	United Kingdom	South Africa	Brazil / Japan
First appearance	20 September 2020	Early August 2020	December 2020
Key spike mutations	H69/V70 deletion; Y144 deletion; N501Y; A570D; and P681H	L242/A243/L244 deletion; K417N E484K, N501Y	K417T, E484K; N501Y
Key mutation in common	S106/G107/F108 deletion in Non-Structural Protein 6 (NSP6)		
Transmissibility*	Increased[1, 2] (36%-75%)[3], increased secondary attack rate[4] (10% to 13%)	Increased [1.50 (95% CI: 1.20-2.13) times more transmissible than previously circulating variant [5, 6]	Increased, more transmissible than previous circulating variants[7]
Severity*	Possible increased risk of hospitalization[8], severity and mortality[4]	Possible increased risk of in-hospital mortality by 20%[6, 9]	Under investigation, limited impact[7]
Neutralization capacity*	Slight reduction but overall neutralizing titers still remained above the levels expected to confer protection[10]	Decreased, suggesting potential increased risk of reinfection[5, 11, 12]	Decreased, reinfections reported[13, 14]
Potential impacts on vaccines*	• No significant impact on post-vaccine neutralization by Moderna, Pfizer-BioNTech, Oxford-AstraZeneca, Novavax and Bharat vaccines 15-18 • No significant change in prevention of disease by Oxford-AstraZeneca, Novavax, and Pfizer[15-17] • Evidence for prevention of infection evidence limited. Reduced effect reported for Oxford-AstraZeneca.[15, 18]	• Post-vaccine neutralization reductions range from minimal to moderate for Moderna and Pfizer, however there is also some evidence of more substantial reductions.[19] • A single study has evaluated Sinopharm.[20] • Substantial reductions have been found for the Oxford-AstraZeneca product.[21, 22] Results for Novavax and Janssen are pending. • Efficacy against disease was retained, but somewhat lower, in South Africa when 501Y.V2 was dominant compared to settings without this variant.[23, 24] • In a small study, AstraZeneca did not demonstrate vaccine efficacy against mild-moderate COVID-19 disease, with wide confidence intervals, while efficacy against severe disease was not assessed and is undetermined.[25, 26] • There is no evidence to inform vaccine impact on asymptomatic infection by 501Y.V2.	• Limited to modest reduction in post-vaccine neutralization by Oxford-AstraZeneca, Moderna and Pfizer vaccines. [19, 21, 27-31] • Preliminary suggestion of loss of neutralization following vaccination with Sinovac [32]
Potential impacts on diagnostics*	S gene target failure (SGTF).[25] No impact on Ag RDTs observed23	None reported to date	None reported to date
Countries reporting cases (newly reported in last week)**	125 (7)	75 (11)	41(3)

†While work is ongoing to establish standardized nomenclature for key variants, these are the names by which WHO will refer to them in this publication.
**Generalized findings as compared to non-VOC viruses. Based on emerging evidence from multiple countries, including nonpeer-reviewed preprint articles and reports from public health authorities and researchers – all subject to ongoing investigation and continuous revision.*
***Includes official and unofficial reports of VOCs detections in countries among either travellers (imported cases only) or community samples (local transmission).*

The number of countries reporting VOCs has continued to increase (Table 2, Figures 5, 6 and 7, Annex 2). This information should be interpreted with due consideration of limitations of ongoing surveillance, including but not limited to differences between countries in sequencing capacity and which samples are prioritized for sequencing. WHO continues to advocate for strengthening surveillance and sequencing capacity, and a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants; based on the local epidemiological situation and capacity, and the detection of unusual events.

VOC 202012/01, 501Y.V2 and P.1 have commonly demonstrated an increase in transmissibility compared to wild-type (non-VOC) variants, and a veracity to rapidly replace other circulating strains. We analysed sequence data submitted to GISAID to determine the change in proportion of VOCs over time and calculate the associated change in transmissibility. Variants 202012/01, 501Y.V2 and P.1 rapidly replaced the wild-type variant in the United Kingdom, South Africa and Brazil, respectively (Figure 4). Using a logistic model of competitive growth, the additive increase in the effective reproduction number (R_t) relative to the wild-type variant was estimated at 41% (95% CI: 41–42%) for 202012/01, 36% (95% CI: 32–40%) for 501Y.V2, and 11% (95% CI: 7–16%) for P.1. The transmissibility of P.1 was higher when estimated only for the Amazonas region of Brazil (data not shown), suggesting more rapid replacement of the wild-type variant at a local level. However, the number of sequences was too low to meaningfully quantify the change in R_t. These analyses assume that sequence data submitted to GISAID is representative of the variants circulating in the region under consideration; if sequencing efforts are targeted at suspected VOCs, the rate of replacement and associated increased transmissibility of VOCs may be overestimated.

Figure 4. Proportion of SARS-CoV-2 202012/01, 501Y.V2 and P.1 variants over time in the United Kingdom, South Africa and Brazil, respectively. The estimated increase in Rt and associated 95% confidence interval is indicated below the country name.



Variant VOC 202012/01

Since our last update on 16 March, VOC 202012/01 has been detected in seven additional countries. As of 23 March, a total of 125 countries across all six WHO regions have reported cases of this variant (Figure 5).

Previous studies have shown VOC 202012/01 may be associated with an increased risk of hospitalization, severity and mortality.[4, 8] A recently published matched cohort study provides additional evidence, highlighting that there is a higher risk of mortality when infected by VOC 202012/01. The study involved nearly 55 000 matched pairs of participants who tested positive for SARS-CoV-2 between 1 October 2020 and 29 January 2021 and were followed-up until 12 February 2021. Results showed an increased mortality hazard ratio of 1.64 (95% confidence interval 1.32 to 2.04). This ratio was associated with infection with VOC 202012/01 compared with infection with previously circulating variants, in patients who tested positive for COVID-19 in the community. Although this constitutes a comparatively low risk group overall, it represents an increase in deaths from 2.5 to 4.1 per 1000 detected cases.

Vaccine updates

There is a growing body of evidence on vaccine-induced neutralizing antibody activity against VOC202012/01, including for AstraZeneca, Moderna, Pfizer, Novavax, and Bharat vaccines. The findings support that neutralizing activity is largely sustained against this variant.[10, 33] Additional evidence is available on the ability of vaccines to protect against disease from VOC 202012/01 are available for the AstraZeneca and Pfizer vaccines, from a randomized controlled trial (RCT) in the UK (AstraZeneca) and observational evidence (Pfizer and AstraZeneca) from the UK during the period when VOC 202012/01 was prevalent.[17] Results from a test-negative case control study conducted in England from December 2020 to February 2021 when VOC202012/01 was very prevalent, showed the early real-world effectiveness of the Pfizer/BioNTech - BNT162b2 vaccine and AstraZeneca - ChAdOx1 vaccine against confirmed COVID-19, hospitalizations and deaths.[17] This study also estimated effectiveness on the VOC202012/01. Both vaccines show that vaccination with either a single dose of BNT162b2 or ChAdOx1 was associated with a significant reduction in symptomatic COVID-19 cases in older adults (>70 years old) with even greater protection against severe disease.

Evidence for vaccines to protect against asymptomatic infection, which would influence community transmission, is limited to the RCT in the UK of the AstraZeneca product.[15] Although effectiveness against disease was largely sustained against VOC202012/01, preliminary evidence suggests that the efficacy against asymptomatic infection is reduced in the face of this variant.

Figure 5. Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01 as of 23 March 2021

Variant 501Y.V2

Since the last update on 16 March, 501Y.V2 has been reported from 11 additional countries – totaling 75 countries across all six WHO regions (Figure 6). In several areas within the African Region, variant 501Y.V2 has been reported to comprise a high proportion of sequenced samples, including over 90% of sequenced specimens in some settings.[34, 35]

A newly released population-based study in South Africa, available in preprint, compared in-hospital mortality during its first wave peaking in mid-July 2020 to the second wave peaking in January 2021 when variant 501Y.V2 was the predominant variant. After adjusting for weekly hospital admissions, the risk of in-hospital mortality increased by 20% (adjusted odds ratio of 1.2, 95%CI 1.2-1.3).[9]

Vaccine updates

Reductions in neutralizing antibody activity against 501Y.V2 induced by vaccines or natural infection compared with wild-type (non-VOC) variants, have been documented in a substantial number of studies.[5, 30] Findings from a recent study that analyzed convalescent plasma from 20 patients and sera from 22 participants of vaccine trials [Moderna SARS-CoV-2 mRNA-1273 vaccine (12 participants); Pfizer BNT162b2 COVID-19 vaccine (10 participants)] indicated that relative to wild-type variants, there was a substantial decrease in the neutralizing activity of convalescent plasma (9.4-fold) and sera from vaccinated participants (10.3 to 12.4-fold) against 501Y.V2.[31] In addition, T-cell analyses suggest this component of the vaccine induced immune response is less influenced by the variants than the impact on the neutralization activity.[36]

Evidence of vaccine efficacy against clinical disease from B.1.351 is available for AstraZeneca, Janssen and the Novavax vaccines.[24, 37, 38] Comparisons are hampered by different case definitions, and trials sizes. Although there appears to be some reduction in efficacy compared with non-B.1.351 strains, both the Novavax and the Janssen product retain significant efficacy. The AstraZeneca trial found no statistically significant efficacy; however, this trial was of a small sample size, had only mild and moderate cases and used a dosing interval of 4 weeks.[37] Separate evidence indicates a longer dosing interval improves both immunogenicity and efficacy, which along with other evidence leave open the plausibility that efficacy against severe disease may be partially retained.

Figure 6. Countries, territories and areas reporting SARS-CoV-2 501Y.V2 as of 23 March 2021

Variant P.1

Since our last update, variant P.1 has been reported in three additional countries. As of 23 March, this variant is reported in 41 countries across all six WHO regions (Figure 7).

A recent study analyzed the national health surveillance data of hospitalizations and frequency of variant P.1 in Manaus city, in Amazonas State, Brazil where this variant was first detected and has widely spread. Based on the preliminary findings, P.1 is found to be 2.5 times more transmissible (95% CI:2.3-2.8) compared to the previously circulating variant while the reinfection probability was found to be low i.e. 6.4% (CI:5.7–7.1%).[39] Two additional studies analyzed the genomic data from Manaus and estimated higher transmissibility of the P.1 variant.[7, 14] However, these are preliminary findings and more studies are required to fully understand the transmissibility and severity of P.1 variant.

Vaccine updates

Numerous studies have measured the neutralization of variant P.1 by sera from those vaccinated with Pfizer, Moderna, AstraZeneca or Sinovac against SARS-CoV-2 virus including in Manaus.[21, 27-32 19] Based on these findings, the neutralization activity was reduced by 2.6 to 10-fold depending on the vaccine and individuals. In particular, among people vaccinated with the Sinovac product (CoronaVac vaccine), the plasma failed to efficiently neutralize variant P.1 suggesting possibility of reinfection. One T-cell study concluded that response was largely preserved.[36] There are no clinical outcome data following vaccination which are needed to understand the implications of the limited to moderate loss of neutralization activity.

Figure 7. Countries, territories and areas reporting SARS-CoV-2 P.1 variant as of 23 March 2021

WHO Global workshop on enhancing sequencing for SARS-CoV-2, 19 March 2021

On 19 March 2021, WHO hosted a global workshop on enhancing sequencing to monitor SARS-CoV-2 evolution, bringing together stakeholders in a high level discussion to agree on a common vision and a global, coordinated plan to increase SARS-CoV-2 sequencing capacity, in order to strengthen detection of VOIs and VOCs. Over 800 participants joined this virtual workshop, including representatives from Ministries of Health,

academia and donors, engaging in discussions on the international sequencing landscape, available capacities and opportunities for network-driven strengthening of SARS-CoV-2 variant detection.

The workshop highlighted how we can leverage existing surveillance systems and structures, such as existing SARS-CoV-2 reference network, the Global Influenza Surveillance and Response System (GISRS), HIV, TB and Polio laboratory networks, to strenghen existing regional networks, and to build new sustainable capacity to generate and process sequencing data for SARS-CoV-2 and other infectious pathogens. Sequence and supporting meta-data sharing is critical to better understand virus evaluation and to inform the COVID-19 response. The workshop outcomes were as follows:

- A situational overview of national and regional sequencing and data analysis capacities around the world and demonstration of ongoing support from Member States with capacities to support others.
- An agreement from participants on the importance of timely data sharing and a need to build capacity for sequencing, data processing leading to informed action.
- An agreement toward a global plan to enhance sequencing and analysis capacities and linking results with public health actions.

The workshop outlined the need for global coordination of sequencing capacity. WHO will provide the coordination role by providing a platform, leadership and coordination for future discussions, capacity building and network-based knowledge sharing. The workshop will inform discussions at the upcoming Global Consultation on a Decision Framework for Assessing the Impact of SARS-CoV-2 Variants of Concern on Public Health Interventions on 29 March 2021.

Emerging variants of interest (VOIs)

All viruses, including SARS-CoV-2, change over time resulting in the emergence of new variants, most without a direct benefit to the virus or other public health impacts. WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 result in changes in transmissibility, clinical presentation and severity, or if they impact on public health and social measures (PHSM). Systems have been established to detect "signals" of potential variants of interest or concern, as well as unusual events potentially associated with a variant, and assess these based on the risk posed to global public health (see also working definitions). A number of such signals are currently under assessment, and as new VOIs or VOCs are determined, WHO is committed to highlighting these to support prioritization for further monitoring and assessment. Table 3 summarises assessed and designated VOIs as of 23 March 2021. National authorities may choose to designate other variants of local interest/concern as every local situation is unique, with different variants circulating, requiring surveillance and response systems to adapt to their local epidemiological situation.

Table 3: Overview of variants of interest (VOIs), as of 23 March 2021*

Nextstrain clade	20C	20C/S:452R	20J
PANGO lineage	B.1.525	B.1.427/B.1.429	B.1.1.28.2, alias P.2
GISAID clade	G/484K.V3	GH/452R.V1	
Alternate names		CAL.20C/L452R	
First detected by	United Kingdom and Nigeria	United States of America	Brazil
First appearance	December 2020	June 2020	April 2020
Key spike mutations	H69-V70 deletion; Y144 deletion; Q52R; E484K; Q677H; D614G; and F888L	L452R; W152C; S13I; D614G	L18F; T20N; P26S; F157L; E484K; D614G; S929I; and V1176F

WHO recommendations

The potential for virus mutation increases with the frequency of human and animal infections. Therefore, reducing transmission of SARS-CoV-2 by using established disease control methods as well as avoiding introductions to animal populations, are critical aspects to the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critically important to curb the spread of SARS-CoV-2, including newly reported variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the implementation of physical distancing and other PHSM as well as infection prevention and control (IPC) measures in health facilities has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. Findings from new studies evaluating transmission, severity and impact on medical countermeasures will continue to help inform PHSM and IPC measures employed by Member States. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities, including epidemiological surveillance, strategic testing, and systematic sequencing of SARS-CoV-2 where feasible.

Additional resources

- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19
- Proposed working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern
- Disease Outbreak News on SARS-CoV-2 Variants, 31 December 2020

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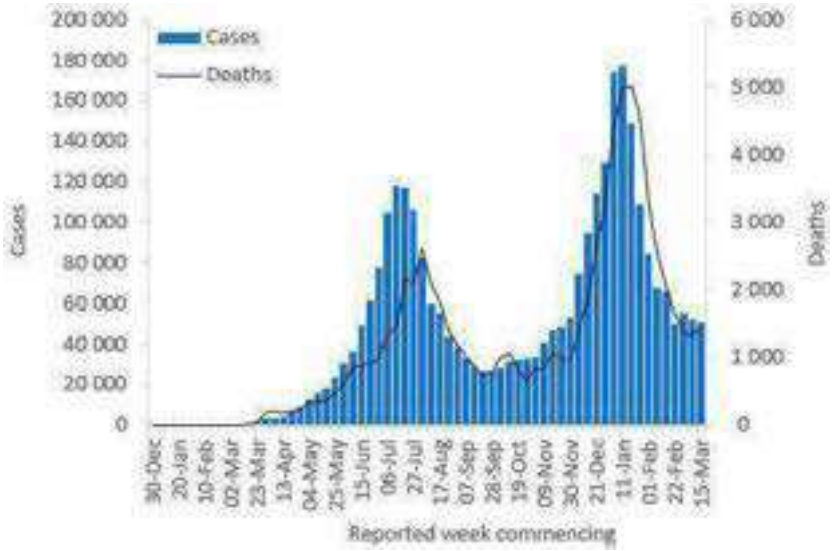
WHO regional overviews

African Region

The African Region reported nearly 51 000 new cases and over 1400 new deaths, a 3% decrease and a 10% increase respectively compared to the previous week. This is the first time in eight weeks, that an increase in new deaths has been reported. The highest numbers of new cases were reported from Ethiopia (11 587 new cases; 10.1 new cases per 100 000 population; a 28% increase), South Africa (8387 new cases; 14.1 new cases per 100 000; a 2% increase), and Kenya (7358 new cases; 13.7 new cases per 100 000; a 66% increase).

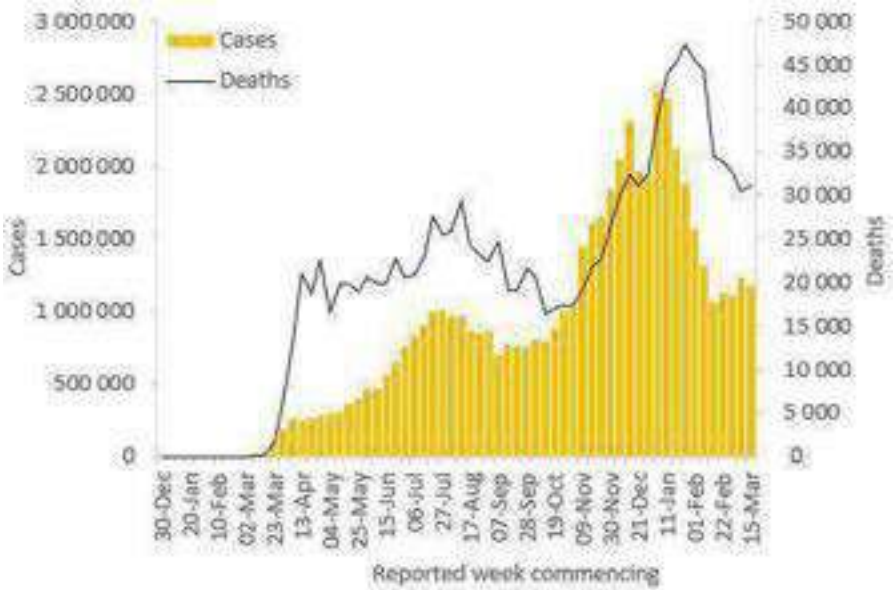
The highest numbers of new deaths were reported in the same countries, from South Africa (821 new deaths; 1.4 new deaths per 100 000 population; a 34% increase), Ethiopia (107 new deaths; 0.1 new deaths per 100 000; a 11% decrease), and Kenya (79 new deaths; 0.1 new deaths per 100 000; a 132% increase).



Region of the Americas

The Region of the Americas reported nearly 1.2 million new cases and just over 31 000 new deaths, a 5% decrease and a 2% increase respectively compared to the previous week. After six weeks of decline in deaths, this week there has been a slight increase reported. The highest numbers of new cases were reported from Brazil (508 010 new cases; 239 new cases per 100 000; a 3% increase), the United States of America (374 369 new cases; 113.1 new cases per 100 000; an 19% decrease), and Peru (49 035 new cases; 148.7 new cases per 100 000; a 11% increase).

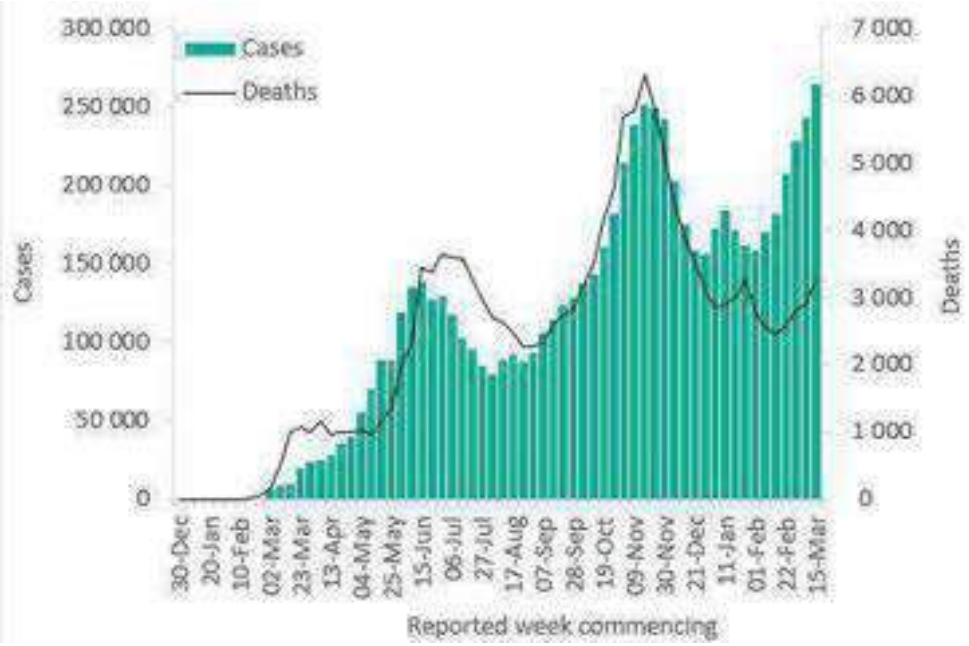
The highest numbers of new deaths were reported from Brazil (15 209 new deaths; 7.2 new deaths per 100 000; a 23% increase), the United States of America (7552 new deaths; 2.3 new deaths per 100 000; a 19% decrease), and Mexico (3368 new deaths; 2.6 new deaths per 100 000; a 21% decrease).



Eastern Mediterranean Region

The Eastern Mediterranean Region reported nearly264 000 new cases and just over 3200 new deaths, an 8% and a 12% increase respectively compared to the previous week. New weekly cases have increased for the past six weeks and deaths have increased for the past four weeks. The highest numbers of new cases were reported from Jordan (57 666 new cases; 565.2 new cases per 100 000; a 21% increase), the Islamic Republic of Iran (54 445 new cases; 64.8 new cases per 100 000; a 6% decrease), and Iraq (35 072 new cases; 87.2 new cases per 100 000; a 13% increase).

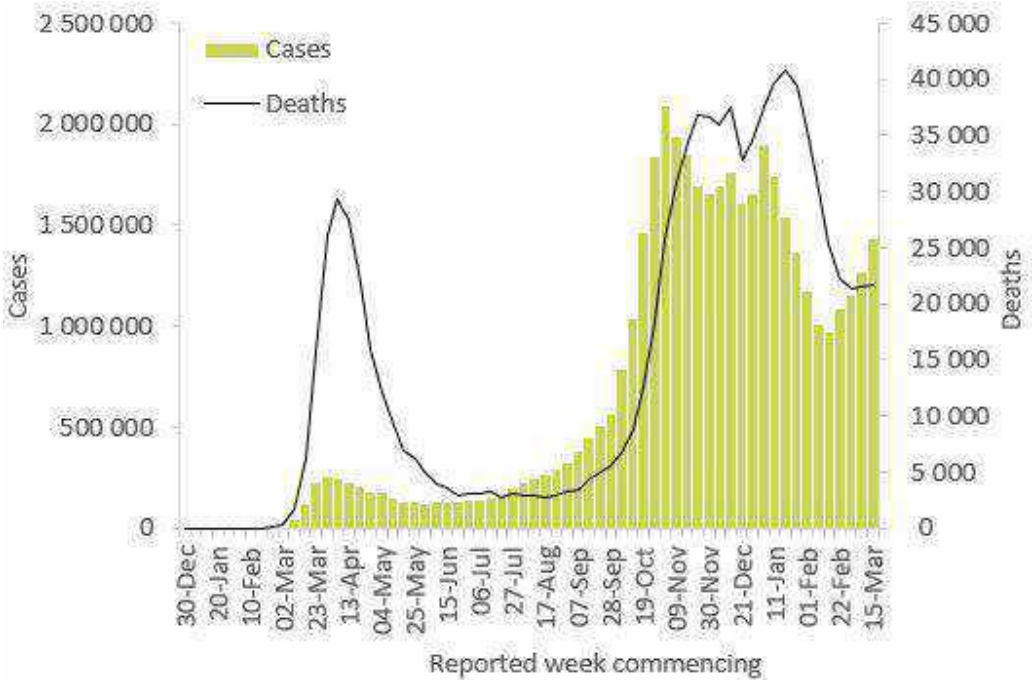
The highest numbers of new deaths were reported from the Islamic Republic of Iran (582 new deaths; 0.7 new deaths per 100 000; a 6% increase), Jordan (503 new deaths; 4.9 new deaths per 100 000; a 31% increase), and Lebanon (381 new deaths; 5.6 new deaths per 100 000; an 19% increase).



European Region

The European Region reported over 1.4 million new cases and nearly 22 000 new deaths, a 13% and a 1% increase respectively compared to the previous week. Cases in the Region have been steadily increasing over the past four weeks. The highest numbers of new cases were reported from France (204 840 new cases; 313.8 new cases per 100 000; a 27% increase), Italy (154 493 new cases; 255.5 new cases per 100 000; similar to the previous week), and Poland (151 918 new cases; 401.4 new cases per 100 000; a 36% increase).

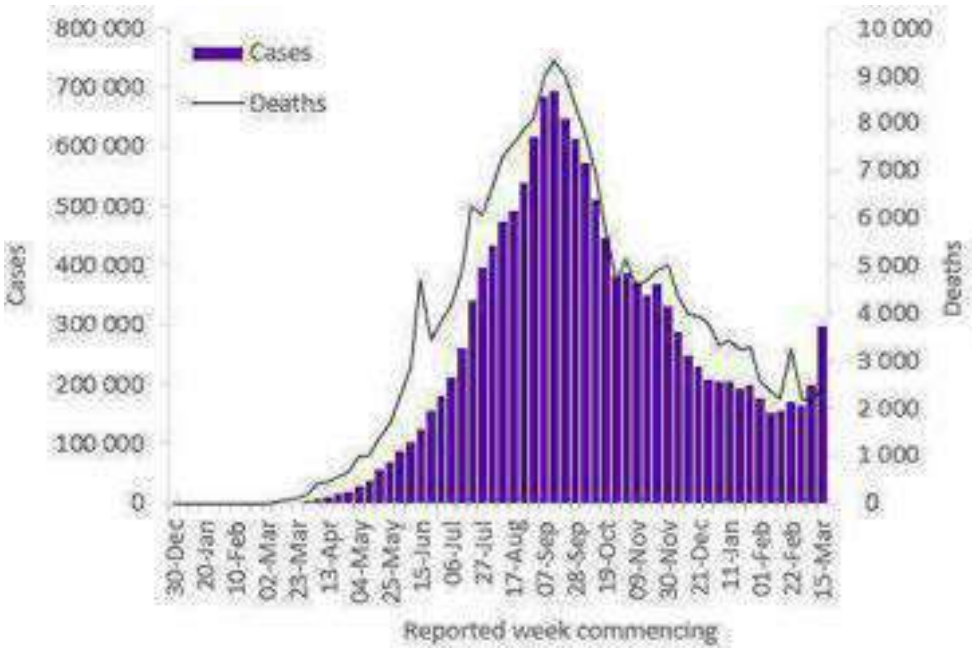
The highest numbers of new deaths were reported from Russian Federation (2940 new deaths; 2 new deaths per 100 000; a 2% decrease), Italy (2761 new deaths; 4.6 new deaths per 100 000; a 20% increase), and Poland (2122 new deaths; 5.6 new deaths per 100 000; a 12% increase).



South-East Asia Region

The South-East Asia Region reported over 298 000 new cases and over 2400 new deaths, a 49% and a 14% increase respectively compared to the previous week. Eighty per cent of all new cases were reported from India. The highest numbers of new cases were reported from India (240 082 new cases; 17.4 new cases per 100 000; a 62% increase), Indonesia (41 047 new cases; 15.0 new cases per 100 000; similar to the previous week), and Bangladesh (12 470 new cases; 7.6 new cases per 100 000; a 91% increase).

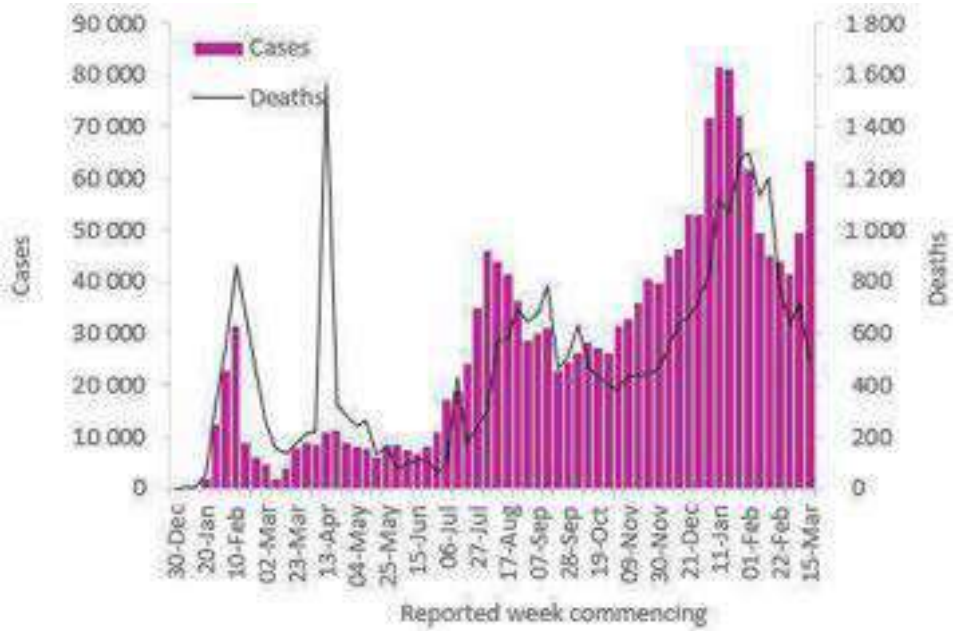
The same countries reported the highest numbers of new deaths in the region; India (1148 new deaths; 0.1 new deaths per 100 000; a 35% increase), Indonesia (1118 new deaths; 0.4 new deaths per 100 000; a 5% decrease), and Bangladesh (141 new deaths; 0.1 new deaths per 100 000; an 86% increase).



Western Pacific Region

The Western Pacific Region reported nearly 64 000 new cases and nearly 500 new deaths, a 29% increase and a 33% decrease respectively compared to the previous week. Although the number of new cases in the region has increased for the third consecutive week, the number of new weekly deaths continues to decline. The highest numbers of new cases were reported from the Philippines (39 445 new cases; 36 new cases per 100 000; a 55% increase), Malaysia (9304 new cases; 28.7 new cases per 100 000; a 12% decrease), and Japan (8765 new cases; 6.9 new cases per 100 000; a 11% increase).

The highest numbers of new deaths were reported from Japan (252 new deaths; 0.2 new deaths per 100 000; a 24% decrease), the Philippines (164 new deaths; 0.1 new deaths per 100 000; a 45% decrease), and the Republic of Korea (27 new deaths; 0.1 new deaths per 100 000; a 23% decrease). Japan and the Philippines reported 86% of new weekly deaths in the Region.



Key weekly updates

WHO Director-General's key message

Opening remarks at the media briefing on COVID-19 – 19 March 2021: *'The Global Advisory Committee has*

preventing infections and deaths from COVID-

- WHO statement on AstraZeneca COVID-19 vaccine safety signals
- Statement of the WHO Global Advisory Committee on Vaccine Safety (GACVS) COVID-19 subcommittee on safety signals related to the AstraZeneca COVID-19 vaccine

Vaccine publications

- Janssen Ad26.COV2.S (COVID-19) vaccine: Background document to the WHO Interim recommendations for use of Ad26.COV2.S (COVID-19) vaccine
- Interim recommendations for the use of the Janssen Ad26.COV2.S (COVID-19) vaccine
- How to monitor and report COVID-19 vaccine side effects

COVID-19 Solidarity Response Fund 1 year Anniversary

- COVID-19 Solidarity Response Fund marks first anniversary and appeals for continued support

Separating newborns from mothers during COVID-19

- New research highlights risks of separating newborns from mothers during COVID-19 pandemic

Down Syndrome and COVID-19

- World Down Syndrome Day, 21 March 2021
- Down Syndrome and COVID-19

Tuberculosis (TB) and COVID-19

- World TB Day, 24 March 2021
- Tuberculosis and COVID-19

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 21 March 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**50 916**	**2 999 152**	**267.3**	**1 428**	**76 113**	**6.8**	
Ethiopia	11 587	185 641	161.5	107	2 647	2.3	Community transmission
South Africa	8 387	1 536 801	2 591.2	821	52 082	87.8	Community transmission
Kenya	7 358	120 163	223.5	79	1 987	3.7	Community transmission
Côte d'Ivoire	2 609	39 913	151.3	6	217	0.8	Community transmission
Zambia	1 799	86 273	469.3	25	1 178	6.4	Community transmission
Ghana	1 514	89 276	287.3	31	716	2.3	Community transmission
Mozambique	1 503	65 799	210.5	18	740	2.4	Community transmission
Botswana	1 395	35 493	1 509.3	34	458	19.5	Community transmission
Namibia	1 178	42 203	1 660.9	34	492	19.4	Community transmission
Nigeria	1 114	161 651	78.4	17	2 030	1.0	Community transmission
Guinea	970	18 562	141.3	6	108	0.8	Community transmission
Senegal	967	37 693	225.1	52	1 007	6.0	Community transmission
Algeria	923	116 066	264.7	21	3 055	7.0	Community transmission
Togo	790	8 839	106.8	9	102	1.2	Community transmission
Madagascar	757	22 113	79.9	14	340	1.2	Community transmission
Gabon	637	17 297	777.1	9	105	4.7	Community transmission
Rwanda	618	20 761	160.3	11	287	2.2	Community transmission
Democratic Republic of the Congo	530	27 467	30.7	9	726	0.8	Community transmission
Seychelles	443	3 616	3 676.8	1	16	16.3	Community transmission
Malawi	427	33 216	173.6	11	1 093	5.7	Community transmission
South Sudan	420	9 849	88.0	2	106	0.9	Community transmission
Mali	408	9 270	45.8	7	367	1.8	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Cabo Verde	405	16 440	2 956.9	3	159	28.6	Community transmission
Angola	373	21 696	66.0	6	526	1.6	Community transmission
Benin	317	6 818	56.2	9	90	0.7	Community transmission
Gambia	316	5 255	217.4	8	161	6.7	Community transmission
Congo	235	9 564	173.3	3	134	2.4	Community transmission
Zimbabwe	191	36 662	246.7	9	1 510	10.2	Community transmission
Mauritania	177	17 587	378.2	4	446	9.6	Community transmission
Equatorial Guinea	174	6 736	480.1	2	100	7.1	Community transmission
Burundi	172	2 613	22.0	3	6	0.1	Community transmission
Burkina Faso	166	12 516	59.9	1	145	0.7	Community transmission
Chad	122	4 410	26.8	4	157	1.0	Community transmission
Guinea-Bissau	122	3 558	180.8	3	55	2.8	Community transmission
Mauritius	121	812	63.8	0	10	0.8	Clusters of cases
Uganda	107	40 651	88.9	0	334	0.7	Community transmission
Eritrea	80	3 118	87.9	0	7	0.2	Community transmission
Central African Republic	66	5 087	105.3	1	64	1.3	Community transmission
Sao Tome and Principe	64	2 142	977.4	2	34	15.5	Community transmission
Niger	61	4 918	20.3	4	185	0.8	Community transmission
Eswatini	49	17 283	1 489.7	4	665	57.3	Community transmission
Comoros	42	3 665	421.5	0	146	16.8	Community transmission
Liberia	12	2 042	40.4	0	85	1.7	Community transmission
Sierra Leone	11	3 948	49.5	0	79	1.0	Community transmission
Lesotho	5	10 535	491.8	0	309	14.4	Community transmission
Cameroon	0	38 988	146.9	0	588	2.2	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territoriesiii							
Réunion	830	14 631	1 634.2	16	87	9.7	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Mayotte	364	19 006	6 966.6	22	151	55.3	Community transmission
Americas	**1 173 561**	**53 937 714**	**5 273.7**	**31 040**	**1 299 243**	**127.0**	
Brazil	508 010	11 871 390	5 585.0	15 209	290 314	136.6	Community transmission
United States of America	374 369	29 437 770	8 893.5	7 552	536 008	161.9	Community transmission
Peru	49 035	1 451 645	4 402.7	1 233	49 897	151.3	Community transmission
Argentina	42 888	2 234 913	4 945.0	830	54 476	120.5	Community transmission
Chile	39 710	925 089	4 839.3	606	22 180	116.0	Community transmission
Mexico	30 139	2 187 910	1 696.9	3 368	197 219	153.0	Community transmission
Colombia	29 809	2 324 426	4 568.2	821	61 771	121.4	Community transmission
Canada	23 836	927 069	2 456.3	213	22 617	59.9	Community transmission
Paraguay	12 906	190 499	2 670.8	226	3 662	51.3	Community transmission
Ecuador	10 202	310 868	1 762.0	220	16 435	93.2	Community transmission
Uruguay	9 327	78 401	2 257.0	71	760	21.9	Community transmission
Bolivia (Plurinational State of)	5 484	263 808	2 260.0	138	12 041	103.2	Community transmission
Cuba	5 404	65 962	582.4	26	392	3.5	Community transmission
Guatemala	4 980	187 659	1 047.5	122	6 685	37.3	Community transmission
Jamaica	4 753	34 665	1 170.7	40	524	17.7	Community transmission
Venezuela (Bolivarian Republic of)	4 359	149 145	524.5	53	1 475	5.2	Community transmission
Honduras	4 189	181 357	1 831.0	97	4 422	44.6	Community transmission
Dominican Republic	3 373	248 989	2 295.3	56	3 269	30.1	Community transmission
Panama	2 994	350 220	8 116.8	54	6 035	139.9	Community transmission
Costa Rica	2 810	211 903	4 159.8	34	2 896	56.8	Community transmission
El Salvador	445	62 531	964.1	30	1 975	30.4	Community transmission
Guyana	417	9 486	1 206.0	6	212	27.0	Clusters of cases
Saint Lucia	124	4 113	2 239.9	7	55	30.0	Community transmission
Barbados	121	3 512	1 222.1	2	39	13.6	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Bahamas	117	8 839	2 247.7	1	186	47.3	Clusters of cases
Haiti	82	12 714	111.5	1	251	2.2	Community transmission
Antigua and Barbuda	71	1 033	1 054.8	1	28	28.6	Clusters of cases
Trinidad and Tobago	52	7 821	558.8	0	140	10.0	Community transmission
Suriname	43	9 055	1 543.6	0	176	30.0	Clusters of cases
Nicaragua	35	5 251	79.3	1	176	2.7	Community transmission
Belize	30	12 400	3 118.5	0	316	79.5	Community transmission
Saint Vincent and the Grenadines	14	1 694	1 527.0	1	9	8.1	Community transmission
Grenada	3	154	136.9	0	1	0.9	Sporadic cases
Dominica	1	157	218.1	0	0	0.0	Clusters of cases
Saint Kitts and Nevis	1	44	82.7	0	0	0.0	Sporadic cases
Territoriesiii							
Puerto Rico	1 324	103 891	3 631.5	15	2 092	73.1	Community transmission
Curaçao	605	5 520	3 363.9	1	23	14.0	Community transmission
Guadeloupe	370	11 095	2 772.9	1	169	42.2	Community transmission
Aruba	352	8 624	8 077.5	4	81	75.9	Community transmission
Bonaire	286	919	4 394.0	0	6	28.7	Community transmission
Martinique	227	7 264	1 935.7	0	47	12.5	Community transmission
Turks and Caicos Islands	90	2 290	5 914.6	0	15	38.7	Clusters of cases
Saint Barthélemy	51	776	7 850.3	0	1	10.1	Clusters of cases
United States Virgin Islands	47	2 814	2 694.8	0	25	23.9	Community transmission
Bermuda	32	767	1 231.7	0	12	19.3	Sporadic cases
Saint Martin	21	1 633	4 224.1	0	12	31.0	Community transmission
Sint Maarten	15	2 093	4 880.8	0	27	63.0	Community transmission
Cayman Islands	7	475	722.8	0	2	3.0	Sporadic cases
Anguilla	1	22	146.6	0	0	0.0	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
British Virgin Islands	0	154	509.3	0	1	3.3	Clusters of cases
Falkland Islands (Malvinas)	0	51	1 464.3	0	0	0.0	No cases
French Guiana	0	16 764	5 612.7	0	87	29.1	Community transmission
Montserrat	0	20	400.1	0	1	20.0	Sporadic cases
Saba	0	6	310.4	0	0	0.0	No cases
Saint Pierre and Miquelon	0	24	414.2	0	0	0.0	No cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	**263 650**	**7 124 121**	**974.8**	**3 253**	**153 446**	**21.0**	
Jordan	57 666	526 666	5 161.8	503	5 788	56.7	Community transmission
Iran (Islamic Republic of)	54 445	1 793 805	2 135.7	582	61 724	73.5	Community transmission
Iraq	35 072	789 390	1 962.6	250	13 969	34.7	Community transmission
Lebanon	21 213	436 575	6 396.3	381	5 715	83.7	Community transmission
Pakistan	20 599	623 135	282.1	323	13 799	6.2	Community transmission
United Arab Emirates	14 233	438 638	4 435.0	45	1 433	14.5	Community transmission
Kuwait	9 473	217 933	5 103.1	50	1 215	28.5	Community transmission
Libya	6 698	150 341	2 188.0	139	2 487	36.2	Community transmission
Bahrain	4 922	135 326	7 953.0	17	498	29.3	Clusters of cases
Egypt	4 491	194 771	190.3	301	11 557	11.3	Clusters of cases
Tunisia	4 148	245 405	2 076.4	167	8 526	72.1	Community transmission
Oman	3 878	149 135	2 920.4	20	1 620	31.7	Community transmission
Qatar	3 439	173 206	6 011.9	7	272	9.4	Community transmission
Morocco	2 831	491 463	1 331.5	45	8 763	23.7	Clusters of cases
Saudi Arabia	2 594	384 653	1 104.9	39	6 602	19.0	Sporadic cases
Somalia	1 022	9 968	62.7	70	419	2.6	Community transmission
Syrian Arab Republic	839	17 240	98.5	59	1 153	6.6	Community transmission
Yemen	507	3 282	11.0	54	738	2.5	Community transmission
Djibouti	266	6 518	659.7	0	63	6.4	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Sudan	224	31 147	71.0	33	1 986	4.5	Community transmission
Afghanistan	118	56 103	144.1	6	2 463	6.3	Clusters of cases
Territoriesiii							
occupied Palestinian territory	14 972	249 421	4 889.3	162	2 656	52.1	Community transmission
Europe	**1 441 065**	**42 516 762**	**4 555.0**	**21 772**	**929 332**	**99.6**	
France	204 840	4 180 829	6 405.1	1 813	91 613	140.4	Community transmission
Italy	154 493	3 356 331	5 551.2	2 761	104 642	173.1	Clusters of cases
Poland	151 918	2 058 550	5 439.2	2 122	49 300	130.3	Community transmission
Turkey	126 682	2 992 694	3 548.4	538	29 959	35.5	Community transmission
Germany	90 271	2 659 516	3 174.3	1 293	74 664	89.1	Community transmission
Ukraine	85 607	1 546 363	3 535.9	1 638	29 941	68.5	Community transmission
Czechia	70 469	1 469 547	13 722.6	1 441	24 667	230.3	Community transmission
Russian Federation	66 261	4 456 869	3 054.0	2 940	95 030	65.1	Clusters of cases
Hungary	55 106	571 596	5 916.9	1 310	18 262	189.0	Community transmission
Netherlands	43 547	1 194 520	6 971.3	217	16 260	94.9	Community transmission
Romania	37 522	892 848	4 641.1	693	22 132	115.0	Community transmission
The United Kingdom	37 451	4 291 275	6 321.3	658	126 122	185.8	Community transmission
Serbia	34 845	546 896	7 853.5	206	4 900	70.4	Community transmission
Belgium	27 278	837 006	7 222.0	175	22 707	195.9	Community transmission
Sweden	26 700	744 272	7 369.6	28	13 262	131.3	Community transmission
Bulgaria	24 602	302 480	4 353.2	732	11 966	172.2	Clusters of cases
Austria	20 737	508 744	5 648.7	165	8 817	97.9	Community transmission
Greece	16 090	235 611	2 260.5	383	7 421	71.2	Community transmission
Spain	12 381	3 206 116	6 857.3	185	72 793	155.7	Community transmission
Slovakia	11 366	348 869	6 390.0	516	9 044	165.7	Clusters of cases
Estonia	10 594	95 401	7 191.7	68	787	59.3	Clusters of cases
Republic of Moldova	10 493	214 203	5 310.0	237	4 531	112.3	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Bosnia and Herzegovina	9 536	152 754	4 656.0	329	5 817	177.3	Community transmission
Kazakhstan	8 486	283 027	1 507.3	75	3 586	19.1	Clusters of cases
Belarus	7 965	309 293	3 273.2	61	2 148	22.7	Community transmission
Israel	7 381	824 716	9 528.2	80	6 064	70.1	Community transmission
Switzerland	7 216	577 905	6 677.4	43	9 455	109.2	Community transmission
North Macedonia	6 629	118 736	5 699.2	148	3 448	165.5	Community transmission
Croatia	6 594	257 639	6 275.8	96	5 773	140.6	Community transmission
Norway	6 513	84 553	1 559.7	9	648	12.0	Community transmission
Azerbaijan	5 798	245 490	2 421.2	63	3 339	32.9	Clusters of cases
Slovenia	5 656	205 511	9 885.4	25	4 259	204.9	Clusters of cases
Armenia	5 328	183 713	6 199.7	93	3 348	113.0	Community transmission
Finland	5 117	71 123	1 283.6	19	805	14.5	Community transmission
Denmark	4 930	224 848	3 881.9	9	2 399	41.4	Community transmission
Albania	3 728	120 541	4 188.7	103	2 133	74.1	Clusters of cases
Latvia	3 665	97 149	5 150.5	64	1 821	96.5	Community transmission
Lithuania	3 626	209 011	7 677.8	80	3 476	127.7	Community transmission
Ireland	3 473	229 831	4 654.5	51	4 585	92.9	Community transmission
Portugal	3 364	817 080	8 013.2	93	16 762	164.4	Clusters of cases
Cyprus	2 605	41 882	3 468.9	4	242	20.0	Clusters of cases
Georgia	2 491	277 480	6 955.8	52	3 700	92.8	Community transmission
Malta	1 637	27 904	6 319.7	19	369	83.6	Clusters of cases
Montenegro	1 610	85 763	13 655.1	40	1 169	186.1	Clusters of cases
Luxembourg	1 510	59 210	9 458.8	27	715	114.2	Community transmission
Uzbekistan	772	81 339	243.0	0	622	1.9	Clusters of cases
Kyrgyzstan	539	87 389	1 339.5	9	1 490	22.8	Clusters of cases
Andorra	253	11 481	14 859.3	1	113	146.2	Community transmission
San Marino	230	4 356	12 835.2	2	79	232.8	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Monaco	67	2 173	5 537.2	0	27	68.8	Sporadic cases
Iceland	25	6 097	1 786.7	0	29	8.5	Community transmission
Liechtenstein	15	2 704	7 090.2	0	54	141.6	Sporadic cases
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territoriesiii							
Kosovo [1]	4 704	81 349	4 372.7	56	1 742	93.6	Community transmission
Isle of Man	340	1 432	1 684.1	1	26	30.6	No cases
Gibraltar	7	4 270	12 674.0	1	94	279.0	Clusters of cases
Jersey	2	3 224	2 963.2	0	69	63.4	Community transmission
Faroe Islands	0	661	1 352.7	0	1	2.0	Sporadic cases
Greenland	0	31	54.6	0	0	0.0	No cases
Guernsey	0	821	1 299.1	0	14	22.2	Community transmission
South-East Asia	**298 438**	**14 182 826**	**701.6**	**2 435**	**214 790**	**10.6**	
India	240 082	11 599 130	840.5	1 148	159 755	11.6	Clusters of cases
Indonesia	41 047	1 455 788	532.2	1 118	39 447	14.4	Community transmission
Bangladesh	12 470	568 706	345.3	141	8 668	5.3	Community transmission
Sri Lanka	2 246	89 846	419.6	18	544	2.5	Clusters of cases
Maldives	897	22 373	4 139.0	1	65	12.0	Clusters of cases
Thailand	876	27 803	39.8	4	90	0.1	Clusters of cases
Nepal	651	275 829	946.7	2	3 016	10.4	Clusters of cases
Timor-Leste	93	271	20.6	0	0	0.0	Clusters of cases
Myanmar	76	142 212	261.4	3	3 204	5.9	Clusters of cases
Bhutan	0	868	112.5	0	1	0.1	No cases
Western Pacific	**63 730**	**1 775 560**	**90.4**	**486**	**30 843**	**1.6**	
Philippines	39 445	656 056	598.7	164	12 930	11.8	Community transmission
Malaysia	9 304	331 713	1 024.9	23	1 229	3.8	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Japan	8 765	455 638	360.3	252	8 812	7.0	Clusters of cases
Republic of Korea	3 025	98 660	192.4	27	1 696	3.3	Clusters of cases
Papua New Guinea	1 186	3 359	37.5	15	36	0.4	Community transmission
Mongolia	973	4 806	146.6	1	5	0.2	Clusters of cases
Cambodia	375	1 680	10.0	2	3	0.0	Sporadic cases
China	190	102 523	7.0	0	4 849	0.3	Clusters of cases
Singapore	96	60 184	1 028.7	0	30	0.5	Sporadic cases
Australia	80	29 192	114.5	0	909	3.6	Clusters of cases
New Zealand	30	2 097	43.5	0	26	0.5	Clusters of cases
Viet Nam	19	2 572	2.6	0	35	0.0	Clusters of cases
Brunei Darussalam	13	205	46.9	0	3	0.7	Clusters of cases
Fiji	1	67	7.5	0	2	0.2	Sporadic cases
Lao People's Democratic Republic	0	49	0.7	0	0	0.0	Sporadic cases
Solomon Islands	0	18	2.6	0	0	0.0	No cases
Territoriesiii							
Wallis and Futuna	135	311	2 765.4	1	1	8.9	Sporadic cases
French Polynesia	49	18 576	6 612.8	0	141	50.2	Sporadic cases
New Caledonia	25	116	40.6	0	0	0.0	Sporadic cases
Guam	12	7 570	4 485.3	1	134	79.4	Clusters of cases
Northern Mariana Islands (Commonwealth of the)	7	157	272.8	0	2	3.5	Pending
Marshall Islands	0	4	6.8	0	0	0.0	No cases
Samoa	0	4	2.0	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Global	**3 291 360**	**122 536 880**	**1 572.0**	**60 414**	**2 703 780**	**34.7**	

*See *Annex: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting variants of concern as of 23 March 2021**

Country/Territory/Area	501Y.v2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Albania			Not Verified
Angola	Verified		Verified
Argentina		Verified	Verified
Aruba	Verified	Verified	Verified
Australia	Verified	Not Verified	Verified
Austria	Verified		Verified
Azerbaijan			Verified
Bahrain			Verified
Bangladesh			Verified
Barbados			Verified
Belarus			Verified
Belgium	Verified	Verified	Verified
Belize			Verified
Bonaire			Verified
Bosnia and Herzegovina			Not Verified
Botswana	Verified		
Brazil		Verified	Verified
Brunei Darussalam	Verified		Verified
Bulgaria			Verified
Cabo Verde			Verified
Cambodia			Verified
Cameroon	Verified		
Canada	Verified	Verified	Verified
Cayman Islands			Verified
Chile		Verified	Verified
China	Verified	Not Verified	Verified
Colombia		Verified	

Country/Territory/Area	501Y.v2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Comoros	Verified		
Costa Rica	Verified		Verified
Croatia	Not Verified		Verified
Cuba	Verified		
Curaçao			Verified
Cyprus			Verified
Czechia	Not Verified		Verified
Democratic Republic of the Congo	Verified		Verified
Denmark	Verified	Verified	Verified
Dominican Republic			Verified
Ecuador			Verified
Estonia	Not Verified		Verified
Eswatini	Verified		
Faroe Islands		Verified	
Finland	Verified	Verified	Verified
France	Verified	Verified	Verified
French Guiana		Verified	Verified
French Polynesia			Verified
Gambia			Verified
Georgia			Verified
Germany	Verified	Verified	Verified
Ghana	Verified		Verified
Gibraltar			Not Verified
Greece	Verified		Verified
Guadeloupe	Verified	Verified	Verified
Hungary	Not Verified		Verified
Iceland			Verified

Country/Territory/Area	501Y.v2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
India	Verified	Verified	Verified
Indonesia			Verified
Iran (Islamic Republic of)			Verified
Iraq			Verified
Ireland	Verified	Not Verified	Verified
Israel	Verified		Verified
Italy	Not Verified	Verified	Verified
Jamaica			Verified
Japan	Verified	Verified	Verified
Jordan			Verified
Kenya	Verified		Not Verified
Kosovo[1]			Verified
Kuwait			Verified
Latvia	Verified		Verified
Lebanon			Verified
Lesotho	Verified		
Libya			Verified
Liechtenstein			Verified
Lithuania			Verified
Luxembourg	Verified		Verified
Malawi	Verified		
Malaysia	Not Verified		Verified
Malta	Not Verified		Verified
Martinique	Verified	Verified	Verified
Mauritania	Verified		Verified
Mauritius			Not Verified
Mayotte	Verified		Verified
Mexico		Verified	Verified

Country/Territory/Area	501Y.v2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Monaco	Not Verified		Verified
Montenegro			Verified
Morocco			Verified
Mozambique	Verified		
Namibia	Verified		
Nepal			Verified
Netherlands	Verified	Verified	Verified
New Caledonia			Verified
New Zealand	Verified	Not Verified	Verified
Nigeria			Verified
North Macedonia			Verified
Norway	Verified		Verified
occupied Palestinian territory	Not Verified		Verified
Oman			Verified
Pakistan			Verified
Panama	Verified		
Peru		Verified	Verified
Philippines	Verified	Verified	Verified
Poland	Not Verified		Verified
Portugal	Verified	Not Verified	Verified
Puerto Rico			Verified
Republic of Korea	Verified	Verified	Verified
Republic of Moldova			Not Verified
Réunion	Verified	Verified	Verified
Romania	Verified	Verified	Verified
Russian Federation	Not Verified		Verified
Rwanda	Not Verified		Not Verified
Saint Barthélemy			Verified

Country/Territory/Area	501Y.v2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Saint Lucia			Verified
Saint Martin	Verified	Verified	Verified
Saudi Arabia			Verified
Senegal			Verified
Serbia			Verified
Singapore	Not Verified		Verified
Sint Maarten			Verified
Slovakia	Not Verified		Verified
Slovenia	Verified	Not Verified	Verified
South Africa	Verified		Verified
Spain	Verified	Verified	Verified
Sri Lanka	Verified		Verified
Sweden	Verified	Not Verified	Verified
Switzerland	Verified	Not Verified	Verified
Thailand	Verified		Verified
The United Kingdom	Verified	Verified	Verified

Country/Territory/Area	501Y.v2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Trinidad and Tobago			Verified
Tunisia			Verified
Turkey	Not Verified	Not Verified	Verified
Turks and Caicos Islands			Verified
Ukraine			Not Verified
United Arab Emirates	Verified	Verified	Verified
United Republic of Tanzania	Verified		
United States of America	Verified	Verified	Verified
Uruguay		Verified	Verified
Uzbekistan			Verified
Venezuela (Bolivarian Republic of)		Verified	
Viet Nam	Verified		Verified
Wallis and Futuna			Not Verified
Zambia	Verified		
Zimbabwe	Verified		

**See *Annex : Data, table and figure notes*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 745 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that

are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.

- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 14 March 2021, 10 am CET

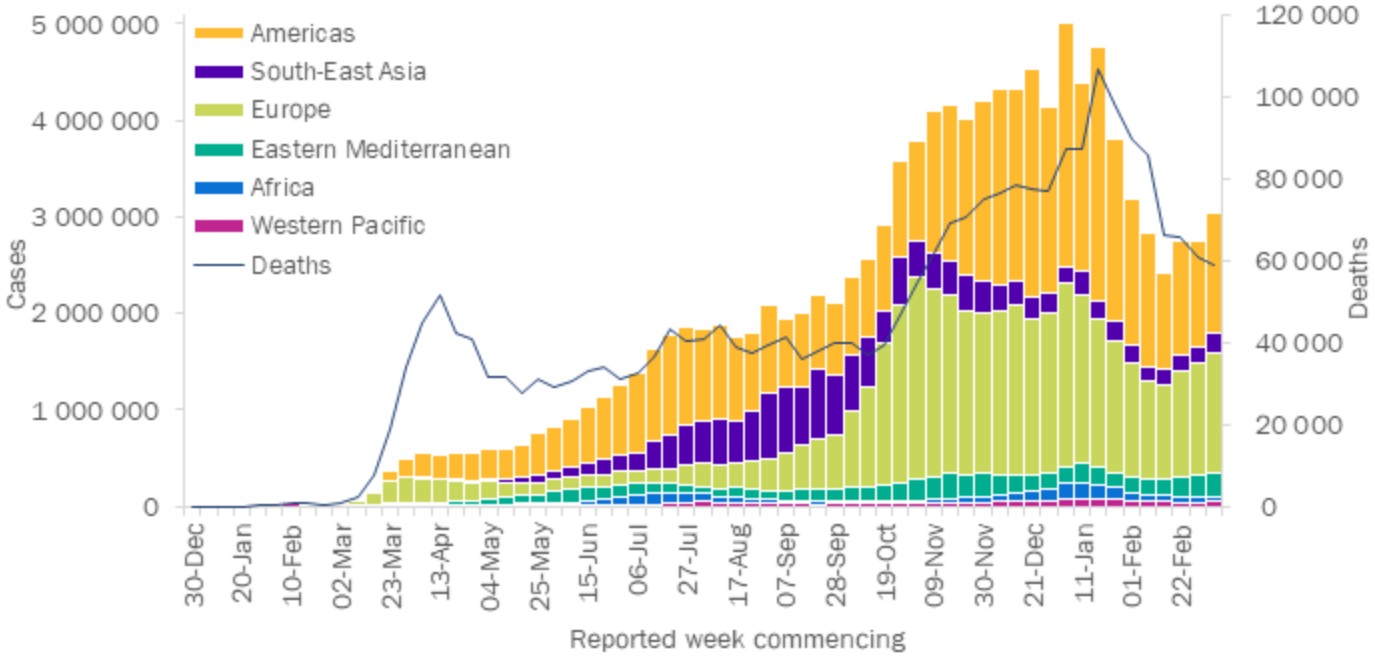
In this edition:

- Global overview
- Special focus: Building and maintaining trust - what countries should do to prepare communities for a COVID-19 vaccine, treatment, or a new test
- Special focus: SARS-CoV-2 variants of concern
- WHO regional overviews
- Key weekly updates

Global overview

New cases continue to rise globally, increasing by 10% in the past week to over 3 million new reported cases (Table 1). The number of new cases peaked in early January 2021 when there were just under 5 million cases reported in one week. New cases then declined to just under 2.5 million cases by the week commencing 15 February. However, for the past three weeks new cases have increased. This week, the Americas and Europe continue to account for over 80% of new cases and new deaths, with rises in new cases seen in all regions apart from Africa, where incidence rates remained similar to the previous week. New deaths on the other hand continue to decline and are now under 60 000, since peaking in the week commencing 18 January (when there were over 95 000 new deaths in the week). The last time when there were fewer than 60 000 new weekly deaths was four months ago, in the week commencing 9 November. This week, although new deaths declined globally, they rose in two WHO regions; the Eastern Mediterranean (by 7%) and the Western Pacific (by 14%).

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 14 March 2021**



**See *Annex: Data, table and figure notes*

The highest numbers of new cases were reported from Brazil (494 153 new cases; 20% increase), the United States of America (461 190 new cases; 8% increase), France (161 159 new cases; 12% increase), Italy (155 076 new cases; 12% increase), and India (148 249 new cases; 30% increase).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 14 March 2021**

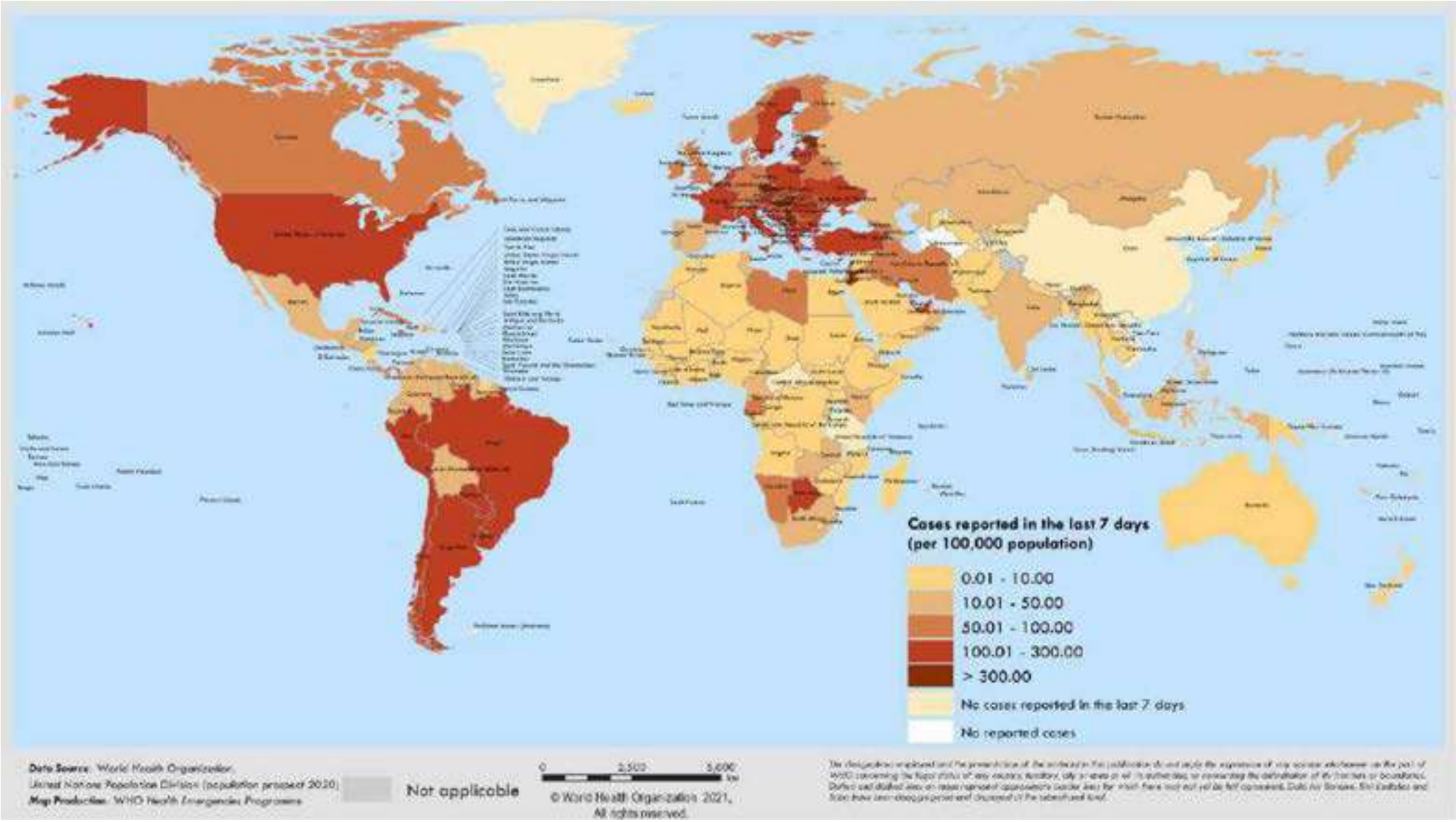
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 241 439 (41%)	13%	52 763 406 (44%)	30 596 (52%)	-6%	1 268 186 (48%)
Europe	1 236 697 (41%)	6%	41 043 949 (34%)	20 977 (36%)	-1%	906 843 (34%)
South-East Asia	199 924 (7%)	19%	13 884 294 (12%)	2 141 (4%)	-3%	212 355 (8%)
Eastern Mediterranean	251 375 (8%)	14%	6 860 070 (6%)	2 955 (5%)	7%	150 173 (6%)
Africa	54 225 (2%)	0%	2 948 236 (2%)	1 309 (2%)	-6%	74 685 (3%)
Western Pacific	49 553 (2%)	19%	1 711 830 (1%)	720 (1%)	14%	30 357 (1%)
Global	**3 033 213 (100%)**	**10%**	**119 212 530 (100%)**	**58 698 (100%)**	**-3%**	**2 642 612 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number; global totals may not equal 100%.*
**See *Annex: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 8-14 March 2021**



**See *Annex: Data, table and figure notes*

Special Focus: Building and maintaining trust - what countries should do to prepare communities for a COVID-19 vaccine, treatment, or a new test

As we move to the next critical phase of the response, when vaccines and other biomedical tools become more widely available, building trust and engaging communities remains essential. We have learned from previous epidemic responses that when communities fully engage and actively participate in the full cycle of planning, delivery and assessment for new biomedical tools, demand for these tools increases, leading to widespread and effective uptake and use.

Addressing community concerns

Social-behavioral data tell us that we have much to do in order to build and sustain trust in communities around the world.

People have concerns over the safety of vaccines and other biomedical tools made with unprecedented speed and with new technologies. These concerns must be acknowledged and addressed by providing individuals and communities with actionable, timely and credible health information from trusted sources and by providing the space and follow-up necessary to work through these concerns with trusted health or community leaders. Past epidemics have shown us just how quickly and widely individual or community fears can spread if not dealt with in a timely and comprehensive way.

Recent studies suggest that around 65% of global populations surveyed are willing to be vaccinated with a COVID-19 vaccine.[1] But this has fluctuated over time. The proportion of those likely to accept a COVID-19 vaccine varies significantly between regions and countries and within countries. The barriers to vaccine uptake are likely to be influenced by a large range of factors.[2] These include exposure to misinformation and rumours, which can negatively impact on vaccine confidence, as well as the role local health care professionals play in promoting vaccine uptake among their patients and communities.[3]

As the pandemic becomes protracted, pandemic fatigue is increasing. The growing fatigue, the stress caused by uncertainty, lower risk perceptions, and reduced trust in government responses, are taking a toll on the fabric of our communities. This has already led to stigma and discrimination in some settings as well as protests against public health and social measures in many countries.

This is why since the beginning of the pandemic, WHO has promoted and provided guidance on implementing a whole-of-society approach to ensure the widest array of stakeholders are actively involved in the introduction of new biomedical tools, while also supporting communities' broader trust in their health systems.

One of the ways WHO is supporting countries strengthen their engagement and empowerment strategies is through the publication of the **10 Steps to Community Readiness – What countries should do to prepare communities for a COVID-19 vaccine, treatment, or new test.**

This is a new tool, developed by WHO, UNICEF, IFRC and the Global Outbreak and Alert Response Network (GOARN) through the Risk Communication and Community Engagement (RCCE) Collective Service (a new partnership launched in June 2020), to strengthen coordination and quality of practice for the COVID-19 pandemic response.

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[1] Johns Hopkins University, WHO, GOARN, Facebook, MIT (2021) KAP COVID-19 - Vaccine acceptance around the world. https://ccp.jhu.edu/kap-covid/vaccine-acceptance

[2] Anthrologica (2020) Literature analysis: norms and practices relevant to COVID-19 in the Middle East and North Africa Region.

[3] PERC (2020) Responding to COVID-19 in Africa: using data to find a balance Part II. https://preventepidemics.org/covid19/perc/

Figure 3: 10 Steps to Community Readiness

The tool is built around the recognition that the empowerment of people and communities is not an abstract idea, and there are concrete and measurable steps that can be taken to ensure citizens are engaged and ready to support new biomedical tools.

Though communication needs may be slightly different for each step, the principles that promote their safe and successful introduction remain the same.

The steps build on well-established RCCE principles that put communities at the heart of the roll-out of new vaccines, treatments, and tests, and promote trust – the critical ingredient for all community action.

With the imminent arrival of new biomedical tools, investments in coordinated and proactive community engagement approaches, such as the 10 Steps to Community Readiness, are now needed more than ever. These approaches not only support the widest possible uptake of new tools but also support the continued maintenance of protective behaviours, such as mask wearing and physical distancing.

Additional resources:

- Tools guidance and job aids to support implementing each of the 10 steps that lead to community readiness
- Ways the RCCE Collective Service supporting regions and countries
- Guidance on how to ensure people centered and community led approaches underpin the COVID-19 response

Special Focus: Update on SARS-CoV-2 Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, continues to monitor the public health events associated with SARS-CoV-2 variants. Further information on the background of the variants of concern (VOCs) is available in previously published editions of the Weekly Epidemiological Update. Here we provide an update on the geographical distribution of the three VOCs, considered as such by WHO and as reported by countries, territories and areas (hereafter countries) as of 16 March 2021; and emerging variants of interest (VOIs).

As surveillance activities, including systematic genomic sequencing, are strengthened at local and national levels to detect cases infected with SARS-CoV-2 variants, the number of countries reporting VOCs has continued to increase (Table 2, Figures 4-6, Annex 2). This information should be interpreted with due consideration of limitations of ongoing surveillance, including but not limited to differences between countries in sequencing capacity and which samples are prioritized for sequencing. WHO continues to advocate for strengthening surveillance and sequencing capacity, and a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants; based on the local epidemiological situation and capacity, and the detection of unusual events.

Table 2: Overview of emerging information on key variants of concern, as of 16 March 2021*

Nextstrain clade	20I/501Y.V1	20H/501Y.V2†	20J/501Y.V3
PANGO lineage	B.1.1.7	B.1.351	B.1.1.28.1, alias P.1†
GISAID clade	GR	GH	GR
Alternate names	VOC 202012/01†	VOC 202012/02	-
First detected by	United Kingdom	South Africa	Brazil / Japan
Earliest sample date	20 September 2020	Early August 2020	December 2020
Key spike mutations	H69/V70 deletion; Y144 deletion; N501Y; A570D; P681H	L242/A243/L244 deletion; K417N; E484K; N501Y	K417T, E484K; N501Y
Key mutation in common	S106/G107/F108 deletion in Non-Structural Protein 6 (NSP6)		
Countries reporting cases (newly reported in last week)**	118 (7)	64 (6)	38 (6)

*†While work is ongoing to establish standardized nomenclature for key variants, these are the names by which WHO will refer to them in this publication. **Includes official and unofficial reports of VOCs detections in countries among either travellers (imported cases only) or community samples (local transmission).*

Figure 4. Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01 as of 16 March 2021

Figure 5. Countries, territories and areas reporting SARS-CoV-2 variant 501Y.V2 as of 16 March 2021

Figure 6. Countries, territories and areas reporting SARS-CoV-2 variant P.1 as of 16 March 2021

Emerging variants of interest (VOIs)

All viruses, including SARS-CoV-2, change over time resulting in the emergence of new variants, most without a direct benefit to the virus or other public health impacts. WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 result in changes in transmissibility, clinical presentation and severity, or if they impact on public health and social measures (PHSM). Systems have been established to detect "signals" of potential variants of interest or concern, as well as unusual events potentially associated with a variant, and assess these based on the risk posed to global public health (see also working definitions). Such signals are currently under assessment, and as new variants of interest VOIs or VOCs are determined, WHO is committed to highlighting these to support prioritization for further monitoring and assessment.

A SARS-CoV-2 variant, labelled CAL.20C/L452R (based upon the NextStrain subclade and key mutation), spanning PANGO lineages B.1.427 and B.1.429, has been designated as a VOI by WHO based on recent assessments and emerging evidence. This variant is characterized by a combination of three mutations in the receptor binding domain (RBD), namely S13I, W152C, L452R, of which the focus is on the L452R mutation. It was first detected during a local increase in COVID-19 cases in California, United States of America in June 2020. Surveillance has shown that it has since contributed to a substantive proportion of local COVID-19 cases in California, and has been detected in all US states and at least 26 other countries to date[1-4]. Outside of the US, reported detections of this VOI are currently limited to a relatively low number of sequences, suggesting it has not yet resulted in widespread disease in other countries.

The assessment as a VOI follows preliminary, emerging evidence that this variant may be associated with phenotypic impacts which may pose an increased public health risk and COVID-19 control measures compared to other variants. This includes a possible increase in transmissibility,[1] mixed findings on potentially higher infectivity (based on PCR cycle thresholds as a proxy),[1,5,6] and a slight reduction in neutralization for sera from recovered patients clinically diagnosed with COVID-19 and in vaccine recipients.[1,7] The L452R mutation has been associated with a reduction in neutralization of monoclonal antibodies but further investigations are ongoing[8,9]. The impact of this variant on disease severity is under investigation. These are preliminary findings, include non-peer review studies, and require further investigations. WHO is working with US Centers for Disease Control and Prevention (CDC) and the WHO Virus Evolution Working Group to further assess this VOI.

WHO recommendations and working definitions of VOI and VOC

The potential for virus mutation increases with the frequency of human and animal infections. Therefore, reducing transmission of all circulating SARS-CoV-2 viruses and variants by using established disease control methods, are critical aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM and infection prevention and control measures inside and outside of health facilities remain critically important to curb the spread of SARS-CoV-2, including newly reported variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the implementation of physical distancing and other PHSM, as well as infection prevention and control (IPC) measures in health facilities, has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. Findings from new studies evaluating transmission, severity and impact on medical countermeasures will continue to help inform PHSM and IPC measures employed by Member States. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities, including epidemiological surveillance, strategic testing, and systematic sequencing of SARS-CoV-2 where feasible.

On 25 February 2021, proposed working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern were published. As SARS-CoV-2 is continuously evolving, and new signals of potential VOIs and VOCs are frequently detected, WHO aims to assess potential VOCs based on the risk posed to global public health. National authorities may choose to designate other variants of local interest/concern as every local situation is unique, with different variants circulating, requiring surveillance and response systems to adapt to their local epidemiological situation.

If potential VOIs or VOCs are detected, Member States are requested to inform WHO through established WHO Country or Regional Office reporting channels, submit genome sequences to publicly available databases (e.g., GISAID), and perform field and laboratory investigations (where appropriate) to improve understanding of potential impacts.

Additional resources

- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19
- Proposed working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern
- Disease Outbreak News on SARS-CoV-2 Variants, 31 December 2020

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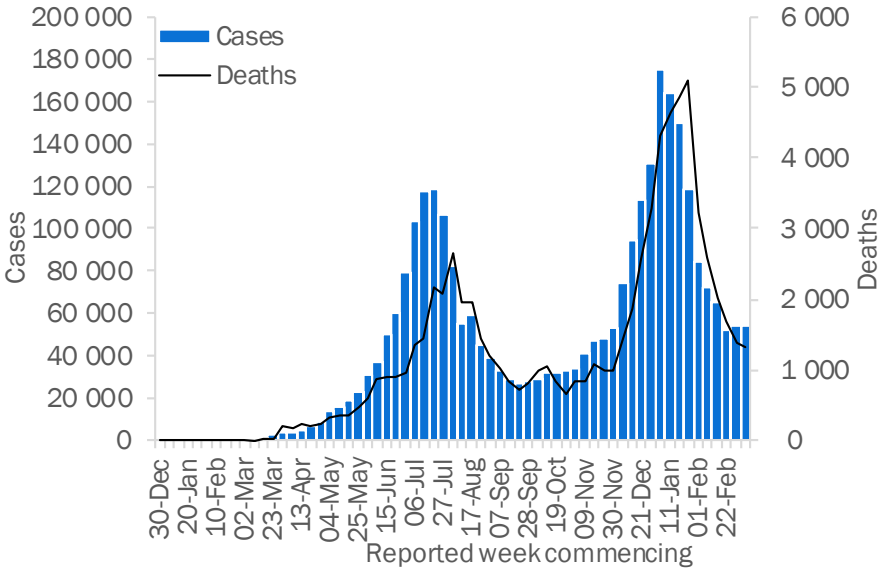
WHO regional overviews

African Region

The African Region reported over 54 000 new cases, a number similar to last week, while deaths decreased by 6% compared to the previous week with just over 1300 deaths reported. The decreasing trend in deaths has been observed since early February 2021. The highest numbers of new cases were reported from Ethiopia (9025 new cases; 7.9 new cases per 100 000 population; a 29% increase), South Africa (8208 new cases; 13.8 new cases per 100 000; a 3% increase), and Kenya (5476 new cases; 10.2 new cases per 100 000; a 226% increase).

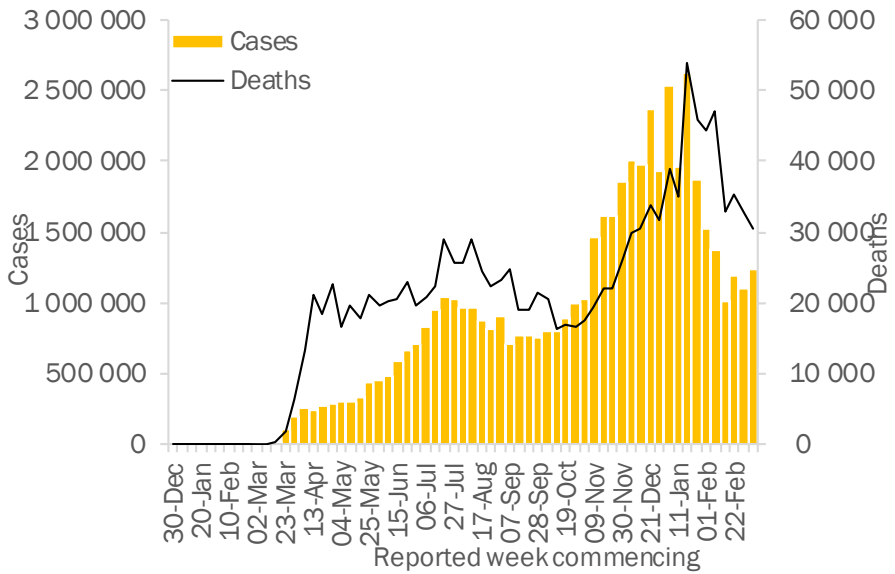
The highest numbers of new deaths were reported from South Africa (614 new deaths; 1.0 new deaths per 100 000 population; a 13% decrease), Ethiopia (120 new deaths; 0.1 new deaths per 100 000; an 82% increase), and Botswana (65 new deaths; 2.8 new deaths per 100 000; a 33% increase).



Region of the Americas

The Region of the Americas reported over 1.2 million new cases and over 30 000 new deaths, a 13% increase and a 6% decrease respectively compared to the previous week. Deaths continued to decrease for the second consecutive week. The highest numbers of new cases were reported from Brazil (494 153 new cases; 232.5 new cases per 100 000; a 20% increase), the United States of America (461 190 new cases; 139.3 new cases per 100 000; an 8% increase), and Peru (52 763 new cases; 160.0 new cases per 100 000; a 58% increase).

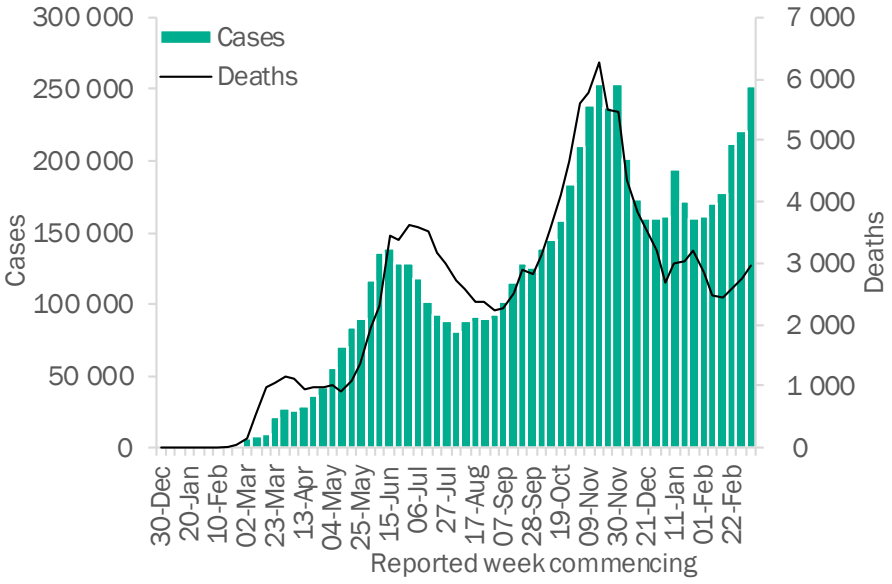
The highest numbers of new deaths were reported from Brazil (12 335 new deaths; 5.8 new deaths per 100 000; a 24% increase), the United States of America (9381 new deaths; 2.8 new deaths per 100 000; a 24% decrease), and Mexico (4273 new deaths; 3.3 new deaths per 100 000; a 16% decrease). These three countries accounted for 85% of deaths reported in the Americas this week.



Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 251 000 new cases and just under 3000 new deaths, a 14% and a 7% increase respectively compared to the previous week. New weekly cases have increased for the past five weeks and deaths have increased for the past three weeks. The highest numbers of new cases were reported from the Islamic Republic of Iran (65 890 new cases; 78.4 new cases per 100 000; a 31% increase), Jordan (47 585 new cases; 466.4 new cases per 100 000; a 36% increase), and Iraq (31 129 new cases; 77.4 new cases per 100 000; a 1% increase).

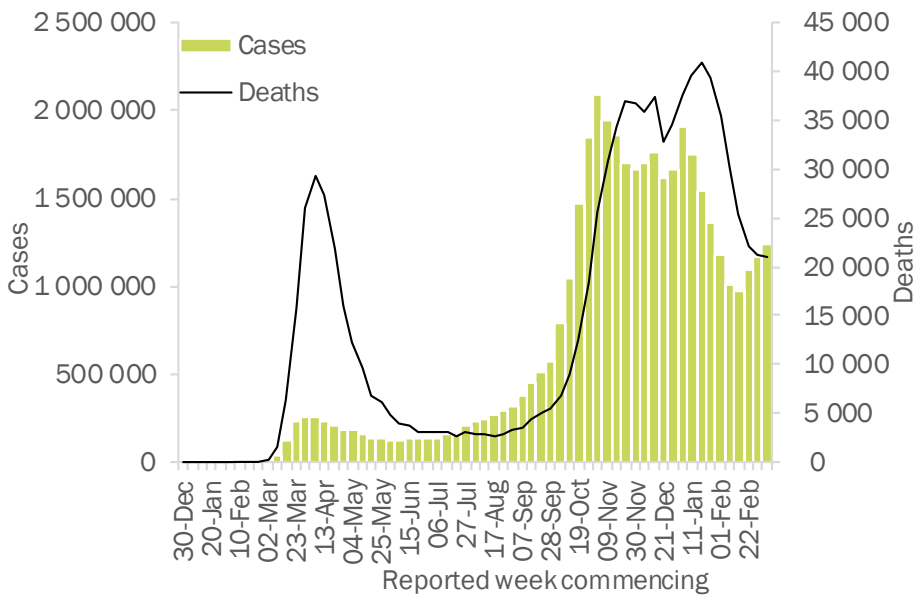
The highest numbers of new deaths were reported from the Islamic Republic of Iran (630 new deaths; 0.8 new deaths per 100 000; an 18% increase), Jordan (385 new deaths; 3.8 new deaths per 100 000; a 71% increase), and Lebanon (321 new deaths; 4.7 new deaths per 100 000; an 11% decrease).



European Region

The European Region reported over 1.2 million new cases and just under 21 000 new deaths, a 6% increase and a 1% decrease respectively compared to the previous week. Cases in the Region have been steadily increasing over the past three weeks while trends in new deaths have been consistently declining for the past eight weeks. The highest numbers of new cases were reported from France (161 159 new cases; 246.9 new cases per 100 000; a 12% increase), Italy (155 076 new cases; 256.5 new cases per 100 000; a 12% increase), and Poland (111 718 new cases; 295.2 new cases per 100 000; a 27% increase).

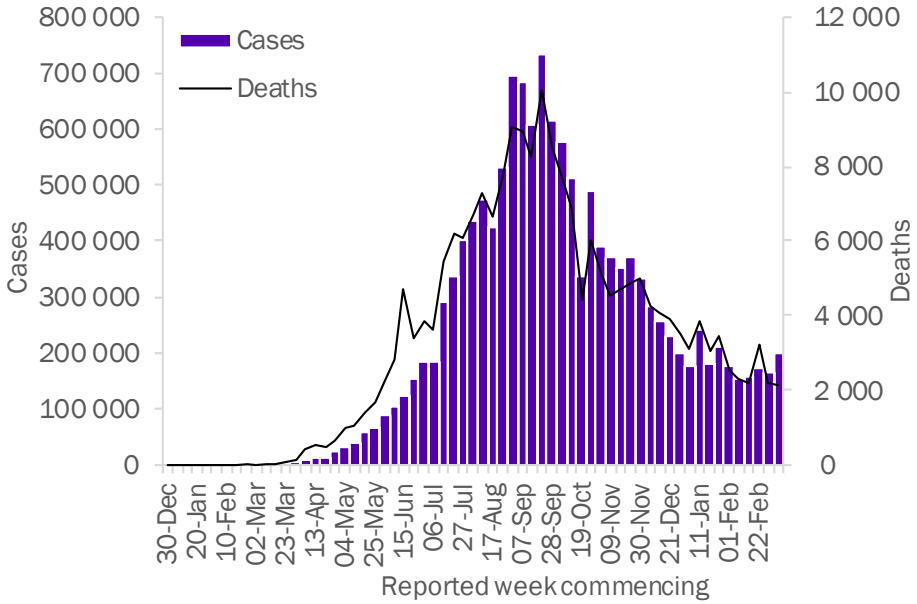
The highest numbers of new deaths were reported from the Russian Federation (2990 new deaths; 2.0 new deaths per 100 000; similar to the previous week), Italy (2303 new deaths; 3.8 new deaths per 100 000; an 11% increase), and Poland (1893 new deaths; 5.0 new deaths per 100 000; a 25% increase).

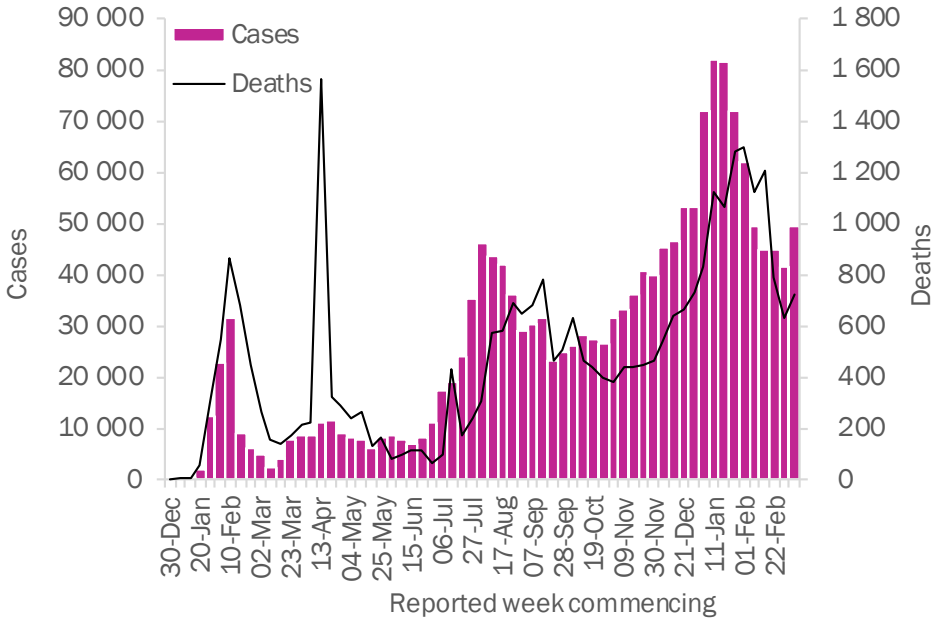


South-East Asia Region

The South-East Asia Region reported just under 200 000 new cases and just over 2100 new deaths, a 19% increase and a 3% decrease respectively compared to the previous week. The highest numbers of new cases were reported from India (148 249 new cases; 10.7 new cases per 100 000; a 30% increase), Indonesia (40 905 new cases; 15.0 new cases per 100 000; a 9% decrease), and Bangladesh (6512 new cases; 4.0 new cases per 100 000; a 67% increase).

The highest numbers of new deaths were reported from Indonesia (1175 new deaths; 0.4 new deaths per 100 000; similar to the previous week), India (851 new deaths; 0.1 new deaths per 100 000; a 21% increase), and Bangladesh (76 new deaths; <0.1 new deaths per 100 000; a 49% increase).





Western Pacific Region

The Western Pacific Region reported just under 50 000 new cases and over 700 new deaths, a 19% and a 14% increase respectively compared to the previous week. This is the first time in seven weeks that an increase in new cases has been reported with new deaths also showing an uptick. The highest numbers of new cases were reported from the Philippines (25 473 new cases; 23.2 new cases per 100 000; a 51% increase), Malaysia (10 632 new cases; 32.8 new cases per 100 000; a 21% decrease), and Japan (7917 new cases; 6.3 new cases per 100 000; a 10% increase).

The highest numbers of new deaths were reported from Japan (333 new deaths; 0.3 new deaths per 100 000; a 9% decrease), the Philippines (301 new deaths; 0.3 new deaths per 100 000; a 71% increase), and Malaysia (40 new deaths; 0.1 new deaths per 100 000; an 11% decrease).

Key weekly updates

WHO Director-General's key message

Opening remarks at the media briefing on COVID-19 – 12 March 2021: *The inequitable distribution of vaccines remains the biggest threat to ending the pandemic and driving a global recovery.*

International Women's Day: Women and COVID-19

- WHO signs MoU with Women in Global Health on International Women's Day
- Devastatingly pervasive: 1 in 3 women globally experience violence
- Women scientists capture public attention as COVID-19 rages across the world

COVID-19 Vaccines

- Waive COVID vaccine patents to put world on war footing
- WHO adds Janssen vaccine to list of safe and effective emergency tools against COVID-19
- GACVS COVID-19 Vaccine Safety subcommittee meeting to review reports on influenza-like illness in individuals vaccinated with COVID-19 vaccines

COVID-19 Solidarity Response Fund

- COVID-19 Solidarity Response Fund marks first anniversary and appeals for continued support

ACT Accelerator strategy and budget

- ACT-Accelerator releases prioritised strategy and budget for 2021 to change the course of the evolving COVID-19 pandemic

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 14 March 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**54 225**	**2 948 236**	**262.8**	**1 309**	**74 685**	**6.7**	
Ethiopia	9 025	174 054	151.4	120	2 540	2.2	Community transmission
South Africa	8 208	1 528 414	2 577.0	614	51 261	86.4	Community transmission
Kenya	5 476	112 805	209.8	38	1 908	3.5	Community transmission
Cameroon	3 274	38 988	146.9	37	588	2.2	Community transmission
Zambia	2 463	84 474	459.5	37	1 153	6.3	Community transmission
Botswana	2 440	34 098	1 450.0	65	424	18.0	Community transmission
Côte d'Ivoire	2 369	37 304	141.4	11	211	0.8	Community transmission
Nigeria	2 300	160 537	77.9	49	2 013	1.0	Community transmission
Mozambique	2 165	64 296	205.7	36	722	2.3	Community transmission
Ghana	1 670	87 762	282.4	45	685	2.2	Community transmission
Namibia	1 559	41 025	1 614.6	22	458	18.0	Community transmission
Madagascar	1 201	21 356	77.1	26	326	1.2	Community transmission
Gabon	1 143	16 660	748.5	6	96	4.3	Community transmission
Senegal	1 094	36 726	219.3	47	955	5.7	Community transmission
Guinea	1 052	17 592	134.0	9	102	0.8	Community transmission
Algeria	1 039	115 143	262.6	24	3 034	6.9	Community transmission
South Sudan	752	9 429	84.2	2	104	0.9	Community transmission
Rwanda	717	20 143	155.5	9	276	2.1	Community transmission
Togo	528	8 049	97.2	3	93	1.1	Community transmission
Democratic Republic of the Congo	469	26 937	30.1	5	717	0.8	Community transmission
Benin	430	6 501	53.6	6	81	0.7	Community transmission
Malawi	391	32 789	171.4	15	1 082	5.7	Community transmission
Mali	353	8 862	43.8	2	360	1.8	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Cabo Verde	311	16 035	2 884.1	4	156	28.1	Community transmission
Angola	268	21 323	64.9	8	520	1.6	Community transmission
Equatorial Guinea	233	6 562	467.7	2	98	7.0	Community transmission
Seychelles	223	3 173	3 226.3	1	15	15.3	Community transmission
Zimbabwe	211	36 471	245.4	16	1 501	10.1	Community transmission
Burkina Faso	197	12 350	59.1	1	144	0.7	Community transmission
Gambia	180	4 939	204.4	1	153	6.3	Community transmission
Congo	150	9 329	169.1	0	131	2.4	Community transmission
Burundi	142	2 441	20.5	0	3	0.0	Community transmission
Sao Tome and Principe	140	2 078	948.2	1	32	14.6	Community transmission
Chad	127	4 288	26.1	13	153	0.9	Community transmission
Guinea-Bissau	124	3 436	174.6	3	52	2.6	Community transmission
Niger	117	4 857	20.1	9	181	0.7	Community transmission
Eritrea	116	3 038	85.7	0	7	0.2	Community transmission
Mauritania	101	17 410	374.4	0	442	9.5	Community transmission
Uganda	92	40 544	88.6	0	334	0.7	Community transmission
Mauritius	71	691	54.3	0	10	0.8	Clusters of cases
Eswatini	61	17 234	1 485.5	3	661	57.0	Community transmission
Comoros	32	3 623	416.6	1	146	16.8	Community transmission
Sierra Leone	19	3 937	49.4	0	79	1.0	Community transmission
Lesotho	8	10 530	491.5	2	309	14.4	Community transmission
Liberia	6	2 030	40.1	0	85	1.7	Community transmission
Central African Republic	0	5 021	104.0	0	63	1.3	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories[iii]							
Réunion	676	13 801	1 541.5	12	71	7.9	Community transmission
Mayotte	502	18 642	6 833.2	4	129	47.3	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Americas	**1 241 439**	**52 763 406**	**5 158.8**	**30 596**	**1 268 186**	**124.0**	
Brazil	494 153	11 363 380	5 346.0	12 335	275 105	129.4	Community transmission
United States of America	461 190	29 063 401	8 780.4	9 381	528 456	159.7	Community transmission
Peru	52 763	1 402 610	4 254.0	1 358	48 664	147.6	Community transmission
Argentina	45 311	2 192 025	4 850.1	776	53 646	118.7	Community transmission
Mexico	38 466	2 157 771	1 673.6	4 273	193 851	150.4	Community transmission
Chile	34 896	885 379	4 631.6	566	21 574	112.9	Community transmission
Colombia	25 035	2 294 617	4 509.6	650	60 950	119.8	Community transmission
Canada	21 472	903 233	2 393.2	212	22 404	59.4	Community transmission
Paraguay	11 782	177 593	2 489.9	158	3 436	48.2	Community transmission
Ecuador	7 723	300 666	1 704.2	195	16 215	91.9	Community transmission
Uruguay	7 145	69 074	1 988.5	52	689	19.8	Community transmission
Cuba	6 473	60 558	534.7	25	366	3.2	Community transmission
Bolivia (Plurinational State of)	5 027	258 324	2 213.0	114	11 903	102.0	Community transmission
Jamaica	4 609	29 912	1 010.1	38	484	16.3	Community transmission
Honduras	4 148	177 168	1 788.7	78	4 325	43.7	Community transmission
Guatemala	3 637	181 974	1 015.7	79	6 546	36.5	Community transmission
Panama	3 483	347 226	8 047.4	74	5 981	138.6	Community transmission
Venezuela (Bolivarian Republic of)	3 430	144 786	509.2	51	1 422	5.0	Community transmission
Dominican Republic	2 956	245 616	2 264.2	51	3 213	29.6	Community transmission
Costa Rica	2 453	209 093	4 104.6	29	2 862	56.2	Community transmission
El Salvador	1 286	62 086	957.2	51	1 945	30.0	Community transmission
Guyana	340	9 069	1 153.0	6	206	26.2	Clusters of cases
Saint Lucia	175	3 989	2 172.3	5	48	26.1	Community transmission
Barbados	174	3 391	1 180.0	0	37	12.9	Community transmission
Antigua and Barbuda	149	962	982.3	6	27	27.6	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Haiti	96	12 632	110.8	0	250	2.2	Community transmission
Bahamas	64	8 680	2 207.3	3	185	47.0	Clusters of cases
Suriname	46	9 012	1 536.2	1	176	30.0	Clusters of cases
Nicaragua	40	5 216	78.7	1	175	2.6	Community transmission
Trinidad and Tobago	40	7 769	555.1	1	140	10.0	Community transmission
Belize	35	12 370	3 110.9	1	316	79.5	Community transmission
Saint Vincent and the Grenadines	22	1 680	1 514.3	0	8	7.2	Community transmission
Dominica	12	156	216.7	0	0	0.0	Clusters of cases
Saint Kitts and Nevis	2	43	80.8	0	0	0.0	Sporadic cases
Grenada	0	151	134.2	0	1	0.9	Sporadic cases
Territories[iii]							
Puerto Rico	1 501	102 567	3 585.2	21	2 077	72.6	Community transmission
Guadeloupe	267	10 725	2 680.4	0	168	42.0	Community transmission
Aruba	263	8 272	7 747.8	2	77	72.1	Community transmission
Bonaire	178	633	3 026.5	1	6	28.7	Community transmission
Curaçao	164	4 915	2 995.3	0	22	13.4	Community transmission
Martinique	151	7 037	1 875.2	0	47	12.5	Community transmission
French Guiana	71	16 764	5 612.7	0	87	29.1	Community transmission
Saint Barthélemy	54	725	7 334.3	1	1	10.1	Clusters of cases
United States Virgin Islands	53	2 767	2 649.7	0	25	23.9	Community transmission
Saint Martin	31	1 612	4 169.8	0	12	31.0	Community transmission
Turks and Caicos Islands	28	2 200	5 682.1	1	15	38.7	Clusters of cases
Cayman Islands	17	468	712.1	0	2	3.0	Sporadic cases
Bermuda	13	735	1 180.3	0	12	19.3	Sporadic cases
Sint Maarten	12	2 078	4 845.9	0	27	63.0	Community transmission
Anguilla	3	21	140.0	0	0	0.0	Sporadic cases
British Virgin Islands	0	154	509.3	0	1	3.3	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Falkland Islands (Malvinas)	0	51	1 464.3	0	0	0.0	No cases
Montserrat	0	20	400.1	0	1	20.0	Sporadic cases
Saba	0	6	310.4	0	0	0.0	No cases
Saint Pierre and Miquelon	0	24	414.2	0	0	0.0	No cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	**251 375**	**6 860 070**	**938.7**	**2 955**	**150 173**	**20.5**	
Iran (Islamic Republic of)	65 890	1 739 360	2 070.8	630	61 142	72.8	Community transmission
Jordan	47 585	469 000	4 596.6	385	5 285	51.8	Community transmission
Iraq	31 129	754 318	1 875.4	171	13 719	34.1	Community transmission
Lebanon	22 151	415 362	6 085.5	321	5 334	78.1	Community transmission
United Arab Emirates	16 169	424 405	4 291.1	78	1 388	14.0	Community transmission
Pakistan	13 808	602 536	272.8	310	13 476	6.1	Community transmission
Kuwait	9 032	208 460	4 881.3	45	1 165	27.3	Community transmission
Libya	6 161	143 643	2 090.5	112	2 348	34.2	Community transmission
Egypt	4 358	190 280	185.9	302	11 256	11.0	Clusters of cases
Bahrain	4 278	130 404	7 663.7	12	481	28.3	Clusters of cases
Tunisia	4 229	241 257	2 041.3	192	8 359	70.7	Community transmission
Qatar	3 292	169 767	5 892.5	3	265	9.2	Community transmission
Morocco	2 658	488 632	1 323.8	42	8 718	23.6	Clusters of cases
Oman	2 361	145 257	2 844.5	17	1 600	31.3	Community transmission
Saudi Arabia	2 234	381 708	1 096.4	32	6 556	18.8	Sporadic cases
Somalia	905	8 946	56.3	55	349	2.2	Community transmission
Syrian Arab Republic	476	16 401	93.7	36	1 094	6.3	Community transmission
Yemen	327	2 775	9.3	33	684	2.3	Community transmission
Sudan	266	30 873	70.4	29	1 940	4.4	Community transmission
Afghanistan	138	55 985	143.8	8	2 457	6.3	Clusters of cases
Djibouti	118	6 252	632.8	0	63	6.4	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Territories[iii]							
occupied Palestinian territory	13 810	234 449	4 595.8	142	2 494	48.9	Community transmission
Europe	**1 236 697**	**41 043 949**	**4 397.2**	**20 977**	**906 843**	**97.2**	
France	161 159	3 975 989	6 091.3	1 828	89 800	137.6	Community transmission
Italy	155 076	3 201 838	5 295.6	2 303	101 881	168.5	Clusters of cases
Poland	111 718	1 906 632	5 037.8	1 893	47 178	124.7	Community transmission
Turkey	96 782	2 866 012	3 398.2	456	29 421	34.9	Community transmission
Czechia	77 747	1 399 078	13 064.5	1 509	23 226	216.9	Community transmission
Germany	69 063	2 569 245	3 066.5	1 471	73 371	87.6	Community transmission
Russian Federation	67 832	4 390 608	3 008.6	2 990	92 090	63.1	Clusters of cases
Ukraine	59 528	1 460 756	3 340.1	1 281	28 303	64.7	Community transmission
Hungary	50 473	516 490	5 346.5	1 079	16 952	175.5	Community transmission
The United Kingdom	40 477	4 253 824	6 266.1	1 045	125 464	184.8	Community transmission
Netherlands	35 811	1 151 180	6 718.3	243	16 045	93.6	Community transmission
Romania	30 331	855 326	4 446.1	585	21 439	111.4	Community transmission
Serbia	29 654	512 051	7 353.1	152	4 694	67.4	Community transmission
Sweden	23 431	712 527	7 055.2	30	13 146	130.2	Community transmission
Belgium	19 397	808 283	6 974.2	167	22 441	193.6	Community transmission
Austria	18 468	488 007	5 418.4	123	8 652	96.1	Community transmission
Spain	18 078	3 183 704	6 809.4	308	72 258	154.5	Community transmission
Bulgaria	18 067	277 878	3 999.1	641	11 234	161.7	Clusters of cases
Greece	15 543	219 521	2 106.1	333	7 038	67.5	Community transmission
Slovakia	14 113	337 503	6 181.8	692	8 528	156.2	Clusters of cases
Estonia	9 804	84 807	6 393.1	66	719	54.2	Clusters of cases
Republic of Moldova	9 105	203 710	5 049.9	203	4 294	106.4	Community transmission
Israel	7 903	806 257	9 314.9	62	5 925	68.5	Community transmission
Belarus	6 896	301 328	3 188.9	58	2 087	22.1	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Bosnia and Herzegovina	6 720	143 218	4 365.3	241	5 488	167.3	Community transmission
Switzerland	5 937	567 967	6 562.6	37	9 359	108.1	Community transmission
Denmark	5 592	219 918	3 796.8	13	2 390	41.3	Community transmission
North Macedonia	5 275	112 107	5 381.0	115	3 300	158.4	Community transmission
Kazakhstan	5 194	273 521	1 456.7	67	3 456	18.4	Clusters of cases
Slovenia	4 765	199 855	9 613.3	26	4 218	202.9	Clusters of cases
Albania	4 735	116 813	4 059.1	112	2 030	70.5	Clusters of cases
Norway	4 547	78 040	1 439.5	7	639	11.8	Community transmission
Croatia	4 531	251 045	6 115.2	87	5 677	138.3	Community transmission
Portugal	4 304	813 716	7 980.2	157	16 669	163.5	Clusters of cases
Finland	3 943	66 006	1 191.3	19	786	14.2	Community transmission
Armenia	3 706	178 385	6 019.9	34	3 255	109.8	Community transmission
Ireland	3 659	226 358	4 584.2	115	4 534	91.8	Community transmission
Montenegro	3 502	83 690	13 325.0	55	1 122	178.6	Clusters of cases
Latvia	3 475	93 484	4 956.2	70	1 757	93.2	Community transmission
Azerbaijan	3 327	239 692	2 364.0	38	3 276	32.3	Clusters of cases
Lithuania	3 171	205 385	7 544.6	68	3 396	124.7	Community transmission
Cyprus	2 702	39 277	3 253.1	6	238	19.7	Clusters of cases
Georgia	2 138	274 989	6 893.4	72	3 648	91.4	Community transmission
Malta	2 051	26 267	5 948.9	21	350	79.3	Clusters of cases
Luxembourg	1 194	57 700	9 217.6	31	688	109.9	Community transmission
Uzbekistan	391	80 567	240.7	0	622	1.9	Clusters of cases
Kyrgyzstan	300	86 850	1 331.2	10	1 481	22.7	Clusters of cases
Andorra	209	11 228	14 531.8	0	112	145.0	Community transmission
San Marino	204	4 126	12 157.5	1	77	226.9	Community transmission
Monaco	88	2 106	5 366.4	1	27	68.8	Sporadic cases
Iceland	13	6 072	1 779.4	0	29	8.5	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Liechtenstein	10	2 678	7 022.1	0	54	141.6	Sporadic cases
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territoriesiii							
Kosovo [1]	4 048	76 505	4 112.3	56	1 686	90.6	Community transmission
Isle of Man	486	1 092	1 284.2	0	25	29.4	No cases
Gibraltar	19	4 263	12 653.2	0	93	276.0	Clusters of cases
Faroe Islands	3	661	1 352.7	0	1	2.0	Sporadic cases
Jersey	2	3 222	2 961.4	0	69	63.4	Community transmission
Greenland	0	31	54.6	0	0	0.0	No cases
Guernsey	0	821	1 299.1	0	14	22.2	Community transmission
South-East Asia	**199 924**	**13 884 294**	**686.9**	**2 141**	**212 355**	**10.5**	
India	148 249	11 359 048	823.1	851	158 607	11.5	Clusters of cases
Indonesia	40 905	1 414 741	517.2	1 175	38 329	14.0	Community transmission
Bangladesh	6 512	556 236	337.7	76	8 527	5.2	Community transmission
Sri Lanka	2 264	87 600	409.1	33	526	2.5	Clusters of cases
Maldives	719	21 382	3 955.6	0	64	11.8	Clusters of cases
Thailand	557	26 927	38.6	1	86	0.1	Clusters of cases
Nepal	523	275 178	944.4	4	3 014	10.3	Clusters of cases
Myanmar	136	142 136	261.2	1	3 201	5.9	Clusters of cases
Timor-Leste	59	178	13.5	0	0	0.0	Clusters of cases
Bhutan	0	868	112.5	0	1	0.1	Sporadic cases
Western Pacific	**49 553**	**1 711 830**	**87.1**	**720**	**30 357**	**1.5**	
Philippines	25 473	616 611	562.7	301	12 766	11.6	Community transmission
Malaysia	10 632	322 409	996.1	40	1 206	3.7	Clusters of cases
Japan	7 917	446 873	353.3	333	8 560	6.8	Clusters of cases
Republic of Korea	3 164	95 635	186.5	35	1 669	3.3	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Mongolia	672	3 833	116.9	2	4	0.1	Clusters of cases
Papua New Guinea	590	2 173	24.3	5	21	0.2	Community transmission
Cambodia	318	1 305	7.8	1	1	0.0	Sporadic cases
China	269	102 333	7.0	1	4 849	0.3	Clusters of cases
Australia	82	29 112	114.2	0	909	3.6	Clusters of cases
Singapore	68	60 088	1 027.1	1	30	0.5	Sporadic cases
Viet Nam	44	2 553	2.6	0	35	0.0	Clusters of cases
New Zealand	24	2 067	42.9	0	26	0.5	Clusters of cases
Brunei Darussalam	3	192	43.9	0	3	0.7	Sporadic cases
Fiji	3	66	7.4	0	2	0.2	Sporadic cases
Lao People's Democratic Republic	2	49	0.7	0	0	0.0	Sporadic cases
Solomon Islands	0	18	2.6	0	0	0.0	No cases
Territories[iii]							
Wallis and Futuna	166	176	1 565.0	0	0	0.0	Sporadic cases
French Polynesia	68	18 527	6 595.4	1	141	50.2	Sporadic cases
New Caledonia	33	91	31.9	0	0	0.0	Sporadic cases
Guam	18	7 558	4 478.2	0	133	78.8	Clusters of cases
Northern Mariana Islands (Commonwealth of the)	5	150	260.6	0	2	3.5	Pending
Vanuatu	2	3	1.0	0	0	0.0	No cases
Marshall Islands	0	4	6.8	0	0	0.0	No cases
Samoa	0	4	2.0	0	0	0.0	No cases
Global	**3 033 213**	**119 212 530**	**1 529.4**	**58 698**	**2 642 612**	**33.9**	

*See *Annex: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting variants of concern as of 16 March 2021**

Country/Territory/Area	501Y.v2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Albania			
Angola	Verified		Verified
Argentina		Verified	Verified
Aruba			Verified
Australia	Verified		Verified
Austria	Verified		Verified
Bahrain			
Bangladesh			Verified
Barbados			Verified
Belarus			
Belgium	Verified	Verified	Verified
Belize			Verified
Bonaire			Verified
Bosnia and Herzegovina			Not Verified
Botswana	Verified		
Brazil		Verified	Verified
Brunei Darussalam	Verified		
Bulgaria			Verified
Cabo Verde			Verified
Cambodia			Verified
Cameroon	Verified		
Canada	Verified	Verified	Verified
Cayman Islands			Verified
Chile		Verified	Verified
China	Verified	Not Verified	Verified
Colombia		Verified	
Comoros	Verified		

Country/Territory/Area	501Y.v2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Costa Rica	Verified		Verified
Croatia	Not Verified		Verified
Cuba	Verified		
Curaçao			Verified
Cyprus			Verified
Czechia	Not Verified		Verified
Democratic Republic of the Congo			Not Verified
Denmark	Verified	Verified	Verified
Dominican Republic			Verified
Ecuador			Verified
Estonia	Not Verified		Verified
Faroe Islands		Verified	
Finland	Verified	Verified	Verified
France	Verified	Verified	Verified
French Guiana		Verified	Verified
French Polynesia			Verified
Gambia			Verified
Georgia			Verified
Germany	Verified	Verified	Verified
Ghana	Verified		Verified
Gibraltar			Not Verified
Greece	Verified		Verified
Guadeloupe			Verified
Hungary	Not Verified		Verified
Iceland			Verified
India	Verified	Verified	Verified
Indonesia			Verified

Country/Territory/Area	501Y.v2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Iran (Islamic Republic of)			Verified
Iraq			Verified
Ireland	Verified	Not Verified	Verified
Israel	Verified		Verified
Italy	Not Verified	Verified	Verified
Jamaica			Verified
Japan	Verified	Verified	Verified
Jordan			Verified
Kenya	Verified		
Kosovo[1]			Verified
Kuwait			Verified
Latvia			Verified
Lebanon			Verified
Libya			Verified
Liechtenstein			Verified
Lithuania			Verified
Luxembourg	Verified		Verified
Malawi	Verified		
Malaysia			Verified
Malta	Not Verified		Verified
Martinique			Verified
Mayotte	Verified		Verified
Mexico		Verified	Verified
Monaco			
Montenegro			Verified
Morocco			Verified
Mozambique	Verified		
Namibia	Verified		
Nepal			Verified

Country/Territory/Area	501Y.v2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Netherlands	Verified	Verified	Verified
New Caledonia			
New Zealand	Verified		Verified
Nigeria			Verified
North Macedonia			Verified
Norway	Verified		Verified
occupied Palestinian territory			Verified
Oman			Verified
Pakistan			Verified
Panama	Verified		
Peru		Verified	Verified
Philippines	Verified	Verified	Verified
Poland	Not Verified		Verified
Portugal	Verified	Not Verified	Verified
Puerto Rico			Verified
Republic of Korea	Verified	Verified	Verified
Republic of Moldova			
Réunion	Verified	Verified	Verified
Romania	Verified	Verified	Verified
Russian Federation			Verified
Saint Barthélemy			Verified
Saint Lucia			Verified
Saint Martin			Verified
Saudi Arabia			Verified
Senegal			Verified
Serbia			Verified
Singapore			Verified
Slovakia	Not Verified		Verified
Slovenia	Verified		Verified

Country/Territory/Area	501Y.v2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
South Africa	Verified		Verified
Spain	Verified	Verified	Verified
Sri Lanka			Verified
Sweden	Verified	Not Verified	Verified
Switzerland	Verified	Not Verified	Verified
Thailand	Verified		Verified
The United Kingdom	Verified	Verified	Verified
Trinidad and Tobago			Verified
Tunisia			Verified
Turkey	Not Verified	Not Verified	Verified
Turks and Caicos Islands			Verified

Country/Territory/Area	501Y.v2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Ukraine			Not Verified
United Arab Emirates	Verified	Verified	Verified
United Republic of Tanzania	Not Verified		
United States of America	Verified	Verified	Verified
Uruguay			Verified
Uzbekistan			Verified
Venezuela (Bolivarian Republic of)		Verified	
Viet Nam	Verified		Verified
Wallis and Futuna			
Zambia	Verified		
Zimbabwe	Verified		

**See *Annex : Data, table and figure notes*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 745 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.

- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 7 March 2021, 10 am CET

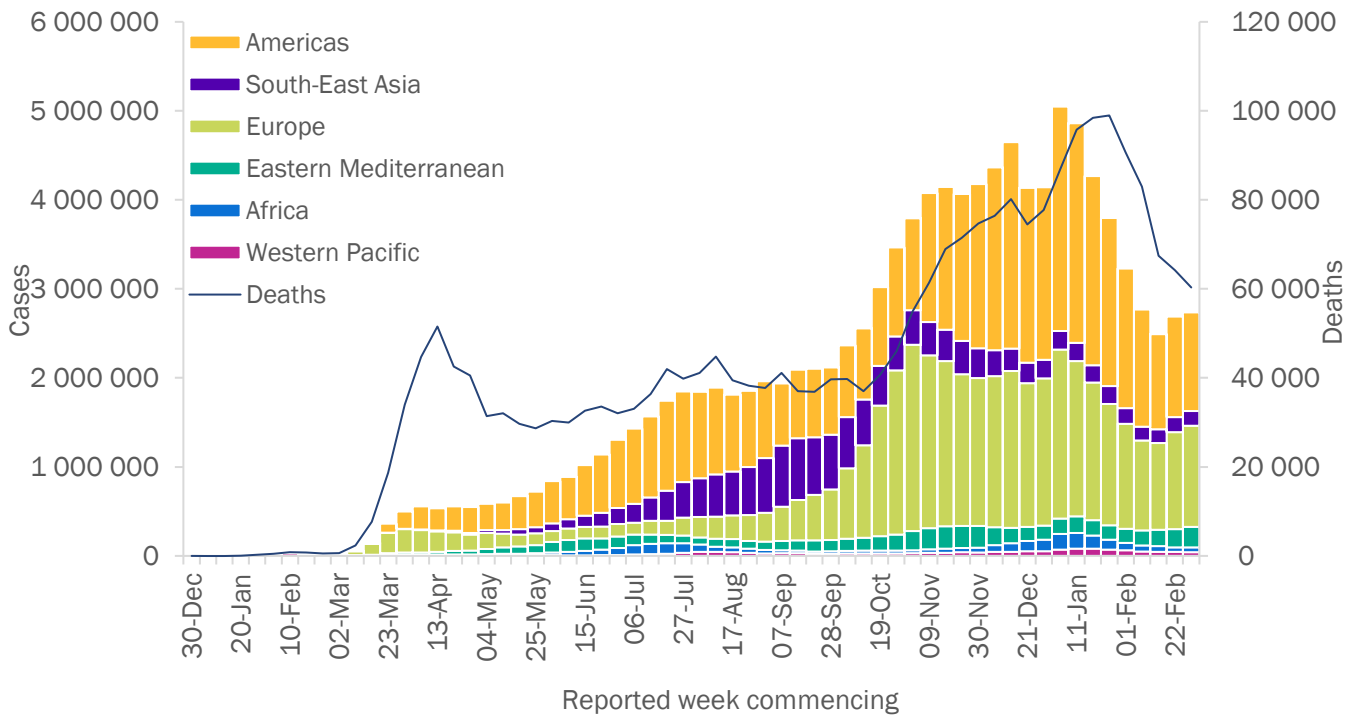
In this edition:

- Global overview
- Special focus: Global Influenza Surveillance and Response System – best practices for integrating influenza and COVID-19 sentinel surveillance
- Special focus: SARS-CoV-2 sero-epidemiology in Kenya
- Special focus: SARS-CoV-2 variants of concern
- WHO regional overviews
- Key weekly updates

Global overview

Over 2.7 million new cases were reported last week, a 2% increase compared to the previous week (Figure 1). The global case increase was driven by increases in the Eastern Mediterranean (10%), African Region (10%), and Europe (4%), while small declines were seen in the Americas (-2%), South-East Asia (-2%) and Western Pacific regions (-6%). Globally, around half of countries are seeing declines while the other half are experiencing increasing numbers of new cases. Global new deaths continued the downward trend observed since early February 2021, declining a further 6% compared to last week. Death rates declined in all regions except in the Eastern Mediterannean, where new deaths reported rose by 9%. The Americas and Europe account for around 80% of new cases and new deaths reported globally.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 7 March 2021**



**See *Annex: Data, table and figure notes*

The highest numbers of new cases were reported from the United States of America (427 233 new cases; 10% decrease), Brazil (413 597 new cases; 11% increase), France (143 622 new cases; 4% decrease), Italy (138 937 new cases; 24% increase), and India (114 068 new cases; 9% increase).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 7 March 2021**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 105 355 (40%)	-2%	51 531 438 (44%)	32 535 (54%)	-4%	1 237 781 (48%)
Europe	1 136 080 (42%)	4%	39 775 409 (34%)	20 770 (34%)	-6%	884 218 (34%)
South-East Asia	167 385 (6%)	-2%	13 684 394 (12%)	2 201 (4%)	-32%	210 214 (8%)
Eastern Mediterranean	228 543 (8%)	10%	6 616 840 (6%)	2 797 (5%)	9%	147 284 (6%)
Africa	55 341 (2%)	10%	2 895 549 (2%)	1 390 (2%)	-16%	73 381 (3%)
Western Pacific	41 677 (2%)	-6%	1 662 277 (1%)	630 (1%)	-20%	29 637 (1%)
Global	**2 734 381 (100%)**	**2%**	**116 166 652 (100%)**	**60 323 (100%)**	**-6%**	**2 582 528 (100%)**

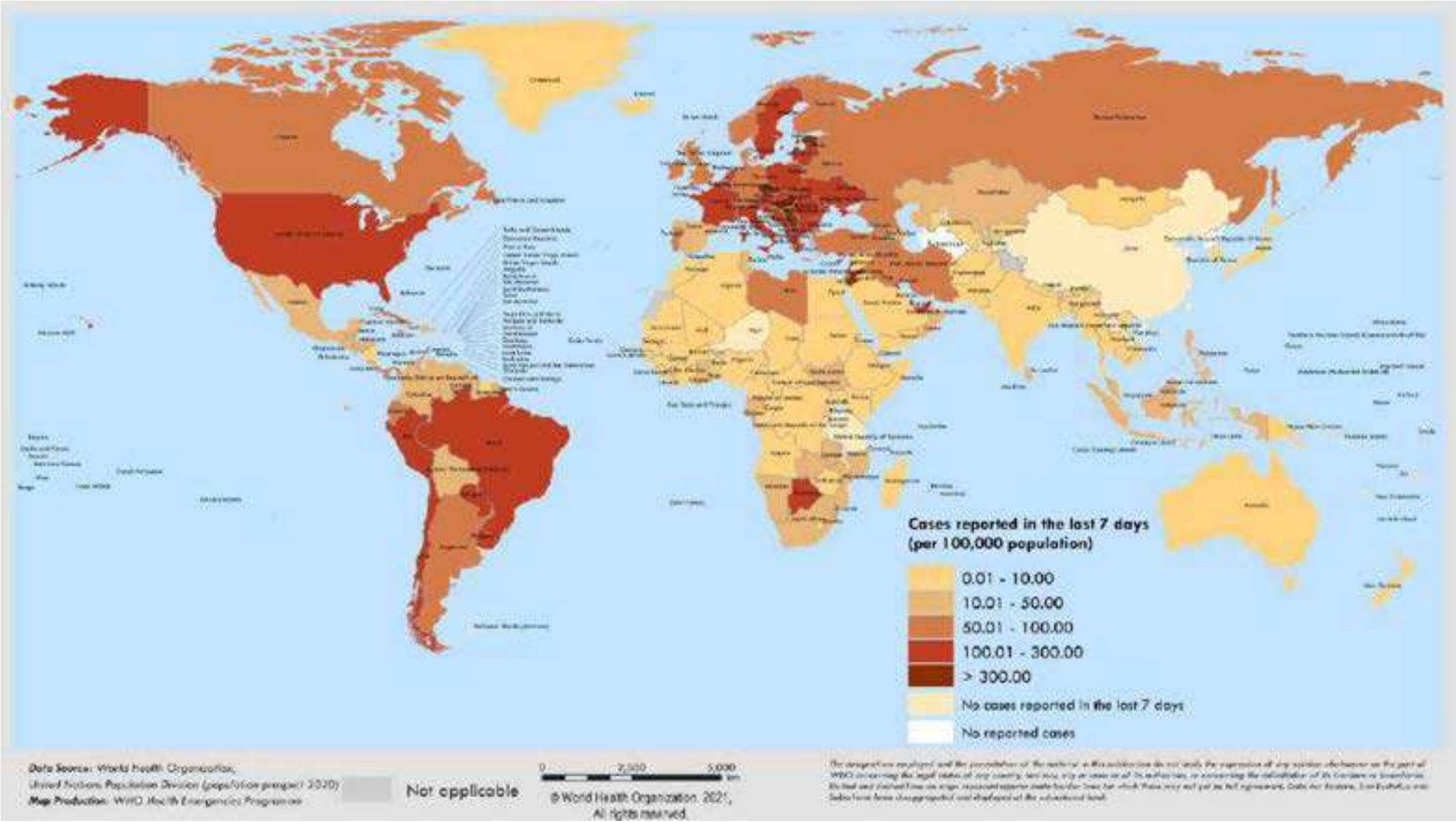
**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number; global totals may not equal 100%.*

**See *Annex: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 1-7 March 2021**



**See *Annex: Data, table and figure notes*

Special Focus: Global Influenza Surveillance and Response System – best practices for integrating influenza and COVID-19 sentinel surveillance

WHO estimates that seasonal influenza may result in 290 000 – 650 000 deaths each year due to respiratory diseases alone, with further deaths from other diseases such as cardiovascular disease, which can be influenza-related. SARS-CoV-2 is also a respiratory virus like influenza, but they are not the same virus. In 2020, there were around 1.8 million COVID-19 deaths. Influenza surveillance systems have been leveraged to support monitoring SARS-CoV-2 and have proven to be efficient, practical and sustainable. In this Special Focus, we look at how influenza surveillance systems work, how they are being used to provide effective support to monitor SARS-CoV-2 and other respiratory viruses, and provide some country examples.

How influenza surveillance systems work

Influenza surveillance uses complementary information from multiple systems to monitor influenza viruses and diseases, assess associated epidemic and pandemic risks including severity, and inform development and update of vaccines and control measures. Influenza is typically monitored using country information coming from:

- Syndromic disease surveillance – monitoring the frequency of a combination of symptoms associated with influenza in people seeking healthcare;
- Virological surveillance – testing all or a subset of ill patients for influenza and other respiratory viruses;
- Other data sources, such as excess mortality and participatory surveillance – monitoring the frequency of syndromes in people who may not seek healthcare for their symptoms; and,
- Event-based surveillance – looking for unusual events.

Influenza surveillance systems have been established in more than 100 countries and are functioning within the Global Influenza Surveillance and Response System (GISRS). For more than half a century, GISRS has been the global platform for surveillance and control of influenza, and other respiratory viruses.

How existing influenza systems are being used to monitor SARS-CoV-2

Influenza and other respiratory viruses, including SARS-CoV-2, are respiratory pathogens which can cause similar symptoms. This makes the use of existing respiratory syndromic surveillance an asset to monitor SARS-CoV-2 circulation, to complement other outbreak surveillance, and to monitor efforts of the COVID-19 pandemic response.

At the same time, using the same systems to monitor influenza and SARS-CoV-2 enables an assessment of the relative co-circulation of both viruses. This allows for concurrent national and global response measures for both influenza and COVID-19. WHO has provided practical guidance to countries to use existing systems for sentinel surveillance and laboratory testing algorithms for influenza and SARS-CoV-2.

As mentioned in the Special Focus of 16 February 2021, since early 2020, more and more countries have started using the existing influenza surveillance systems to monitor COVID-19, continuing and even enhancing syndromic and virologic surveillance to understand community transmission trends for COVID-19 and influenza. So far, since the onset of the COVID-19 pandemic, influenza has been circulating at very low levels.

Influenza surveillance systems have been fully established in many developing and developed countries. These systems, which proved their value in the 2009 H1N1 pandemic, are ready resources in countries for national integrated surveillance for influenza, SARS-CoV-2 and other existing or future important respiratory viruses to public health. Influenza has been and will continue to be among the top global health threats via seasonal epidemics, zoonotic outbreaks and pandemics. Investing in influenza surveillance systems and pandemic preparedness are key to protecting national and global health security.

Country examples

Many countries have benefited from using their influenza surveillance systems to tackle COVID-19 without compromising their continued ability to protect people from the threat of influenza. Below we highlight some country examples.

- The existing influenza surveillance infrastructure in **Afghanistan**, from the the sentinel sites and staff who are experienced in sample collection to the expertise and resources at the National Influenza Centre, allowed for a rapid response to surveillance for COVID-19 following the detection of the first case in February 2020 in the country. Importantly, the country has continued to monitor trends in patients with influenza-like illness (ILI) and severe acute respiratory infections (SARI) seeking care at sentinel sites and to collect samples from these patients. In December 2020, the National Influenza Centre in Kabul implemented the sequential testing algorithm for these samples recommended in WHO's interim guidance, first testing the samples for influenza, then testing the influenza-negative samples for SARS-CoV-2. Since then, SARS-CoV-2 has been detected in influenza-negative samples. Simultaneously, influenza B viruses have also been detected among sentinel samples indicating the likely community circulation of seasonal influenza as typically occurs in Afghanistan at this time of the year. The country plans to initiate the reporting of this information on COVID-19 testing of sentinel samples to the regional influenza data platform, EMFLU, as they have been doing for influenza on a regular basis for many years.

- In April 2020, **Bhutan** developed a web-based, integrated influenza/COVID-19 surveillance reporting platform and published guidelines for an integrated COVID-19 and influenza surveillance system that scaled-up the existing influenza surveillance system to incorporate monitoring of the COVID-19 virus[1]. The web-based integrated platform eased the work on healthcare staff on reporting daily ILI, SARI and COVID-19 cases. The number of SARI sites was increased from 11 to 50 hospitals and the number of ILI sites was increased from 7 to 186 health facilities. The laboratory network was also expanded to include SARS-CoV-2 testing centers, which has benefited influenza surveillance by ensuring a more regular supply of resources for testing samples for influenza as well. The data generated from integrated surveillance have been used to detect cases of both influenza and COVID-19 in the community, to monitor trends in both viruses and to provide epidemiological information in support of timely prevention and containment measures. Results of the integrated epidemiological and virological surveillance is published in the Weekly COVID-19 integrated Flu view and are being shared to relevant stakeholders, including COVID-19 task force, for evidence-based decision making within the country and for sharing information globally[2].

- In **Cambodia**, COVID-19 surveillance was integrated into existing influenza surveillance in March 2020, whereby all ILI and SARI cases at sentinel sites are tested for SARS-CoV-2 and influenza. Influenza samples collected in December 2019 were also retrospectively tested for COVID-19. Since March 2020, no COVID-19 cases have been detected among sentinel ILI and SARI cases giving confidence to the assessment that only sporadic cases of COVID-19 are occurring and there is no community transmission of SARS-CoV-2 in the country. ILI surveillance data are an important component of multisource surveillance, where data from multiple sources are used to assess the current epidemiological situation in the country, and support decision making for the COVID-19 response. Maintaining strong influenza surveillance throughout the pandemic was also critical to detect and respond to eight clusters of influenza A(H3N2) infections in various community and closed settings since August 2020.

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[1]Ministry of Health Bhutan (2020) *COVID-19 Integrated Influenza Surveillance Guideline*, http://www.rcdc.gov.bt/web/wp-content/uploads/2020/05/COVID-19-Integrated-Influenza-Surveillance-Guideline-V1.pdf

[2] Royal Government of Bhutan, *Royal Centre for Disease Control*, http://www.rcdc.gov.bt

- In Europe, countries are increasingly integrating SARS-CoV-2 into existing sentinel surveillance schemes in both primary and secondary care. **Albania**, for example, has adapted its existing SARI surveillance systems to monitor both influenza and COVID-19[3]. Additionally, in Europe, the excess weekly all-cause mortality monitoring was established to provide near real-time estimates of the impact of seasonal influenza. These systems have provided important insights into the mortality impact temporally associated with COVID-19 circulation[4].

[3]ECDC/WHO, *Flu News Europe*, https://flunewseurope.org/HospitalData/SARI

[4] Adlhoch C et al. (2021) Real-time monitoring shows substantial excess all-cause mortality during second wave of COVID-19 in Europe, October to December 2020, *Euro Surveill.* 2021;26(2):pii=2002023. https://doi.org/10.2807/1560-7917.ES.2021.26.1.2002023

Special Focus: SARS-CoV-2 sero-epidemiology in Kenya

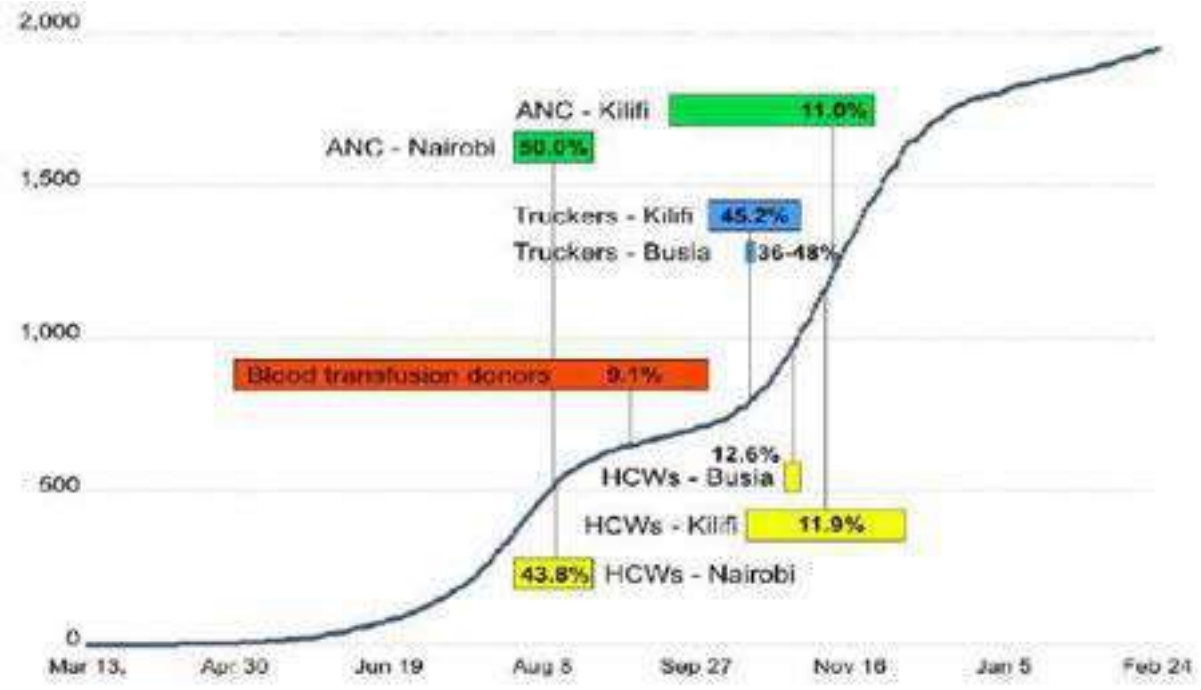
Solidarity II is a global collaboration led by WHO that promotes the implementation of serological surveys of SARS-CoV-2 (For more details, please see Weekly Epidemiological Update published on 27 January 2021, and "Solidarity II" global serologic study for COVID-19). It provides a collaborative environment for public health agencies and academic institutions around the world to work together and hosts a weekly open forum to discuss recent findings in COVID-19 sero-epidemiological research. Every week over 100 investigators from public health agencies and academic institutions join to discuss the recent research progress, debate the scientific challenges and how to collaboratively solve them. On 26 February 2021, Solidarity II hosted the Kenya Medical Research Institute (KEMRI)-Wellcome Trust Research Programme (KWTRP), who gave a series of presentations on the sero-epidemiology of SARS-CoV-2 in Kenya.

Below we provide an update on the dynamics of SARS-CoV-2 infection across Kenya estimated in blood transfusion donors, seroprevalence in antenatal care screening, health care workers and truck drivers.

The laboratory of KEMRI participated in the WHO Inter-lab study to establish a WHO International Standard and Reference Panel[i]. All of the presented studies are based on an in-house ELISA conducted at the KWTRP in Kilifi, Kenya. The assay uses an adaptation of the Krammer ELISA, previously presented at Solidarity II, to measure SARS-CoV-2 anti-Spike antibodies. The assay readout was optimized to selectively differentiate between those previously infected with SARS-CoV-2 and non-infected individuals. This assay was validated using over 900 locally-acquired serum/plasma samples from 2011-2018 with a specificity of 99%. Sensitivity was estimated to be 92.7%[ii] based on 179 PCR samples taken at least 7 days after a positive COVID-19 PCR test in Nairobi.

At the request of the Kenyan Government, the KWTRP developed protocols for sampling blood donors, attendees at antenatal care clinics (ANC), health care workers (HCW) and truck drivers at different settings across the country. The seroprevalence results ranged from 9 – 50% in the different populations at different time periods, these are summarised (Figure 3) in relation to the period of sampling and the cumulative number of PCR positive cases identified in Kenya.

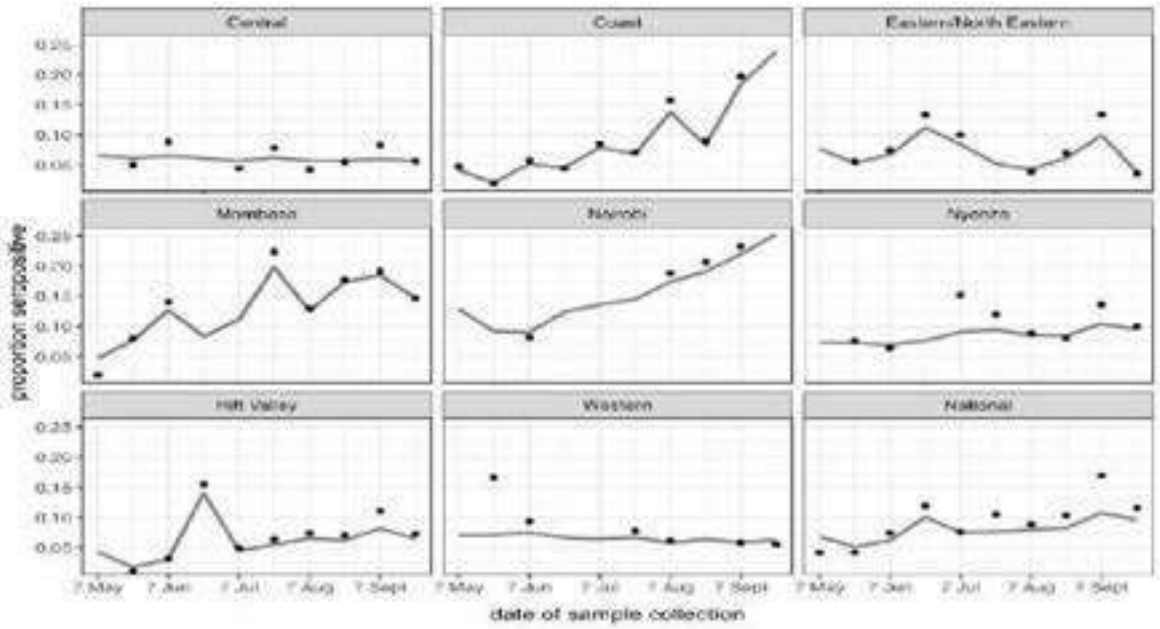
Figure 3: Cumulative confirmed COVID-19 cases per million population in Kenya and time point of the seroprevalence studies



The black line and y-axis represents the national cumulative incidence per 1 million population; each box represents the duration of the studies (the sampling period); the populations studied and the seroprevalence estimate. The vertical lines represent the midpoint for sampling dropping to the cumulative incidence curve.

A study of blood transfusion donors sampled nearly 10 000 donors from sites across the entire country[iii]. Results were statistically adjusted on age, sex and region to the population structure of Kenya as well as being adjusted for assay test performance. Figure 4 illustrates the unadjusted estimates (dots) and the statistical model estimates for seroprevalence in eight regions and nationally. There is a marked rise in prevalence in the Nairobi and Coast regions throughout the first wave (March to September 2020) with a slightly earlier peak in Mombasa. At the end of the first wave, approximately one in ten Kenyans is estimated to have antibodies to SARS-CoV-2 and this rises to one in five in the major cities, Nairobi and Mombasa. Based on the estimates from the cumulative incidence in Kenya, approximately two in 1000 Kenyans have been confirmed as PCR positive COVID-19 cases in the same time period.

Figure 4: Seroprevalence estimates over time in eight regions and nationally in Kenya, May - September 2020



In August 2020, seroprevalence in 196 expectant mothers in Nairobi was estimated at 50% after adjustment for assay sensitivity and specificity[iv]. In 419 mothers in Kilifi (Coast region), seroprevalence rose from 1.3% in September to 11.0% in November. Seroprevalence estimates in nearly 700 HCW varied geographically; in urban Nairobi in August, seroprevalence was 43.8% while in rural Kilifi and Busia in November, it was 11.9% and 12.6%, respectively. There was no association between health service role and seroprevalence suggesting that the cumulative incidence in HCWs was driven more by the community prevalence than by hospital-based risk. Truck drivers provide essential services in the pandemic and are subject to mandatory PCR testing every two weeks. Among 830 truck drivers, seroprevalence was 42.3% in October , varying little between the Coast Region (45.2%) and two sites in Busia in the Western Region (36.0%, 47.9%)[v]. This illustrates a challenge in pandemic control where mobility of essential workers is necessary to support movement restrictions of the rest of the population.

All studies mentioned were conducted before the second wave (October 2020 to January 2021) of cases in Kenya. When viewing these results as estimates of cumulative incidence, they illustrate substantial under-ascertainment of infections by PCR testing. Additionally, the study in blood donors illustrates large regional heterogeneity in infection with much higher cumulative incidence in the cities.

Additional SARS-CoV-2 seroprevalence studies are ongoing in Kenya with support from WHO (Unity Studies). More information about WHO's work on SARS-CoV-2 seroepidemiology can be found here.

[i] Mattiuzzo G et al. Establishment of the WHO International Standard and Reference Panel for anti-SARS-CoV-2 antibody. WHO/BS/2020.2403. 2020: WHO(Geneva) https://www.who.int/publications/m/item/WHO-BS-2020.2403
[ii] Uyoga S et al. Seroprevalence of anti-SARS-CoV-2 IgG antibodies in Kenyan blood donors. Science 2021:371;79-82
[iii] Adetifa et al., Temporal trends of SARS-CoV-2 seroprevalence in transfusion blood donors during the first wave of the COVID-19 epidemic in Kenya. medRxiv 2021 https://doi.org/10.1101/2021.02.09.21251404
[iv] Lucinde et al. Sero-surveillance for IgG to SARS-CoV-2 at antenatal care clinics in two Kenyan referral hospitals medRxiv 2021 https://doi.org/10.1101/2021.02.05.2125073
[v] Kagucia et al. Seroprevalence of anti-SARS-CoV-2 IgG antibodies among truck drivers and assistants in Kenya medRxiv 2021 https://doi.org/10.1101/2021.02.12.21251294

Special Focus: Update on SARS-CoV-2 Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, continues to monitor the public health events associated with SARS-CoV-2 variants and provides updates as new information becomes available.

Further information on the background of the variants of concern (VOCs) is available from previously published editions of the Weekly Epidemiological Update. Here we provide an update on ongoing studies and the geographical distribution of select VOCs as reported by countries, territories and areas (hereafter countries) as of 9 March 2021.

Results of ongoing studies of VOCs are summarized in Table 2 below. While many countries worldwide are currently experiencing a decline in overall SARS-CoV-2 infections, likely as a result of the public health and social measures (PHSM) implemented, an increased number of reports of variants have been noted in a number of countries. As surveillance activities at local and national levels are strengthened, including systematic genomic sequencing to detect cases infected with SARS-CoV-2 variants, the number of countries reporting VOCs has continued to increase (Table 2, Figures 5, 6 and 7, Annex 2). This information should be interpreted with due consideration of limitations of ongoing surveillance, including but not limited to differences between countries in sequencing capacity and which samples are prioritized for sequencing. WHO continues to advocate for strengthening surveillance and sequencing capacity, and a systematic approach to provide a representative indication of the extent of variant transmission. New potential variants of interest (VOIs) or VOCs are currently under review and may be added to future updates.

Table 3: Overview of emerging information on key variants of concern, as of 9 March 2021*

Nextstrain clade	20I/501Y.V1	20H/**501Y.V2**[†]	20J/501Y.V3
PANGO lineage	B.1.1.7	B.1.351	B.1.1.28.1, alias **P.1**[†]
GISAID clade	GR	GH	GR
Alternate names	**VOC 202012/01**[†]	VOC 202012/02	-
First detected by	United Kingdom	South Africa	Brazil / Japan
First appearance	20 September 2020	Early August 2020	December 2020
Key spike mutations	H69/V70 deletion; Y144 deletion; N501Y; A570D; and P681H	L242/A243/L244 deletion; K417N E484K, N501Y	K417N, E484K; N501Y
Key mutation in common	S106/G107/F108 deletion in Non-Structural Protein 6 (NSP6)		
Transmissibility*	Increased[1] (36%-75%)[2], increased secondary attack rate[3] (10% to 13%)	Increased [1.50 (95% CI: 1.20-2.13) times more transmissible than previously circulating variants][4, 5]	Increased, more transmissible than previous circulating variants[6]
Severity*	Possible increased risk of hospitalization[7], severity and mortality[3]	No impact reported to date[4, 5], no significant change in-hospital mortality[8]	Under investigation, limited impact[6]
Neutralization capacity*	Slight reduction but overall neutralizing titers still remained above the levels expected to confer protection[9]	Decreased, suggesting potential increased risk of reinfection[4, 10, 11]	Decreased, reinfections reported[12-14]
Potential impacts on vaccines*	No significant impact on Moderna, Pfizer-BioNTech, and Oxford-AstraZeneca vaccines[15-18]	Moderna and Pfizer-BioNTech: Reduction in the neutralizing activity, but impact on protection against disease not known.[15-18] Novavax and Janssen: Lower vaccine efficacy in South Africa compared to settings without the variant (press release data only). Moderate-severe disease were assessed. Serologic neutralization results pending.[19, 20] AstraZeneca: Limited vaccine efficacy against mild-moderate COVID-19 disease, with wide confidence intervals, impact on severe disease undetermined. Serologic neutralization substantially reduced compared with original strains, based on small number of samples analyzed[21, 22]	Under investigation
Potential impacts on diagnostics*	S gene target failure (SGTF).[21] No impact on Ag RDTs observed[23]	None reported to date	None reported to date
Countries reporting cases (newly reported in last week)**	111 (5)	58 (3)	32 (3)

[†]*While work is ongoing to establish standardized nomenclature for key variants, these are the names by which WHO will refer to them in this publication.*

**Generalized findings as compared to non-VOC viruses. Based on emerging evidence from multiple countries, including non-peer-reviewed preprint articles and reports from public health authorities and researchers – all subject to ongoing investigation and continuous revision.*

***Includes official and unofficial reports of VOCs detections in countries among either travellers (imported cases only) or community samples (local transmission).*

Variant VOC 202012/01

Since our last update on 9 March, VOC 202012/01 has been detected in five additional countries. As of 9 March, a total of 111 countries across all six WHO regions have reported cases of this variant (Figure 5).

Figure 5. Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01 as of 9 March 2021

Variant 501Y.V2

Since the last update on 2 March, 501Y.V2 has been reported from three additional countries –totaling 58 countries across all six WHO regions (Figure 4). In several areas within the African Region, variant 501Y.V2 has been reported to comprise a high proportion of sequenced samples.[35]

Reductions in neutralizing antibody activity against 501Y.V2 following either natural infection or vaccination have been documented[4, 24] and discussed in past editions of the Weekly Epidemiological Update. Findings from a recent study that analyzed convalescent plasma from 20 patients and sera from 22 participants of vaccine trials [Moderna SARS-CoV-2 mRNA-1273 vaccine (12 participants); Pfizer BNT162b2 COVID-19 vaccine (10 participants)] indicated that relative to the original SARS-CoV-2, there was a substantial decrease in the neutralizing activity of convalescent plasma (9.4-fold) and sera from vaccinated participants (10.3 to 12.4-fold) against the 501Y.V2 variant.[18]

Figure 6. Countries, territories and areas reporting SARS-CoV-2 501Y.V2 as of 9 March 2021

Variant P.1

Since our last update, variant P.1 has been reported in three additional countries. As of 9 March, this variant is reported in 32 countries across all six WHO regions (Figure 5).

Figure 7. Countries, territories and areas reporting SARS-CoV-2 P.1 variant as of 9 March 2021

Brazil has experienced high incidence and mortality due to COVID-19, recording over 11 million cases and 260 000 deaths (as of 7 March 2021); the second highest globally (figure 8). The burden of COVID-19 has been highly variable across the country, with Amazonas State and its capital Manaus, being the most affected[6]. There has been a sharp increase in cases and deaths reported in the month of January, however, both the cases and deaths have slowly started to decline in these states (figure 9), while remaining high or increasing in the country overall.

In a genomic survey conducted from 16 March 2020 to 13 January 2021 in 25 municipalities of Amazonas State, Brazil, several sequences were identified[25]. Variant P.1, which was first detected in early December 2020 in Manaus in Amazons state, displayed a rapid increase in prevalence through January 2021; accounting 24% (n=60) of sequences samples included in this study. Additionally, to better understand the emergence of P.1 in the Amazonas State, a real-time PCR assay was performed to detect the deletion at orf1ab (NSP6: S106del, G107del, F108del) – a deletion found in all three VOCs (P.1, B.1.1.7 and B.1.351). Upon evaluating the SARS-CoV-2 positive samples between 1 November 2020 through 31 January 2021 but not sequenced, no sample was found positive for the NSP6 deletion before 16 December, supporting low prevalence of VOC P.1 before mid-December 2020 in Amazonas. However, between mid-December 2020 and January 2021, positive samples with NSP6 deletion were very frequent. Collectively these studies highlight a sharp increase in prevalence of variant P.1 from 0% in November 2020 (n=0/88) to 73% during 1-15 January 2021 (n=119/162).

Figure 8: Weekly COVID-19 cases per 1 million population in Brazil, as of 7 March 2021

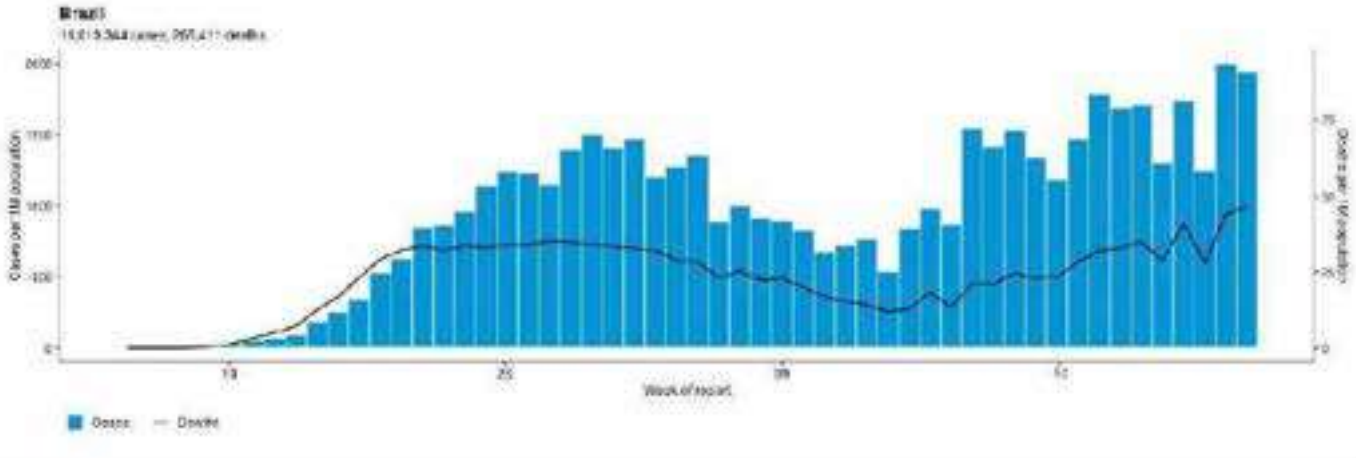
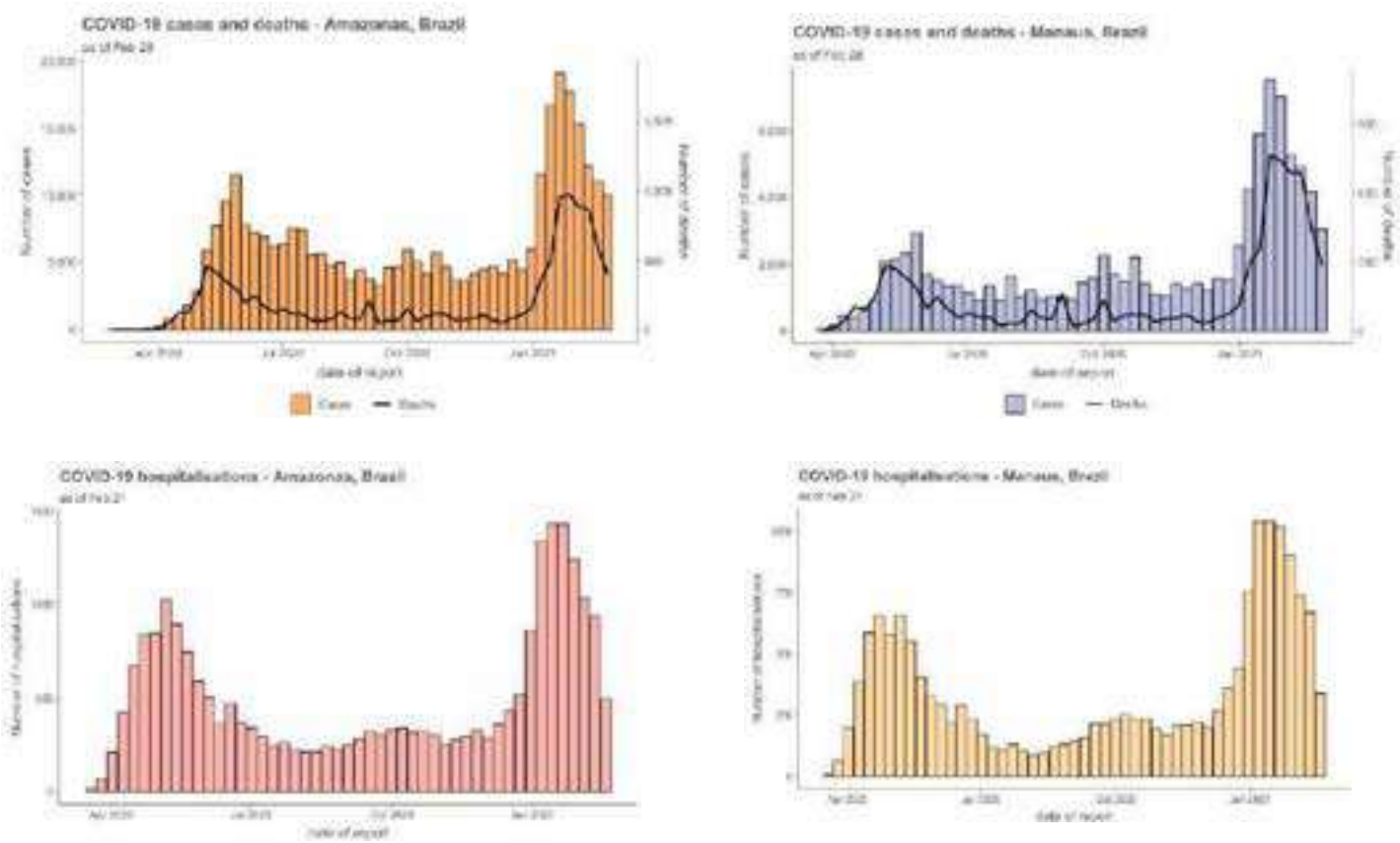


Figure 9: COVID-19 cases, deaths (as of 28 February 2021) and hospitalizations (as of 21 February) in Amazonas and Manaus, Brazil



Source: Ministry of Health Brazil

Based on preliminary investigations in Manaus, where this variant was initially identified, P.1 has shown to have increased transmissibility compared to previously circulating variants. It can evade 25% to 61% protective immunity provided by the previous infection, thereby making people susceptible to reinfection[6]. Additionally, it is 1.1–1.8 times more likely to result in mortality. Researchers have cautioned that these are preliminary findings and the results are not generalizable to other settings. More studies and genome sequencing data are required to assess the transmissibility and severity of variant P.1. It is also important to conduct these studies outside of Manaus as there has been a sharp increase in hospitalizations during the second wave which has resulted in collapsing of health systems in Manaus (figure 9). Therefore, it is difficult to determine the cause of high mortality which could be either due to variant P.1 or collapsed health systems or both.

WHO Recommendations

PHSM remain critically important to curb the spread of SARS-CoV-2, including newly reported variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the implementation of physical distancing and other PHSM as well as infection prevention and control measures in health facilities has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. Findings from new studies evaluating transmission, severity and impact on medical countermeasures will continue to help inform PHSM and IPC measures employed by Member States. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities, including epidemiological surveillance, strategic testing, and systematic sequencing of SARS-CoV-2 where feasible.

If potential VOIs or VOCs are detected, Member States are requested to inform WHO through established WHO Country or Regional Office reporting channels, submit genome sequences to publicly available databases (e.g., GISAID), and perform field and laboratory investigations (where appropriate) to improve understanding of potential impacts. For further information on see: Proposed working definitions for SARS-CoV-2 variants of interest and variants of concern.

Resources

- Proposed working definitions for SARS-CoV-2 variants of interest and variants of concern
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19
- Disease Outbreak News on SARS-CoV-2 Variants, 31 December 2020

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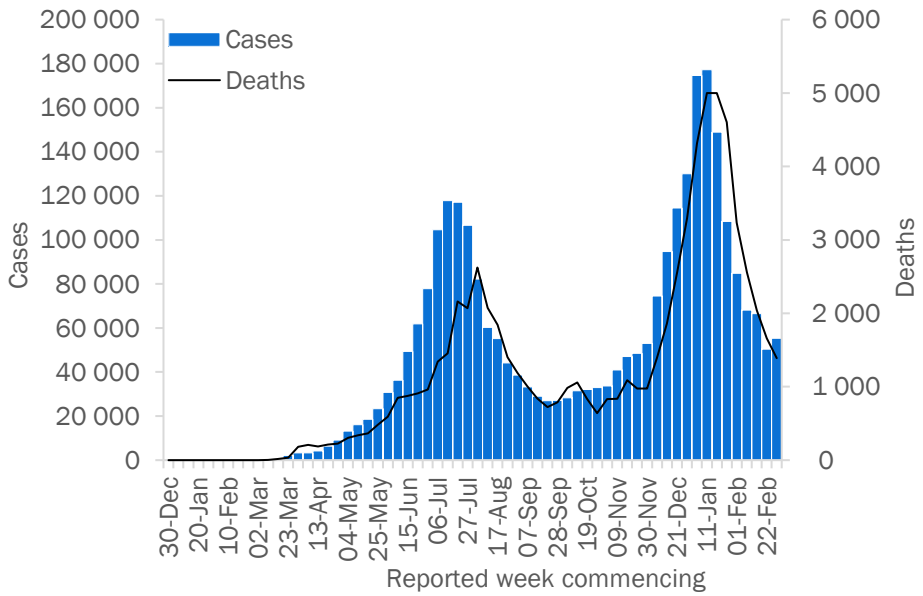
WHO regional overviews

African Region

The Africa region reported over 55 000 new cases and over 1300 new deaths, a 10% increase and 16% decrease respectively compared to the previous week. Since new weekly case counts peaked in early January 2021, this is the first weekly increase following 6 weeks of decreasing case numbers. The highest numbers of new cases were reported from South Africa (7981 new cases; 13.5 new cases per 100 000 population; a 19% decrease), Ethiopia (6976 new cases; 6.1 new cases per 100 000; a 13% increase), and Zambia (4840 new cases; 26.3 new cases per 100 000; a 48% increase).

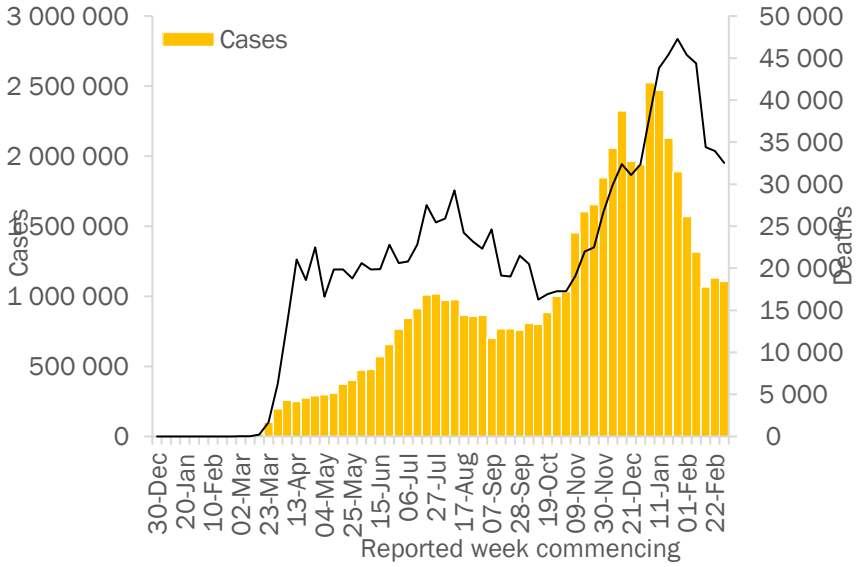
The highest numbers of new deaths were reported from South Africa (706 new deaths; 1.2 new deaths per 100 000 population; a 30% decrease), Ethiopia (66 new deaths; 0.1 new deaths per 100 000; a 21% decrease), and Nigeria (59 new deaths; <0.1 new deaths per 100 000; a 20% decrease).



Region of the Americas

The Region of the Americas reported over 1.1 million new cases and over 32 000 new deaths, a 2% and 4% decrease respectively compared to the previous week. The highest numbers of new cases were reported from the United States of America (427 233 new cases; 129.1 new cases per 100 000; a 10% decrease), Brazil (413 597 new cases; 194.6 new cases per 100 000; an 11% increase), and Argentina (42 517 new cases; 94.1 new cases; a 14% decrease). The United States and Brazil accounted for 76% of new weekly cases reported in the Americas.

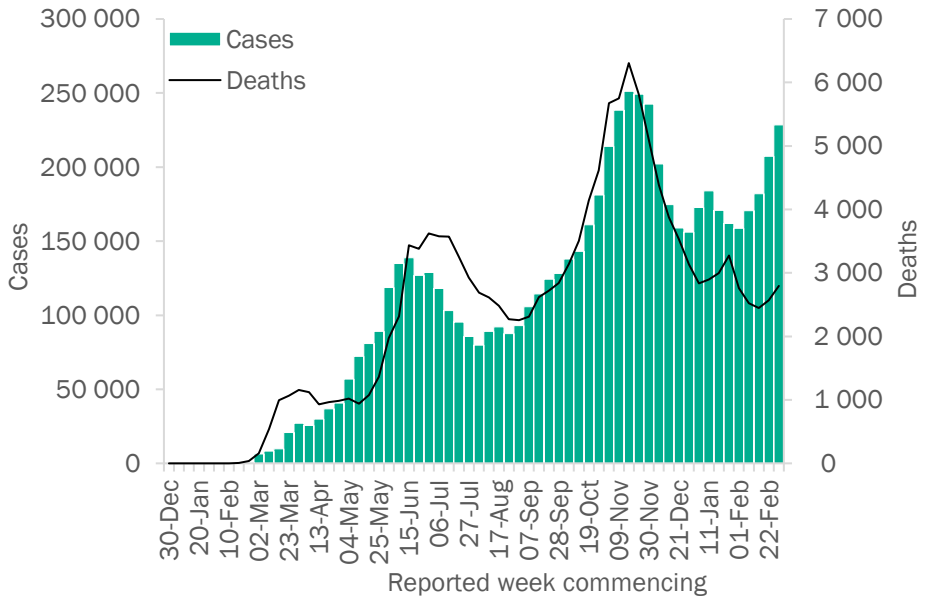
The highest numbers of new deaths were reported from the United States of America (12 315 new deaths; 3.7 new deaths per 100 000; a 17% decrease), Brazil (9935 new deaths; 4.7 new deaths per 100 000; a 23% increase), and Mexico (5104 new deaths; 4.0 new deaths per 100 000; a 7% decrease).



Eastern Mediterranean Region

The Eastern Mediterranean region reported just under 229 000 new cases and just under 2800 new deaths, a 10% and 9% increase respectively compared to the previous week. New cases have increased week on week for the past four weeks, while deaths have increased for the past two weeks. The highest numbers of new cases were reported from Islamic Republic of Iran (58 523 new cases; 69.7 new cases per 100 000; a 3% increase), Jordan (34 919 new cases; 342.2 new cases per 100 000; a 31% increase), and Iraq (30 948 new cases; 76.9 new cases per 100 000; a 13% increase).

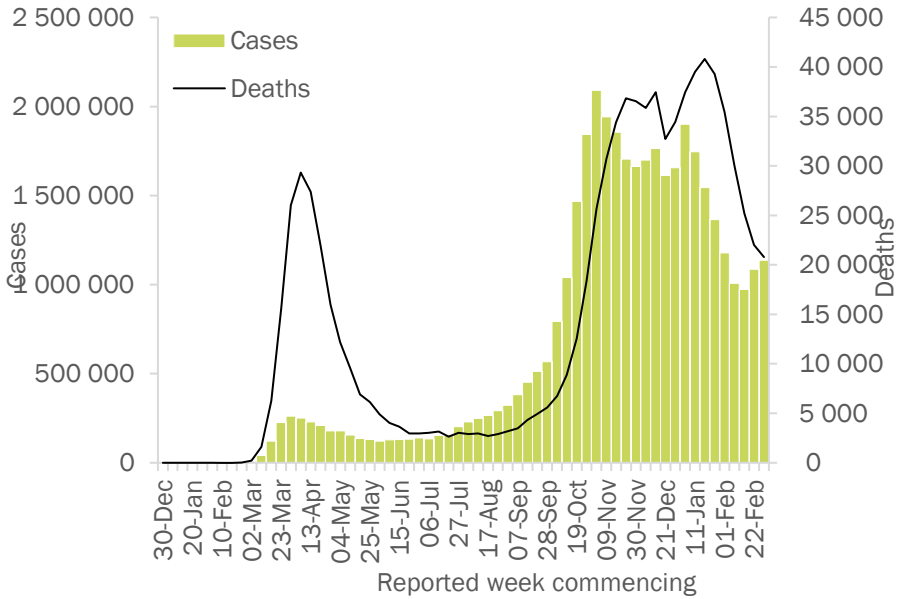
The highest numbers of new deaths were reported from Islamic Republic of Iran (614 new deaths; 0.7 new deaths per 100 000 population; an 8% increase), Lebanon (361 new deaths; 5.3 new deaths per 100 000; a 2% increase), and Pakistan (329 new deaths; 0.1 new deaths per 100 000; a 20% increase)



European Region

The European region reported over 1.1 million new cases and under 21 000 new deaths, a 4% increase and 6% decrease respectively compared to the previous week. Since early January 2021, new weekly cases have decreased overall; however, increases have been reported in the past two weeks. New weekly deaths have continued to decline since the mid-January 2021. The highest numbers of new cases were reported from France (143 622 new cases; 220.0 new cases per 100 000; a 4% decrease), Italy (138 937 new cases; 229.8 new cases per 100 000; a 24% increase), and Poland (87 928 new cases; 232.3 new cases per 100 000; a 29% increase).

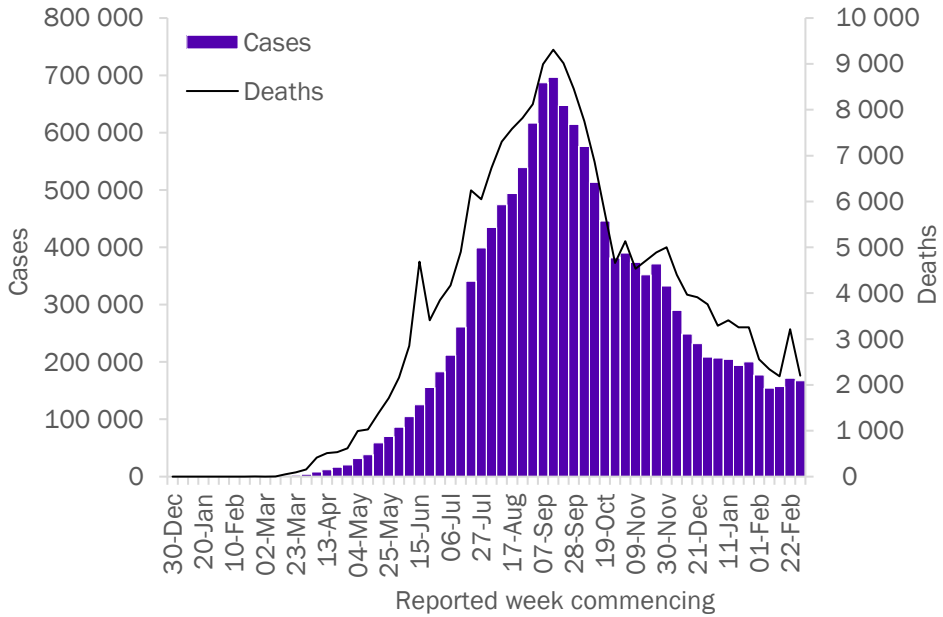
The highest numbers of new deaths were reported from the Russian Federation (2978 new deaths; 2.0 new deaths per 100 000; a 5% increase), France (2100 new deaths; 3.2 new deaths per 100 000; a 3% decrease), and Italy (2071 new deaths; 3.4 new deaths per 100 000; a 3% increase).



South-East Asia Region

The South-East Asia region reported over 167 000 new cases and 2200 new deaths, a 2% and 32% decrease respectively compared to the previous week. Progressive declines in case incidence observed mid-September 2020 have slowed in recent weeks, and increases have been observed in several countries in the region. The highest numbers of new cases were reported from India (114 068 new cases; 8.3 new cases per 100 000; a 9% increase), Indonesia (44 762 new cases; 16.4 new cases per 100 000; a 23% decrease), and Bangladesh (3893 new cases; 2.4 new cases per 100 000; a 39% increase).

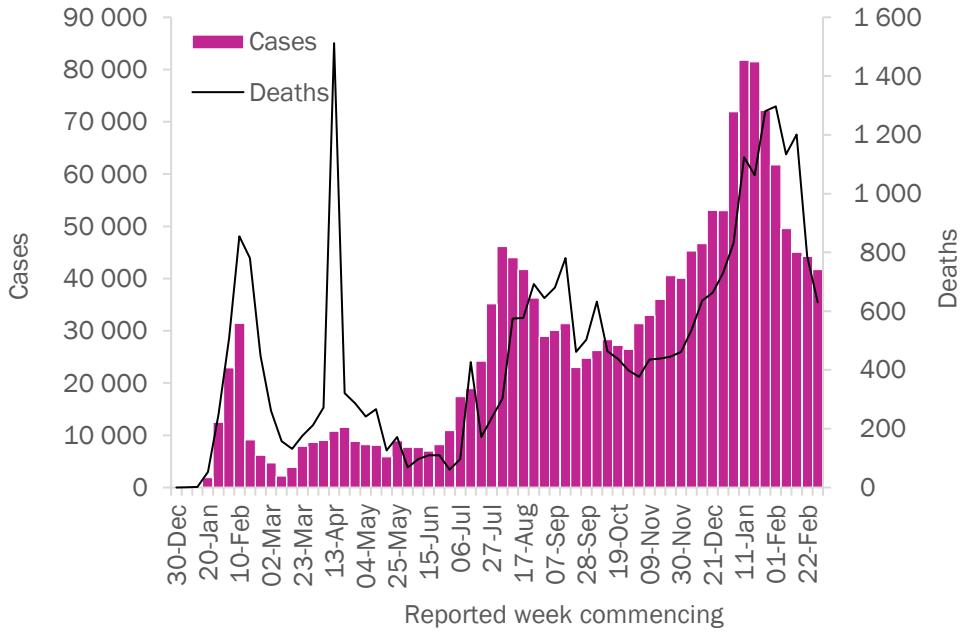
The highest numbers of new deaths were reported from Indonesia (1173 new deaths; 0.4 new deaths per 100 000; a 30% decrease), India (705 new deaths; <0.1 new deaths per 100 000; a 6% decrease), and Nepal (237 new deaths; 0.8 new deaths per 100 000; a 67% decrease). The spike in deaths observed last week were driven by retroadjustments in Nepal.



Western Pacific Region

The Western Pacific region reported over 41 000 new cases and over 600 new deaths, a 6% and 20% decrease respectively compared to the previous week. New weekly cases have continued to decrease since mid-January 2021, and deaths have decreased overall in recent weeks. The highest numbers of new cases were reported from Philippines (16 891 new cases; 15.4 new cases per 100 000; a 13% increase), Malaysia (13 462 new cases; 41.6 new cases per 100 000; a 25% decrease), and Japan (7216 new cases; 5.7 new cases per 100 000; similar to the previous week).

The highest numbers of new deaths were reported from Japan (367 new deaths; 0.3 new deaths per 100 000; a 17% decrease), Philippines (176 new deaths; 0.2 new deaths per 100 000; a 20% decrease), and Malaysia (45 new deaths; 0.1 new deaths per 100 000; a 36% decrease).



Key weekly updates

WHO Director-General key message
Governments and individuals must remember that vaccines alone will not keep up safe. Basic public health measures remain the foundation of the response.

Opening remarks at Member States Information Session on COVID-19, 4 March 2021

COVAX and vaccines

- The effects of virus variants on COVID-19 vaccinesFirst COVID-19 COVAX vaccine doses administered in Africa
- COVAX publishes first round of allocations
- Background document on the AZD1222 vaccine against COVID-19 developed by Oxford University and AstraZeneca

Publications

- WHO Living guideline: Drugs to prevent COVID-19
- COVID-19 vaccine checklist
- Health worker communication for COVID-19 vaccination flow diagram
- Roadmap to improve and ensure good indoor ventilation in the context of COVID-19
- Responding to the COVID-19 pandemic: WHO's action in countries, territories and areas, 2020

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
  - EPI-WIN: tailored information for individuals, organizations and communities

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 7 March 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**55 341**	**2 895 549**	**258.1**	**1 390**	**73 381**	**6.5**	
South Africa	7 981	1 520 206	2 563.2	706	50 647	85.4	Community transmission
Ethiopia	6 976	165 029	143.5	66	2 420	2.1	Community transmission
Zambia	4 840	82 011	446.1	57	1 116	6.1	Community transmission
Ghana	3 506	86 092	277.1	46	640	2.1	Community transmission
Mozambique	3 359	62 131	198.8	56	686	2.2	Community transmission
Botswana	3 288	31 658	1 346.2	49	359	15.3	Community transmission
Nigeria	2 820	158 237	76.8	59	1 964	1.0	Community transmission
Kenya	2 714	108 362	201.5	20	1 874	3.5	Community transmission
Côte d'Ivoire	2 304	34 935	132.4	8	200	0.8	Community transmission
Cameroon	1 965	35 714	134.5	28	551	2.1	Community transmission
Senegal	1 377	35 632	212.8	42	908	5.4	Community transmission
South Sudan	1 328	8 677	77.5	15	102	0.9	Community transmission
Namibia	1 233	39 877	1 569.4	19	437	17.2	Community transmission
Algeria	1 144	114 104	260.2	31	3 010	6.9	Community transmission
Gabon	953	15 517	697.2	7	90	4.0	Community transmission
Democratic Republic of the Congo	677	26 468	29.6	5	712	0.8	Community transmission
Togo	670	7 521	90.8	7	90	1.1	Community transmission
Guinea	646	16 540	125.9	4	93	0.7	Community transmission
Rwanda	636	19 426	150.0	6	267	2.1	Community transmission
Malawi	600	32 398	169.4	30	1 067	5.6	Community transmission
Benin	437	6 071	50.1	5	75	0.6	Community transmission
Cabo Verde	400	15 724	2 828.1	5	152	27.3	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Congo	359	9 179	166.3	3	131	2.4	Community transmission
Seychelles	358	2 950	2 999.6	3	14	14.2	Community transmission
Equatorial Guinea	324	6 329	451.1	5	96	6.8	Community transmission
Madagascar	324	20 155	72.8	3	300	1.1	Community transmission
Angola	273	21 055	64.1	6	512	1.6	Community transmission
Zimbabwe	266	36 260	244.0	27	1 485	10.0	Community transmission
Mali	195	8 560	42.3	6	358	1.8	Community transmission
Chad	188	4 161	25.3	0	140	0.9	Community transmission
Burkina Faso	171	12 153	58.1	1	143	0.7	Community transmission
Eswatini	171	17 173	1 480.2	8	658	56.7	Community transmission
Sao Tome and Principe	152	1 938	884.3	3	31	14.1	Community transmission
Mauritania	130	17 309	372.3	3	442	9.5	Community transmission
Uganda	117	40 452	88.4	0	334	0.7	Community transmission
Burundi	110	2 319	19.5	0	3	0.0	Community transmission
Eritrea	97	2 944	83.0	0	7	0.2	Community transmission
Gambia	68	4 759	196.9	4	152	6.3	Community transmission
Guinea-Bissau	65	3 312	168.3	1	49	2.5	Community transmission
Lesotho	32	10 523	491.2	15	307	14.3	Community transmission
Sierra Leone	31	3 918	49.1	0	79	1.0	Community transmission
Central African Republic	24	5 021	104.0	0	63	1.3	Community transmission
Comoros	20	3 591	412.9	1	145	16.7	Community transmission
Liberia	14	2 024	40.0	0	85	1.7	Community transmission
Mauritius	10	620	48.8	0	10	0.8	Sporadic cases
Niger	0	4 740	19.6	0	172	0.7	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories[iii]							
Mayotte	1 279	18 140	6 649.2	23	125	45.8	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Réunion	709	13 125	1 466.0	7	59	6.6	Community transmission
Americas	**1 105 355**	**51 531 438**	**5 038.4**	**32 535**	**1 237 781**	**121.0**	
United States of America	427 233	28 602 211	8 641.1	12 315	519 075	156.8	Community transmission
Brazil	413 597	10 869 227	5 113.5	9 935	262 770	123.6	Community transmission
Argentina	42 517	2 146 714	4 749.8	924	52 870	117.0	Community transmission
Mexico	42 423	2 119 305	1 643.7	5 104	189 578	147.0	Community transmission
Peru	41 931	1 358 294	4 119.6	1 397	47 491	144.0	Community transmission
Chile	29 065	850 483	4 449.0	532	21 008	109.9	Community transmission
Colombia	24 790	2 269 582	4 460.4	782	60 300	118.5	Community transmission
Canada	20 289	881 761	2 336.3	277	22 192	58.8	Community transmission
Ecuador	10 344	292 943	1 660.4	307	16 020	90.8	Community transmission
Paraguay	8 208	165 811	2 324.7	126	3 278	46.0	Community transmission
Cuba	5 674	54 835	484.1	26	344	3.0	Community transmission
Bolivia (Plurinational State of)	5 406	253 297	2 169.9	180	11 789	101.0	Community transmission
Uruguay	5 387	61 929	1 782.8	36	637	18.3	Community transmission
Honduras	4 109	173 020	1 746.9	130	4 247	42.9	Community transmission
Guatemala	4 002	178 337	995.4	93	6 467	36.1	Community transmission
Panama	3 962	343 743	7 966.7	87	5 907	136.9	Community transmission
Dominican Republic	3 651	242 660	2 236.9	69	3 162	29.1	Community transmission
Venezuela (Bolivarian Republic of)	3 061	141 356	497.1	33	1 371	4.8	Community transmission
Jamaica	2 486	25 303	854.5	29	446	15.1	Community transmission
Costa Rica	2 299	206 640	4 056.4	33	2 833	55.6	Community transmission
El Salvador	934	60 800	937.4	47	1 894	29.2	Community transmission
Saint Lucia	487	3 843	2 092.8	8	43	23.4	Community transmission
Barbados	223	3 217	1 119.4	4	37	12.9	Community transmission
Guyana	216	8 729	1 109.8	5	200	25.4	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Haiti	106	12 536	109.9	1	251	2.2	Community transmission
Saint Vincent and the Grenadines	102	1 658	1 494.5	0	8	7.2	Community transmission
Antigua and Barbuda	87	813	830.2	7	21	21.4	Clusters of cases
Bahamas	58	8 600	2 186.9	1	181	46.0	Clusters of cases
Suriname	53	8 966	1 528.4	5	175	29.8	Clusters of cases
Belize	42	12 335	3 102.1	1	315	79.2	Community transmission
Nicaragua	34	5 176	78.1	1	174	2.6	Community transmission
Trinidad and Tobago	25	7 729	552.3	0	139	9.9	Community transmission
Grenada	3	151	134.2	0	1	0.9	Sporadic cases
Dominica	2	144	200.0	0	0	0.0	Clusters of cases
Saint Kitts and Nevis	0	41	77.1	0	0	0.0	Sporadic cases
Territories[iii]							
Puerto Rico	1 283	101 327	3 541.8	27	2 059	72.0	Community transmission
Guadeloupe	490	10 458	2 613.7	4	168	42.0	Community transmission
Aruba	205	8 009	7 501.5	4	75	70.2	Community transmission
Martinique	140	6 886	1 835.0	2	47	12.5	Community transmission
Turks and Caicos Islands	73	2 172	5 609.8	0	14	36.2	Clusters of cases
United States Virgin Islands	68	2 714	2 599.0	0	25	23.9	Community transmission
French Guiana	66	16 693	5 588.9	2	87	29.1	Community transmission
Saint Barthélemy	59	671	6 788.1	0	0	0.0	Clusters of cases
Bonaire	49	455	2 175.5	1	5	23.9	Community transmission
Curaçao	43	4 751	2 895.3	0	22	13.4	Community transmission
Saint Martin	27	1 581	4 089.6	0	12	31.0	Community transmission
Bermuda	17	722	1 159.4	0	12	19.3	Sporadic cases
Sint Maarten	15	2 066	4 817.9	0	27	63.0	Community transmission
Cayman Islands	13	451	686.2	0	2	3.0	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
British Virgin Islands	1	154	509.3	0	1	3.3	Clusters of cases
Anguilla	0	18	120.0	0	0	0.0	Sporadic cases
Falkland Islands (Malvinas)	0	51	1 464.3	0	0	0.0	No cases
Montserrat	0	20	400.1	0	1	20.0	Sporadic cases
Saba	0	6	310.4	0	0	0.0	No cases
Saint Pierre and Miquelon	0	24	414.2	0	0	0.0	No cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	**228 543**	**6 616 840**	**905.4**	**2 797**	**147 284**	**20.2**	
Iran (Islamic Republic of)	58 523	1 681 682	2 002.2	614	60 594	72.1	Community transmission
Jordan	34 919	421 415	4 130.3	225	4 900	48.0	Community transmission
Iraq	30 948	723 189	1 798.0	165	13 548	33.7	Community transmission
Lebanon	20 436	393 211	5 761.0	361	5 013	73.4	Community transmission
United Arab Emirates	19 642	408 236	4 127.6	97	1 310	13.2	Community transmission
Pakistan	9 931	588 728	266.5	329	13 166	6.0	Community transmission
Kuwait	9 538	199 428	4 669.8	42	1 120	26.2	Community transmission
Libya	5 024	137 482	2 000.8	62	2 236	32.5	Community transmission
Tunisia	4 413	237 028	2 005.5	193	8 167	69.1	Community transmission
Bahrain	4 348	126 126	7 412.3	25	469	27.6	Clusters of cases
Egypt	4 093	185 922	181.7	315	10 954	10.7	Clusters of cases
Qatar	3 278	166 475	5 778.3	5	262	9.1	Community transmission
Morocco	2 564	485 974	1 316.6	61	8 676	23.5	Clusters of cases
Saudi Arabia	2 413	379 474	1 090.0	36	6 524	18.7	Sporadic cases
Oman	2 308	142 896	2 798.2	21	1 583	31.0	Community transmission
Somalia	1 050	8 041	50.6	63	294	1.8	Community transmission
Syrian Arab Republic	392	15 925	91.0	35	1 058	6.0	Community transmission
Yemen	175	2 448	8.2	19	651	2.2	Community transmission
Sudan	145	30 540	69.6	7	1 895	4.3	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Afghanistan	133	55 847	143.5	6	2 449	6.3	Clusters of cases
Djibouti	69	6 134	620.9	0	63	6.4	Community transmission
Territories[iii]							
occupied Palestinian territory	14 201	220 639	4 325.1	116	2 352	46.1	Community transmission
Europe	**1 136 080**	**39 775 409**	**4 261.3**	**20 770**	**884 218**	**94.7**	
France	143 622	3 814 830	5 844.4	2 100	87 972	134.8	Community transmission
Italy	138 937	3 046 762	5 039.1	2 071	99 578	164.7	Clusters of cases
Poland	87 928	1 794 914	4 742.6	1 516	45 285	119.7	Community transmission
Czechia	85 851	1 321 331	12 338.5	1 378	21 717	202.8	Community transmission
Russian Federation	76 697	4 322 776	2 962.1	2 978	89 100	61.1	Clusters of cases
Turkey	76 066	2 769 230	3 283.4	462	28 965	34.3	Community transmission
Germany	57 846	2 500 182	2 984.1	1 855	71 900	85.8	Community transmission
Ukraine	53 379	1 401 228	3 204.0	1 040	27 022	61.8	Community transmission
The United Kingdom	42 824	4 213 347	6 206.5	1 714	124 419	183.3	Community transmission
Hungary	37 418	466 017	4 824.0	899	15 873	164.3	Community transmission
Netherlands	31 642	1 115 508	6 510.2	262	15 803	92.2	Community transmission
Serbia	25 947	482 397	6 927.2	113	4 542	65.2	Community transmission
Israel	25 832	798 354	9 223.6	148	5 863	67.7	Community transmission
Romania	25 831	824 995	4 288.4	567	20 854	108.4	Community transmission
Sweden	23 077	684 961	6 782.3	35	13 003	128.8	Community transmission
Spain	17 900	3 142 358	6 720.9	409	70 501	150.8	Community transmission
Austria	15 772	469 539	5 213.4	135	8 529	94.7	Community transmission
Belgium	15 494	787 891	6 798.2	176	22 261	192.1	Community transmission
Slovakia	15 307	323 390	5 923.3	647	7 836	143.5	Clusters of cases
Greece	14 147	203 978	1 957.0	237	6 705	64.3	Community transmission
Bulgaria	13 105	259 811	3 739.1	426	10 593	152.5	Clusters of cases
Republic of Moldova	9 749	194 605	4 824.2	167	4 091	101.4	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Estonia	9 403	75 003	5 654.1	64	653	49.2	Clusters of cases
Belarus	8 473	294 432	3 115.9	63	2 029	21.5	Community transmission
Albania	5 863	112 078	3 894.6	143	1 918	66.6	Clusters of cases
Kazakhstan	5 602	268 327	1 429.0	0	3 389	18.0	Clusters of cases
Portugal	5 568	809 412	7 938.0	236	16 512	161.9	Clusters of cases
Slovenia	5 459	195 086	9 383.9	31	4 168	200.5	Clusters of cases
Switzerland	5 145	559 627	6 466.2	28	9 278	107.2	Community transmission
Bosnia and Herzegovina	4 808	136 498	4 160.5	159	5 247	159.9	Community transmission
Finland	4 497	60 904	1 099.2	25	767	13.8	Community transmission
North Macedonia	4 350	106 832	5 127.8	59	3 185	152.9	Community transmission
Latvia	4 199	90 009	4 772.0	73	1 687	89.4	Community transmission
Ireland	3 719	222 699	4 510.1	106	4 419	89.5	Community transmission
Denmark	3 594	214 326	3 700.3	19	2 377	41.0	Community transmission
Croatia	3 541	246 514	6 004.8	64	5 590	136.2	Community transmission
Montenegro	3 482	79 771	12 701.1	56	1 059	168.6	Clusters of cases
Norway	3 459	73 493	1 355.6	10	632	11.7	Community transmission
Lithuania	3 069	202 214	7 428.1	84	3 328	122.3	Community transmission
Armenia	2 621	174 679	5 894.9	29	3 221	108.7	Community transmission
Azerbaijan	2 501	236 768	2 335.2	23	3 241	32.0	Clusters of cases
Cyprus	2 151	36 575	3 029.3	1	232	19.2	Clusters of cases
Georgia	2 093	272 851	6 839.8	66	3 576	89.6	Community transmission
Malta	1 997	24 216	5 484.4	16	329	74.5	Clusters of cases
Luxembourg	1 193	56 506	9 026.8	20	657	105.0	Community transmission
Kyrgyzstan	321	86 550	1 326.6	7	1 471	22.5	Clusters of cases
Uzbekistan	290	80 176	239.6	0	622	1.9	Clusters of cases
San Marino	206	3 922	11 556.4	2	76	223.9	Community transmission
Andorra	170	11 019	14 261.3	2	112	145.0	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Monaco	66	2 019	5 144.7	2	26	66.3	Sporadic cases
Liechtenstein	15	2 663	6 982.7	1	53	139.0	Sporadic cases
Iceland	10	6 059	1 775.6	0	29	8.5	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Kosovo[1]	3 697	72 457	3 894.7	45	1 630	87.6	Community transmission
Isle of Man	131	606	712.7	0	25	29.4	No cases
Gibraltar	8	4 244	12 596.8	1	93	276.0	Clusters of cases
Jersey	5	3 220	2 959.6	0	69	63.4	Community transmission
Guernsey	2	821	1 299.1	0	14	22.2	Community transmission
Greenland	1	31	54.6	0	0	0.0	No cases
Faroe Islands	0	658	1 346.6	0	1	2.0	Sporadic cases
South-East Asia	**167 385**	**13 684 394**	**677.0**	**2 201**	**210 214**	**10.4**	
India	114 068	11 210 799	812.4	705	157 756	11.4	Clusters of cases
Indonesia	44 762	1 373 836	502.3	1 173	37 154	13.6	Community transmission
Bangladesh	3 893	549 724	333.8	51	8 451	5.1	Community transmission
Sri Lanka	2 446	85 336	398.5	29	493	2.3	Clusters of cases
Maldives	1 066	20 663	3 822.6	3	64	11.8	Clusters of cases
Nepal	590	274 655	942.6	237	3 010	10.3	Clusters of cases
Thailand	419	26 370	37.8	2	85	0.1	Clusters of cases
Myanmar	133	142 023	261.0	1	3 200	5.9	Clusters of cases
Timor-Leste	7	120	9.1	0	0	0.0	Clusters of cases
Bhutan	1	868	112.5	0	1	0.1	Sporadic cases
Western Pacific	**41 677**	**1 662 277**	**84.6**	**630**	**29 637**	**1.5**	
Philippines	16 891	591 138	539.5	176	12 465	11.4	Community transmission
Malaysia	13 462	311 777	963.3	45	1 166	3.6	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Japan	7 216	438 956	347.1	367	8 227	6.5	Clusters of cases
Republic of Korea	2 799	92 471	180.4	31	1 634	3.2	Clusters of cases
Mongolia	295	3 161	96.4	0	2	0.1	Clusters of cases
Papua New Guinea	288	1 583	17.7	3	16	0.2	Community transmission
China	186	102 064	6.9	5	4 848	0.3	Clusters of cases
Cambodia	182	987	5.9	0	0	0.0	Sporadic cases
Singapore	95	60 020	1 025.9	0	29	0.5	Sporadic cases
Viet Nam	77	2 509	2.6	0	35	0.0	Clusters of cases
Australia	65	29 030	113.8	0	909	3.6	Clusters of cases
New Zealand	23	2 043	42.4	0	26	0.5	Clusters of cases
Fiji	4	63	7.0	0	2	0.2	Sporadic cases
Brunei Darussalam	3	189	43.2	0	3	0.7	Sporadic cases
Lao People's Democratic Republic	2	47	0.6	0	0	0.0	Sporadic cases
Solomon Islands	0	18	2.6	0	0	0.0	No cases
Territories[iii]							
French Polynesia	72	18 459	6 571.2	1	140	49.8	Sporadic cases
Guam	14	7 540	4 467.5	2	133	78.8	Clusters of cases
Northern Mariana Islands (Commonwealth of the)	2	145	251.9	0	2	3.5	Pending
Wallis and Futuna	1	10	88.9	0	0	0.0	Sporadic cases
Marshall Islands	0	4	6.8	0	0	0.0	No cases
New Caledonia	0	58	20.3	0	0	0.0	Sporadic cases
Samoa	0	4	2.0	0	0	0.0	No cases
Vanuatu	0	1	0.3	0	0	0.0	No cases
Global	**2 734 381**	**116 166 652**	**1 490.3**	**60 323**	**2 582 528**	**33.1**	

*See *Annex: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting variants of concern as of 9 March 2021**

Country/Territory/Area	501Y.V2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Argentina		Verified	Verified
Aruba			Verified
Australia	Verified		Verified
Austria	Verified		Verified
Bahrain			Verified
Bangladesh			Verified
Barbados			Verified
Belgium	Verified	Verified	Verified
Belize			Verified
Bosnia and Herzegovina			Not Verified
Botswana	Verified		
Brazil		Verified	Verified
Brunei Darussalam	Verified		
Bulgaria			Verified
Cabo Verde			Verified
Cambodia			Not Verified
Cameroon	Verified		
Canada	Verified	Verified	Verified
Cayman Islands			Verified
Chile		Verified	Verified
China	Verified	Not Verified	Verified
Colombia		Verified	
Comoros	Verified		
Costa Rica	Verified		Verified
Croatia	Not Verified		Verified
Cuba	Verified		
Curaçao			Verified
Cyprus			Verified
Czechia	Not Verified		Verified
Democratic Republic of the Congo			Not Verified
Denmark	Verified	Verified	Verified
Dominican Republic			Verified
Ecuador			Verified
Estonia	Not Verified		Verified
Faroe Islands		Verified	

Country/Territory/Area	501Y.V2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Finland	Verified	Verified	Verified
France	Verified	Verified	Verified
French Guiana		Verified	Verified
French Polynesia			Verified
Gambia			Verified
Georgia			Verified
Germany	Verified	Verified	Verified
Ghana	Verified		Verified
Gibraltar			Not Verified
Greece	Verified		Verified
Guadeloupe			Verified
Hungary	Not Verified		Verified
Iceland			Verified
India	Verified	Verified	Verified
Indonesia			Verified
Iran (Islamic Republic of)			Verified
Iraq			Verified
Ireland	Verified	Not Verified	Verified
Israel	Verified		Verified
Italy	Not Verified	Verified	Verified
Jamaica			Verified
Japan	Verified	Verified	Verified
Jordan			Verified
Kenya	Verified		
Kosovo[1]			Verified
Kuwait			Verified
Latvia			Verified
Lebanon			Verified
Libya			Verified
Liechtenstein			Verified
Lithuania			Verified
Luxembourg	Verified		Verified
Malawi	Verified		
Malaysia			Verified
Malta	Not Verified		Verified

Country/Territory/Area	501Y.V2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Martinique			Verified
Mayotte	Verified		Verified
Mexico		Verified	Verified
Montenegro			Verified
Morocco			Verified
Mozambique	Verified		
Namibia	Verified		
Nepal			Verified
Netherlands	Verified	Verified	Verified
New Zealand	Verified		Verified
Nigeria			Verified
North Macedonia			Verified
Norway	Verified		Verified
occupied Palestinian territory			Verified
Oman			Verified
Pakistan			Verified
Panama	Verified		
Peru		Verified	Verified
Philippines	Not Verified		Verified
Poland	Not Verified		Verified
Portugal	Verified	Not Verified	Verified
Puerto Rico			Verified
Republic of Korea	Verified	Verified	Verified
Republic of Moldova			Not Verified
Réunion	Verified	Verified	Verified
Romania	Verified	Verified	Verified
Russian Federation			Verified
Saint Barthélemy			Verified
Saint Lucia			Verified

Country/Territory/Area	501Y.V2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Saint Martin			Verified
Saudi Arabia			Verified
Senegal			Verified
Serbia			Verified
Singapore			Verified
Slovakia	Not Verified		Verified
Slovenia	Verified		Verified
South Africa	Verified		Verified
Spain	Verified	Verified	Verified
Sri Lanka			Verified
Sweden	Verified	Not Verified	Verified
Switzerland	Verified	Not Verified	Verified
Thailand	Verified		Verified
The United Kingdom	Verified	Verified	Verified
Trinidad and Tobago			Verified
Tunisia			Verified
Turkey	Not Verified	Not Verified	Verified
Turks and Caicos Islands			Verified
Ukraine			Not Verified
United Arab Emirates	Verified	Verified	Verified
United Republic of Tanzania	Not Verified		
United States of America	Verified	Verified	Verified
Uruguay			Verified
Uzbekistan			Verified
Venezuela (Bolivarian Republic of)		Verified	
Viet Nam	Verified		Verified
Zambia	Verified		
Zimbabwe	Verified		

**See *Annex : Data, table and figure notes*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 745 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that

are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.

- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 28 February 2021, 10 am CET

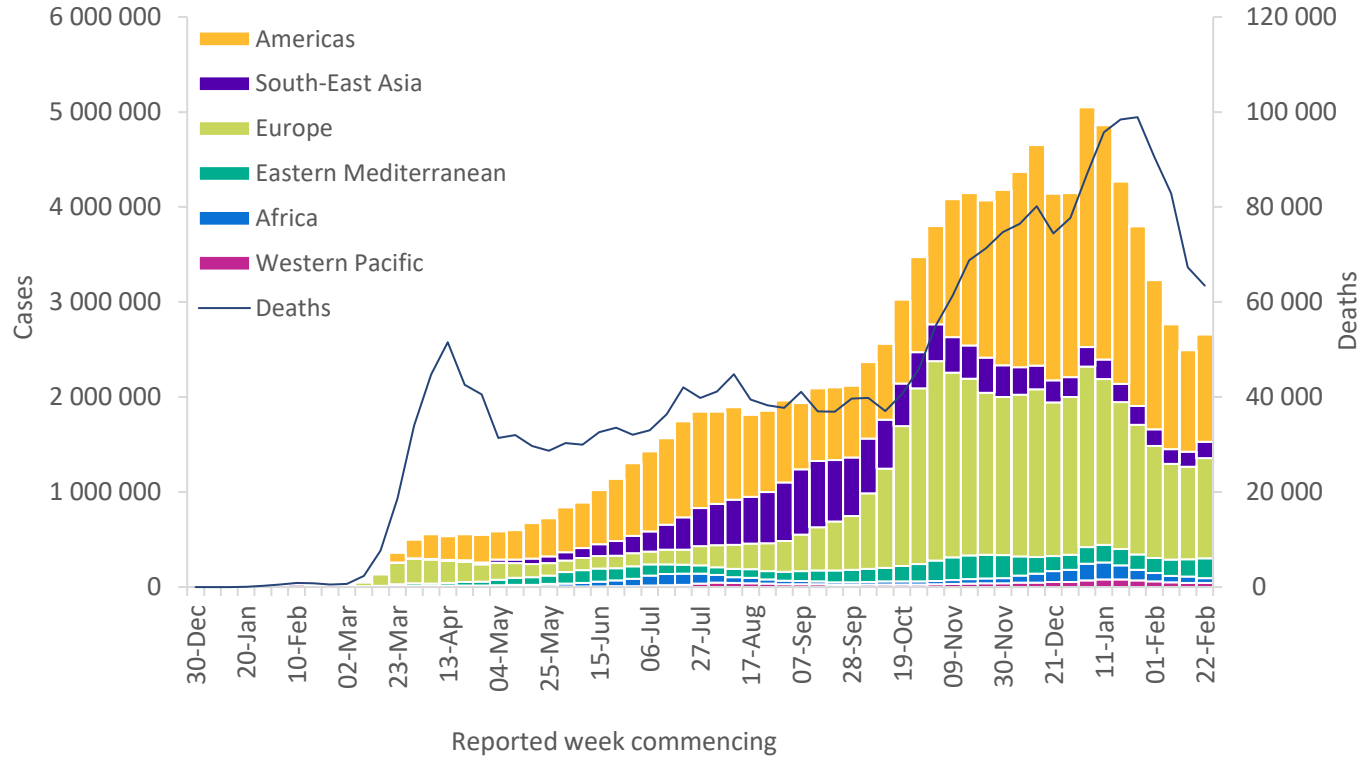
In this edition:

- Global overview
- Special focus: COVID-19 trade, travel and points of entry
- Special focus: the importance of fit, filtration and breathability of non-medical (fabric) masks in the context of COVID-19
- Special focus: SARS-CoV-2 variants of concern
- WHO regional overviews
- Key weekly updates

Global overview

Over 2.6 million new cases were reported last week, a 7% increase compared to the previous week, following six consecutive weeks of declining numbers (Figure 1). The global case increase was driven by increases in the Eastern Mediterranean (14%), South-East Asia (9%), Europe (9%) and the Americas (6%). Possible reasons for this increase include the continued spread of more transmissible variants of concern (VOCs), relaxation of public health and social measures (PHSM) and fatigue around adhering to PSHM measures. Basic public health measures remain the foundation of the response. For public health authorities, that means testing, contact tracing, isolation, supported quarantine and quality care. For individuals, it means avoiding crowds, physical distancing, hand hygiene, masks and ventilation. Furthermore, immunity conferred by vaccination takes weeks at the individual level, and it may take longer to observe impacts at the population-level.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 28 February 2021**



**See *Annex: Data, table and figure notes*

The number of global new deaths continues to decrease, with over 63 000 new deaths reported last week, a 6% decrease as compared to the previous week. New deaths decreased in four regions, Europe, Africa the Western Pacific, and the Americas (by 15%, 19%, 35% and 1%, respectively), and increased by 47% in the South East Asia Region, partly due to retrospective reporting of deaths from Nepal. The Americas reported over 1.1 million new cases and nearly 34 000 deaths, which accounted for 42% of global cases and 53% of global deaths.

In the past week, the five countries reporting the highest number of new cases were the United States of America (472 904 new cases, a 2% decrease), Brazil (373 954 new cases, a 18% increase), France (149 959 new cases, a 14% increase), Italy (112 029 new cases, an 32% increase) and India (105 080 new cases, a 21% increase).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 28 February 2021**

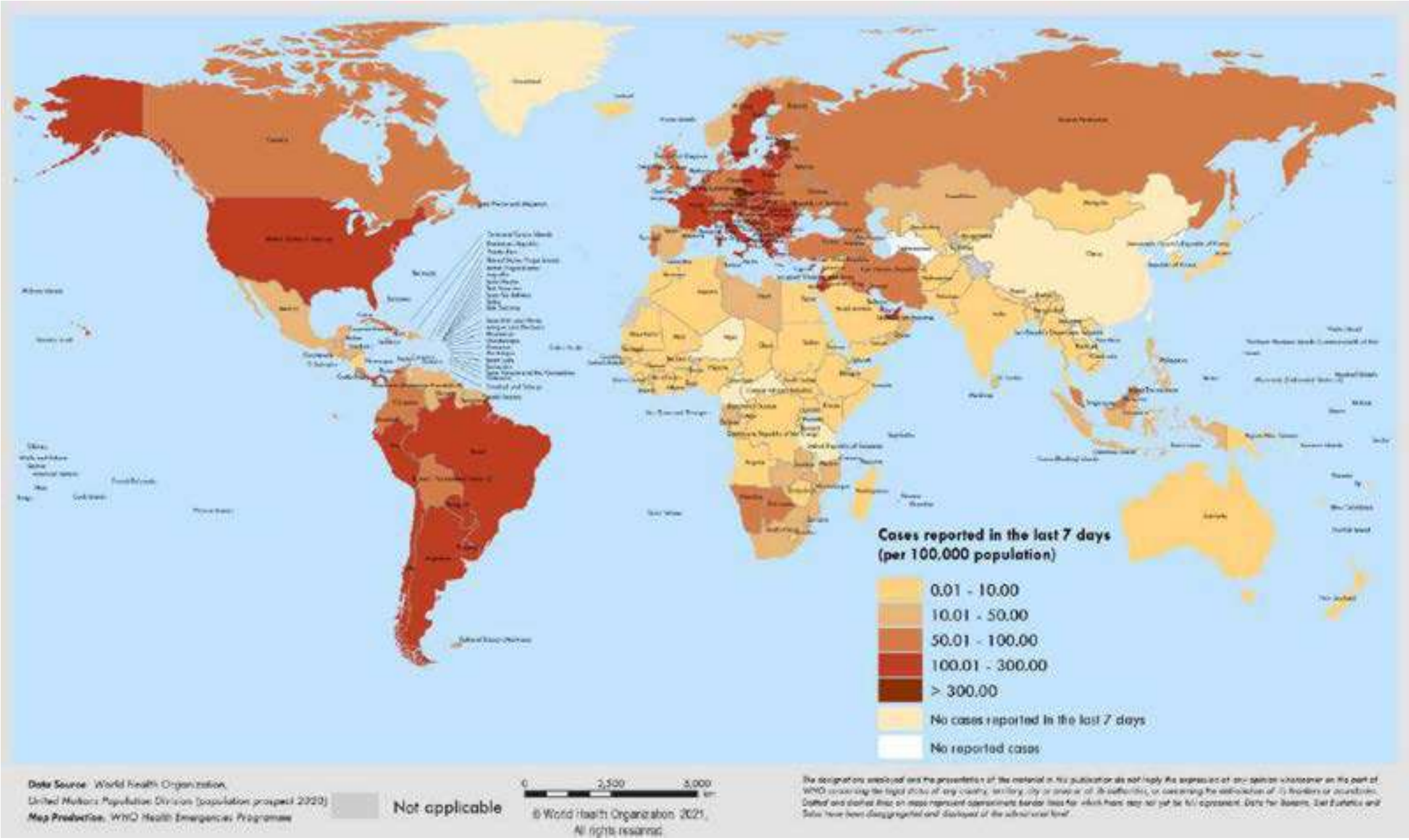
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 129 929 (42%)	6%	50 426 060 (44%)	33 951 (53%)	-1%	1 205 245 (48%)
Europe	1 055 781 (40%)	9%	38 679 334 (34%)	21 302 (34%)	-15%	861 906 (34%)
South-East Asia	171 419 (6%)	9%	13 517 009 (12%)	3 217 (5%)	47%	208 013 (8%)
Eastern Mediterranean	207 177 (8%)	14%	6 388 249 (6%)	2 562 (4%)	5%	144 479 (6%)
Africa	50 324 (2%)	-24%	2 840 208 (3%)	1 659 (3%)	-19%	71 991 (3%)
Western Pacific	44 193 (2%)	-2%	1 620 582 (1%)	786 (1%)	-35%	29 006 (1%)
Global	**2 658 823 (100%)**	**7%**	**113 472 187 (100%)**	**63 477 (100%)**	**-6%**	**2 520 653 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number; global totals may not equal 100%.*
**See *Annex: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Figure 2. COVID-19 cases per 100 000 population reported in the last seven days by countries, territories and areas, 22 February through 28 February 2021**



**See *Annex: Data, table and figure notes*

Special Focus: COVID-19 and international trade, travel and points of entry

The COVID-19 pandemic has had, and is having, a substantial impact on international trade and travel. In 2020, world passenger traffic fell by 2.7 billion passengers, or by 60% compared to 2019, causing a US$ 371 billion loss of gross passenger operating revenues of airlines[1]. In addition to the economic loss, travel restrictions are also having a direct impact on the lives and livelihoods of transport workers, most notably in the maritime sector. The International Maritime Organization (IMO) estimates that around 400 000 seafarers have been stranded on board commercial vessels, long past the expiry of their contracts and unable to be repatriated. A similar number of seafarers urgently need to join ships to replace these individuals[2].

WHO has been engaging with and supporting stakeholders in the travel sector across all points of entry (airports, ports, and ground crossings) since the start of the pandemic, and produced its first travel-related guidance in March 2020. All guidance documents can be found here.

Managing the safe and effective recovery of international travel through a risk-based approach

To promote a safe and effective gradual recovery of international travel while managing the public health risks associated with the cross-border movement of people and goods, key stakeholders – including Member States, the travel industry and its affiliates, and the general public – requested further guidance from WHO on how to implement a risk-based approach to international travel. This was also echoed in the advice to WHO by the IHR (2005) Emergency Committee for COVID-19 at both its fifth meeting in October 2020, and its sixth meeting in January 2021.

In December 2020, WHO published guidance for national authorities on a step-by-step approach to decision-making for calibrating public health risk mitigation measures for international travel in the context of COVID-19. It is divided into three main sections: risk assessment, risk mitigation and risk communication. Key points include:

- During the COVID-19 pandemic, international travel should always be prioritized for emergencies and humanitarian actions, travel of essential personnel, repatriations, and cargo transport for essential supplies such as food, medicines, and fuel;
- As countries gradually resume international travel, introduction of risk mitigation measures aiming to reduce travel associated exportation, importation and onward transmission of SARS-CoV-2 should not unnecessarily interfere with international traffic and should be based on a thorough risk assessment that is conducted systematically and routinely;
- Decision- makers in Member States can conduct risk assessments through a mixed-method approach (explained in the guidance and the accompanying risk assessment tool) to calculate the additional burden presented by possible importation of COVID-19 cases and decide policies on the basis of whether they have the capacity to cope with this burden;
- International travellers should not be considered by nature as suspected COVID-19 cases or contacts. Therefore, WHO does not recommend travellers as a priority group for testing;
- The use of "immunity certificates" for international travel in the context of COVID-19 is not currently supported by scientific evidence and is therefore not recommended by WHO; and
- The overall health and well-being of communities should be at the forefront of considerations when deciding on and implementing international travel-related measures.

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[1] ICAO (2021). Effects of Novel Coronavirus (COVID-19) on Civil Aviation: Economic Impact Analysis. https://www.icao.int/sustainability/Documents/COVID-19/ICAO_Coronavirus_Econ_Impact.pdf

[2] UN News (2021). 'An unwanted prison sentence' for seafarers stuck at home and stranded at sea. https://news.un.org/en/story/2021/01/1081482

COVID-19 diagnostic testing in the context of international travel

To limit transmission and reduce morbidity and mortality from COVID-19, countries around the globe have implemented public health and social measures (PHSM) for epidemic control. One measure considered by many countries and transport sector stakeholders is testing for SARS-CoV-2 in international travellers prior to travel, at points of entry or after travel. In addition to the risk-based travel guidance, WHO has published a scientific brief on diagnostic testing, examining the requirements and issues around testing as a tool for mitigating cross-border transmission of SARS-CoV-2. It provides an overview of SARS-CoV-2 diagnostic assays and their performance and suitability for potential use in SARS-CoV-2 testing prior to departure, at points of entry and on arrival. It also raises the following key points:

- Testing at borders is not a substitute for other public health measures, especially robust contact tracing systems;
- WHO recommends that confirmed, probable and suspected cases for COVID-19 and contacts of confirmed or probable cases do not travel. WHO also advises that travellers who are unwell or any persons who are at an elevated risk for developing severe disease and dying from SARS-CoV-2 infection, including people 60 years of age or older or those with chronic diseases or underlying health conditions, delay or avoid travelling internationally to and from areas with COVID-19 community transmission; and
- A thorough risk assessment should be a key element of the decision-making process regarding SARS-CoV-2 testing policies for international travellers. Additionally, resources and capacity to offer testing for international travellers should be assessed critically to avert negative impact on testing in high-risk settings and high-risk groups.

Impact of new variants of concern on international travel restrictions

As previously reported, evidence suggests that some newly identified variants of concern may have increased transmissibility as compared to previously circulating variants. It is likely that there will continue to be elevated risks of the exportation and importation of cases between countries via international travel, including cases of the new variants of concern. The impact on countries will depend on multiple factors including their epidemiological situation, the capacity of their health systems, and the implementation of other public health and social measures, as explained in the WHO risk-based travel guidance.

Any measures imposed to prevent the importation of SARS-CoV-2 variants of concern must, therefore, be time limited; not prejudiced towards countries readily sequencing and sharing findings; based on thorough assessments of risk; and continuously adapted to emerging information.

Considerations regarding COVID-19 vaccination for international travellers

Following the advice of the IHR (2005) Emergency Committee for COVID-19 after its sixth meeting in January 2021, WHO published an interim position paper on considerations regarding proof of COVID-19 vaccination for international travellers. At the present time, national authorities and conveyance operators should not introduce requirements of proof of COVID-19 vaccination for international travel as a condition for departure or entry, given that there are still critical unknowns regarding the efficacy of vaccination in reducing transmission; duration of protection offered by vaccination; whether vaccination offers protection against asymptomatic infection; and possible exemption of people who have antibodies against SARS-CoV-2. In addition, considering that there is limited availability of vaccines, preferential vaccination of travellers could result in inadequate supplies of vaccines for priority populations considered at high risk of severe COVID-19. WHO also recommends that people who are vaccinated should not be exempt from complying with other travel risk-reduction measures. Should the requirement of proof of COVID-19 vaccination for international travellers be introduced in the future in accordance with IHR provisions, vaccines must be approved by WHO, be of suitable quality and universally available.

WHO is working with partners to establish a governance framework and specifications for a digital vaccination certificate for possible use at both national and international levels. Regardless of any technology implemented in the future, the COVID-19 vaccination status of international travellers should be recorded

through the International Certificate for Vaccination and Prophylaxis based on the model presented in Annex 6 of the IHR. The same format could be adapted once WHO pre-qualified COVID-19 vaccines become universally available, and relevant recommendations are provided under the IHR.

Systematically reviewing the evidence available to inform and update WHO's travel guidance

WHO commissioned a systematic review, with support from the Cochrane collaboration, on the evidence available up to June 2020 on the effectiveness of travel measures on reducing international transmission of COVID-19[3]. Subsequently, since October 2020, WHO has been convening the International Travel and Health Guideline Development Group (ITH GDG) to develop guidance documents based on systematic reviews of the evidence available on the efficacy, safety and harms of specific public health interventions for the mitigation of SARS-CoV-2 transmission before, during and after travel. The ITH GDG is currently focusing on air travel, which will be followed by maritime travel and travel via land.

The first publication, Evidence to recommendations: COVID-19 mitigation in the aviation sector, describes the methodological approaches underpinning the work of the ITH GDG and presents an analytic framework that will inform interim guidance and recommendations. It presents the nine questions being addressed, which relate to infection prevention and control (IPC), health screening, quarantine and isolation, testing, contact tracing, risk communication and restriction of air travel, among others.

The second publication, Evidence to recommendations: Methods used for assessing health equity and human rights considerations in COVID-19 and aviation, describes the process that WHO is undertaking to assess the reporting of key factors related to health equity and human rights in the primary literature of specific public health interventions as they relate to COVID-19 and aviation. Guidance documents to address these nine questions are currently being developed, using the methodologies described in these documents and will be published in the coming weeks.

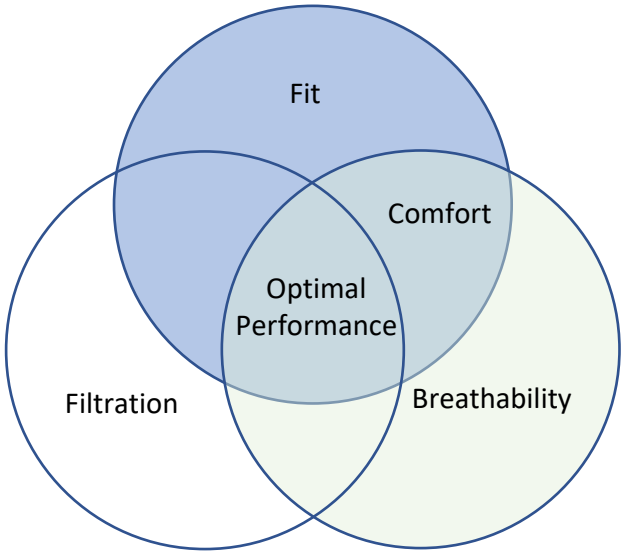
[3] Cochrane (2020). Cochrane Rapid Review examines travel-related control measures to contain the COVID-19 pandemic. https://www.cochrane.org/news/cochrane-rapid-review-examines-travel-related-control-measures-contain-covid-19-pandemic

Special Focus: The importance of fit, filtration and breathability of non-medical (fabric) masks in the context of COVID-19

Since January 2020, WHO has recommended the use of masks as part of a comprehensive set of interventions to prevent the spread of SARS-CoV-2. There are many commercial non-medical (also called fabric or cloth) masks available; however, the multitude of voluntary international standards together with the absence of regulatory oversight has made it difficult for people to know if their masks are effective barriers.

When implemented with other public health and social measures, a mask can serve as an effective barrier to prevent transmission of the SARS-CoV-2 virus, provided that it fits well, has good filtration, and the wearer can easily breathe through it (Figure 3). When any of these three parameters are not optimized, the mask may be an ineffective barrier and/or uncomfortable to wear.

Figure 3. Illustration of the three essential parameters of filtration, breathability and fit



Good fit means the mask fully covers the nose, mouth and chin. There should be no leaks around the edges of the mask. The exhaled breath should be filtered through the surface of the mask.

Good filtration means the mask has the right fabric or combination of fabrics that filter droplets present in exhaled air.

Good breathability means the wearer can easily breathe through the material of the mask. Since masks are often rated in terms of their filtration, it is equally important to maximize breathability to ensure the wearer's comfort.

WHO first issued guidance on the composition of non-medical or fabric masks in June 2020 providing specific recommendations about the number of layers, their composition and performance, and the importance of fit. Where possible, to ensure adequate wearer comfort, the design and combination of textiles used in manufacturing the fabric masks should be independently tested for adequate fit, filtration and breathability. This is especially important for masks used for an extended period of time and/or in humid environments.

WHO continues to encourage governments to establish regulations for non-medical masks, and has published evidence-based recommendations on what to look for when purchasing a fabric mask, which are summarized below:

When purchasing a fabric mask, check the packaging for information that they have been laboratory tested:

- At least 70% filtration of particles or droplets measuring three microns (lower filtration is acceptable if the challenge particles/droplets are smaller);
- No more than 60 pascals of pressure difference per square centimetre (<60 Pa/cm2) (alternative measures such as air permeability or airflow resistance may be used);
- Guaranteed at least five cycles of washing with no performance reduction;
- No exhalation valves;
- Antimicrobial coatings or treatments are not required; if included, the treated layers must be away from the skin and be tested for inhalational and skin safety as per the ISO or REACH regulation requirements.

If there are no standards listed on the package, find a mask that has three layers, made up of:

- Inner layer made of absorbent cotton;
- Middle layer made of a non-woven spunbond polypropylene (i.e., a filter layer); and
- Outer layer made of a moisture resistant polyester or another layer of non-woven spunbond polypropylene.

More detailed information can be found in the annex section of the guidance document. Breathability may be altered when additional layers are added to increase filtration. For example, adding a second mask over the first may increase filtration and fit, but can also make breathing more difficult and uncomfortable. If people have to take off a mask to breathe, the barrier is naturally lost.

Finally, a non-medical/fabric mask should always be stored properly in designated plastic bags or containers before and after use and should be cleaned daily when used, with soap or detergent and preferably hot water (60 degrees). If hot water is not available, wash the mask with soap or detergent using water at room temperature followed by boiling the mask for one minute.

Single use masks should always be disposed of properly, preferably into a closed bin after use. Masks should never be left out after use, as used masks may contain virus which may be transmitted to the wearer or others.

WHO continues to closely monitor masks that are being developed by industry, and encourages research into textile combinations and innovative designs that maximize fit, filtration, breathability and overall comfort. Consultations with scientists, ministries of health and public health institutions continue, and updates will be provided as the science in this field evolves.

For complete information on the selection of a mask, how to wear and maintain it, visit the WHO mask webpage.

WHO technical guidance for mask use in the context of COVID-19 can be found here.

Special Focus: Update on SARS-CoV-2 Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, continues to monitor the public health events associated with SARS-CoV-2 variants and provides updates as new information becomes available. Further information on the background of the variants of concern (VOC) is available from previously published Disease Outbreak News and recent publications of the Weekly Epidemiological Update. Here we provide an update on the geographical distribution of three VOCs as reported by countries, territories and areas (hereafter countries) as of 2 March 2021 (Table 2, Annex 2). This information should be interpreted with due consideration of limitations of ongoing surveillance, including but not limited to differences between countries in sequencing capacity and which samples are prioritized for sequencing. WHO continues to advocate for strengthening surveillance and sequencing capacity, and a systematic approach to provide a representative indication of the extent of variant transmission. New potential variants of interest (VOIs) or VOCs are currently under review and may be added to future updates.

Although many countries worldwide are currently experiencing a decline in overall SARS-CoV-2 infections likely as a result of the public health and social measures (PHSM) implemented and various vaccination programme implementations, there has been an increased number of reports of variants which are of concern. Many countries across all six WHO regions have started to report increases in new cases of COVID-19 in the past month, while it is difficult to ascertain the exact proportion of all new cases which may be attributable to VOIs and VOCs, summaries on the past week's updates on VOC 202012/01, 501Y.V2 and P.1 variants of concern are outlined below.

Table 2: Key characteristics of circulating variants of concern (as of 1 March 2021)*

Nextstrain clade	20I/501Y.V1	20H/**501Y.V2**†	20J/501Y.V3
PANGO lineage	B.1.1.7	B.1.351	B.1.1.28.1, alias **P.1**†
GISAID clade	GR	GH	GR
Alternate names	**VOC 202012/01**†	VOC 202012/02	-
First detected by	United Kingdom	South Africa	Brazil / Japan
Earliest sample date	20 September 2020	Early August 2020	December 2020
Key spike mutations	• N501Y • D614G • A570D • P681H • H69/V70 deletion • Y144 deletion	• N501Y • D614G • E484K • K417N • L242/A243/L244 deletion	• N501Y • D614G • E484K • K417N
Key mutation in common	S106/G107/F108 deletion in non-structural protein 6 (nsp6)		
Number of countries reporting cases (newly reported in last week)**	106 (5)	56 (5)	29± (1)

** A more detailed version of this table is available in the previous Weekly Epidemiological Update, and an updated version will be available in the next issue.*

†While work is ongoing to establish an easy-to-pronounce and non-stigmatizing nomenclature for VOIs and VOCs, these are the names by which they will be referred to in this publication.

***Includes official and unofficial reports of VOCs detected in countries among travellers (imported cases) or community-based samples.*

± One country was removed and another added this week, resulting in the same total as reported in 23 February update

Proposed working definitions for SARS-CoV-2 VOIs and VOCs

As a supplement to last week's issue, a special edition was published with an overview of the working definitions for SARS-CoV-2 variants of interest and variants of concern, and the associated actions WHO will take to support Member States, their national public health institutes and reference laboratories, along with the recommended actions Member States should take. These definitions will be reviewed regularly and updated as necessary.

VOC 202012/01

Since our last update on 23 February, VOC 202012/01 has been detected in five additional countries. As of 2 March, a total of 106 countries across all six WHO regions have reported cases of this variant (Figure 4). Community transmission has been reported in at least 42 countries across four WHO regions, noting that transmission classification is currently incomplete for 35 (33%) countries reporting this variant.

Figure 4. Countries, territories and areas reporting VOC 202012/01, as of 2 March 2021

501Y.V2

Since the last update on 23 February, 501Y.V2 has been reported from five additional countries – now totalling 56 countries across all six WHO regions (Figure 5). Community transmission of 501Y.V2 has been reported in eight countries across three WHO regions, noting the transmission classification is currently incomplete for 42 (75%) countries reporting this variant.

Figure 5. Countries, territories and areas reporting 501Y.V2, as of 2 March 2021

P.1

Since our last update, one country has corrected their reporting, and reporting from another amounted to one additional country. To date, this variant is reported in 29 countries across all six WHO regions (Figure 6). Community transmission of P.1 has been reported in at least three countries in one WHO region, noting the transmission classification is currently incomplete for nine (31%) countries reporting this variant.

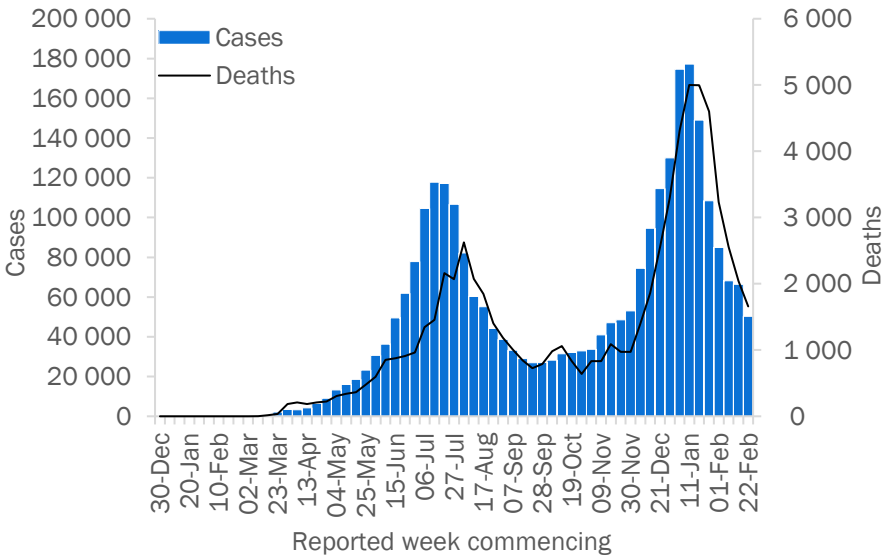
Figure 6. Countries, territories and areas reporting P.1, as of 2 March 2021

WHO regional overviews

African Region

In the past week, the African Region reported over 50 000 new cases and 1500 new deaths, a 24% and 19% decrease respectively compared to the previous week. This represents the largest decline as a percentage in new cases and the second largest decline of new deaths globally. In the region new cases in the past week rose in 17 of 49 (36%) countries and fell in 30 of 49 (64%). This week new deaths increased in 13 of 49 (28%) countries and declined in 24 of 49 (53%).

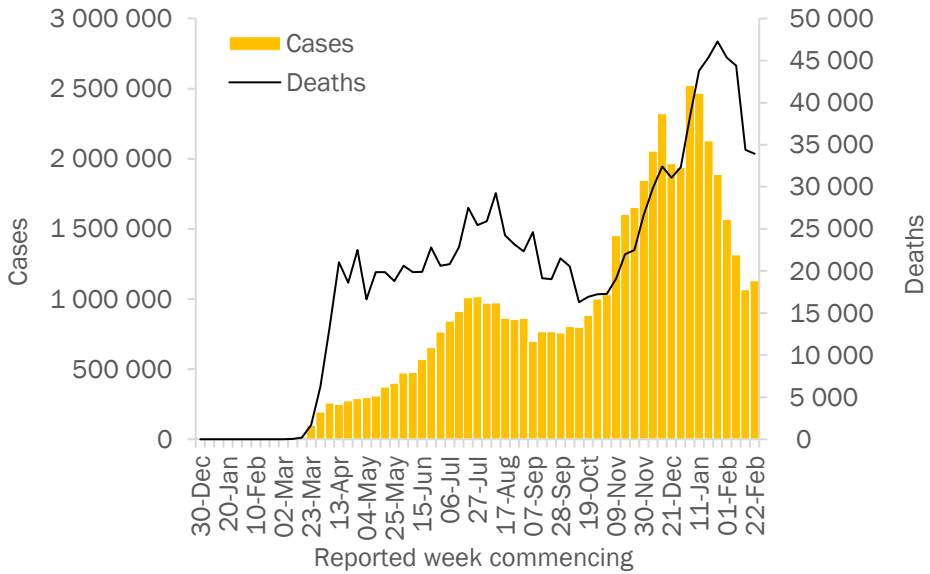
The highest numbers of new cases were reported in South Africa (9858 new cases; 16.6 new cases per 100 000 population; a 20% decrease), Ethiopia (6196 new cases; 5.4 new cases per 100 000; a 1% increase), and Nigeria (3864 new cases; 1.9 new cases per 100 000; a 34% decrease). The same countries reported the highest number of new deaths in the past week: South Africa (1001 new deaths; 1.7 new deaths per 100 000; an 11% decrease), Ethiopia (83 new deaths; 0.1 new deaths per 100 000; an 8% decrease), and Nigeria (74 new deaths; <0.1 new deaths per 100 000; a 12% decrease).



Region of the Americas

Over 1.1 million new cases and just under 34 000 new deaths were reported in the Region of the Americas this week, a 6% increase and 1% decrease respectively compared to the previous week. This represents the first rise in new cases since the week ending 10 January. This week, new cases rose in 22 of 56 (39%) countires and fell in 24 of 56 (43%). This week, new deaths increased in 11 of 56 (20%) countries and declined in 20 of 56 (36%).

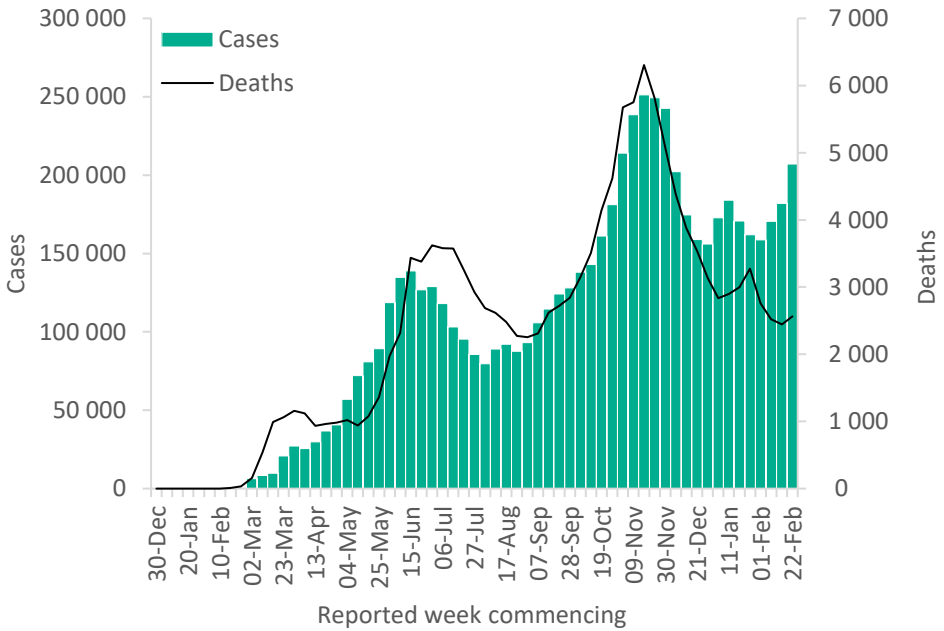
The highest numbers of new cases were reported from the United States of America (472 904 new cases; 142.9 new cases per 100 000 population; a 2% decrease), Brazil (373 954 new cases; 175.9 new cases per 100 000; an 18% increase) and Argentina (49 516 new cases; 109.6 new cases per 100 000; a 50% increase). The highest numbers of new deaths were reported from the United States of America (14 866 new deaths; 4.5 new deaths per 100 000; a 1% increase), Brazil (8070 new deaths; 3.8 new deaths per 100 000; an 11% increase), and Mexico (5509 new deaths; 4.3 new deaths per 100 000; a 14% decrease).



Eastern Mediterranean Region

In the past week, the Eastern Mediterranean Region reported over 207 000 new cases, a 14% increase compared to last week. The region reported just over 2500 new deaths, a 5% increase. Across the region 14 of 22 (64%) countries reported increases in new cases and 8 of 22 (36%) declined this week. New deaths rose in 13 of 22 countries (59%) and fell in 7 of 22 (32%).

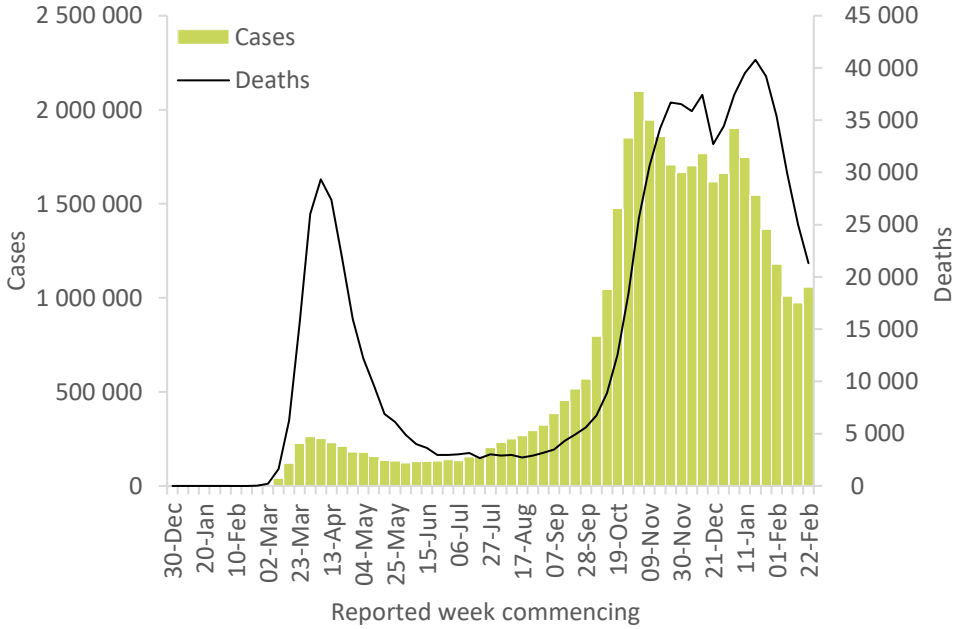
The three countries reporting the highest numbers of new cases this week were the Islamic Republic of Iran (57 078 new cases; 68 new cases per 100 000 population; a 3% increase), Iraq (27 491 new cases; 68.3 new cases per 100 000; a 19% increase) and Jordan (26 685 new cases; 261.5 new cases per 100 000; a 78% increase). The highest numbers of new deaths this week have been reported in the Islamic Republic of Iran (571 new deaths; 0.7 new deaths per 100 000 population; a 9% increase), Lebanon (355 new deaths; 5.2 new deaths per 100 000; a 6% increase) and Egypt (341 new deaths; 0.3 new deaths per 100 000; a 6% decrease).



European Region

The European Region reported over 1 million new cases and over 21 000 new deaths, an increase of 9% and decrease of 15% respectively when compared to the previous week. This represents the first rise in new cases since the week ending 10 January, and reverses declines made over the previous two reporting weeks. This week new cases rose in 36 of 61 (59%) countries and fell in 22 of 61 (36%) while new deaths rose in 16 of 61 countries (26%) and fell in 30 of 61 (49%).

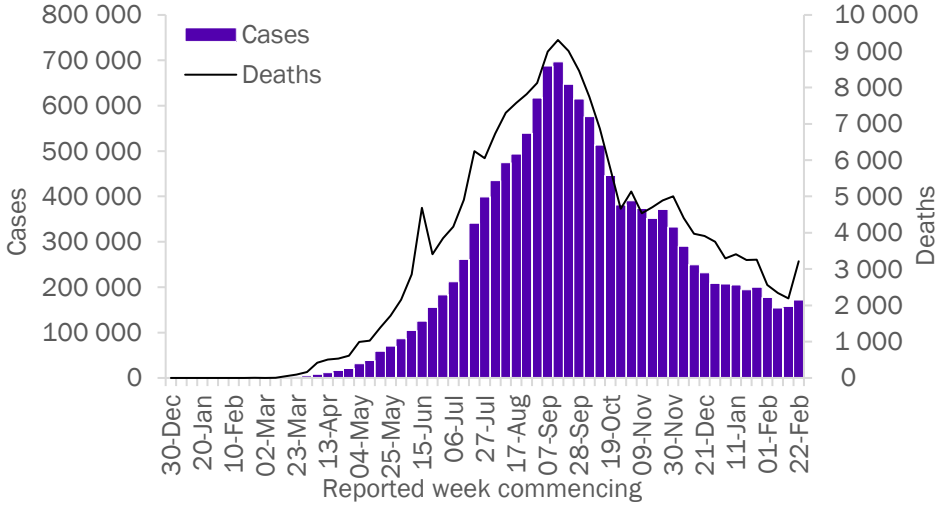
The three countries reporting the highest numbers of new cases were France (149 959 new cases; 229.7 new cases per 100 000; a 14% increase), Italy (112 029 new cases; 185.3 new cases per 100 000; an 32% increase), and Czechia (82 321 new cases; 768.7 new cases per 100 000; a 26% increase). The highest numbers of deaths were reported from the Russian Federation (2829 new deaths; 1.9 new deaths per 100 000; an 11% decrease), the United Kingdom of Great Britain and Northern Ireland (2340 new deaths, 3.4 new deaths per 100 000, a 32% decrease, and Germany (2204 new deaths; 2.6 new deaths per 100 000; a 24% decrease).



South-East Asia Region

In the past week, the South-East Asia Region reported over 171 000 new cases, an increase of 9% compared to last week while the region reported over 3200 new deaths, a 47% increase[†]. Across the region half of the countries (5/10; 50%) reported increases in new cases and the other half (5/10; 50%) declined this week. New deaths rose in 3 of 10 countries (30%) and fell in 5 of 10 (50%).

The three countries reporting the highest numbers of new cases were India (105 080 new cases; 7.6 new cases per 100 000; a 21% increase), Indonesia (57 721 new cases; 21.2 new cases per 100 000; a 5% decrease) and Sri Lanka (3410 new cases; 15.9 new cases per 100 000; a 26% decrease). The three countries reporting the highest numbers of new deaths this week were Indonesia (1665 new deaths; 0.6 new deaths per 100 000; a 21% increase), India (749 new deaths; 0.1 new deaths per 100 000; a 14% increase) and Nepal (712 new deaths; 2.4 new deaths per 100 000[†])

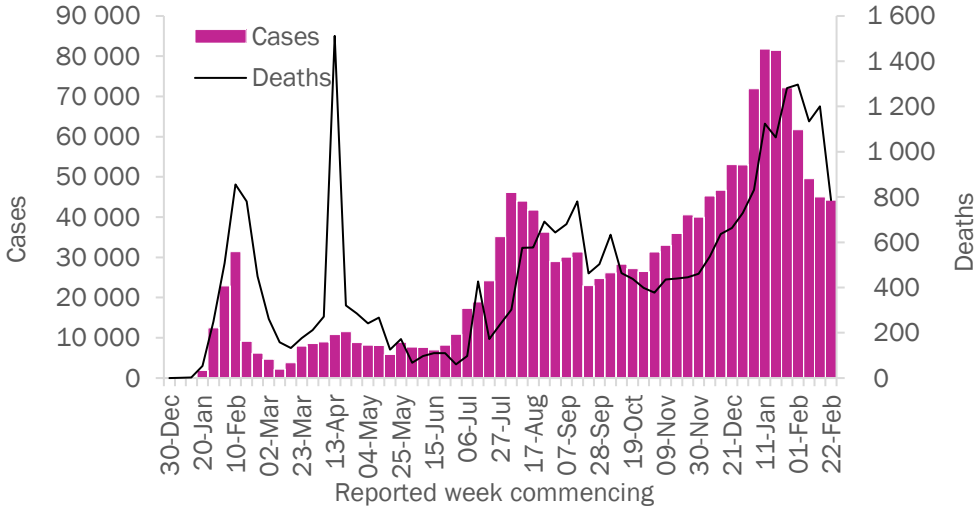


[†]The number of new deaths includes additional COVID-19 deaths in the past one year reported from different bodies managing COVID-19 pandemic within Nepal. The temporal distribution of these deaths is being confirmed

Western Pacific Region

The Western Pacific Region reported just over 44 000 new cases the past week, a 2% decrease compared to the previous week and reported just under 800 new deaths, a 35% decrease. Of the 22 countries in the region the number of new cases rose in 6 (27%) this week while they fell in 10 of 22 (45%). The number of new deaths increased in 1 of 22 countries (14%) and declined in 5 of 22 (23%) this week.

The three countries reporting the highest numbers of new cases in the region this week were Malaysia (18 043 new cases; 55.7 new cases per 100 000; a 2% decrease), the Philippines (14 959 new cases; 13.7 new cases per 100 000; a 24% increase) and Japan (7233 new cases; 5.7 new cases per 100 000; a 28% decrease). The three countries reporting the highest numbers of new deaths this week were Japan (443 new deaths; 0.4 new deaths per 100 000; a 12% decrease), the Philippines (221 new deaths; 0.2 new deaths per 100 000; a 61% decrease) and Malaysia (70 new deaths; 0.2 new deaths per 100 000; a 25% decrease).



Key weekly updates

WHO Director-General quote of the week

<vaccine> production, including licensing and technology transfer,

Opening remarks at the media briefing on COVID-19, 26 February 2021

2021 COVID-19 Strategic Preparedness and Response Plan

COVID-19 Strategic Preparedness and Response Plan (SPRP 2021)

Vaccinations

ChAdOx1-S [recombinant], COVID-19 vaccine

COVID-19 vaccine doses shipped by the COVAX Facility head to Ghana, marking beginning of global rollout

No-fault compensation programme for COVID-19 vaccines is a world first

Oxygen supply

COVID-19 oxygen emergency impacting more than half a million people in low- and middle-income countries every day, as demand surges

The life-saving power of medical oxygen

WHO funding in action

How WHO transforms funding into action in regions around the world

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
  - EPI-WIN: tailored information for individuals, organizations and communities

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 28 February 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**50 324**	**2 840 208**	**253.2**	**1 659**	**71 991**	**6.4**	
South Africa	9 858	1 512 225	2 549.8	1 001	49 941	84.2	Community transmission
Ethiopia	6 196	158 053	137.5	83	2 354	2.0	Community transmission
Nigeria	3 864	155 417	75.4	74	1 905	0.9	Community transmission
Mozambique	3 804	58 772	188.0	43	630	2.0	Community transmission
Zambia	3 277	77 171	419.8	43	1 059	5.8	Community transmission
Ghana	2 930	82 586	265.8	22	594	1.9	Community transmission
Botswana	1 846	28 370	1 206.4	56	310	13.2	Community transmission
Kenya	1 655	105 648	196.5	37	1 854	3.4	Community transmission
Senegal	1 625	34 255	204.6	71	866	5.2	Community transmission
Namibia	1 349	38 644	1 520.9	16	418	16.5	Community transmission
Malawi	1 270	31 798	166.2	33	1 037	5.4	Community transmission
Algeria	1 196	112 960	257.6	21	2 979	6.8	Community transmission
Gabon	1 011	14 564	654.3	8	83	3.7	Community transmission
South Sudan	932	7 349	65.7	2	87	0.8	Community transmission
Rwanda	802	18 790	145.1	14	261	2.0	Community transmission
Côte d'Ivoire	717	32 631	123.7	7	192	0.7	Community transmission
Democratic Republic of the Congo	712	25 791	28.8	7	707	0.8	Community transmission
Guinea	591	15 894	121.0	3	89	0.7	Community transmission
Togo	583	6 851	82.8	2	83	1.0	Community transmission
Benin	491	5 634	46.5	5	70	0.6	Community transmission
Cabo Verde	325	15 324	2 756.2	4	147	26.4	Community transmission
Angola	283	20 782	63.2	8	506	1.5	Community transmission
Seychelles	264	2 592	2 635.6	1	11	11.2	Community transmission
Eswatini	238	17 002	1 465.5	5	650	56.0	Community transmission
Madagascar	233	19 831	71.6	5	297	1.1	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Zimbabwe	226	35 994	242.2	26	1 458	9.8	Community transmission
Sao Tome and Principe	208	1 786	814.9	7	28	12.8	Community transmission
Equatorial Guinea	207	6 005	428.0	2	91	6.5	Community transmission
Burkina Faso	199	11 982	57.3	3	142	0.7	Community transmission
Congo	195	8 820	159.8	1	128	2.3	Community transmission
Chad	179	3 973	24.2	7	140	0.9	Community transmission
Burundi	178	2 209	18.6	0	3	0.0	Community transmission
Eritrea	162	2 847	80.3	0	7	0.2	Community transmission
Guinea-Bissau	156	3 247	165.0	2	48	2.4	Community transmission
Gambia	148	4 691	194.1	5	148	6.1	Community transmission
Uganda	136	40 335	88.2	1	334	0.7	Community transmission
Mauritania	96	17 179	369.5	5	439	9.4	Community transmission
Comoros	81	3 571	410.6	1	144	16.6	Community transmission
Mali	73	8 365	41.3	5	352	1.7	Community transmission
Sierra Leone	38	3 887	48.7	0	79	1.0	Community transmission
Lesotho	30	10 491	489.7	7	292	13.6	Community transmission
Liberia	22	2 010	39.7	0	85	1.7	Community transmission
Mauritius	7	610	48.0	0	10	0.8	Sporadic cases
Niger	7	4 740	19.6	2	172	0.7	Community transmission
Central African Republic	1	4 997	103.5	0	63	1.3	Community transmission
Cameroon	0	33 749	127.1	0	523	2.0	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories[iii]							
Mayotte	1 069	16 861	6 180.4	10	102	37.4	Community transmission
Réunion	854	12 416	1 386.8	4	52	5.8	Community transmission
Americas	**1 129 929**	**50 426 060**	**4 930.3**	**33 951**	**1 205 245**	**117.8**	
United States of America	472 904	28 174 978	8 512.0	14 866	506 760	153.1	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Brazil	373 954	10 455 630	4 918.9	8 070	252 835	118.9	Community transmission
Argentina	49 516	2 104 197	4 655.7	946	51 946	114.9	Community transmission
Peru	46 840	1 316 363	3 992.4	1 404	46 094	139.8	Community transmission
Mexico	46 391	2 076 882	1 610.8	5 509	184 474	143.1	Community transmission
Colombia	27 791	2 244 792	4 411.7	1 007	59 518	117.0	Community transmission
Chile	25 573	821 418	4 297.0	502	20 476	107.1	Community transmission
Canada	20 886	861 472	2 282.5	339	21 915	58.1	Community transmission
Ecuador	9 502	282 599	1 601.8	200	15 713	89.1	Community transmission
Paraguay	7 919	157 603	2 209.6	126	3 152	44.2	Community transmission
Bolivia (Plurinational State of)	7 215	247 891	2 123.6	219	11 609	99.5	Community transmission
Cuba	5 677	49 161	434.0	27	318	2.8	Community transmission
Uruguay	5 165	56 542	1 627.7	38	601	17.3	Community transmission
Honduras	4 834	168 911	1 705.4	142	4 117	41.6	Community transmission
Dominican Republic	4 507	239 009	2 203.3	65	3 093	28.5	Community transmission
Panama	4 442	339 781	7 874.8	109	5 820	134.9	Community transmission
Guatemala	3 404	174 335	973.1	125	6 374	35.6	Community transmission
Venezuela (Bolivarian Republic of)	3 181	138 295	486.3	30	1 338	4.7	Community transmission
Costa Rica	2 663	204 341	4 011.3	37	2 800	55.0	Community transmission
Jamaica	1 893	22 817	770.5	26	417	14.1	Community transmission
El Salvador	1 320	59 866	923.0	55	1 847	28.5	Community transmission
Saint Lucia	496	3 356	1 827.6	7	35	19.1	Community transmission
Barbados	317	2 994	1 041.8	3	33	11.5	Community transmission
Guyana	156	8 513	1 082.3	6	195	24.8	Clusters of cases
Haiti	156	12 430	109.0	3	250	2.2	Community transmission
Antigua and Barbuda	128	726	741.4	3	14	14.3	Clusters of cases
Bahamas	100	8 519	2 166.3	0	179	45.5	Clusters of cases
Belize	66	12 293	3 091.6	0	314	79.0	Community transmission
Suriname	59	8 913	1 519.4	2	170	29.0	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Saint Vincent and the Grenadines	58	1 556	1 402.6	2	8	7.2	Community transmission
Trinidad and Tobago	38	7 704	550.5	0	139	9.9	Community transmission
Nicaragua	36	5 142	77.6	1	173	2.6	Community transmission
Dominica	8	142	197.2	0	0	0.0	Clusters of cases
Grenada	0	148	131.5	0	1	0.9	Sporadic cases
Saint Kitts and Nevis	0	41	77.1	0	0	0.0	Sporadic cases
Territories[iii]							
Puerto Rico	1 209	100 044	3 497.0	75	2 032	71.0	Community transmission
Guadeloupe	513	9 968	2 491.2	4	164	41.0	Community transmission
Aruba	251	7 804	7 309.4	1	71	66.5	Community transmission
Martinique	153	6 746	1 797.7	0	45	12.0	Community transmission
Saint Barthélemy	137	612	6 191.2	0	0	0.0	Clusters of cases
Turks and Caicos Islands	101	2 099	5 421.3	0	14	36.2	Clusters of cases
French Guiana	98	16 627	5 566.8	2	85	28.5	Community transmission
Saint Martin	98	1 554	4 019.8	0	12	31.0	Community transmission
United States Virgin Islands	71	2 646	2 533.9	0	25	23.9	Community transmission
Curaçao	42	4 708	2 869.1	0	22	13.4	Community transmission
Sint Maarten	24	2 051	4 782.9	0	27	63.0	Community transmission
Bonaire	19	406	1 941.2	0	4	19.1	Community transmission
Cayman Islands	10	438	666.5	0	2	3.0	Sporadic cases
Bermuda	6	705	1 132.1	0	12	19.3	Sporadic cases
Falkland Islands (Malvinas)	2	51	1 464.3	0	0	0.0	No cases
Anguilla	0	18	120.0	0	0	0.0	Sporadic cases
British Virgin Islands	0	153	506.0	0	1	3.3	Clusters of cases
Montserrat	0	20	400.1	0	1	20.0	Sporadic cases
Saba	0	6	310.4	0	0	0.0	No cases
Saint Pierre and Miquelon	0	24	414.2	0	0	0.0	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	**207 177**	**6 388 249**	**874.1**	**2 562**	**144 479**	**19.8**	
Iran (Islamic Republic of)	57 078	1 623 159	1 932.5	571	59 980	71.4	Community transmission
Iraq	27 491	692 241	1 721.0	138	13 383	33.3	Community transmission
Jordan	26 685	386 496	3 788.0	132	4 675	45.8	Community transmission
United Arab Emirates	20 419	388 594	3 929.0	105	1 213	12.3	Community transmission
Lebanon	19 404	372 775	5 461.5	355	4 652	68.2	Community transmission
Pakistan	8 951	578 797	262.0	274	12 837	5.8	Community transmission
Kuwait	6 568	189 890	4 446.5	39	1 078	25.2	Community transmission
Tunisia	4 972	232 615	1 968.2	219	7 974	67.5	Community transmission
Bahrain	4 544	121 778	7 156.8	24	444	26.1	Clusters of cases
Egypt	4 286	181 829	177.7	341	10 639	10.4	Clusters of cases
Qatar	3 230	163 197	5 664.5	1	257	8.9	Community transmission
Libya	3 133	132 458	1 927.7	86	2 174	31.6	Community transmission
Morocco	2 462	483 410	1 309.7	67	8 615	23.3	Clusters of cases
Saudi Arabia	2 370	377 061	1 083.1	31	6 488	18.6	Sporadic cases
Oman	2 094	140 588	2 753.1	13	1 562	30.6	Community transmission
Somalia	1 102	6 991	44.0	37	231	1.5	Community transmission
Syrian Arab Republic	390	15 533	88.8	27	1 023	5.8	Community transmission
Sudan	170	30 347	69.2	14	1 880	4.3	Community transmission
Yemen	112	2 273	7.6	13	632	2.1	Community transmission
Afghanistan	110	55 714	143.1	11	2 443	6.3	Clusters of cases
Djibouti	43	6 065	613.9	0	63	6.4	Sporadic cases
Territories[iii]							
occupied Palestinian territory	11 563	206 438	4 046.7	64	2 236	43.8	Community transmission
Europe	**1 055 781**	**38 679 334**	**4 143.9**	**21 302**	**861 906**	**92.3**	
France	149 959	3 671 208	5 624.3	2 165	85 872	131.6	Community transmission
Italy	112 029	2 907 825	4 809.4	2 021	97 507	161.3	Clusters of cases
Czechia	82 321	1 235 480	11 536.9	1 125	20 339	189.9	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Russian Federation	81 353	4 246 079	2 909.6	2 829	86 122	59.0	Clusters of cases
Poland	68 219	1 706 986	4 510.3	1 598	43 769	115.6	Community transmission
The United Kingdom	64 844	4 170 523	6 143.4	2 340	122 705	180.8	Community transmission
Turkey	61 288	2 693 164	3 193.3	520	28 503	33.8	Community transmission
Germany	55 777	2 442 336	2 915.0	2 204	70 045	83.6	Community transmission
Ukraine	43 393	1 347 849	3 081.9	879	25 982	59.4	Community transmission
Netherlands	32 188	1 083 961	6 326.1	343	15 542	90.7	Community transmission
Hungary	25 576	428 599	4 436.7	675	14 974	155.0	Community transmission
Spain	22 774	3 180 212	6 801.9	529	68 813	147.2	Community transmission
Serbia	22 328	456 450	6 554.6	108	4 429	63.6	Community transmission
Sweden	22 145	657 309	6 508.5	38	12 826	127.0	Community transmission
Romania	21 888	799 164	4 154.2	492	20 287	105.5	Community transmission
Israel	17 883	764 791	8 835.9	116	5 669	65.5	Community transmission
Belgium	15 971	771 510	6 656.9	159	22 071	190.4	Community transmission
Slovakia	15 940	308 083	5 642.9	684	7 189	131.7	Clusters of cases
Austria	13 888	453 767	5 038.3	147	8 394	93.2	Community transmission
Greece	10 913	189 831	1 821.3	196	6 468	62.1	Community transmission
Bulgaria	10 267	246 706	3 550.5	328	10 167	146.3	Clusters of cases
Belarus	8 969	285 959	3 026.2	63	1 966	20.8	Community transmission
Republic of Moldova	8 611	184 856	4 582.5	164	3 924	97.3	Community transmission
Estonia	7 984	65 600	4 945.2	54	589	44.4	Clusters of cases
Portugal	7 505	803 844	7 883.4	379	16 276	159.6	Clusters of cases
Albania	7 153	106 215	3 690.8	122	1 775	61.7	Clusters of cases
Kazakhstan	5 625	262 725	1 399.2	78	3 389	18.0	Clusters of cases
Slovenia	5 375	189 630	9 121.5	24	4 110	197.7	Clusters of cases
Switzerland	5 007	552 290	6 381.4	30	9 219	106.5	Community transmission
Latvia	4 701	85 810	4 549.4	76	1 614	85.6	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Ireland	4 602	218 980	4 434.8	178	4 313	87.3	Community transmission
Lithuania	3 654	199 145	7 315.4	70	3 244	119.2	Community transmission
Denmark	3 651	210 732	3 638.2	25	2 358	40.7	Community transmission
Bosnia and Herzegovina	3 641	131 690	4 013.9	93	5 088	155.1	Community transmission
North Macedonia	3 451	102 482	4 919.0	79	3 126	150.0	Community transmission
Montenegro	3 428	75 833	12 074.0	49	999	159.1	Clusters of cases
Finland	3 122	56 407	1 018.0	16	742	13.4	Community transmission
Croatia	3 028	242 973	5 918.6	97	5 526	134.6	Community transmission
Georgia	2 403	270 758	6 787.3	75	3 510	88.0	Community transmission
Norway	1 927	70 034	1 291.8	15	622	11.5	Clusters of cases
Armenia	1 656	172 058	5 806.4	28	3 192	107.7	Community transmission
Malta	1 457	22 219	5 032.1	10	313	70.9	Clusters of cases
Luxembourg	1 345	55 313	8 836.3	14	637	101.8	Community transmission
Azerbaijan	1 294	234 267	2 310.5	23	3 218	31.7	Clusters of cases
Cyprus	1 271	34 424	2 851.2	2	231	19.1	Clusters of cases
Kyrgyzstan	344	86 229	1 321.7	6	1 464	22.4	Clusters of cases
San Marino	244	3 716	10 949.4	2	74	218.0	Community transmission
Uzbekistan	232	79 886	238.7	0	622	1.9	Clusters of cases
Andorra	177	10 849	14 041.3	3	110	142.4	Community transmission
Monaco	88	1 953	4 976.6	2	24	61.2	Sporadic cases
Liechtenstein	22	2 642	6 927.7	0	52	136.4	Sporadic cases
Iceland	4	6 049	1 772.6	0	29	8.5	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Kosovo	2 821	68 760	3 696.0	24	1 585	85.2	Community transmission
Isle of Man	26	475	558.6	0	25	29.4	No cases
Guernsey	9	819	1 296.0	0	14	22.2	Community transmission
Gibraltar	8	4 236	12 573.1	4	92	273.1	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Jersey	2	3 215	2 955.0	1	69	63.4	Community transmission
Faroe Islands	0	658	1 346.6	0	1	2.0	Sporadic cases
Greenland	0	30	52.8	0	0	0.0	No cases
South-East Asia	**171 419**	**13 517 009**	**668.7**	**3 217**	**208 013**	**10.3**	
India	105 080	11 096 731	804.1	749	157 051	11.4	Clusters of cases
Indonesia	57 721	1 329 074	485.9	1 665	35 981	13.2	Community transmission
Sri Lanka	3 410	82 890	387.1	29	464	2.2	Clusters of cases
Bangladesh	2 807	545 831	331.4	58	8 400	5.1	Community transmission
Maldives	985	19 597	3 625.4	1	61	11.3	Clusters of cases
Nepal	714	274 065	940.6	712	2 773	9.5	Clusters of cases
Thailand	536	25 951	37.2	0	83	0.1	Clusters of cases
Myanmar	155	141 890	260.8	3	3 199	5.9	Clusters of cases
Timor-Leste	10	113	8.6	0	0	0.0	Sporadic cases
Bhutan	1	867	112.4	0	1	0.1	Clusters of cases
Western Pacific	**44 193**	**1 620 582**	**82.5**	**786**	**29 006**	**1.5**	
Malaysia	18 043	298 315	921.7	70	1 121	3.5	Clusters of cases
Philippines	14 959	574 247	524.0	221	12 289	11.2	Community transmission
Japan	7 233	431 740	341.4	443	7 860	6.2	Clusters of cases
Republic of Korea	2 682	89 674	174.9	46	1 603	3.1	Clusters of cases
Mongolia	280	2 866	87.4	0	2	0.1	Clusters of cases
Cambodia	272	805	4.8	0	0	0.0	Sporadic cases
Papua New Guinea	246	1 275	14.3	2	12	0.1	Community transmission
China	209	101 878	6.9	1	4 843	0.3	Clusters of cases
Singapore	67	59 925	1 024.3	0	29	0.5	Sporadic cases
Viet Nam	64	2 432	2.5	0	35	0.0	Clusters of cases
Australia	45	28 965	113.6	0	909	3.6	Clusters of cases
New Zealand	26	2 020	41.9	0	26	0.5	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Fiji	3	59	6.6	0	2	0.2	Sporadic cases
Brunei Darussalam	1	186	42.5	0	3	0.7	Sporadic cases
Lao People's Democratic Republic	0	45	0.6	0	0	0.0	Sporadic cases
Solomon Islands	0	18	2.6	0	0	0.0	No cases
Territories[iii]							
French Polynesia	41	18 387	6 545.6	2	139	49.5	Sporadic cases
Guam	19	7 526	4 459.2	1	131	77.6	Clusters of cases
New Caledonia	3	58	20.3	0	0	0.0	Sporadic cases
Marshall Islands	0	4	6.8	0	0	0.0	No cases
Northern Mariana Islands (Commonwealth of the)	0	143	248.4	0	2	3.5	Pending
Samoa	0	4	2.0	0	0	0.0	No cases
Vanuatu	0	1	0.3	0	0	0.0	No cases
Wallis and Futuna	0	9	80.0	0	0	0.0	Sporadic cases
Global	**2 658 823**	**113 472 187**	**1 455.7**	**63 477**	**2 520 653**	**32.3**	

*See *Annex: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting variants of concern as of 2 March 2021**

Country/Territory/Area[i]	501Y.V2 (B.1.351)	P.1 (B.1.1.28.1)	VOC 202012/01 (B.1.1.7)
Argentina		Verified	Verified
Aruba			Verified
Australia	Verified		Verified
Austria	Verified		Verified
Bahrain			Verified
Bangladesh			Verified
Barbados			Verified
Belgium	Verified	Verified	Verified
Belize			Verified
Bosnia and Herzegovina			Unverified
Botswana	Verified		
Brazil		Verified	Verified
Brunei Darussalam	Verified		
Bulgaria			Verified
Cambodia			Unverified
Canada	Verified	Verified	Verified
Cayman Islands			Verified
Chile		Verified	Verified
China	Verified	Unverified	Verified
Colombia		Verified	
Comoros	Unverified		
Costa Rica	Verified		Verified
Croatia	Unverified		Verified
Cuba	Verified		
Curaçao			Verified
Cyprus			Verified
Czechia	Unverified		Verified
Democratic Republic of the Congo			Unverified

Denmark	Verified		Verified
Dominican Republic			Verified
Ecuador			Verified
Estonia	Unverified		Verified
Faroe Islands		Verified	
Finland	Verified	Verified	Verified
France	Verified	Verified	Verified
French Guiana		Verified	Verified
French Polynesia			Verified
Gambia	Verified		Verified
Georgia			Verified
Germany	Verified	Verified	Verified
Ghana	Verified		Unverified
Gibraltar			Unverified
Greece	Verified		Verified
Guadeloupe			Verified
Hungary	Unverified		Verified
Iceland			Verified
India	Verified	Verified	Verified
Indonesia			Verified
Iran (Islamic Republic of)			Verified
Iraq			Unverified
Ireland	Verified	Unverified	Verified
Israel	Verified		Verified
Italy	Unverified	Verified	Verified
Jamaica			Verified
Japan	Verified	Verified	Verified
Jordan			Verified
Kenya	Verified		
Kosovo[1]			Verified
Kuwait			Verified
Latvia			Verified
Lebanon			Verified

Libya			Verified
Liechtenstein			Verified
Lithuania			Verified
Luxembourg	Verified		Verified
Malawi	Unverified		
Malaysia			Verified
Malta	Unverified		Verified
Martinique			Verified
Mayotte	Verified		Verified
Mexico		Verified	Verified
Montenegro			Verified
Morocco			Verified
Mozambique	Verified		
Namibia	Unverified		
Nepal			Verified
Netherlands	Verified	Verified	Verified
New Zealand	Verified		Verified
Nigeria			Verified
North Macedonia			Verified
Norway	Verified		Verified
occupied Palestinian territory			Verified
Oman			Verified
Pakistan			Verified
Panama	Verified		
Peru		Verified	Verified
Philippines	Unverified		Verified
Poland	Unverified		Verified
Portugal	Verified	Unverified	Verified
Puerto Rico			Verified
Republic of Korea	Verified	Verified	Verified
Réunion	Verified	Verified	Verified

Romania			Verified
Russian Federation			Verified
Saint Barthélemy			Verified
Saint Lucia			Verified
Saint Martin			Verified
Saudi Arabia			Verified
Senegal			Unverified
Serbia			Verified
Singapore			Verified
Slovakia			Verified
Slovenia	Verified		Verified
South Africa	Verified		Unverified
Spain	Verified	Verified	Verified
Sri Lanka			Verified
Sweden	Verified	Unverified	Verified
Switzerland	Verified	Unverified	Verified
Thailand	Verified		Verified
The United Kingdom	Verified	Verified	Verified
Trinidad and Tobago			Verified
Turkey	Unverified	Unverified	Verified
United Arab Emirates	Verified	Verified	Verified
United Republic of Tanzania	Unverified		
United States of America	Verified	Verified	Verified
Uruguay			Verified
Uzbekistan			Verified
Viet Nam	Verified		Verified
Zambia	Verified		
Zimbabwe	Unverified		

**See *Annex : Data, table and figure notes*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 745 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that

are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.

- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 21 February 2021, 10 am CET

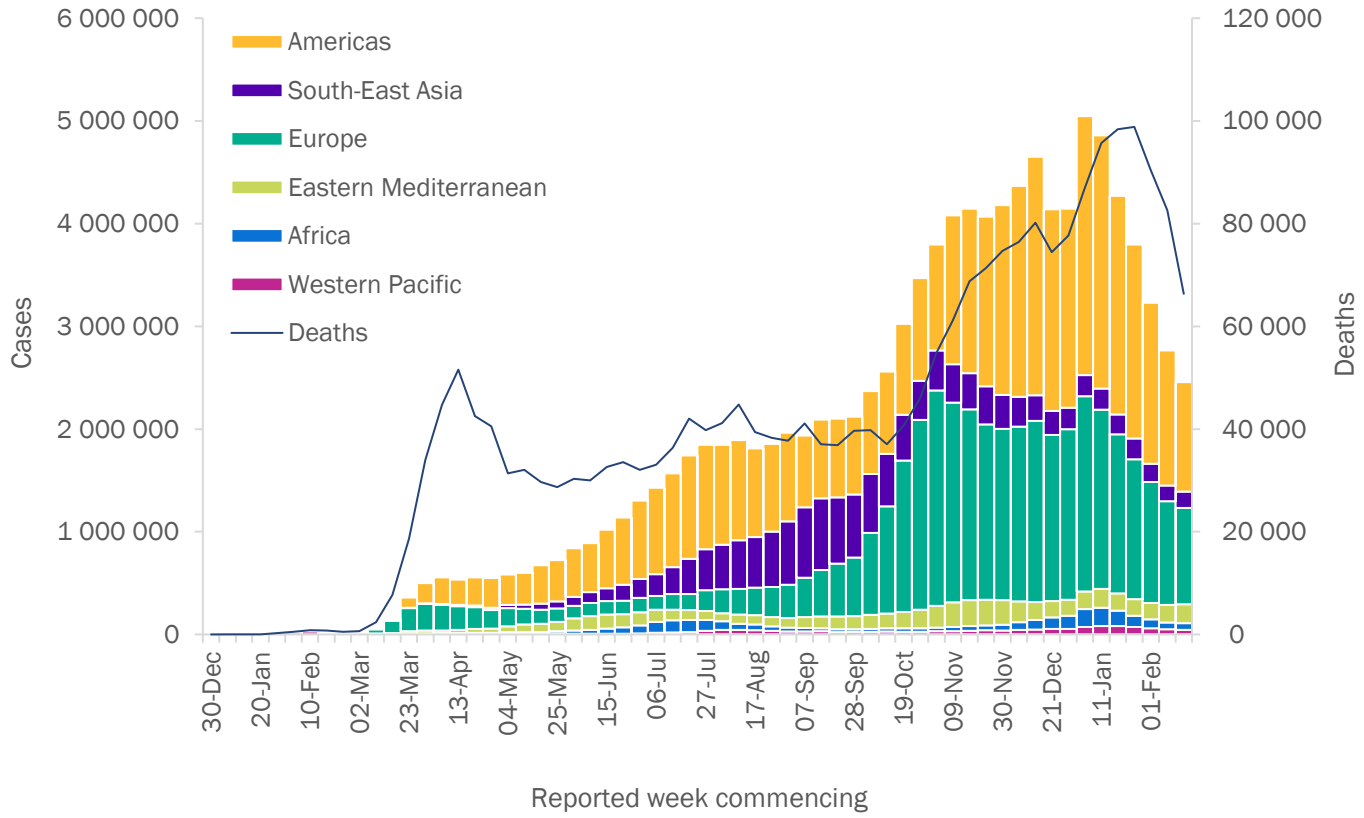
In this edition:

- Global overview
- Special focus: WHO COVID-19 vaccine policy recommendations
- Special focus: SARS-CoV-2 variants of concern
- WHO regional overviews
- Key weekly updates

Global overview

The number of global new cases reported continues to fall for the sixth consecutive week, with 2.4 million new cases last week, a 11% decline compared to the previous week (Figure 1). The number of new deaths also continued to fall for the past three weeks, with nearly 66 000 new deaths reported last week, a 20% decline as compared to the previous week. A total of four out of six WHO regions reported declines in new cases (Table 1), with only South-East Asia and the Eastern Mediterranean regions showing a small 2% and 7% increase, respectively. The Americas continue to see the greatest drops in absolute numbers of cases. Meanwhile, the number of new deaths declined in all regions apart from the Western Pacific (6% increase).

Figure 1: COVID-19 cases reported weekly by WHO Region, and global deaths, as of 21 February 2021**



**See *Annex: Data, table and figure notes*

In the past week, the five countries reporting the highest number of new cases continue to be the United States of America (480 467 new cases, a 29% decrease), Brazil (316 221 new cases, a 1% decrease), France (131 179 new cases, a 3% increase), the Russian Federation (92 843 new cases, an 11% decrease), and India (86 711 new cases, a 10% increase).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 21 February 2021**

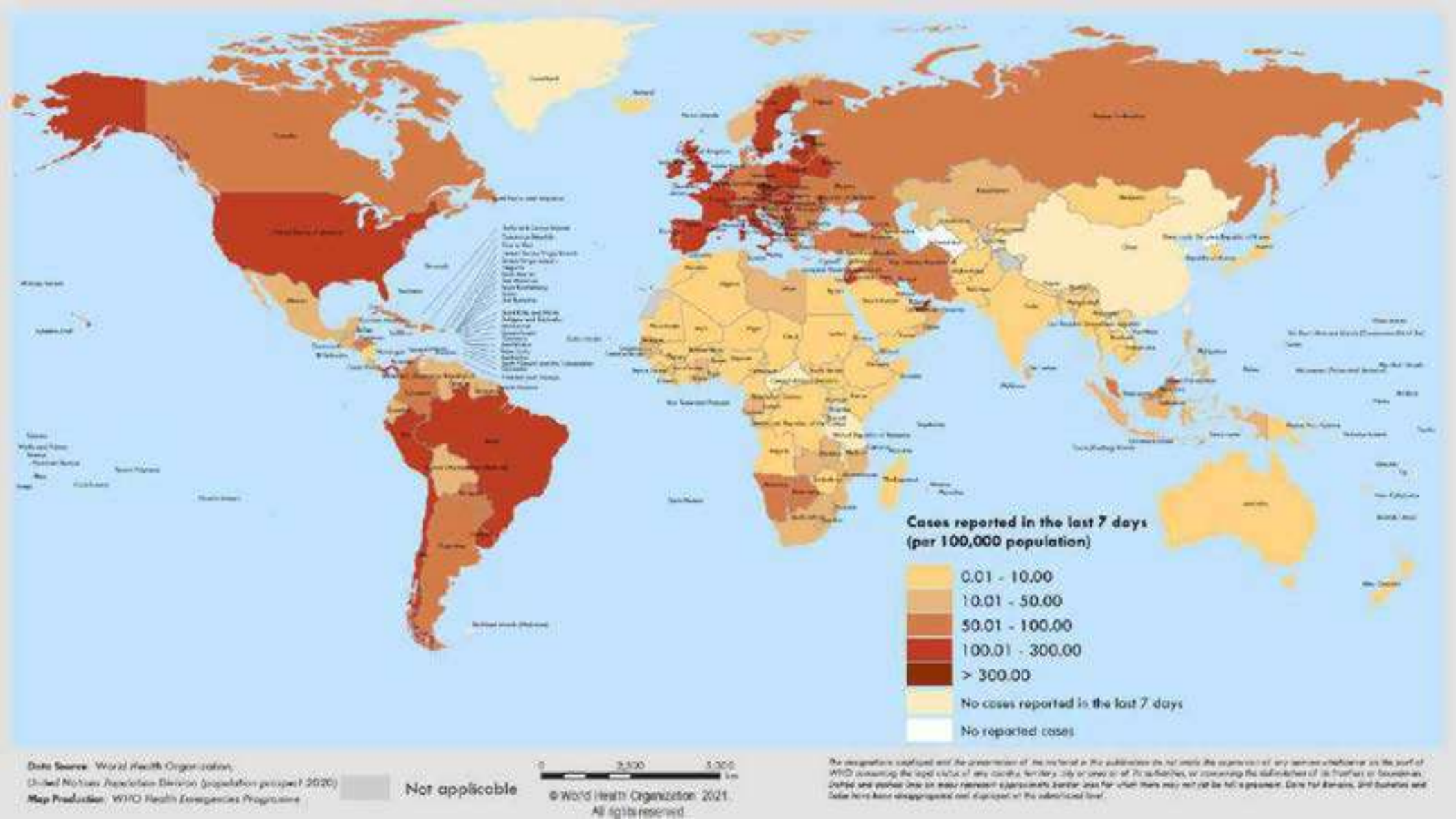
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 066 990 (43%)	-19%	49 296 115 (45%)	34 386 (52%)	-23%	1 171 294 (48%)
Europe	939 271 (38%)	-7%	37 574 211 (34%)	24 102 (36%)	-19%	838 761 (34%)
South-East Asia	157 379 (6%)	2%	13 345 590 (12%)	2 189 (3%)	-6%	204 796 (8%)
Eastern Mediterranean	181 969 (7%)	7%	6 181 023 (6%)	2 443 (4%)	-3%	141 915 (6%)
Africa	66 453 (3%)	-2%	2 789 884 (3%)	2 038 (3%)	-20%	70 332 (3%)
Western Pacific	44 964 (2%)	-9%	1 576 330 (1%)	1 201 (2%)	6%	28 220 (1%)
Global	**2 457 026 (100%)**	**-11%**	**110 763 898 (100%)**	**66 359 (100%)**	**-20%**	**2 455 331 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number; global totals may not equal 100%.*
**See *Annex: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Figure 2. COVID-19 cases per 100 000 population reported in the last seven days by countries, territories and areas, 15 February through 21 February 2021**



**See *Annex: Data, table and figure notes*

Special Focus: WHO COVID-19 vaccine policy recommendations

WHO relies on the Strategic Advisory Group of Experts on Immunization (SAGE) to issue policy recommendations on COVID-19 vaccination to Members States. Through an established methodological process rooted in evidence-based medicine, and with the support of a dedicated COVID-19 vaccine working group, SAGE has issued three sets of interim recommendations to date, covering: the Pfizer- BioNTech BNT162b2 vaccine , the Moderna mRNA-1273 vaccine , and the AstraZeneca – Oxford University AZD1222 vaccine.

The last of these reviews examined AstraZeneca core clinical data from the Phase 1-3 clinical trials. The WHO interim recommendations that ensued apply to AZD1222 (named generically as ChAdOx1-S [recombinant]) vaccine against COVID-19, developed by Oxford University (United Kingdom) and AstraZeneca, as well as to ChAdOx1-S [recombinant]) vaccines against COVID-19 produced by other manufacturers. These include the Serum Institute of India and SK Bioscience (South Korea), both of which rely on the AstraZeneca core clinical data and have demonstrated equivalence in their regulatory review. It will be the responsibility of regulatory bodies and WHO's Emergency Use Listing (EUL) process to ensure that products emerging from different manufacturing facilities are equivalent.

For each of these three vaccines, SAGE was able to issue policy recommendations because of the publication of appropriate data by the vaccine developers and on the basis that the vaccine was in the process of acquiring EUL from WHO or a marketing authorization from a stringent regulatory authority, such as the European Medicines Agency. WHO assesses vaccines with a pathway to prequalification or EUL as they become available. In that context and under exceptional circumstances, WHO will review products with authorization from a regulatory authority considered by WHO as maintaining the highest of standards, even if EUL has yet to be confirmed, such as was the case for the Moderna and AstraZeneca vaccines. It should further be noted that EUL is a WHO time-limited regulatory recommendation based on a risk-benefit assessment of limited amount of quality, safety and efficacy data for use during a public health emergency. SAGE recommendations, on the other hand, are policy recommendations to guide ministries of health and their recommending bodies and disease programmes on the use of regulated products to optimize the individual and public health benefit of vaccines. The two sets of recommendations are complementary. WHO cannot comment or make recommendations on vaccines until the manufacturer in question has chosen to share the relevant data and allows SAGE, on behalf of WHO, to conduct a formal assessment. WHO urges all manufactures to share evidence to allow prompt review and guidance by designated WHO experts and advisory groups.

SAGE does not usually make vaccine- or product-specific recommendations, issuing instead one recommendation that covers all vaccines for a given disease, unless the evidence suggests product-specific recommendations are needed. The current situation with respect to COVID-19 differs as a large variety of vaccines based on very different platform technologies is being developed, and data on the performance of each vaccine are still emerging. Products also have varying characteristics, including storage and handling requirements, such that some may be considered more suitable for certain settings than others. Consequently, SAGE is issuing product-specific recommendations for COVID-19 and will likely continue doing so for additional candidate vaccines. In the longer run, these recommendations may be regrouped into overall recommendations for COVID-19 vaccination.

SAGE began to mobilize its evidence review and recommendation process for COVID-19 vaccination policy as early as the summer of 2020. An essential starting point to this process was the preparation and release of two critical documents forming the foundation for future vaccine-specific interim recommendations. These consist of the WHO SAGE values framework for the allocation and prioritization of COVID-19 vaccination and the WHO SAGE Roadmap for Prioritizing Uses of COVID-19 Vaccines in the Context of Limited Supply, which jointly guide countries in their prioritization of target groups. The Roadmap highlights the importance of vaccinating

frontline health workers and older people with and without comorbidities first, and outlines how additional groups can then be vaccinated as more vaccine becomes available, in keeping with the local epidemiological context. The Roadmap also encourages national programmes to consider groups that are disproportionately affected by the pandemic and to continuously base vaccination decisions on a thorough risk benefit assessment.

For all three vaccines reviewed to date, SAGE concluded that the known and potential benefits outweigh the known and potential risks. The high efficacy of each of the products was acknowledged, despite insufficient data on if and how these vaccines impact virus transmission, although it is likely there will be some level of protection against transmission. These vaccines will have a beneficial effect on the high rate of severe disease and mortality caused by SARS-CoV-2 infection, a key objective of vaccination. More work is needed to understand if this is the case for all circulating variants of concern.

Based on current data for each of these three vaccines, a regimen of 2 full doses of the same vaccine is recommended, injected intramuscularly in the upper arm. This means the dosage cannot be reduced, or interchanged (i.e., if the first dose is Pfizer-BioNTech vaccine, the second should not be Moderna or AstraZeneca vaccines). There are multiple reasons for this, including a lack of research so far on interchangeability. Furthermore, each vaccine has a different minimum interval time between doses: a second dose of the Pfizer-BioNTech vaccine can be administered after three weeks; the Moderna vaccine requires a minimum interval of four weeks, which can be extended to six weeks; and the AstraZeneca vaccine requires an interval of no less than eight weeks which can be extended to twelve. This latter WHO recommendation deviates slightly from the vaccine developers, who have determined the product is sufficiently efficacious when a second dose is administered after four weeks. SAGE preferred to recommend a longer interval for the AstraZeneca vaccines based on the evidence that supported an improved vaccine performance (for efficacy and immunogenicity) when delaying the second dose by a few weeks.

With all three vaccines, it is recommended that the administration of any other vaccines against other conditions be held off for at least two weeks after vaccination against COVID-19, until data on co-administration become available.

The minimum recommended ages for COVID-19 vaccination vary only slightly between the three vaccines and SAGE confirmed there is no upper limits for any of the three vaccines. These conclusions were based on available data and will evolve when more efficacy and safety data become available. The same evidence scenario applies for specific populations such as pregnant or lactating women, as well as persons with compromised immune systems or living with HIV. For each of these groups, there is no reason to believe the vaccine would be harmful – especially since these are not vaccines containing live viruses which can replicate; however, more evidence is being sought in order to further inform WHO policy recommendations. Whenever possible, potential vaccine recipients should be informed and counselled in relation to the available data and a risk-benefit assessment of their individual case. It should be clarified that, while recommendations exist for these profiles, there are no current COVID-19 vaccination recommendations for children and adolescents.

WHO recommendations on who may be vaccinated with each of the three vaccines are summarized in Table 2, with the assumption that people falling into high-risk groups (e.g., health workers or people with co-morbidities) are being prioritized as per the WHO SAGE Roadmap on COVID-19 vaccines.

Table 2. Who can be vaccinated with which vaccine against COVID-19?

SAGE INTERIM RECOMMENDATION	Pfizer-BioNTech BNT162b2 vaccine	Moderna mRNA-1273 vaccine	Oxford University – Astra Zeneca AZD1222 vaccine
Minimum age requirement	**16** years	**18** years	**18** years
Maximum age requirement	**none**	**none**	**none**
Ok for pregnant women?	**Yes**, if in high priority group and ok'd by health care provider.	**Yes**, if in high priority group and ok'd by health care provider.	**Yes**, if in high priority group and ok'd by health care provider.
Ok for breastfeeding mothers?	**Yes**, if in high priority group.	**Yes**, if in high priority group.	**Yes**, if in high priority group.
Ok for people with compromised immune systems?	**yes**	**yes**	**yes**
Ok for people living with HIV?	**yes**	**yes**	**yes**
Ok for people previously infected with SARS-CoV-2 (confirmed by PCR test)?	**Yes**, though that person may elect to delay vaccination up to 6 months from the time of infection.	**Yes**, though that person may elect to delay vaccination up to 6 months from the time of infection.	**Yes**, though that person may elect to delay vaccination up to 6 months from the time of infection.
Ok for people with a history of severe allergic reaction (anaphylaxis)?	**no**	**no**	**No**, if anaphylactic reaction was linked to any component of the vaccine.

No studies have yet been conducted to compare these three vaccines and despite the above listed similarities, there are also notable differences such as the dose size, the number of doses per container, and the required storage conditions. These differences affect the practices around vaccination, including the handling of vaccine vials and the timeframe within which a vial must be used once thawed or brought to ambient temperatures. In some cases, the less constraining temperature requirements can make storage and distribution much easier, especially when freezing is neither needed nor recommended. However, in no way do these differences diminish the respective performance of the vaccines, which in all three cases are recognized as highly efficacious and with excellent safety profiles.

While these vaccines, and others coming through the pipeline, offer us reason to be optimistic, the current lack of evidence of their effect on transmission, circulating variants of concern, coupled with a continuing limited supply of the vaccines, mean that more data collection is required, and public health and social measures (PHSM) must continue, and should be practised by all individuals regardless of vaccination status, including use of face masks, physical distancing, hand-washing and other measures.

Special Focus: Update on SARS-CoV-2 Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, continues to monitor the public health events associated with SARS-CoV-2 variants and provides updates as new information becomes available.

Further information on the background of the variants of concern (VOCs) is available from previously published Disease Outbreak News and recent publications of the Weekly Epidemiological Update. Here we provide an update on ongoing studies and the geographical distribution of select VOCs as reported by countries, territories and areas (hereafter countries) as of 23 February 2021. New variants of potential interest or concern are continuously emerging; we provide here an update on two such variants currently under review.

Results of ongoing studies of VOCs are summarized in Table 3 below. While many countries worldwide are currently experiencing a decline in overall SARS-CoV-2 infections likely as a result of the public health and social measures (PHSM) implemented, there has been an increased number of reports of variants which are of concern. As surveillance activities at local and national levels are strengthened, including strategic genomic sequencing to detect cases infected with SARS-CoV-2 variants, the number of countries reporting VOCs has continued to increase in the past two weeks (Table 3, Figures 3, 4 and 5, Annex 2). In addition, the number of countries reporting local transmission of VOCs has increased in the same period.

Increased transmissibility has been reported for some VOCs resulting in increased incidence in settings experiencing community transmission. PHSM remain critically important to curb the spread of SARS-CoV-2, including newly reported variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the implementation of physical distancing and other PHSM has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations among COVID-19 patients. Findings from new studies evaluating transmission, severity and impact on medical countermeasures will continue to help inform PHSM employed by Member States.

Table 3: Overview of emerging information on key variants of concern, as of 23 February 2021*

Nextstrain clade	20I/501Y.V1	20H/**501Y.V2**[†]	20J/501Y.V3
Pango lineage	B.1.1.7	B.1.351	B.1.1.28.1
GISAID clade	GR	GH	GR
Alternate names	**VOC 202012/01**[†]	VOC 202012/02	**P.1**[†]
First detected by	United Kingdom	South Africa	Brazil / Japan
First appearance	20 September 2020	Early August 2020	December 2020
Key spike mutations	H69/V70 deletion; Y144 deletion; N501Y; A570D; D614G; and P681H	L242/A243/L244 deletion; N501Y; D614G; E484K; and K417N	N501Y; D614G; E484K; and K417N
Key mutation in common	S106/G107/F108 deletion in Non-Structural Protein 6 (NSP6)		
Transmissibility*	Increased[1] (36%-75%)[2], increased secondary attack rate[3] (10% to 13%)	Increased [1.50 (95% CI: 1.20-2.13) times more transmissible than previously circulating variants][4,5]	Suggested to be increased
Severity*	Possible increased severity and mortality[6]	No impact reported to date[4,5], no significant change in-hospital mortality[7]	Under investigation, no impact reported to date
Neutralization capacity*	Slight reduction but overall neutralizing titers still remained above the levels expected to confer protection[8]	Decreased, suggesting potential increased risk of reinfection[4,9,10]	Potential decrease, small number of reinfections reported[11,12]
Potential impacts on vaccines*	No significant impact on Moderna, Pfizer-BioNTech, and Oxford-AstraZeneca vaccines[13-16]	Moderna and Pfizer-BioNTech: Reduction in the neutralizing activity, but impact on protection against disease not known.[13-16] Novavax and Johnson & Johnson: Lower vaccine efficacy in South Africa compared to settings without the variant (press release data only). Moderate-severe disease were assessed. Serologic neutralization results pending.[17,18] Oxford/AstraZeneca: Limited vaccine efficacy against mild-moderate COVID-19 disease, with wide confidence intervals, impact on severe disease undetermined. Serologic neutralization substantially reduced compared with original strains, based on small number of samples analyzed[19,20]	Under investigation
Potential impacts on diagnostics*	S gene target failure (SGTF).[19] No impact on Ag RDTs observed[21]	None reported to date	None reported to date
Countries reporting cases (newly reported in last week)**	101 (7)	51 (5)	29 (8)

[†]*While work is ongoing to establish standardized nomenclature for key variants, these are the names by which WHO will refer to them in this publication.*

**Generalized findings as compared to non-VOC viruses. Based on emerging evidence from multiple countries, including non-peer-reviewed preprint articles and reports from public health authorities and researchers – all subject to ongoing investigation and continuous revision.*

***Includes official and unofficial reports of VOCs detections in countries among either travellers (imported cases only) or community samples (local transmission).*

Variant VOC 202012/01

Since our last update on 16 February, VOC 202012/01 has been detected in seven additional countries. As of 23 February, a total of 101 countries across all six WHO regions have reported cases of this variant (Figure 3). Community transmission has been reported in at least 45 countries across five WHO regions, noting that transmission classification is currently incomplete for 23 (23%) countries reporting this variant.

Since January 2021, several countries and in the European Region in particular, have observed a marked increase in the number and proportion of cases infected with VOC 202012/01 among samples tested by PCR-based screening and whole genome sequencing.[22] As of 8 February, the proportion of sequenced samples in which VOC 202012/01 was detected in Spain varied across the different regions from 0.4% to 53.3%.[23] During the epidemiological week 6 (from 7 to 14 February 2021), Germany detected VOC 202012/01 in 22% of the specimens analysed (23 000 samples tested),[24] 36% in France,[25] and 47% in Denmark.[26,27] In the United States of America (USA), genomic sequencing by one commercial laboratory suggested prevalence of VOC 202012/01 to be approximately 1% nationwide, and over 2% in some States as of 3 February 2021.[28] Another study estimated a 3.6% prevalence of VOC 202012/01 by the end of January 2021 using the S-gene target failure (SGTF; a proxy used to identify cases infected with VOC 202012/01).[29] As of 21 February, the USA has reported a total of 1661 cases from 44 States in the United States of America.[30] Additionally, the VOC 202012/01 has increasingly been associated with outbreaks in several different settings.[31,32]

On 21 January 2021, the United Kingdom's New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG) released analyses suggesting increased disease severity and risk of death in cases with SGTF compared to cases without SGTF.[3] When comparing cases with SGTF to cases without SGTF: (i) one study reported the relative hazard of death within 28 days of testing to be 1.35 (95% CI: 1.08-1.68); (ii) one study reported the mean case fatality ratio to be 1.36 (95% CI 1.18-1.56) by a case-control weighing method; (iii) one study reported a mortality hazard ratio of 1.91 (95% CI 1.35-2.71) (studies unpublished to date). In addition, a matched cohort analysis reported a death risk ratio of 1.65 (95% CI: 1.21-2.25) for cases infected with VOC 202012/01 compared with non-VOC 202012/01 cases. Although there are limitations to these studies including representativeness of the dataset used, these findings follow an initial assessment that there was no significant difference in the risk of hospitalization or death as compared to other variants, conducted in December 2020. The absolute risk of death of SARS-CoV-2 remains low, and additional studies are required to investigate these findings.

Based on available information, VOC 202012/01 has not been associated with decreased neutralization activity of polyclonal antibodies such as vaccine-derived or convalescent sera. However, the genomic changes of the epitope which binds to the host cell receptor, such as deletions in the N terminal domain, may affect binding of this variant to monoclonal antibodies, indicating possible effects on the efficacy of monoclonal antibodies used as therapeutics.[33]

A pre-print study with a small sample size (n=65, including 7 infected individuals with VOC 202012/01), suggested that individuals infected with VOC 202012/01 had longer duration of acute infection and similar peak viral load when compared to non-VOC 202012/01 variants.[34] However, these are preliminary findings and require further investigations with larger cohorts.

Figure 3. Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01 as of 23 February 2021

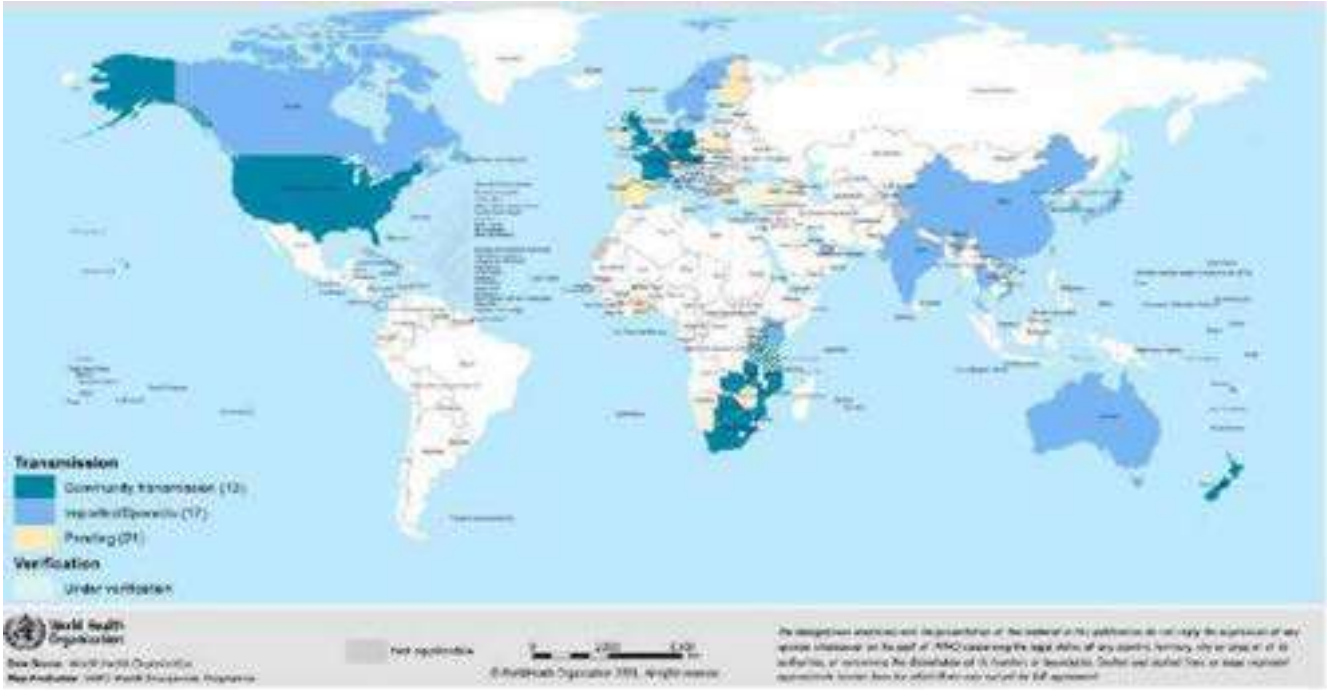
Variant 501Y.V2

Since the last update on 16 February, 501Y.V2 has been reported from five additional countries – now totalling 51 countries across all six WHO regions (Figure 4). Community transmission of 501Y.V2 has been reported in 13 countries across four WHO regions, noting the transmission classification is currently incomplete for 21 (41%) countries reporting this variant. In several areas within the African Region, variant 501Y.V2 has been reported to comprise a high proportion of sequenced samples.[35]

Studies highlighting reductions in neutralizing antibody activity against 501Y.V2 following either natural infection or vaccination, with potential to impact re-infection risk or vaccine effectiveness have been discussed previously (see Table 3, and past editions of the Weekly Epidemiological Update). A preliminary report with a small sample size (n=20) indicated that the serum neutralization capacity of serum elicited by BNT162b2 vaccine, produced by Pfizer-BioNTech, was weaker against variant 501Y.V2 by approximately two thirds as compared to that of another variant.[36] Further studies are needed to fully understand efficacy of existing vaccines.

Recent preliminary evidence suggests that variant 501Y.V2 may compromise immunity indicating potential increased risk of reinfection. There is now growing evidence that the mutations present in this variant may help the virus evade immune system responses triggered by previous infections of SARS-CoV-2 or by vaccines. There has been a report of a SARS-CoV-2 reinfection with the 501Y.V2 variant months after recovering from a first episode of COVID-19 with a more severe clinical presentation.[37]

Figure 4. Countries, territories and areas reporting SARS-CoV-2 501Y.V2 as of 23 February 2021



Variant P.1

Since our last update, variant P.1 has been reported in eight additional countries. To date, this variant is reported in 28 countries across all six WHO regions (Figure 5). Community transmission of P.1 has been reported in at least three countries in one WHO region, noting the transmission classification is currently incomplete for 8 (28%) countries reporting this variant.

In a genomic survey conducted from April to November 2020 in Amazonas State, Brazil, variant P.1 was found to be the most prevalent variant among 148 whole-genomes sequenced, comprising 47% (69/148) of specimens collected from 12 municipalities.[38] During the period of 1 November 2020 to 13 January 2021, sequencing of samples from different municipalities in Amazonas found rapid increase in the proportion of variant P.1 in the state. In the state capital Manaus, cases associated to the P.1 variant were initially detected on the 4 December 2020 and as of January 2021, 91% of cases were infected with the P1 variant. Furthermore, the variant was found in a widespread geographic distribution in the state.[39]

Figure 5. Countries, territories and areas reporting SARS-CoV-2 P.1 variant as of 23 February 2021

Emerging variants of interest or concern

To inform local, national and regional risk assessments, surveillance of SARS-CoV-2 variants continues globally with timely sharing of sequence data. As of 23 February 2021, over 590 000 sequences of SARS-CoV-2 globally have been uploaded into publicly available databases. New variants of potential interest or concern are continuously emerging and undergo assessment. We provide here an update on two such variants currently under review.

Variant B.1.525 (also referred to as VUI-202102/03, and previously UK1188), was first detected in the United Kingdom and Nigeria in December 2020.[40] Since then, it has been detected in at least another 13 countries.[41] This variant is partially similar to the 501Y.V2 variant and contains mutations which may be associated with some degree of biological significance, including the E484K, Q677H and F888L mutations, as well as a similar number of deletions that are contained in B.1.1.7.

A variant of B.1.1.7 with an E484K mutation (labelled VOC 202102/02 by the United Kingdom health authorities) has been detected in South West England. As of 17 February 2021, 26 cases of this variant have been detected in the United Kingdom.[33] Local authorities are responding with enhanced PHSM with the aim to prevent further spread. The E484K mutation is a mutation in the spike protein and has been associated with antigenic change, as well as increased binding affinity to the human host receptor, Angiotensin Converting Enzyme 2 (ACE2), in conjunction with the N501Y mutation.[42] E484K has been labelled as an escape mutation, so called because it may help the SARS-CoV-2 virus to evade host immune defences. It has been identified as an adaptation of SARS-CoV-2 in at least one immunocompromised patient with long lasting infection.[43] The E484K mutation has been identified independently in several variants (including 501Y.V2 and P.1.), indicating convergent mutations, where distinct lineages independently acquire similar genetic mutations.[42,44] Although there is no evidence that this mutation alone is associated with increased disease severity or higher transmissibility, E484K is of significance due to its possible impact on immune response, vaccine efficacy and transmissibility.[40]

Further investigations are required to better understand the importance of specific mutations (and/or clusters of mutations), whether they are identified in emerging variants of interest or concern, as well as ongoing adaptations and evolution of SARS-CoV-2.

WHO Recommendations

National and local authorities are encouraged to continue strengthening existing disease control activities, including epidemiological surveillance, strategic testing, and increased routine systematic sequencing of SARS-CoV-2 where feasible (for more information, please see WHO advice in the previously published Disease Outbreak News).

WHO has been tracking mutations since the beginning of the pandemic. In June 2020, WHO established the SARS-CoV-2 Virus Evolution Working Group (VEWG) to specifically assess new variants. Together with Member States and partners, a global risk monitoring framework has been established to:

- Coordinate and harmonize a global system for monitoring and assessing SARS-CoV-2 variants and their impact;
- Identify critical priorities, thresholds, and triggers for decision-making;
- Define a multi-disciplinary coordination mechanism to collect, analyze, and share data to inform decision-making, including on vaccination programs; and
- Leverage and enhance existing technical networks and expert groups.

Working definitions of SARS-CoV-2 variants of interest and variants of concern have been developed and are currently under review, with an aim to publish later this week.

WHO is working to increase sequencing capacities globally and has published a comprehensive implementation guide and risk-monitoring framework to support countries set up high-impact sequencing programmes for SARS-CoV-2 variants and maximize public health impact.

PHSM have proven to remain effective against VOCs to date. WHO continues to advise that the application and adjustment of PHSM should be driven by detailed data analyses of epidemiology at the most local level possible (for more information, please see our technical guidance).

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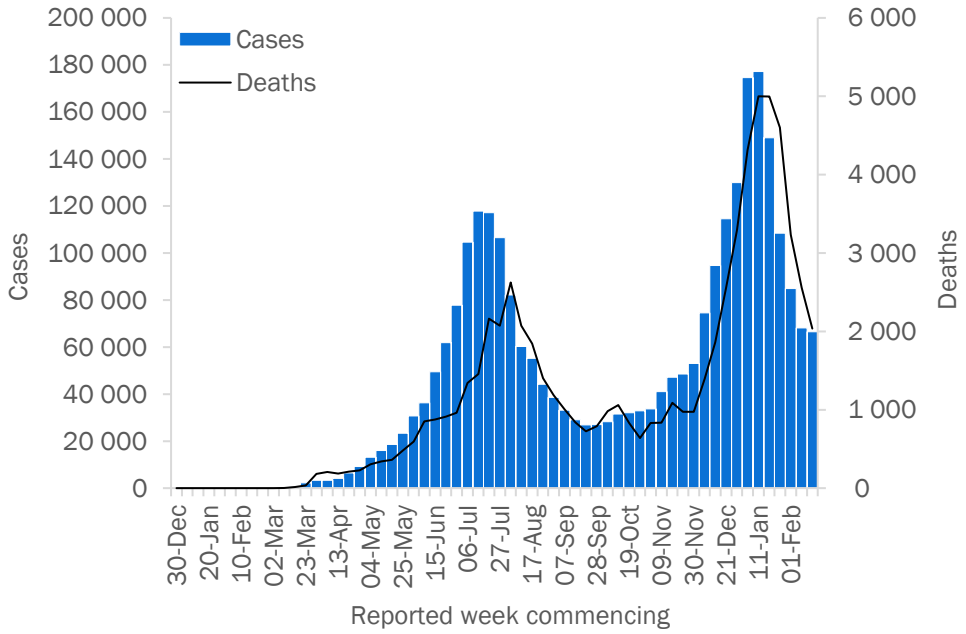
WHO regional overviews

African Region

In the past week, the African Region reported over 66 400 cases and 2000 deaths, a 2% and 20% decrease respectively compared to the previous week. This is the fifth consecutive week the Region reported decreases in both new cases and deaths. The highest numbers of new cases were reported in South Africa (12 304 new cases; 20.7 new cases per 100 000 population; a 25% decrease), Mozambique (6380 new cases; 20.4 new cases per 100 000; a 42% increase) and Ethiopia (6153 new cases; 5.4 new cases per 100 000; a 45% increase).

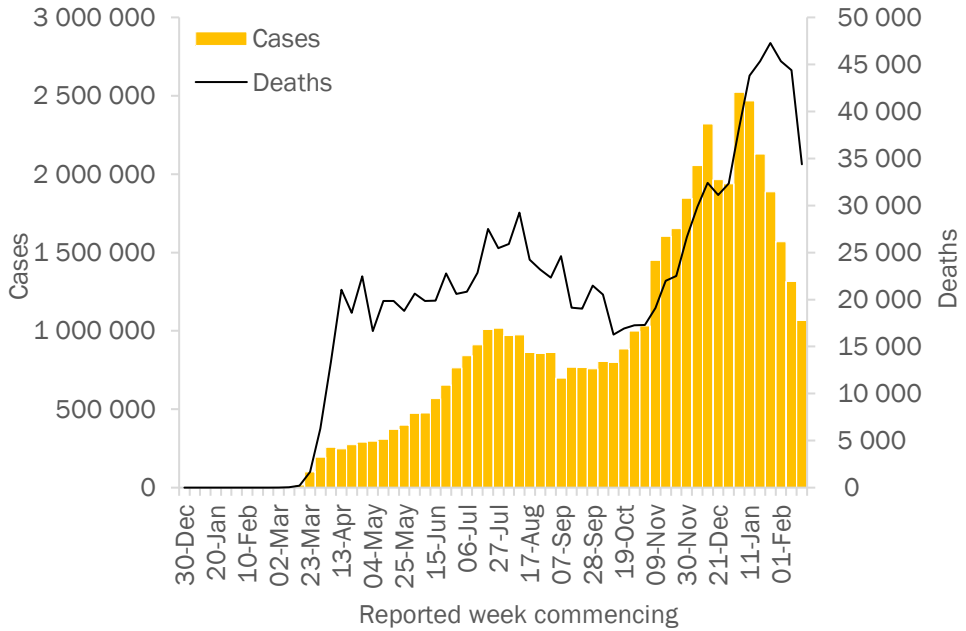
The countries reporting the highest number of new deaths in the past week were South Africa (1119 new deaths; 1.9 new deaths per 100 000; a 32% decrease), Ethiopia (90 new deaths; 0.1 new deaths per 100 000; a 150% increase), and Nigeria (84 new deaths; <0.1 new deaths per 100 000; a 16% decrease).



Region of the Americas

Over 1 million new cases and over 34 300 new deaths were reported in the Region of the Americas this week, a 19% and 23% decrease respectively compared to the previous week. The highest numbers of new cases were reported from the United States of America (480 467 new cases; 145.2 new cases per 100 000 population; a 29% decrease), Brazil (316 221 new cases; 148.8 new cases per 100 000; a 1% decrease) and Mexico (51 537 new cases; 40 new cases per 100 000; a 22% decrease).

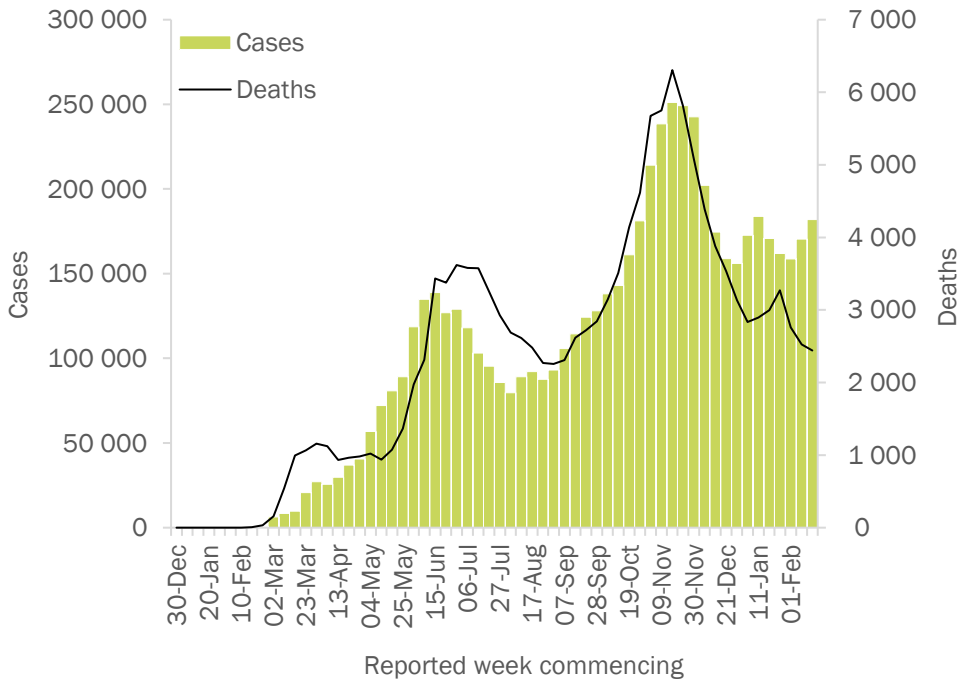
The highest numbers of new deaths were reported from the same countries, the United States of America (14 747 new deaths; 4.5 new deaths per 100 000; a 31% decrease), Brazil (7276 new deaths; 3.4 new deaths per 100 000; a 2% decrease) and Mexico (6408 new deaths; 5.0 new deaths per 100 000; a 22% decrease).



Eastern Mediterranean Region

In the past week, the Eastern Mediterranean Region reported over 181 000 new cases, a 7% increase compared to last week. The region reported just over 2400 new deaths, a 3% decrease. The three countries reporting the highest numbers of new cases this week were the Islamic Republic of Iran (55 208 new cases; 65.7 new cases per 100 000 population; a 7% increase), Iraq (23 122 new cases; 57.5 new cases per 100 000; a 63% increase) and the United Arab Emirates (22 570 new cases; 228.2 new cases per 100 000; a 2% increase).

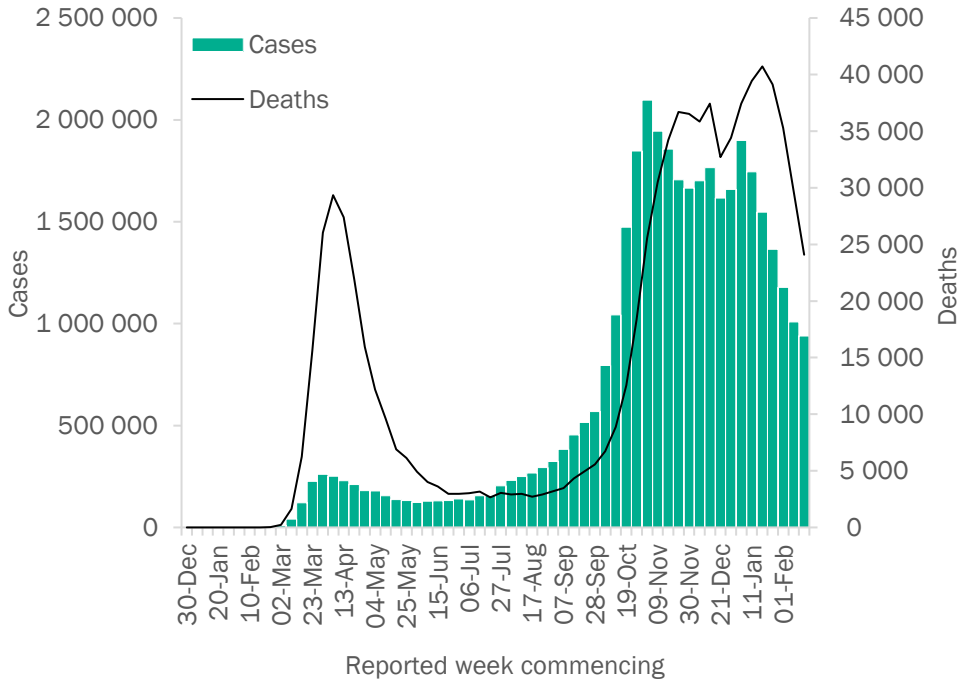
The highest numbers of new deaths this week have been reported in the Islamic Republic of Iran (526 new deaths; 0.6 new deaths per 100 000 population; a 12% increase), Egypt (363 new deaths; 0.4 new deaths per 100 000; a 10% increase) and Lebanon (336 new deaths; 4.9 new deaths per 100 000; a 16% decrease).



European Region

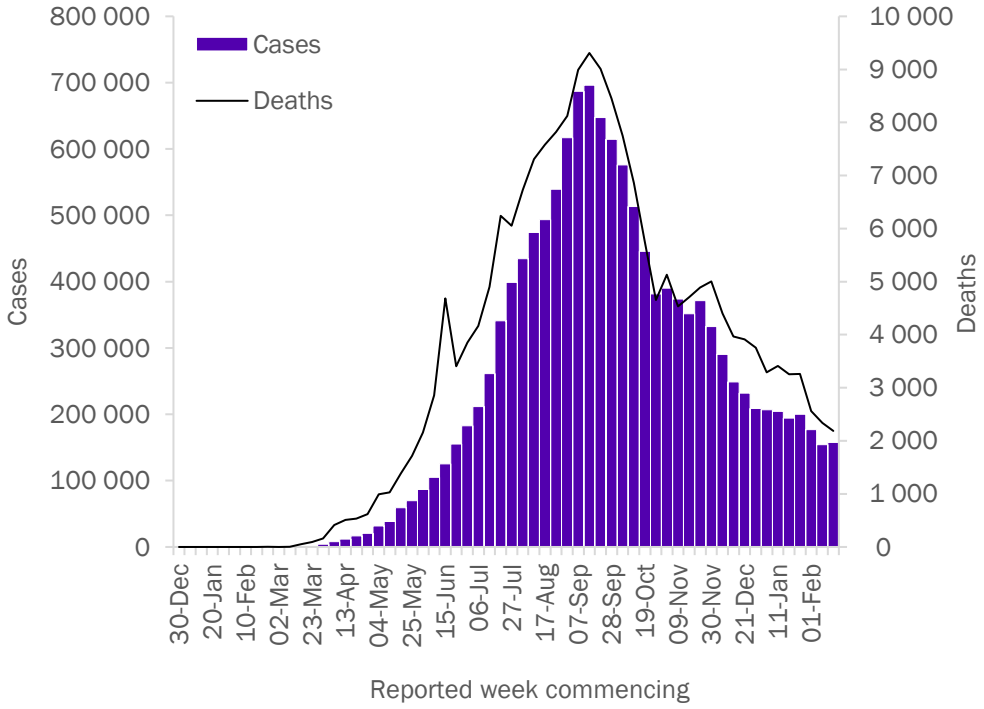
The European Region reported over 939 000 new cases and over 24 000 new deaths, a decrease of 7% and 19% respectively when compared to the previous week. The three countries reporting the highest numbers of new cases were France (131 179 new cases; 201 new cases per 100 000; a 3% increase), the Russian Federation (92 843 new cases; 63.6 new cases per 100 000; an 11% decrease), and Italy (84 977 new cases; 140.5 new cases per 100 000; an 1% decrease).

The highest numbers of deaths were reported from the United Kingdom (3457 new deaths; 5.1 new deaths per 100 000; a 28% decrease), the Russian Federation (3167 new deaths; 2.2 new deaths per 100 000; a 9% decrease) and Germany (2881 new deaths; 3.4 new deaths per 100 000; a 16% decrease).



South-East Asia Region

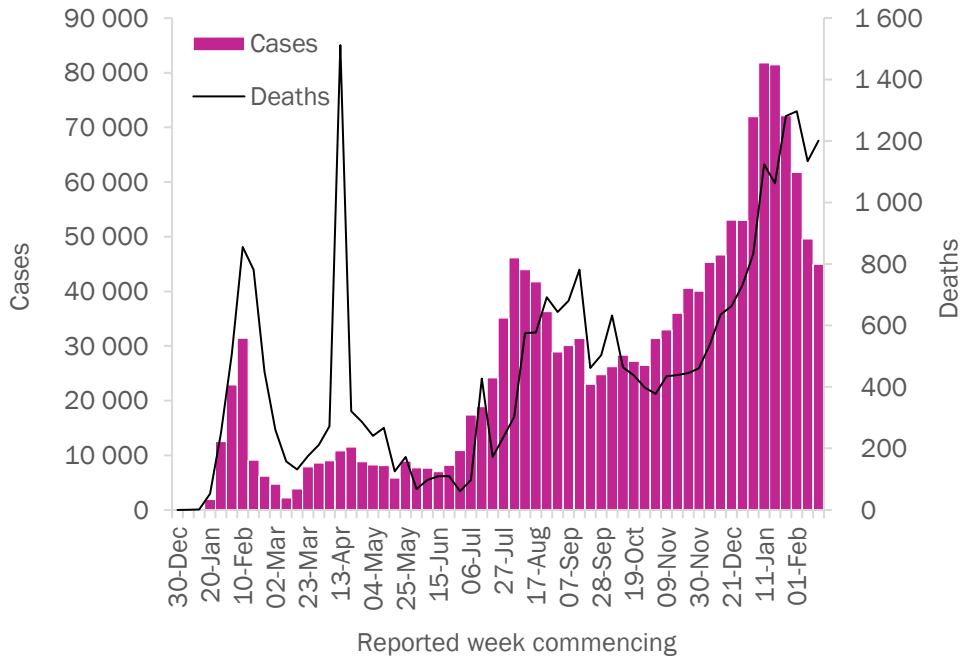
In the past week, the South-East Asia Region reported over 157 000 new cases, an increase of 2% compared to last week. The region reported over 2100 new deaths, a 6% decrease. The three countries reporting the highest numbers of new cases were India (86 711 new cases; 6.3 new cases per 100 000; a 10% increase), Indonesia (60 650 new cases; 22.2 new cases per 100 000; a 5% decrease), and Sri Lanka (4628 new cases; 21.6 new cases per 100 000; a 26% decrease).
The three countries reporting the highest numbers of new deaths this week were Indonesia (1380 new deaths; 0.5 new deaths per 100 000; an 11% decrease), India (660 new deaths; <0.1 new deaths per 100 000; a 2% increase) and Bangladesh (76 new deaths; <0.1 new deaths per 100 000, no change in new deaths reported this week as compared to last week).



Western Pacific Region

The Western Pacific Region reported just under 45 000 new cases the past week, a 9% decrease compared to the previous week. The region reported 1200 new deaths, a 6% increase. The three countries reporting the highest numbers of new cases in the region this week were Malaysia (18 467 new cases; 57.1 new cases per 100 000; a 20% decrease), the Philippines (12 033 new cases; 11.0 new cases per 100 000; a 2% increase), and Japan (10 035 new cases; 7.9 new cases per 100 000; a 9% decrease).

The three countries reporting the highest numbers of new deaths this week were the Philippines (561 new deaths; 0.5 new deaths per 100 000; a 41% increase), Japan (505 new deaths; 0.4 new deaths per 100 000; a 12% decrease), and Malaysia (93 new deaths; 0.3 new deaths per 100 000; an 8% decrease).



Key weekly updates

- **WHO Director-General Dr Tedros issued a statement on Tanzania on 20 February** "A number of Tanzanians travelling to neighbouring countries and beyond have tested positive for COVID-19." The situation in Tanzania remains concerning. WHO urges Tanzania:
    - to start reporting COVID-19 cases and share data;
    - to implement the public health measures that we know work in breaking the chains of transmission;
    - and to prepare for vaccination.

GISRS Surveillance of SARS-CoV-2

- Operational considerations to expedite genomic sequencing component of GISRS surveillance of SARS-CoV-2, 16 February 2021

Management of the blood supply in response to the pandemic outbreak of coronavirus disease (COVID-19)

- Maintaining a safe and adequate blood supply and collecting convalescent plasma in the context of the COVID-19 pandemic: Interim guidance, 17 February 2021

COVID-19 vaccines

- Country readiness for COVID-19 vaccines
- Draft landscape and tracker of COVID-19 candidate vaccines
- World Waking Up to Vaccine Equity
- G7 leaders commit US$ 4.3 billion to finance global equitable access to tests, treatments and vaccines in 2021
- COVAX Statement on WHO Emergency Use Listing for AstraZeneca/Oxford COVID-19 Vaccine
- Coronavirus disease (COVID-19) Q&A update: Vaccines safety

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
  - EPI-WIN: tailored information for individuals, organizations and communities

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 21 February 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**66 453**	**2 789 884**	**248.7**	**2 038**	**70 332**	**6.3**	
South Africa	12 304	1 502 367	2 533.1	1 119	48 940	82.5	Community transmission
Mozambique	6 380	54 968	175.9	73	587	1.9	Community transmission
Ethiopia	6 153	151 857	132.1	90	2 271	2.0	Community transmission
Nigeria	5 889	151 553	73.5	84	1 831	0.9	Community transmission
Zambia	5 440	73 894	401.9	76	1 016	5.5	Community transmission
Ghana	4 538	79 656	256.4	54	572	1.8	Community transmission
Cameroon	2 355	33 749	127.1	49	523	2.0	Community transmission
Senegal	1 989	32 630	194.9	54	795	4.7	Community transmission
Malawi	1 652	30 528	159.6	67	1 004	5.2	Community transmission
Botswana	1 598	26 524	1 127.9	52	254	10.8	Community transmission
Namibia	1 498	37 295	1 467.8	16	402	15.8	Community transmission
Algeria	1 251	111 764	254.9	23	2 958	6.7	Community transmission
Kenya	1 201	103 993	193.4	22	1 817	3.4	Community transmission
South Sudan	1 107	6 417	57.3	11	85	0.8	Community transmission
Côte d'Ivoire	1 030	31 914	121.0	12	185	0.7	Community transmission
Gabon	976	13 553	608.9	2	75	3.4	Community transmission
Democratic Republic of the Congo	840	25 079	28.0	8	700	0.8	Community transmission
Rwanda	721	17 988	138.9	11	247	1.9	Community transmission
Zimbabwe	664	35 768	240.7	34	1 432	9.6	Community transmission
Lesotho	609	10 461	488.3	60	285	13.3	Community transmission
Benin	583	5 143	42.4	9	65	0.5	Community transmission
Togo	445	6 268	75.7	1	81	1.0	Community transmission
Seychelles	436	2 328	2 367.1	2	10	10.2	Community transmission
Guinea	408	15 303	116.5	2	86	0.7	Community transmission
Mauritania	306	17 083	367.4	9	434	9.3	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Cabo Verde	299	14 999	2 697.7	4	143	25.7	Community transmission
Eswatini	276	16 764	1 445.0	15	645	55.6	Community transmission
Eritrea	256	2 685	75.7	0	7	0.2	Community transmission
Gambia	241	4 543	188.0	8	143	5.9	Community transmission
Madagascar	238	19 598	70.8	7	292	1.1	Community transmission
Burundi	207	2 031	17.1	0	3	0.0	Community transmission
Congo	206	8 625	156.3	4	127	2.3	Community transmission
Guinea-Bissau	206	3 091	157.1	0	46	2.3	Community transmission
Burkina Faso	195	11 783	56.4	1	139	0.7	Community transmission
Uganda	180	40 199	87.9	5	333	0.7	Community transmission
Chad	172	3 794	23.1	6	133	0.8	Community transmission
Angola	170	20 499	62.4	7	498	1.5	Community transmission
Comoros	158	3 490	401.3	15	143	16.4	Community transmission
Equatorial Guinea	104	5 798	413.3	2	89	6.3	Community transmission
Sao Tome and Principe	96	1 578	720.0	2	21	9.6	Community transmission
Mali	66	8 292	40.9	5	347	1.7	Community transmission
Niger	43	4 733	19.6	1	170	0.7	Community transmission
Sierra Leone	28	3 849	48.3	0	79	1.0	Community transmission
Liberia	19	1 988	39.3	1	85	1.7	Community transmission
Mauritius	8	603	47.4	0	10	0.8	Sporadic cases
Central African Republic	0	4 996	103.4	0	63	1.3	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories[iii]							
Mayotte	2 257	15 792	5 788.5	14	92	33.7	Community transmission
Réunion	655	11 562	1 291.4	1	48	5.4	Community transmission
Americas	**1 066 990**	**49 296 115**	**4 819.8**	**34 386**	**1 171 294**	**114.5**	
United States of America	480 467	27 702 074	8 369.1	14 747	491 894	148.6	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Brazil	316 221	10 081 676	4 743.0	7 276	244 765	115.2	Community transmission
Mexico	51 537	2 030 491	1 574.8	6 408	178 965	138.8	Community transmission
Peru	48 775	1 269 523	3 850.3	1 435	44 690	135.5	Community transmission
Argentina	33 128	2 054 681	4 546.2	812	51 000	112.8	Community transmission
Colombia	31 832	2 217 001	4 357.1	1 315	58 511	115.0	Community transmission
Chile	23 450	795 845	4 163.2	531	19 974	104.5	Community transmission
Canada	20 280	840 586	2 227.2	414	21 576	57.2	Community transmission
Ecuador	7 570	273 097	1 547.9	244	15 513	87.9	Community transmission
Paraguay	7 086	149 684	2 098.6	122	3 026	42.4	Community transmission
Cuba	6 001	43 484	383.9	30	291	2.6	Community transmission
Dominican Republic	5 607	234 502	2 161.7	96	3 028	27.9	Community transmission
Bolivia (Plurinational State of)	5 578	240 676	2 061.8	283	11 390	97.6	Community transmission
Honduras	5 053	164 077	1 656.6	127	3 975	40.1	Community transmission
Panama	4 354	335 339	7 771.9	116	5 711	132.4	Community transmission
Guatemala	3 860	170 931	954.1	155	6 249	34.9	Community transmission
Uruguay	3 549	51 377	1 479.0	36	563	16.2	Community transmission
Venezuela (Bolivarian Republic of)	2 855	135 114	475.2	41	1 308	4.6	Community transmission
Costa Rica	2 491	201 678	3 959.0	49	2 763	54.2	Community transmission
Jamaica	2 094	20 924	706.6	19	391	13.2	Community transmission
El Salvador	1 118	58 546	902.6	58	1 792	27.6	Community transmission
Barbados	730	2 677	931.5	7	30	10.4	Community transmission
Saint Lucia	373	2 860	1 557.5	5	28	15.2	Community transmission
Guyana	176	8 357	1 062.5	3	189	24.0	Clusters of cases
Antigua and Barbuda	171	598	610.6	2	11	11.2	Sporadic cases
Haiti	131	12 274	107.6	0	247	2.2	Community transmission
Belize	93	12 227	3 075.0	1	314	79.0	Community transmission
Saint Vincent and the Grenadines	80	1 498	1 350.3	0	6	5.4	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Suriname	76	8 854	1 509.3	2	168	28.6	Community transmission
Nicaragua	42	5 106	77.1	1	172	2.6	Community transmission
Bahamas	33	8 403	2 136.8	0	179	45.5	Clusters of cases
Trinidad and Tobago	29	7 666	547.8	2	139	9.9	Community transmission
Dominica	13	134	186.1	0	0	0.0	Clusters of cases
Saint Kitts and Nevis	1	41	77.1	0	0	0.0	Sporadic cases
Grenada	0	148	131.5	0	1	0.9	Sporadic cases
Territories[iii]							
Puerto Rico	1 522	98 835	3 454.7	42	1 957	68.4	Community transmission
Aruba	215	7 553	7 074.3	2	70	65.6	Community transmission
Turks and Caicos Islands	165	1 998	5 160.4	2	14	36.2	Clusters of cases
French Guiana	73	16 529	5 534.0	3	83	27.8	Community transmission
United States Virgin Islands	51	2 575	2 465.9	0	25	23.9	Community transmission
Sint Maarten	42	2 027	4 726.9	0	27	63.0	Community transmission
Curaçao	33	4 666	2 843.5	0	22	13.4	Community transmission
Bonaire	15	387	1 850.3	0	4	19.1	Community transmission
Cayman Islands	12	428	651.2	0	2	3.0	Sporadic cases
Bermuda	5	699	1 122.5	0	12	19.3	Sporadic cases
British Virgin Islands	2	153	506.0	0	1	3.3	Clusters of cases
Montserrat	1	20	400.1	0	1	20.0	Sporadic cases
Anguilla	0	18	120.0	0	0	0.0	Sporadic cases
Falkland Islands (Malvinas)	0	49	1 406.8	0	0	0.0	No cases
Guadeloupe	0	9 455	2 363.0	0	160	40.0	Community transmission
Martinique	0	6 593	1 756.9	0	45	12.0	Community transmission
Saba	0	6	310.4	0	0	0.0	No cases
Saint Barthélemy	0	475	4 805.3	0	0	0.0	Clusters of cases
Saint Martin	0	1 456	3 766.3	0	12	31.0	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Saint Pierre and Miquelon	0	24	414.2	0	0	0.0	Sporadic cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	**181 969**	**6 181 023**	**845.8**	**2 443**	**141 915**	**19.4**	
Iran (Islamic Republic of)	55 208	1 566 081	1 864.5	526	59 409	70.7	Community transmission
Iraq	23 122	664 750	1 652.7	81	13 245	32.9	Community transmission
United Arab Emirates	22 570	368 175	3 722.5	107	1 108	11.2	Community transmission
Lebanon	16 379	353 371	5 177.3	336	4 297	63.0	Community transmission
Jordan	15 008	359 811	3 526.5	99	4 543	44.5	Community transmission
Pakistan	8 221	569 846	258.0	287	12 563	5.7	Community transmission
Kuwait	6 419	183 322	4 292.7	41	1 039	24.3	Community transmission
Tunisia	5 139	227 643	1 926.1	247	7 755	65.6	Community transmission
Bahrain	5 132	117 234	6 889.7	22	420	24.7	Clusters of cases
Egypt	4 341	177 543	173.5	363	10 298	10.1	Clusters of cases
Qatar	3 163	159 967	5 552.4	1	256	8.9	Community transmission
Morocco	2 813	480 948	1 303.0	88	8 548	23.2	Clusters of cases
Libya	2 444	129 325	1 882.1	74	2 088	30.4	Community transmission
Saudi Arabia	2 281	374 691	1 076.3	29	6 457	18.5	Sporadic cases
Oman	1 872	138 494	2 712.0	10	1 549	30.3	Community transmission
Somalia	797	5 889	37.1	46	194	1.2	Community transmission
Syrian Arab Republic	323	15 143	86.5	21	996	5.7	Community transmission
Sudan	139	30 128	68.7	11	1 864	4.3	Community transmission
Afghanistan	112	55 604	142.8	5	2 432	6.2	Clusters of cases
Djibouti	54	6 022	609.5	0	63	6.4	Sporadic cases
Yemen	21	2 161	7.2	2	619	2.1	Community transmission
Territories[iii]							
occupied Palestinian territory	6 411	194 875	3 820.0	47	2 172	42.6	Community transmission
Europe	**939 271**	**37 574 211**	**4 025.5**	**24 102**	**838 761**	**89.9**	
France	131 179	3 521 249	5 394.6	2 481	83 707	128.2	Community transmission
Russian Federation	92 843	4 164 726	2 853.8	3 167	83 293	57.1	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Italy	84 977	2 795 796	4 624.1	2 130	95 486	157.9	Clusters of cases
The United Kingdom	78 569	4 105 679	6 047.9	3 457	120 365	177.3	Community transmission
Czechia	65 150	1 153 159	10 768.1	1 071	19 214	179.4	Community transmission
Germany	51 998	2 386 559	2 848.5	2 881	67 841	81.0	Community transmission
Turkey	51 980	2 631 876	3 120.6	606	27 983	33.2	Community transmission
Poland	49 812	1 638 767	4 330.0	1 364	42 171	111.4	Community transmission
Ukraine	33 313	1 304 456	2 982.7	773	25 103	57.4	Community transmission
Spain	29 764	3 121 687	6 676.7	680	66 704	142.7	Community transmission
Netherlands	26 268	1 051 919	6 139.1	413	15 200	88.7	Community transmission
Israel	22 209	742 752	8 581.2	177	5 522	63.8	Community transmission
Sweden	19 212	631 166	6 249.6	39	12 649	125.2	Community transmission
Romania	17 185	777 276	4 040.4	470	19 795	102.9	Community transmission
Slovakia	15 909	292 143	5 351.0	693	6 505	119.1	Clusters of cases
Hungary	15 561	403 023	4 171.9	593	14 299	148.0	Community transmission
Serbia	14 629	434 122	6 234.0	107	4 321	62.0	Community transmission
Belgium	14 285	754 473	6 509.9	226	21 903	189.0	Community transmission
Portugal	12 260	796 339	7 809.8	714	15 897	155.9	Clusters of cases
Austria	11 187	439 879	4 884.1	159	8 247	91.6	Community transmission
Belarus	9 961	276 990	2 931.3	63	1 903	20.1	Community transmission
Greece	7 452	178 918	1 716.6	169	6 272	60.2	Community transmission
Albania	7 075	99 062	3 442.3	110	1 653	57.4	Clusters of cases
Bulgaria	6 923	236 439	3 402.8	231	9 839	141.6	Clusters of cases
Republic of Moldova	6 440	176 245	4 369.0	120	3 760	93.2	Community transmission
Kazakhstan	5 833	257 100	1 369.2	65	3 311	17.6	Clusters of cases
Ireland	5 582	214 378	4 341.6	204	4 135	83.7	Community transmission
Slovenia	5 207	184 351	8 867.6	26	4 056	195.1	Clusters of cases
Estonia	5 200	57 616	4 343.3	40	535	40.3	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Latvia	4 827	81 109	4 300.1	95	1 538	81.5	Community transmission
Switzerland	4 811	545 158	6 299.0	50	9 148	105.7	Community transmission
Lithuania	3 327	194 051	7 128.2	101	3 171	116.5	Community transmission
Denmark	3 014	207 081	3 575.2	49	2 333	40.3	Community transmission
Georgia	2 798	268 355	6 727.1	83	3 435	86.1	Community transmission
Montenegro	2 696	71 995	11 463.0	49	939	149.5	Clusters of cases
Finland	2 646	52 653	950.3	16	726	13.1	Community transmission
Bosnia and Herzegovina	2 407	128 049	3 903.0	103	4 995	152.2	Community transmission
Croatia	2 288	239 945	5 844.8	111	5 429	132.2	Community transmission
North Macedonia	2 159	99 031	4 753.4	71	3 047	146.3	Community transmission
Norway	1 871	68 107	1 256.3	15	607	11.2	Clusters of cases
Luxembourg	1 269	53 968	8 621.4	17	623	99.5	Community transmission
Armenia	1 235	170 402	5 750.5	23	3 164	106.8	Community transmission
Malta	1 111	20 762	4 702.1	13	303	68.6	Clusters of cases
Azerbaijan	978	232 973	2 297.8	17	3 195	31.5	Clusters of cases
Cyprus	763	33 153	2 745.9	9	229	19.0	Clusters of cases
Kyrgyzstan	410	85 885	1 316.4	17	1 458	22.3	Clusters of cases
Uzbekistan	238	79 654	238.0	0	622	1.9	Clusters of cases
Andorra	209	10 672	13 812.2	0	107	138.5	Community transmission
San Marino	168	3 472	10 230.4	0	72	212.2	Community transmission
Monaco	107	1 862	4 744.7	1	22	56.1	Sporadic cases
Iceland	12	6 045	1 771.5	0	29	8.5	Community transmission
Liechtenstein	4	2 617	6 862.1	0	52	136.4	Sporadic cases
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Kosovo	1 887	65 939	3 544.4	27	1 561	83.9	Community transmission
Guernsey	28	810	1 281.7	1	14	22.2	Community transmission
Gibraltar	16	4 228	12 549.3	4	88	261.2	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Jersey	15	3 213	2 953.1	1	68	62.5	Community transmission
Isle of Man	13	449	528.0	0	25	29.4	No cases
Faroe Islands	1	658	1 346.6	0	1	2.0	Sporadic cases
Greenland	0	30	52.8	0	0	0.0	No cases
South-East Asia	**157 379**	**13 345 590**	**660.2**	**2 189**	**204 796**	**10.1**	
India	86 711	10 991 651	796.5	660	156 302	11.3	Clusters of cases
Indonesia	60 650	1 271 353	464.8	1 380	34 316	12.5	Community transmission
Sri Lanka	4 628	79 480	371.2	51	435	2.0	Clusters of cases
Bangladesh	2 758	543 024	329.7	76	8 342	5.1	Community transmission
Maldives	896	18 612	3 443.2	4	60	11.1	Clusters of cases
Thailand	844	25 415	36.4	3	83	0.1	Clusters of cases
Nepal	737	273 351	938.2	7	2 061	7.1	Clusters of cases
Myanmar	150	141 735	260.5	8	3 196	5.9	Clusters of cases
Bhutan	3	866	112.2	0	1	0.1	Clusters of cases
Timor-Leste	2	103	7.8	0	0	0.0	Sporadic cases
Western Pacific	**44 964**	**1 576 330**	**80.2**	**1 201**	**28 220**	**1.4**	
Malaysia	18 467	280 272	865.9	93	1 051	3.2	Clusters of cases
Philippines	12 033	559 288	510.4	561	12 068	11.0	Community transmission
Japan	10 035	424 507	335.6	505	7 417	5.9	Clusters of cases
Republic of Korea	3 467	86 992	169.7	35	1 557	3.0	Clusters of cases
Mongolia	293	2 586	78.9	0	2	0.1	Clusters of cases
Viet Nam	173	2 368	2.4	0	35	0.0	Clusters of cases
China	154	101 669	6.9	4	4 842	0.3	Clusters of cases
Singapore	72	59 858	1 023.2	0	29	0.5	Sporadic cases
Cambodia	54	533	3.2	0	0	0.0	Sporadic cases
Papua New Guinea	48	970	10.8	0	10	0.1	Community transmission
Australia	28	28 920	113.4	0	909	3.6	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
New Zealand	20	1 994	41.4	1	26	0.5	Clusters of cases
Brunei Darussalam	1	185	42.3	0	3	0.7	Sporadic cases
Fiji	0	56	6.2	0	2	0.2	Sporadic cases
Lao People's Democratic Republic	0	45	0.6	0	0	0.0	Sporadic cases
Solomon Islands	0	18	2.6	0	0	0.0	No cases
Territories[iii]							
French Polynesia	83	18 346	6 531.0	2	137	48.8	Sporadic cases
Guam	23	7 507	4 447.9	0	130	77.0	Clusters of cases
Northern Mariana Islands (Commonwealth of the)	9	143	248.4	0	2	3.5	Pending
New Caledonia	3	55	19.3	0	0	0.0	Sporadic cases
Samoa	1	4	2.0	0	0	0.0	No cases
Marshall Islands	0	4	6.8	0	0	0.0	No cases
Vanuatu	0	1	0.3	0	0	0.0	No cases
Wallis and Futuna	0	9	80.0	0	0	0.0	Sporadic cases
Global	**2 457 026**	**110 763 898**	**1 421.0**	**66 359**	**2 455 331**	**31.5**	

*See *Annex: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting variants of concern as of 23 February 2021**

Country/Area/Territory[i]	501Y.V2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Argentina		Verified	Verified
Aruba			Verified
Australia	Verified		Verified
Austria	Verified		Verified
Bahrain			Verified
Bangladesh	Unverified		Verified
Barbados			Verified
Belgium	Verified	Verified	Verified
Bosnia and Herzegovina			Unverified
Botswana	Verified		
Brazil		Verified	Verified
Brunei Darussalam	Verified		
Bulgaria			Verified
Cambodia			Unverified
Canada	Verified	Verified	Verified
Cayman Islands			Unverified
Chile			Verified
China	Verified	Unverified	Verified
Colombia		Verified	
Comoros	Unverified		
Croatia		Unverified	Verified
Cuba	Verified		
Curaçao			Verified
Cyprus			Verified
Czechia			Verified
Democratic Republic of the Congo			Unverified
Denmark	Verified		Verified
Dominican Republic			Verified

Country/Area/Territory[i]	501Y.V2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Ecuador			Verified
Estonia	Unverified		Verified
Faroe Islands		Verified	
Finland	Verified	Verified	Verified
France	Verified	Verified	Verified
French Guiana		Verified	
French Polynesia			Verified
Gambia	Verified		Verified
Georgia			Verified
Germany	Verified	Verified	Verified
Ghana	Verified		Unverified
Gibraltar			Unverified
Greece	Verified		Verified
Guadeloupe			Verified
Hungary			Verified
Iceland			Verified
India	Verified	Verified	Verified
Iran (Islamic Republic of)			Verified
Iraq			Unverified
Ireland	Verified	Unverified	Verified
Israel	Verified		Verified
Italy	Unverified	Verified	Verified
Jamaica			Verified
Japan	Verified	Verified	Verified
Jordan			Verified
Kenya	Verified		
Kosovo[1]			Verified
Kuwait			Verified
Latvia			Verified
Lebanon			Verified
Liechtenstein			Verified

Country/Area/Territory[i]	501Y.V2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Lithuania			Verified
Luxembourg	Verified		Verified
Malawi	Unverified		
Malaysia			Verified
Malta	Unverified		Verified
Martinique			Verified
Mayotte	Verified		Verified
Mexico		Verified	Verified
Montenegro			Verified
Morocco			Verified
Mozambique	Verified		
Namibia	Unverified		
Nepal			Verified
Netherlands	Verified	Verified	Verified
New Zealand	Verified		Verified
Nigeria			Verified
North Macedonia			Verified
Norway	Verified		Verified
occupied Palestinian territory			Verified
Oman			Verified
Pakistan			Verified
Panama	Verified		
Peru		Verified	Verified
Philippines			Verified
Poland	Unverified		Verified
Portugal	Verified	Unverified	Verified
Puerto Rico			Verified
Republic of Korea	Verified	Verified	Verified
Réunion	Verified	Verified	Verified

Country/Area/Territory[i]	501Y.V2 (B.1.351)	P.1 (B.1.1.28)	VOC 202012/01 (B.1.1.7)
Romania			Verified
Russian Federation			Verified
Saint Barthélemy			Verified
Saint Lucia			Verified
Saint Martin			Verified
Saudi Arabia			Verified
Senegal			Unverified
Serbia			Verified
Singapore			Verified
Slovakia			Verified
Slovenia			Verified
South Africa	Verified		Unverified
Spain	Verified	Verified	Verified
Sri Lanka			Verified
Sweden	Verified	Unverified	Verified
Switzerland	Verified	Unverified	Verified
Thailand	Verified		Verified
The United Kingdom	Verified	Verified	Verified
Trinidad and Tobago			Verified
Turkey	Unverified	Unverified	Verified
United Arab Emirates	Verified	Verified	Verified
United Republic of Tanzania	Unverified		
United States of America	Verified	Verified	Verified
Uruguay			Verified
Uzbekistan			Verified
Viet Nam	Verified		Verified
Zambia	Verified		
Zimbabwe	Unverified		

**See *Annex : Data, table and figure notes*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 745 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that

are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.

- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 14 February 2021, 10 am CET

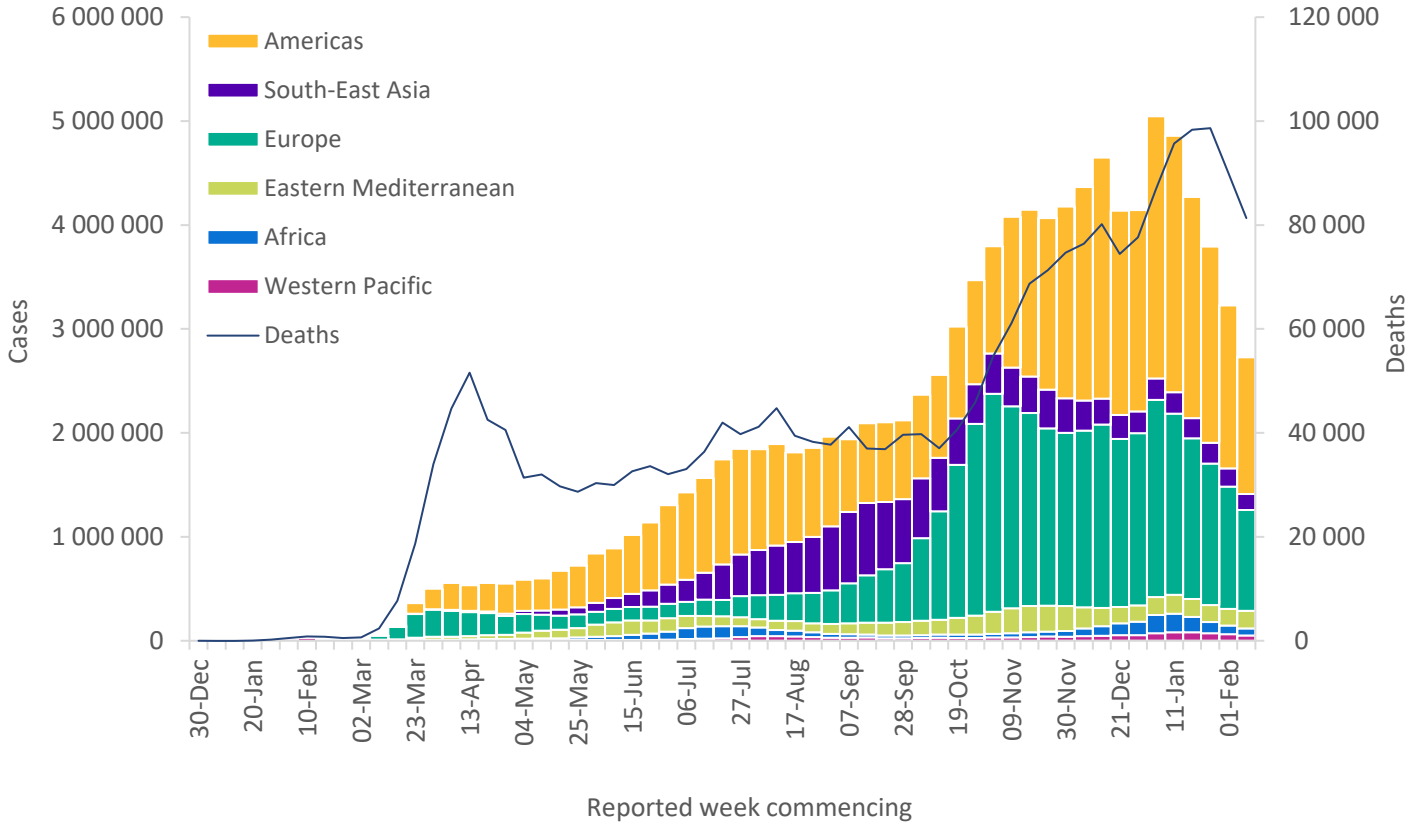
In this edition:

- Global overview
- Special focus: Global Influenza Surveillance and Response System
- Special focus: SARS-CoV-2 variants of concern
- WHO regional overviews
- Key weekly updates

Global overview

The number of global new cases reported has continued to fall, with 2.7 million new cases last week, a 16% decline over 500 000 fewer new cases compared to the previous week (Figure 1). The number of new deaths reported also fell, with 81 000 new deaths reported last week, a 10% decline as compared to the previous week. A total of five out of six WHO regions reported a double-digit percentage decline in new cases (Table 1), with only the Eastern Mediterranean Region showing a 7% rise. Europe and the Americas continue to see the greatest drops in absolute numbers of cases. Meanwhile, the number of new deaths declined in all regions.

Figure 1: COVID-19 cases reported weekly by WHO Region, and global deaths, as of 14 February 2021**



**See *Annex: Data, table and figure notes*

In the past week, the five countries reporting the highest number of new cases continue to be the United States of America (673 630 cases, a 23% decrease), Brazil (318 290 cases, a 3% decrease), France (127 565 cases, a 6% decrease), the Russian Federation (104 602 cases, an 11% decrease), and the United Kingdom of Great Britain and Northern Ireland (97 271 cases, a 27% decrease).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 14 February 2021**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 315 480 (48%)	-16%	48 228 712 (45%)	44 385 (55%)	-2%	1 136 906 (48%)
Europe	968 943 (36%)	-18%	36 575 529 (34%)	28 404 (35%)	-19%	812 410 (34%)
South-East Asia	154 414 (6%)	-13%	13 188 211 (12%)	2 340 (3%)	-9%	202 607 (8%)
Eastern Mediterranean	170 445 (6%)	7%	5 998 998 (6%)	2 519 (3%)	-9%	139 468 (6%)
Africa	68 115 (2%)	-20%	2 723 431 (3%)	2 558 (3%)	-21%	68 294 (3%)
Western Pacific	49 577 (2%)	-20%	1 531 366 (1%)	1 134 (1%)	-13%	27 019 (1%)
Global	**2 726 974 (100%)**	**-16%**	**108 246 992 (100%)**	**81 340 (100%)**	**-10%**	**2 386 717 (100%)**

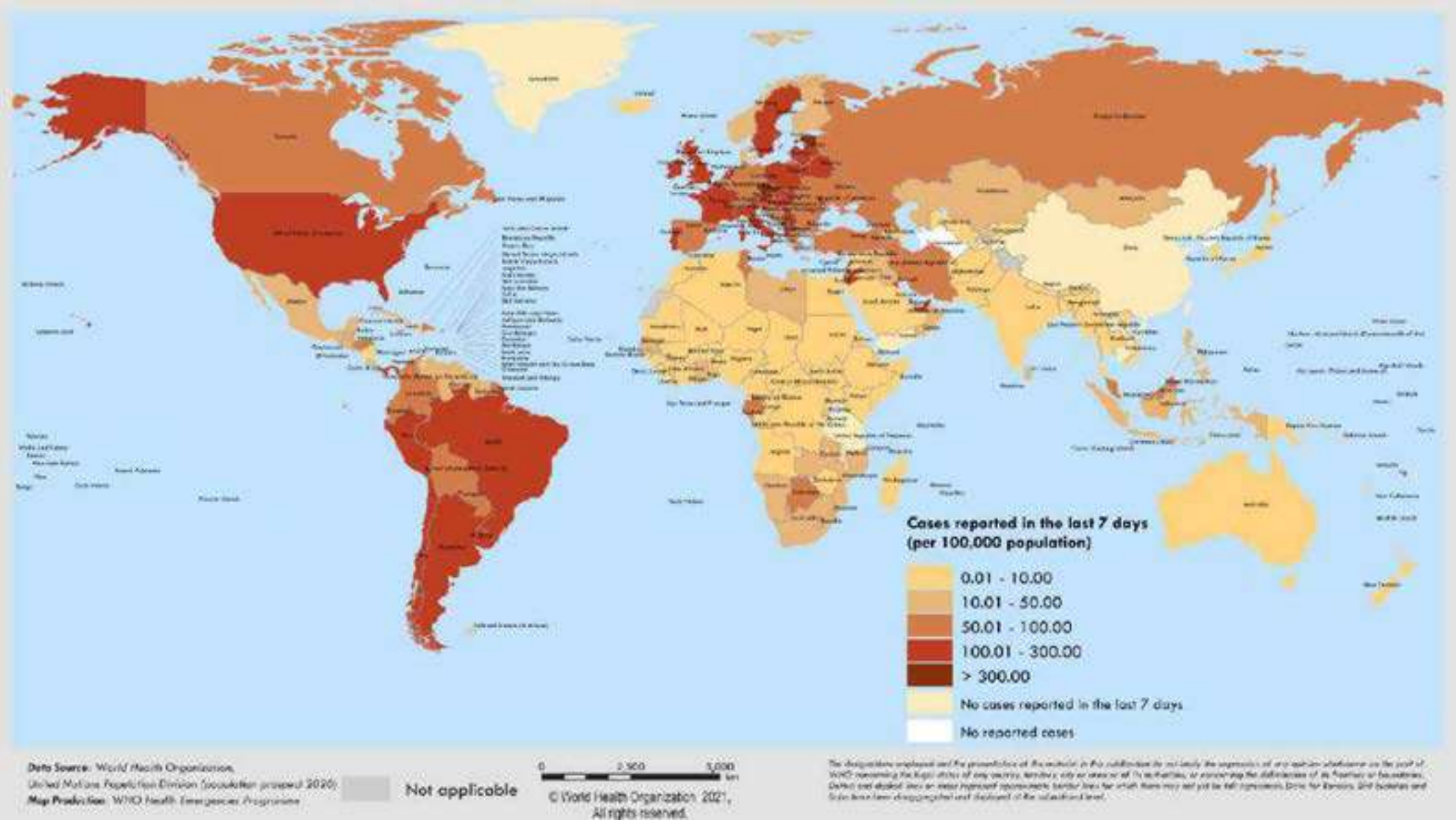
**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*

**See *Annex: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Figure 2. COVID-19 cases per 100 000 population reported in the last seven days by countries, territories and areas, 8 February through 14 February 2021**



**See *Annex: Data, table and figure notes*

Special Focus: Global Influenza Surveillance and Response System – leveraging influenza sentinel surveillance systems to respond to COVID-19

Overview

The Global Influenza Surveillance and Response System (GISRS) is a network of 158 institutions monitoring the spread and evolution of influenza all year-round. It includes six WHO Collaborating Centres and National Influenza centres (NICs) from 126 countries, areas and territories. It functions as a global mechanism for surveillance, preparedness and response for seasonal, pandemic and zoonotic influenza, and a global alert for novel influenza viruses and other respiratory pathogens. More than 3.5 million respiratory specimens are tested for influenza each year with assured quality and standards. These specimens are collected from patients presenting at sentinel hospitals and primary care settings with influenza-like illness (ILI) and severe acute respiratory infection (SARI). More than 10 000 representative influenza viruses are sequenced each year and the genetic sequence data shared via the Global Initiative on Sharing Avian Influenza Data (GISAID). Countries also typically share about 40 000 influenza specimens throughout the year with WHO Collaborating Centres, of which around a quarter undergo a detailed virus characterization that informs the biannual recommendations for the seasonal influenza vaccine composition for the northern and southern hemispheres.

GISRS and COVID-19

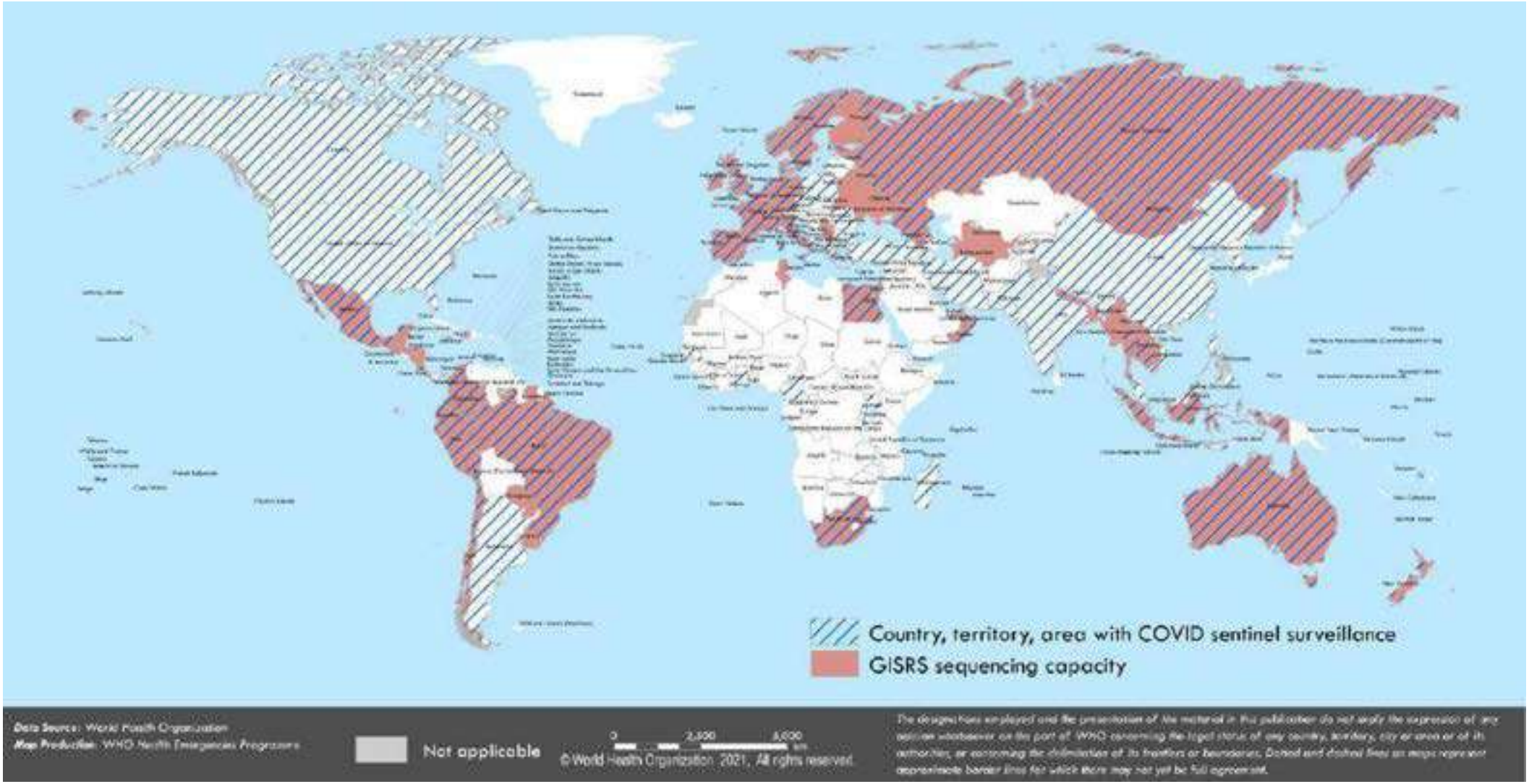
Throughout the COVID-19 response, GISRS laboratories have contributed significantly to country diagnostic and sequencing capacities. Since the onset of the pandemic, 87% of GISRS laboratories have been serving as national reference laboratories for SARS-CoV-2 detection. GISRS has leveraged its External Quality Assessment Program (EQAP) for influenza molecular diagnostics to develop and implement the SARS-CoV-2 EQAP to more than 233 national public health laboratories (including 130 NICs) from 164 countries, areas and territories, with 94% of the laboratories demonstrating 100% correct results.

Early in the COVID-19 pandemic, influenza surveillance systems were leveraged to address the critical need to monitor trends in community circulation of SARS-CoV-2 and influenza. To date, approximately 60 countries have reported integrated SARS-CoV-2 and influenza data that complement SARS-CoV-2 cases detected through non-sentinel sources. The transmission trends based on sentinel surveillance serve to complement and corroborate the transmission trends seen from non-sentinel data sources.

The emergence of SARS-CoV-2 Variants of Concern highlights the importance of quality, representativeness and geographical coverage of genetic sequencing, and the timeliness of sharing of genetic sequence data on publicly accessible databases. As of 10 February 2021, more than 450 000 whole genome sequences of SARS-CoV-2 from 131 countries had been shared with GISAID. However, the majority (approximately 70%) are from three countries (Denmark, the United Kingdom and the United States of America). At least 60% of GISRS laboratories have shared whole genome sequences with GISAID (Figure 3).

The IHR Emergency Committee for COVID-19 recommended further increases in global sequencing capacities and encouraged the further rapid sharing of data. It recognizes the role of GISRS to strengthen sequencing capacities for SARS-CoV-2 and increase the global genetic database that improves the geographic and demographic representativeness, timeliness and quality of meta-data around the world. WHO is working with GISRS to expedite the sequencing component of sentinel surveillance for SARS-CoV-2 along with influenza and has issued guidance to support in this effort.

Figure 3: SARS-CoV-2 detection and sequencing capacities and capabilities



Special Focus: Update on SARS-CoV-2 Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, continues to monitor the public health events associated with SARS-CoV-2 variants and provides updates as new information becomes available. Further information on the background of the variants of concern (VOC) is available from previously published Disease Outbreak News and recent publications of the Weekly Epidemiological Update. Here we provide an update on the geographical distribution of three variants of concern as reported by countries, territories and areas (hereafter countries) as of 15 February 2021. New variants of potential interest or concern are currently under review and may be incorporated into future updates.

Table 2: Condensed overview of emerging information on key variants of concern, as of 15 February 2021*

Nextstrain clade	**20I/501Y.V1**	**20H/501Y.V2**†	**20J/501Y.V3**
Pango lineage	B.1.1.7	B.1.351	B.1.1.28.1
GISAID clade	GR	GH	GR
Alternate names	**VOC202012/01**†	VOC202012/02	**P.1**†
First detected by	United Kingdom	South Africa	Brazil / Japan
First appearance	20 September 2020	Early August 2020	December 2020
Key spike mutations	• H69/V70 deletion • Y144 deletion • N501Y • A570D • D614G • P681H	• L242/A243/L244 deletion • N501Y • D614G • E484K • K417N	• N501Y • D614G • E484K • K417N
Key mutation common to all 3 variants	S106/G107/F108 deletion in Non-Structural Protein 6 (NSP6)		
Countries reporting cases (newly reported in last week)**	94 (8)	46 (2)	21 (6)

** A more detailed version of this table is available in the previous Weekly Epidemiological Update, and an update version will be available in the next issue.*

†While work is ongoing to establish standardized nomenclature for key variants, these are the names by which WHO will refer to them in this publication.

***Includes official and unofficial reports of VOCs detections in countries among either travellers (imported cases only) or community samples (local transmission).*

Variant VOC 202012/01

Since our last update on 9 February, variant VOC 202012/01 has been detected in eight additional countries. As of 16 February, a total of 94 countries across all six WHO regions have reported either imported cases or community transmission of this variant (Figure 4). Local transmission has been reported in at least 47 countries across all six WHO regions.

In an updated report on SARS-CoV-2 and increased circulation of variants of concern in the EU/EEA and vaccine rollout, the European Centre for Disease Control and Prevention (ECDC) highlights that while a number of European countries have been reporting an overall decrease in the incidence of COVID-19, likely due to a strong combination of public health and social measures, the majority of countries in Europe continues to experience high or increasing notification rates among older age groups and/or high death rates.[1] Moreover, among samples tested in Europe by PCR-based screening and whole genome sequencing, the proportion of cases infected with VOC 202012/01 has increased in the past weeks, indicating community transmission in a number of countries.[1]

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[1] European Centre for Disease Prevention and Control, Risk assessment on COVID-19, 15 February 2021. Available at : https://www.ecdc.europa.eu/en/current-risk-assessment-novel-coronavirus-situation

Figure 5. Countries, territories and areas reporting SARS-CoV-2 variant VOC 202012/01 as of 16 February 2021

Variant 501Y.V2

Since the last update on 9 February, 501Y.V2 has been reported from two additional countries– now totaling 46 countries across all six WHO regions (Figure 5). Local transmission has been reported in at least 12 countries across four WHO regions.

Figure 6. Countries, territories and areas reporting SARS-CoV-2 variant 501Y.V2 as of 16 February 2021

Variant P.1

Since our last update, variant P.1 has been reported in six additional countries. To date, this variant is reported in 21 countries across five of the six WHO regions (Figure 6). So far, local transmission has been reported in at least two countries in one WHO region.

Figure 7. Countries, territories and areas reporting SARS-CoV-2 variant P.1 as of 16 February 2021

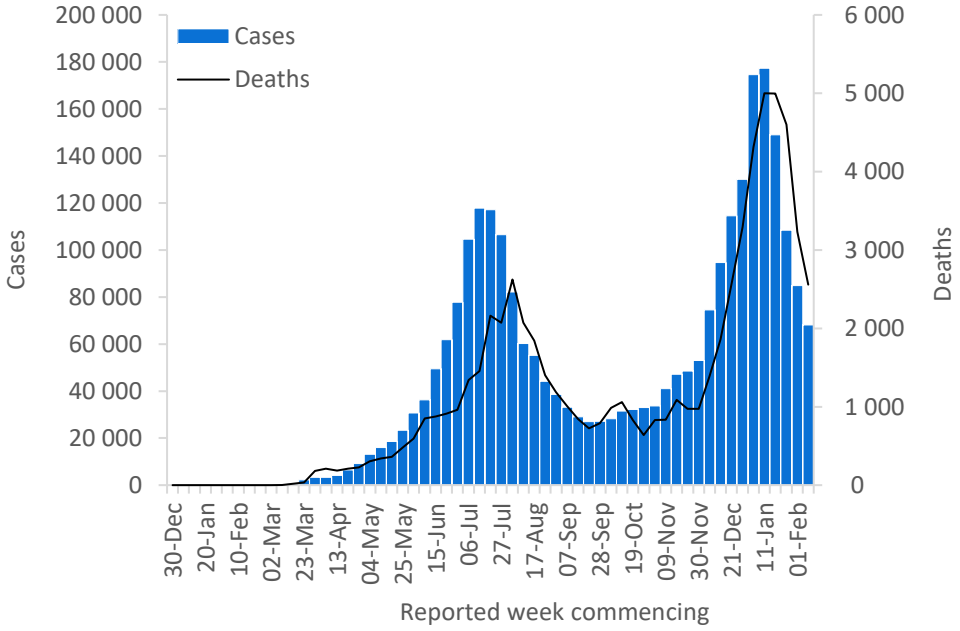
A list of countries/territories/areas reporting variants of concern can be found in Annex 2.

WHO regional overviews

African Region

In the past week, the African Region reported over 68 000 cases and 2500 deaths, a 20% and 21% decrease respectively compared to the previous week. This is the fourth consecutive week the Region reported decreases in both new cases and deaths. The highest numbers of new cases were reported in South Africa (16 363 new cases; 27.6 new cases per 100 000 population; a 33% decrease), Zambia (7027 new cases; 38.2 new cases per 100 000; a 13% decrease) and Nigeria (6422 new cases; 3.1 new cases per 100 000; a 26% decrease),

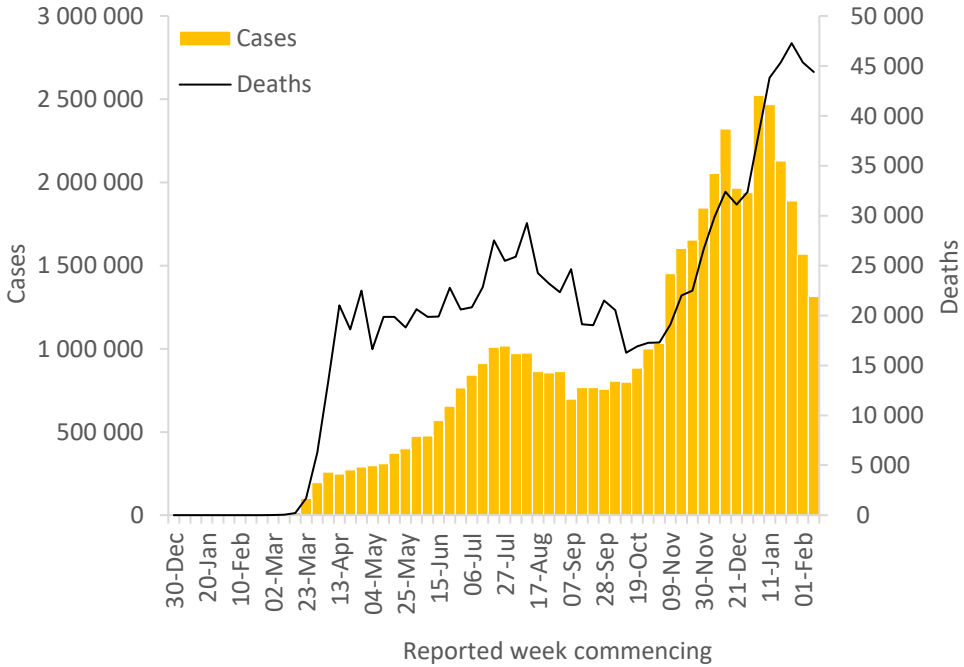
The countries reporting the highest number of new deaths in the past week were South Africa (1641 new deaths; 2.8 new deaths per 100 000; a 26% decrease), Zambia (101 new deaths; 0.5 new deaths per 100 000; a 7% increase), Nigeria (100 new deaths; <0.1 new deaths per 100 000; a 45% increase) and Malawi (100 new deaths; 0.5 new deaths per 100 000; a 33% decrease).



Region of the Americas

Over 1.3 million new cases and over 44 000 new deaths were reported in the Region of the Americas this week, a 16% and 2% decrease respectively compared to the previous week. The highest numbers of new cases were reported from the United States of America (673 630 new cases; 203.5 new cases per 100 000 population; a 23% decrease), Brazil (318 290 new cases; 149.7 new cases per 100 000; a 3% decrease) and Mexico (66 083 new cases; 51.3 new cases per 100 000; a 7% decrease).

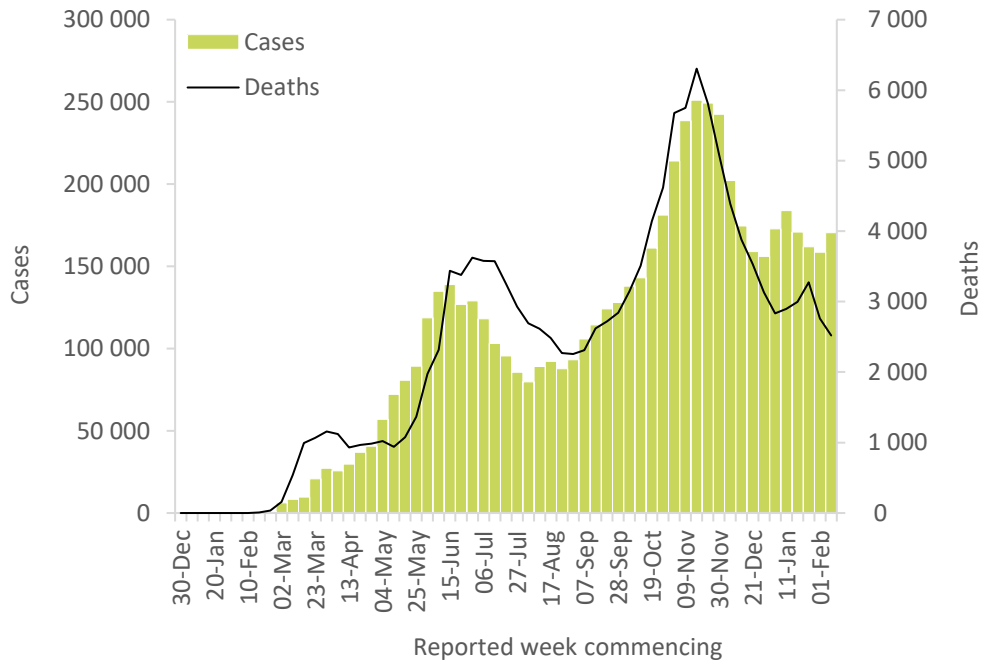
The highest numbers of deaths were reported from the same countries, the United States of America (21 412 new deaths; 6.5 new deaths per 100 000; a 5% decrease), Mexico (8267 new deaths; 6.4 new deaths per 100 000; a 7% increase) and Brazil (7455 new deaths; 3.5 new deaths per 100 000; a 1% increase).



Eastern Mediterranean Region

In the past week, the Eastern Mediterranean Region reported over 170 000 new cases, a 7% increase compared to last week. The region reported just over 2500 new deaths, a 9% decrease. The three countries reporting the highest numbers of new cases continue to be the Islamic Republic of Iran (51 503 new cases; 61.3 new cases per 100 000 population; an 8% increase), United Arab Emirates (22 203 new cases; 224.5 new cases per 100 000; a 2% decrease) and Lebanon (19 156 new cases; 280.7 new cases per 100 000; a 1% increase).

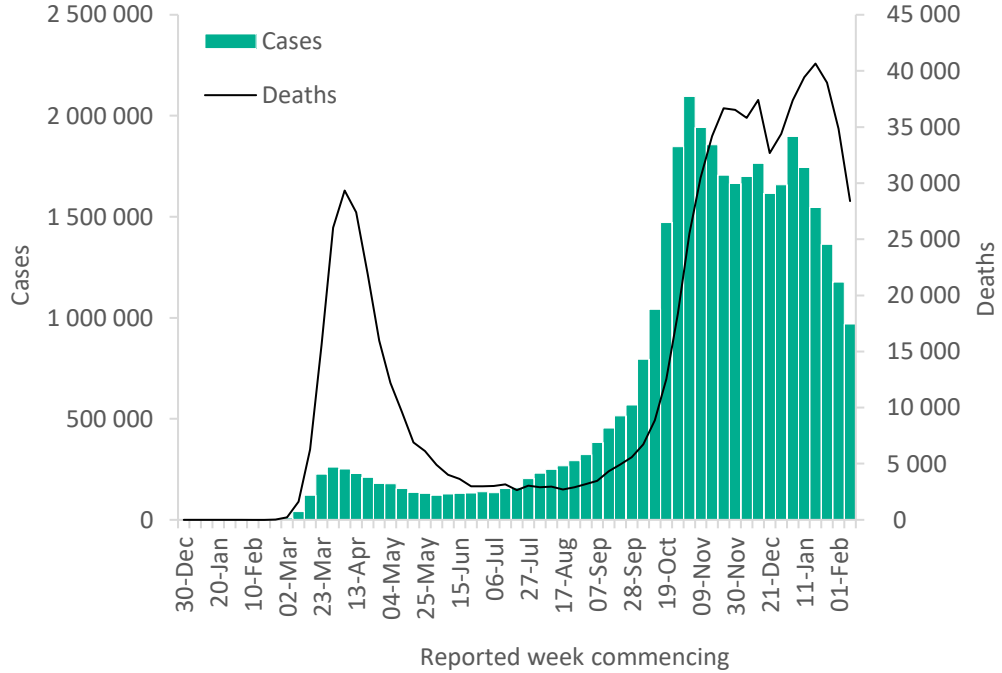
The highest numbers of new deaths continue to be reported in the Islamic Republic of Iran (471 new deaths; 0.6 new death per 100 000 population; a 10% decrease), Lebanon (399 new deaths; 5.8 new death per 100 000; a 25% decrease) and Pakistan (362 new deaths; 0.2 new death per 100 000; a 24% increase).



European Region

The European Region reported over 960 000 new cases and over 28 000 new deaths, a decrease of 18% and 19% respectively when compared to the previous week. The three countries reporting the highest numbers of new cases were France (127 565 new cases; 195.4 new cases per 100 000; a 6% decrease), the Russian Federation (104 602 new cases; 71.7 new cases per 100 000; a 11% decrease), and the United Kingdom (97 271 new cases; 143.3 new cases per 100 000; an 27% decrease).

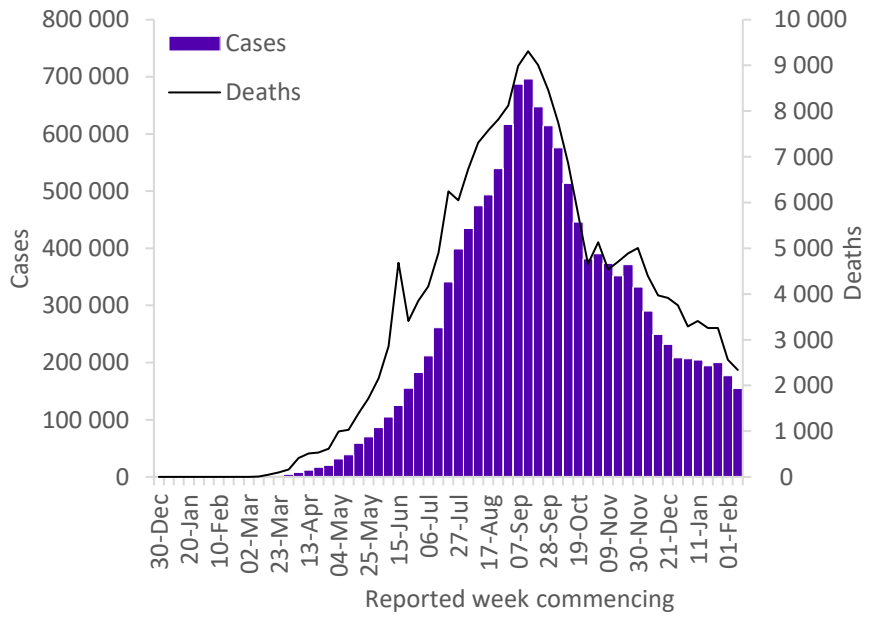
The highest numbers of deaths were reported from the United Kingdom (4816 new deaths; 7.1 new deaths per 100 000; a 26% decrease), the Russian Federation (3465 new deaths; 2.4 new deaths per 100 000, similar to previous week) and Germany (3443 new deaths; 4.1 new deaths per 100 000; a 25% decrease).



South-East Asia Region

In the past week, the South-East Asia Region reported over 150 000 new cases, a decrease of 13% compared to last week. The region reported over 2300 new deaths, a 9% decrease. The three countries reporting the highest numbers of new cases were India (78 577 new cases; 5.7 new cases per 100 000; a 2% decrease), Indonesia (63 693 new cases; 23.3 new cases per 100 000; a 21% decrease), and Sri Lanka (6276 new cases; 29.3 new cases per 100 000; a 19% increase).

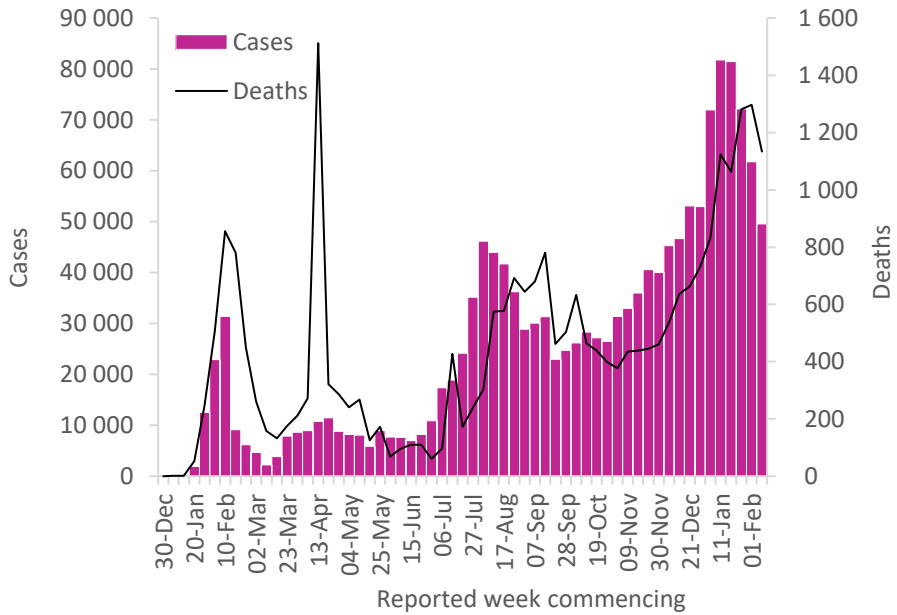
The three countries reporting the highest numbers of new deaths this week were Indonesia (1543 new deaths; 0.6 new deaths per 100 000; a 7% decrease), India (646 new deaths; <0.1 new deaths per 100 000; a 11% decrease) and Bangladesh (76 new deaths; <0.1 new deaths per 100 000; a 4% decrease).



Western Pacific Region

The Western Pacific Region reported over 49 000 new cases the past week, a 20% decrease compared to the previous week. The region reported 1100 new deaths, a 13% decrease. The three countries reporting the highest numbers of new cases in the region this week were Malaysia (23 084 new cases; 71.3 new cases per 100 000; a 21% decrease), the Philippines (11 734 new cases; 10.7 new cases per 100 000; a 2% decrease), and Japan (11 037 new cases; 8.7 new cases per 100 000; a 34% decrease).

The three countries reporting the highest numbers of new deaths this week were Japan (574 new deaths; 0.5 new deaths per 100 000; a 16% decrease), the Philippines (397 new deaths; 0.4 new deaths per 100 000; a 10% decrease) and Malaysia (101 new deaths; 0.3 new deaths per 100 000; a 9% decrease).



Key weekly updates

WHO Director-General Dr Tedros messages

- Member States information session on COVID-19 – 11 February 2021 : "We have to be ready to adapt vaccines so they remain effective, as we do with flu vaccines, which are updated twice a year. Manufacturers will have to adjust to the evolution of the virus, taking into account the latest variants for future shots, including boosters."

Clinical data collection

- Global COVID-19 Clinical Platform Case Report Form (CRF) for Post COVID condition (Post COVID-19 CRF)

COVID-19 vaccines

- 10 steps to community readiness: What countries should do to prepare communities for a COVID-19 vaccine, treatment or new test
- Data for action: achieving high uptake of COVID-19 vaccines: Interim Guidance
- Community needs, perceptions and demand: community assessment tool
- Conducting community engagement for COVID-19 vaccines: Interim guidance, 31 January 2021
- Acceptance and demand for COVID-19 vaccines: Interim guidance, 31 January 2021 and communications plan template
- COVAX Statement on New Variants of SARS-CoV-2
- In the COVID-19 vaccine race, we either win together or lose together
- The Oxford/AstraZeneca COVID-19 vaccine: what you need to know
- AZD1222 vaccine against COVID-19 developed by Oxford University and AstraZeneca: Background paper
- Interim recommendations for use of the AZD1222 (ChAdOx1-S (recombinant)) vaccine against COVID-19 developed by Oxford University and AstraZeneca

Mother-to-child SARS-CoV-2 transmission

- Definition and categorization of the timing of mother-to-child transmission of SARS-CoV-2

Mental health

- WHO Executive Board stresses need for improved response to mental health impact of public health emergencies

Partnerships

- ILO joins the Global Action Plan for Healthy Lives and Well-being for All

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
  - EPI-WIN: tailored information for individuals, organizations and communities

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 14 February 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**68 115**	**2 723 431**	**242.7**	**2 558**	**68 294**	**6.1**	
South Africa	16 363	1 490 063	2 512.4	1 641	47 821	80.6	Community transmission
Zambia	7 027	68 454	372.4	101	940	5.1	Community transmission
Nigeria	6 422	145 664	70.7	100	1 747	0.8	Community transmission
Ghana	5 072	75 118	241.7	69	518	1.7	Community transmission
Mozambique	4 476	48 588	155.5	63	514	1.6	Community transmission
Ethiopia	4 251	145 704	126.7	36	2 181	1.9	Community transmission
Senegal	2 152	30 641	183.0	66	741	4.4	Community transmission
Malawi	2 001	28 876	150.9	100	937	4.9	Community transmission
Algeria	1 661	110 513	252.0	24	2 935	6.7	Community transmission
Botswana	1 423	24 926	1 059.9	39	202	8.6	Community transmission
Côte d'Ivoire	1 317	30 884	117.1	11	173	0.7	Community transmission
Gabon	1 120	12 577	565.1	2	73	3.3	Community transmission
Kenya	1 102	102 792	191.2	19	1 795	3.3	Community transmission
Cameroon	1 081	31 394	118.3	0	474	1.8	Community transmission
South Sudan	955	5 310	47.4	9	74	0.7	Community transmission
Namibia	952	35 797	1 408.8	15	386	15.2	Community transmission
Rwanda	930	17 267	133.3	19	236	1.8	Community transmission
Democratic Republic of the Congo	755	24 239	27.1	13	692	0.8	Community transmission
Zimbabwe	617	35 104	236.2	82	1 398	9.4	Community transmission
Lesotho	472	9 852	459.9	42	225	10.5	Community transmission
Seychelles	388	1 892	1 923.8	2	8	8.1	Community transmission
Togo	387	5 823	70.3	1	80	1.0	Community transmission
Benin	367	4 560	37.6	1	56	0.5	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Burkina Faso	361	11 588	55.4	4	138	0.7	Community transmission
Congo	359	8 419	152.6	1	123	2.2	Community transmission
Cabo Verde	320	14 700	2 643.9	4	139	25.0	Community transmission
Eswatini	307	16 488	1 421.2	26	630	54.3	Community transmission
Madagascar	295	19 360	69.9	4	285	1.0	Community transmission
Angola	267	20 329	61.9	16	491	1.5	Community transmission
Comoros	246	3 332	383.2	20	128	14.7	Community transmission
Guinea	230	14 895	113.4	0	84	0.6	Community transmission
Uganda	198	40 019	87.5	1	328	0.7	Community transmission
Chad	149	3 622	22.1	2	127	0.8	Community transmission
Sao Tome and Principe	143	1 482	676.2	1	19	8.7	Community transmission
Equatorial Guinea	116	5 694	405.8	1	87	6.2	Community transmission
Guinea-Bissau	113	2 885	146.6	0	46	2.3	Community transmission
Eritrea	103	2 429	68.5	0	7	0.2	Community transmission
Burundi	101	1 824	15.3	0	3	0.0	Community transmission
Niger	92	4 690	19.4	4	169	0.7	Community transmission
Mali	66	8 226	40.6	4	342	1.7	Community transmission
Gambia	65	4 302	178.0	1	135	5.6	Community transmission
Sierra Leone	62	3 821	47.9	0	79	1.0	Community transmission
Liberia	13	1 969	38.9	0	84	1.7	Community transmission
Mauritius	11	595	46.8	0	10	0.8	Clusters of cases
Central African Republic	7	4 996	103.4	0	63	1.3	Community transmission
Mauritania	0	16 777	360.8	0	425	9.1	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories[iii]							
Mayotte	2 780	13 535	4 961.2	14	78	28.6	Clusters of cases
Réunion	420	10 907	1 218.2	0	47	5.2	Clusters of cases
Americas	**1 315 480**	**48 228 712**	**4 715.5**	**44 385**	**1 136 906**	**111.2**	
United States of America	673 630	27 221 607	8 224.0	21 412	477 147	144.2	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Brazil	318 290	9 765 455	4 594.2	7 455	237 489	111.7	Community transmission
Mexico	66 083	1 978 954	1 534.9	8 267	172 557	133.8	Community transmission
Argentina	51 544	2 021 553	4 472.9	1 203	50 188	111.0	Community transmission
Peru	47 703	1 220 748	3 702.4	1 322	43 255	131.2	Community transmission
Colombia	42 509	2 185 169	4 294.5	1 793	57 196	112.4	Community transmission
Chile	24 313	772 395	4 040.5	548	19 443	101.7	Community transmission
Canada	22 550	820 306	2 173.4	553	21 162	56.1	Community transmission
Bolivia (Plurinational State of)	9 188	235 098	2 014.0	420	11 107	95.2	Community transmission
Ecuador	8 412	265 527	1 505.0	265	15 269	86.5	Community transmission
Dominican Republic	6 747	228 895	2 110.0	131	2 932	27.0	Community transmission
Honduras	5 771	159 024	1 605.6	154	3 848	38.9	Community transmission
Paraguay	5 708	142 598	1 999.3	113	2 904	40.7	Community transmission
Panama	5 498	330 985	7 671.0	169	5 595	129.7	Community transmission
Cuba	5 472	37 483	330.9	28	261	2.3	Community transmission
Guatemala	4 134	167 071	932.5	240	6 094	34.0	Community transmission
Uruguay	3 525	47 828	1 376.8	49	527	15.2	Community transmission
Venezuela (Bolivarian Republic of)	3 028	132 259	465.1	44	1 267	4.5	Community transmission
Costa Rica	2 749	199 187	3 910.1	42	2 714	53.3	Community transmission
Jamaica	1 989	18 830	635.9	15	372	12.6	Community transmission
El Salvador	1 191	57 428	885.4	61	1 734	26.7	Community transmission
Saint Lucia	674	2 487	1 354.4	5	23	12.5	Community transmission
Haiti	337	12 143	106.5	1	247	2.2	Community transmission
Guyana	294	8 181	1 040.1	7	186	23.6	Clusters of cases
Barbados	271	1 947	677.5	5	23	8.0	Community transmission
Saint Vincent and the Grenadines	248	1 418	1 278.2	3	6	5.4	Community transmission
Suriname	159	8 778	1 496.3	8	166	28.3	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Antigua and Barbuda	150	427	436.0	2	9	9.2	Sporadic cases
Belize	121	12 134	3 051.6	7	313	78.7	Community transmission
Bahamas	41	8 311	2 113.4	2	178	45.3	Clusters of cases
Nicaragua	37	5 064	76.4	1	171	2.6	Community transmission
Trinidad and Tobago	30	7 637	545.7	2	137	9.8	Community transmission
Dominica	0	121	168.1	0	0	0.0	Clusters of cases
Grenada	0	148	131.5	0	1	0.9	Sporadic cases
Saint Kitts and Nevis	0	40	75.2	0	0	0.0	Sporadic cases
Territories[iii]							
Puerto Rico	1 958	97 313	3 401.5	43	1 915	66.9	Community transmission
Aruba	204	7 338	6 873.0	7	68	63.7	Community transmission
Turks and Caicos Islands	179	1 833	4 734.2	3	12	31.0	Clusters of cases
French Guiana	160	16 456	5 509.5	1	80	26.8	Community transmission
Guadeloupe	146	9 302	2 324.8	1	159	39.7	Community transmission
Saint Martin	88	1 377	3 561.9	0	12	31.0	Community transmission
Martinique	79	6 521	1 737.7	0	45	12.0	Community transmission
United States Virgin Islands	75	2 524	2 417.0	1	25	23.9	Community transmission
Sint Maarten	74	1 985	4 629.0	0	27	63.0	Community transmission
Saint Barthélemy	46	425	4 299.4	0	0	0.0	Sporadic cases
Curaçao	36	4 633	2 823.4	1	22	13.4	Community transmission
Cayman Islands	11	416	633.0	0	2	3.0	Sporadic cases
British Virgin Islands	10	151	499.4	0	1	3.3	Clusters of cases
Bonaire	6	372	1 778.6	1	4	19.1	Community transmission
Falkland Islands (Malvinas)	5	49	1 406.8	0	0	0.0	No cases
Montserrat	4	19	380.1	0	1	20.0	Sporadic cases
Bermuda	2	694	1 114.4	0	12	19.3	Sporadic cases
Anguilla	1	18	120.0	0	0	0.0	Sporadic cases
Saba	0	6	310.4	0	0	0.0	Sporadic cases
Saint Pierre and Miquelon	0	24	414.2	0	0	0.0	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Sint Eustatius	0	20	637.1	0	0	0.0	Sporadic cases
Eastern Mediterranean	**170 445**	**5 998 998**	**820.9**	**2 519**	**139 468**	**19.1**	
Iran (Islamic Republic of)	51 503	1 510 873	1 798.8	471	58 883	70.1	Community transmission
United Arab Emirates	22 203	345 605	3 494.3	87	1 001	10.1	Community transmission
Lebanon	19 156	336 992	4 937.3	399	3 961	58.0	Community transmission
Iraq	14 212	641 628	1 595.2	53	13 164	32.7	Community transmission
Jordan	10 948	344 803	3 379.4	75	4 444	43.6	Community transmission
Pakistan	8 497	561 625	254.3	362	12 276	5.6	Community transmission
Kuwait	6 867	176 903	4 142.4	34	998	23.4	Community transmission
Tunisia	6 328	222 504	1 882.7	346	7 508	63.5	Community transmission
Bahrain	5 389	112 102	6 588.1	19	398	23.4	Clusters of cases
Egypt	4 096	173 202	169.3	331	9 935	9.7	Clusters of cases
Libya	3 987	126 881	1 846.5	78	2 014	29.3	Community transmission
Morocco	3 169	478 135	1 295.4	79	8 460	22.9	Clusters of cases
Qatar	3 114	156 804	5 442.6	5	255	8.9	Community transmission
Saudi Arabia	2 449	372 410	1 069.7	31	6 428	18.5	Sporadic cases
Oman	1 581	136 622	2 675.4	7	1 539	30.1	Community transmission
Syrian Arab Republic	412	14 820	84.7	28	975	5.6	Community transmission
Somalia	238	5 092	32.0	14	148	0.9	Community transmission
Sudan	180	29 933	68.3	15	1 849	4.2	Community transmission
Afghanistan	157	55 492	142.5	17	2 427	6.2	Clusters of cases
Djibouti	27	5 968	604.0	0	63	6.4	Clusters of cases
Yemen	9	2 140	7.2	1	617	2.1	Community transmission
Territories[iii]							
occupied Palestinian territory	5 923	188 464	3 694.3	67	2 125	41.7	Community transmission
Europe	**968 943**	**36 575 529**	**3 918.5**	**28 404**	**812 410**	**87.0**	
France	127 565	3 390 070	5 193.6	2 837	81 226	124.4	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Russian Federation	104 602	4 071 883	2 790.2	3 465	80 126	54.9	Clusters of cases
The United Kingdom	97 271	4 027 110	5 932.2	4 816	116 908	172.2	Community transmission
Italy	85 721	2 710 819	4 483.5	2 353	93 356	154.4	Clusters of cases
Turkey	55 110	2 579 896	3 059.0	692	27 377	32.5	Community transmission
Czechia	53 034	1 088 009	10 159.8	908	18 143	169.4	Community transmission
Germany	50 551	2 334 561	2 786.4	3 443	64 960	77.5	Community transmission
Spain	49 840	3 041 454	6 505.1	1 053	64 217	137.3	Community transmission
Poland	38 700	1 588 955	4 198.4	1 720	40 807	107.8	Community transmission
Israel	36 500	720 393	8 322.9	268	5 335	61.6	Community transmission
Ukraine	26 294	1 271 143	2 906.5	733	24 330	55.6	Community transmission
Netherlands	24 162	1 025 787	5 986.5	443	14 793	86.3	Community transmission
Portugal	22 173	784 079	7 689.5	1 229	15 183	148.9	Clusters of cases
Sweden	17 115	608 411	6 024.3	51	12 428	123.1	Community transmission
Romania	16 748	760 091	3 951.1	516	19 325	100.5	Community transmission
Slovakia	14 460	276 234	5 059.6	677	5 812	106.5	Clusters of cases
Serbia	13 141	419 493	6 023.9	102	4 214	60.5	Community transmission
Belgium	11 879	738 631	6 373.2	252	21 662	186.9	Community transmission
Hungary	10 967	387 462	4 010.8	616	13 706	141.9	Community transmission
Belarus	10 070	267 029	2 825.9	67	1 840	19.5	Community transmission
Austria	9 385	428 692	4 759.9	204	8 088	89.8	Community transmission
Greece	8 253	171 466	1 645.1	152	6 103	58.6	Community transmission
Albania	7 775	91 987	3 196.4	97	1 543	53.6	Clusters of cases
Ireland	6 248	208 796	4 228.5	257	3 931	79.6	Community transmission
Kazakhstan	6 048	250 476	1 334.0	0	3 185	17.0	Clusters of cases
Slovenia	5 970	179 153	8 617.5	46	3 977	191.3	Clusters of cases
Bulgaria	5 964	229 516	3 303.1	297	9 608	138.3	Clusters of cases
Switzerland	5 814	538 116	6 217.7	70	8 982	103.8	Community transmission
Republic of Moldova	5 562	169 805	4 209.4	110	3 640	90.2	Community transmission
Latvia	4 962	76 282	4 044.2	116	1 443	76.5	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Estonia	4 488	52 416	3 951.3	34	495	37.3	Clusters of cases
Lithuania	3 954	190 724	7 006.0	133	3 070	112.8	Community transmission
Georgia	3 533	265 557	6 657.0	69	3 352	84.0	Community transmission
Montenegro	3 256	68 921	10 973.5	44	882	140.4	Clusters of cases
Denmark	2 881	204 067	3 523.1	69	2 284	39.4	Community transmission
Finland	2 310	49 572	894.7	15	710	12.8	Community transmission
North Macedonia	2 273	96 872	4 649.8	60	2 976	142.8	Community transmission
Croatia	2 255	237 657	5 789.1	149	5 318	129.5	Community transmission
Bosnia and Herzegovina	1 938	125 642	3 829.6	101	4 892	149.1	Community transmission
Norway	1 753	66 236	1 221.8	10	592	10.9	Clusters of cases
Armenia	1 079	169 167	5 708.8	24	3 141	106.0	Community transmission
Malta	1 075	19 651	4 450.5	11	290	65.7	Clusters of cases
Luxembourg	1 010	52 699	8 418.7	14	606	96.8	Community transmission
Azerbaijan	973	231 995	2 288.1	22	3 178	31.3	Clusters of cases
Cyprus	746	32 390	2 682.7	9	220	18.2	Clusters of cases
Kyrgyzstan	404	85 475	1 310.1	15	1 441	22.1	Clusters of cases
Uzbekistan	318	79 416	237.3	1	622	1.9	Clusters of cases
Andorra	257	10 463	13 541.7	2	107	138.5	Community transmission
San Marino	168	3 304	9 735.4	3	72	212.2	Community transmission
Monaco	108	1 755	4 472.0	1	21	53.5	Sporadic cases
Liechtenstein	17	2 611	6 846.4	0	49	128.5	Sporadic cases
Iceland	13	6 033	1 767.9	0	29	8.5	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Kosovo	2 086	64 052	3 443.0	24	1 534	82.5	Community transmission
Guernsey	93	782	1 237.4	0	13	20.6	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Gibraltar	42	4 212	12 501.9	4	84	249.3	Clusters of cases
Jersey	25	3 198	2 939.3	0	67	61.6	Community transmission
Faroe Islands	2	657	1 344.5	0	1	2.0	Sporadic cases
Isle of Man	2	436	512.7	0	25	29.4	No cases
Greenland	0	30	52.8	0	0	0.0	No cases
South-East Asia	**154 414**	**13 188 211**	**652.4**	**2 340**	**202 607**	**10.0**	
India	78 577	10 904 940	790.2	646	155 642	11.3	Clusters of cases
Indonesia	63 693	1 210 703	442.6	1 543	32 936	12.0	Community transmission
Sri Lanka	6 276	74 852	349.6	33	384	1.8	Clusters of cases
Bangladesh	2 496	540 266	328.1	76	8 266	5.0	Community transmission
Thailand	1 200	24 571	35.2	1	80	0.1	Clusters of cases
Maldives	1 060	17 716	3 277.4	2	56	10.4	Clusters of cases
Nepal	808	272 614	935.6	19	2 054	7.0	Clusters of cases
Myanmar	281	141 585	260.2	20	3 188	5.9	Clusters of cases
Timor-Leste	21	101	7.7	0	0	0.0	Sporadic cases
Bhutan	2	863	111.8	0	1	0.1	Clusters of cases
Western Pacific	**49 577**	**1 531 366**	**77.9**	**1 134**	**27 019**	**1.4**	
Malaysia	23 084	261 805	808.9	101	958	3.0	Clusters of cases
Philippines	11 734	547 255	499.4	397	11 507	10.5	Community transmission
Japan	11 037	414 472	327.7	574	6 912	5.5	Clusters of cases
Republic of Korea	2 629	83 525	162.9	51	1 522	3.0	Clusters of cases
Mongolia	304	2 293	69.9	0	2	0.1	Clusters of cases
China	243	101 515	6.9	7	4 838	0.3	Clusters of cases
Viet Nam	210	2 195	2.3	0	35	0.0	Clusters of cases
Singapore	111	59 786	1 021.9	0	29	0.5	Sporadic cases
Australia	44	28 892	113.3	0	909	3.6	Sporadic cases
Papua New Guinea	28	922	10.3	1	10	0.1	Community transmission
New Zealand	10	1 974	40.9	0	25	0.5	Clusters of cases
Cambodia	5	479	2.9	0	0	0.0	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Brunei Darussalam	3	184	42.1	0	3	0.7	Sporadic cases
Solomon Islands	1	18	2.6	0	0	0.0	No cases
Fiji	0	56	6.2	0	2	0.2	Sporadic cases
Lao People's Democratic Republic	0	45	0.6	0	0	0.0	Sporadic cases
Territories[iii]							
French Polynesia	78	18 263	6 501.4	2	135	48.1	Sporadic cases
Guam	48	7 484	4 434.3	1	130	77.0	Clusters of cases
Wallis and Futuna	4	9	80.0	0	0	0.0	Sporadic cases
New Caledonia	3	52	18.2	0	0	0.0	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	1	134	232.8	0	2	3.5	Pending
Marshall Islands	0	4	6.8	0	0	0.0	No cases
Samoa	0	3	1.5	0	0	0.0	No cases
Vanuatu	0	1	0.3	0	0	0.0	No cases
Global	**2 726 974**	**108 246 992**	**1 388.7**	**81 340**	**2 386 717**	**30.6**	

**See *Annex: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting variants of concern as of 16 February 2021**

Reporting Country/Territory/Area[i]	Variants of concern		
	501Y.V2	P.1	VOC 202012/01
Argentina		Verified	Verified
Aruba			Verified
Australia	Verified		Verified
Austria	Verified		Verified
Bangladesh	Unverified		Verified
Barbados			Verified
Belgium	Verified		Verified
Bosnia and Herzegovina			Unverified
Botswana	Verified		
Brazil		Verified	Verified
Bulgaria			Verified
Canada	Verified	Unverified	Verified
Chile			Verified
China	Verified		Verified
Colombia		Verified	
Comoros			
Croatia			Verified
Cuba	Verified		
Curaçao			Verified
Cyprus			Verified
Czechia			Verified
Denmark	Verified		Verified
Dominican Republic			Verified
Ecuador			Verified
Estonia			Verified
Faroe Islands		Verified	
Finland	Verified		Verified
France	Verified	Verified	Verified
Gambia	Verified		Verified

Reporting Country/Territory/Area[i]	Variants of concern		
	501Y.V2	P.1	VOC 202012/01
Georgia			Verified
Germany	Verified	Verified	Verified
Ghana	Verified		Unverified
Gibraltar			Unverified
Greece	Verified		Verified
Guadeloupe			Verified
Hungary			Verified
Iceland			Verified
India			Verified
Iran (Islamic Republic of)			Verified
Iraq			Unverified
Ireland	Verified		Verified
Israel	Verified		Verified
Italy	Unverified	Verified	Verified
Jamaica			Verified
Japan	Verified	Verified	Verified
Jordan			Verified
Kenya	Verified		
Kosovo[1]			Verified
Kuwait			Verified
Latvia			Verified
Lebanon			Verified
Liechtenstein			Verified
Lithuania			Verified
Luxembourg	Verified		Verified
Malawi	Unverified		
Malaysia			Verified
Malta			Verified
Martinique			Verified

Reporting Country/Territory/Area[i]	Variants of concern		
	501Y.V2	P.1	VOC 202012/01
Mayotte	Verified		Verified
Mexico		Verified	Verified
Morocco			Verified
Mozambique	Verified		
Namibia	Unverified		
Nepal			Verified
Netherlands	Verified	Verified	Verified
New Zealand	Verified		Verified
Nigeria			Verified
North Macedonia			Verified
Norway	Verified		Verified
occupied Palestinian territory			Verified
Oman			Verified
Pakistan			Verified
Panama	Verified		
Peru		Verified	Verified
Philippines			Verified
Poland			Verified
Portugal	Unverified	Unverified	Verified
Republic of Korea	Verified	Verified	Verified
Réunion	Verified	Verified	Verified
Romania			Verified
Russian Federation			Verified
Saint Barthélemy			Verified
Saint Lucia			Verified

Reporting Country/Territory/Area[i]	Variants of concern		
	501Y.V2	P.1	VOC 202012/01
Saint Martin			Verified
Saudi Arabia			Verified
Senegal			Unverified
Serbia			Verified
Singapore			Verified
Slovakia			Verified
Slovenia			Verified
South Africa	Verified		Unverified
Spain	Verified	Verified	Verified
Sri Lanka			Verified
Sweden	Verified		Verified
Switzerland	Verified	Unverified	Verified
Thailand	Verified		Verified
The United Kingdom	Verified	Verified	Verified
Trinidad and Tobago			Verified
Turkey	Unverified	Unverified	Verified
United Arab Emirates	Verified	Verified	Verified
United Republic of Tanzania	Unverified		
United States of America	Verified	Verified	Verified
Uruguay			Verified
Uzbekistan			Verified
Viet Nam	Verified		Verified
Zambia	Verified		
Zimbabwe	Unverified		

**See *Annex : Data, table and figure notes*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 745 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that

are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.

- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 7 February 2021, 10 am CET

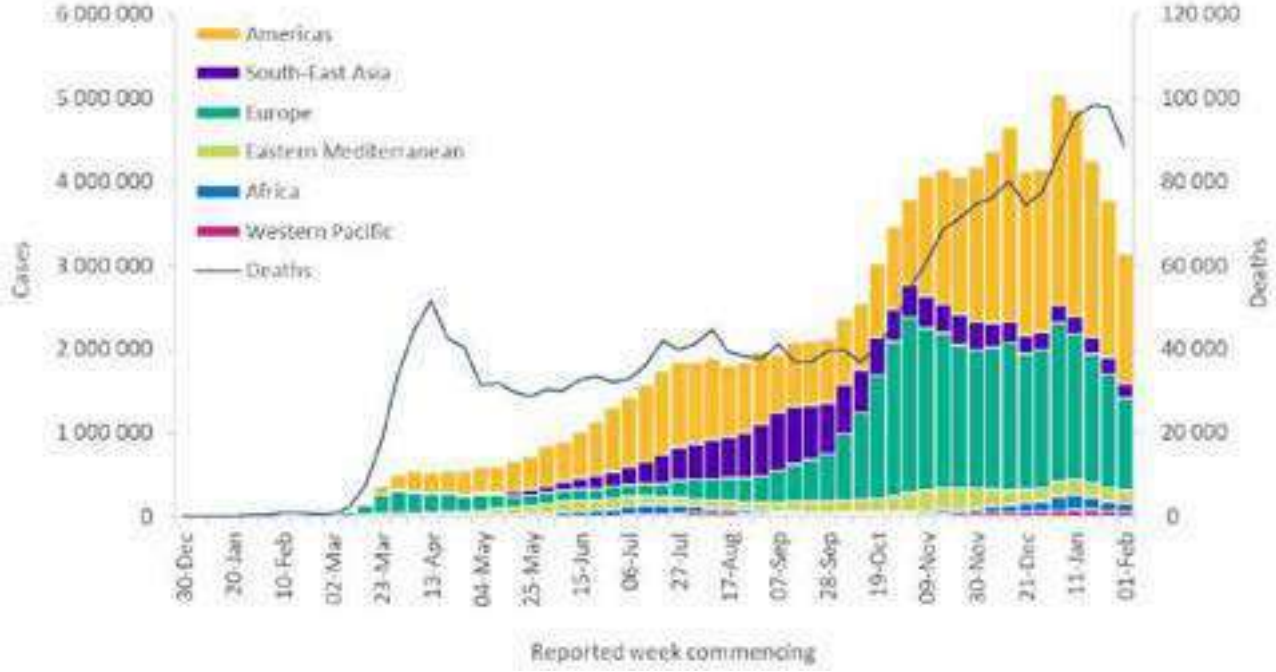
In this edition:

- Global overview
- Special focus: How COVAX is distributing the first COVID-19 vaccines to prioritized countries in all six WHO regions
- Special focus: SARS-CoV-2 variants of concern
- Region-specific information: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western Pacific Region
- Key Weekly Updates

Global overview

For the fourth week in a row, the number of global new cases reported fell, with 3.1 million new cases last week, a 17% decline compared to the previous week (Figure 1). This is the lowest figure since the week of 26 October (15 weeks ago). Although there are still many countries with increasing numbers of cases, at the global level, this is encouraging. The number of new deaths reported also fell for a second week in a row, with 88 000 new deaths reported last week, a 10% decline as compared to the previous week. All WHO regions reported a decline in new cases, with five out of six regions reporting more than 10% decreases (Table 1). Europe and the Region of the Americas saw the greatest drops in absolute numbers, with together nearly 0.5 million fewer new cases reported last week (153 000 and 320 000 fewer new cases reported, respectively). New deaths also declined in all regions except the Western Pacific, where mortality rates remained similar to the previous week.

Figure 1: COVID-19 cases reported weekly by WHO Region, and global deaths, as of 7 February 2021**



**See *data, table and figure notes*

In the past week, the five countries reporting the highest number of new cases continue to be the United States of America (871 365 cases, a 19% decrease), Brazil (328 652 cases, a 10% decrease), France (136 154 cases, a 4% decrease), the United Kingdom of Great Britain and Northern Ireland (133 747 cases, a 25% decrease), and the Russian Federation (116 842 cases, a 11% decrease).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 7 February 2021**

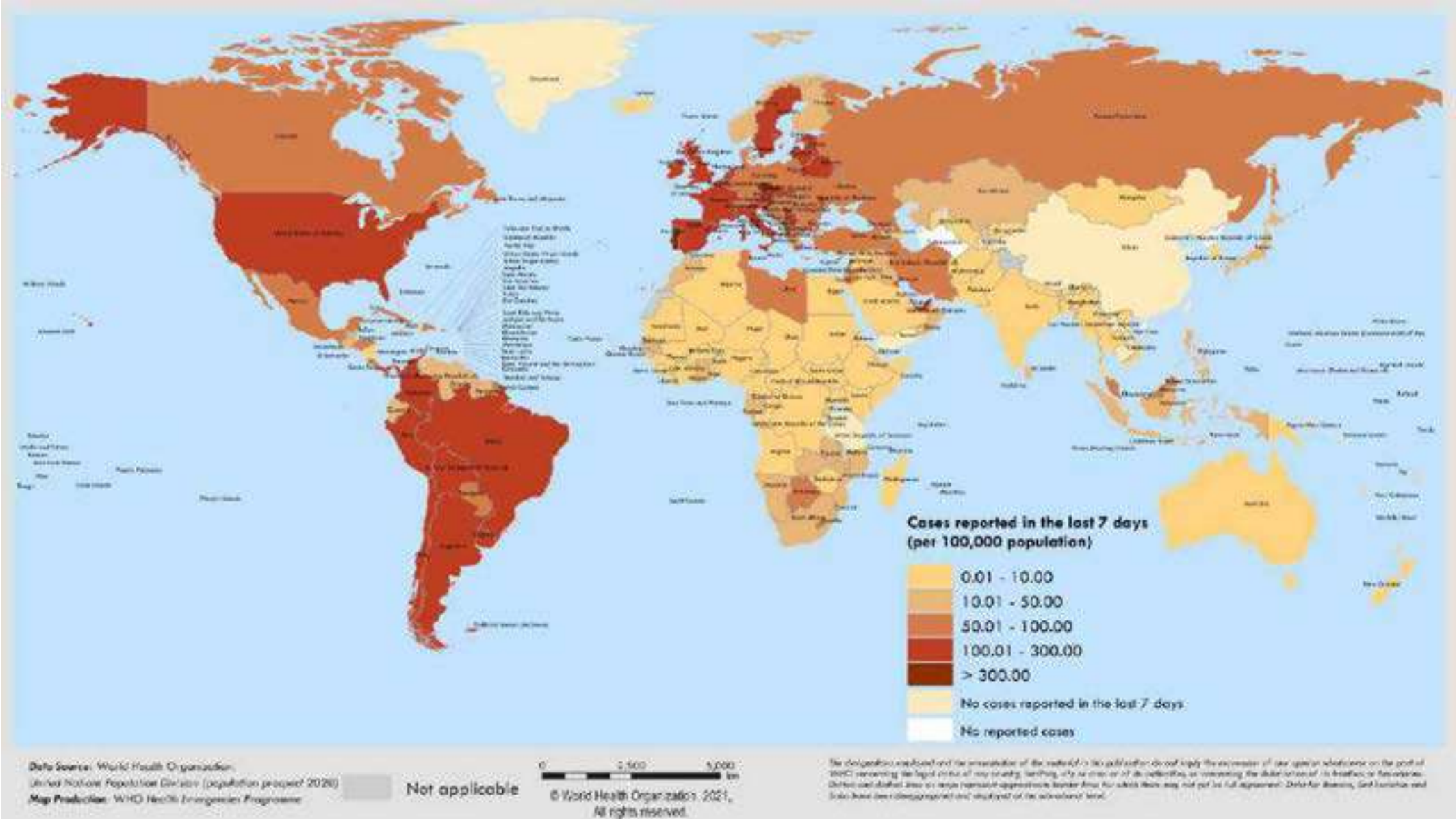
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 568 167 (50%)	-17%	46 913 218 (44%)	45 350 (51%)	-4%	1 092 521 (47%)
Europe	1 102 953 (35%)	-19%	35 515 952 (34%)	33 169 (38%)	-13%	781 242 (34%)
South-East Asia	177 074 (6%)	-12%	13 033 797 (12%)	2 560 (3%)	-21%	200 267 (9%)
Eastern Mediterranean	158 625 (5%)	-2%	5 828 565 (6%)	2 761 (3%)	-16%	136 950 (6%)
Africa	84 842 (3%)	-22%	2 655 316 (3%)	3 232 (4%)	-30%	65 736 (3%)
Western Pacific	61 765 (2%)	-14%	1 481 789 (1%)	1 297 (1%)	1%	25 885 (1%)
Global	**3 153 426 (100%)**	**-17%**	**105 429 382 (100%)**	**88 369 (100%)**	**-10%**	**2 302 614 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*
***See data, table and figure notes.*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Figure 2. COVID-19 cases per 100 000 population reported in the last seven days by countries, territories and areas, 1 February through 7 February 2021**



**See *data, table and figure notes*

Special Focus: How COVAX is distributing the first COVID-19 vaccines to prioritized countries in all six WHO regions

The Access to COVID-19 Tools Accelerator (ACT-Accelerator) was formed ten months ago with two aims: first to develop COVID-19 vaccines, diagnostics and therapeutics fast, and second, to distribute them fairly. The first aim has been achieved. As WHO Director-General Dr Tedros said in his opening remarks at the High-Level Finance Ministries' Meeting for the ACT Accelerator on 29 January: "The development and approval of safe and effective vaccines less than a year after the emergence of a new virus is a stunning scientific achievement, and a much-needed source of hope."

However, in opening remarks at a media briefing on COVID-19 on 5 February, he highlighted that around 130 countries, with 2.5 billion people, were yet to administer a single dose. More than 90% of the countries now rolling out vaccines are high- or upper-middle income countries. Seventy-five percent of doses have been deployed in only 10 countries. At the 148th session of the Executive Board, Dr Tedros stressed that "Vaccine equity is not just a moral imperative, it is a strategic and economic imperative." The International Chamber of Commerce Research Foundation found in a study that "the global economy stands to lose as much as $9.2 trillion if governments fail to ensure developing economy access to COVID-19 vaccines, as much as half of which would fall on advanced economies."[1] Once countries with vaccines have vaccinated their own health workers and older people, the best way to protect the rest of their own population is to share vaccines so other countries can do the same. The longer it takes to vaccinate those most at risk everywhere, the more opportunity the virus has to mutate and evade vaccines.

COVAX, the vaccines pillar of the ACT-Accelerator with 190 participating economies, is supporting the fair distribution of vaccines, and has secured 2 billion doses from five producers, with options on more than 1 billion more doses. A total of 44 bilateral deals were signed last year, and a further 12 signed this year. In this Special Focus, we present how COVAX is receiving and distributing an exceptional first round allocation of 1.2 million doses of the Pfizer-BioNTech vaccine in the first quarter of 2021 to prioritised participants, and 336 million doses of the AstraZeneca/Oxford vaccine.

Following a letter sent to the 190 COVAX participants, as of the deadline of 18 January, 72 expressions of interest were received for the exceptional first round allocation of the ultra-cold chain vaccine from Pfizer-BioNTech. Six regional review committees (composed of staff from WHO, UNICEF, Gavi and members of Gavi's Independent Review Committee) undertook a technical assessment of the applications. Due to the limited quantities of the first wave of vaccines, the list of participants was then narrowed down based on the following considerations; priority was given to COVAX participants that had not started COVID-19 vaccination (as of 29 January 2021), met all of the readiness criteria (including being able to manage the ultra-cold chain vaccine storage at -70°C) and, for self-financing participants, were within the Pfizer price point; this left a total of 51 participants. Participants were then grouped by WHO Region and advance market commitment/self-financing status to ensure all Regions/groups would be represented. Participants in each group were ranked by their 28-day mortality rate as a proxy for the risk of health care worker exposure (i.e. high COVID-19 mortality = high exposure). Eligible COVAX participants were selected from each group up to the 18 maximum that could be covered and supported by the 1.2 million doses. The doses will be delivered in the first quarter of 2021. For more details on the selection factors and countries chosen for the initial COVAX vaccine distribution see the interim distribution forecast. This document complements the recently published COVAX global supply forecast.

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[1] International Chamber of Commerce Research Foundation (2021) '*Study shows vaccine nationalism could cost rich countries US$4.5 trillion*' Retrieved from: https://iccwbo.org/media-wall/news-speeches/study-shows-vaccine-nationalism-could-cost-rich-countries-us4-5-trillion/

A further 336 million AstraZeneca/Oxford vaccine doses (240 million doses produced by the Serum Institute of India and 96 million doses produced by AstraZeneca) will be delivered in the first and second quarters of 2021. The combined population coverage of these initial doses will cover, on average, 3.3% of the total population of the 145 participants receiving doses. This is in line with the COVAX target to reach at least 3% population coverage in all countries, territories and areas in the first half of the year, enough to protect the most vulnerable groups such as health care workers.

COVAX is aiming to have 2 billion doses distributed, including at least 1.3 billion doses to 92 lower income economies, by the end of 2021, protecting at least 20% of each participating population (unless a participant has requested a lower percentage of doses). However, to achieve this, there needs to be prompt and equitable dose sharing, and support to close the funding gap of US$26 billion for the ACT-Accelerator this year, including US$7.8 billion for COVAX. This year the theme for World Health Day is 'health inequality.' The WHO Director-General has challenged Member States to ensure that by the time World Health Day arrives on 7 April, COVID-19 vaccines are being administered in every country. To support Member States in this endeavor, WHO has a COVID-19 vaccine country readiness and delivery portal, which includes guidance and tools, training (including two free online courses on OpenWHO.org), and answers to frequently asked questions.

Other resources

- List of participating economies
- Preparing countries for COVID-19 vaccine introduction
- WHO SAGE values framework for the allocation and prioritization of COVID-19 vaccination
- Guidance on developing a national deployment and vaccination plan for COVID-19 vaccines
- COVID-19 vaccine introduction and deployment costing tool
- Diagnostics, therapeutics, vaccine readiness, and other health products for COVID-19
- Behavioural considerations for acceptance and uptake of COVID-19 vaccines
- COVAX announces additional deals to access promising COVID-19 vaccine candidates; plans global rollout starting Q1 2021
- COVAX publishes first interim distribution forecast
- International Labour Organization (2021) '*ILO Monitor: COVID-19 and the world of work. Seventh edition Updated estimates and analysis*' Retrieved from: https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/briefingnote/wcms_767028.pdf
- Gavi the Vaccine Alliance (2021) '*COVAX announces new agreement, plans for first deliveries*' Retrieved from: https://www.gavi.org/news/media-room/covax-announces-new-agreement-plans-first-deliveries

Special Focus: Update on SARS-CoV-2 variants of concern

WHO is closely monitoring the public health events associated with SARS-CoV-2 variants and continues to provide updates as new information becomes available (see: Disease Outbreak News and Weekly Epidemiological Updates). WHO is working with member states, external partners and experts to evaluate the available evidence around transmissibility, severity, and to assess the potential impacts on countermeasures including vaccines, diagnostics, therapeutics, and public health and social measures (PHSM). Here we provide an update on ongoing studies and the geographical distribution of three variants of concern (VOCs) as reported by countries, territories and areas (hereafter countries) as of 8 February 2021. Emerging evidence is summarized in Table 3 below.

The reported geographical extent of VOC detections has continued to increase as local and national surveillance activities are adapted and strengthened to include strategic sequencing to detect cases with SARS-CoV-2 variants. Since our last update, an additional 6 countries have reported cases of variants VOC202012/01, 3 additional countries reported variant 501Y.V2, and 5 additional countries reported variant P.1 (Table 3, Figures 3,5,7). In many countries, detections remain limited to imported cases only; however, VOCs are increasingly being identified among a subset of community-based samples with no direct links to travellers. Local transmission of VOC202012/01 has been reported in a growing number of countries in the European Region and in some areas of North America. Similarly, there is evidence to suggest that 501Y.V2 transmission is occurring in several countries in the African Region, with clusters of cases or ongoing local transmission suggested in countries in other regions.

On 2 February, the WHO Virus Evolution Working Group convened a meeting with GISAID, Nextstrain and Pango (three prominent systems for tracking the genomic evolution of SARS-CoV-2) and other experts to discuss mechanism for designating variants of concern and labeling these with unbiased, easy to pronounce names. While work is ongoing to establish standardized nomenclature for VOCs, WHO urges authorities, researchers, media and the general public to use non-stigmatizing nomenclature and language for describing VOCs. The group met again today to further discussions and propose a nomenclature.

The emergence of new variants has highlighted the importance of countries continuing to strengthen the PHSM (for more information, please see our technical guidance). As countries work to prepare for and rollout COVID-19 vaccines while continuously adapting other PHSM, it is essential to incorporate studies to investigate potential impacts of emerging VOCs on transmission, disease, and the effectiveness of countermeasures, and to continuously share findings with the global community.

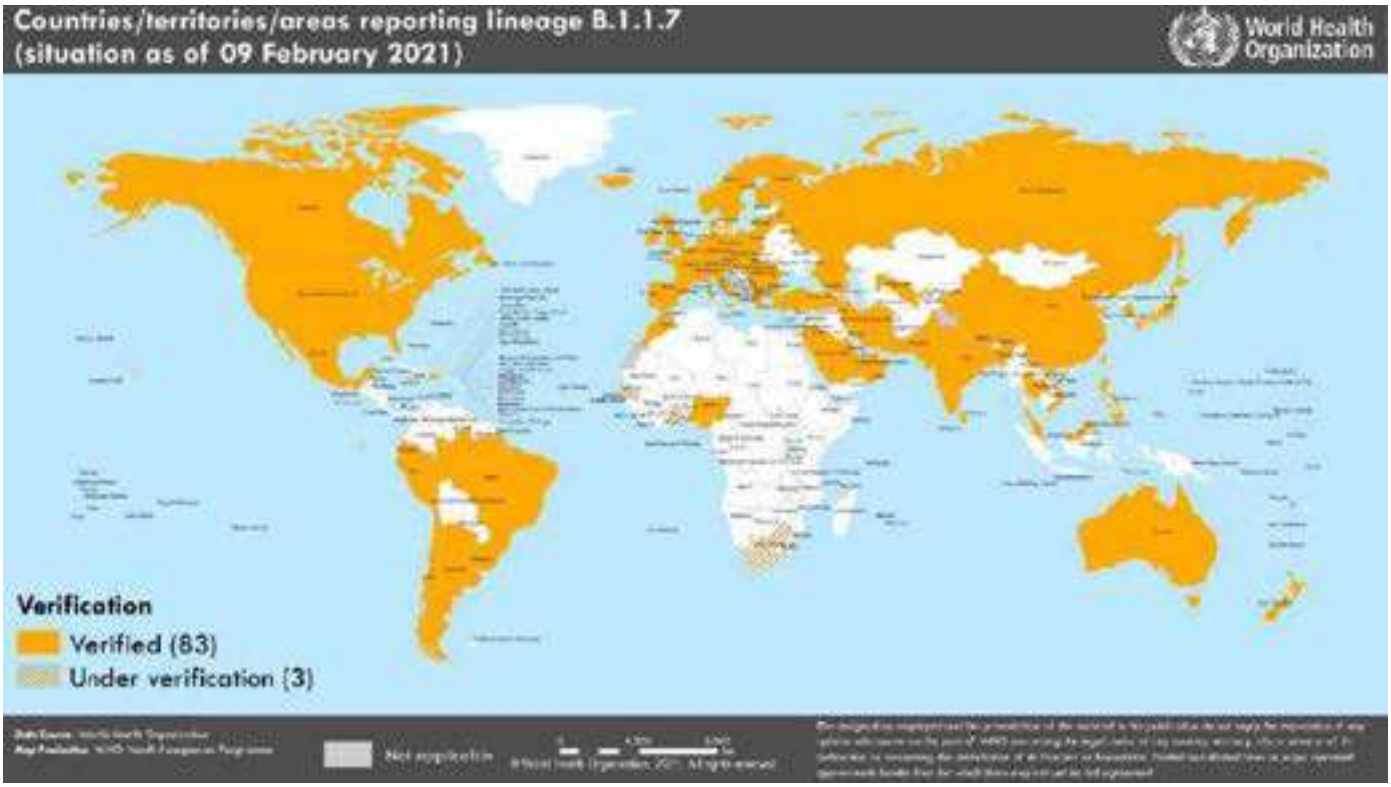
Table 3: Summary of emerging information on key variants of concern, as of 8 February 2021

Nextstrain clade	**20I/501Y.V1**	**20H/501Y.V2†**	**20J/501Y.V3**
Pango lineage	B.1.1.7	B.1.351	B.1.1.28
GISAID clade	GR	GH	GR
Alternate names	VOC202012/01†	VOC202012/02	P.1†
First detected by	United Kingdom	South Africa	Brazil / Japan
First appearance	20 September 2020	Early August 2020	December 2020
Key mutations	• N501Y • D614G • 69/70 deletion • 144Y deletion • A570D • *E484K (detected only in 11 sequences)*[1]	• N501Y • D614G • E484K • K417N	• N501Y • D614G • E484K • K417N
Transmissibility*	Increased[(1)] (36%-75%)[(2)], increased secondary attack rate[(3)] (10% to 13%)	Increased [1.50 (95% CI: 1.20-2.13) times more transmissible than previously circulating variants][(4,6)]	Suggested to be increased
Severity*	Mixed evidence, potential increased mortality based on epidemiological observations[(1,5)]	No impact reported to date[(4,6)], no significant change in-hospital mortality[(17)]	Under investigation, no impact reported to date
Neutralization capacity*	Slight reduction but overall neutralizing titers still remained above the levels expected to confer protection[(7)]	Decreased, suggesting potential increased risk of reinfection[(4,8)]	Potential decrease, small number of reinfections reported[(18,19)]
Potential impacts on vaccines*	No significant impact on Moderna, Pfizer-BioNTech, and Oxford-AstraZeneca vaccines [(9-12)]	Moderna and Pfizer-BioNTech: Reduction in the neutralizing activity, but impact on protection against disease not known.[(9-12)] Novavax and Johnson & Johnson: Lower vaccine efficacy in South Africa compared to settings without the variant (press release data only). Moderate-severe disease were assessed. Serologic neutralization results pending.[(13,14)] Oxford/AstraZeneca: Minimal vaccine efficacy against mild-moderate COVID-19 disease, with wide confidence intervals (press release data only), impact on severe disease undetermined. Serologic neutralization substantially reduced compared with original strains, based on small number of samples analyzed.[(15,16)]	Potential reduction, under investigation
Potential impacts on diagnostics*	S gene target failure.[(15)] No impact on Ag RDTs observed[(20)]	None reported to date.	None reported to date.
Countries reporting cases (newly reported in last week)**	86 (6)	44 (3)	15 (5)

**Generalized findings as compared to non-VOC viruses. Based on emerging evidence from multiple countries, including non-peer-reviewed preprint articles and reports from public health authorities and researchers – all subject to ongoing investigation and continuous revision.*
***Includes official and unofficial reports of VOCs detections in countries among either travellers (imported cases only) or community samples (local transmission).*
†While work is ongoing to establish standardized nomenclature for key variants, these are the names by which WHO will refer to them in this publication.

Variant VOC 202012/01

Figure 3. Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01 as of 9 February 2021



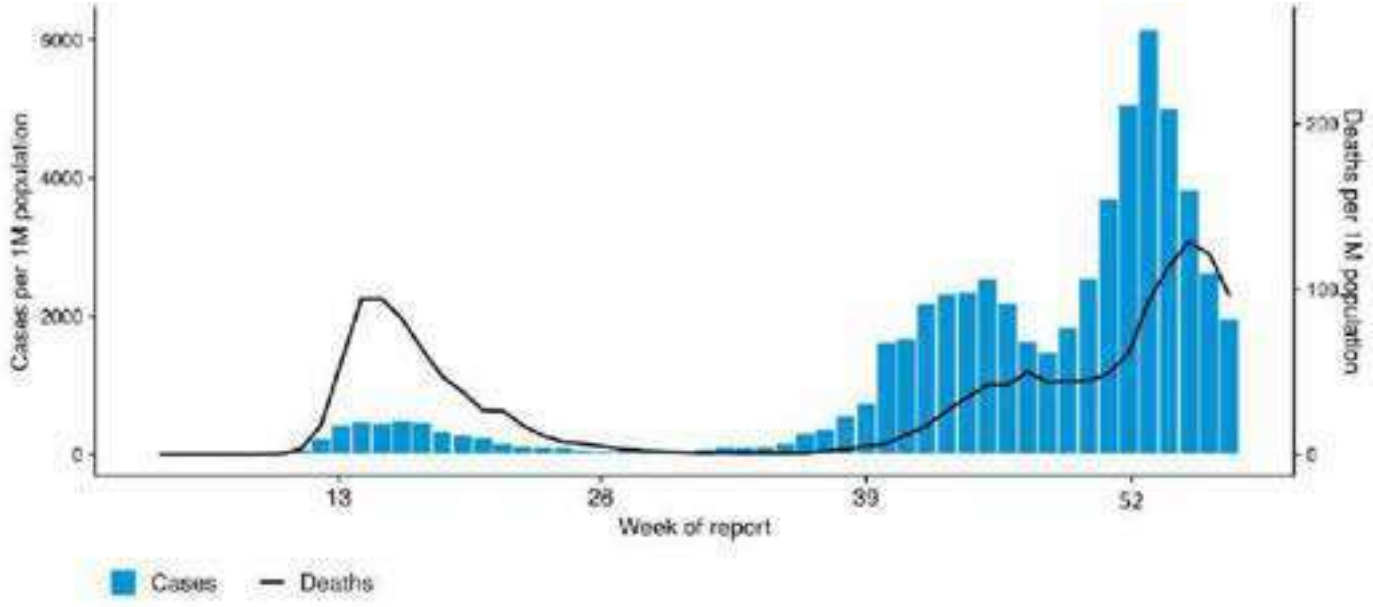
As mentioned in previous publications, the VOC 202012/01 variant has shown increased transmissibility, including increased secondary attack rates, and some evidence of increase in disease severity based on preliminary findings (1,3). More recently, results from a Phase 3 trial conducted by Novavax demonstrated an efficacy of 85.6% against this variant in the United Kingdom (14).

While previously mentioned preliminary studies showed post-vaccination sera with Pfizer-BioNTech and Moderna vaccines had limited to no significant change against the VOC202012/01 variant, recently, the E484K mutation in the spike protein has been detected in 11 sequences within the B.1.1.7 lineage in the United Kingdom (7,9-12,20,21). This mutation is also found in 501Y.V2 and P.1 variant, but the three variants have arisen separately and are not linked to each other (3). Mutation E484K has been identified as an "escape mutation," which has shown the ability to reduce the neutralising activity by monoclonal antibodies or convalescent sera. A preliminary study has shown further reduction in neutralization activity by vaccine elicited antibodies if E484K mutation is present alongside the VOC202012/01 variant (22). The detected E484K mutation within this lineage is currently limited to a small number of cases, and these are all preliminary findings which require further investigation involving larger sample sizes.

In the United Kingdom where this variant was initially identified, the proportion of cases with VOC202012/01 among tested samples has increased from 63% in week commencing 14 December, to 90% in week beginning 18 January 2021 (1).This high rate of detection of VOC202012/01 has persisted in recent weeks while the case and death counts are showing a declining trend (1). From 11 January through 7 February, a decreasing trend has been observed, following the implementation of stringent public health and social measures (Figure 4).

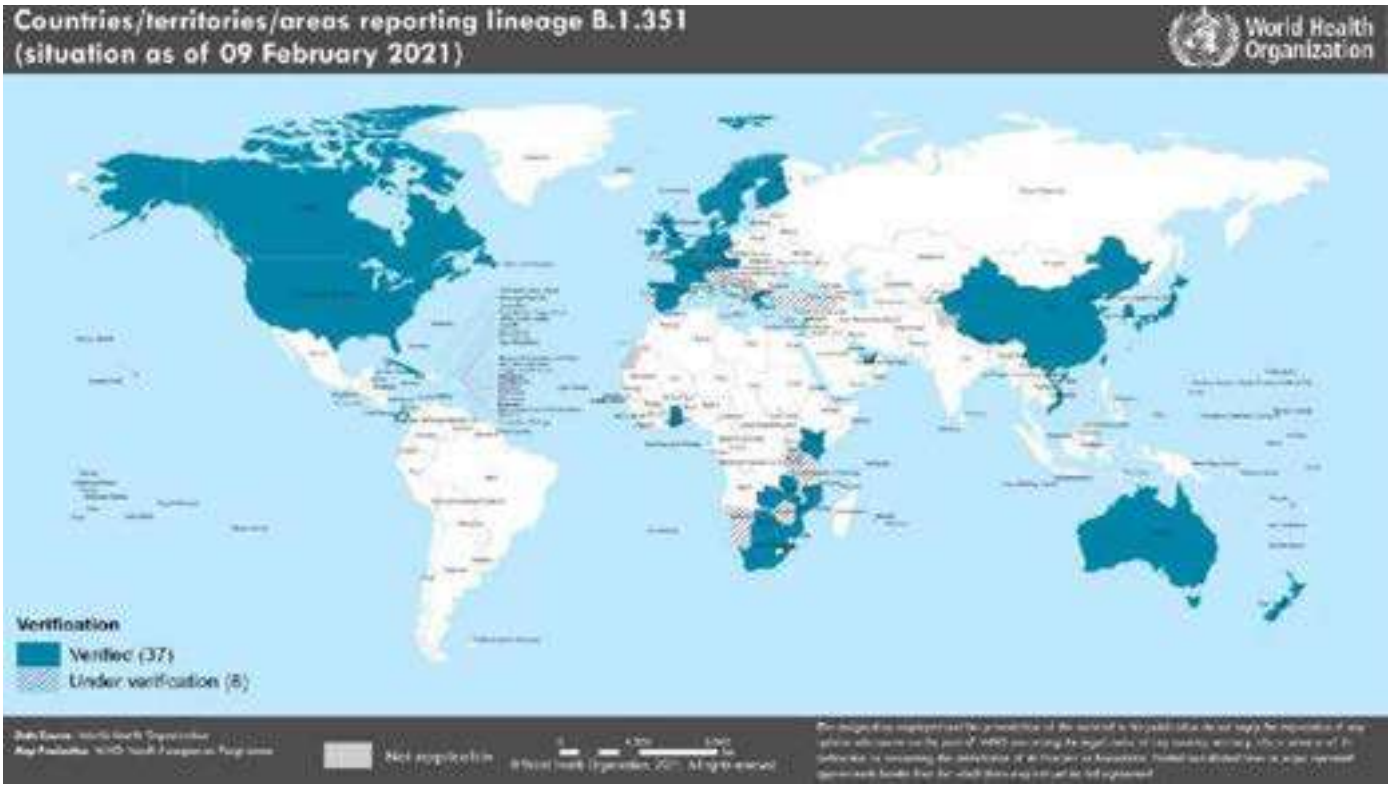
Similarly, in other European countries such as Ireland and Denmark, a marked increasing trend in the number of new COVID-19 cases was detected in late December 2020 as the countries were reporting local transmission of VOC202012/01. In Ireland, local authorities have reported the proportion of cases with VOC202012/01 among tested samples reached over 63% in the week starting on the 25 January and over 7% in Denmark the week starting the 11 January 2021. Implementation of more intensive public health and social measures at the end of December and beginning of January led to marked declines in COVID-19 case and death incidence in both countries.

Figure 4: Weekly COVID-19 cases per 1 million population in the United Kingdom, as of 7 February 2021



Variant 501Y.V2

Figure 5: Countries, territories and areas reporting SARS-CoV-2 501Y.V2 as of 9 February 2021



As mentioned in previous publications, the 501Y.V2 variant has shown increased transmissibility (4,6), and laboratory-based studies noted a small reduction in the neutralizing activity against SARS-CoV-2 501Y.V2 variants in individuals vaccinated with the Moderna or Pfizer-BioNTech vaccines, although the neutralizing titers still remained above the levels expected to confer protection (4,8-12).

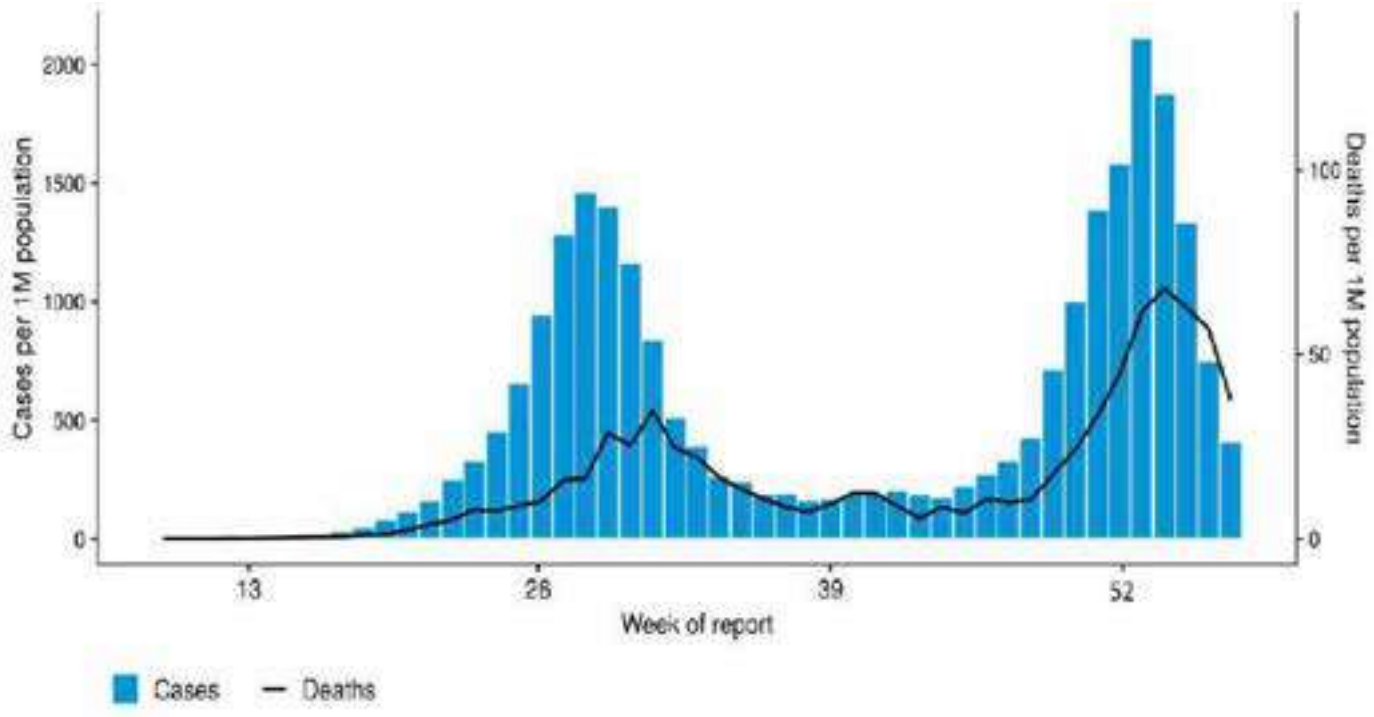
New preliminary results of Novavax, Johnson & Johnson, and Oxford/AstraZeneca vaccines have shown potential reduced effectiveness against 501Y.V2. Phase 3 trials of the Johnson& Johnson vaccine found 66% effectiveness in preventing moderate to severe infections, 28 days after vaccination; however, the efficacy varied across the three trial locations: the South Africa efficacy (57%) was lowest, and reflects 95% of the disease causing strains were the variant (13). Similar preliminary results from Novavax have shown 60%

efficacy against 501Y.V2 (14). In a small trial of approximately 2200 subjects in South Africa, a two-dose regimen of the Oxford/AstraZeneca vaccine resulted in a non-significant efficacy of 21.9% against mild-moderate COVID-19 which included a period when the majority of cases were caused by 501Y.V2; however, efficacy against severe COVID-19, hospitalizations and deaths was not studied (15,16). Serologic neutralization was substantially reduced compared with original strains, based on small number of samples analysed. Notably, primary analysis of data from Phase III trials in the context of viral settings without this variant have shown that the AstraZeneca/Oxford vaccine offers protection against severe disease, hospitalisation and death; therefore, it remains vitaldly important to determine the vaccine's effectiveness for preventing more severe illness caused by the 501Y.V2 variant (22).

It is important to note that these are preliminary findings which require further investigation including the need for assessment of vaccine performance against severe disease, assessment of neutralizing activity in a larger number of samples and for other vaccines against this strain, an evaluation of changes in neutralization on clinical efficacy and eventually, an estimate of the effectiveness of these vaccines on the current emerging variants. Manufacturers are concurrently exploring potential ways to improve protection against emerging VOCs, such as augmenting dosages and dosage intervals, introducing booster doses or booster vaccines, and beginning work to adapt vaccines and optimize production pipelines to allow for rapid strain changes, should this become necessary.

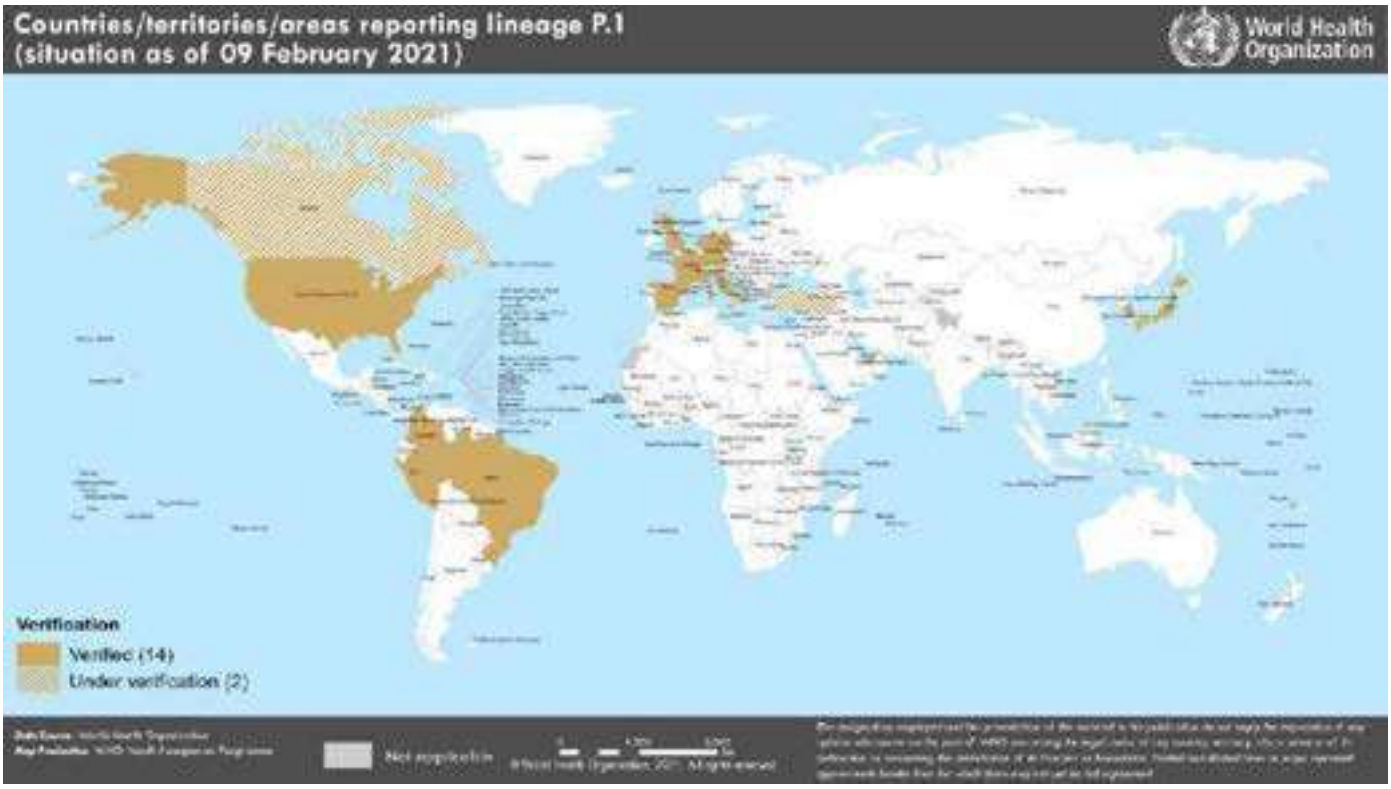
In South Africa, where this variant was initially identified, a progressive decreasing trend in case and death incidence (Figure 6), has been observed following the implementation of stringent PHSM. Here, studies have shown that the second wave (predominated by 501Y.V2 circulation) was associated with a higher incidence, faster increases in cases and hospitalizations, and increased mortality risk in weeks with high rates of hospital admission reflecting increased pressure on the health system. However, it was not associated with increased in-hospital mortality (17) – suggesting disease severity may be similar to previously circulating variants.

Figure 6. Weekly COVID-19 cases per 1 million population in South Africa, as of 7 February 2021



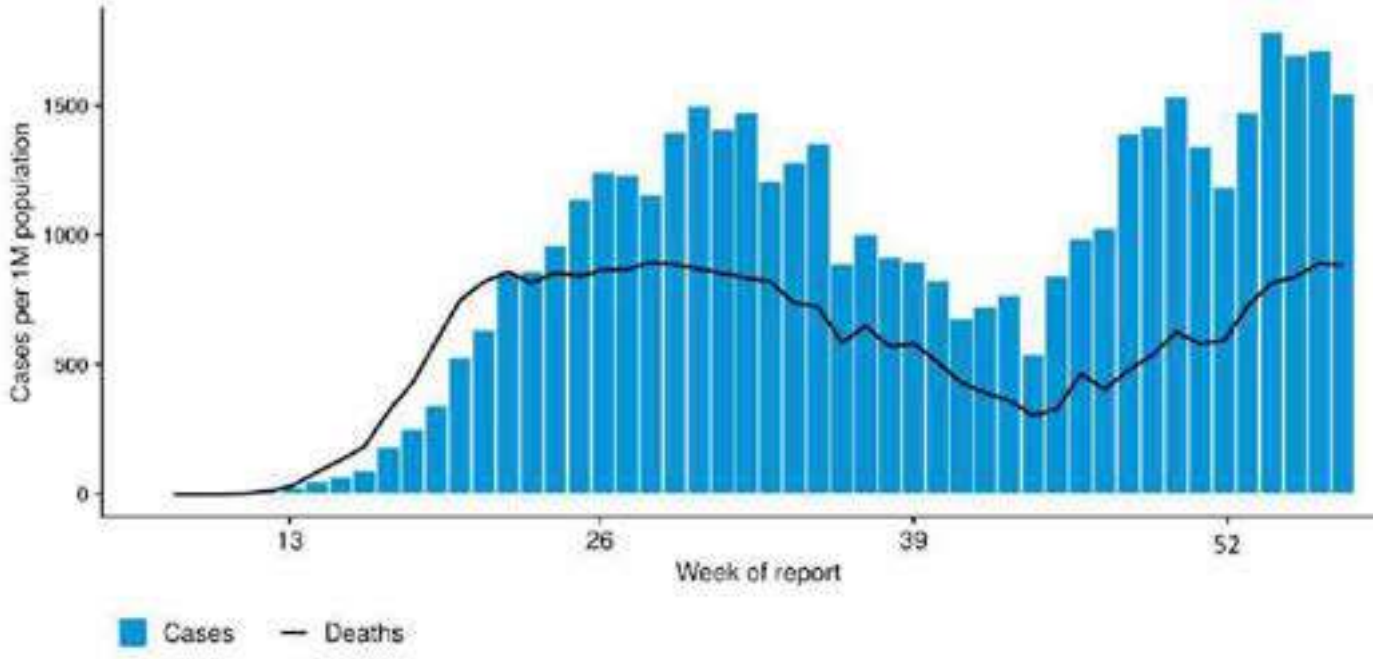
Variant P.1

Figure 7. Countries, territories and areas reporting SARS-CoV-2 P.1 variant as of 9 February 2021



In Brazil, where the P.1 variant was initially identified in addition to detection in a group of travellers from Brazil to Japan, a second wave of cases and corresponding deaths was observed with increasing trends beginning late November 2020, but has shown early signs of waning this week (Figure 8). In Manaus, Brazil, the proportion of cases with P.1 among tested samples have increased from 52% in December 2020 to 85% in January 2021 (23). Based on preliminary investigations, the mutations detected in P.1 variant could potentially reduce antibody neutralization (18); however, additional studies are required to assess if there are changes in transmissibility, severity or antibody neutralizing activity as a result of this new variants.

Figure 8. Weekly COVID-19 cases per 1 million population in Brazil, as of 7 February 2021



Resources

- COVAX Statement on New Variants of SARS-CoV-2
- SARS-CoV-2 genomic sequencing for public health goals: Interim guidance, 8 January 2021
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public healthQ&A on virus evolution

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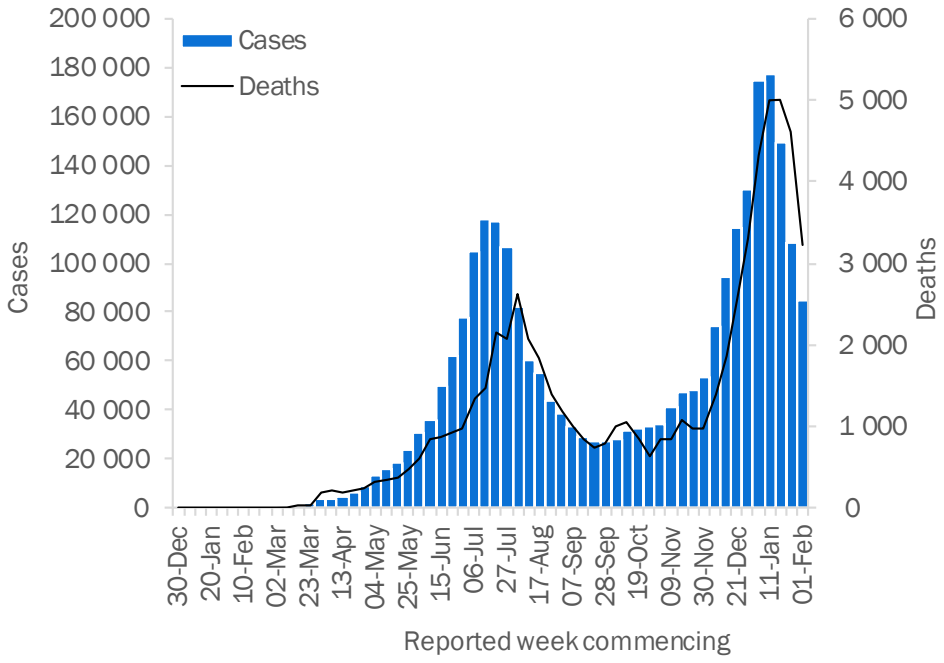
Situation by WHO Region

African Region

In the past week, the African Region reported over 84 800 cases and just over 3200 deaths, a 22% decrease in cases and a 30% decrease in deaths respectively compared to the previous week. This is the third consecutive week the region reported decreases in both new cases and deaths. The highest numbers of new cases were reported in South Africa (24 464 new cases; 41.2 new cases per 100 000 population; a 45% decrease), Nigeria (8685 new cases; 4.2 new cases per 100 000; a 13% decrease) and Zambia (8075 new cases; 43.9 new cases per 100 000; an 8% decrease).

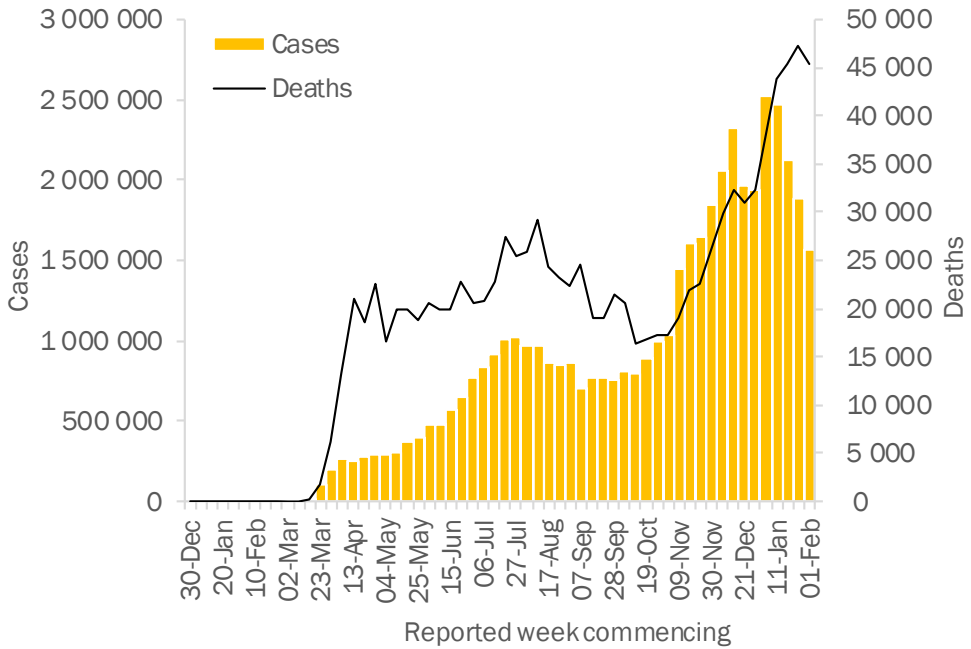
The countries reporting the highest number of new deaths in the past week were South Africa (2229 new deaths; 3.8 new deaths per 100 000; a 34% decrease), Malawi (150 new deaths; 0.8 new deaths per 100 000; a 31% decrease) and Zimbabwe (123 new deaths; 0.8 new deaths per 100 000; a 44% decrease).



Region of the Americas

Over 1.5 million new cases and over 45 000 new deaths were reported in the Region of the Americas this week, a decrease of 17% in cases and a decrease of 4% in deaths compared to the previous week. The highest numbers of new cases were reported from the United States of America (871 365 new cases; 263.3 new cases per 100 000 population; a 19% decrease), Brazil (328 652 new cases; 154.6 new cases per 100 000; a 10% decrease) and Mexico (70 978 new cases; 55.1 new cases per 100 000; a 35% decrease).

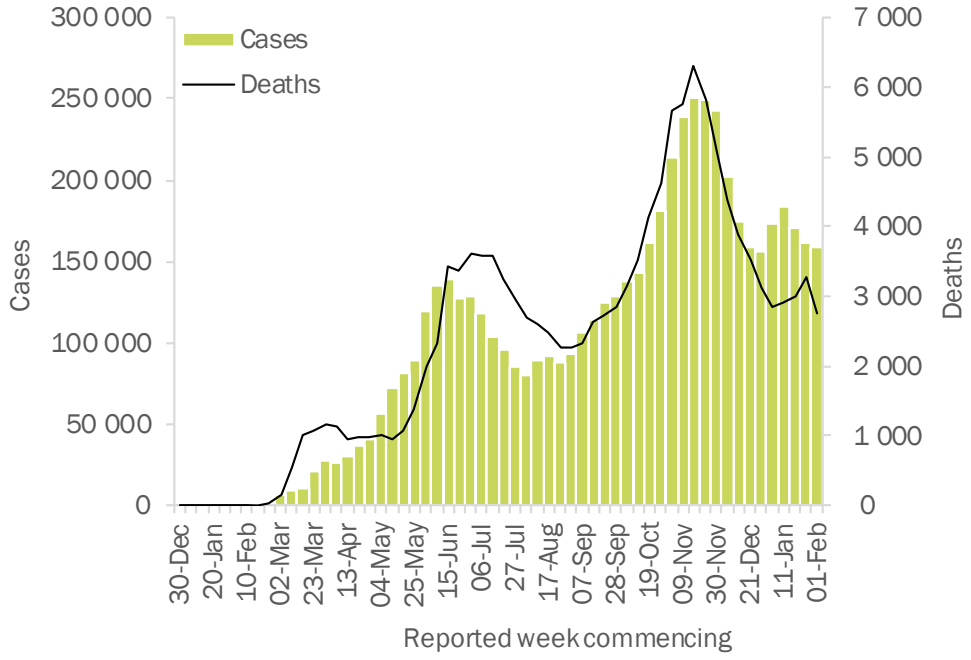
The highest numbers of deaths were reported from the same countries, the United States of America (22 562 new deaths; 6.8 new deaths per 100 000; a 0.2% increase), Mexico (7711 new deaths; 6.0 new deaths per 100 000; a 14% decrease) and Brazil (7368 new deaths; 3.5 new deaths per 100 000; a 1% decrease).



Eastern Mediterranean Region

In the past week, the Eastern Mediterranean Region reported over 158 600 new cases, a decrease of 2% compared to last week. The region reported 2761 new deaths, a 16% decrease. The three countries reporting the highest numbers of new cases continue to be the Islamic Republic of Iran (47 639 new cases, 56.7 new cases per 100 000 population, a 7% increase), United Arab Emirates (22 741 new cases, 229.9 new cases per 100 000, 13% decrease) and Lebanon (18 923 new cases, 277.2 new cases per 100 000, a 15% decrease).

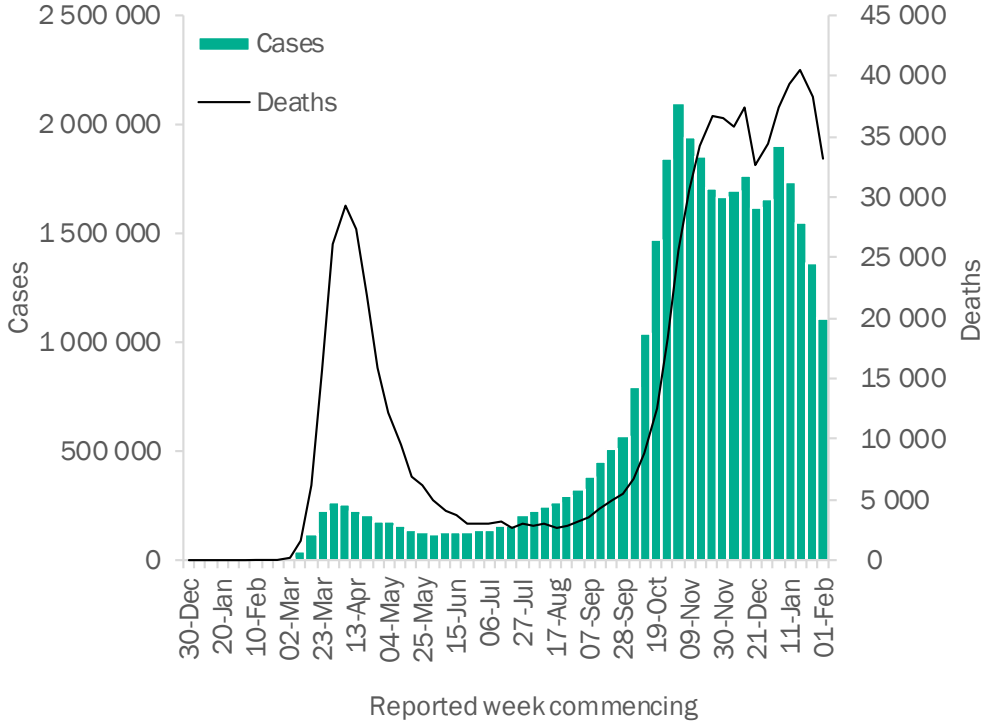
The highest numbers of new deaths continue to be reported in Lebanon (531 new deaths, 7.8 new death per 100 000, an 29% decrease), Islamic Republic of Iran (523 new deaths, 0.6 new death per 100 000 population, a 12% decrease), and Tunisia (482 new deaths, 4.1 new death per 100 000, a 8% decrease).



European Region

The European Region reported over 1.1 million new cases and over 33 000 new deaths, a decrease of 19% and 13% respectively when compared to the previous week. The three countries reporting the highest numbers of new cases were France (136 154 new cases; 208.6 new cases per 100 000, a 3% decrease), the United Kingdom (133 747 new cases, 197 new cases per 100 000, a 25% decrease), and the Russian Federation (116 842 new cases, 80.1 new cases per 100 000, an 11% decrease).

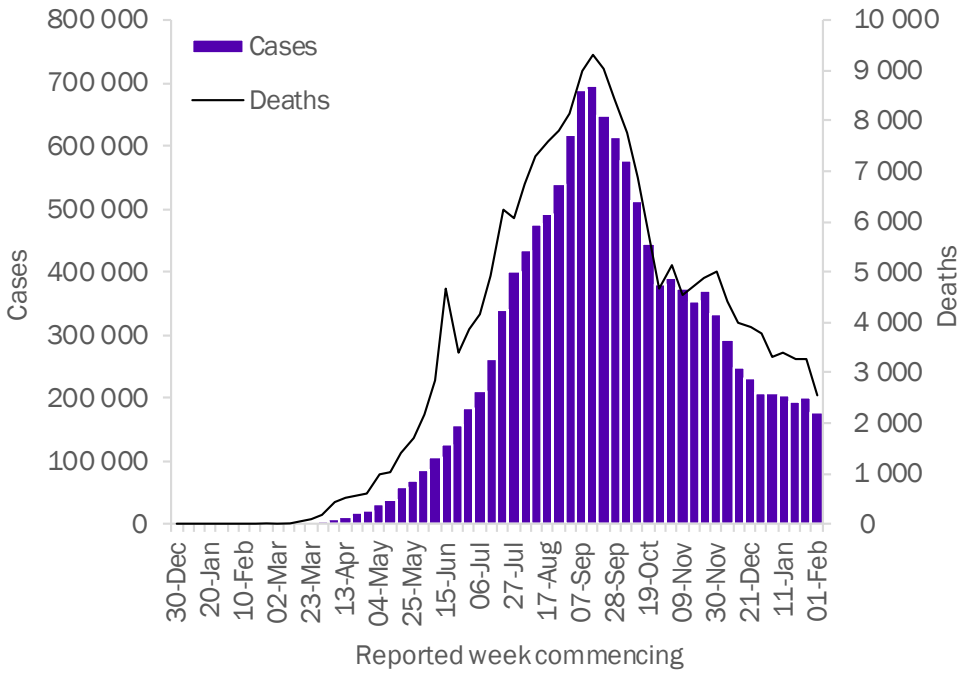
The highest numbers of deaths were reported from the United Kingdom (6521 new deaths; 9.6 new deaths per 100 000, a 21% decrease), Germany (4572 new deaths; 5.5 new deaths per 100 000, a 10% decrease) and the Russian Federation (3479 new deaths; 2.4 new deaths per 100 000, a 6% decrease).



South-East Asia Region

In the past week, the South-East Asia region reported over 177 000 new cases, a decrease of 12% compared to last week. The region reported 2560 new deaths, a 21% decrease. The three countries reporting the highest numbers of new cases and new deaths were Indonesia (80 697 new cases; 29.5 new cases per 100 000; a 9% decrease), India (80 180 new cases; 5.8 new cases per 100 000, a 12% decrease), and Sri Lanka (5283 new cases; 24.7 new cases per 100 000; a 7% decrease).

The three countries reporting the highest numbers of new deaths this week remain Indonesia (1665 new deaths; 0.6 new deaths per 100 000, a 19% decrease), India (722 new deaths; 0.1 new deaths per 100 000, a 23% decrease)

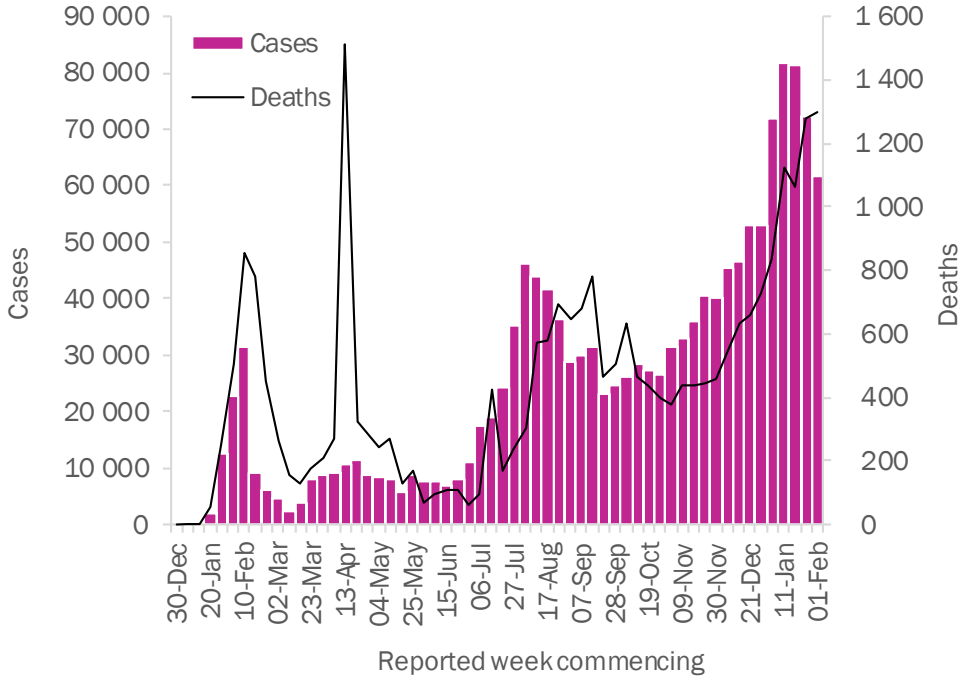


and Bangladesh (79 new deaths; <0.1 new deaths per 100 000; a 27% decrease).

Western Pacific Region

The Western Pacific Region reported over 61 700 new cases the past week, a 14% decrease compared to the previous week. The region reported 1297 new deaths, a 1% increase. The three countries reporting the highest numbers of new cases in the region this week were Malaysia (29 060 new cases; 89.8 new cases per 100 000, a 0.5% decrease), Japan (16 693 new cases; 13.2 new cases per 100 000, a 36% decrease), and the Philippines (12 005 new cases; 11 new cases per 100 000, a 1.4% increase).

The three countries reporting the highest numbers of new deaths this week were Japan (684 new deaths; 0.5 new deaths per 100 000, an 8% increase), the Philippines (441 new deaths; 0.4 new deaths per 100 000, an 8% decrease) and Malaysia (111 new deaths; 0.3 new deaths per 100 000, a 40%



increase).

Table 4. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 7 February 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**84 842**	**2 655 316**	**236.7**	**3 232**	**65 736**	**5.9**	
South Africa	24 464	1 473 700	2 484.8	2 229	46 180	77.9	Community transmission
Nigeria	8 685	139 242	67.5	69	1 647	0.8	Community transmission
Zambia	8 075	61 427	334.1	94	839	4.6	Community transmission
Mozambique	6 407	44 112	141.1	88	451	1.4	Community transmission
Ghana	4 619	70 046	225.4	44	449	1.4	Community transmission
Ethiopia	4 432	141 453	123.0	54	2 145	1.9	Community transmission
Malawi	3 378	26 875	140.5	150	837	4.4	Community transmission
Senegal	2 276	28 489	170.1	54	675	4.0	Community transmission
Botswana	2 210	23 503	999.4	29	163	6.9	Community transmission
Algeria	1 730	108 852	248.2	23	2 911	6.6	Community transmission
Côte d'Ivoire	1 389	29 567	112.1	10	162	0.6	Community transmission
Rwanda	1 219	16 337	126.1	24	217	1.7	Community transmission
Zimbabwe	1 216	34 487	232.0	123	1 316	8.9	Community transmission
Lesotho	1 102	9 380	437.9	23	183	8.5	Community transmission
Namibia	1 017	34 845	1 371.4	21	371	14.6	Community transmission
Kenya	1 015	101 690	189.1	21	1 776	3.3	Community transmission
Democratic Republic of the Congo	881	23 484	26.2	8	679	0.8	Community transmission
Gabon	709	11 457	514.8	3	71	3.2	Community transmission
Cameroon	696	30 313	114.2	12	474	1.8	Community transmission
Burkina Faso	647	11 227	53.7	14	134	0.6	Community transmission
Eswatini	515	16 181	1 394.7	42	604	52.1	Community transmission
Benin	407	4 193	34.6	7	55	0.5	Community transmission
Cabo Verde	399	14 380	2 586.4	2	135	24.3	Community transmission
Togo	395	5 436	65.7	2	79	1.0	Community transmission
South Sudan	394	4 355	38.9	1	65	0.6	Community transmission
Comoros	368	3 086	354.9	18	108	12.4	Community transmission
Madagascar	322	19 065	68.8	2	281	1.0	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Seychelles	318	1 504	1 529.3	3	6	6.1	Clusters of cases
Mauritania	317	16 777	360.8	7	425	9.1	Community transmission
Uganda	288	39 821	87.1	3	327	0.7	Community transmission
Angola	280	20 062	61.0	11	475	1.4	Community transmission
Sierra Leone	231	3 759	47.1	0	79	1.0	Community transmission
Eritrea	191	2 326	65.6	0	7	0.2	Community transmission
Guinea	190	14 665	111.7	2	84	0.6	Community transmission
Congo	173	8 060	146.1	5	122	2.2	Community transmission
Guinea-Bissau	149	2 772	140.9	1	46	2.3	Community transmission
Gambia	147	4 237	175.3	6	134	5.5	Community transmission
Chad	126	3 473	21.1	7	125	0.8	Community transmission
Burundi	91	1 723	14.5	1	3	0.0	Community transmission
Mali	91	8 160	40.3	8	338	1.7	Community transmission
Sao Tome and Principe	83	1 339	611.0	1	18	8.2	Community transmission
Niger	82	4 598	19.0	6	165	0.7	Community transmission
Equatorial Guinea	62	5 578	397.6	0	86	6.1	Community transmission
Liberia	17	1 956	38.7	0	84	1.7	Community transmission
Mauritius	16	584	45.9	0	10	0.8	Sporadic cases
Central African Republic	8	4 989	103.3	0	63	1.3	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories[iii]							
Mayotte	2 524	10 755	3 942.2	3	64	23.5	Clusters of cases
Réunion	491	10 487	1 171.3	1	47	5.2	Clusters of cases
Americas	**1 568 167**	**46 913 218**	**4 586.9**	**45 350**	**1 092 521**	**106.8**	
United States of America	871 365	26 547 977	8 020.5	22 562	455 735	137.7	Community transmission
Brazil	328 652	9 447 165	4 444.5	7 368	230 034	108.2	Community transmission
Mexico	70 978	1 912 871	1 483.6	7 711	164 290	127.4	Community transmission
Colombia	65 027	2 142 660	4 211.0	2 119	55 403	108.9	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Argentina	54 647	1 970 009	4 358.8	1 210	48 985	108.4	Community transmission
Peru	47 170	1 173 045	3 557.7	1 247	41 933	127.2	Community transmission
Canada	26 963	797 756	2 113.7	808	20 609	54.6	Community transmission
Chile	25 182	748 082	3 913.3	556	18 895	98.8	Community transmission
Bolivia (Plurinational State of)	12 518	225 910	1 935.3	461	10 687	91.6	Community transmission
Dominican Republic	9 595	222 148	2 047.8	155	2 801	25.8	Community transmission
Ecuador	7 336	257 115	1 457.3	153	15 004	85.0	Community transmission
Panama	7 234	325 487	7 543.6	205	5 426	125.8	Community transmission
Honduras	7 143	153 253	1 547.3	119	3 694	37.3	Community transmission
Cuba	6 337	32 011	282.6	20	233	2.1	Community transmission
Paraguay	5 004	136 890	1 919.2	98	2 791	39.1	Community transmission
Guatemala	3 819	162 937	909.5	236	5 854	32.7	Community transmission
Uruguay	3 774	44 303	1 275.4	53	478	13.8	Community transmission
Venezuela (Bolivarian Republic of)	3 455	129 231	454.5	46	1 223	4.3	Community transmission
Costa Rica	3 162	196 438	3 856.2	68	2 672	52.5	Community transmission
El Salvador	2 248	56 237	867.0	59	1 673	25.8	Community transmission
Jamaica	1 314	16 841	568.7	9	357	12.1	Community transmission
Saint Lucia	618	1 813	987.3	5	18	9.8	Sporadic cases
Guyana	359	7 887	1 002.7	4	179	22.8	Clusters of cases
Saint Vincent and the Grenadines	274	1 170	1 054.6	1	3	2.7	Clusters of cases
Haiti	273	11 806	103.5	1	246	2.2	Community transmission
Suriname	255	8 619	1 469.2	4	158	26.9	Community transmission
Barbados	178	1 676	583.2	6	18	6.3	Community transmission
Belize	136	12 013	3 021.2	5	306	77.0	Community transmission
Bahamas	82	8 256	2 099.5	0	176	44.8	Clusters of cases
Trinidad and Tobago	74	7 607	543.6	1	135	9.6	Community transmission
Antigua and Barbuda	59	277	282.9	0	7	7.1	Sporadic cases
Nicaragua	35	5 027	75.9	1	170	2.6	Community transmission
Dominica	4	121	168.1	0	0	0.0	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Saint Kitts and Nevis	3	40	75.2	0	0	0.0	Sporadic cases
Grenada	0	148	131.5	0	1	0.9	Sporadic cases
Territories[iii]							
Puerto Rico	1 949	95 355	3 333.1	49	1 872	65.4	Community transmission
Aruba	276	7 134	6 681.9	3	61	57.1	Community transmission
French Guiana	213	16 296	5 456.0	3	79	26.4	Community transmission
Turks and Caicos Islands	195	1 654	4 271.9	1	9	23.2	Clusters of cases
Sint Maarten	89	1 911	4 456.4	0	27	63.0	Community transmission
Martinique	72	6 442	1 716.7	1	45	12.0	Community transmission
United States Virgin Islands	51	2 449	2 345.2	0	24	23.0	Community transmission
Curaçao	23	4 597	2 801.5	1	21	12.8	Community transmission
Cayman Islands	15	405	616.3	0	2	3.0	Sporadic cases
Bonaire	4	366	1 749.9	0	3	14.3	Community transmission
Falkland Islands (Malvinas)	4	44	1 263.3	0	0	0.0	No cases
Montserrat	2	15	300.1	0	1	20.0	No cases
Bermuda	1	692	1 111.2	0	12	19.3	Sporadic cases
Anguilla	0	17	113.3	0	0	0.0	Sporadic cases
British Virgin Islands	0	141	466.3	0	1	3.3	Clusters of cases
Guadeloupe	0	9 156	2 288.3	1	158	39.5	Community transmission
Saba	0	6	310.4	0	0	0.0	Sporadic cases
Saint Barthélemy	0	379	3 834.1	0	0	0.0	Sporadic cases
Saint Martin	0	1 289	3 334.3	0	12	31.0	Community transmission
Saint Pierre and Miquelon	0	24	414.2	0	0	0.0	Clusters of cases
Sint Eustatius	0	20	637.1	0	0	0.0	Sporadic cases
Eastern Mediterranean	**158 625**	**5 828 565**	**797.5**	**2 761**	**136 950**	**18.7**	
Iran (Islamic Republic of)	47 639	1 459 370	1 737.5	523	58 412	69.5	Community transmission
United Arab Emirates	22 741	323 402	3 269.9	76	914	9.2	Community transmission
Lebanon	18 923	317 836	4 656.6	531	3 562	52.2	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Pakistan	9 914	553 128	250.4	291	11 914	5.4	Community transmission
Tunisia	8 708	216 176	1 829.1	482	7 162	60.6	Community transmission
Iraq	8 494	627 416	1 559.9	70	13 111	32.6	Community transmission
Jordan	8 181	333 855	3 272.1	65	4 369	42.8	Community transmission
Kuwait	5 414	170 036	3 981.6	5	964	22.6	Community transmission
Libya	5 244	122 894	1 788.5	94	1 936	28.2	Community transmission
Morocco	4 275	474 966	1 286.8	122	8 381	22.7	Clusters of cases
Bahrain	4 087	106 713	6 271.4	7	379	22.3	Clusters of cases
Egypt	3 688	169 106	165.2	341	9 604	9.4	Clusters of cases
Qatar	2 706	153 690	5 334.5	2	250	8.7	Community transmission
Saudi Arabia	2 148	369 961	1 062.7	25	6 397	18.4	Sporadic cases
Oman	1 313	135 041	2 644.4	5	1 532	30.0	Community transmission
Syrian Arab Republic	410	14 408	82.3	31	947	5.4	Community transmission
Sudan	316	29 765	67.9	28	1 835	4.2	Community transmission
Afghanistan	312	55 335	142.1	10	2 410	6.2	Clusters of cases
Somalia	70	4 854	30.5	4	134	0.8	Community transmission
Djibouti	10	5 941	601.3	1	63	6.4	Clusters of cases
Yemen	7	2 131	7.1	0	616	2.1	Community transmission
Territories[iii]							
occupied Palestinian territory	4 025	182 541	3 578.2	48	2 058	40.3	Community transmission
Europe	**1 102 953**	**35 515 952**	**3 805.0**	**33 169**	**781 242**	**83.7**	
France	136 154	3 262 505	4 998.2	2 923	78 389	120.1	Community transmission
The United Kingdom	133 747	3 929 839	5 788.9	6 521	112 092	165.1	Community transmission
Russian Federation	116 842	3 967 281	2 718.5	3 479	76 661	52.5	Clusters of cases
Italy	83 315	2 625 098	4 341.7	2 724	91 003	150.5	Clusters of cases
Spain	82 192	2 913 425	6 231.3	1 202	60 802	130.0	Community transmission
Germany	67 647	2 284 010	2 726.1	4 572	61 517	73.4	Community transmission
Turkey	53 885	2 524 786	2 993.6	820	26 685	31.6	Community transmission
Portugal	50 888	761 906	7 472.1	1 775	13 954	136.8	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Czechia	50 201	1 034 975	9 664.6	927	17 235	160.9	Community transmission
Israel	39 414	677 315	7 825.2	285	5 014	57.9	Community transmission
Poland	36 870	1 550 255	4 096.2	1 907	39 087	103.3	Community transmission
Netherlands	27 226	1 001 797	5 846.5	400	14 355	83.8	Community transmission
Ukraine	25 394	1 244 849	2 846.4	890	23 597	54.0	Community transmission
Sweden	16 892	588 062	5 822.8	69	12 115	120.0	Community transmission
Romania	16 425	743 343	3 864.0	545	18 809	97.8	Community transmission
Belgium	14 384	725 610	6 260.9	274	21 389	184.6	Community transmission
Slovakia	13 413	263 326	4 823.1	557	5 199	95.2	Clusters of cases
Serbia	12 455	406 352	5 835.2	112	4 112	59.0	Community transmission
Belarus	10 389	256 959	2 719.3	65	1 773	18.8	Community transmission
Austria	9 415	419 307	4 655.7	248	7 884	87.5	Community transmission
Hungary	8 909	376 495	3 897.3	566	13 090	135.5	Community transmission
Kazakhstan	8 584	244 428	1 301.8	59	3 185	17.0	Clusters of cases
Ireland	7 245	202 548	4 102.0	382	3 674	74.4	Community transmission
Slovenia	7 169	173 696	8 355.0	62	3 891	187.2	Clusters of cases
Switzerland	7 134	529 285	6 115.6	91	8 822	101.9	Community transmission
Albania	6 961	84 212	2 926.3	77	1 446	50.2	Clusters of cases
Greece	6 740	163 213	1 565.9	172	5 951	57.1	Community transmission
Latvia	5 612	71 320	3 781.2	147	1 327	70.4	Community transmission
Bulgaria	4 934	223 552	3 217.3	283	9 311	134.0	Clusters of cases
Republic of Moldova	4 730	164 243	4 071.5	96	3 530	87.5	Community transmission
Lithuania	4 231	186 770	6 860.8	134	2 937	107.9	Community transmission
Georgia	3 913	262 024	6 568.4	105	3 283	82.3	Community transmission
Estonia	3 720	47 928	3 613.0	42	461	34.8	Clusters of cases
Montenegro	3 229	65 227	10 385.4	31	836	133.1	Clusters of cases
Denmark	3 091	201 186	3 473.4	109	2 215	38.2	Community transmission
Croatia	2 976	235 402	5 734.1	142	5 169	125.9	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
North Macedonia	2 081	94 599	4 540.7	68	2 916	140.0	Community transmission
Finland	2 023	46 894	846.4	21	692	12.5	Community transmission
Norway	1 908	64 483	1 189.5	19	582	10.7	Clusters of cases
Bosnia and Herzegovina	1 813	123 704	3 770.5	95	4 791	146.0	Community transmission
Luxembourg	1 142	51 689	8 257.3	13	592	94.6	Community transmission
Armenia	1 062	168 088	5 672.4	37	3 117	105.2	Community transmission
Azerbaijan	956	231 022	2 278.5	30	3 156	31.1	Clusters of cases
Cyprus	874	31 644	2 620.9	14	211	17.5	Clusters of cases
Malta	773	18 676	4 229.7	15	282	63.9	Clusters of cases
Kyrgyzstan	542	85 071	1 303.9	14	1 426	21.9	Clusters of cases
Uzbekistan	387	79 098	236.3	0	621	1.9	Clusters of cases
Andorra	321	10 206	13 209.1	4	105	135.9	Community transmission
Monaco	172	1 647	4 196.8	8	20	51.0	Sporadic cases
San Marino	111	3 136	9 240.4	2	69	203.3	Community transmission
Liechtenstein	23	2 588	6 786.1	0	46	120.6	Sporadic cases
Iceland	19	6 021	1 764.4	0	29	8.5	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Kosovo	2 075	61 966	3 330.8	28	1 510	81.2	Community transmission
Guernsey	240	689	1 090.3	0	13	20.6	Community transmission
Gibraltar	74	4 170	12 377.2	7	80	237.5	Clusters of cases
Jersey	30	3 173	2 916.4	1	67	61.6	Community transmission
Faroe Islands	1	655	1 340.4	0	1	2.0	Sporadic cases
Greenland	0	30	52.8	0	0	0.0	No cases
Isle of Man	0	434	510.4	0	25	29.4	No cases
South-East Asia	**177 074**	**13 033 797**	**644.8**	**2 560**	**200 267**	**9.9**	
Indonesia	80 697	1 147 010	419.3	1 665	31 393	11.5	Community transmission
India	80 180	10 826 363	784.5	722	154 996	11.2	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Sri Lanka	5 283	68 576	320.3	38	351	1.6	Clusters of cases
Thailand	4 589	23 371	33.5	2	79	0.1	Clusters of cases
Bangladesh	3 000	537 770	326.5	79	8 190	5.0	Community transmission
Myanmar	1 440	141 304	259.7	43	3 168	5.8	Clusters of cases
Nepal	952	271 806	932.9	8	2 035	7.0	Clusters of cases
Maldives	920	16 656	3 081.3	3	54	10.0	Clusters of cases
Timor-Leste	10	80	6.1	0	0	0.0	Sporadic cases
Bhutan	3	861	111.6	0	1	0.1	Clusters of cases
Western Pacific	**61 765**	**1 481 789**	**75.4**	**1 297**	**25 885**	**1.3**	
Malaysia	29 060	238 721	737.6	111	857	2.6	Clusters of cases
Japan	16 693	403 435	319.0	684	6 338	5.0	Clusters of cases
Philippines	12 005	535 521	488.7	441	11 110	10.1	Community transmission
Republic of Korea	2 694	80 896	157.8	51	1 471	2.9	Clusters of cases
China	395	101 272	6.9	8	4 831	0.3	Clusters of cases
Mongolia	247	1 989	60.7	0	2	0.1	Clusters of cases
Viet Nam	204	1 985	2.0	0	35	0.0	Clusters of cases
Singapore	168	59 675	1 020.0	0	29	0.5	Sporadic cases
Papua New Guinea	43	894	10.0	0	9	0.1	Community transmission
Australia	42	28 848	113.1	0	909	3.6	Sporadic cases
New Zealand	17	1 964	40.7	0	25	0.5	Clusters of cases
Cambodia	9	474	2.8	0	0	0.0	Sporadic cases
Brunei Darussalam	1	181	41.4	0	3	0.7	Sporadic cases
Fiji	1	56	6.2	0	2	0.2	Sporadic cases
Lao People's Democratic Republic	1	45	0.6	0	0	0.0	Sporadic cases
Solomon Islands	0	17	2.5	0	0	0.0	No cases
Territories[iii]							
French Polynesia	125	18 185	6 473.6	2	133	47.3	Sporadic cases
Guam	57	7 436	4 405.9	0	129	76.4	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
New Caledonia	2	49	17.2	0	0	0.0	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	1	133	231.1	0	2	3.5	Pending
Marshall Islands	0	4	6.8	0	0	0.0	No cases
Samoa	0	3	1.5	0	0	0.0	No cases
Vanuatu	0	1	0.3	0	0	0.0	No cases
Wallis and Futuna	0	5	44.5	0	0	0.0	Sporadic cases
Global	**3 153 426**	**105 429 382**	**1 352.5**	**88 369**	**2 302 614**	**29.5**	

Key Weekly Updates

WHO Director-General Dr Tedros' remarks

- *Do not rush to reopen*

Now as we begin to roll out vaccines, we must remember that vaccines alone will not control this pandemic. It is vital that governments do not rush to re-open, and that they continue public health measures to prevent the spread of the virus.
Opening remarks at the Member States briefing on COVID-19 - 4 February 2021

- *Sharing vaccines to protect the population*

Once countries with vaccines have vaccinated their own health workers and older people, the best way to protect the rest of their own population is to share vaccines so other countries can do the same. That's because the longer it takes to vaccinate those most at risk everywhere, the more opportunity we give the virus to mutate and evade vaccines.

- *Scaling-up the manufacturing process*

We need a massive scale-up in production. Manufacturers can do more: having received substantial public funding, we encourage all manufacturers to share their data and technology to ensure global equitable access to vaccines.

- *Sharing dossiers with WHO for emergency listing*

We call on companies to share their dossiers with WHO faster and more fully than they have been doing, so we can review them for emergency use listing.
Opening remarks at the media briefing on COVID-19 – 5 February 2021

Health for All film festival
WHO receives nearly 1200 entries for the second edition of Health for All Film Festival

WHO and FIFA partnership
FIFA and WHO #ACTogether to tackle COVID-19

WHO SCORE Global Report
WHO SCORE Global Report highlights urgent need for better data to strengthen pandemic response and improve health outcomes
Score dashboard

COVID-19 and Non-Communicable Diseases
Michael R. Bloomberg and Dr Tedros Adhanom Ghebreyesus call for global focus on noncommunicable diseases to save lives from COVID-19

Publications
Background document on the mRNA-1273 vaccine (Moderna) against COVID-19
COVID-19: Occupational health and safety for health workers
Contact tracing in the context of COVID-19
Interim position paper: Considerations regarding proof of COVID-19 vaccination for international travellers
WHO publishes public health research agenda for managing infodemics
Course 6: Clinical management of patients with COVID-19 - Rehabilitation of patients with COVID-19

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions
- African Region
- Eastern Mediterranean Region
- European Region
- Region of the Americas
- South-East Asia Region
- Western Pacific Region

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 745 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its

authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case.

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 31 January 2021, 10 am CET

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

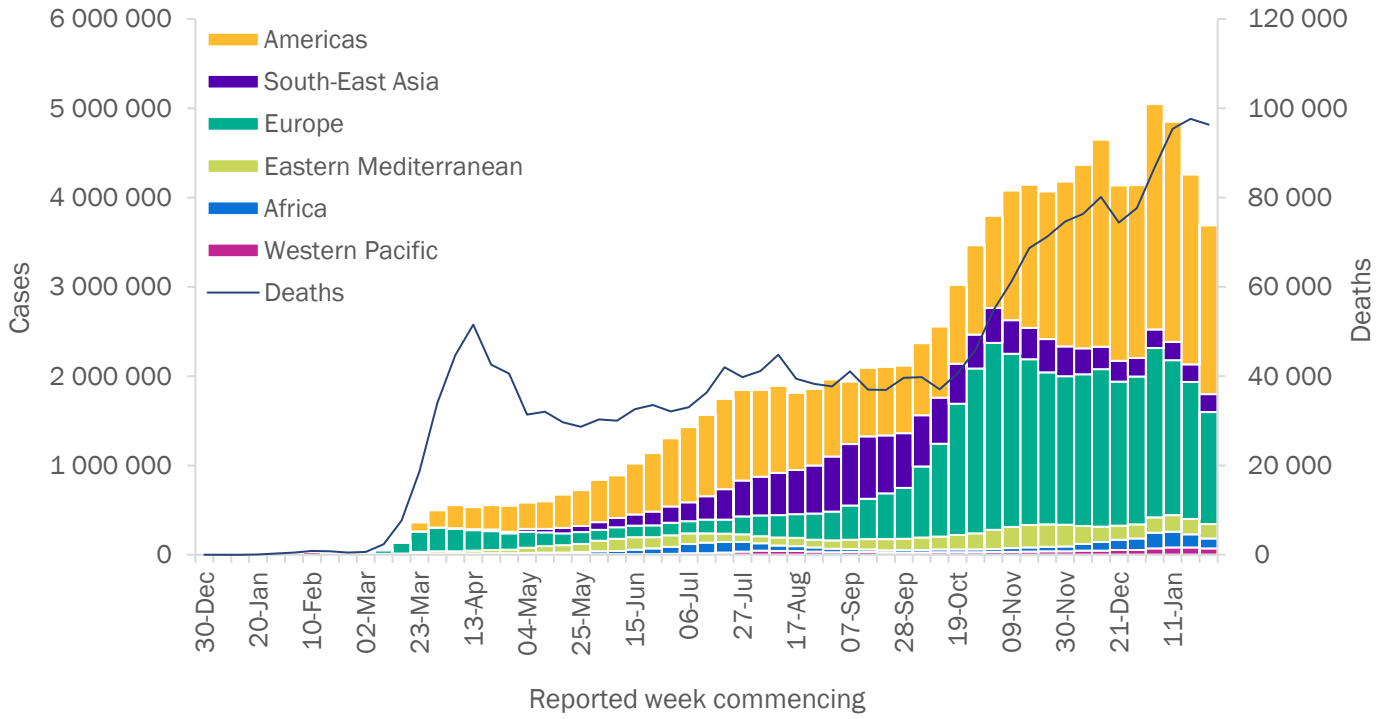
Global epidemiological situation

Globally, 3.7 million new cases were reported last week, a 13% decline as compared to the previous week, and the third consecutive week showing a decline in cases. There were 96 000 new deaths, and a 1% decline as compared to the previous week, (Figure 1). This brings the total number of cases to over 102 million and the total number of deaths to 2.2 million from 222 countries and territories. Last week, all WHO regions, except South-East Asia reported a decline in new cases (Table 1). Although new deaths declined globally by 1%, they rose in the Western Pacific (21%), Eastern Mediterranean (9%), and the Americas (4%).

Saturday 30 January 2021 marked one year since WHO declared COVID-19 a Public Health Emergency of International Concern. At that time, there were 9826 cases in 20 countries, and 213 deaths in one country (all of which were in China).

In the past week, the five countries reporting the highest number of new cases continue to be the United States of America (1 072 287 cases, a 15% decrease), Brazil (364 593 cases, a 1% increase), the United Kingdom of Great Britain and Northern Ireland (178 629 cases, a 31% decrease), France (141 092 cases, a 2% increase) and the Russian Federation (131 039 cases, a 13% decrease).

Figure 1: COVID-19 cases reported weekly by WHO Region, and global deaths, as of 31 January 2021**



**See *data, table and figure notes*

In this edition of the COVID-19 Weekly Epidemiological Update, special focus updates are provided on:

- COVID-19 and Health Workers
- SARS-CoV-2 variants of concern
- Additional Region-specific information: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western Pacific Region
- Key Weekly Updates

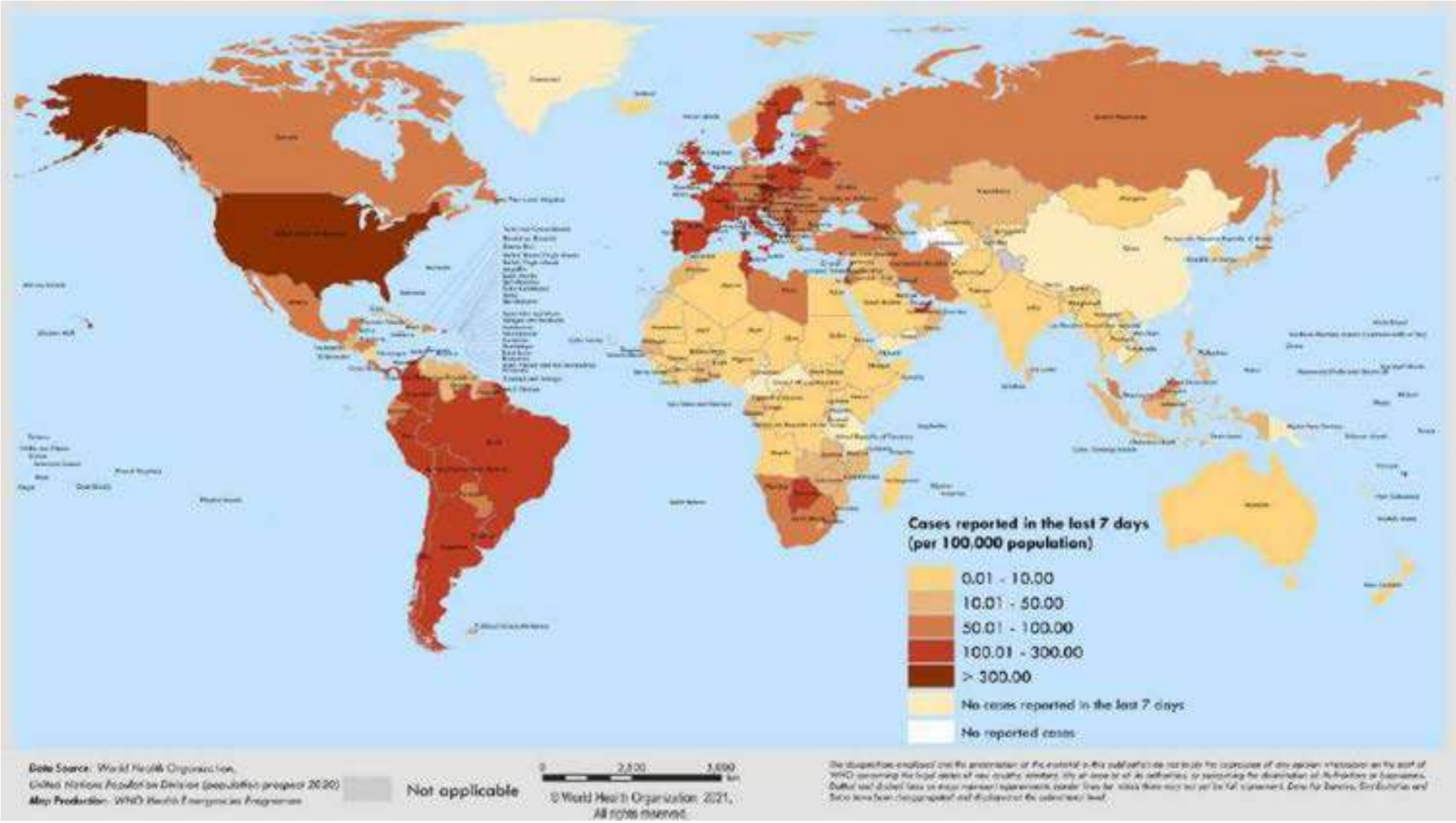
Note: From 3 February 2021, a daily log of major changes and errata in WHO daily aggregate case and death count data will no longer be published online. A record of historic data adjustment made will continue to be available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 31 January 2021**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 888 070 (51%)	-11%	45 345 051 (44%)	47 277 (49%)	4%	1 047 171 (47%)
Europe	1 255 352 (34%)	-18%	34 276 814 (34%)	36 674 (38%)	-8%	745 590 (34%)
South-East Asia	200 219 (5%)	3%	12 856 723 (13%)	3 258 (3%)	0%	197 707 (9%)
Eastern Mediterranean	161 943 (4%)	-5%	5 669 940 (6%)	3 272 (3%)	9%	134 189 (6%)
Africa	108 391 (3%)	-27%	2 570 474 (3%)	4 602 (5%)	-8%	62 504 (3%)
Western Pacific	72 135 (2%)	-11%	1 420 024 (1%)	1 281 (1%)	21%	24 588 (1%)
Global	**3 686 110 (100%)**	**-13%**	**102 139 771 (100%)**	**96 364 (100%)**	**-1%**	**2 211 762 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*
***See data, table and figure notes.*

Figure 2. COVID-19 cases per 100 000 population reported in the last seven days by countries, territories and areas, 25 January through 31 January 2021**



**See *data, table and figure notes*

Special Focus: COVID-19 and Health Workers

Overview

In his press briefing of 29 January 2021, WHO Director-General Dr Tedros again emphasized that healthcare workers have been at the forefront of the response to the pandemic but are often under-protected and over-exposed. He reiterated his 18 January 2021 call to action: for governments and industry leaders to work together to ensure that in the first 100 days of 2021, vaccination of health workers and older people is underway in all countries.

In this Special Focus – recognizing that 2021 has been designated as the International Year of Health and Care Workers – we present an overview of health worker SARS-CoV-2 infections using data collected via the WHO Global Surveillance systems, and analyse risk factors from available scientific literature.

To date, a total of 183 countries have reported data via WHO Case Report Forms (CRFs) to date, covering 37 million cases (36% of current global COVID-19 cases). The CRFs were mainly received from Member States in the Region of the Americas and European Region. Over 16 million CRFs (43% of CRFs received, representing 16% of global COVID-19 cases) included information on occupation status, including health workers[1]. Within this subset, health workers accounted for close to 1.29 million COVID-19 cases, or 8% of cases. The median age of health worker cases was 42 years (interquartile range 27 to 60 years), and 68% were women. This is in line with the proportion of women working in the health and social sectors globally.

At the outset, it is important to mention that the analyses based on CRF data provided to WHO has limitations, mainly due to variations in reporting coverage and completeness, reporting methods, some irregularity of weekly reports, health worker definitions, and lack of information about the setting of exposure. WHO advises Member States to use the definition of health workers as stated in the Surveillance Protocol for SARS-CoV-2 infection.[2]

Percentage of health worker infections and relative risk over time

It is important to acknowledge that country-specific trends remain highly variable, and the data are based on reported cases (those testing positive for SARS-CoV-2) often without providing information on the overall number tested. Therefore, it is difficult to reliably compare incidence of health worker infections over time and trends should be interpreted with caution due to variations in reporting coverage and completeness, adaptations to testing strategies, differences in the implementation of public health measures and interventions, as well as differences in the circulation of SARS-CoV-2 in the community over time. Additionally, it is not possible to determine the place of exposure (e.g., health care facility or community) among health workers from WHO CFR data.

Based on WHO CRF data, in the first three months of the pandemic, health worker infections slightly exceeded 10% of reported cases (Figure 3), declining to less than 5% by early-June 2020 (Epi week 2) and to approximately 2.5% by September 2020 (Epi week 37).

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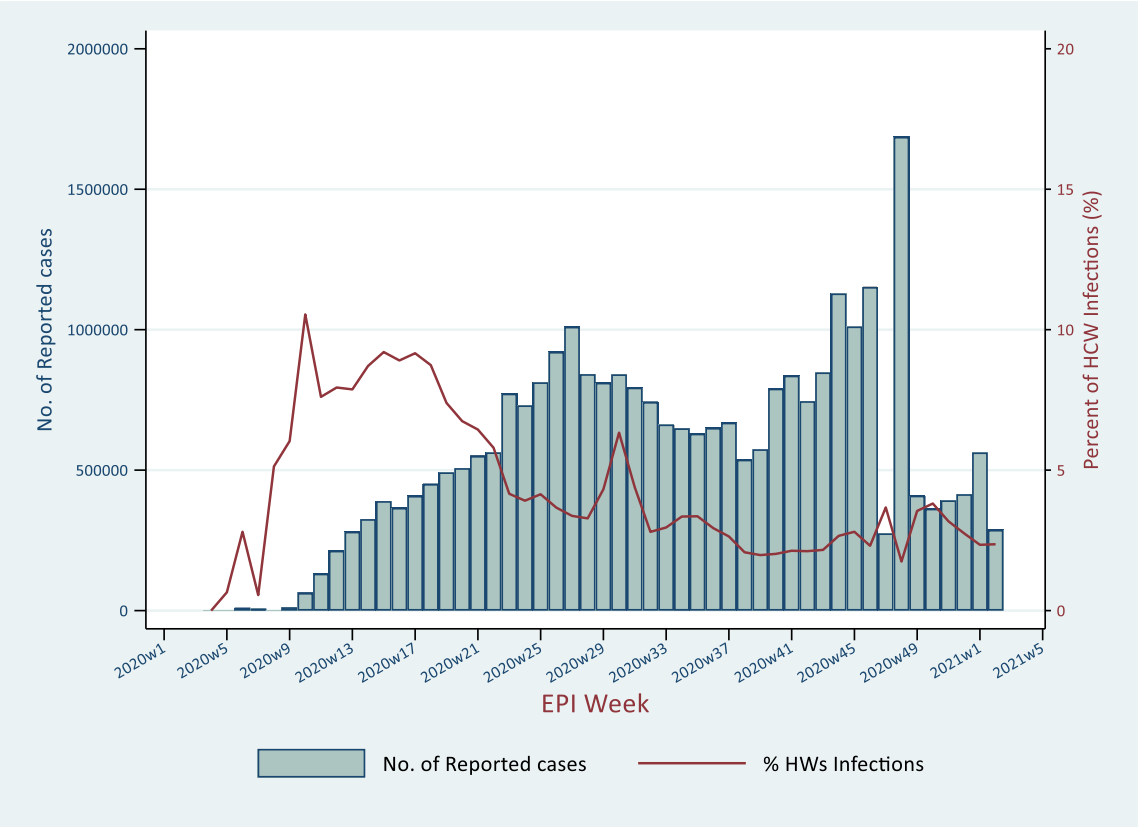
[1] For the purposes of the case-based surveillance, 'health workers' were defined as those working "any job in a health care setting".

[2] The term "health worker" includes allied health workers and auxiliary health workers such as cleaning and laundry personnel, x-ray physicians and technicians, clerks, phlebotomists, respiratory therapists, nutritionists, social workers, physical therapists, laboratory personnel, cleaners, admission/reception clerks, patient transporters, catering staff and so on).

Figure 3: Weekly total number of cases, and percentage of health worker cases among infected individuals reported, data from WHO Case Report Forms where occupation was indicated, 20 January 2020 to 31 January 2021.



A relative risk measure (dividing the rate of health worker infections by that of the non-health workers) was calculated for each week by estimating the total number of health workers and non-health workers. The rate of health worker infections was calculated by dividing their number by all workers employed in the health and social sector. A similar rate of infection was calculated for non-health workers relative to the general population size. It must be noted that there has likely been surveillance bias and differences in testing of health workers compared to general population, particularly early on. Based on the data we have available, it is observed that health workers experienced more than triple the risk of infection as that of the general population in the period between mid-March to mid-May 2020. A similar level of relative risk[3] was also reported by an observational cohort study of about 2 million community individuals and 100 000 front-line health-care workers in the United Kingdom of Great Britain and Northern Ireland, and the United States of America. Our data suggests this period of elevated risk was followed by a steep decline to that found in the general population by end of May 2020.

Analysis of health worker risk factors

WHO first commissioned a rapid systematic review of published literature on the risk factors in health workers for SARS-CoV-2 infections in April 2020 and this has been updated regularly since. The latest update on 24 December 2020 identified a total of 37 studies evaluating risk factors associated with SARS-CoV-2 infection in health workers. Highlights include:

- SARS-CoV-2 infections occurred among health workers in various roles (clinical or non-clinical) and departments/settings (including outpatient and non-COVID-19 care settings).
- There was no consistent difference in risk of infection between job titles, including between nurses compared with physicians, which represented the most commonly reported health worker roles.

[3] Adjusted HR 3·40, 95% CI 3·37–3·43

- There was no association found between sex or age and risk of SARS-CoV-2 infection or seropositivity in health workers.
- African-Americans and Hispanic health workers had an increased risk of SARS CoV-2 infection.
- Education and training in infection prevention and control were associated with decreased risk of SARS-CoV-2 infection in health workers.
- Certain exposures such as those involving intubations, other aerosol-generating procedures, direct patient contact, or contact with bodily secretions were found to be associated with increased infection risk compared with less intensive or direct exposure; though evidence was inconsistent, likely related to confounding factors such as those related to the availability, distribution, and use of PPE.
- Evidence on the association between health worker infection and use of individual PPE measures (masks, gloves, gown, eye protection) and hand hygiene was limited. However, most studies found that availability and appropriate use of PPE as recommended by local authorities was associated with decreased risk of SARS-CoV-2 infection. Evidence on the use of N95 or FFP2 respirators versus medical/surgical masks was inconclusive and limited to two inconsistent observational studies. Further information on the use of masks in health facilities can be found in the interim guidance on mask use in the context of COVID-19.
- Three studies found that universal masking in health facilities was associated with decreased risk of SARS-CoV-2 infection in health workers.

A number of possible hypotheses may help to explain the observed trends in health worker infections. The higher proportion of health worker infections at the beginning of the pandemic in some countries may be due to the lack of preparedness to infectious disease outbreaks, of standard IPC precautions during care delivery, and reduced access to PPE, and overburdened health systems due to increased hospitalizations and limited health care capacities. Trends could also reflect different testing strategies prioritizing health workers over the general public. The subsequent decline in health worker infections could be a result of multiple interventions, including: i) training of health workers on IPC measures; ii) increased availability and appropriate use of personal protective equipment (PPE); iii) monitoring of IPC practices by occupational health and safety personnel; iv) improved clinical management based on improved knowledge about COVID-19, v) reduced bed capacity of COVID-19 patients in hospitals; vi) general reduction in community transmission with implementation of public health and social measures resulting in less pressure on hospital systems and hospitalizations; vi) increased SARS-CoV-2 testing capabilities; and, vii) increased knowledge of methods of transmission. Hence, it is impossible to determine from the available data how these interventions (individually or as a mix) contributed to the observed trends.

The WHO review of available studies found that observational studies provided important insights but had some methodological limitations. These limitations include potential recall bias, low or unclear participation rates, small sample sizes, and challenges in disentangling the effect of different measures, which were often implemented at the same time.

To bridge these gaps and improve the understanding of SARS-CoV-2 infection among health workers, WHO has developed a standardized protocol for COVID-19 surveillance among health workers that countries can use, and is leading an international multi-centre case-control study primarily aimed at identifying risk factors and settings of exposure. More than 140 sites in 28 countries have enrolled so far and recruitment is ongoing (for more information please contact: earlyinvestigations-2019-nCoV@who.int).

Additionally, to mitigate health workers' infections WHO has developed a health workers' risk assessment and management of exposure to COVID-19 cases and guidance on Prevention, identification and management of health worker infection in the context of COVID-19.

WHO continues to support health workforce managers and policy makers with the December 2020 release of Health workforce policy and management in the context of the COVID-19 pandemic response interim guidance, consolidating the evolving evidence on the design, management and preservation of the workforce necessary to respond to the COVID-19 pandemic and maintain essential health services.

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Special Focus: Update on SARS-CoV-2 variants of concern

WHO, in collaboration with national authorities, institutions and researchers, continues to monitor the public health events associated with SARS-CoV-2 variants and provides updates as new information becomes available. Further information on the background of the variants of concern (VOC) is available from previously published Disease Outbreak News and in the last four publications of the Weekly Epidemiological Updates.

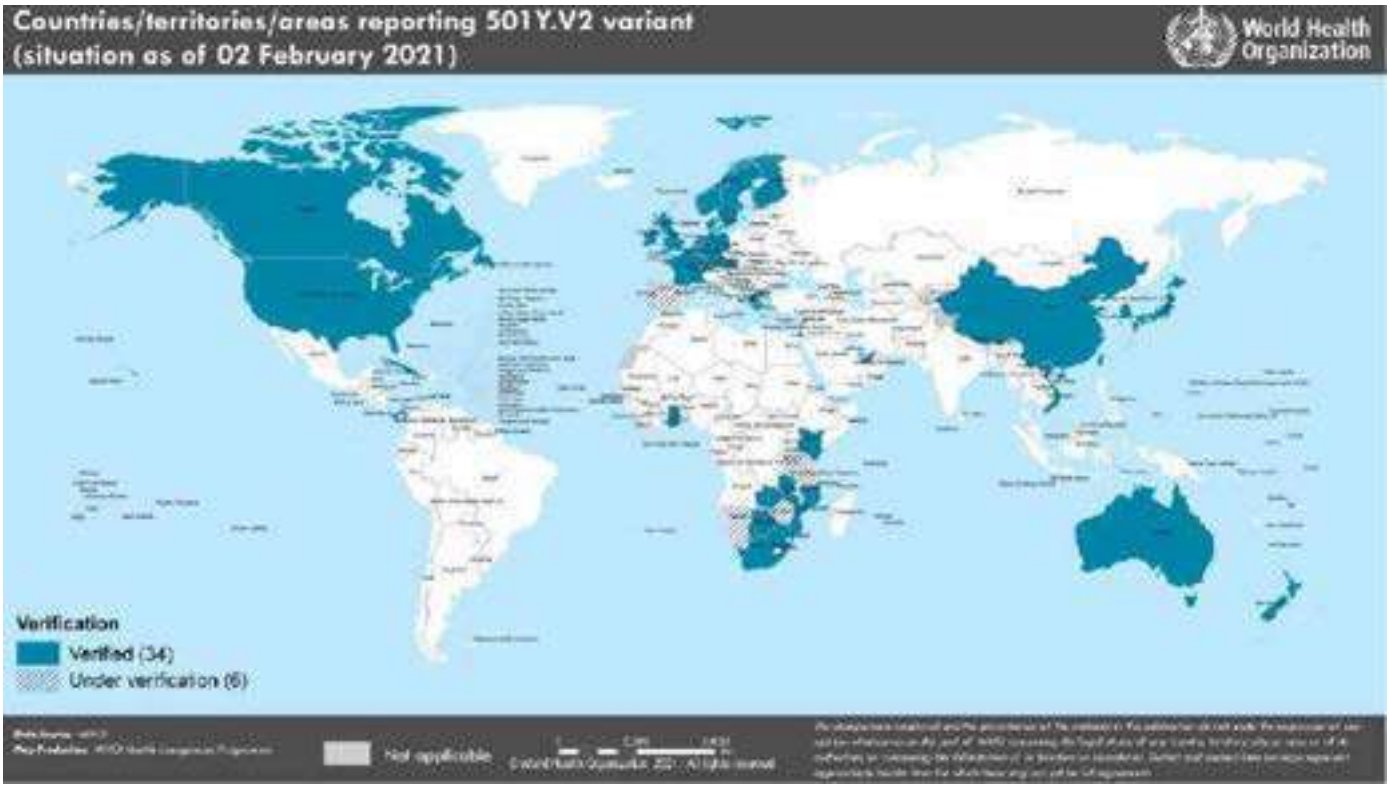
WHO continues to work with partners to evaluate available evidence around transmissibility, severity, antibody neutralization capabilities and potential impacts on vaccines of specific mutations, variants of interest and variants of concern. Here we provide an update on the geographical distribution of three variants of concern as reported by countries, territories and areas (hereafter countries) as of 2 February 2021:

1. Variant VOC 202012/01, lineage B.1.1.7: Since our last update on 27 January, variant VOC 202012/01 has been detected in ten additional countries. As of 2 February, a total of 80 countries across all six WHO regions have reported either imported cases or community transmission of this variant (Figure 5).

Figure 5. Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01 as of 2 February 2021

2. Variant 501Y.V2, lineage B.1.351: Since the last update on 27 January, 501Y.V2 has been reported from ten additional countries– now totaling 41 countries across four of the six WHO regions (Figure 6).

Figure 6. Countries, territories and areas reporting SARS-CoV-2 501Y.V2 as of 2 February 2021



3. Variant P.1, lineage B.1.1.28: Since our last update, variant P.1 has been reported in two additional countries. To date, this variant is reported in ten countries across four of the six WHO regions (Figure 7).

Figure 7. Countries, territories and areas reporting SARS-CoV-2 P.1 variant as of 2 February 2021

Last week, WHO held a multidisciplinary Global Transmission Discussion Seminar on SARS-CoV-2 variants and transmission. Participants from Brazil, Denmark, South Africa and the United Kingdom presented ongoing work aiming to understand transmission aspects of the variants of concern emerging in their countries, namely variants: P.1/P.2, cluster 5, 501Y.V2 and VOC202012/01, respectively. Initial analyses suggest that some variants may be more transmissible, possibly due to mutations that improve the virus's ability to bind to human cells, but available studies have found that the modes of transmission have not changed.

SARS-CoV-2 incidence and hospitalizations in a number of countries where VOC202012/01 and 501Y.V2 are circulating has started to decline in recent weeks, demonstrating the effectiveness of public health and social measures for controlling transmission of these variants.

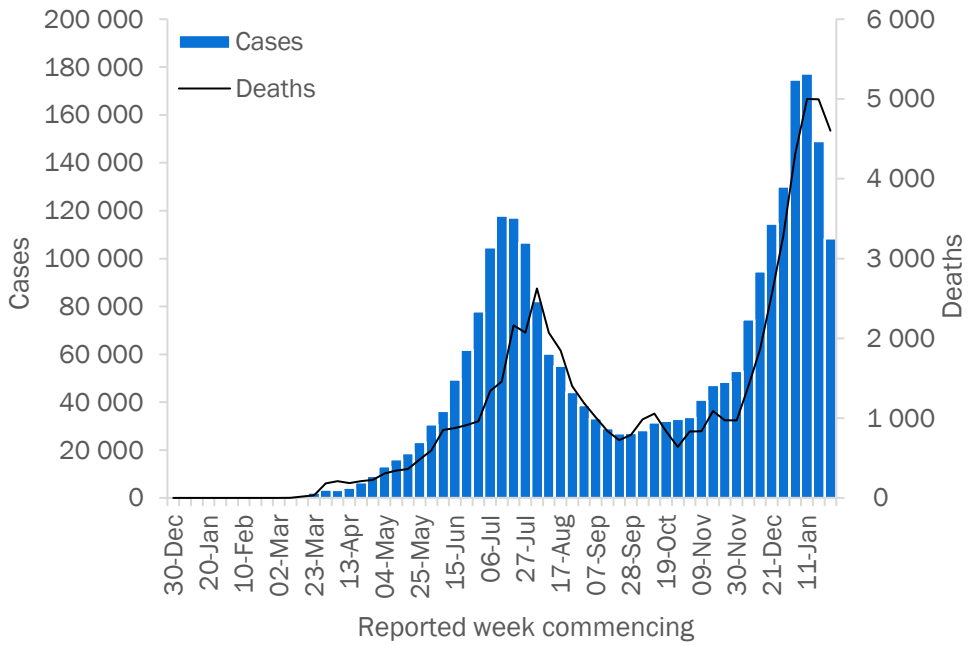
The emergence of new variants has highlighted the importance for everyone to continue to comply with local and national public health and social measures, and to take simple precautions, such as physical distancing, wearing a mask, keeping rooms well ventilated, avoiding crowds, cleaning your hands, and coughing into a bent elbow or tissue (see also Protect yourself and others from COVID-19). It remains critical to increase diagnostic capacity and strategic genetic sequencing of SARS-CoV-2 where capacity allows, and continue to share sequence data internationally in a timely manner. Genetic sequencing should be considered for a subset of SARS-CoV-2 cases in each country, especially among outbreaks or clusters where transmission and/or severity may appear unusual. WHO has recently issued guidance for SARS-CoV-2 suggesting how to apply the use sequencing to monitor virus evolution in addition to epidemiological and virologic surveillance sequencing (SARS-CoV-2 genomic sequencing for public health goals: Interim guidance; Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health).

Situation by WHO Region

African Region

In the past week, the African Region reported over 108 000 cases and just over 4600 deaths, a 27% decrease in cases and an 8% decrease in deaths respectively compared to the previous week. Cases have decreased for two consecutive weeks. The highest numbers of new cases were reported in South Africa (44 397 new cases; 74.9 new cases per 100 000 population; a 44% decrease), Nigeria (9955 new cases; 4.8 new cases per 100 000; a 15% decrease) and Zambia (8760 new cases; 47.7 new cases per 100 000; a 3% increase).

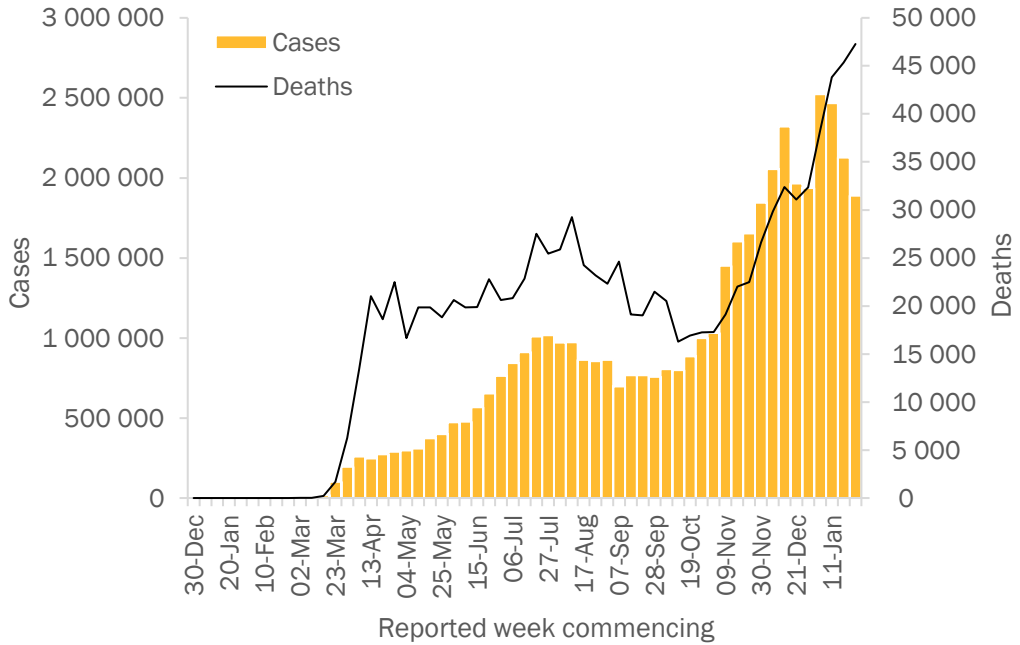
The countries reporting the highest number of new deaths in the past week were South Africa (3377 new deaths; 5.7 new deaths per 100 000; a 9% decrease), Zimbabwe (219 new deaths; 1.5 new deaths per 100 000; a 25% decrease) and Malawi (217 new deaths; 1.1 new deaths per 100 000; a 28% increase).



Region of the Americas

Over 1.8 million new cases and over 47 000 new deaths were reported in the Region of the Americas this week, a decrease of 11% and an increase of 4% respectively compared to the previous week. The highest numbers of new cases were reported from the United States of America (1 072 287 new cases; 324.0 new cases per 100 000 population; a 15% decrease), Brazil (364 593 new cases; 171.5 new cases per 100 000; a 1% increase) and Mexico (109 603 new cases; 85.0 new cases per 100 000; an 11% decrease).

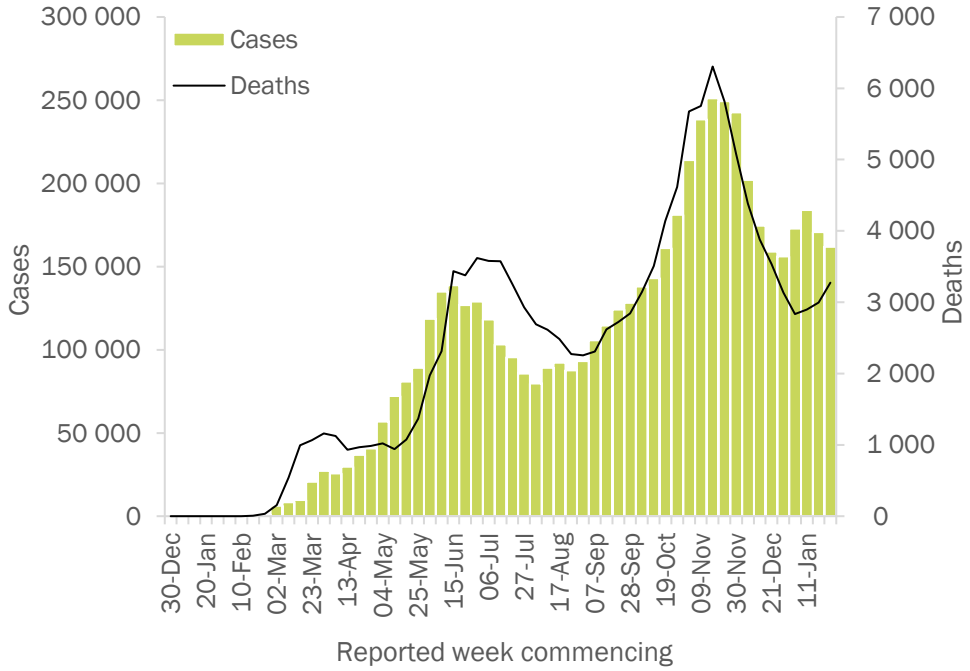
The highest numbers of deaths were reported from the same countries, the United States of America (22 506 new deaths; 6.8 new deaths per 100 000; a 4% increase), Mexico (8965 new deaths; 7.0 new deaths per 100 000; a 4% increase) and Brazil (7423 new deaths; 3.5 new deaths per 100 000; a 6% increase).



Eastern Mediterranean Region

In the past week, the Eastern Mediterranean Region reported over 161 000 new cases, a decrease of 5% compared to last week. The region reported 3200 new deaths, a 9% increase. The three countries reporting the highest numbers of new cases continue to be the Islamic Republic of Iran (44 699 new cases, 53.2 new cases per 100 000 population, a 5% increase), Lebanon (22 326 new cases, 327.1 new cases per 100 000, a 19% decrease) and United Arab Emirates (26 285 new cases, 265.8 new cases per 100 000, 7% increase).

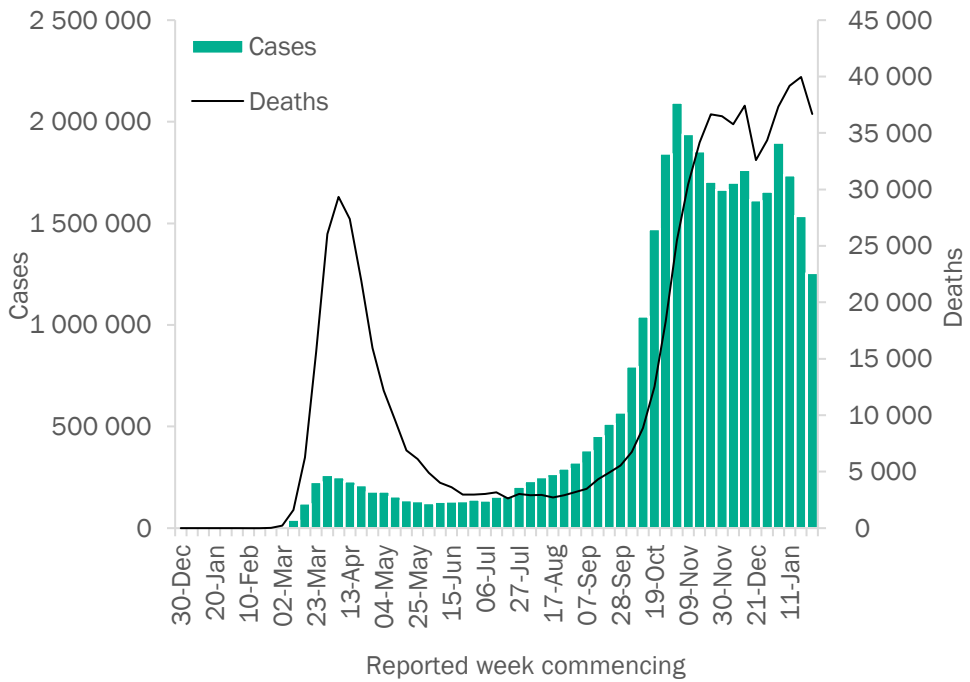
The highest numbers of new deaths were reported in Lebanon (751 new deaths, 11.0 new death per 100 000, an 81% increase), Iran (595 new deaths, 0.7 new death per 100 000 population, a 3% increase), and Tunisia (526 new deaths, 4.5 new death per 100 000, a 2% decrease).



European Region

The European Region reported over 1.2 million new cases and over 36 000 new deaths, a decrease of 18% and 8% respectively when compared to the previous week. The three countries reporting the highest numbers of new cases were the United Kingdom (178 629 new cases, 263.1 new cases per 100 000, a 31% decrease), France (141 092 new cases; 216.2 new cases per 100 000, a 2% increase) and the Russian Federation (131 039 new cases, 89.8 new cases per 100 000, a 13% decrease).

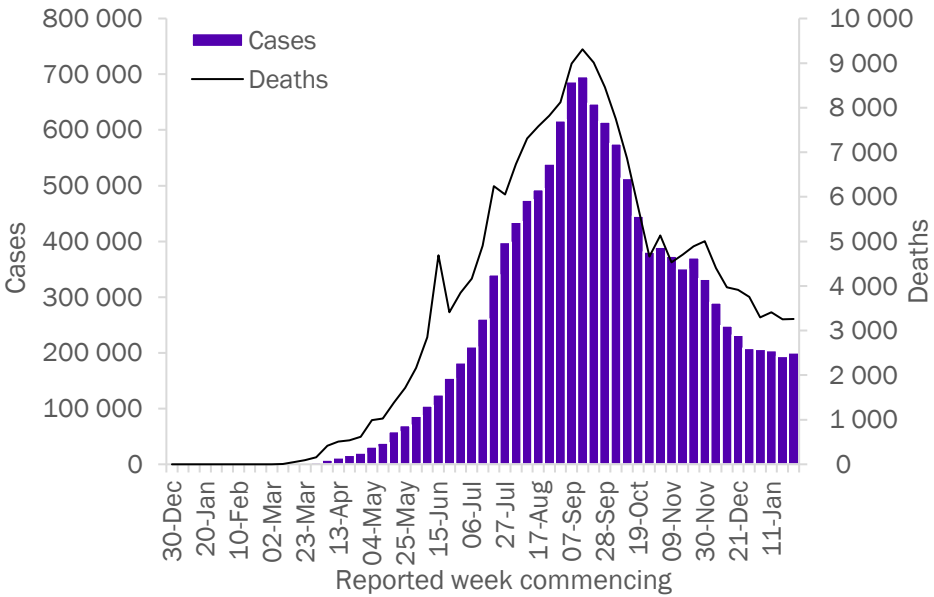
The highest numbers of deaths were reported from the United Kingdom (8242 new deaths; 12.1 new deaths per 100 000, a 6% decrease), Germany (5075 new deaths; 6.1 new deaths per 100 000, a 7% decrease) and the Russian Federation (3720 new deaths; 2.5 new deaths per 100 000, a 5% decrease).



South-East Asia Region

Following slow declines in the number of new cases in the South-East Asia Region in recent weeks, there was a plateau in newly reported cases (200 000 new cases, 3% increase from last week), and deaths (3000 new deaths, 0% change) this week. The three countries reporting the highest numbers of new cases and new deaths were India (91 650 new cases; 6.6 new cases per 100 000, a 5% decrease), Indonesia (88 839 new cases; 32.5 new cases per 100 000; a 10% increase) and Sri Lanka (5706 new cases; 26.6 new cases per 100 000; an 8% increase).

The three countries reporting the highest numbers of new deaths this week were Indonesia (2064 new deaths; 0.8 new deaths per 100 000, a 9% increase), India (935 new deaths; <0.1 new deaths per 100 000, a 12% decrease) and Bangladesh (108 new deaths; <0.1 new deaths per 100 000; a 10% decrease).



Western Pacific Region

The Western Pacific Region reported 72 000 new cases the past week, an 11% decrease compared the previous week, while a marked (21%) increase was seen in the number of new deaths, with over 1200 deaths reported this week. The three countries reporting the highest numbers of new cases in the region this week were Malaysia (29 206 new cases; 90.2 new cases per 100 000, a 15% decrease), Japan (26 081 new cases; 20.6 new cases per 100 000, a 32% decrease), and the Philippines (11 837 new cases; 10.8 new cases per 100 000, a 9% decrease).

The three countries reporting the highest numbers of new deaths this week were Japan (635 new deaths; 0.5 new deaths per 100 000, an 8% increase), the Philippines (479 new deaths; 0.4 new deaths per 100 000, an 11% increase) and Malaysia (79 new deaths; 0.2 new deaths per 100 000, a 56% increase).

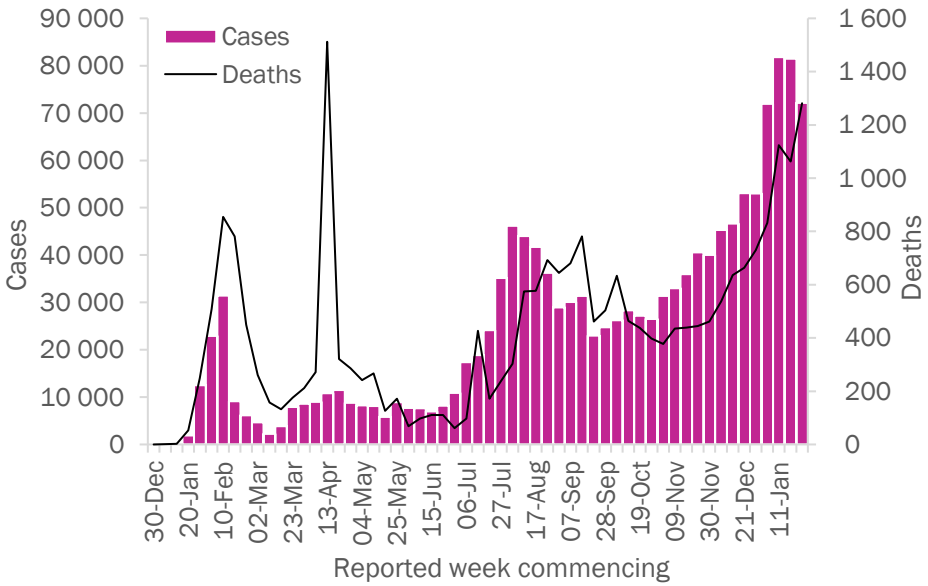


Table 2. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 31 January 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**108 391**	**2 570 474**	**229.1**	**4 602**	**62 504**	**5.6**	
South Africa	44 397	1 449 236	2 443.5	3 377	43 951	74.1	Community transmission
Nigeria	9 955	130 557	63.3	83	1 578	0.8	Community transmission
Zambia	8 760	53 352	290.2	118	745	4.1	Community transmission
Mozambique	6 077	37 705	120.6	66	363	1.2	Community transmission
Ghana	5 312	65 427	210.6	44	405	1.3	Community transmission
Malawi	5 058	23 497	122.8	217	687	3.6	Community transmission
Ethiopia	3 723	137 021	119.2	28	2 091	1.8	Community transmission
Botswana	2 663	21 293	905.5	46	134	5.7	Community transmission
Rwanda	2 471	15 118	116.7	21	193	1.5	Community transmission
Zimbabwe	2 264	33 271	223.9	219	1 193	8.0	Community transmission
Algeria	1 753	107 122	244.3	27	2 888	6.6	Community transmission
Senegal	1 753	26 213	156.6	52	621	3.7	Community transmission
Namibia	1 615	33 828	1 331.3	33	350	13.8	Community transmission
Côte d'Ivoire	1 566	28 178	106.8	7	152	0.6	Community transmission
Eswatini	1 336	15 666	1 350.3	104	562	48.4	Community transmission
Kenya	777	100 675	187.2	15	1 755	3.3	Community transmission
Democratic Republic of the Congo	735	22 603	25.2	11	671	0.7	Community transmission
Lesotho	622	8 278	386.4	37	160	7.5	Community transmission
Burkina Faso	613	10 580	50.6	11	120	0.6	Community transmission
Cabo Verde	567	13 981	2 514.6	9	133	23.9	Community transmission
Uganda	489	39 533	86.4	7	324	0.7	Community transmission
Gabon	470	10 748	482.9	1	68	3.1	Community transmission
Comoros	458	2 718	312.6	20	90	10.3	Community transmission
Madagascar	442	18 743	67.7	6	279	1.0	Community transmission
Angola	415	19 782	60.2	7	464	1.4	Community transmission
Sierra Leone	408	3 528	44.2	2	79	1.0	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Togo	405	5 041	60.9	3	77	0.9	Community transmission
Mauritania	238	16 460	354.0	8	418	9.0	Community transmission
Chad	210	3 347	20.4	3	118	0.7	Community transmission
Eritrea	195	2 135	60.2	1	7	0.2	Sporadic cases
Niger	195	4 516	18.7	8	159	0.7	Community transmission
South Sudan	188	3 961	35.4	0	64	0.6	Community transmission
Guinea	175	14 475	110.2	1	82	0.6	Community transmission
Burundi	160	1 632	13.7	0	2	0.0	Community transmission
Seychelles	153	1 186	1 205.9	0	3	3.1	Clusters of cases
Benin	143	3 786	31.2	0	48	0.4	Community transmission
Gambia	132	4 090	169.2	0	128	5.3	Community transmission
Equatorial Guinea	115	5 516	393.2	0	86	6.1	Community transmission
Mali	104	8 069	39.8	7	330	1.6	Community transmission
Congo	93	7 887	142.9	0	117	2.1	Community transmission
Guinea-Bissau	92	2 623	133.3	0	45	2.3	Community transmission
Sao Tome and Principe	74	1 256	573.1	0	17	7.8	Community transmission
Liberia	25	1 939	38.3	0	84	1.7	Community transmission
Mauritius	12	568	44.7	0	10	0.8	Sporadic cases
Central African Republic	1	4 981	103.1	0	63	1.3	Community transmission
Cameroon	0	29 617	111.6	0	462	1.7	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories[iii]							
Mayotte	687	8 231	3 017.1	2	61	22.4	Clusters of cases
Réunion	295	9 996	1 116.5	1	46	5.1	Clusters of cases
Americas	**1 888 070**	**45 345 051**	**4 433.5**	**47 277**	**1 047 171**	**102.4**	
United States of America	1 072 287	25 676 612	7 757.2	22 506	433 173	130.9	Community transmission
Brazil	364 593	9 118 513	4 289.9	7 423	222 666	104.8	Community transmission
Mexico	109 603	1 841 893	1 428.6	8 965	156 579	121.4	Community transmission
Colombia	90 215	2 077 633	4 083.2	2 698	53 284	104.7	Community transmission
Argentina	61 532	1 915 362	4 237.9	1 200	47 775	105.7	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Peru	37 779	1 125 875	3 414.7	1 259	40 686	123.4	Community transmission
Canada	33 386	770 793	2 042.3	973	19 801	52.5	Community transmission
Chile	28 253	722 900	3 781.6	485	18 339	95.9	Community transmission
Bolivia (Plurinational State of)	15 135	213 392	1 828.1	355	10 226	87.6	Community transmission
Ecuador	11 547	249 779	1 415.7	255	14 851	84.2	Community transmission
Panama	10 460	318 253	7 375.9	241	5 221	121.0	Community transmission
Dominican Republic	10 046	212 553	1 959.4	133	2 646	24.4	Community transmission
Honduras	6 928	146 110	1 475.2	136	3 575	36.1	Community transmission
Paraguay	5 516	131 886	1 849.1	108	2 693	37.8	Community transmission
Guatemala	5 228	159 118	888.2	162	5 618	31.4	Community transmission
Cuba	5 047	25 674	226.7	22	213	1.9	Clusters of cases
Uruguay	4 359	40 529	1 166.7	61	425	12.2	Community transmission
Costa Rica	3 968	193 276	3 794.1	86	2 604	51.1	Community transmission
Venezuela (Bolivarian Republic of)	2 981	125 776	442.3	41	1 177	4.1	Community transmission
El Salvador	1 317	53 989	832.4	63	1 614	24.9	Community transmission
Jamaica	755	15 527	524.4	12	348	11.8	Community transmission
Haiti	434	11 533	101.1	2	245	2.1	Community transmission
Saint Lucia	425	1 195	650.8	3	13	7.1	Sporadic cases
Suriname	419	8 364	1 425.8	6	154	26.3	Clusters of cases
Guyana	385	7 528	957.1	5	175	22.2	Clusters of cases
Barbados	255	1 498	521.3	3	12	4.2	Community transmission
Belize	177	11 877	2 987.0	11	301	75.7	Community transmission
Saint Vincent and the Grenadines	176	896	807.6	0	2	1.8	Clusters of cases
Trinidad and Tobago	77	7 533	538.3	1	134	9.6	Community transmission
Bahamas	64	8 174	2 078.6	1	176	44.8	Clusters of cases
Nicaragua	39	4 992	75.4	1	169	2.6	Community transmission
Antigua and Barbuda	23	218	222.6	1	7	7.1	Sporadic cases
Dominica	4	117	162.5	0	0	0.0	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Saint Kitts and Nevis	2	37	69.6	0	0	0.0	Sporadic cases
Grenada	1	148	131.5	0	1	0.9	Sporadic cases
Territories[iii]							
Puerto Rico	3 333	93 406	3 265.0	52	1 823	63.7	Community transmission
French Guiana	419	16 083	5 384.7	0	76	25.4	Community transmission
Aruba	235	6 858	6 423.4	6	58	54.3	Community transmission
Turks and Caicos Islands	215	1 459	3 768.3	1	8	20.7	Clusters of cases
Sint Maarten	114	1 822	4 248.9	0	27	63.0	Community transmission
Guadeloupe	100	9 156	2 288.3	0	157	39.2	Community transmission
Saint Martin	98	1 289	3 334.3	0	12	31.0	Community transmission
United States Virgin Islands	63	2 398	2 296.4	0	24	23.0	Community transmission
Curaçao	37	4 574	2 787.4	0	20	12.2	Community transmission
Bonaire	12	362	1 730.8	0	3	14.3	Community transmission
Cayman Islands	7	390	593.4	0	2	3.0	Sporadic cases
Bermuda	5	691	1 109.6	0	12	19.3	Sporadic cases
British Virgin Islands	4	141	466.3	0	1	3.3	Clusters of cases
Saint Pierre and Miquelon	4	24	414.2	0	0	0.0	Clusters of cases
Falkland Islands (Malvinas)	3	40	1 148.4	0	0	0.0	No cases
Saint Barthélemy	3	379	3 834.1	0	0	0.0	Sporadic cases
Anguilla	2	17	113.3	0	0	0.0	Sporadic cases
Martinique	0	6 370	1 697.5	0	44	11.7	Community transmission
Montserrat	0	13	260.1	0	1	20.0	No cases
Saba	0	6	310.4	0	0	0.0	Sporadic cases
Sint Eustatius	0	20	637.1	0	0	0.0	Sporadic cases
Eastern Mediterranean	**161 943**	**5 669 940**	**775.8**	**3 272**	**134 189**	**18.4**	
Iran (Islamic Republic of)	44 699	1 411 731	1 680.8	595	57 889	68.9	Community transmission
United Arab Emirates	26 285	300 661	3 039.9	55	838	8.5	Community transmission
Lebanon	22 326	298 913	4 379.4	751	3 031	44.4	Community transmission
Pakistan	12 396	543 214	245.9	376	11 623	5.3	Community transmission
Tunisia	12 154	207 468	1 755.4	526	6 680	56.5	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Jordan	6 155	325 674	3 191.9	87	4 304	42.2	Community transmission
Iraq	6 052	618 922	1 538.7	53	13 041	32.4	Community transmission
Libya	5 110	117 650	1 712.2	105	1 842	26.8	Community transmission
Morocco	4 922	470 691	1 275.2	131	8 259	22.4	Clusters of cases
Egypt	4 275	165 418	161.6	361	9 263	9.1	Clusters of cases
Kuwait	3 721	164 622	3 854.8	7	959	22.5	Community transmission
Bahrain	3 170	102 626	6 031.2	5	372	21.9	Clusters of cases
Qatar	2 212	150 984	5 240.6	0	248	8.6	Community transmission
Saudi Arabia	1 628	367 813	1 056.5	22	6 372	18.3	Sporadic cases
Oman	1 242	133 728	2 618.7	10	1 527	29.9	Community transmission
Sudan	579	29 449	67.2	69	1 807	4.1	Community transmission
Syrian Arab Republic	441	13 998	80.0	37	916	5.2	Community transmission
Afghanistan	428	55 023	141.3	22	2 400	6.2	Clusters of cases
Somalia	30	4 784	30.1	0	130	0.8	Community transmission
Djibouti	13	5 931	600.3	1	62	6.3	Clusters of cases
Yemen	2	2 124	7.1	0	616	2.1	Community transmission
Territories[iii]							
occupied Palestinian territory	4 103	178 516	3 499.3	59	2 010	39.4	Community transmission
Europe	**1 255 352**	**34 276 814**	**3 672.2**	**36 674**	**745 590**	**79.9**	
The United Kingdom	178 629	3 796 092	5 591.9	8 242	105 571	155.5	Community transmission
France	141 092	3 126 351	4 789.6	2 982	75 466	115.6	Community transmission
Russian Federation	131 039	3 850 439	2 638.5	3 720	73 182	50.1	Clusters of cases
Spain	109 866	2 705 001	5 785.5	1 153	57 806	123.6	Community transmission
Italy	86 598	2 541 783	4 203.9	3 117	88 279	146.0	Clusters of cases
Portugal	86 549	711 018	6 973.0	1 985	12 179	119.4	Clusters of cases
Germany	81 427	2 216 363	2 645.3	5 075	56 945	68.0	Community transmission
Czechia	47 157	984 774	9 195.8	939	16 308	152.3	Community transmission
Turkey	46 573	2 470 901	2 929.7	932	25 865	30.7	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Israel	45 194	637 242	7 362.2	406	4 722	54.6	Community transmission
Poland	37 940	1 513 385	3 998.7	1 817	37 180	98.2	Community transmission
Netherlands	31 069	974 761	5 688.8	455	13 958	81.5	Community transmission
Ukraine	27 643	1 219 455	2 788.4	846	22 707	51.9	Community transmission
Romania	17 724	726 918	3 778.6	542	18 264	94.9	Community transmission
Sweden	16 073	566 957	5 613.8	76	11 591	114.8	Community transmission
Belgium	15 503	710 153	6 127.5	283	21 092	182.0	Community transmission
Slovakia	13 437	249 913	4 577.5	574	4 642	85.0	Clusters of cases
Serbia	11 612	393 897	5 656.4	132	4 000	57.4	Community transmission
Belarus	10 711	246 570	2 609.4	69	1 708	18.1	Community transmission
Kazakhstan	9 953	235 844	1 256.0	91	3 126	16.6	Clusters of cases
Austria	9 705	409 892	4 551.1	318	7 636	84.8	Community transmission
Ireland	9 119	195 303	3 955.3	345	3 292	66.7	Community transmission
Slovenia	8 593	166 473	8 007.6	124	3 752	180.5	Clusters of cases
Switzerland	8 120	518 759	5 994.0	138	8 601	99.4	Community transmission
Hungary	8 012	367 586	3 805.1	556	12 524	129.6	Community transmission
Lithuania	5 915	182 539	6 705.3	154	2 803	103.0	Community transmission
Albania	5 810	77 251	2 684.4	59	1 369	47.6	Clusters of cases
Latvia	5 212	65 708	3 483.6	83	1 180	62.6	Community transmission
Greece	4 827	156 473	1 501.2	157	5 779	55.4	Community transmission
Georgia	4 593	258 111	6 470.3	123	3 178	79.7	Community transmission
Denmark	4 178	198 095	3 420.0	137	2 106	36.4	Community transmission
Bulgaria	3 922	218 618	3 146.3	217	9 028	129.9	Clusters of cases
Republic of Moldova	3 576	159 513	3 954.3	87	3 434	85.1	Community transmission
Croatia	3 506	232 426	5 661.7	200	5 027	122.5	Community transmission
Estonia	3 492	44 208	3 332.6	43	419	31.6	Clusters of cases
Montenegro	3 034	61 719	9 826.8	37	805	128.2	Clusters of cases
Finland	2 068	44 402	801.4	23	671	12.1	Community transmission
Bosnia and Herzegovina	2 051	121 891	3 715.3	127	4 696	143.1	Community transmission
North Macedonia	2 047	92 518	4 440.8	69	2 848	136.7	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Norway	2 010	62 575	1 154.3	19	563	10.4	Community transmission
Azerbaijan	1 378	230 066	2 269.1	54	3 126	30.8	Clusters of cases
Malta	1 245	17 903	4 054.6	16	267	60.5	Clusters of cases
Armenia	990	167 026	5 636.6	41	3 080	103.9	Community transmission
Luxembourg	966	50 547	8 074.9	15	579	92.5	Community transmission
Cyprus	883	30 770	2 548.5	14	197	16.3	Clusters of cases
Kyrgyzstan	629	84 529	1 295.6	12	1 412	21.6	Clusters of cases
Andorra	386	9 885	12 793.6	5	101	130.7	Community transmission
Uzbekistan	336	78 711	235.2	0	621	1.9	Clusters of cases
San Marino	151	3 025	8 913.3	2	67	197.4	Community transmission
Monaco	130	1 475	3 758.5	4	12	30.6	Sporadic cases
Liechtenstein	50	2 561	6 715.3	0	46	120.6	Sporadic cases
Iceland	21	6 002	1 758.9	0	29	8.5	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Kosovo	2 235	59 891	3 219.3	42	1 482	79.7	Community transmission
Gibraltar	191	4 096	12 157.5	14	73	216.7	Clusters of cases
Guernsey	139	449	710.5	0	13	20.6	Community transmission
Jersey	39	3 143	2 888.8	3	66	60.7	Community transmission
Faroe Islands	2	654	1 338.4	0	1	2.0	Sporadic cases
Isle of Man	2	434	510.4	0	25	29.4	No cases
Greenland	0	30	52.8	0	0	0.0	No cases
South-East Asia	**200 219**	**12 856 723**	**636.0**	**3 258**	**197 707**	**9.8**	
India	91 650	10 746 183	778.7	935	154 274	11.2	Clusters of cases
Indonesia	88 839	1 066 313	389.8	2 064	29 728	10.9	Community transmission
Sri Lanka	5 706	63 293	295.6	33	313	1.5	Clusters of cases
Thailand	5 282	18 782	26.9	4	77	0.1	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Bangladesh	3 444	534 770	324.7	108	8 111	4.9	Community transmission
Myanmar	2 766	139 864	257.1	80	3 125	5.7	Clusters of cases
Nepal	1 674	270 854	929.6	33	2 027	7.0	Clusters of cases
Maldives	851	15 736	2 911.1	1	51	9.4	Clusters of cases
Bhutan	4	858	111.2	0	1	0.1	Clusters of cases
Timor-Leste	3	70	5.3	0	0	0.0	Sporadic cases
Western Pacific	**72 135**	**1 420 024**	**72.3**	**1 281**	**24 588**	**1.3**	
Malaysia	29 206	209 661	647.8	79	746	2.3	Clusters of cases
Japan	26 081	386 742	305.8	635	5 654	4.5	Clusters of cases
Philippines	11 837	523 516	477.7	479	10 669	9.7	Community transmission
Republic of Korea	3 122	78 203	152.5	71	1 420	2.8	Clusters of cases
China	946	100 877	6.9	13	4 823	0.3	Clusters of cases
Singapore	247	59 507	1 017.2	0	29	0.5	Sporadic cases
Viet Nam	233	1 781	1.8	0	35	0.0	Clusters of cases
Mongolia	131	1 742	53.1	0	2	0.1	Clusters of cases
Australia	45	28 806	113.0	0	909	3.6	Clusters of cases
New Zealand	21	1 947	40.4	0	25	0.5	Clusters of cases
Cambodia	7	465	2.8	0	0	0.0	Sporadic cases
Brunei Darussalam	5	180	41.1	0	3	0.7	Sporadic cases
Papua New Guinea	2	851	9.5	0	9	0.1	Community transmission
Lao People's Democratic Republic	1	44	0.6	0	0	0.0	Sporadic cases
Fiji	0	55	6.1	0	2	0.2	Sporadic cases
Solomon Islands	0	17	2.5	0	0	0.0	No cases
Territories[iii]							
French Polynesia	208	18 060	6 429.2	3	131	46.6	Sporadic cases
Guam	39	7 379	4 372.1	1	129	76.4	Clusters of cases
New Caledonia	3	47	16.5	0	0	0.0	Sporadic cases
Wallis and Futuna	1	5	44.5	0	0	0.0	Sporadic cases
Marshall Islands	0	4	6.8	0	0	0.0	No cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Northern Mariana Islands (Commonwealth of the)	0	132	229.3	0	2	3.5	Pending
Samoa	0	2	1.0	0	0	0.0	No cases
Vanuatu	0	1	0.3	0	0	0.0	No cases
Global	**3 686 110**	**102 139 771**	**1 310.3**	**96 364**	**2 211 762**	**28.4**	

**See *data, table and figure notes*

Key Weekly Updates

WHO Director-General Dr Tedros remarks

On health workers and older people
"I leave you with the challenge I set at the beginning of the week: together, we must ensure that vaccination of health workers and older people is underway in all countries within the first 100 days of this year." Closing remarks at 148th session of the Executive Board

On vaccine equity
"Vaccine nationalism is self-defeating and inefficient, leaving the world's poorest and most vulnerable people at risk." The Director-General recommended three urgent actions: "First, prompt and equitable dose sharing is critical if we are to overcome this pandemic. Second, we need support to close the funding gap of 26 billion US dollars for the ACT Accelerator this year, including 7.8 billion dollars for COVAX. If fully funded, the ACT Accelerator would return up to 166 US dollars for every dollar invested. And third, even as we work to end the pandemic, we must learn the lessons it is teaching us." NORAD Conference 2021, panel: Vaccine nationalism and global distribution and Closing remarks at 148th session of the Executive Board

Therapeutics and vaccines
"We have identified dexamethasone to treat severe disease, which is being stockpiled for use in low and lower-middle income countries.

And the development and approval of safe and effective vaccines less than a year after the emergence of this new virus is a stunning scientific achievement. It gives us all a much-needed source of hope." Debate on the report "COVID-19 vaccines: ethical, legal and practical considerations

Moderna vaccine

The Moderna COVID-19 (mRNA-1273) vaccine: what you need to know

Interim recommendations for use of the Moderna mRNA-1273 vaccine against COVID-19

Testing

WHO publishes new Essential Diagnostics List and urges countries to prioritize investments in testing

The selection and use of essential in vitro diagnostics - TRS 1031

COVID-19 and oral health-care

New videos explain how to prevent COVID-19 infection in oral health-care services

Publications

COVID-19 Clinical management: living guidance

Laboratory biosafety guidance related to coronavirus disease (COVID-19): Interim guidance

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.
Global totals include 745 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case.

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 24 January 2021, 10 am CET

For the latest data and information on COVID-19, please see:

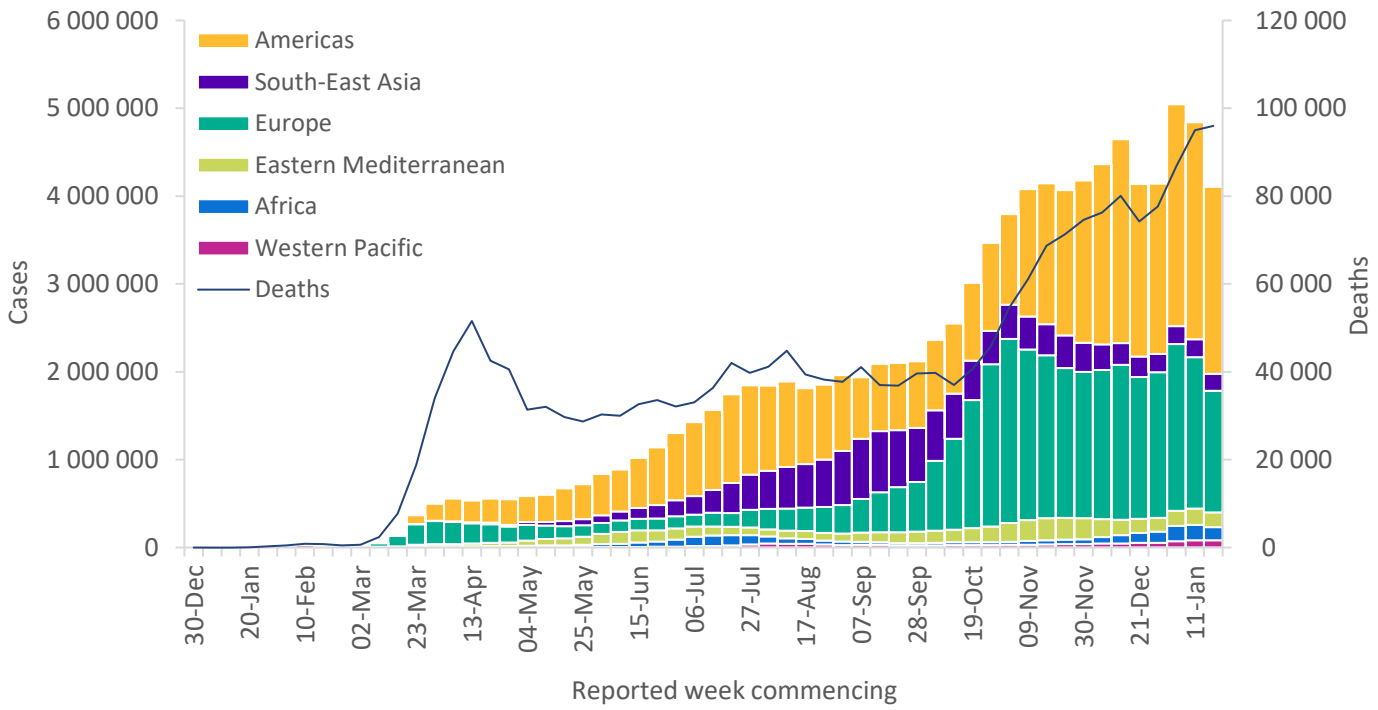
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

Globally, 4.1 million new cases were reported in the past week, a decline of 15% from the previous week and the second week of decline after global case incidence peaked in the first week of January 2021 (Figure 1). This downward trend is largely attributed to relative reductions in case incidence in several countries that have contributed the highest numbers in recent months, but hides continued upward trends in other countries in the same regions. The ongoing and prolonged high rates of new infections continues to strain health systems in many countries around the world. All regions reported a decline in new cases except the Western Pacific Region which reported a similar incidence to last week (Table 1). The largest decrease in new cases was reported in the European Region (by 20%) followed by the African Region (decrease of 16%). The Americas and Europe reported 86% of all new cases globally in the past week.

During the same period, around 96 000 deaths have been reported – a similar number reported as last week. The Americas and Eastern Mediterranean region reported an increase in new deaths by 4% and 3% respectively, whereas Europe, South-East Asia and Western Pacific regions showed a decrease in new deaths compared to last week. No change in new deaths was seen for the African region.

Figure 1: COVID-19 cases reported weekly by WHO Region, and global deaths, as of 24 January 2021**



**See *data, table and figure notes*

In the past week, the five countries reporting the highest number of new cases continue to be the United States of America (1 259 902 cases, a 20% decrease), Brazil (360 428 cases, a 5% decrease), the United Kingdom of Great Britain and Northern Ireland (260 098 cases, a 24% decrease), the Russian Federation (151 191 cases, a 9% decrease) and France (138 288 cases, a 10% increase).

In this edition of the COVID-19 Weekly Epidemiological Update, special focus updates are provided on:

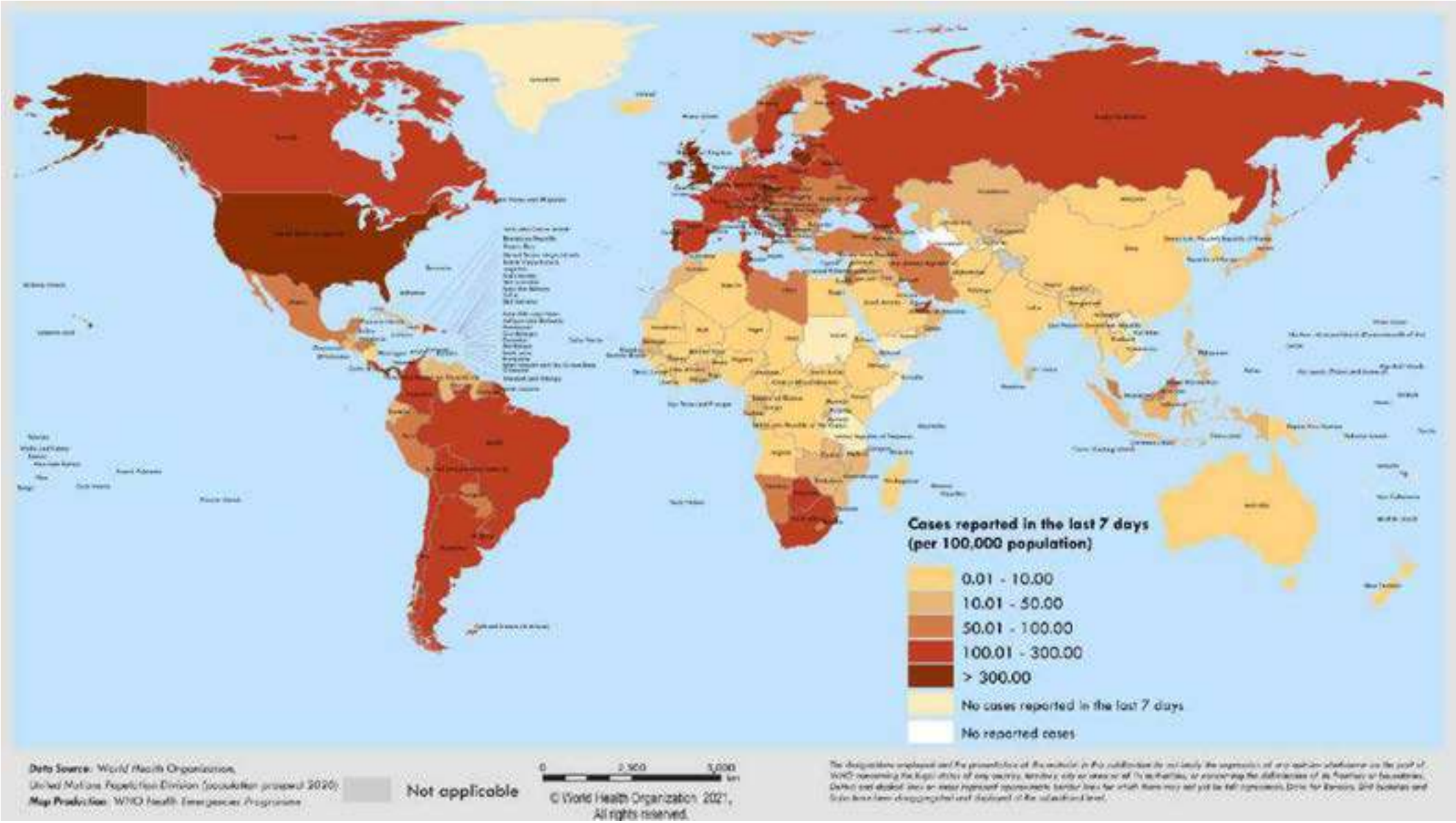
- Solidarity II forum and use of international standards for sero-epidemiology surveys
- SARS-CoV-2 variants of concern
- Additional Region-specific information: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western Pacific Region
- Key Weekly Updates

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 24 January 2021**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	2 127 479 (52%)	-14%	43 456 972 (44%)	45 349 (47%)	4%	999 894 (47%)
Europe	1 382 460 (34%)	-20%	32 848 998 (33%)	38 349 (40%)	-1%	706 293 (33%)
South-East Asia	194 166 (5%)	-5%	12 656 504 (13%)	3 253 (3%)	-5%	194 449 (9%)
Eastern Mediterranean	170 422 (4%)	-7%	5 507 649 (6%)	2 980 (3%)	3%	130 901 (6%)
Africa	148 953 (4%)	-16%	2 462 083 (3%)	4 997 (5%)	0%	57 902 (3%)
Western Pacific	81 467 (2%)	0%	1 347 893 (1%)	1 063 (1%)	-5%	23 307 (1%)
Global	**4 104 947 (100%)**	**-15%**	**98 280 844 (100%)**	**95 991 (100%)**	**1%**	**2 112 759 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*
***See data, table and figure notes.*

Figure 2. COVID-19 cases per 100 000 population reported in the last seven days by countries, territories and areas, 18 January through 24 January 2021**



**See *data, table and figure notes*

Special Focus: Solidarity II forum and use of international standards for sero-epidemiology surveys

Solidarity II is a sero-epidemiological international forum

Solidarity II is a global collaborative forum that promotes the implementation of serological surveys for estimating the exposure to SARS-CoV-2 in the population. The Solidarity II network facilitates discussions between public health agencies and academic institutions with three main objectives: 1) sharing cutting edge scientific findings, 2) identifying and bridging research gaps, and 3) creating collaborations to progress the research of serological epidemiology of SARS-CoV-2.

Why use a common language across serological assays?

Serology is the study of serum and other fluids in the body, which is used to ascertain if antibodies are present. Serological assays are also used to determine the level of antibody response to SARS-CoV-2. A WHO Q&A on serology is available here. The availability of an International Standard for antibodies facilitates the standardization of SARS-CoV-2 serological methods, and allows for comparison and harmonisation of data sets across laboratories. The readout from serology assays can be expressed in different and non-comparable units, including unit/mL, titer or ng/ml, and should be calibrated to international units to allow comparisons.

WHO Working Assay Group meeting on the calibration of serological assays with the WHO IS

On 20 January 2021, 90 participants from the Solidarity II forum, from 34 countries, joined SARS-CoV-2 vaccine developers at the Working Assay Group meeting on the calibration of serological assays with the WHO International Standard anti-SARS-CoV-2 Immunoglobulin (WHO IS). Participants included national research institutes, academic research groups as well as clinical laboratories. This meeting was the first webinar aimed at standardizing the practice of SARS-CoV-2 serological assays. During this meeting, WHO presented the outcome from the 73rd meeting of the WHO Expert Committee on Biological Standardization (ECBS). More information can be found in the WHO guidance on Calibration to WHO International Standards.

How to order the WHO International Standard anti-SARS-CoV-2 Immunoglobulin (WHO IS)

The WHO IS is now available and can be ordered directly from the NIBSC website. The Solidarity II forum is offering financial support to low and middle income country (LMIC) research groups to acquire this material as well as technical support for the implementation of the calibration protocol. Working/secondary serological reagents will also be soon available through the Solidarity II network.

For more information about WHO's work on SARS-CoV-2 serology, please see the website on Serology and Early Investigation Protocols or contact solidarity2@who.int.

Special Focus: Update on SARS-CoV-2 variants of concern

WHO, in collaboration with national authorities, institutions and researchers, continues to monitor the public health events associated with SARS-CoV-2 variants and provides updates as new information becomes available. Further information on the background of the variants of concern (VOC) is available from previously published Disease Outbreak News and in the last three publications of the Weekly Epidemiological Updates.

WHO is working with partners to evaluate available evidence around transmissibility, severity, antibody neutralization capabilities and potential impacts on vaccines of specific mutations, variants of interest and variants of concern. Here we provide an update on ongoing studies, as well as the geographical distribution of three variants of concern as reported by countries, territories and areas (hereafter countries) as of 25 January 2021:

1. Variant VOC 202012/01, lineage B.1.1.7: Since our last update on 19 January, variant VOC 202012/01 has been detected in ten additional countries. As of 25 January, a total of 70 countries across all six WHO regions have reported either imported cases or community transmission of this variant (Figure 3). Local transmission has been reported in several other European countries.

Figure 3. Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01 as of 25 January 2021

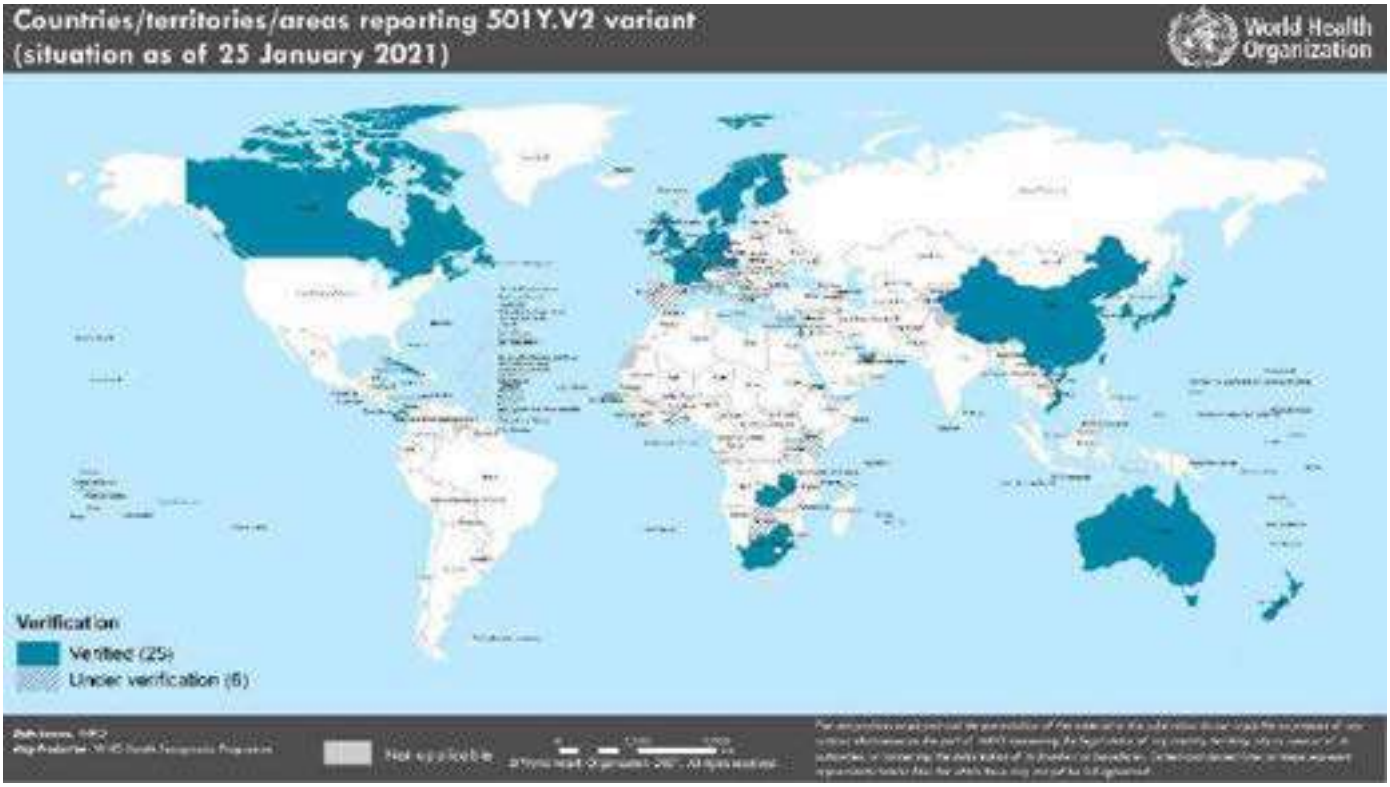
In the United Kingdom of Great Britain and Northern Ireland, where this variant was initially identified, variant VOC 202012/01 has shown to have increased transmissibility compared to previously circulating variants. The United Kingdom has also recently shared results from studies suggesting that there is some evidence of an increase in disease severity; however, results are preliminary, and more analyses are required to further corroborate these findings (1).

In the United Kingdom, COVID-19 case incidence increased week-on-week since early December 2020, peaking in early January 2021. From 11 January through 24 January, a decreasing trend has been observed, following the implementation of stringent public health and social measures. Similar declines in incidence have also been reported in Denmark, Ireland and the Netherlands, where local transmission of VOC 202012/01 has been reported.

Studies are ongoing to fully understand the effectiveness of vaccines against the B.1.1.7 lineage, however, based on preliminary in vitro studies (available as pre-prints), post-vaccination sera with Pfizer and Moderna vaccines have limited to no significant change against the VOC202012/01 variant (2-6). These are all preliminary findings which require further investigation involving larger sample sizes.

2. Variant 501Y.V2, lineage B.1.351: Since the last update on 19 January, 501Y.V2 has been reported from eight additional countries– now totalling 31 countries across five of the six WHO regions (Figure 4). In South Africa, where this variant was initially identified, new weekly cases increased from early November 2020, peaking in early January 2021. In the past two weeks, a decreasing trend has been observed.

Figure 4. Countries, territories and areas reporting SARS-CoV-2 501Y.V2 as of 25 January 2021



Recent laboratory studies of a limited number of patients using pseudo virus and live attenuated virus from South Africa have shown that the 501Y.V2 variant is less susceptible to antibody neutralization – where activity was either lost or reduced in blood samples of patients with natural infection with previous variants circulating earlier in the pandemic (7-8). While further investigations are needed to determine whether the 501Y.V2 variant may escape immune responses acquired from previous infection, these findings raise concerns of increased rates of SARS-CoV-2 re-infection. While the risk of reinfection remains for all SARS-CoV-2 variants, based on current information available, there is no indication that there is increased risk of re-infection in relation to 501Y.V2 based on observational studies in South Africa.

Studies are also ongoing to fully understand the effectiveness of COVID-19 vaccines against the 501Y.V2 variant. Preliminary in vitro studies using sera from individuals vaccinated with Moderna mRNA-1273 COVID-19 vaccine showed a reduction in neutralizing titers to the 501Y.V2 variant compared to previous variants tested; however, neutralizing titres remain above the levels expected to be protective (2,4). Other in vitro studies reported similar observations of either equivalent or a small reduction in neutralizing activity against SARS-CoV-2 variants encoding the mutations of concern in persons vaccinated with the Moderna or Pfizer-BioNTech vaccines compared to previous variants (6, 9).These are preliminary findings which require further investigation including of neutralizing activity in a larger number of samples and an assessment of changes in

neutralization on clinical efficacy. Out of an abundance of caution, Moderna is investigating the potential use of an additional booster dose to increase neutralizing titres against emerging variants and beginning to evaluate an emerging variant booster candidate vaccine (4).

3. Variant P.1, lineage B.1.1.28: Since our last update, variant P.1 has been reported in six additional countries. To date, this variant is reported in eight countries (Figure 5). In Brazil, where the variant was initially identified in addition to detection in a group of travellers from Brazil to Japan, the number of new weekly cases in the past two weeks are reported at higher levels compared to that of September to November 2020, and new weekly deaths have increased since early November 2020. The highest weekly cases since the start of the pandemic was reported in the week commencing 11 January 2021. Based on the preliminary investigations conducted in Manaus, Amazonas State, there has been an increase in the proportion of cases sequenced as variant P.1, from 52.2% (35/67) in December 2020 to 85.4% (41/48) in January 2021, highlighting ongoing local transmission of this variant and, given the mutations documented, raising similar concerns for potential increases in transmissibility or propensity for re-infection (10). Further studies are needed to assess if there are changes in transmissibility, severity or antibody neutralizing activity as a result of these new variants.

Figure 5. Countries, territories and areas reporting SARS-CoV-2 P.1 variant as of 25 January 2021

The emergence of new variants has underscored the importance for everyone, including those previously infected or vaccinated, to strictly adhere to public health and social measures. They also highlight the importance of increasing diagnostic capacity and systematic sequencing of SARS-CoV-2 where capacity allows, as well as the timely sharing of sequence data internationally. Systematic sequencing should be considered for a subset of incoming travellers, as well as community-based samples to ascertain the existence and extent of local transmission. Virus sequencing should be performed in all breakthrough disease following vaccination, in addition to population-based vaccine effectiveness studies. Global surveillance on virus evolution should continue to inform adjustments to public health and social measures.

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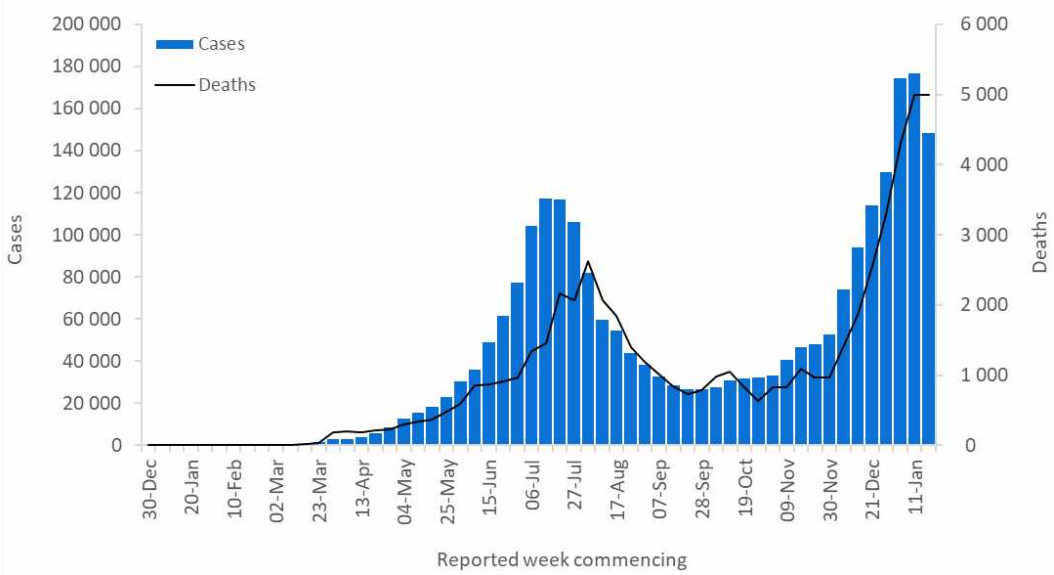
Situation by WHO Region

African Region

In the past week, the African Region reported over 148 000 cases and just under 5000 deaths, a 16% decrease in cases and similar number of deaths compared to the previous week. This was the first time since mid-September 2020 that weekly cases decreased. The highest numbers of new cases were reported in South Africa (79 180 new cases; 133.5 new cases per 100 000 population; a 29% decrease), Nigeria (11 659 new cases; 5.7 new cases per 100 000; a 2% increase) and Zambia (8518 new cases; 46.3 new cases per 100 000; a 10% decrease).

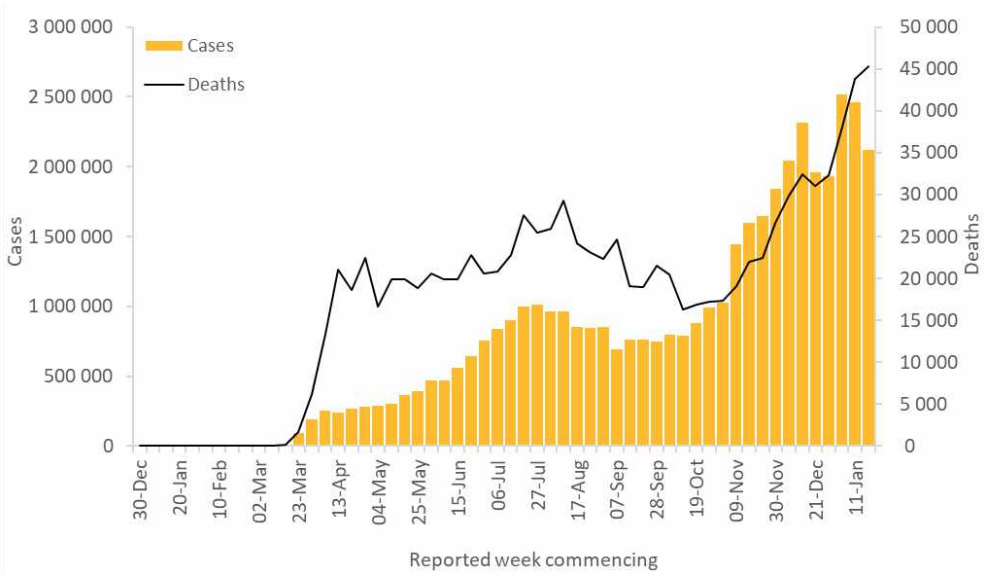
The countries reporting the highest number of new deaths in the past week were South Africa (3723 new deaths; 6.3 new deaths per 100 000; a 8% decrease), Zimbabwe (291 new deaths; 2.0 new deaths per 100 000; a 35% decrease) and Malawi (170 new deaths; 0.9 new deaths per 100 000; a 113% increase).



Region of the Americas

Over 2.1 million new cases and over 45 000 new deaths were reported in the Region of the Americas this week, a decrease of 14% and an increase of 4% respectively compared to the previous week. The highest numbers of new cases were reported from the United States of America (1 259 902 new cases; 380.6 new cases per 100 000 population; a 20% decrease), Brazil (360 428 new cases; 169.6 new cases per 100 000; a 5% decrease) and Mexico (122 555 new cases; 95.1 new cases per 100 000; a 20% increase).

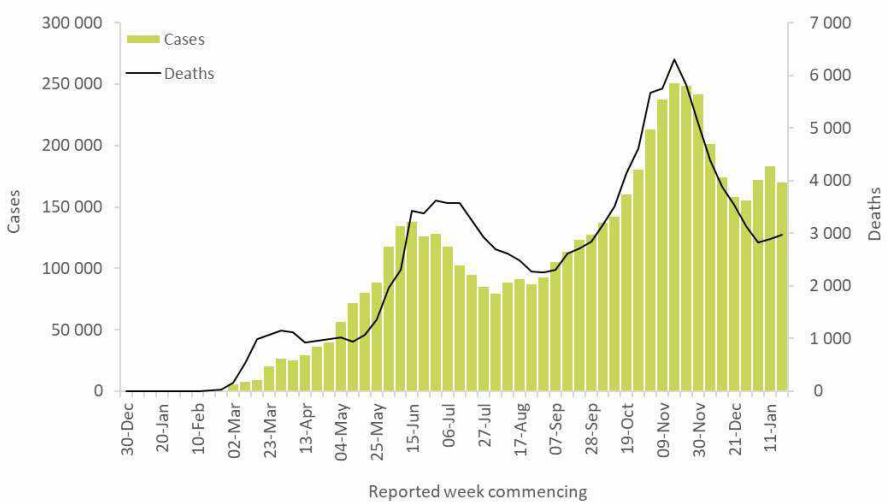
The highest numbers of deaths were reported from the same countries, the United States of America (21 583 new deaths; 6.5 new deaths per 100 000; a 7% decrease), Mexico (8592 new deaths; 6.7 new deaths per 100 000; a 24% increase) and Brazil (6997 new deaths; 3.3 new deaths per 100 000; a 3% increase).



Eastern Mediterranean Region

In the past week, the Eastern Mediterranean Region reported over 170 000 new cases, a decrease of 7% compared to last week. The region reported 2980 new deaths, an increase of 3%, the second consecutive weekly increase following a sustained decrease in deaths from 23 November 2020 through the week of 11 January 2021. The three countries reporting the highest numbers of new cases continue to be Iran (42 637 new cases, 50.8 new cases per 100 000 population, a 3% decrease), Lebanon (27 429 new cases, 401.9 new cases per 100 000, 18% decrease) and United Arab Emirates (24 568 new cases, 248.4 new cases per 100 000, 11 % increase). These three countries accounted for almost half (55%) of the new weekly cases in the Region.

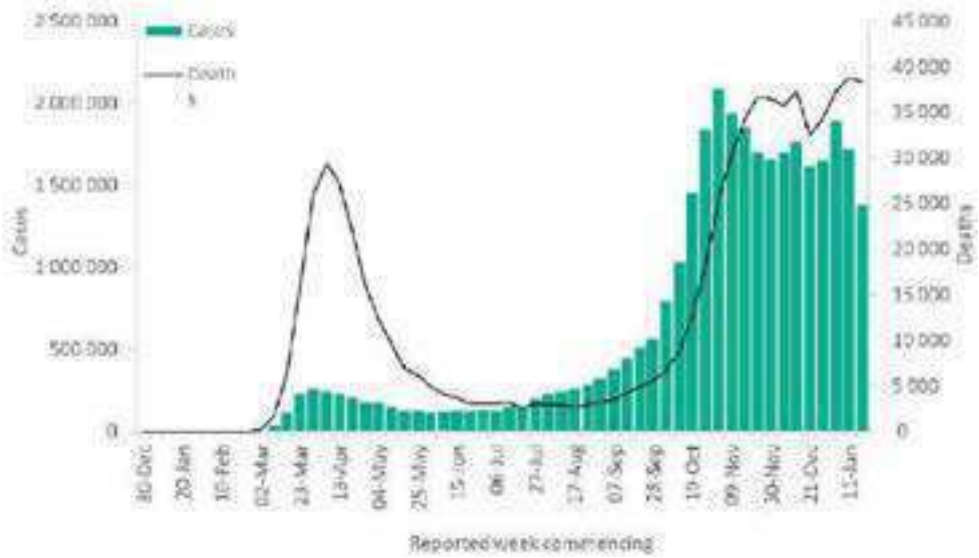
The highest numbers of new deaths were reported in Iran (577 new deaths, 0.7 new death per 100 000 population, 7% decrease) followed by Tunisia (538 new deaths, 4.6 new death per 100 000, 16% increase) and Lebanon (414 new deaths, 6.1 new death per 100 000, a 50% increase). These countries accounted for almost 51% of deaths reported in the Region.



European Region

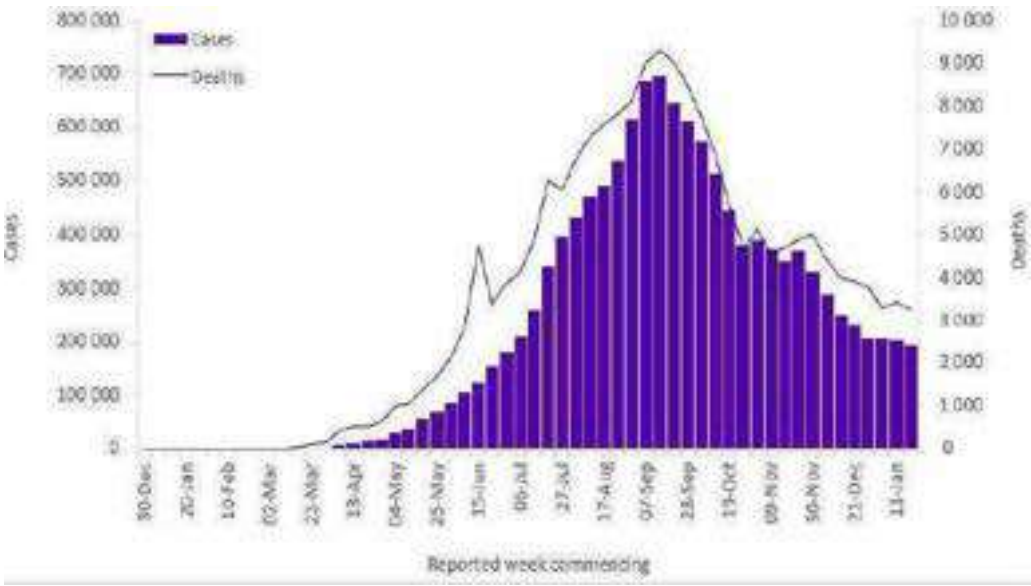
The European Region reported over 1.3 million new cases and over 38 000 new deaths, a decrease of 20% and 1% respectively when compared to the previous week. The three countries reporting the highest numbers of new cases were the United Kingdom (260 098 new cases; 383.1 new cases per 100 000, 24% decrease), the Russian Federation (151 191 new cases, 103.6 new cases per 100 000, 9% decrease) and France (138 288 new cases, 211.9 new cases per 100 000, 10% increase). These three countries accounted for almost 40% of all cases reported in the region.

The highest numbers of deaths were reported from the United Kingdom (8739 new deaths; 12.9 new deaths per 100 000, a 13% increase), Germany (5451 new deaths; 6.5 new deaths per 100 000, a 10% decrease) and the Russian Federation (3896 new deaths; 2.7 new deaths per 100 000, a 5% increase).



South-East Asia Region

The South-East Asia Region reported a decrease in cases and deaths compared to the previous week following a 3- week plateau in new case and death reports. Just over 194 000 new cases and over 3000 new deaths were reported in the past week, a 5% decrease in both cases and deaths, compared to the previous week. The three countries reporting the highest numbers of new cases and new deaths were India (96 548 new cases; 7 new cases per 100 000, a 10% decrease), Indonesia (80 832 new cases; 29.6 new cases per 100 000; a 3% increase) and Sri Lanka (5274 new cases; 24.6 new cases per 100 000; an 18% increase). The three countries reporting the highest numbers of new deaths this week were Indonesia (1897 new deaths; 0.7 new deaths per 100 000, a 4% increase), India (1065 new deaths; 0.1 new deaths per 100 000, a 17% decrease) and Bangladesh (120 new deaths; 0.1 new deaths per 100 000; a 6% decrease).



Western Pacific Region

The Western Pacific Region reported a similar number of new cases (over 81 000 cases) and decrease in new deaths by 5% (over 1000) in the past week compared to the previous week. The three countries reporting the highest numbers of new cases this week were Japan (38 365 new cases; 30.3 new cases per 100 000, a 8% decrease), Malaysia (25 360 new cases; 78.4 new cases per 100 000, a 18% increase) and the Philippines (12 988 new cases; 11.9 new cases per 100 000, a 1% increase).

The three countries reporting the highest numbers of new deaths this week were Japan (573 new deaths; 0.5 new deaths per 100 000, a 27% increase), the Philippines (306 new deaths; 0.3 new deaths per 100 000, a 37% decrease) and the Republic of Korea (100 new deaths; 0.2 new deaths per 100 000, a 19% decrease).

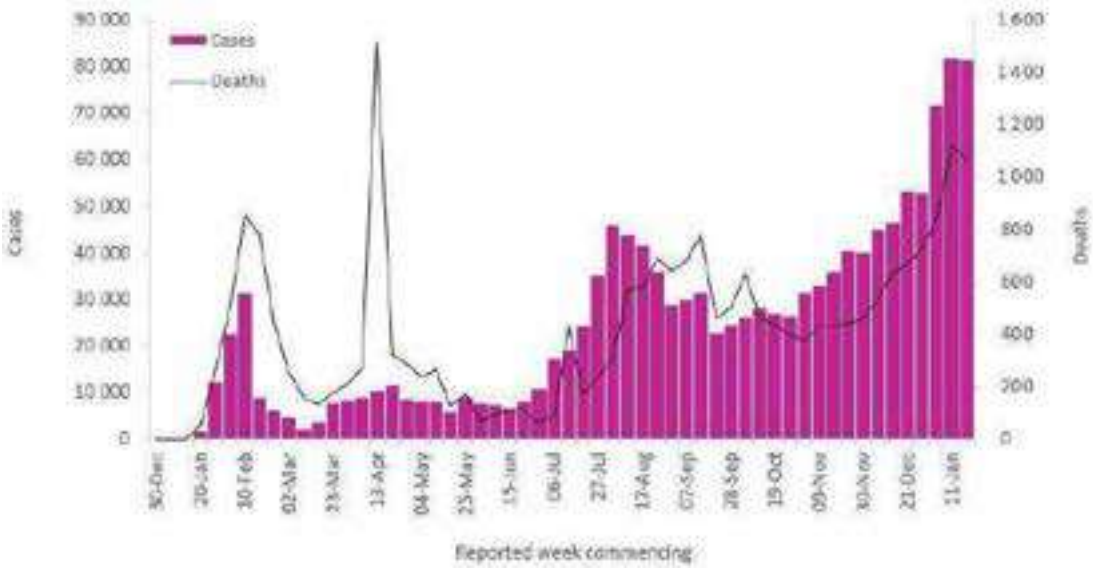


Table 2. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 24 January 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**148 953**	**2 462 083**	**219.5**	**4 997**	**57 902**	**5.2**	
South Africa	79 180	1 404 839	2 368.7	3 723	40 574	68.4	Community transmission
Nigeria	11 659	120 602	58.5	75	1 495	0.7	Community transmission
Zambia	8 518	44 592	242.6	95	627	3.4	Community transmission
Malawi	6 654	18 439	96.4	170	470	2.5	Community transmission
Mozambique	5 766	31 628	101.2	63	297	1.0	Community transmission
Zimbabwe	4 126	31 007	208.6	291	974	6.6	Community transmission
Ghana	3 134	60 115	193.5	20	361	1.2	Community transmission
Botswana	2 579	18 630	792.2	40	88	3.7	Community transmission
Ethiopia	2 526	133 298	115.9	34	2 063	1.8	Community transmission
Cameroon	2 281	29 617	111.6	11	462	1.7	Community transmission
Namibia	2 015	32 213	1 267.8	37	317	12.5	Community transmission
Rwanda	1 797	12 647	97.6	32	172	1.3	Community transmission
Algeria	1 758	105 369	240.3	30	2 861	6.5	Community transmission
Côte d'Ivoire	1 756	26 612	100.9	4	145	0.5	Community transmission
Senegal	1 722	24 460	146.1	60	569	3.4	Community transmission
Eswatini	1 594	14 330	1 235.2	98	458	39.5	Community transmission
Lesotho	1 285	7 656	357.4	26	123	5.7	Community transmission
Democratic Republic of the Congo	1 243	21 868	24.4	31	660	0.7	Community transmission
Burkina Faso	967	9 967	47.7	8	109	0.5	Community transmission
Uganda	959	39 044	85.4	13	317	0.7	Community transmission
Kenya	816	99 898	185.8	12	1 740	3.2	Community transmission
Comoros	683	2 260	259.9	29	70	8.0	Community transmission
Angola	602	19 367	58.9	26	457	1.4	Community transmission
Cabo Verde	513	13 414	2 412.6	5	124	22.3	Community transmission
Gabon	379	10 278	461.8	1	67	3.0	Community transmission

Togo	364	4 636	56.0	1	74	0.9	Community transmission
Seychelles	344	1 033	1 050.4	2	3	3.1	Clusters of cases
Mauritania	329	16 222	348.9	14	410	8.8	Community transmission
Madagascar	300	18 301	66.1	6	273	1.0	Community transmission
Chad	282	3 137	19.1	4	115	0.7	Community transmission
Burundi	236	1 472	12.4	0	2	0.0	Community transmission
Benin	230	3 643	30.0	2	48	0.4	Community transmission
Guinea	202	14 300	108.9	0	81	0.6	Community transmission
Niger	189	4 321	17.9	13	151	0.6	Community transmission
Sierra Leone	150	3 120	39.1	0	77	1.0	Community transmission
Mali	142	7 965	39.3	15	323	1.6	Community transmission
Congo	85	7 794	141.2	3	117	2.1	Community transmission
South Sudan	80	3 773	33.7	1	64	0.6	Community transmission
Eritrea	63	1 940	54.7	0	6	0.2	Sporadic cases
Gambia	61	3 958	163.8	1	128	5.3	Community transmission
Guinea-Bissau	53	2 531	128.6	0	45	2.3	Community transmission
Sao Tome and Principe	52	1 182	539.3	0	17	7.8	Community transmission
Equatorial Guinea	45	5 401	385.0	0	86	6.1	Community transmission
Liberia	27	1 914	37.8	0	84	1.7	Community transmission
Mauritius	9	556	43.7	0	10	0.8	Sporadic cases
Central African Republic	7	4 980	103.1	0	63	1.3	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories[iii]							
Mayotte	933	7 544	2 765.2	1	59	21.6	Clusters of cases
Réunion	258	9 701	1 083.5	0	45	5.0	Clusters of cases
Americas	**2 127 479**	**43 456 972**	**4 248.9**	**45 349**	**999 894**	**97.8**	
United States of America	1 259 902	24 604 325	7 433.3	21 583	410 667	124.1	Community transmission
Brazil	360 428	8 753 920	4 118.3	6 997	215 243	101.3	Community transmission
Mexico	122 555	1 732 290	1 343.6	8 592	147 614	114.5	Community transmission
Colombia	117 239	1 987 418	3 905.9	2 718	50 586	99.4	Community transmission
Argentina	70 783	1 853 830	4 101.8	1 348	46 575	103.1	Community transmission
Canada	41 700	737 407	1 953.8	1 099	18 828	49.9	Community transmission
Peru	32 073	1 088 096	3 300.1	773	39 427	119.6	Community transmission

Chile	29 154	694 647	3 633.8	419	17 854	93.4	Community transmission
Bolivia (Plurinational State of)	14 668	198 257	1 698.4	300	9 871	84.6	Community transmission
Panama	14 201	307 793	7 133.5	291	4 980	115.4	Community transmission
Dominican Republic	11 168	202 507	1 866.8	81	2 513	23.2	Community transmission
Ecuador	7 424	238 232	1 350.3	280	14 596	82.7	Community transmission
Honduras	6 770	139 182	1 405.2	95	3 439	34.7	Community transmission
Paraguay	5 581	126 370	1 771.7	106	2 585	36.2	Community transmission
Guatemala	5 292	153 890	859.0	236	5 456	30.5	Community transmission
Uruguay	5 224	36 170	1 041.2	73	364	10.5	Community transmission
Costa Rica	5 121	189 308	3 716.2	102	2 518	49.4	Community transmission
Venezuela (Bolivarian Republic of)	3 939	122 795	431.8	41	1 136	4.0	Community transmission
Cuba	3 126	20 627	182.1	25	191	1.7	Clusters of cases
El Salvador	2 515	52 672	812.1	72	1 551	23.9	Community transmission
Jamaica	676	14 772	498.9	13	336	11.3	Community transmission
Suriname	536	7 945	1 354.3	9	148	25.2	Clusters of cases
Guyana	338	7 143	908.1	0	170	21.6	Clusters of cases
Haiti	318	11 099	97.3	3	243	2.1	Community transmission
Saint Vincent and the Grenadines	270	720	649.0	1	2	1.8	Clusters of cases
Barbados	207	1 243	432.5	2	9	3.1	Clusters of cases
Saint Lucia	194	770	419.3	4	10	5.4	Sporadic cases
Belize	171	11 700	2 942.4	9	290	72.9	Community transmission
Trinidad and Tobago	113	7 456	532.8	3	133	9.5	Community transmission
Bahamas	69	8 101	2 060.0	0	175	44.5	Clusters of cases
Nicaragua	37	4 953	74.8	1	168	2.5	Community transmission
Antigua and Barbuda	8	195	199.1	0	6	6.1	Sporadic cases
Grenada	8	147	130.6	0	1	0.9	Sporadic cases
Dominica	3	113	157.0	0	0	0.0	Clusters of cases
Saint Kitts and Nevis	1	35	65.8	0	0	0.0	Sporadic cases
Territories[iii]							
Puerto Rico	3 550	90 073	3 148.5	68	1 771	61.9	Community transmission

French Guiana	689	15 664	5 244.4	1	76	25.4	Community transmission
Aruba	327	6 623	6 203.3	0	52	48.7	Community transmission
Guadeloupe	222	9 056	2 263.3	1	157	39.2	Community transmission
Turks and Caicos Islands	165	1 244	3 213.0	1	7	18.1	Clusters of cases
Saint Barthélemy	152	376	3 803.7	0	0	0.0	Sporadic cases
Saint Martin	145	1 191	3 080.8	0	12	31.0	Community transmission
Martinique	143	6 370	1 697.5	1	44	11.7	Community transmission
United States Virgin Islands	83	2 335	2 236.1	0	24	23.0	Community transmission
Sint Maarten	79	1 708	3 983.0	0	27	63.0	Community transmission
Curaçao	39	4 537	2 764.9	1	20	12.2	Community transmission
Bonaire	21	350	1 673.4	0	3	14.3	Community transmission
Bermuda	16	686	1 101.6	0	12	19.3	Sporadic cases
British Virgin Islands	16	137	453.1	0	1	3.3	Clusters of cases
Cayman Islands	9	383	582.8	0	2	3.0	Sporadic cases
Falkland Islands (Malvinas)	5	37	1 062.3	0	0	0.0	No cases
Saint Pierre and Miquelon	4	20	345.1	0	0	0.0	Sporadic cases
Saba	1	6	310.4	0	0	0.0	Sporadic cases
Sint Eustatius	1	20	637.1	0	0	0.0	Sporadic cases
Anguilla	0	15	100.0	0	0	0.0	Sporadic cases
Montserrat	0	13	260.1	0	1	20.0	No cases
Eastern Mediterranean	**170 422**	**5 507 649**	**753.6**	**2 980**	**130 901**	**17.9**	
Iran (Islamic Republic of)	42 637	1 367 032	1 627.6	577	57 294	68.2	Community transmission
Lebanon	27 429	276 587	4 052.3	414	2 280	33.4	Community transmission
United Arab Emirates	24 568	274 376	2 774.2	43	783	7.9	Community transmission
Tunisia	18 083	195 314	1 652.6	538	6 154	52.1	Community transmission
Pakistan	14 048	530 818	240.3	339	11 247	5.1	Community transmission
Morocco	6 904	465 769	1 261.9	217	8 128	22.0	Clusters of cases
Jordan	5 962	319 519	3 131.6	80	4 217	41.3	Community transmission
Egypt	5 636	161 143	157.5	375	8 902	8.7	Clusters of cases
Iraq	5 283	612 870	1 523.7	53	12 988	32.3	Community transmission
Libya	4 523	112 540	1 637.8	86	1 737	25.3	Community transmission
Kuwait	3 502	160 901	3 767.7	5	952	22.3	Community transmission
Bahrain	2 188	99 456	5 844.9	9	367	21.6	Clusters of cases

Qatar	1 683	148 772	5 163.8	2	248	8.6	Community transmission
Saudi Arabia	1 432	366 185	1 051.8	32	6 350	18.2	Sporadic cases
Oman	1 222	132 486	2 594.4	8	1 517	29.7	Community transmission
Syrian Arab Republic	615	13 557	77.5	55	879	5.0	Community transmission
Afghanistan	611	54 595	140.2	39	2 378	6.1	Clusters of cases
Sudan	289	28 522	65.0	15	1 722	3.9	Community transmission
Djibouti	15	5 918	599.0	0	61	6.2	Clusters of cases
Somalia	10	4 754	29.9	0	130	0.8	Community transmission
Yemen	6	2 122	7.1	3	616	2.1	Sporadic cases
Territories[iii]							
occupied Palestinian territory	3 776	174 413	3 418.9	90	1 951	38.2	Community transmission
Europe	**1 382 460**	**32 848 998**	**3 519.2**	**38 349**	**706 293**	**75.7**	
The United Kingdom	260 098	3 617 463	5 328.7	8 739	97 329	143.4	Community transmission
Russian Federation	151 191	3 719 400	2 548.7	3 896	69 462	47.6	Clusters of cases
France	138 288	2 985 259	4 573.5	2 731	72 484	111.0	Community transmission
Spain	109 000	2 456 675	5 254.4	854	55 041	117.7	Community transmission
Germany	101 418	2 134 936	2 548.1	5 451	51 870	61.9	Community transmission
Italy	86 452	2 455 185	4 060.7	3 362	85 162	140.9	Clusters of cases
Portugal	85 053	624 469	6 124.2	1 485	10 194	100.0	Clusters of cases
Czechia	48 458	937 617	8 755.4	1 031	15 369	143.5	Community transmission
Turkey	43 663	2 424 328	2 874.5	1 101	24 933	29.6	Community transmission
Poland	39 863	1 475 445	3 898.5	2 008	35 363	93.4	Community transmission
Netherlands	37 354	944 009	5 509.3	564	13 510	78.8	Community transmission
Ukraine	31 130	1 191 812	2 725.2	1 059	21 861	50.0	Community transmission
Israel	29 421	569 152	6 575.6	218	4 158	48.0	Community transmission
Sweden	19 437	547 166	5 417.9	105	11 005	109.0	Community transmission
Romania	17 706	709 194	3 686.5	558	17 722	92.1	Community transmission
Ireland	16 404	186 184	3 770.6	352	2 947	59.7	Community transmission
Belgium	14 153	693 666	5 985.2	348	20 779	179.3	Community transmission
Slovakia	13 151	236 476	4 331.3	594	4 068	74.5	Clusters of cases
Switzerland	12 427	506 775	5 855.5	331	8 300	95.9	Community transmission
Belarus	12 322	235 859	2 496.0	66	1 639	17.3	Community transmission

Serbia	11 069	382 285	5 489.6	138	3 868	55.5	Community transmission
Austria	10 435	400 187	4 443.4	354	7 318	81.3	Community transmission
Lithuania	9 108	176 624	6 488.1	204	2 649	97.3	Community transmission
Slovenia	8 737	157 293	7 566.0	228	3 555	171.0	Clusters of cases
Kazakhstan	8 448	224 395	1 195.1	0	2 956	15.7	Clusters of cases
Hungary	7 746	359 574	3 722.2	627	11 968	123.9	Community transmission
Denmark	5 718	193 917	3 347.9	222	1 969	34.0	Community transmission
Georgia	5 713	253 518	6 355.2	122	3 055	76.6	Community transmission
Latvia	5 399	60 496	3 207.3	136	1 097	58.2	Community transmission
Albania	4 225	71 441	2 482.5	40	1 310	45.5	Clusters of cases
Croatia	3 966	228 920	5 576.3	211	4 827	117.6	Community transmission
Estonia	3 637	40 716	3 069.3	51	376	28.3	Clusters of cases
Republic of Moldova	3 297	155 937	3 865.6	102	3 347	83.0	Community transmission
Greece	3 276	151 646	1 454.9	181	5 622	53.9	Community transmission
Bulgaria	2 960	214 696	3 089.8	337	8 811	126.8	Clusters of cases
Norway	2 831	60 565	1 117.2	27	544	10.0	Community transmission
Montenegro	2 566	58 335	9 288.0	23	768	122.3	Clusters of cases
Bosnia and Herzegovina	2 047	119 840	3 652.7	120	4 569	139.3	Community transmission
Finland	1 814	41 915	756.5	26	644	11.6	Community transmission
Azerbaijan	1 737	228 688	2 255.5	74	3 072	30.3	Clusters of cases
North Macedonia	1 722	90 471	4 342.5	83	2 779	133.4	Community transmission
Armenia	1 450	166 036	5 603.2	47	3 039	102.6	Community transmission
Cyprus	1 076	29 887	2 475.4	16	183	15.2	Clusters of cases
Malta	1 070	16 658	3 772.7	12	251	56.8	Clusters of cases
Luxembourg	824	49 581	7 920.6	12	564	90.1	Community transmission
Kyrgyzstan	791	83 900	1 286.0	16	1 400	21.5	Clusters of cases
Andorra	461	9 499	12 294.1	5	96	124.2	Community transmission
Uzbekistan	407	78 375	234.2	2	621	1.9	Clusters of cases
Monaco	148	1 345	3 427.3	0	8	20.4	Sporadic cases
San Marino	96	2 874	8 468.4	0	65	191.5	Community transmission
Liechtenstein	63	2 504	6 565.8	5	45	118.0	Sporadic cases
Iceland	25	5 981	1 752.7	0	29	8.5	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases

Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories[iii]							
Kosovo	2 201	57 656	3 099.2	45	1 440	77.4	Community transmission
Gibraltar	330	3 905	11 590.6	29	59	175.1	Clusters of cases
Jersey	60	3 104	2 852.9	1	63	57.9	Community transmission
Isle of Man	14	432	508.0	0	25	29.4	No cases
Faroe Islands	3	652	1 334.3	0	1	2.0	Sporadic cases
Guernsey	1	310	490.5	0	13	20.6	Community transmission
Greenland	0	30	52.8	0	0	0.0	No cases
South-East Asia	**194 166**	**12 656 504**	**626.1**	**3 253**	**194 449**	**9.6**	
India	96 548	10 654 533	772.1	1 065	153 339	11.1	Clusters of cases
Indonesia	80 832	977 474	357.4	1 897	27 664	10.1	Community transmission
Sri Lanka	5 274	57 587	268.9	24	280	1.3	Clusters of cases
Bangladesh	4 263	531 326	322.6	120	8 003	4.9	Community transmission
Myanmar	3 229	137 098	252.0	103	3 045	5.6	Clusters of cases
Nepal	2 124	269 180	923.8	40	1 994	6.8	Clusters of cases
Thailand	1 446	13 500	19.3	3	73	0.1	Clusters of cases
Maldives	423	14 885	2 753.7	1	50	9.2	Clusters of cases
Timor-Leste	15	67	5.1	0	0	0.0	Sporadic cases
Bhutan	12	854	110.7	0	1	0.1	Clusters of cases
Western Pacific	**81 467**	**1 347 893**	**68.6**	**1 063**	**23 307**	**1.2**	
Japan	38 365	360 661	285.2	573	5 019	4.0	Clusters of cases
Malaysia	25 360	180 455	557.5	73	667	2.1	Clusters of cases
Philippines	12 988	511 679	466.9	306	10 190	9.3	Community transmission
Republic of Korea	2 748	75 084	146.5	100	1 349	2.6	Clusters of cases
China	1 306	99 931	6.8	6	4 810	0.3	Clusters of cases
Singapore	177	59 260	1 012.9	0	29	0.5	Sporadic cases
Mongolia	99	1 611	49.1	1	2	0.1	Clusters of cases
Australia	72	28 761	112.8	0	909	3.6	Clusters of cases
New Zealand	26	1 926	39.9	0	25	0.5	Clusters of cases
Cambodia	19	458	2.7	0	0	0.0	Sporadic cases
Papua New Guinea	15	849	9.5	0	9	0.1	Community transmission

Viet Nam	11	1 548	1.6	0	35	0.0	Clusters of cases
Lao People's Democratic Republic	2	43	0.6	0	0	0.0	Sporadic cases
Brunei Darussalam	1	175	40.0	0	3	0.7	Sporadic cases
Fiji	0	55	6.1	0	2	0.2	Sporadic cases
Solomon Islands	0	17	2.5	0	0	0.0	No cases
Territories[iii]							
French Polynesia	217	17 852	6 355.1	2	128	45.6	Sporadic cases
Guam	57	7 340	4 349.0	2	128	75.8	Clusters of cases
Northern Mariana Islands (Commonwealth of the)	4	132	229.3	0	2	3.5	Pending
Marshall Islands	0	4	6.8	0	0	0.0	No cases
Micronesia (Federated States of)	0	1	0.9	0	0	0.0	No cases
New Caledonia	0	44	15.4	0	0	0.0	Sporadic cases
Samoa	0	2	1.0	0	0	0.0	No cases
Vanuatu	0	1	0.3	0	0	0.0	No cases
Wallis and Futuna	0	4	35.6	0	0	0.0	Sporadic cases
Global	**4 104 947**	**98 280 844**	**1 260.8**	**95 991**	**2 112 759**	**27.1**	

**See *data, table and figure notes*

Key Weekly Updates

WHO Director-General Dr Tedros remarks

"Several lessons are already staring us in the face…First, <the importance of> preparedness and response, second the health of humans, animals and the planet are intimately intertwined, and third, the world needs a strong WHO." Opening remarks at 148th session of the Executive Board

"The development and approval of safe and effective vaccines less than a year after the emergence of a new virus is a stunning scientific achievement, and a much-needed source of hope." Opening remarks at the extraordinary meeting of the Strategic Advisory Group of Experts (SAGE) on Immunization

"Two new studies show that <if we don't deliver equitable access to vaccines> it wouldn't just be a moral failure, it would be an economic failure." Opening remarks at the media briefing on COVID-19 – 25 January 2021

COVAX on track to deliver 2 billion vaccine doses

COVAX on track to deliver at least 2 billion vaccine doses by the end of the year, including at least 1.3 billion doses to 92 lower income economies

Vaccine safety for frail, elderly patients

Vaccine Safety subcommittee reviews available information and data on deaths reported in frail, elderly individuals who had received the Pfizer BioNTech COVID-19 mRNA vaccine

IHR Review Committee

Statement to the 148th Executive Board by the Chair of the Review Committee on the Functioning of the International Health Regulations (2005) during the COVID-19 Response

WHO's work around the world in support of COVID-19 response activities

How contributions support WHO's work in ongoing fight of COVID-19 pandemic around the world

Primary health care and Universal Health Coverage activities during the COVID-19 pandemic

Governments push for Universal Health Coverage as COVID-19 continues to devastate communities and economies

WHO Publications

Online global consultation on contact tracing for COVID-19, 9-11 June 2020

mRNA-1273 vaccine (Moderna) against COVID-19 Background document (draft)

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions
- African Region
- Eastern Mediterranean Region
- European Region
- Region of the Americas
- South-East Asia Region
- Western Pacific Region

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.
Global totals include 745 cases and 13 deaths reported from international conveyances.
The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps

represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case.

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g. laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 17 January 2021, 10 am CET

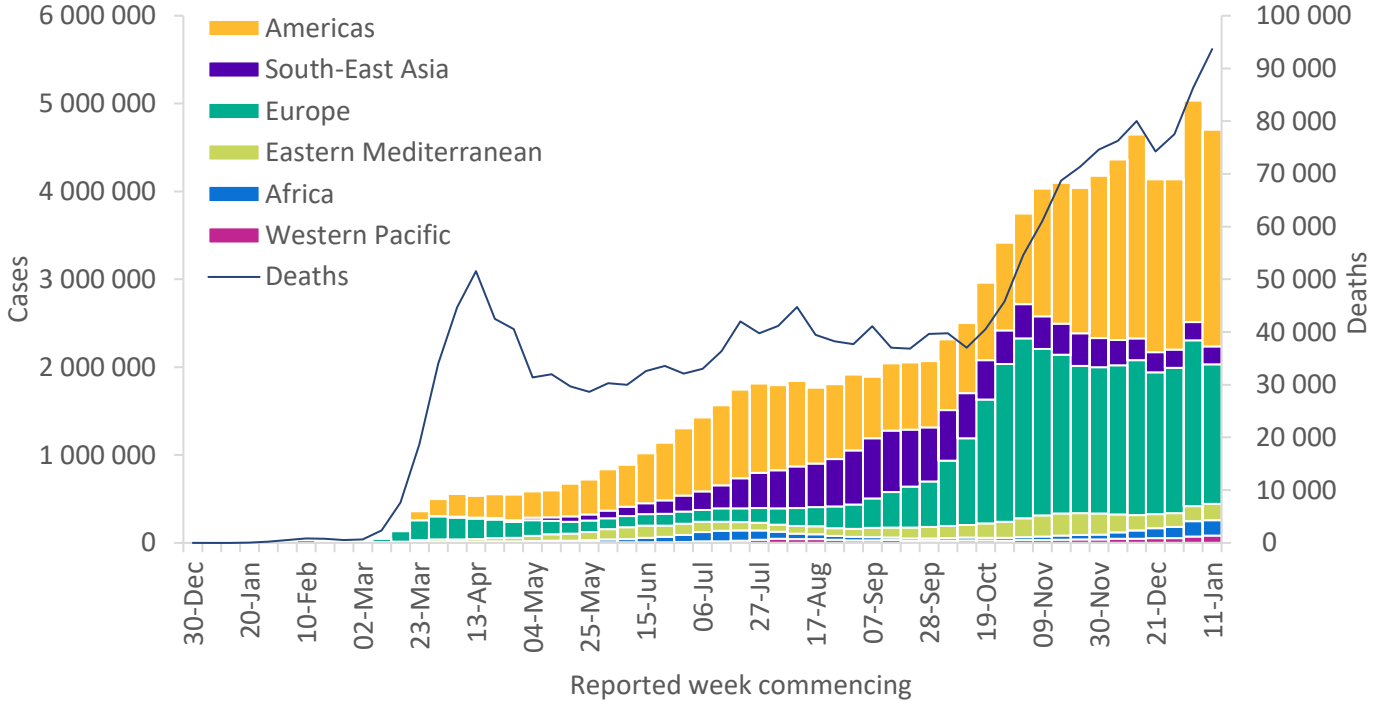
For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

Globally, 4.7 million new cases were reported in the past week, a decline of 6% from last week (Figure 1). At the same time, the number of new deaths has climbed to a record high at 93 000, a 9% increase from last week. Over 2 million people have now lost their lives to COVID-19. The Americas, Europe, and South-East Asia regions showed declines in new cases, with Europe showing a 15% decline and the Americas and South-East Asia regions showing more moderate declines of 2% and 1% respectively (Table 1). On the other hand, the Eastern Mediterranean, African, and Western Pacific regions reported increases in new cases, with the Western Pacific showing the largest increase (14%). All regions reported increases in new deaths; case incidence continues to be one of the primary drivers of mortality – where increases in the number of COVID-19 related hospitalizations and deaths follow large numbers of cases after a short time lag.

Figure 1: COVID-19 cases reported weekly by WHO Region, and global deaths, as of 17 January 2021**



In the past week, the five countries reporting the highest number of cases were the United States of America (1 583 237 cases, an 11% decrease), Brazil (379 784 cases, a 21% increase), the United Kingdom of Great Britain and Northern Ireland (339 952 cases, a 19% decrease), the Russian Federation (166 255 cases, 1% increase) and France (125 279 cases, a 2% increase).

In this edition of the COVID-19 Weekly Epidemiological Update, special focus updates are provided on:

- Children, COVID-19, and transmission in schools

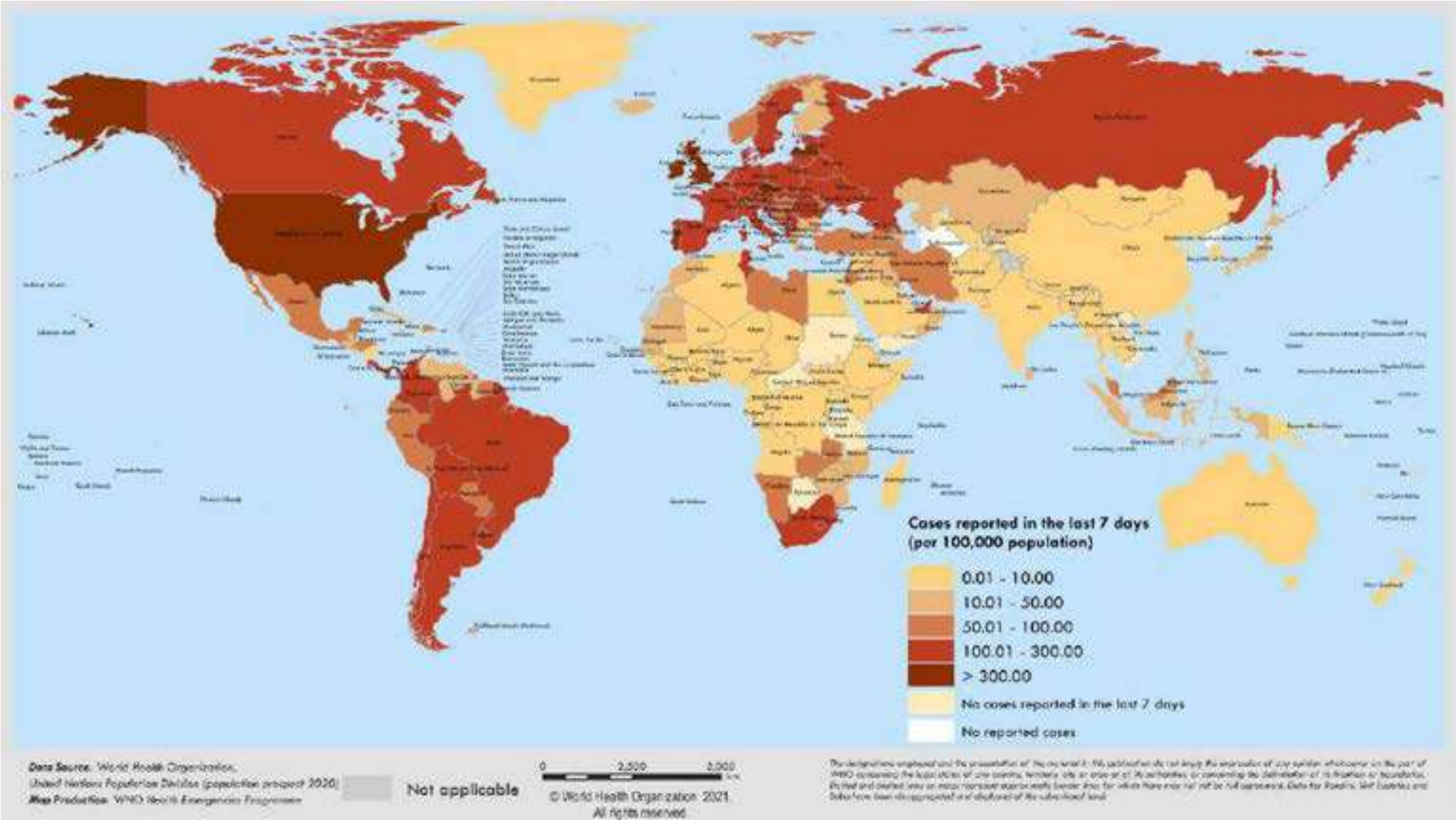
  Note - Special Focus on Children, COVID-19, and transmission in schools: this section has been updated based on additional information received.
- SARS-CoV-2 variants of concern
- Additional Region-specific information: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western Pacific Region
- Key Weekly Updates

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 17 January 2021**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	2 467 817 (52%)	-2%	41 329 493 (44%)	43 804 (47%)	15%	954 545 (47%)
Europe	1 610 353 (34%)	-15%	30 509 880 (33%)	37 698 (40%)	2%	666 237 (33%)
South-East Asia	204 654 (4%)	-1%	12 462 338 (13%)	3 410 (4%)	4%	191 196 (9%)
Eastern Mediterranean	183 178 (4%)	7%	5 335 273 (6%)	2 846 (3%)	2%	127 817 (6%)
Africa	177 252 (4%)	1%	2 313 130 (2%)	5 000 (5%)	16%	52 905 (3%)
Western Pacific	81 775 (2%)	14%	1 266 428 (1%)	1 124 (1%)	35%	22 244 (1%)
Global	**4 725 029 (100%)**	**-6%**	**93 217 287 (100%)**	**93 882 (100%)**	**9%**	**2 014 957 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*
***For all figures included in this report please see data, table and figure notes*

Figure 2. COVID-19 cases per 100 000 population reported in the last seven days by countries, territories and areas, 11 January through 17 January 2021**



**See *data, table and figure notes*

Special Focus: Children, COVID-19, and transmission in schools

One of the most concerning questions has been the extent to which COVID-19 affects children and adolescents and the role of schools in community transmission. As WHO Director-General Dr Tedros said in a press conference, "understanding how COVID-19 affects children has been a priority issue. We all want to see children back at school and we all want to make sure schools are the safe and supportive learning environments they should be."[1] Research is ongoing into the factors that may put children and adolescents at risk, long-term health effects in those who have been infected, and importantly the impact of new variants of SARS-CoV-2. Here we present a number of research findings learned in 2020.

- Of all COVID-19 cases reported by countries, children and adolescents under 18 have represented around 8% of cases in 2020, despite comprising 29% of the global population. This may be due to the under reporting of mild and asymptomatic infections, which are more likely among children and adolescents.
- Children are also much less likely than adults to be hospitalized or have fatal outcomes.[2] Approximately 0.2% of deaths were reported in people under the age of 20 years.[3]
- Evidence suggests that adolescents appear to transmit the virus as often as adults, whereas children under 10 years seem to be less susceptible and less infectious than older children and adolescents[4]. This is supported by the higher frequency of outbreaks reported in secondary/high schools compared to in primary/elementary schools [5]
- Large-scale community-based studies in the UK have showed higher levels of acute infection among adolescents and young adults compared to other age groups, further supporting differences in transmission patterns and susceptibility between primary and secondary-school aged children[6,7].
- A study[8] in Norway from August to November 2020 found low levels of child-to-child and child-to-adult transmission in primary schools (children aged 5-13 years) that had infection prevention and control measures in place. Viral load studies suggest that children with symptoms carry as much virus in the nose, mouth and throat as adults, but for shorter periods with peak respiratory viral load early after symptom onset, followed by a rapid decline after the first week of illness.
- National surveillance data from the United Kingdom found that school staff are at lower risk of infection in school settings when compared to the general adult population. Another study among 57 000 caregivers at childcare facilities in the United States of America, found that there was no increased risk of infection for the caregivers.[9]
- Several studies and reviews have shown that school re-openings have not been associated with significant increases in community transmission.[10,11,12,13] The return to school of many children in mid-August, following periods of lower community transmission in many countries, does not appear to have contributed toward the

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[1] World Health Organization, 2020 (https://www.who.int/docs/default-source/coronaviruse/transcripts/who-audio-emergencies-coronavirus-press-conference-15sep2020.pdf?sfvrsn=580fa5f0_2)

[2] European centre for disease control, 2020 (https://www.ecdc.europa.eu/en/publications-data/children-and-school-settings-covid-19-transmission)

[3] World Health Organization, 2020 (https://www.who.int/docs/default-source/coronaviruse/transcripts/who-audio-emergencies-coronavirus-press-conference-15sep2020.pdf?sfvrsn=580fa5f0_2)

[4] Goldstein, et al., 2020 (https://www.medrxiv.org/content/10.1101/2020.07.19.20157362v2)

[5] European centre for disease control, 2020 (https://www.ecdc.europa.eu/en/publications-data/children-and-school-settings-covid-19-transmission)

[6] Riley et al, 2020 (https://www.medrxiv.org/content/10.1101/2020.10.30.20223123v1)

[7] United Kingdom government, 2020 (https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/coronaviruscovid19infectionsurveypilot/13november2020)

[8] Brandal, et al., 2021 (https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.26.1.2002011)

[9] Gilliam et al., 2020 (https://pediatrics.aappublications.org/content/early/2020/10/16/peds.2020-031971)

[10] Von Bismarck-Osten, et al., 2020 (https://www.cream-migration.org/publ_uploads/CDP_22_20.pdf)

[11] European centre for disease control, 2020 (https://www.ecdc.europa.eu/sites/default/files/ documents/COVID-19-schools-transmission-August%202020.pdf)

[12] Ludvigsson, 2020 (https://pubmed.ncbi.nlm.nih.gov/32202343/)

[13] Yoon et al., 2020 (https://www.medrxiv.org/content/10.1101/2020.08.03.20165589v1)

rises seen in October. A United Kingdom government report[14] found that when schools reopened in England and Wales in the summer, the infection rates among students did not increase over the existing population rate. A study in the Republic of Korea[12] found that there was not an increase in COVID-19 cases in the two months following the resumption of classes in May, and that in most COVID-19 cases in children, the infection had been acquired from family members outside of school.

- Following the detection of new SARS-CoV-2 variants of concern (VOC), further investigations are underway to fully assess each variant and potential impacts on COVID-19 age and sex distributions. Investigations in the United Kingdom suggest that the age and sex profile of VOC 202012/01 cases are similar to other SARS-CoV-2 viruses.[15]
- Impacts of school closures on children and adolescents:
    - The longer vulnerable children are out of school, the less likely they are to return.
    - Children from the poorest households are almost five times more likely to be out of primary school than those from the richest. Being out of school increases the risk of teenage pregnancy, sexual exploitation, child marriage, violence and other threats.[16]
    - Prolonged closures disrupt essential school-based services such as immunization, school feeding, and mental health and psychosocial support, and disrupt the important roles school play in child protection.[17]
    - Closures also cause stress and anxiety due to the loss of peer interaction and disrupted routines. These negative impacts are significantly higher for vulnerable children, such as those living in countries affected by conflict and other protracted crises, migrants, refugees and the forcibly displaced, minorities, children living with disabilities, and children in institutions.[18]
    - School closures affect children negatively in many ways besides their education, including equity, child health (both physical and mental health) and development and can affect the ability of parents to work, introducing other risks.[19,20]

Audrey Azoulay, UNESCO Director-General, has warned that "The longer schools remain closed, the more damaging the consequences, especially for children from more disadvantaged backgrounds … therefore, supporting safe schools must be a priority for us all".[21] Henrietta Fore, the United Nations Children's Fund (UNICEF) Executive Director stated, "As we enter the second year of the COVID-19 pandemic, and as cases continue to soar around the world, no effort should be spared to keep schools open or prioritize them in reopening plans....closing schools must be a measure of last resort, after all other options have been considered."[22]

Based on available information, a number of preliminary conclusions and recommendations have been made:

- Transmission occurring in communities can be reflected in school settings: when community transmission is low and when appropriate mitigation measures are applied, schools are unlikely to be the main drivers of COVID-19

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[14] United Kingdom Scientific Advisory Group for Emergencies (SAGE), 2020 (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/935125/tfc-covid-19-children-transmission-s0860-041120.pdf)

[15] Public Health England, 2021 (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/952490/Variant_of_Concern_VOC_202012_01_Technical_Briefing_4_England.pdf)

[16] United Nations Children's Fund (UNICEF), 2020 (https://www.unicef.org/media/67506/file/TechnicalNote-COVID-19-and-HarmfulPractices-April%202020.pdf)

[17] Viner R et al., Impacts of school closures on physical and mental health of children and young people: a systematic review, Pre-print 20 January 2021, submitted to JAMA Pediatrics

[18] United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Children's Fund (UNICEF), World Food Programme, World Bank & United Nations High Commissioner for Refugees. Framework for Reopening Schools, June 2020 (https://www.unicef.org/sites/default/files/2020-06/Framework-for-reopening-schools-2020.pdf)

[19] United Nations, 2020 (https://www.un.org/sites/un2.un.org/files/policy_brief_on_covid_impact_on_children _16_april_2020.pdf)

[20] Public Health Ontario, 2020, (https://www.publichealthontario.ca/-/media/documents/ncov/cong/2020/06/covid-19-negative-impacts-public-health-pandemic-families.pdf)

[21] United Nations, 2020 (https://news.un.org/en/story/2020/09/1072472)

[22] United Nations Children's Fund (UNICEF), 2021 (https://www.unicef.org/press-releases/children-cannot-afford-another-year-school-disruption)

transmission. However, where there is community transmission and/or the number of new cases is rising, schools, and particularly secondary schools, may play a substantial role in community transmission. As such, WHO continues to advise a comprehensive approach to reduce transmission, including early detection and isolation of cases as well as contact tracing and supported quarantine, along with other risk mitigation public health measures to reduce exposure and spread.

- WHO and partners have issued guidance on the safe operation of schools during the COVID-19 pandemic (see key resources below). Schools should have outbreak prevention and management plans ready, including control measures to protect staff and individuals at high risk. Measures include the need for adequate ventilation, hygiene practices (such as hand cleaning, cleaning of surfaces and items), mask use (12 years and older should wear a mask under the same conditions as adults and teacher and support staff should wear masks when they cannot guarantee at least a 1-metre distance from others where there is widespread transmission in the area), physical distancing (such as by limiting the number of students per class, alternating shifts, limiting mixing of classes), and frequent communication with parents, students, teachers and staff (such as asking parents to report any cases of COVID-19 in the household, posting signs in visible locations).
- Strong infection prevention and control measures are necessary in all schools and may need to be applied differently based on the age of the students (e.g. secondary/high schools and older students compared to primary/elementary schools and younger students). In particular, all students should be reminded to limit their risk of exposure outside educational settings by avoiding high risk environments, including crowded, close-contact and poorly ventilated spaces.
- School teachers and staff need to remain vigilant to prevent exposure outside the school, where they can be infected.
- Where a student or staff tests positive for SARS-CoV-2, appropriate actions must be taken, including notifying health officials, staff and families, cooperating closely with local health authorities, quarantine, identifying and notifying close contacts and advising them to stay home for 14 days, and disinfecting school areas.
- Considerations to decide to close, partially close or reopen schools should be guided by a risk-based approach to maximize the educational and health benefit for students, teachers, staff, and the wider community, and help prevent transmission of SARS-CoV-2 in the community. School closure should be implemented as a last resort, be temporary and only at a local level in areas with intense transmission.
- Where schools are fully or partially closed, opportunities for remote learning should be instituted, school-based health services, immunization, meals and support services should be maintained, and opportunities for psychosocial and mental health support enhanced.
- The time during which schools are physically closed should be used to put in place measures to prevent and respond to transmission when schools reopen.
- Health and education authorities should continue to monitor guidance based on new information and research, particularly with respect to the appearance of new and possibly more transmissible variants of SARS-CoV-2.

WHO thanks the participation of UNICEF in this special focus.

Key Resources:

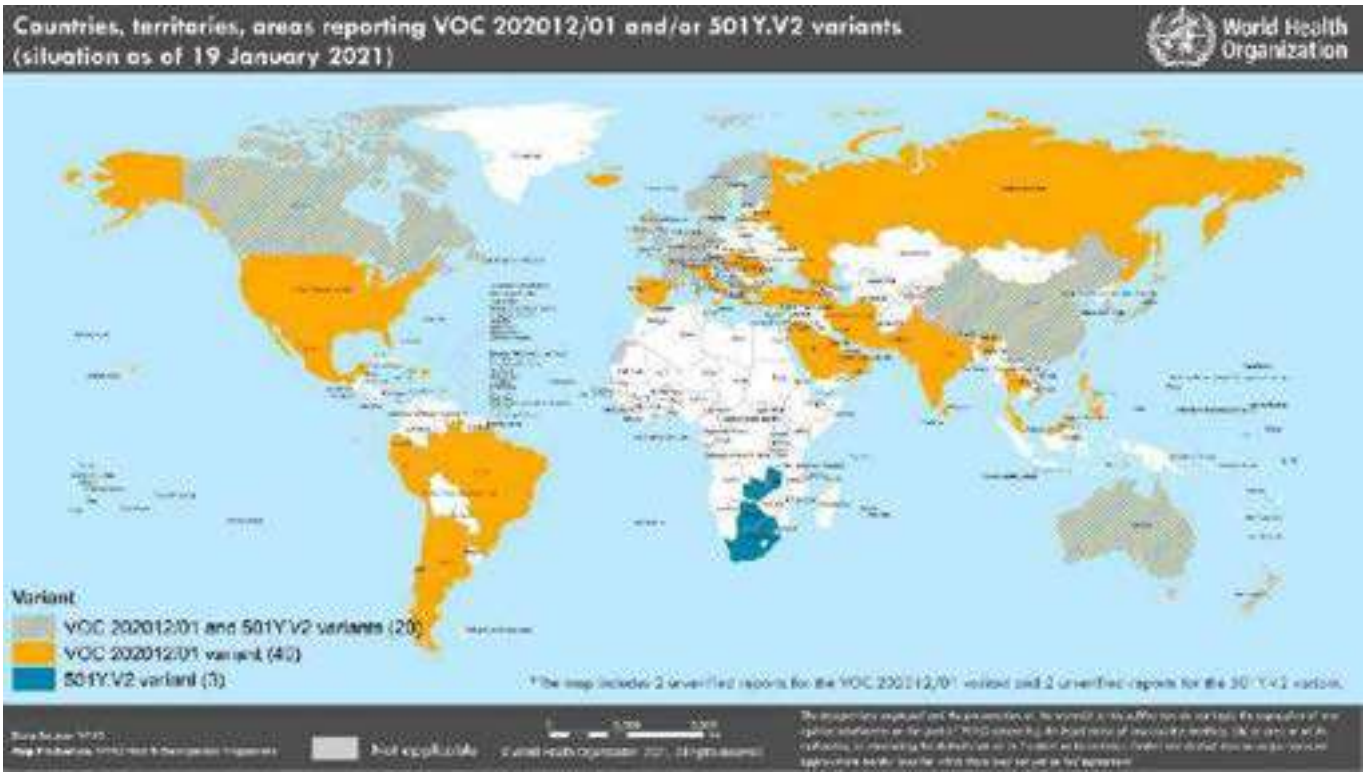
- Coronavirus disease (COVID-19): Schools
- Checklist to support schools re-opening and preparation for COVID-19 resurgences or similar public health crises
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- What we know about COVID-19 transmission in schools
- Framework for reopening schools
- Advice on the use of masks for children in the community in the context of COVID-19
- Coronavirus disease (COVID-19): Ventilation and air conditioning in public spaces and buildings
- Contact tracing in the context of COVID-19
- Criteria for releasing COVID-19 patients from isolation
- In-person schooling and COVID-19 transmission: a review of the evidence
- COVID-19 in children and the role of school settings in transmission - first update

Special Focus: Update on SARS-CoV-2 variants of concern

WHO, in collaboration with national authorities, institutions and researchers, is closely monitoring the public health events associated with SARS-CoV-2 variants and will continue providing updates as new information becomes available. This includes routine assessment of SARS-CoV-2 variants to establish if they have altered transmissibility, clinical presentation and severity, or if they may respond differently to countermeasures, including diagnostics, therapeutics and vaccines. Further information on the background of variants of concern (VOC) is available in Disease Outbreak News and the Weekly Epidemiological Updates published on 5 January 2021 and 11 January 2021.

Since the last update on 12 January, VOC 202012/01 has been detected in 10 additional countries, territories and areas (hereafter countries). To date, 60 countries across all six WHO regions have reported either imported cases or community transmission of this variant (Figure 3). Several reports of ongoing studies evaluating transmission and severity have been made available by Public Health England. Concurrently, variant 501Y.V2 has been reported from three additional countries – now totaling 23 countries across four of the six WHO regions.

Figure 3. Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01 and SARS-CoV-2 501Y.V2 variant as of 19 January 2021



Since our last update, a new variant (named the P.1 variant) has been reported from Brazil (Manaus, Amazonas State), which belongs to Nextstrain clade 20B, GISAID clade GR, and Pangolin lineage B.1.1.28. This variant includes mutations N501Y, E484K, K417T, and deletion in ORF1b (del11288-11296) in the spike protein. In addition to the P.1 variant, another variant within the lineage B.1.1.28 with the E484K mutation (but none of the other mutations) has been reported from Brazil. There is currently little available information to assess if there are changes in transmissibility or severity as a result of these new variants; however, given similar amino acid changes observed in VOC 202012/01 and 501Y.V2, which have shown increased transmissibility and potential impacts on antibody neutralization, further investigations are needed and are underway.

On 14 January, WHO Director-General convened the sixth meeting of the Emergency Committee on COVID-19, which included discussions on the impact of the emerging variants of SARS-CoV-2 and additional travel restrictions that many countries are imposing. The WHO secretariat presented a Risk Monitoring Framework to identify, monitor and assess SARS-CoV-2 mutations, variants of interest and variants of concern. The Emergency Committee supported the call for a global effort to sequence and share data to monitor the virus evolution and collaborate scientifically to increase global understanding of variants and their effects on vaccine, therapeutics and diagnostic efficacy. The Committee advised WHO to develop a standardized nomenclature and definitions of SARS-CoV-2 virus variants that are geographically neutral, an area WHO has already begun work in.

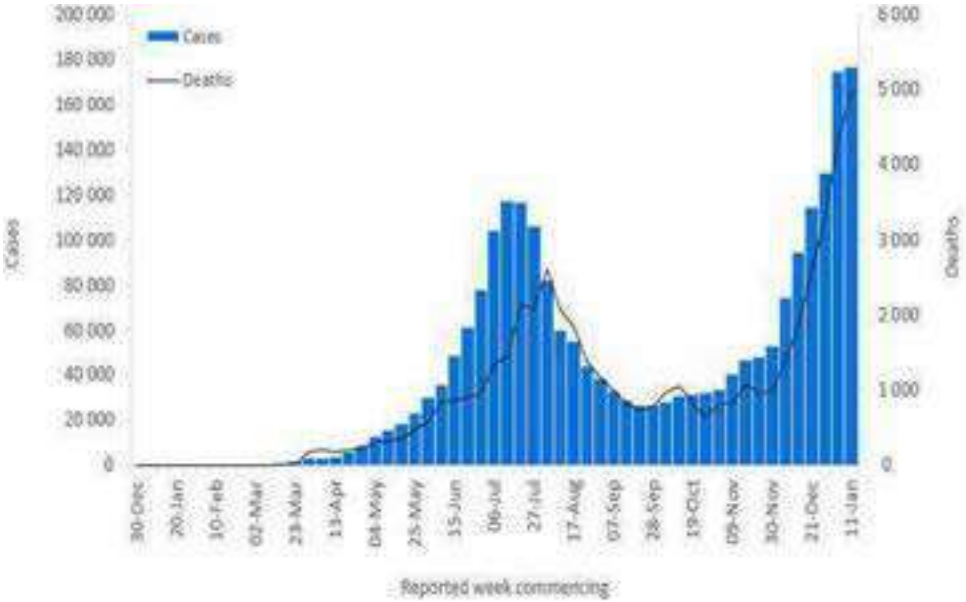
On 12 January and 15 January, WHO convened two global virtual meetings of scientific experts and partners, to identify and discuss critical knowledge gaps and research priorities for emerging variants of SARS-CoV-2, and vaccines developed for SARS-CoV-2. The participants of both meetings emphasized the importance of coordinated research to detect and understand early the potential impact of emerging variants on diagnostics, treatments, the efficacy of vaccines, the impact of vaccines on transmission of infection, and the need to develop the next generation of vaccine platforms. WHO will work to ensure that critical research is coordinated across all partners. The meeting concluded with agreement to establish a WHO-hosted platform for global sharing and coordination of emerging vaccine research information on efficacy and safety. The forum would enable scientists to share and discuss unpublished and published data and research protocols to further our collective understanding of SARS-CoV-2 vaccines.

Situation by WHO Region

African Region

In the past week, the African Region reported over 177 000 cases and 5000 deaths, a 1% increase in cases and 16% increase in deaths compared to the previous week. Cases in the Region continue to increase since mid-September 2020; however, the increase this week has been slight when compared to steeper increases in recent months. The highest numbers of new cases were reported in South Africa (111 483 new cases; 188 new cases per 100 000 population; a 11% decrease), Nigeria (11 465 new cases; 5.6 new cases per 100 000; a 38% increase) and Zambia (9507 new cases; 51.7 new cases per 100 000; a 78% increase).

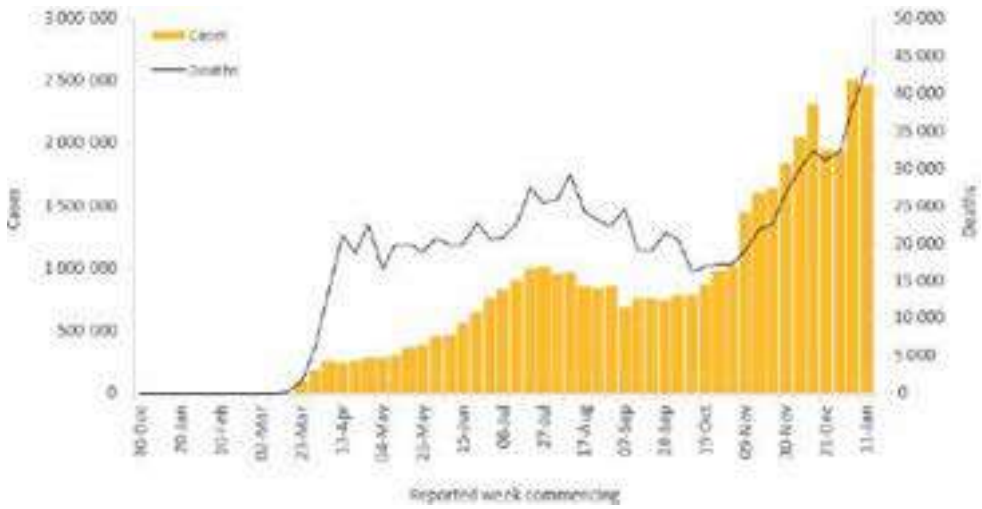
The countries reporting the highest number of new deaths in the past week were South Africa (4027 new deaths; 6.8 new deaths per 100 000; a 10% increase), Zimbabwe (200 new deaths; 1.3 new deaths per 100 000; an 89% increase) and Malawi (80 new deaths; 0.4 new deaths per 100 000; a 186% increase).



Region of the Americas

Over 2.4 million new cases and over 43 000 new deaths were reported in the Region of the Americas this week, a decrease of 2% and an increase of 15% respectively compared to the previous week. For the past four weeks, the highest numbers of new cases continue to be reported from the United States of America (1 583 237 new cases; 478.3 new cases per 100 000 population; a 11% decrease), Brazil (379 784 new cases; 178.7 new cases per 100 000; a 21% increase) and Colombia (114 611 new cases; 225.2 new cases per 100 000; a 14% increase).

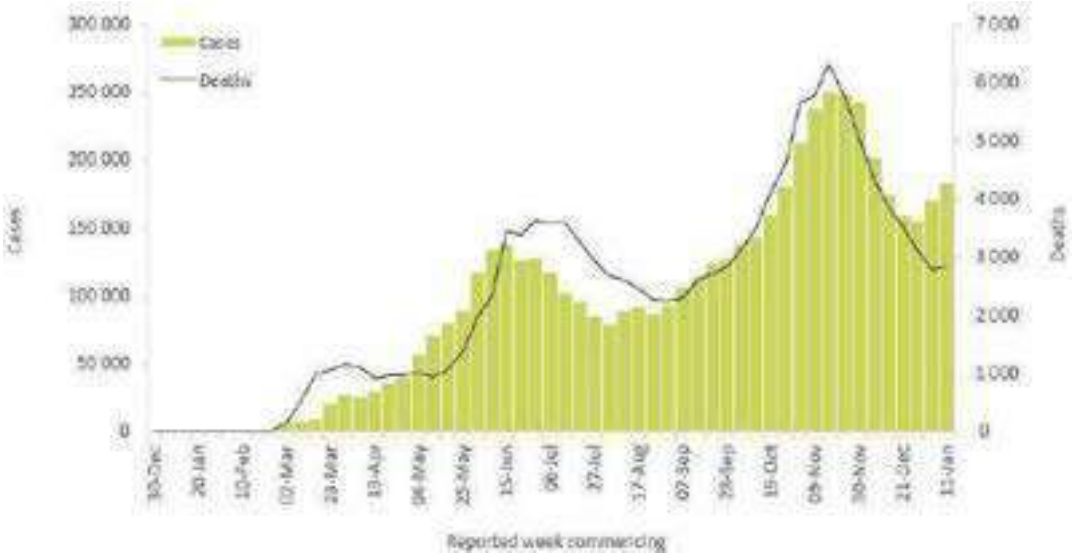
The highest numbers of deaths were reported from the United States of America (23 198 new deaths; 7.0 new deaths per 100 000; a 12% increase), Mexico (6953 new deaths; 5.4 new deaths per 100 000; a 25% increase) and Brazil (6786 new deaths; 3.2 new deaths per 100 000; a 12% increase).



Eastern Mediterranean Region

In the past week, the Eastern Mediterranean Region reported over 183 000 new cases, an increase of 7% compared to last week. The region reported 2846 new deaths, an increase of 2% after a sustained decrease in deaths from 23 November 2020 through the week of 11 January 2021. The three countries reporting the highest numbers of new cases continue to be Iran (43 957 new cases, 52.3 new cases per 100 000 population, a 2% increase), Lebanon (33 605 new cases, 492.3 new cases per 100 000, 15% increase) and United Arab Emirates (22 106 new cases, 223.5 new cases per 100 000, 38 % increase). These three countries accounted for almost half (54%) of the new weekly cases in the Region.

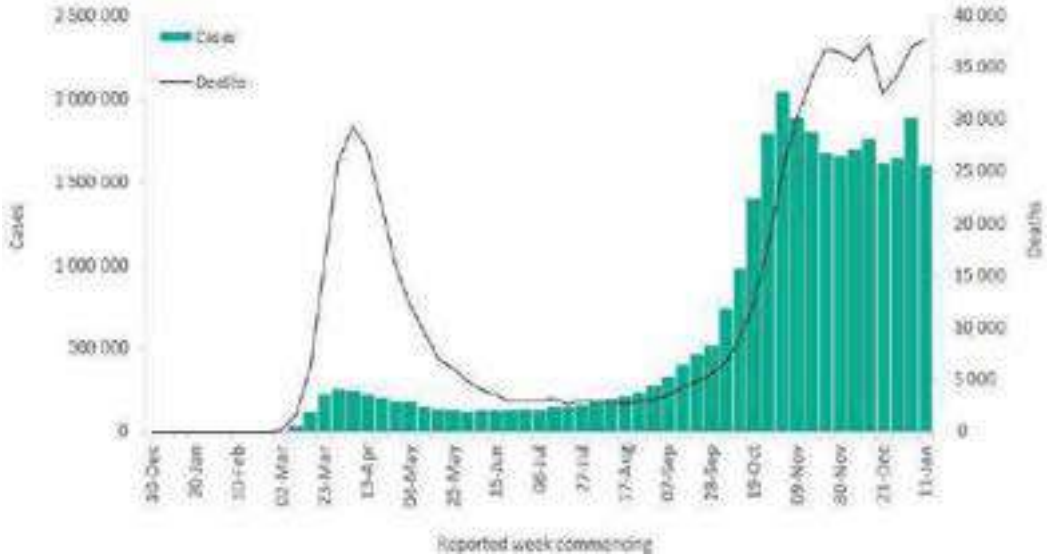
The highest numbers of new deaths were reported in Iran (617 new deaths, 0.7 new death per 100 000 population, 7% decrease) followed by Tunisia (463 new deaths, 3.9 new death per 100 000, 19% increase) and Egypt (385 new deaths, 0.4 new death per 100 000, a 4 % decrease). These countries accounted for almost 52% of deaths reported in the Region.



European Region

The European Region continues to report a substantial number of cases with over 1.6 million new cases and over 37 000 new deaths, a decrease of 15% and an increase of 2% respectively when compared to the previous week. The three countries reporting the highest numbers of new cases were the United Kingdom (339 952 new cases; 500.8 new cases per 100 000, 19% decrease), the Russian Federation (166 255 new cases, 113.9 new cases per 100 000, 1% increase) and France (125 279 new cases, 191.9 new cases per 100 000, 2% increase). These three countries accounted for almost 40% of all cases reported in the region with the United Kingdom accounting for 21% of all new cases.

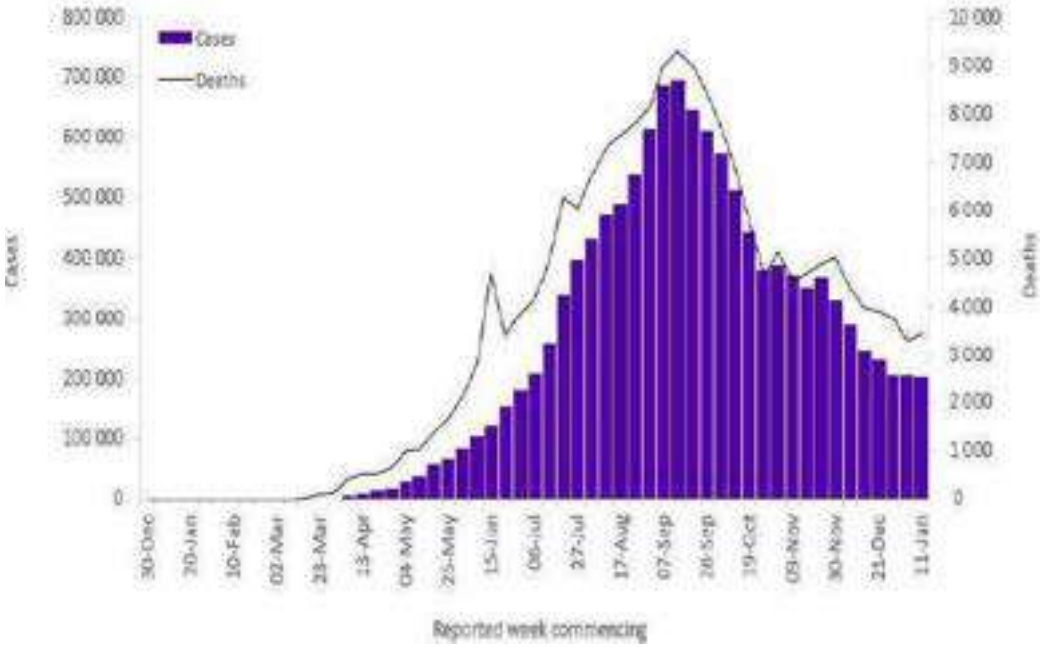
The highest numbers of deaths were reported from the United Kingdom (7722 new deaths; 11.4 new deaths per 100 000, 23% increase), Germany (6076 new deaths; 7.3 new deaths per 100 000, similar to the previous week) and the Russian Federation (3729 new deaths; 2.6 new deaths per 100 000, a 12% increase).



South-East Asia Region

The South-East Asia Region continues to report falling numbers of new cases and deaths, a decline observed since September 2020. Just over 200 000 new cases and over 3400 new deaths were reported in the past week, a 1% decrease and 4% increase respectively, compared to the previous week. The three countries reporting the highest numbers of new cases and new deaths were India (107 701 new cases; 7.8 new cases per 100 000, a 15% decrease), Indonesia (78 256 new cases; 28.6 new cases per 100 000; a 31% increase) and Bangladesh (5681 new cases; 3.4 new cases per 100 000; an 8% decrease).

The three countries reporting the highest numbers of new deaths this week were India (1275 new deaths; 0.1 new death per 100 000, a 18% decrease), Indonesia (1820 new deaths; 0.7 new death per 100 000, a 31% decrease) and Bangladesh (127 new deaths; 0.1 new death per 100 000; a 19% decrease).



Western Pacific Region

The Western Pacific Region reported an increase in the number of new cases by 14% (over 81 000) and new deaths by 35% (over 1100) in the past week compared to the previous week. The upward trend in new weekly cases and deaths has continued since October 2020. The three countries reporting the highest numbers of new cases this week were Japan (41 521 new cases; 32.8 new cases per 100 000, a 4% increase), Malaysia (21 536 new cases; 66.5 new cases per 100 000, a 33% increase) and the Philippines (12 894 new cases; 11.8 new cases per 100 000, a 45% increase).

The three countries reporting the highest numbers of new deaths this week were the Philippines (486 new deaths; 0.4 new deaths per 100 000, a 235% increase), Japan (450 new deaths; 0.4 new deaths per 100 000, similar to previous week) and the Republic of Korea (124 new deaths; 0.2 new deaths per 100 000, a 24% decrease).

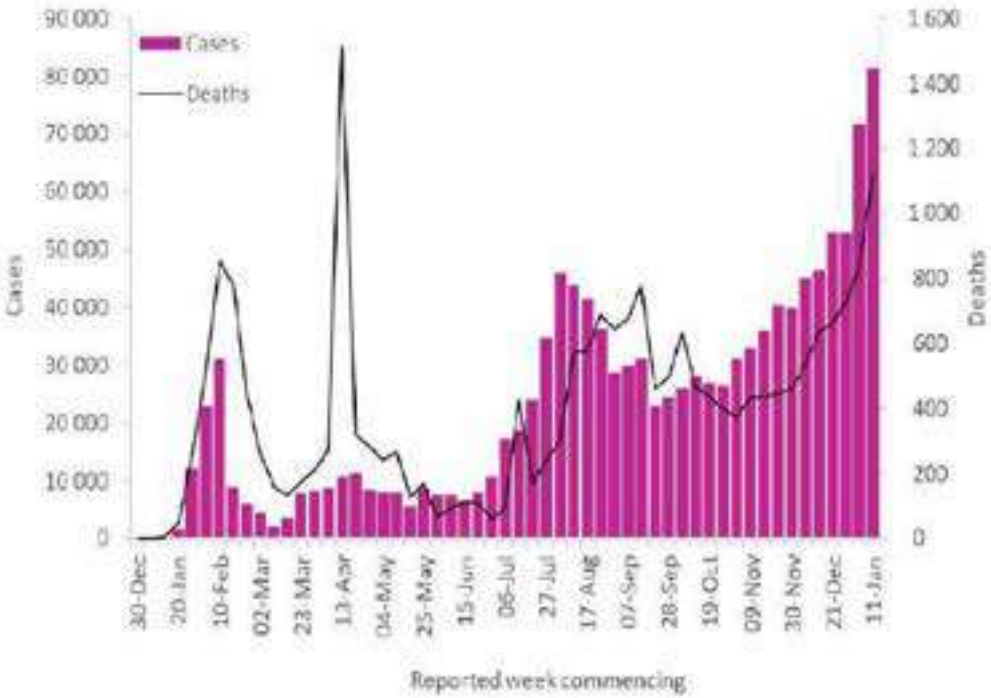


Table 2. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 17 January 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**177 252**	**2 313 130**	**206.2**	**5 000**	**52 905**	**4.7**	
South Africa	111 483	1 325 659	2 235.2	4 027	36 851	62.1	Community transmission
Nigeria	11 465	108 943	52.8	78	1 420	0.7	Community transmission
Zambia	9 507	36 074	196.2	68	532	2.9	Community transmission
Zimbabwe	6 382	26 881	180.9	200	683	4.6	Community transmission
Mozambique	4 501	25 862	82.7	47	234	0.7	Community transmission
Lesotho	3 794	6 371	297.4	47	97	4.5	Community transmission
Malawi	3 479	11 785	61.6	80	300	1.6	Community transmission
Ethiopia	2 980	130 772	113.8	44	2 029	1.8	Community transmission
Namibia	2 475	30 198	1 188.5	29	280	11.0	Community transmission
Senegal	1 738	22 738	135.8	50	509	3.0	Community transmission
Algeria	1 698	103 611	236.3	28	2 831	6.5	Community transmission
Democratic Republic of the Congo	1 658	20 625	23.0	19	629	0.7	Community transmission
Côte d'Ivoire	1 602	24 856	94.2	3	141	0.5	Community transmission
Eswatini	1 556	12 736	1 097.8	69	360	31.0	Community transmission
Rwanda	1 389	10 850	83.8	22	140	1.1	Clusters of cases
Ghana	1 209	56 981	183.4	5	341	1.1	Community transmission
Burkina Faso	1 134	9 000	43.1	12	101	0.5	Community transmission
Kenya	898	99 082	184.3	24	1 728	3.2	Community transmission
Niger	810	4 132	17.1	34	138	0.6	Community transmission
Mauritania	679	15 893	341.8	18	396	8.5	Community transmission
Cabo Verde	664	12 901	2 320.4	5	119	21.4	Community transmission
Angola	609	18 765	57.1	15	431	1.3	Community transmission
Congo	549	7 709	139.7	14	114	2.1	Community transmission
Uganda	531	38 085	83.3	3	304	0.7	Community transmission
Cameroon	488	27 336	103.0	3	451	1.7	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Comoros	427	1 577	181.3	23	41	4.7	Community transmission
Chad	345	2 855	17.4	4	111	0.7	Community transmission
Togo	340	4 272	51.6	1	73	0.9	Community transmission
Eritrea	321	1 877	52.9	0	6	0.2	Sporadic cases
Mali	258	7 823	38.6	13	308	1.5	Community transmission
Burundi	250	1 236	10.4	0	2	0.0	Community transmission
Madagascar	234	18 001	65.0	5	267	1.0	Community transmission
Gabon	205	9 899	444.8	0	66	3.0	Community transmission
Guinea	194	14 098	107.3	0	81	0.6	Community transmission
Seychelles	187	689	700.6	0	1	1.0	Sporadic cases
Sierra Leone	167	2 970	37.2	0	77	1.0	Community transmission
Benin	109	3 413	28.2	2	46	0.4	Community transmission
Liberia	87	1 887	37.3	1	84	1.7	Community transmission
Sao Tome and Principe	76	1 130	515.6	0	17	7.8	Community transmission
Equatorial Guinea	67	5 356	381.8	0	86	6.1	Community transmission
South Sudan	53	3 693	33.0	0	63	0.6	Community transmission
Gambia	40	3 897	161.3	2	127	5.3	Community transmission
Guinea-Bissau	31	2 478	125.9	0	45	2.3	Community transmission
Mauritius	8	547	43.0	0	10	0.8	Clusters of cases
Botswana	0	16 051	682.5	0	48	2.0	Community transmission
Central African Republic	0	4 973	103.0	0	63	1.3	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territoriesiii							
Mayotte	379	6 611	2 423.3	2	58	21.3	Clusters of cases
Réunion	196	9 443	1 054.7	3	45	5.0	Clusters of cases
Americas	**2 467 817**	**41 329 493**	**4 040.9**	**43 804**	**954 545**	**93.3**	
United States of America	1 583 237	23 344 423	7 052.6	23 198	389 084	117.5	Community transmission
Brazil	379 784	8 393 492	3 948.8	6 786	208 246	98.0	Community transmission
Colombia	114 611	1 870 179	3 675.5	2 437	47 868	94.1	Community transmission
Mexico	101 804	1 609 735	1 248.5	6 953	139 022	107.8	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Argentina	79 695	1 783 047	3 945.2	954	45 227	100.1	Community transmission
Canada	51 359	695 707	1 843.3	1 022	17 729	47.0	Community transmission
Chile	27 751	665 493	3 481.3	398	17 435	91.2	Community transmission
Peru	26 552	1 056 023	3 202.8	509	38 654	117.2	Community transmission
Panama	20 555	293 592	6 804.4	326	4 689	108.7	Community transmission
Bolivia (Plurinational State of)	12 435	183 589	1 572.8	243	9 571	82.0	Community transmission
Dominican Republic	10 695	191 339	1 763.8	8	2 432	22.4	Community transmission
Ecuador	10 459	230 808	1 308.2	139	14 316	81.1	Community transmission
Paraguay	6 795	120 789	1 693.5	107	2 479	34.8	Community transmission
Uruguay	6 607	30 946	890.9	51	291	8.4	Community transmission
Costa Rica	6 573	184 187	3 615.7	111	2 416	47.4	Community transmission
Honduras	6 016	132 412	1 336.9	78	3 344	33.8	Community transmission
Guatemala	5 471	148 598	829.4	221	5 220	29.1	Community transmission
Cuba	3 313	17 501	154.5	18	166	1.5	Clusters of cases
Venezuela (Bolivarian Republic of)	3 189	118 856	418.0	39	1 095	3.9	Community transmission
El Salvador	1 583	50 157	773.3	71	1 479	22.8	Community transmission
Jamaica	641	14 096	476.0	12	323	10.9	Community transmission
Suriname	555	7 409	1 263.0	8	139	23.7	Clusters of cases
Haiti	540	10 781	94.5	3	240	2.1	Community transmission
Guyana	336	6 805	865.2	3	170	21.6	Clusters of cases
Belize	327	11 529	2 899.4	10	281	70.7	Community transmission
Saint Vincent and the Grenadines	246	450	405.6	1	1	0.9	Community transmission
Barbados	228	1 036	360.5	0	7	2.4	Clusters of cases
Saint Lucia	181	576	313.7	1	6	3.3	Sporadic cases
Trinidad and Tobago	124	7 343	524.7	3	130	9.3	Community transmission
Bahamas	55	8 032	2 042.5	0	175	44.5	Clusters of cases
Nicaragua	49	4 916	74.2	1	167	2.5	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Antigua and Barbuda	18	187	191.0	1	6	6.1	Sporadic cases
Dominica	4	110	152.8	0	0	0.0	Clusters of cases
Grenada	4	139	123.5	0	1	0.9	Sporadic cases
Saint Kitts and Nevis	0	34	63.9	0	0	0.0	Sporadic cases
Territoriesiii							
Puerto Rico	3 893	86 523	3 024.4	87	1 703	59.5	Community transmission
French Guiana	862	14 975	5 013.7	1	75	25.1	Community transmission
Aruba	413	6 296	5 897.0	2	52	48.7	Community transmission
Guadeloupe	132	8 834	2 207.8	1	156	39.0	Community transmission
Turks and Caicos Islands	114	1 079	2 786.8	0	6	15.5	Clusters of cases
Martinique	110	6 227	1 659.4	0	43	11.5	Community transmission
United States Virgin Islands	109	2 252	2 156.6	0	24	23.0	Community transmission
Sint Maarten	98	1 629	3 798.8	0	27	63.0	Community transmission
Curaçao	93	4 498	2 741.1	1	19	11.6	Community transmission
Bonaire	75	329	1 573.0	0	3	14.3	Community transmission
Saint Martin	44	1 046	2 705.7	0	12	31.0	Community transmission
Saint Barthélemy	33	224	2 266.1	0	0	0.0	Sporadic cases
Bermuda	24	670	1 075.9	0	12	19.3	Clusters of cases
Cayman Islands	15	374	569.1	0	2	3.0	Sporadic cases
British Virgin Islands	7	121	400.2	0	1	3.3	Clusters of cases
Falkland Islands (Malvinas)	3	32	918.7	0	0	0.0	No cases
Anguilla	0	15	100.0	0	0	0.0	Sporadic cases
Montserrat	0	13	260.1	0	1	20.0	No cases
Saba	0	5	258.7	0	0	0.0	No cases
Saint Pierre and Miquelon	0	16	276.1	0	0	0.0	Sporadic cases
Sint Eustatius	0	19	605.3	0	0	0.0	Sporadic cases
Eastern Mediterranean	**183 178**	**5 335 273**	**730.0**	**2 846**	**127 817**	**17.5**	
Iran (Islamic Republic of)	43 957	1 324 395	1 576.8	617	56 717	67.5	Community transmission
Lebanon	33 605	249 158	3 650.4	276	1 866	27.3	Community transmission
United Arab Emirates	22 106	249 808	2 525.8	38	740	7.5	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Tunisia	19 717	177 231	1 499.6	463	5 616	47.5	Community transmission
Pakistan	17 253	516 770	233.9	310	10 908	4.9	Community transmission
Jordan	7 598	313 557	3 073.1	128	4 137	40.5	Community transmission
Morocco	7 228	458 865	1 243.2	202	7 911	21.4	Clusters of cases
Egypt	6 708	155 507	152.0	385	8 527	8.3	Clusters of cases
Iraq	5 256	607 587	1 510.6	54	12 935	32.2	Community transmission
Libya	4 015	108 017	1 572.0	83	1 651	24.0	Community transmission
Kuwait	3 499	157 399	3 685.7	5	947	22.2	Community transmission
Bahrain	1 951	97 268	5 716.4	3	358	21.0	Clusters of cases
Qatar	1 417	147 089	5 105.4	0	246	8.5	Community transmission
Oman	1 194	131 264	2 570.5	4	1 509	29.5	Community transmission
Saudi Arabia	1 061	364 753	1 047.7	32	6 318	18.1	Sporadic cases
Syrian Arab Republic	668	12 942	74.0	56	824	4.7	Community transmission
Afghanistan	495	53 984	138.7	62	2 339	6.0	Clusters of cases
Djibouti	37	5 903	597.5	0	61	6.2	Clusters of cases
Somalia	18	4 744	29.8	0	130	0.8	Community transmission
Yemen	8	2 116	7.1	2	613	2.1	Sporadic cases
Sudan	0	26 279	59.9	0	1 603	3.7	Community transmission
Territoriesiii							
occupied Palestinian territory	5 387	170 637	3 344.9	126	1 861	36.5	Community transmission
Europe	**1 610 353**	**30 509 880**	**3 268.6**	**37 698**	**666 237**	**71.4**	
The United Kingdom	339 952	3 357 365	4 945.6	7 722	88 590	130.5	Community transmission
Russian Federation	166 255	3 568 209	2 445.1	3 729	65 566	44.9	Clusters of cases
France	125 279	2 846 971	4 361.6	2 536	69 753	106.9	Community transmission
Germany	124 991	2 033 518	2 427.1	6 076	46 419	55.4	Community transmission
Italy	110 867	2 368 733	3 917.7	3 406	81 800	135.3	Clusters of cases
Spain	93 971	2 211 967	4 731.0	500	53 079	113.5	Community transmission
Turkey	63 547	1 566 327	1 857.2	1 201	23 832	28.3	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Portugal	63 229	539 416	5 290.1	1 008	8 709	85.4	Clusters of cases
Israel	58 248	539 731	6 235.7	289	3 940	45.5	Community transmission
Czechia	57 994	889 159	8 302.9	1 223	14 338	133.9	Community transmission
Poland	50 060	1 435 582	3 793.2	2 166	33 355	88.1	Community transmission
Ukraine	45 656	1 160 682	2 654.0	1 035	20 802	47.6	Community transmission
Netherlands	41 090	906 932	5 292.9	661	12 963	75.7	Community transmission
Ireland	29 053	169 780	3 438.4	259	2 595	52.6	Community transmission
Sweden	28 362	523 486	5 183.4	129	10 323	102.2	Community transmission
Romania	23 286	691 488	3 594.4	572	17 164	89.2	Community transmission
Slovakia	15 116	223 325	4 090.5	556	3 474	63.6	Clusters of cases
Switzerland	15 020	492 787	5 693.9	349	7 930	91.6	Community transmission
Serbia	13 322	371 216	5 330.7	182	3 730	53.6	Community transmission
Belgium	13 312	678 838	5 857.3	328	20 431	176.3	Community transmission
Belarus	13 169	223 537	2 365.6	66	1 573	16.6	Community transmission
Austria	11 642	389 752	4 327.5	350	6 964	77.3	Community transmission
Hungary	9 591	351 828	3 642.0	693	11 341	117.4	Community transmission
Slovenia	9 275	148 556	7 145.8	180	3 327	160.0	Clusters of cases
Georgia	8 576	247 805	6 211.9	160	2 933	73.5	Community transmission
Denmark	7 959	188 199	3 249.2	205	1 747	30.2	Community transmission
Lithuania	7 845	167 516	6 153.5	245	2 445	89.8	Community transmission
Kazakhstan	6 578	215 947	1 150.1	71	2 956	15.7	Clusters of cases
Latvia	6 145	55 097	2 921.1	143	961	50.9	Community transmission
Croatia	4 961	224 954	5 479.6	248	4 616	112.4	Community transmission
Albania	4 183	67 216	2 335.7	37	1 270	44.1	Clusters of cases
Greece	4 077	148 370	1 423.5	214	5 441	52.2	Community transmission
Norway	3 942	57 734	1 065.0	46	517	9.5	Community transmission
Estonia	3 563	37 079	2 795.2	42	325	24.5	Clusters of cases
Republic of Moldova	3 547	152 640	3 783.9	115	3 245	80.4	Community transmission
Bulgaria	3 330	211 736	3 047.2	377	8 474	122.0	Clusters of cases
Azerbaijan	2 901	226 951	2 238.4	108	2 998	29.6	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Montenegro	2 819	55 561	8 846.4	20	745	118.6	Clusters of cases
North Macedonia	2 599	88 749	4 259.9	82	2 696	129.4	Community transmission
Armenia	2 455	164 586	5 554.3	63	2 992	101.0	Community transmission
Bosnia and Herzegovina	2 414	117 793	3 590.4	144	4 449	135.6	Community transmission
Cyprus	1 800	28 811	2 386.3	20	167	13.8	Clusters of cases
Finland	1 519	39 911	720.3	32	618	11.2	Community transmission
Malta	1 192	15 588	3 530.3	6	239	54.1	Clusters of cases
Luxembourg	881	48 757	7 788.9	22	552	88.2	Community transmission
Kyrgyzstan	836	83 109	1 273.9	15	1 384	21.2	Clusters of cases
Andorra	452	9 038	11 697.4	6	91	117.8	Community transmission
Uzbekistan	396	77 968	233.0	2	619	1.8	Clusters of cases
Monaco	141	1 194	3 042.5	3	8	20.4	Sporadic cases
San Marino	128	2 778	8 185.5	1	65	191.5	Community transmission
Iceland	76	5 956	1 745.4	0	29	8.5	Community transmission
Liechtenstein	62	2 441	6 400.6	2	40	104.9	Sporadic cases
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 705	143.7	0	91	1.0	Pending
Territoriesiii							
Kosovo	1 975	55 455	2 980.8	30	1 395	75.0	Community transmission
Gibraltar	554	3 575	10 611.1	18	30	89.0	Clusters of cases
Jersey	123	3 044	2 797.8	5	62	57.0	Community transmission
Isle of Man	26	418	491.6	0	25	29.4	No cases
Guernsey	7	309	489.0	0	13	20.6	Community transmission
Faroe Islands	3	649	1 328.1	0	1	2.0	Sporadic cases
Greenland	1	30	52.8	0	0	0.0	No cases
South-East Asia	**204 654**	**12 462 338**	**616.5**	**3 410**	**191 196**	**9.5**	
India	107 701	10 557 985	765.1	1 275	152 274	11.0	Clusters of cases
Indonesia	78 256	896 642	327.8	1 820	25 767	9.4	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Bangladesh	5 681	527 063	320.0	127	7 883	4.8	Community transmission
Sri Lanka	4 473	52 313	244.3	27	256	1.2	Clusters of cases
Myanmar	3 820	133 869	246.0	116	2 942	5.4	Clusters of cases
Nepal	2 535	267 056	916.6	42	1 954	6.7	Clusters of cases
Thailand	1 756	12 054	17.3	3	70	0.1	Clusters of cases
Maldives	397	14 462	2 675.5	0	49	9.1	Clusters of cases
Bhutan	32	842	109.1	0	1	0.1	Clusters of cases
Timor-Leste	3	52	3.9	0	0	0.0	Sporadic cases
Western Pacific	**81 775**	**1 266 428**	**64.5**	**1 124**	**22 244**	**1.1**	
Japan	41 521	322 296	254.8	450	4 446	3.5	Clusters of cases
Malaysia	21 536	155 095	479.2	52	594	1.8	Clusters of cases
Philippines	12 894	498 691	455.1	486	9 884	9.0	Community transmission
Republic of Korea	3 685	72 340	141.1	124	1 249	2.4	Clusters of cases
China	1 107	98 625	6.7	6	4 804	0.3	Clusters of cases
Singapore	218	59 083	1 009.9	0	29	0.5	Sporadic cases
Australia	107	28 689	112.5	0	909	3.6	Clusters of cases
Mongolia	104	1 512	46.1	0	1	0.0	Clusters of cases
Cambodia	48	439	2.6	0	0	0.0	Sporadic cases
New Zealand	39	1 900	39.4	0	25	0.5	Clusters of cases
Viet Nam	24	1 537	1.6	0	35	0.0	Clusters of cases
Papua New Guinea	23	834	9.3	0	9	0.1	Community transmission
Fiji	2	55	6.1	0	2	0.2	Sporadic cases
Brunei Darussalam	1	174	39.8	0	3	0.7	Sporadic cases
Lao People's Democratic Republic	0	41	0.6	0	0	0.0	Sporadic cases
Solomon Islands	0	17	2.5	0	0	0.0	No cases
Territoriesiii							
French Polynesia	394	17 635	6 277.9	4	126	44.9	Sporadic cases
Guam	65	7 283	4 315.2	2	126	74.7	Clusters of cases
New Caledonia	4	44	15.4	0	0	0.0	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Northern Mariana Islands (Commonwealth of the)	3	128	222.4	0	2	3.5	Pending
Marshall Islands	0	4	6.8	0	0	0.0	No cases
Micronesia (Federated States of)	0	1	0.9	0	0	0.0	No cases
Vanuatu	0	1	0.3	0	0	0.0	No cases
Wallis and Futuna	0	4	35.6	0	0	0.0	Sporadic cases
Global	**4 725 029**	**93 217 287**	**1 195.9**	**93 882**	**2 014 957**	**25.8**	

**See *data, table and figure notes*

Key Weekly Updates

1. WHO is encouraging all countries to fulfil their pledges to COVAX. WHO is calling on all countries to start vaccinating health workers and those at high risk of developing severe disease or death in the next 100 days.
2. 13 January 2021 marks the one-year anniversary of WHO publishing the first protocol for developing PCR assays for diagnosing the new coronavirus, less than two weeks after the first cases were reported. The rapid isolation and sequencing of the virus laid the platform for the development of vaccines, which are now being rolled out globally.
3. An international team of scientists is in China to engage in and review scientific research with their Chinese counterparts on the origins of the virus.
4. As new virus variants have been reported, WHO calls on all countries to increase the systematic sequencing of the virus to supplement ongoing surveillance, monitoring and testing efforts.

Global vaccine research and development forum

- Scientists tackle vaccine safety, efficacy and access at global R&D forum
- Global scientists double down on SARS-CoV-2 variants research at WHO-hosted forum

Emergency Committee on COVID-19

- Emergency Committee on COVID-19 advises on variants, vaccines
- Statement on the 6th meeting of the International Health Regulations (2005) Emergency Committee regarding the coronavirus disease (COVID-19) pandemic
- 5th Open meeting of the Review Committee on the Functioning of the International Health Regulations during COVID-19
- WHO Director-General's opening remarks at the 6th Meeting of the IHR Emergency Committee on COVID-19

Vaccine access and allocation

- Access and allocation: how will there be fair and equitable allocation of limited supplies?

Vaccine research and development

- The race for a COVID-19 vaccine, explained
- Standardization of vaccines for coronavirus disease (COVID-19)

Publication: using routine data to monitor the effects of COVID-19 on essential health services

- Analyzing and using routine data to monitor the effects of COVID-19 on essential health services: practical guide for national and subnational decision-makers

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions
- African Region
- Eastern Mediterranean Region
- European Region
- Region of the Americas
- South-East Asia Region
- Western Pacific Region

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.
Global totals include 745 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case.

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g. laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 10 January 2021, 10 am CET

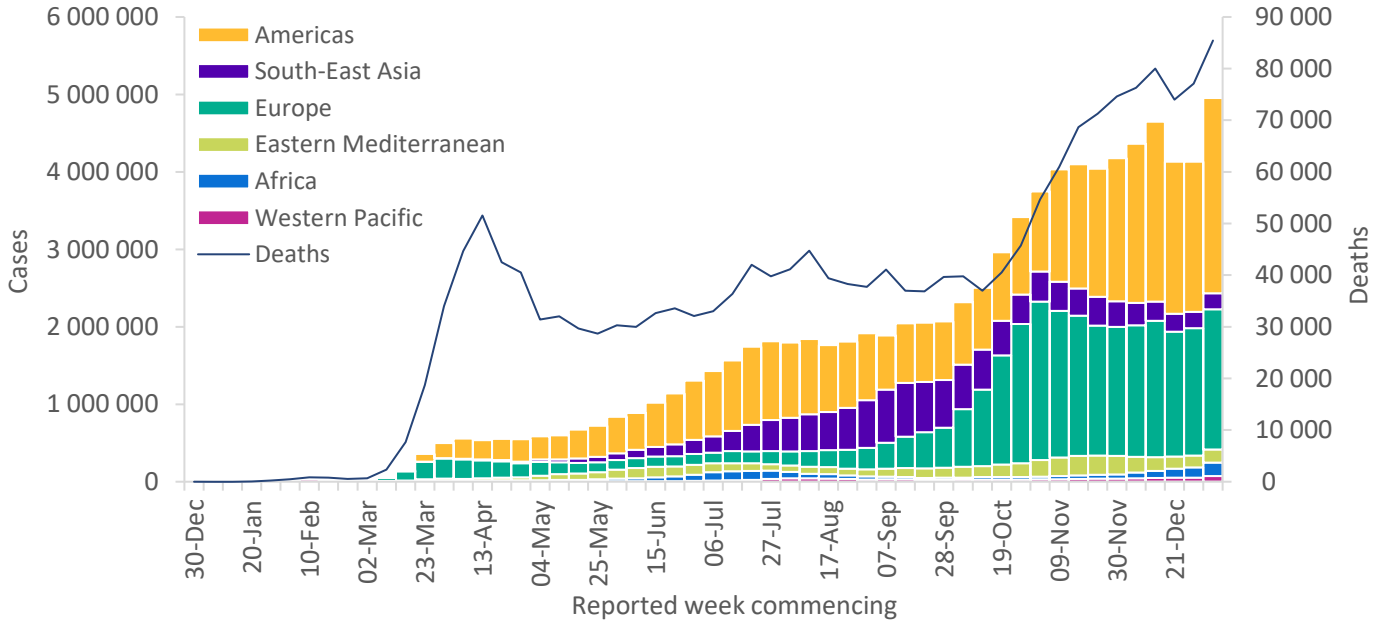
For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

Following two weeks of low reporting, likely due to the year-end holiday period, the overall upward trend seen in earlier weeks has resumed, with just under 5 million new cases reported last week globally. The number of new deaths has also shown a similar trend, with over 85 000 reported last week, an 11% increase (Figure 1, Table 1). All regions apart from South-East Asia showed an increase in new cases, with the Western Pacific, Africa and the Americas reporting increases of over 30%. The Region of the Americas accounted for 51% of all new cases and 45% of all new deaths globally in the past week. The European Region had a lower increase in new cases (10%), however still accounts for over a third of new cases globally. In South-East Asia, the decline in new cases and new deaths seen since the end of November 2020 continues. Although the Eastern Mediterranean Region is showing an 11% increase in new cases, new deaths have fallen by 9%, continuing a downward trend since a peak in mid-November. The African Region reported 175 000 new cases and 4300 new deaths, an increase of over 30% in new cases and new deaths, far exceeding previous peaks in July 2020. The Western Pacific also reported an increase of more than 30% in new cases, while the number of new deaths also rose by 14%.

Figure 1: COVID-19 cases reported weekly by WHO Region, and global deaths, as of 10 January 2021**



In the past week, the five countries reporting the highest number of cases were the United States of America (with 1 786 773 cases, a 35% increase), the United Kingdom of Great Britain and Northern Ireland (417 620 cases, a 22% increase), Brazil (313 130 cases, a 24% increase), the Russian Federation (165 167 cases, continuing last week's decrease with an 12% decrease) and Germany (142 861 cases, reversing last week's decrease with a 15% increase).

Additional Region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western Pacific Region.

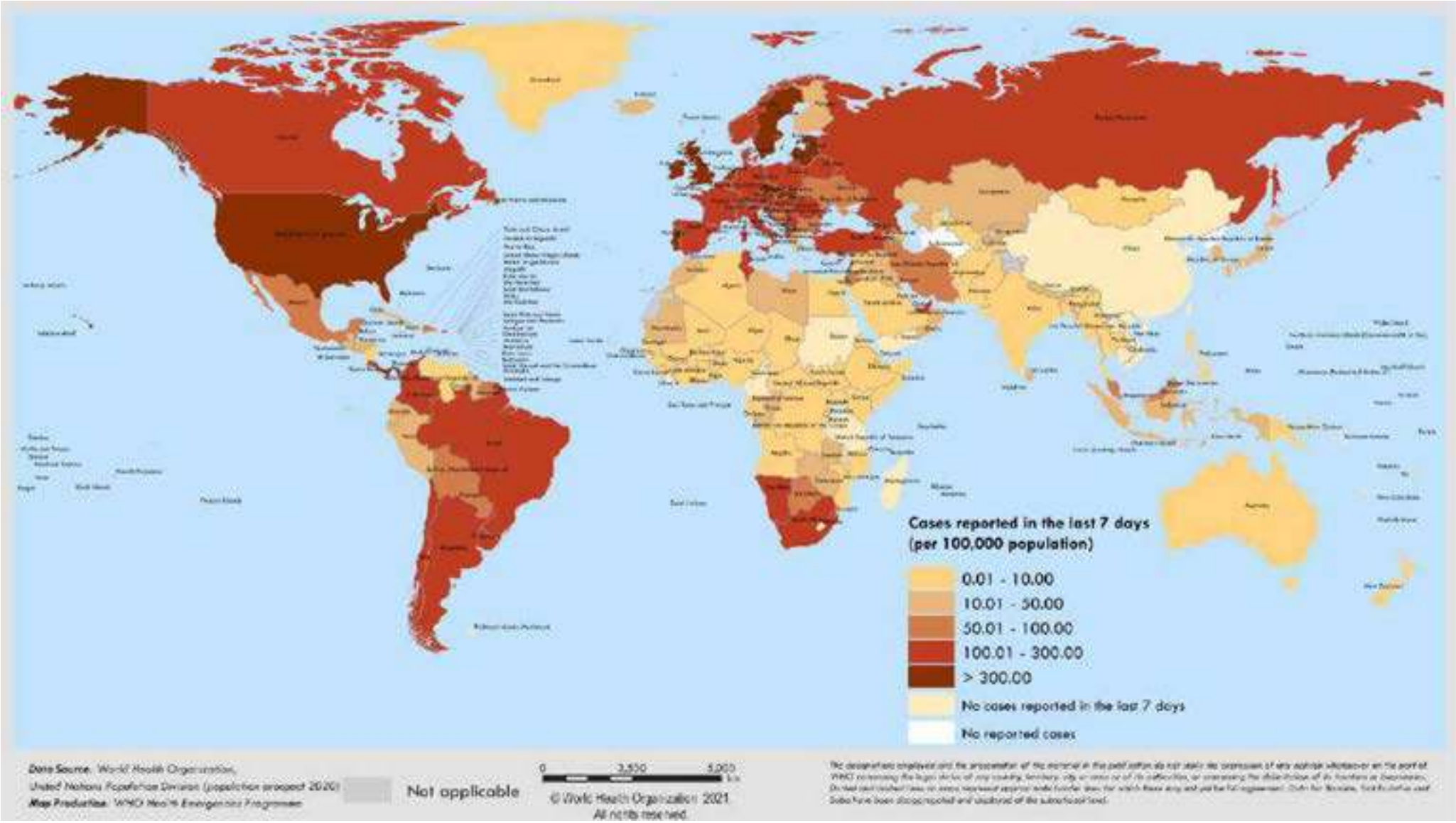
Please note: New cases and deaths will be reported per 100 000 population instead of per 1 million population, starting from this report.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 10 January 2021**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	2 522 297 (51%)	30%	38 861 668 (44%)	38 183 (45%)	18%	910 741 (47%)
Europe	1 806 928 (36%)	10%	28 797 583 (33%)	36 041 (42%)	6%	626 804 (33%)
South-East Asia	206 670 (4%)	-1%	12 257 684 (14%)	3 293 (4%)	-12%	187 786 (10%)
Eastern Mediterranean	171 280 (3%)	11%	5 149 132 (6%)	2 775 (3%)	-9%	124 836 (7%)
Africa	174 644 (4%)	34%	2 135 878 (2%)	4 313 (5%)	31%	47 905 (2%)
Western Pacific	71 939 (1%)	36%	1 184 662 (1%)	831 (1%)	14%	21 119 (1%)
Global	**4 953 758 (100%)**	**20%**	**88 387 352 (100%)**	**85 436 (100%)**	**11%**	**1 919 204 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*
***For all figures included in this report please see data, table and figure notes*

Figure 2. COVID-19 cases per 1 million population reported in the last seven days by countries, territories and areas, 4 January through 10 January 2021**



**See *data, table and figure notes*

SARS-CoV-2 Variants of concern

Since the start of the COVID-19 pandemic, WHO has received several reports of public health events associated with variants of SARS-CoV-2. When considered to potentially have different epidemiological, immunological or pathogenic properties, variants are reported to WHO and raised for further investigation by national authorities. Further background on variants of concern (VOC) is available in Disease Outbreak News and the Weekly Epidemiological Update published 5 January. In collaboration with local authorities, institutions and researchers, WHO routinely assesses if variants of SARS-CoV-2 result in changes in transmissibility, clinical presentation and severity, or if they may impact on countermeasures, including diagnostics, therapeutics and vaccines. While investigations are ongoing, in the following update, we highlight the geographical extent of two variants – VOC 202012/01 (initially identified in the United Kingdom) and 501Y.V2 (initially identified in South Africa) – reported by countries, territories and areas as of 12 January 2021, as well as highlight recent reports of other new variants of potential concern.

Since first detected on 14 December 2020, VOC 202012/01 has been detected in 50 countries, territories and areas across five of the six WHO regions to date (Figure 3). In England, the variant has been detected in all regions and almost all local authorities. Here, investigations are using a proxy S gene target failure (SGTF) to indicate carriage of the VOC, as only a small proportion of these variants is detected using whole genome sequencing, which lags approximately two weeks behind the initial test date. Results show that the age and sex distribution of VOC 202012/01, as determined by SGTF, is similar that of other variants in circulation over the same period. Analyses using contact tracing data showed higher transmissibility (secondary attack rates) where the index case has the variant strain, from around 11% to 15% of named contacts.

Since first reported on 18 December 2020, variant 501Y.V2 has been detected in 20 countries, territories and areas across four of the six WHO regions (Figure 4). From preliminary and ongoing investigations in South Africa, it is possible that the 501Y.V2 variant is more transmissible than variants circulating in South Africa previously. Moreover, while this new variant does not appear to cause more severe illness, the observed rapid increases in case numbers has placed health systems under pressure.

On 9 January, Japan notified WHO of a new SARS-CoV-2 variant within lineage B.1.1.28 (initially reported as B.1.1.248) detected in four travelers arriving from Brazil. This variant has 12 mutations to the spike protein, including three mutations of concern in common with VOC 202012/01 and 501Y.V2, i.e.: K417N/T, E484K and N501Y, which may impact transmissibility and host immune response. Researchers in Brazil have additionally reported the emergence of a similar variant also with a E484K mutation, which has likely evolved independently of the variant detected among Japanese travelers. The extent and public health significance of these new variants require further investigation.

It is well known that viruses constantly change through mutation, and so the emergence of new variants is an expected occurrence. Many mutations have no impact on the virus itself while some could be detrimental to the virus and few may result in an advantage to the virus. These variants of concern identified in different countries highlight the importance of increasing diagnostic capacity and systematic sequencing of SARS-CoV-2 where capacity allows, as well as the timely sharing of sequence data internationally.

Systematic sequencing should be considered for a subset of incoming travellers, as well as community-based samples to ascertain the existence and extent of local transmission. The geographical extent of both VOC 202012/01 and 501Y.V2 reported above is likely underestimated given a bias toward countries/territories/areas detecting the variants with sequencing capacity, and where surveillance systems have been adapted to detect these new variants. Irrespective of sequencing capacity in countries, surveillance through established systems and regular epidemiology analyses should continue to inform adjustments to public health and social measures. Research is ongoing to determine the impact of new variants on transmission, disease severity as well as any potential impacts on vaccines, therapeutics and diagnostics. These efforts will require coordination of research between WHO, partners and groups of international scientists (WHO Virus Evolution Working Group).

Figure 3. Countries, territories and areas reporting SARS-CoV-2 202012/01 variant as of 12 January 2021

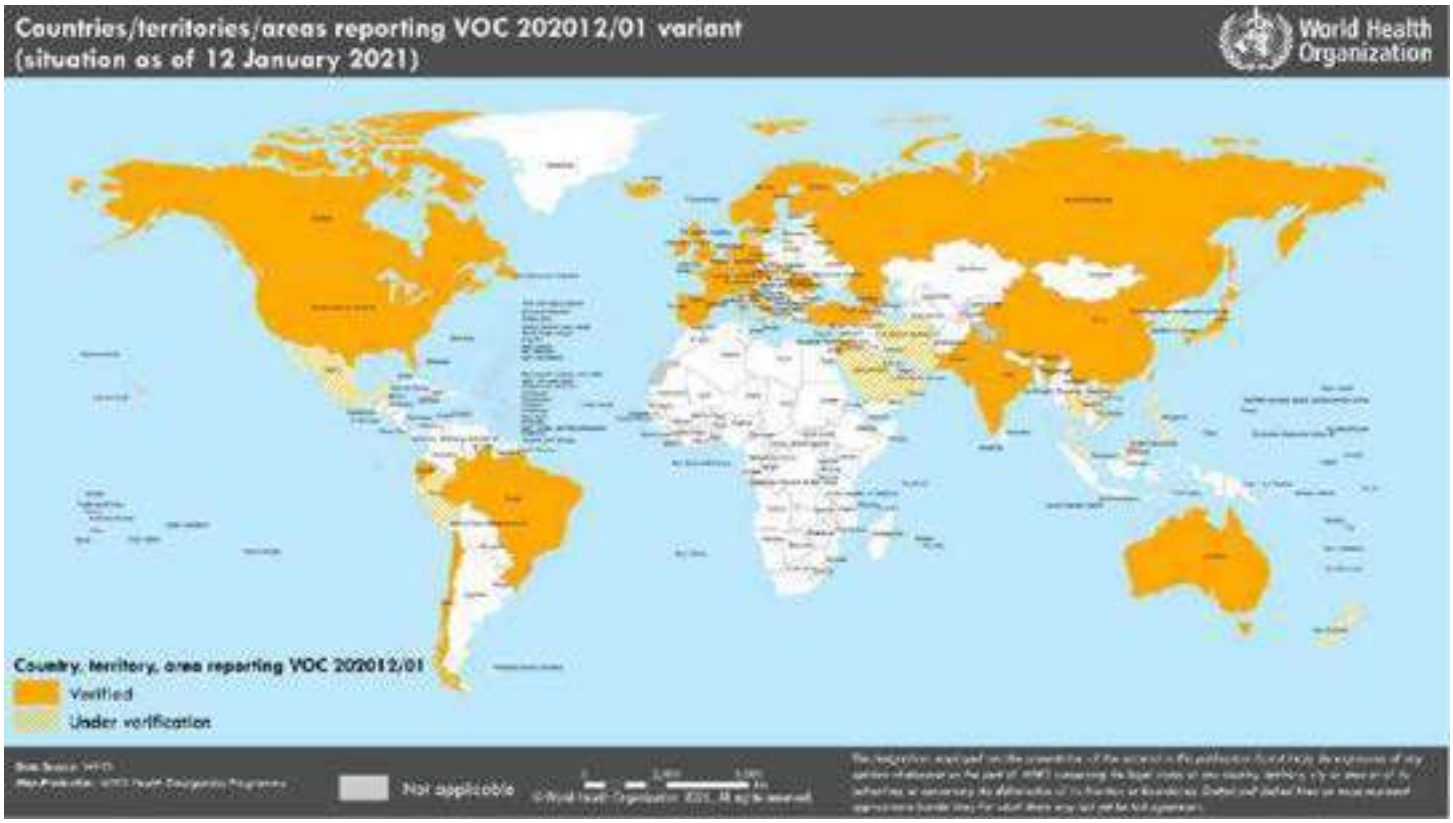
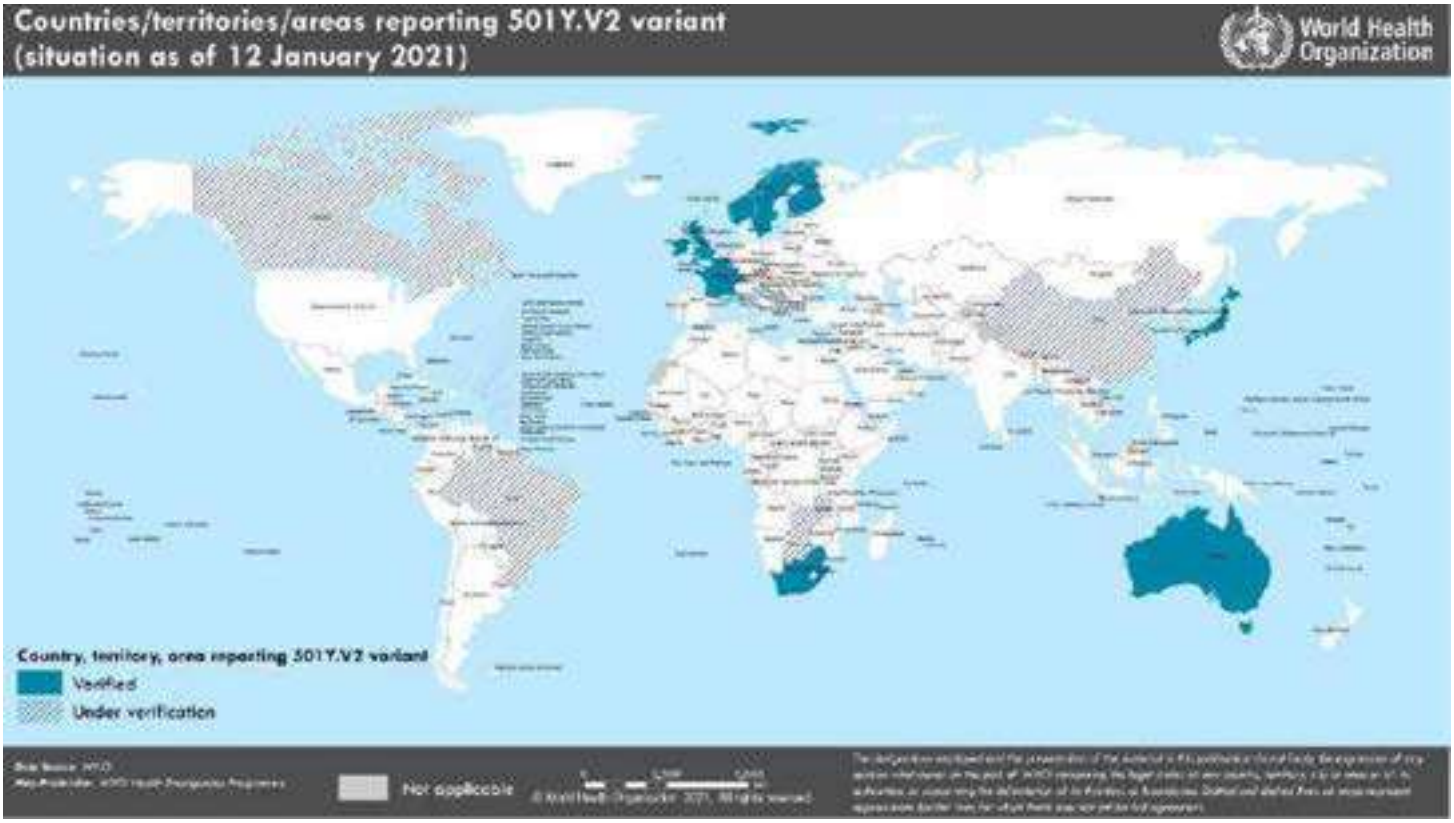


Figure 4. Countries, territories and areas reporting SARS-CoV-2 501Y.V2 variant as of 12 January 2021

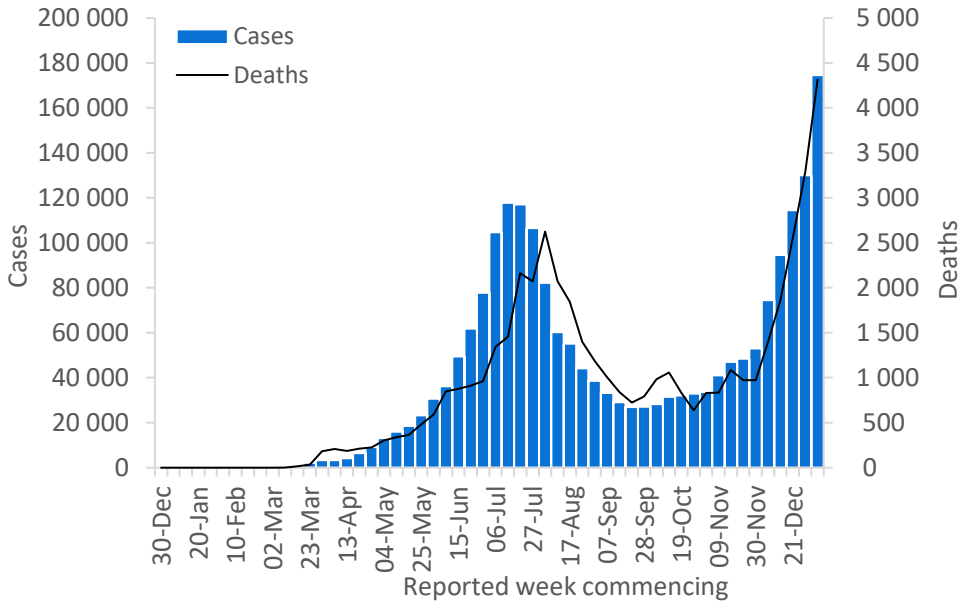


Situation by WHO Region

African Region

In the past week, the African Region reported the highest percentage increases in both cases and deaths compared to the previous week. Over 174 000 new cases and over 4300 deaths were reported, increases of 34% and 31% respectively. Cases in the Region have been increasing since mid-September 2020 but steeper increases have been observed since late November. The highest numbers of new cases were reported in South Africa (125 287 new cases; 211.2 new cases per 100 000 population; a 27% increase), Nigeria (8315 new cases; 4.0 new cases per 100 000; a 49% increase) and Zimbabwe (6008 new cases; 40.4 new cases per 100 000; a 293% increase).

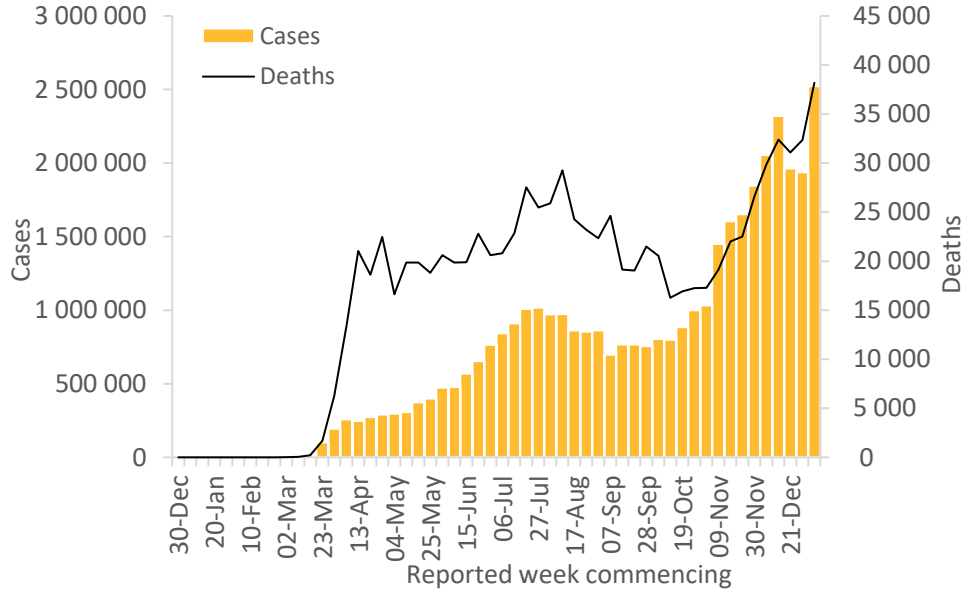
The countries reporting the highest number of new deaths in the past week were South Africa (3649 new deaths; 6.2 new deaths per 100 000; a 37% increase), Zimbabwe (106 new deaths; 0.7 new deaths per 100 000; a 194% increase) and Zambia (72 new deaths; 0.4 new deaths per 100 000; a 620% increase).



Region of the Americas

Over 2.5 million new cases and over 38 000 new deaths were reported in the Region of the Americas this week, a 30% and 18% increase respectively, compared to the previous week. The countries reporting the highest number of new cases in the past week were the United States of America (1 786 773 new cases; 539.8 new cases per 100 000 population; a 35% increase), Brazil (313 130 new cases; 147.3 new cases per 100 000; a 24% increase) and Colombia (100 688 new cases; 197.9 new cases per 100 000; a 26% increase).

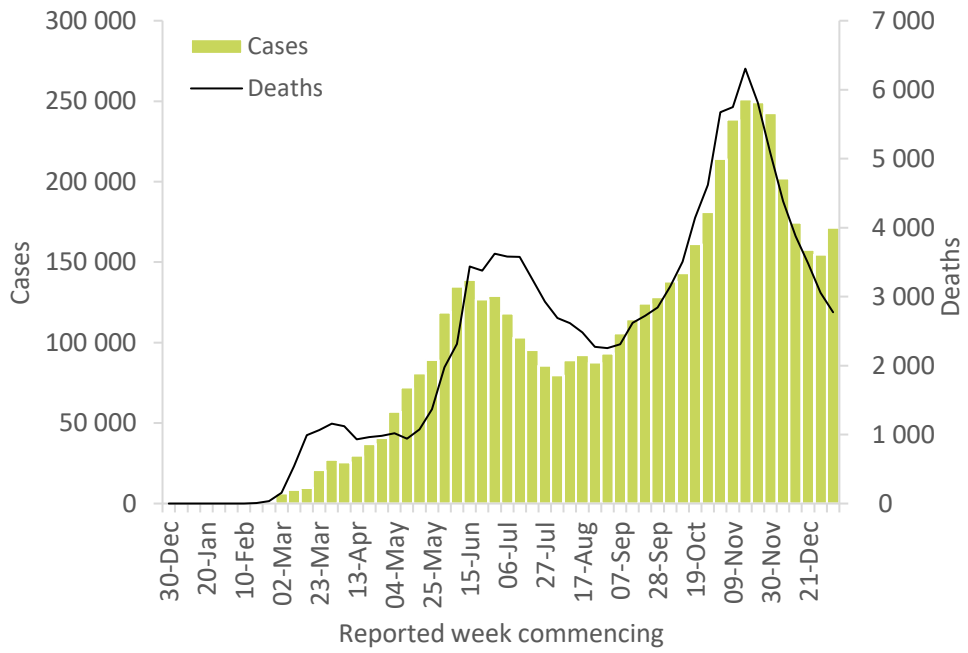
The highest number of new deaths this week were reported in the United States of America (20 633 new deaths; 6.2 new deaths per 100 000; a 20% increase), Brazil (6049 new deaths; 2.8 new deaths per 100 000; a 23% increase) and Mexico (5562 new deaths; 4.3 new deaths per 100 000; a 19% increase).



Eastern Mediterranean Region

In the past week, the Eastern Mediterranean Region reported over 171 000 new cases, an increase of 11% after a sustained decrease in cases from 23 November through the week of 28 December 2020. The new deaths continue to decrease for the seventh consecutive week with over 2700 new deaths (9% decrease) reported this week. The three countries reporting the highest number of new cases were Iran (42 964 new cases, 51.2 new cases per 100 000 population, a 1% increase), Lebanon (29 145 new cases, 427.0 new cases per 100 000, 72% increase) and United Arab Emirates (16 061 new cases, 162.4 new cases per 100 000, 49 % increase). These three countries accounted for almost half (52%) of the new weekly cases in the Region.

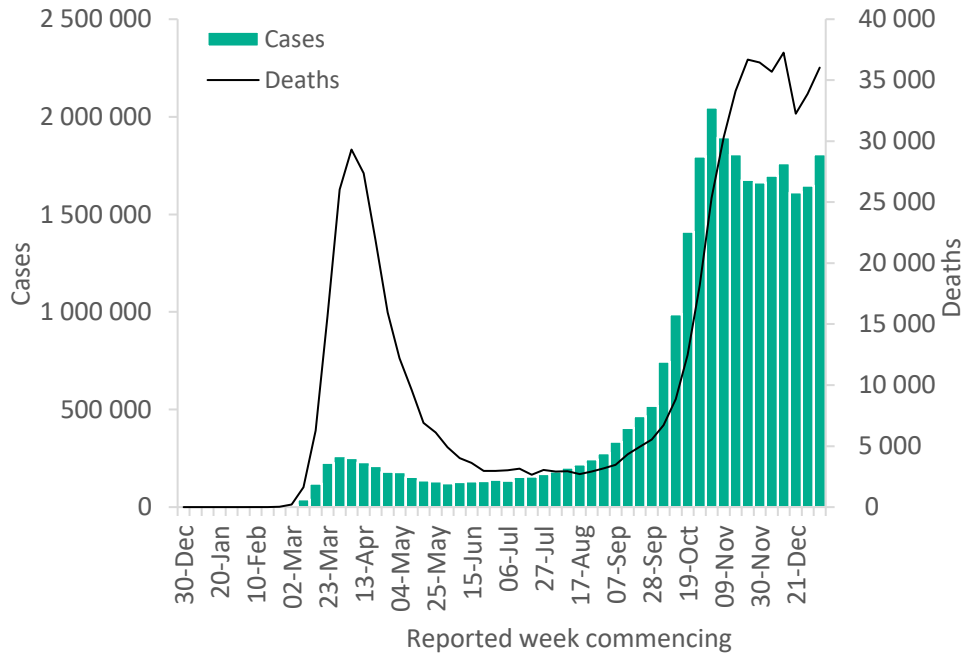
The highest number of new deaths were reported in Iran (662 new deaths, 0.8 new death per 100 000 population, 23% decrease) followed by Pakistan (340 new deaths, 0.2 new death per 100 000, 23% decrease) and Egypt (401 new deaths, 0.4 new death per 100 000, a 3 % increase). These countries accounted for almost 60% of deaths reported in the Region.



European Region

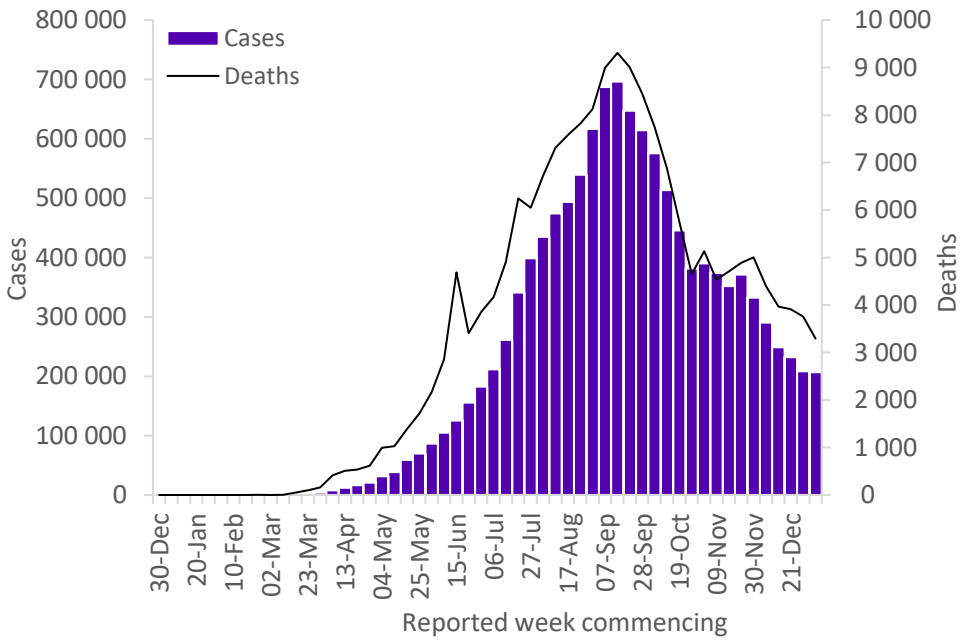
The European Region continues to report a substantial number of cases with over 1.8 million new cases and 36 000 new deaths, increases of 10% and 7% compared to the previous week, respectively. The three countries reporting the highest number of new cases remain the same as last week with United Kingdom (417 620 new cases; 615.2 new cases per 100 000, 21% increase), Russian Federation (165 167 new cases, 113.2 new cases per 100 000, 11% decrease) and Germany (142 861 new cases, 170.5 new cases per 100 000, 14% increase). These three countries accounted for almost 40% of all cases reported in the region with the United Kingdom accounting for 23% of all new cases.

The highest numbers of deaths were reported from the United Kingdom (6298 new deaths; 9.3 new deaths per 100 000, 51% increase), Germany (6071 new deaths; 7.2 new deaths per 100 000, 35% increase), and Italy (3409 new deaths; 5.6 new deaths per 100 000, a 1 % increase).



South-East Asia Region

The South-East Asia Region reported similar numbers of new cases and deaths, with an overall declining trend observed since early September 2020. Just over 200 000 new cases and 3200 new deaths were reported in the past week, a 1% and 12% decrease respectively, compared to the previous week. The three countries reporting the highest number of new cases and new deaths were India (126 319 new cases; 9.2 new cases per 100 000, a 7% decrease; 1564 new deaths; 0.1 new death per 100 000, a 14% decrease), Indonesia (59 913 new cases; 21.9 new cases per 100 000; a 16% increase; 1392 new deaths; 0.5 new death per 100 000, a 11% decrease) and Bangladesh (6198 new cases; 3.8 new cases per 100 000; a 13% decrease; 157 new deaths; 0.1 new death per 100 000; an 8% decrease). India has consistently reported the highest number of new cases and deaths cumulatively in the region since the end of the first week of April 2020.



Western Pacific Region

In the past week, the Western Pacific Region reported an increase in the number of new cases by 36% (over 71 000) and new deaths by 14% (over 800) compared to the previous week. An upward trend in new weekly cases has been reported since late October 2020. The three countries reporting the highest numbers of new cases this week were Japan (39 821 new cases; 31.5 new cases per 100 000, a 68% increase), Malaysia (16 186 new cases; 50.0 new cases per 100 000, a 20% increase) and the Philippines (8881 new cases; 8.1 new cases per 100 000, a 12% increase).

The three countries reporting the highest numbers of new deaths this week were Japan (448 new deaths; 0.4 new deaths per 100 000, a 34% increase), the Republic of Korea (163 new deaths; 0.3 new deaths per 100 000, a 6% increase) and the Philippines (145 new deaths; 0.1 new deaths per 100 000, a 22% decrease).

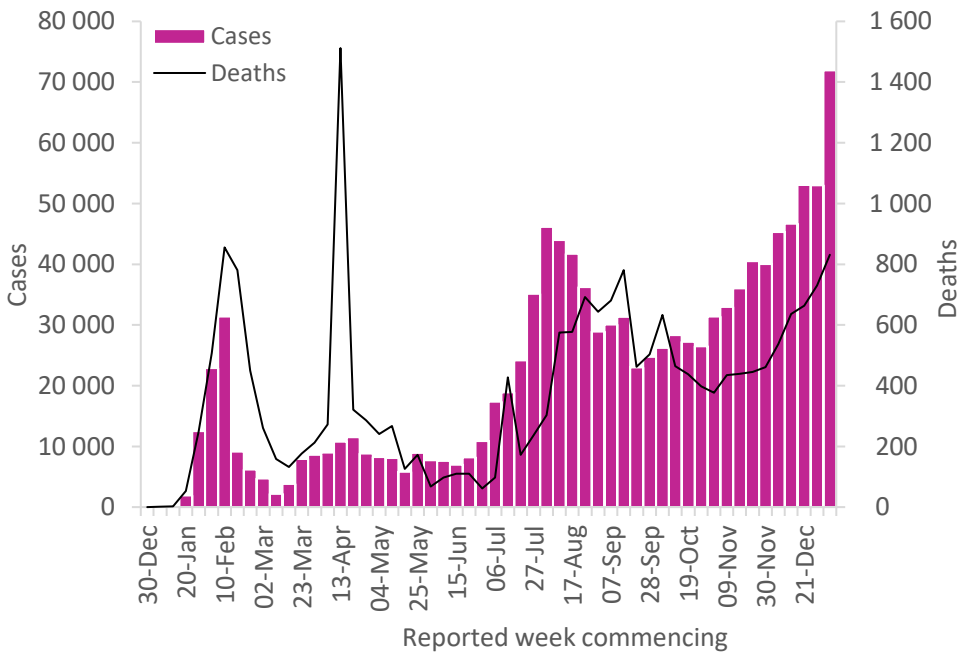


Table 2. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 10 January 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**174 644**	**2 135 878**	**190.4**	**4 313**	**47 905**	**4.3**	
South Africa	125 287	1 214 176	2 047.2	3 649	32 824	55.3	Community transmission
Nigeria	8 315	97 478	47.3	40	1 342	0.7	Community transmission
Zimbabwe	6 008	20 499	137.9	106	483	3.2	Community transmission
Zambia	5 337	26 567	144.5	72	464	2.5	Community transmission
Namibia	3 069	27 723	1 091.1	38	251	9.9	Community transmission
Ethiopia	2 743	127 792	111.2	41	1 985	1.7	Community transmission
Mozambique	2 393	21 361	68.3	19	187	0.6	Community transmission
Uganda	1 842	37 554	82.1	27	301	0.7	Community transmission
Algeria	1 754	101 913	232.4	34	2 803	6.4	Community transmission
Malawi	1 595	8 306	43.4	28	220	1.2	Community transmission
Kenya	1 506	98 184	182.6	19	1 704	3.2	Community transmission
Senegal	1 489	21 000	125.4	43	459	2.7	Community transmission
Eswatini	1 469	11 180	963.7	64	291	25.1	Community transmission
Botswana	1 246	16 051	682.5	6	48	2.0	Community transmission
Democratic Republic of the Congo	1 119	18 967	21.2	19	610	0.7	Community transmission
Côte d'Ivoire	1 004	23 254	88.2	1	138	0.5	Community transmission
Congo	960	7 160	129.8	0	100	1.8	Community transmission
Burkina Faso	926	7 866	37.6	3	89	0.4	Community transmission
Rwanda	894	9 461	73.0	20	118	0.9	Clusters of cases
Mauritania	850	15 214	327.2	31	378	8.1	Community transmission
Ghana	708	55 772	179.5	1	336	1.1	Community transmission
Angola	548	18 156	55.2	9	416	1.3	Community transmission
Cabo Verde	354	12 237	2 201.0	1	114	20.5	Community transmission
Chad	341	2 510	15.3	3	107	0.7	Community transmission
Mali	339	7 565	37.4	19	295	1.5	Community transmission
Comoros	286	1 150	132.2	5	18	2.1	Community transmission
Togo	249	3 932	47.5	4	72	0.9	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Sierra Leone	243	2 803	35.1	1	77	1.0	Community transmission
Eritrea	236	1 556	43.9	3	6	0.2	Sporadic cases
Seychelles	218	502	510.4	1	1	1.0	Sporadic cases
Burundi	153	986	8.3	0	2	0.0	Community transmission
Gabon	123	9 694	435.5	2	66	3.0	Community transmission
Guinea	120	13 904	105.9	0	81	0.6	Community transmission
Niger	114	3 322	13.7	2	104	0.4	Community transmission
South Sudan	82	3 640	32.5	0	63	0.6	Community transmission
Gambia	55	3 857	159.6	1	125	5.2	Community transmission
Benin	53	3 304	27.3	0	44	0.4	Community transmission
Sao Tome and Principe	30	1 054	480.9	0	17	7.8	Community transmission
Equatorial Guinea	12	5 289	377.0	0	86	6.1	Community transmission
Mauritius	12	539	42.4	0	10	0.8	Clusters of cases
Central African Republic	10	4 973	103.0	0	63	1.3	Community transmission
Cameroon	0	26 848	101.1	0	448	1.7	Community transmission
Guinea-Bissau	0	2 447	124.3	0	45	2.3	Community transmission
Lesotho	0	2 577	120.3	0	50	2.3	Community transmission
Liberia	0	1 800	35.6	0	83	1.6	Community transmission
Madagascar	0	17 767	64.2	0	262	0.9	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Community transmission
Territories[iii]							
Mayotte	342	6 232	2 284.3	1	56	20.5	Clusters of cases
Réunion	210	9 247	1 032.8	0	42	4.7	Clusters of cases
Americas	**2 522 297**	**38 861 668**	**3 799.6**	**38 183**	**910 741**	**89.0**	
United States of America	1 786 773	21 761 186	6 574.3	20 633	365 886	110.5	Community transmission
Brazil	313 130	8 013 708	3 770.1	6 049	201 460	94.8	Community transmission
Colombia	100 688	1 755 568	3 450.2	1 936	45 431	89.3	Community transmission
Argentina	73 758	1 703 352	3 768.8	954	44 273	98.0	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Mexico	70 746	1 507 931	1 169.5	5 562	132 069	102.4	Community transmission
Canada	56 071	644 348	1 707.2	966	16 707	44.3	Community transmission
Panama	23 304	273 037	6 328.0	299	4 363	101.1	Community transmission
Chile	21 840	637 742	3 336.1	313	17 037	89.1	Community transmission
Peru	12 272	1 029 471	3 122.3	421	38 145	115.7	Community transmission
Bolivia (Plurinational State of)	9 099	171 154	1 466.2	142	9 328	79.9	Community transmission
Dominican Republic	7 679	180 644	1 665.2	8	2 424	22.3	Community transmission
Costa Rica	7 023	177 614	3 486.6	112	2 305	45.2	Community transmission
Ecuador	5 836	220 349	1 248.9	118	14 177	80.4	Community transmission
Paraguay	5 645	113 994	1 598.2	110	2 372	33.3	Community transmission
Guatemala	4 811	143 127	798.9	172	4 999	27.9	Community transmission
Uruguay	4 586	24 339	700.7	47	240	6.9	Community transmission
Honduras	3 422	126 396	1 276.1	106	3 266	33.0	Community transmission
El Salvador	2 332	48 574	748.9	57	1 408	21.7	Community transmission
Venezuela (Bolivarian Republic of)	2 105	115 667	406.8	28	1 056	3.7	Community transmission
Cuba	1 963	14 188	125.3	2	148	1.3	Clusters of cases
Suriname	577	6 854	1 168.4	8	131	22.3	Clusters of cases
Jamaica	524	13 455	454.4	8	311	10.5	Community transmission
Barbados	413	808	281.2	0	7	2.4	Clusters of cases
Belize	395	11 202	2 817.2	22	271	68.2	Community transmission
Haiti	164	10 241	89.8	1	237	2.1	Community transmission
Guyana	118	6 469	822.5	3	167	21.2	Clusters of cases
Saint Vincent and the Grenadines	82	204	183.9	0	0	0.0	Sporadic cases
Bahamas	70	7 969	2 026.5	4	175	44.5	Clusters of cases
Trinidad and Tobago	61	7 219	515.8	0	127	9.1	Community transmission
Saint Lucia	42	395	215.1	0	5	2.7	Sporadic cases
Nicaragua	38	4 867	73.5	1	166	2.5	Community transmission
Antigua and Barbuda	10	169	172.6	0	5	5.1	Sporadic cases
Dominica	10	106	147.2	0	0	0.0	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Grenada	5	135	120.0	0	1	0.9	Sporadic cases
Saint Kitts and Nevis	1	34	63.9	0	0	0.0	Sporadic cases
Territories[iii]							
Puerto Rico	4 698	82 630	2 888.3	90	1 616	56.5	Community transmission
French Guiana	840	14 113	4 725.1	3	74	24.8	Community transmission
Aruba	441	5 883	5 510.2	1	50	46.8	Community transmission
Curaçao	175	4 405	2 684.5	4	18	11.0	Community transmission
United States Virgin Islands	107	2 143	2 052.2	1	24	23.0	Community transmission
Sint Maarten	97	1 531	3 570.3	0	27	63.0	Community transmission
Bonaire	89	254	1 214.4	0	3	14.3	Sporadic cases
Guadeloupe	82	8 702	2 174.8	0	155	38.7	Community transmission
Turks and Caicos Islands	57	965	2 492.4	0	6	15.5	Clusters of cases
Bermuda	42	646	1 037.4	2	12	19.3	Clusters of cases
Martinique	26	6 117	1 630.0	0	43	11.5	Community transmission
British Virgin Islands	21	114	377.0	0	1	3.3	Clusters of cases
Cayman Islands	21	359	546.3	0	2	3.0	Sporadic cases
Saint Martin	7	1 002	2 591.9	0	12	31.0	Community transmission
Saint Barthélemy	1	191	1 932.2	0	0	0.0	Sporadic cases
Anguilla	0	15	100.0	0	0	0.0	Sporadic cases
Falkland Islands (Malvinas)	0	29	832.6	0	0	0.0	No cases
Montserrat	0	13	260.1	0	1	20.0	No cases
Saba	0	5	258.7	0	0	0.0	No cases
Saint Pierre and Miquelon	0	16	276.1	0	0	0.0	Sporadic cases
Sint Eustatius	0	19	605.3	0	0	0.0	Sporadic cases
Eastern Mediterranean	**171 280**	**5 149 132**	**704.6**	**2 775**	**124 836**	**17.1**	
Iran (Islamic Republic of)	42 964	1 280 438	1 524.5	662	56 100	66.8	Community transmission
Lebanon	29 145	215 553	3 158.1	114	1 590	23.3	Community transmission
United Arab Emirates	16 061	227 702	2 302.3	28	702	7.1	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Tunisia	15 535	157 514	1 332.8	388	5 153	43.6	Community transmission
Pakistan	15 155	499 517	226.1	340	10 598	4.8	Clusters of cases
Morocco	9 496	451 637	1 223.6	257	7 709	20.9	Clusters of cases
Jordan	9 291	305 959	2 998.7	132	4 009	39.3	Community transmission
Egypt	7 921	148 799	145.4	401	8 142	8.0	Clusters of cases
Iraq	5 298	602 331	1 497.5	52	12 881	32.0	Community transmission
Libya	3 258	104 002	1 513.6	81	1 568	22.8	Community transmission
Kuwait	2 826	153 900	3 603.7	5	942	22.1	Community transmission
Bahrain	2 133	95 317	5 601.7	3	355	20.9	Clusters of cases
Qatar	1 432	145 672	5 056.2	1	246	8.5	Community transmission
Oman	1 203	130 070	2 547.1	6	1 505	29.5	Community transmission
Afghanistan	780	53 489	137.4	56	2 277	5.8	Clusters of cases
Saudi Arabia	713	363 692	1 044.7	47	6 286	18.1	Sporadic cases
Syrian Arab Republic	658	12 274	70.1	45	768	4.4	Community transmission
Djibouti	25	5 866	593.7	0	61	6.2	Clusters of cases
Somalia	12	4 726	29.7	0	130	0.8	Community transmission
Yemen	3	2 108	7.1	0	611	2.0	Sporadic cases
Sudan	0	23 316	53.2	0	1 468	3.3	Community transmission
Territories[iii]							
occupied Palestinian territory	7 371	165 250	3 239.3	157	1 735	34.0	Community transmission
Europe	**1 806 928**	**28 797 583**	**3 085.2**	**36 041**	**626 804**	**67.2**	
The United Kingdom	417 620	3 017 413	4 444.8	6 298	80 868	119.1	Community transmission
Russian Federation	165 167	3 401 954	2 331.2	3 331	61 837	42.4	Clusters of cases
Germany	142 861	1 908 527	2 277.9	6 071	40 343	48.2	Community transmission
France	122 565	2 721 692	4 169.7	2 674	67 217	103.0	Community transmission
Italy	116 665	2 257 866	3 734.4	3 409	78 394	129.7	Clusters of cases
Czechia	90 684	831 165	7 761.4	1 155	13 115	122.5	Community transmission
Turkey	85 083	1 502 780	1 781.8	1 336	22 631	26.8	Community transmission
Poland	66 960	1 385 522	3 660.9	2 070	31 189	82.4	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Spain	59 343	2 025 560	4 332.3	354	51 690	110.6	Community transmission
Netherlands	52 774	866 190	5 055.1	751	12 307	71.8	Community transmission
Portugal	52 317	476 187	4 670.0	656	7 701	75.5	Clusters of cases
Israel	49 605	481 306	5 560.7	250	3 631	42.0	Community transmission
Ireland	43 801	140 727	2 850.0	84	2 336	47.3	Community transmission
Ukraine	40 933	1 115 026	2 549.6	913	19 767	45.2	Community transmission
Sweden	32 004	489 471	4 846.6	69	9 433	93.4	Community transmission
Romania	30 807	668 202	3 473.4	673	16 592	86.2	Community transmission
Slovakia	20 746	208 209	3 813.6	601	2 918	53.4	Clusters of cases
Switzerland	20 737	475 604	5 495.4	402	7 545	87.2	Community transmission
Serbia	15 990	357 894	5 139.4	260	3 548	50.9	Community transmission
Austria	15 147	378 110	4 198.2	400	6 614	73.4	Community transmission
Hungary	14 242	342 237	3 542.7	764	10 648	110.2	Community transmission
Slovenia	14 195	139 281	6 699.6	258	3 147	151.4	Clusters of cases
Belgium	13 590	664 261	5 731.5	337	20 069	173.2	Community transmission
Lithuania	13 046	159 671	5 865.3	262	2 200	80.8	Community transmission
Denmark	12 699	180 240	3 111.8	197	1 542	26.6	Community transmission
Belarus	12 243	210 368	2 226.3	65	1 507	15.9	Community transmission
Georgia	10 060	239 229	5 997.0	170	2 773	69.5	Community transmission
Croatia	7 035	219 993	5 358.8	296	4 368	106.4	Community transmission
Latvia	7 023	48 952	2 595.3	150	818	43.4	Community transmission
Kazakhstan	5 806	209 369	1 115.0	40	2 885	15.4	Clusters of cases
Bulgaria	5 526	208 406	2 999.3	453	8 097	116.5	Clusters of cases
Norway	5 514	53 792	992.2	35	471	8.7	Community transmission
Azerbaijan	4 588	224 050	2 209.7	187	2 890	28.5	Clusters of cases
Greece	4 584	144 293	1 384.4	306	5 227	50.1	Community transmission
Estonia	4 385	33 516	2 526.6	39	283	21.3	Clusters of cases
Albania	4 042	63 033	2 190.3	43	1 233	42.8	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Cyprus	3 566	27 011	2 237.2	18	147	12.2	Clusters of cases
Republic of Moldova	3 399	149 093	3 695.9	110	3 130	77.6	Community transmission
Bosnia and Herzegovina	3 034	115 379	3 516.8	205	4 305	131.2	Community transmission
Montenegro	2 989	52 468	8 353.9	36	725	115.4	Clusters of cases
North Macedonia	2 361	86 150	4 135.1	92	2 614	125.5	Community transmission
Armenia	2 104	162 131	5 471.4	79	2 929	98.8	Community transmission
Finland	1 464	38 068	687.1	25	586	10.6	Community transmission
Malta	1 399	14 396	3 260.4	13	233	52.8	Clusters of cases
Luxembourg	1 038	47 876	7 648.2	27	530	84.7	Community transmission
Kyrgyzstan	968	82 273	1 261.0	10	1 369	21.0	Clusters of cases
Andorra	420	8 586	11 112.4	1	85	110.0	Community transmission
Uzbekistan	334	77 572	231.8	3	617	1.8	Clusters of cases
San Marino	187	2 650	7 808.4	3	64	188.6	Community transmission
Liechtenstein	158	2 379	6 238.0	5	38	99.6	Sporadic cases
Monaco	152	1 053	2 683.2	1	5	12.7	Sporadic cases
Iceland	126	5 880	1 723.1	0	29	8.5	Community transmission
Tajikistan	31	13 705	143.7	0	91	1.0	Pending
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Territories[iii]							
Kosovo	1 792	53 480	2 874.7	35	1 365	73.4	Community transmission
Gibraltar	809	3 021	8 966.8	5	12	35.6	Clusters of cases
Jersey	161	2 921	2 684.7	13	57	52.4	Community transmission
Faroe Islands	32	646	1 322.0	1	1	2.0	Sporadic cases
Isle of Man	12	392	461.0	0	25	29.4	No cases
Guernsey	3	302	477.9	0	13	20.6	Community transmission
Greenland	2	29	51.1	0	0	0.0	No cases
South-East Asia	**206 670**	**12 257 684**	**606.4**	**3 293**	**187 786**	**9.3**	
India	126 319	10 450 284	757.3	1 564	150 999	10.9	Clusters of cases
Indonesia	59 913	818 386	299.2	1 392	23 947	8.8	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Bangladesh	6 198	521 382	316.6	157	7 756	4.7	Community transmission
Myanmar	4 433	130 049	239.0	115	2 826	5.2	Clusters of cases
Sri Lanka	3 469	47 840	223.4	18	229	1.1	Clusters of cases
Nepal	3 083	264 521	907.9	42	1 912	6.6	Clusters of cases
Thailand	2 919	10 298	14.8	3	67	0.1	Clusters of cases
Maldives	231	14 065	2 602.0	1	49	9.1	Clusters of cases
Bhutan	100	810	105.0	1	1	0.1	Clusters of cases
Timor-Leste	5	49	3.7	0	0	0.0	Sporadic cases
Western Pacific	**71 939**	**1 184 662**	**60.3**	**831**	**21 119**	**1.1**	
Japan	39 821	280 775	222.0	448	3 996	3.2	Clusters of cases
Malaysia	16 186	133 559	412.7	59	542	1.7	Clusters of cases
Philippines	8 881	485 797	443.3	145	9 398	8.6	Community transmission
Republic of Korea	5 420	68 663	133.9	163	1 125	2.2	Clusters of cases
China	624	97 518	6.6	7	4 798	0.3	Clusters of cases
Singapore	203	58 865	1 006.2	0	29	0.5	Sporadic cases
Mongolia	166	1 408	42.9	0	0	0.0	Clusters of cases
Australia	120	28 582	112.1	0	909	3.6	Clusters of cases
New Zealand	37	1 862	38.6	0	25	0.5	Clusters of cases
Papua New Guinea	31	811	9.1	0	9	0.1	Community transmission
Viet Nam	31	1 513	1.6	0	35	0.0	Clusters of cases
Brunei Darussalam	16	173	39.5	0	3	0.7	Sporadic cases
Cambodia	10	391	2.3	0	0	0.0	Sporadic cases
Fiji	4	53	5.9	0	2	0.2	Sporadic cases
Lao People's Democratic Republic	0	41	0.6	0	0	0.0	Sporadic cases
Solomon Islands	0	17	2.5	0	0	0.0	No cases
Territories[iii]							
French Polynesia	315	17 241	6 137.6	8	122	43.4	Sporadic cases
Guam	70	7 218	4 276.7	1	124	73.5	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Northern Mariana Islands (Commonwealth of the)	3	125	217.2	0	2	3.5	Pending
Micronesia (Federated States of)	1	1	0.9	0	0	0.0	No cases
Marshall Islands	0	4	6.8	0	0	0.0	No cases
New Caledonia	0	40	14.0	0	0	0.0	Sporadic cases
Vanuatu	0	1	0.3	0	0	0.0	No cases
Wallis and Futuna	0	4	35.6	0	0	0.0	Sporadic cases
Global	**4 953 758**	**88 387 352**	**1 133.9**	**85 436**	**1 919 204**	**24.6**	

**See *data, table and figure notes*

Key Weekly Updates

- WHO Director-General Dr Tedros Adhanom Ghebreyesus at the Member States briefing on COVID-19 - 7 January 2021

"Vaccines are giving us real hope of bringing the pandemic under control in the next 12 months."

- **COVAX, WHO's vaccines pillar of the Access to COVID-19 Tools (ACT) Accelerator**

COVAX – set up by GAVI, CEPI and WHO in April last year – has secured contracts of 2 billion doses of safe and effective COVID-19 vaccines

- **Pfizer-BioNTech COVID-19 vaccine**

WHO issues its first emergency use validation for a COVID-19 vaccine and emphasizes need for equitable global access
Who can take the Pfizer-BioNTech COVID-19 vaccine?
Interim recommendations for use of the Pfizer–BioNTech COVID-19 vaccine, BNT162b2, under Emergency Use Listing

- **Genomic sequencing**

Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
SARS-CoV-2 genomic sequencing for public health goals: Interim guidance, 8 January 2021

- **Infection prevention and control for long-term care facilities**

Infection prevention and control guidance for long-term care facilities in the context of COVID-19 update

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions
- African Region
- Eastern Mediterranean Region
- European Region
- Region of the Americas
- South-East Asia Region
- Western Pacific Region

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.
Global totals include 745 cases and 13 deaths reported from international conveyances.
The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps

represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case.

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g. laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 3 January 2021, 10 am CET

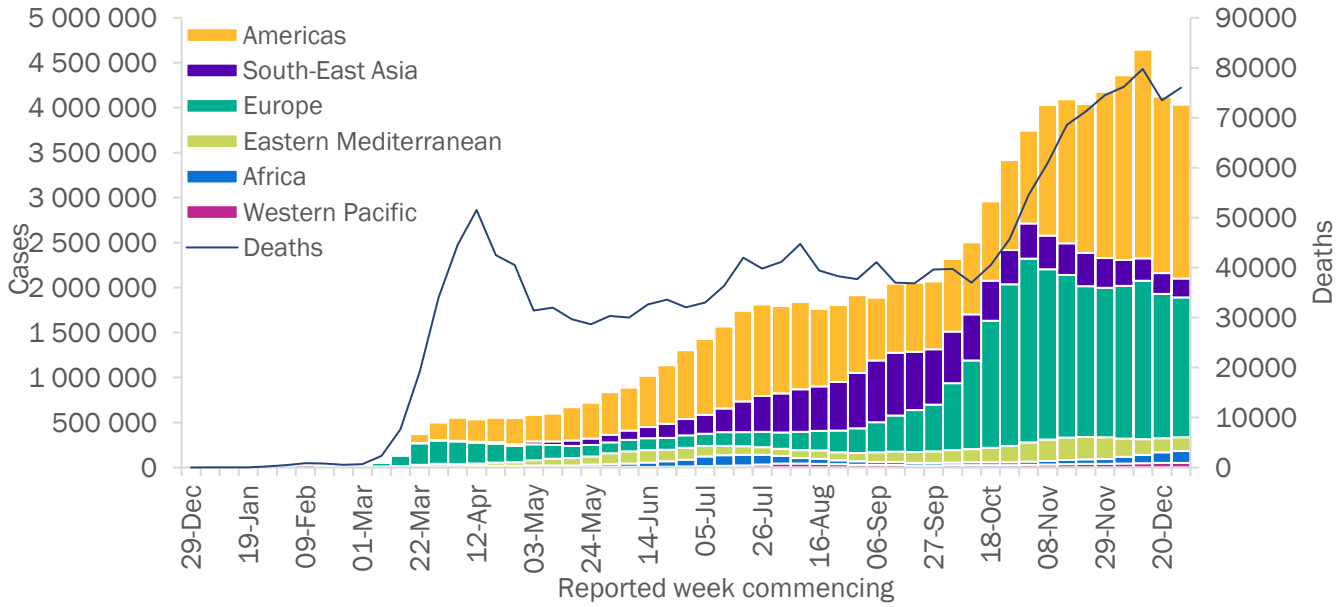
For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

For the third week in a row over 4 million new cases were reported globally, although this week saw a slight decrease compared to the previous week. However, this and other short-term trends in data should be interpreted with caution owing to the end-of-year holiday season, as numbers may be influenced by presentation, testing and reporting delays. The decrease seen last week in new deaths has been reversed with deaths rising by 3% to 76 000 (Figure 1, Table 1). The Region of the Americas accounted for 47% of all new cases and 42% of all new deaths globally in the past week. New cases and deaths remained high in the European Region, which accounted for 38% and 43% respectively, showing a slight decrease in new cases and a slight increase in new deaths. New cases and deaths continue to decline in the South-East Asia and Eastern Mediterranean regions. In the African Region, while both new cases and deaths remain low in absolute numbers, for the fourth week in a row, the Region is reporting the largest percentage increase globally in weekly reported case numbers and this week there was a further 13% increase in new cases and 28% increase in new deaths. In the Western Pacific Region, new cases remained comparable to the previous week, but new deaths rose by 10%. As we welcome the New Year, and look eagerly towards COVID-19 vaccination campaigns worldwide, the current epidemiological situation with near record numbers of new cases and deaths, makes it imperative to continue to adhere to safety measures to prevent further transmission and loss of life.

Figure 1: COVID-19 cases reported weekly by WHO Region, and global deaths, as of 3 January 2021**



Recent reports of different variants of SARS-CoV-2, the virus that causes COVID-19, have again raised interest in and concern about the impact of viral changes. In the last months, two different variants of SARS-CoV-2 have been reported to WHO as unusual public health events from the United Kingdom of Great Britain and Northern Ireland, referred to as VOC 202012/01, and the Republic of South Africa, named 501Y.V2. Preliminary epidemiologic, modelling, phylogenetic and clinical findings suggest that SARS-CoV-2 VOC 202012/01 has increased transmissibility, and preliminary data also indicates that there is no change in disease severity (as measured by length of hospitalization and 28-day case fatality), or occurrence of reinfection between variant cases compared to other SARS-CoV-2 viruses circulating in the United Kingdom. To date, outside of the United Kingdom, 40 countries across five of the six WHO regions have reported cases of VOC 202012/01, while outside of South Africa six countries, in two of the six WHO regions have reported cases of 501Y.V2. The authorities in both countries are conducting further epidemiological and virological investigations to further assess the transmissibility, severity, risk of reinfection and antibody response to these new variants, as well as potential impact on countermeasures, including diagnostics, therapeutics and vaccines.

In the past week, the five countries reporting the highest number of cases were the United States of America (with 1 325 424 cases, just under a third of global cases and unchanged from last week), the United Kingdom of Great Britain and Northern Ireland (343 784 cases, continuing last week's rapid increase with a 36% increase), Brazil (252 018 cases, an 11% decrease), the Russian Federation (186 539 cases, a 7% decrease) and India (136 115 cases, a 13% decrease).

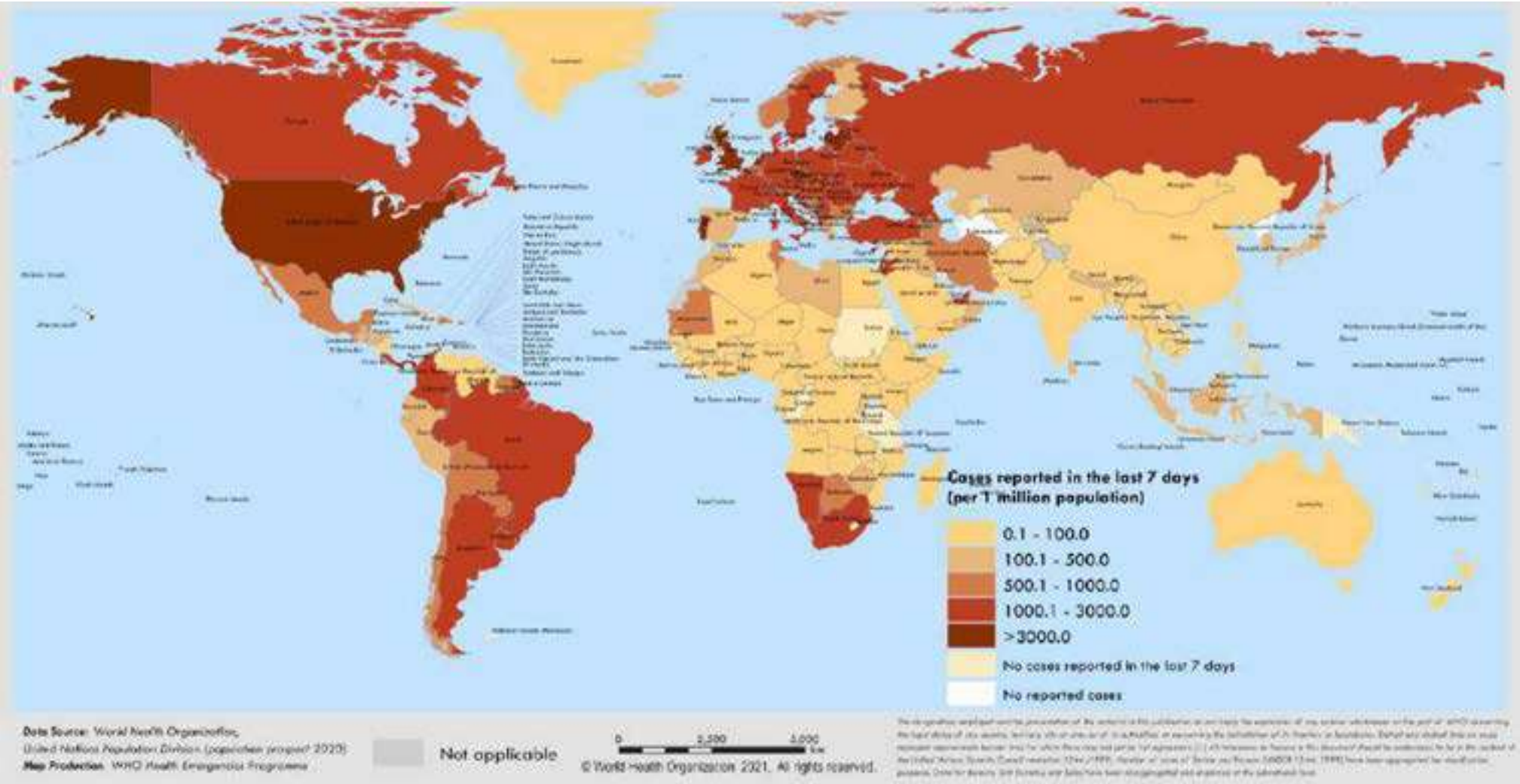
Additional Region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western Pacific Region.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 3 January 2021**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 935 621 (47%)	-1%	36 337 439 (43%)	32 283 (42%)	3%	872 486 (47%)
Europe	1 553 332 (38%)	-3%	26 885 471 (32%)	32 898 (43%)	3%	588 770 (32%)
South-East Asia	208 592 (5%)	-10%	12 051 014 (14%)	3 756 (4%)	-3%	184 493 (10%)
Eastern Mediterranean	154 695 (3%)	-1%	4 977 852 (5%)	3 057 (4%)	-12%	122 061 (6%)
Africa	130 007 (3%)	13%	1 961 234 (2%)	3 293 (4%)	28%	43 592 (2%)
Western Pacific	52 979 (1%)	0%	1 112 724 (1%)	730 (0%)	10%	20 288 (1%)
Global	**4 035 226 (100%)**	**-2%**	**83 326 479 (100%)**	**76 017 (100%)**	**3%**	**1 831 703 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*
***For all figures included in this report please see data, table and figure notes*

Figure 2. COVID-19 cases per 1 million population reported in the last seven days by countries, territories and areas, 28 December through 3 January 2021**

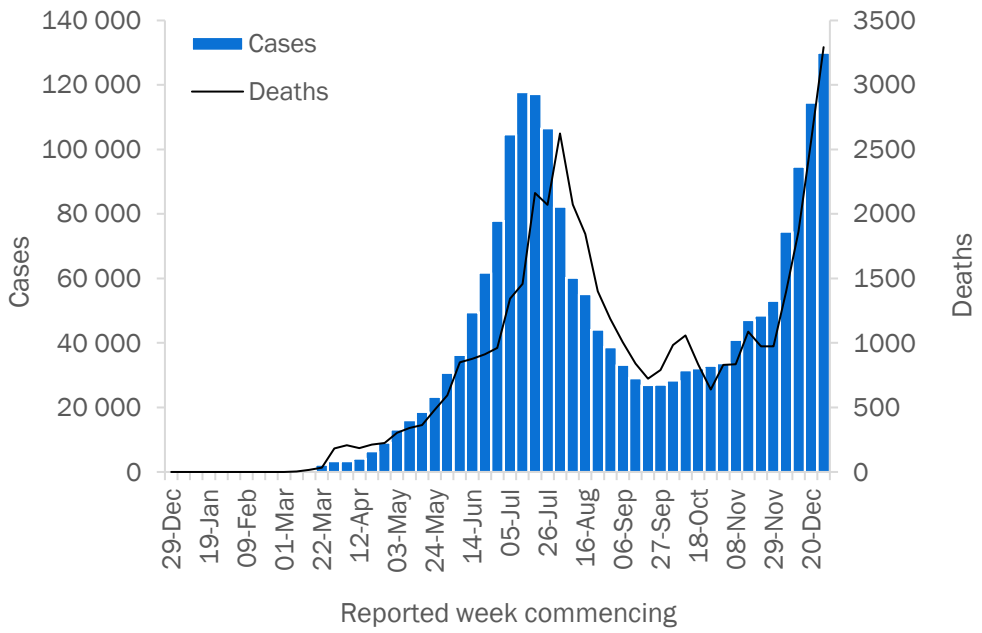


**See *data, table and figure notes*

Situation by WHO Region

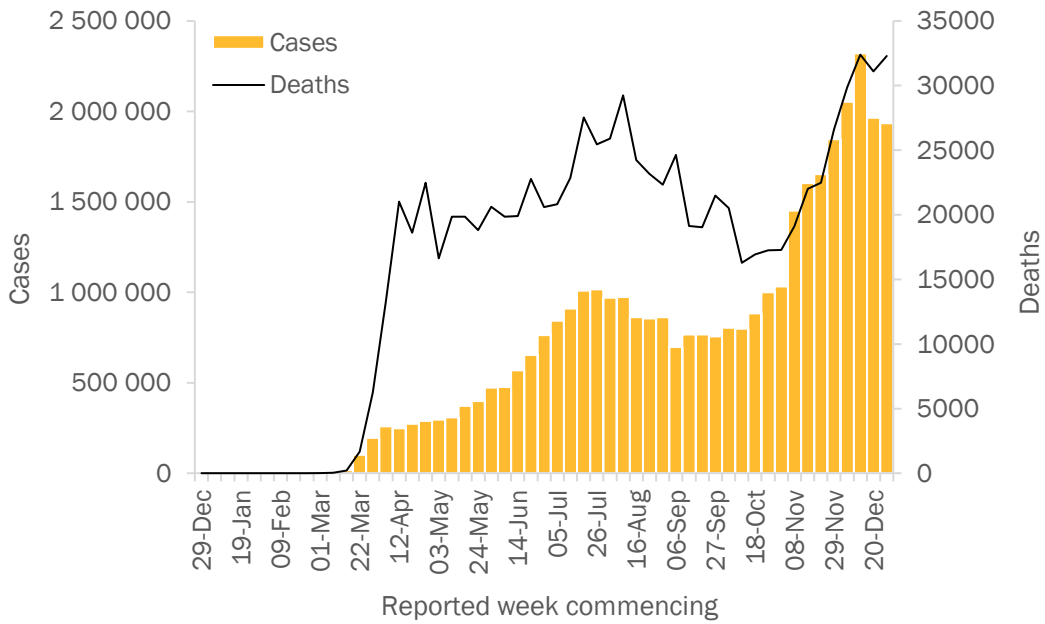
African Region

In the past week, over 130 000 new cases were reported in the African Region, a 13% increase compared to the previous week, and over 3000 deaths, a 4% increase over the previous week. In the past week, South Africa reported the highest number of new cases (93 978 new cases; 1585 new cases per 1 million population), Nigeria (5587 new cases; 27 new cases per 1 million), Mauritania (3393 new cases, 730 new cases per 1 million) and Namibia (3256 new cases, 1281 new cases per 1 million). The highest numbers of new deaths were reported from South Africa (2654 new deaths; 45 new deaths per 1 million), Mauritania (122 new deaths; 26 new deaths per 1 million) and the Kingdom of Eswatini (64 new deaths; 55 new deaths per 1 million).



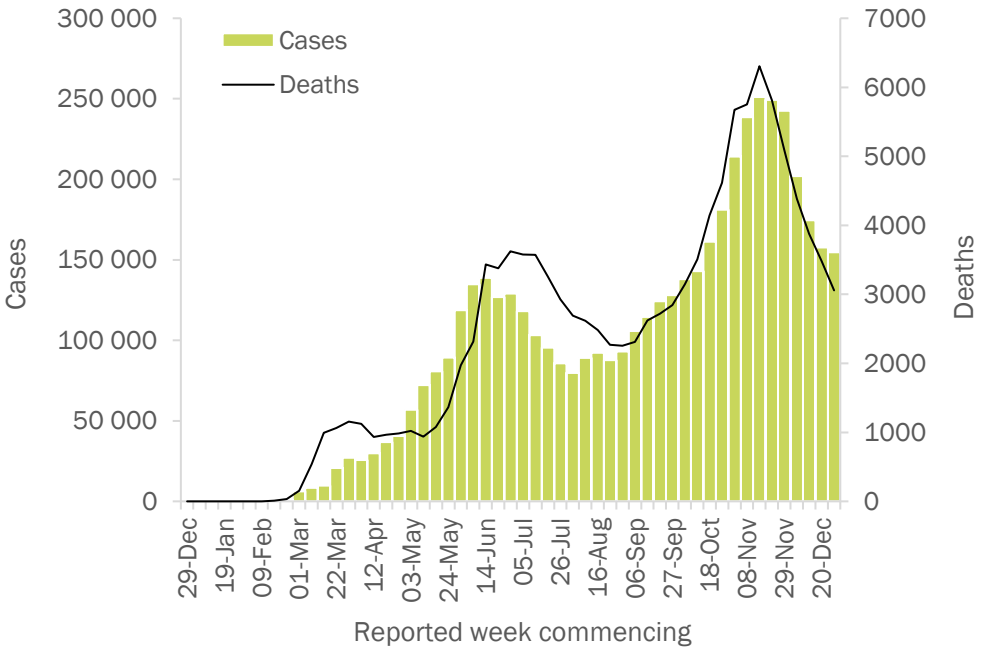
Region of the Americas

In the Region of the Americas, the number of new weekly cases remained at similar levels to last week with over 1.9 million new cases and 32 000 new deaths reported (a slight fall of 1% and rise of 3% respectively from last week). The highest new case counts were reported in the United States of America (1 325 424 new cases, 4004 new cases per 1 million), Brazil (252 018 new cases; 1186 new cases per 1 million) and Colombia (80 173 new cases, 1576 new cases per 1 million). The highest numbers of new deaths were reported from the United States of America (17 239new deaths; 52 new deaths per 1 million), Brazil (4923 new deaths; 23 new deaths per 1 million) and Mexico (4670 new deaths; 36 new deaths per 1 million).



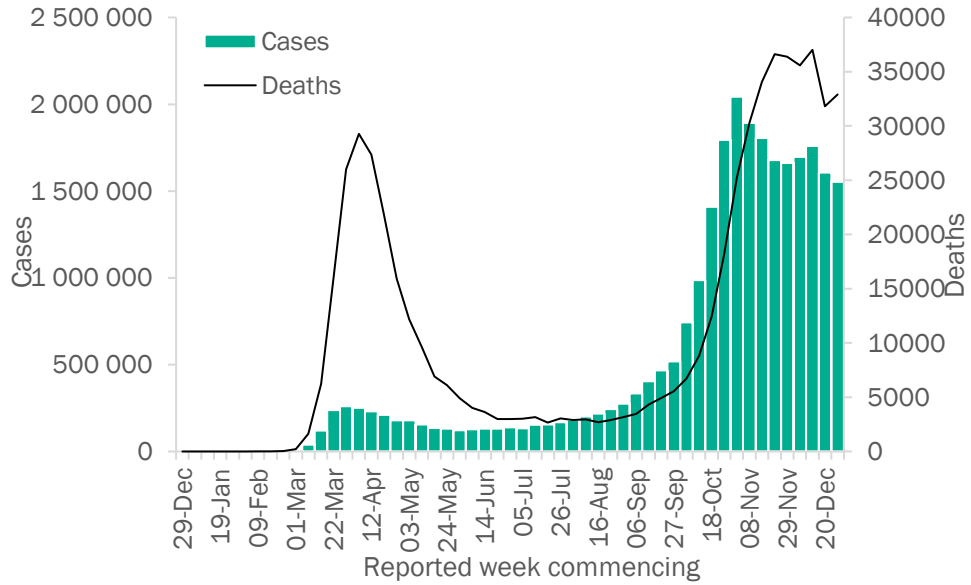
Eastern Mediterranean Region

In the past week, the Eastern Mediterranean Region reported over 154 000 new cases and over 3000 new deaths, a decrease of 1% and 12%, respectively compared to the previous week. Cases and deaths in the Region decreased for the sixth consecutive week. The highest number of new cases were reported from the Islamic Republic of Iran (42 511 new cases, 506 new cases per 1 million), Lebanon (16 936 new cases, 2841 new cases per 1 million) and Pakistan (14 880 new cases, 67 new cases per 1 million). These three countries accounted for almost half (48%) of new weekly cases in the Region. The highest number of new deaths were reported from the Islamic Republic of Iran (864 new deaths; 10 new deaths per 1 million), Pakistan (442 new deaths; 2 new deaths per 1 million) and Egypt (389 new deaths; 4 new deaths per 1 million).



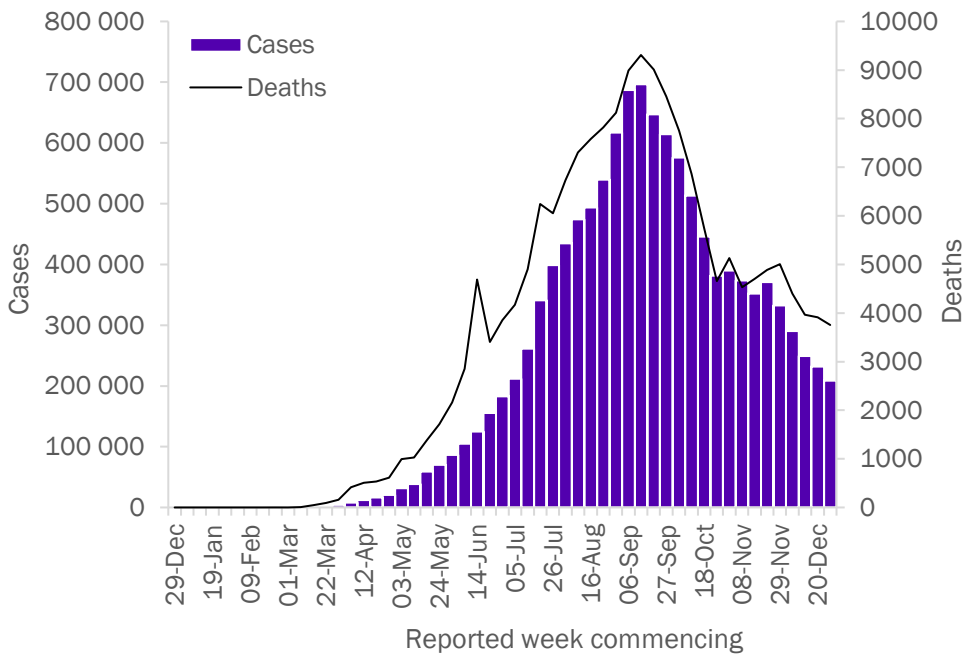
European Region

The European Region continues to report a large number of cases with over 1.5 million new cases and 3200 new deaths, a 3% decrease and 2% increase compared to the previous week, respectively. New weekly cases have decreased for the past two weeks. The Region reported the highest proportion (43%) of global new deaths among all regions. Last week, the countries reporting the highest number of new cases were the United Kingdom of Great Britain and Northern Ireland (343 784 new cases, 5064 new cases per 1 million), the Russian Federation (186 539 new cases; 1278 new cases per 1 million) and Germany (124 808 new cases; 1490 new cases per 1 million). The highest number of deaths were reported from Germany (4494 new deaths; 54 new deaths per 1 million), the United Kingdom (4165 new deaths; 61 new deaths per 1 million) and the Russian Federation (3728 new deaths; 26 new deaths per 1 million).



South-East Asia Region

New cases and deaths in the South-East Region have continued to decrease, a trend observed since early September. Just over 200 000 new cases and 3700 new deaths were reported this week, a 10% and 3% decrease respectively, compared to the previous week. The three countries reporting the highest number of new cases and new deaths were India (136 115 new cases; 99 new cases per 1 million; 1813 new deaths; 1 new death per 1 million), Indonesia (51 636 new cases; 189 new cases per 1 million; 1561 new deaths; 6 new deaths per 1 million) and Bangladesh (7085 new cases; 43 new cases per 1 million; 171 new deaths; 1 new death per 1 million). India has consistently reported the highest number of new cases and deaths since the end of the first week of April 2020.



Western Pacific Region

In the past week, there has been little change in the number of new cases (just under 53 000) reported in the Western Pacific Region, while new deaths increased by 10% (over 700) compared to the previous week. The plateau in new cases over the past week comes after four weeks of increasing trends. The three countries reporting the highest number of new cases this week were Japan (23 642 new cases; 187 new cases per 1 million), Malaysia (13 473 new cases; 416 new cases per 1 million) and Philippines (7911 new cases; 72 new cases per 1 million). The three countries reporting the greatest number of new deaths this week included Japan (335 new deaths; 3 new deaths per 1 million), Philippines (186 new deaths; 2 new deaths per 1 million) and the Republic of Korea (154 new deaths; 3 new deaths per 1 million).

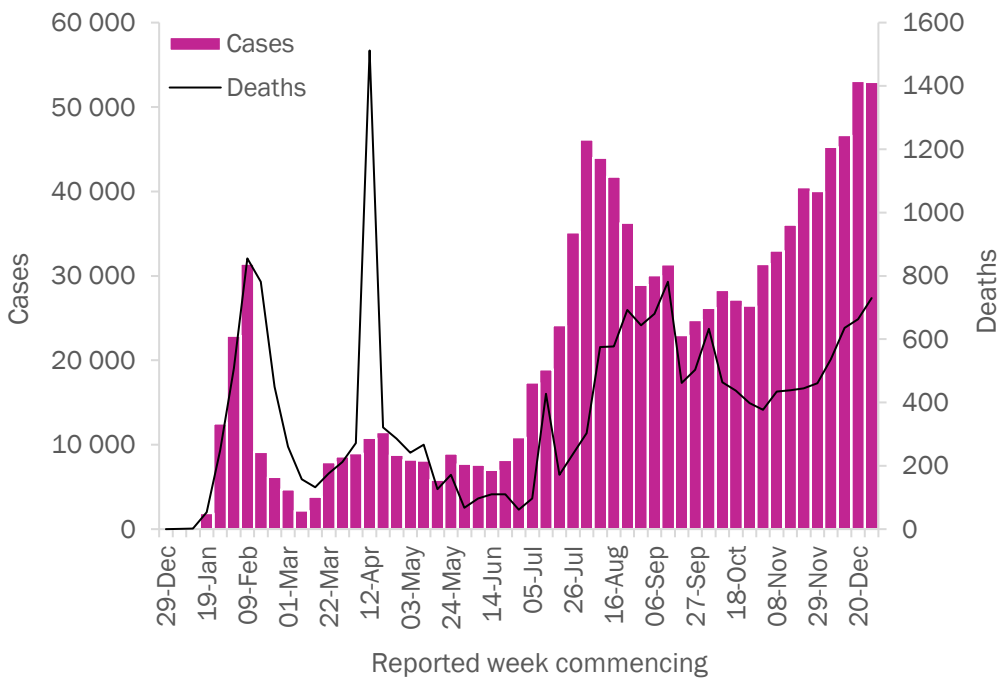


Table 2. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 3 January 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Africa	**130 007**	**1 961 234**	**1 748**	**3 293**	**43 592**	**39**	
South Africa	93 978	1 088 889	18 360	2 654	29 175	492	Community transmission
Nigeria	5 587	89 163	433	55	1 302	6	Community transmission
Mauritania	3 393	14 364	3 089	122	347	75	Community transmission
Namibia	3 256	24 654	9 703	26	213	84	Community transmission
Ethiopia	2 636	125 049	1 088	43	1 944	17	Community transmission
Algeria	2 302	100 159	2 284	47	2 769	63	Community transmission
Uganda	2 149	35 712	781	29	274	6	Community transmission
Democratic Republic of the Congo	1 568	17 848	199	25	591	7	Community transmission
Zambia	1 559	21 230	1 155	10	392	21	Community transmission
Zimbabwe	1 528	14 491	975	36	377	25	Community transmission
Eswatini	1 344	9 711	8 370	64	227	196	Community transmission
Botswana	1 183	14 805	6 296	4	42	18	Community transmission
Senegal	988	19 511	1 165	29	416	25	Community transmission
Kenya	835	96 678	1 798	30	1 685	31	Community transmission
Mozambique	806	18 968	607	9	168	5	Community transmission
Ghana	778	55 064	1 772	2	335	11	Community transmission
Rwanda	750	8 567	661	26	98	8	Clusters of cases
Burkina Faso	685	6 940	332	9	86	4	Community transmission
Mali	652	7 226	357	27	276	14	Community transmission
Cameroon	571	26 848	1 011	0	448	17	Community transmission
Angola	459	17 608	536	8	407	12	Community transmission
Niger	405	3 208	133	13	102	4	Community transmission
Malawi	368	6 711	351	4	192	10	Community transmission
Eritrea	328	1 320	372	2	3	1	Sporadic cases
South Sudan	250	3 558	318	1	63	6	Community transmission
Cabo Verde	185	11 883	21 373	1	113	203	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Chad	183	2 169	132	1	104	6	Community transmission
Côte d'Ivoire	169	22 250	843	4	137	5	Community transmission
Comoros	149	864	994	6	13	15	Community transmission
Guinea	138	13 784	1 050	1	81	6	Community transmission
Madagascar	134	17 767	642	2	262	9	Community transmission
Togo	128	3 683	445	0	68	8	Community transmission
Gabon	74	9 571	4 300	0	64	29	Community transmission
Seychelles	73	284	2 888	0	0	0	Sporadic cases
Benin	46	3 251	268	0	44	4	Community transmission
Equatorial Guinea	41	5 277	3 761	1	86	61	Community transmission
Burundi	29	833	70	0	2	0	Community transmission
Central African Republic	15	4 963	1 028	0	63	13	Community transmission
Sierra Leone	11	2 560	321	0	76	10	Community transmission
Gambia	10	3 802	1 573	1	124	51	Community transmission
Sao Tome and Principe	10	1 024	4 672	0	17	78	Community transmission
Mauritius	3	527	414	0	10	8	Clusters of cases
Congo	0	6 200	1 124	0	100	18	Community transmission
Guinea-Bissau	0	2 447	1 243	0	45	23	Community transmission
Lesotho	0	2 577	1 203	0	50	23	Community transmission
Liberia	0	1 800	356	0	83	16	Community transmission
United Republic of Tanzania	0	509	9	0	21	0	Community transmission
Territories[iii]							
Réunion	128	9 037	10 094	0	42	47	Clusters of cases
Mayotte	123	5 890	21 590	1	55	202	Clusters of cases
Americas	**1 935 621**	**36 337 439**	**35 528**	**32 283**	**872 486**	**853**	
United States of America	1 325 424	19 974 413	60 345	17 239	345 253	1 043	Community transmission
Brazil	252 018	7 700 578	36 228	4 923	195 411	919	Community transmission
Colombia	80 173	1 654 880	32 523	1 805	43 495	855	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Mexico	64 942	1 437 185	11 147	4 670	126 507	981	Community transmission
Argentina	55 040	1 629 594	36 056	897	43 319	958	Community transmission
Canada	50 966	587 639	15 570	959	15 679	415	Community transmission
Panama	23 073	249 733	57 879	308	4 064	942	Community transmission
Chile	17 508	615 902	32 219	320	16 724	875	Community transmission
Peru	11 653	1 017 199	30 851	356	37 724	1 144	Community transmission
Bolivia (Plurinational State of)	8 465	162 055	13 883	103	9 186	787	Community transmission
Dominican Republic	7 025	172 965	15 945	12	2 416	223	Community transmission
Costa Rica	5 259	169 321	33 239	82	2 185	429	Community transmission
Ecuador	5 239	214 513	12 158	69	14 059	797	Community transmission
Paraguay	4 461	108 349	15 191	108	2 262	317	Community transmission
Honduras	4 315	122 974	12 416	99	3 160	319	Community transmission
Uruguay	3 905	19 753	5 686	50	193	56	Community transmission
Guatemala	3 145	138 316	7 720	64	4 827	269	Community transmission
Venezuela (Bolivarian Republic of)	1 959	113 562	3 994	18	1 028	36	Community transmission
El Salvador	1 623	46 242	7 129	54	1 351	208	Community transmission
Cuba	1 187	12 225	1 079	5	146	13	Clusters of cases
Suriname	397	6 277	10 700	4	123	210	Clusters of cases
Belize	317	10 807	27 179	21	249	626	Community transmission
Jamaica	247	12 931	4 367	9	303	102	Community transmission
Haiti	231	10 077	884	1	236	21	Community transmission
Bahamas	83	7 871	20 016	1	170	432	Clusters of cases
Guyana	62	6 351	8 074	2	164	209	Clusters of cases
Trinidad and Tobago	61	7 158	5 115	2	127	91	Community transmission
Barbados	48	395	1 375	0	7	24	Clusters of cases
Saint Lucia	48	353	1 922	0	5	27	Sporadic cases
Nicaragua	39	4 829	729	1	165	25	Community transmission
Grenada	18	134	1 191	0	0	0	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Saint Vincent and the Grenadines	14	122	1 100	0	0	0	Sporadic cases
Antigua and Barbuda	4	159	1 624	0	5	51	Sporadic cases
Saint Kitts and Nevis	3	33	620	0	0	0	Sporadic cases
Dominica	0	96	1 334	0	0	0	Clusters of cases
Territories[iii]							
Puerto Rico	5 489	77 932	27 241	94	1 526	533	Community transmission
French Guiana	500	13 273	44 439	0	71	238	Community transmission
Aruba	214	5 442	50 971	2	49	459	Community transmission
Curaçao	179	4 230	25 778	2	14	85	Community transmission
Sint Maarten	64	1 434	33 441	1	27	630	Community transmission
Turks and Caicos Islands	64	908	23 452	0	6	155	Clusters of cases
United States Virgin Islands	57	2 036	19 497	0	23	220	Community transmission
Bermuda	43	604	9 699	1	10	161	Clusters of cases
Cayman Islands	20	338	5 143	0	2	30	Sporadic cases
Martinique	19	6 091	16 231	1	43	115	Community transmission
Saint Martin	9	995	25 738	0	12	310	Community transmission
Bonaire, Sint Eustatius and Saba	7	189	7 208	0	3	114	
Anguilla	3	15	1 000	0	0	0	Sporadic cases
Saint Barthélemy	1	190	19 221	0	0	0	Sporadic cases
British Virgin Islands	0	93	3 076	0	1	33	Clusters of cases
Falkland Islands (Malvinas)	0	29	8 326	0	0	0	No cases
Guadeloupe	0	8 620	21 543	0	155	387	Community transmission
Montserrat	0	13	2 601	0	1	200	No cases
Saint Pierre and Miquelon	0	16	2 761	0	0	0	Sporadic cases
Eastern Mediterranean	**154 695**	**4 977 852**	**6 811**	**3 057**	**122 061**	**167**	
Iran (Islamic Republic of)	42 511	1 237 474	14 733	864	55 438	660	Community transmission
Lebanon	16 936	186 408	27 311	97	1 476	216	Community transmission
Pakistan	14 880	484 362	2 193	442	10 258	46	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Tunisia	11 749	141 979	12 013	339	4 765	403	Community transmission
Morocco	11 579	442 141	11 979	248	7 452	202	Clusters of cases
United Arab Emirates	10 749	211 641	21 399	19	674	68	Community transmission
Jordan	10 312	296 668	29 076	148	3 877	380	Community transmission
Egypt	9 563	140 878	1 377	389	7 741	76	Clusters of cases
Iraq	6 254	597 033	14 843	62	12 829	319	Community transmission
Libya	3 091	100 744	14 662	72	1 487	216	Community transmission
Bahrain	1 666	93 184	54 763	1	352	207	Clusters of cases
Kuwait	1 625	151 074	35 376	8	937	219	Community transmission
Qatar	1 337	144 240	50 065	1	245	85	Community transmission
Saudi Arabia	913	362 979	10 426	63	6 239	179	Sporadic cases
Afghanistan	861	52 709	1 354	63	2 221	57	Clusters of cases
Syrian Arab Republic	684	11 616	664	54	723	41	Community transmission
Oman	577	128 867	25 235	8	1 499	294	Community transmission
Djibouti	36	5 841	5 912	0	61	62	Clusters of cases
Somalia	24	4 714	297	3	130	8	Sporadic cases
Yemen	9	2 105	71	4	611	20	Sporadic cases
Sudan	0	23 316	532	0	1 468	33	Community transmission
Territories[iii]							
occupied Palestinian territory	9 339	157 879	30 948	172	1 578	309	Community transmission
Europe	**1 553 332**	**26 885 471**	**28 803**	**32 898**	**588 770**	**631**	
The United Kingdom	343 784	2 599 793	38 296	4 165	74 570	1 098	Community transmission
Russian Federation	186 539	3 236 787	22 180	3 728	58 506	401	Clusters of cases
Germany	124 808	1 765 666	21 074	4 494	34 272	409	Clusters of cases
Italy	102 442	2 141 201	35 414	3 365	74 985	1 240	Clusters of cases
Turkey	98 662	1 417 697	16 809	1 671	21 295	252	Community transmission
France	91 595	2 599 127	39 819	2 346	64 543	989	Community transmission
Czechia	69 882	740 481	69 146	916	11 960	1 117	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Poland	60 763	1 318 562	34 840	2 001	29 119	769	Community transmission
Netherlands	59 975	813 725	47 489	600	11 565	675	Community transmission
Ukraine	48 104	1 074 093	24 560	1 080	18 854	431	Community transmission
Portugal	30 874	423 870	41 569	489	7 045	691	Clusters of cases
Israel	28 963	425 582	49 169	132	3 338	386	Community transmission
Romania	23 635	637 395	33 133	811	15 919	827	Community transmission
Sweden	22 117	437 379	43 308	68	8 727	864	Community transmission
Slovakia	19 940	187 463	34 336	544	2 317	424	Clusters of cases
Switzerland	18 879	450 075	52 004	419	7 049	814	Community transmission
Serbia	18 537	341 904	49 098	305	3 288	472	Community transmission
Spain	16 852	1 893 502	40 499	168	50 442	1 079	Community transmission
Denmark	16 374	167 541	28 925	192	1 345	232	Community transmission
Lithuania	16 039	146 637	53 865	390	1 644	604	Community transmission
Austria	14 604	362 963	40 301	462	6 214	690	Community transmission
Belarus	13 203	198 125	20 967	66	1 442	153	Community transmission
Hungary	11 935	327 995	33 953	837	9 884	1 023	Community transmission
Ireland	11 532	96 926	19 629	52	2 252	456	Community transmission
Slovenia	10 894	125 086	60 168	359	2 889	1 390	Clusters of cases
Belgium	10 458	650 009	56 085	436	19 693	1 699	Community transmission
Croatia	8 028	212 958	51 874	401	4 072	992	Community transmission
Georgia	7 564	229 169	57 448	226	2 603	653	Community transmission
Azerbaijan	6 270	219 462	21 645	249	2 703	267	Clusters of cases
Latvia	6 110	41 929	22 229	153	668	354	Clusters of cases
Kazakhstan	5 661	203 563	10 841	96	2 845	152	Clusters of cases
Bulgaria	5 496	202 880	29 198	521	7 644	1 100	Clusters of cases
Republic of Moldova	4 698	145 694	36 117	137	3 020	749	Community transmission
Greece	4 595	139 709	13 404	368	4 921	472	Community transmission
Cyprus	4 054	23 445	19 418	18	129	107	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Estonia	3 739	29 131	21 960	40	244	184	Clusters of cases
Norway	3 346	48 278	8 905	15	436	80	Clusters of cases
Albania	3 236	58 991	20 499	47	1 190	414	Clusters of cases
Bosnia and Herzegovina	3 015	112 345	34 243	177	4 100	1 250	Community transmission
Armenia	2 880	160 027	54 004	87	2 850	962	Community transmission
Montenegro	2 439	49 339	78 557	23	690	1 099	Clusters of cases
North Macedonia	2 364	83 789	40 218	95	2 522	1 211	Community transmission
Finland	2 023	36 107	6 517	37	561	101	Community transmission
Luxembourg	1 062	46 838	74 824	33	503	804	Community transmission
Kyrgyzstan	932	81 305	12 462	11	1 359	208	Clusters of cases
Malta	756	12 997	29 435	14	220	498	Clusters of cases
Uzbekistan	487	77 238	2 308	1	614	18	Clusters of cases
Andorra	360	8 166	105 688	1	84	1 087	Community transmission
Liechtenstein	223	2 221	58 237	7	33	865	Sporadic cases
San Marino	199	2 463	72 574	4	61	1 797	Community transmission
Monaco	101	901	22 959	1	4	102	Sporadic cases
Iceland	71	5 754	16 862	1	29	85	Community transmission
Holy See	0	26	32 138	0	0	0	Sporadic cases
Tajikistan	0	13 182	1 382	0	89	9	Pending
Territories[iii]							
Kosovo	1 326	51 688	27 784	35	1 330	715	Community transmission
Gibraltar	678	2 212	65 656	1	7	208	Clusters of cases
Jersey	177	2 760	25 368	3	44	404	Community transmission
Faroe Islands	43	614	12 565	0	0	0	Sporadic cases
Isle of Man	6	380	4 469	0	25	294	No cases
Guernsey	2	299	4 731	0	13	206	Community transmission
Greenland	1	27	476	0	0	0	No cases
South-East Asia	**208 592**	**12 051 014**	**5 962**	**3 756**	**184 493**	**91**	

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
India	136 115	10 323 965	7 481	1 813	149 435	108	Clusters of cases
Indonesia	51 636	758 473	2 773	1 561	22 555	82	Community transmission
Bangladesh	7 085	515 184	3 128	171	7 599	46	Community transmission
Myanmar	4 336	125 616	2 309	132	2 711	50	Clusters of cases
Sri Lanka	3 991	44 371	2 072	24	211	10	Clusters of cases
Nepal	3 738	261 438	8 973	51	1 870	64	Clusters of cases
Thailand	1 359	7 379	106	4	64	1	Clusters of cases
Maldives	216	13 834	25 593	0	48	89	Clusters of cases
Bhutan	113	710	920	0	0	0	Clusters of cases
Timor-Leste	3	44	33	0	0	0	Sporadic cases
Western Pacific	**52 979**	**1 112 724**	**566**	**730**	**20 288**	**10**	
Japan	23 642	240 954	1 905	335	3 548	28	Clusters of cases
Malaysia	13 473	117 373	3 626	32	483	15	Clusters of cases
Philippines	7 911	476 916	4 352	186	9 253	84	Community transmission
Republic of Korea	6 378	63 244	1 234	154	962	19	Clusters of cases
China	570	96 894	66	14	4 791	3	Clusters of cases
Australia	166	28 462	1 116	1	909	36	Sporadic cases
Mongolia	160	1 242	379	0	0	0	Clusters of cases
Singapore	143	58 662	10 027	0	29	5	Sporadic cases
Viet Nam	42	1 482	15	0	35	0	Clusters of cases
New Zealand	37	1 825	378	0	25	5	Clusters of cases
Cambodia	17	381	23	0	0	0	Sporadic cases
Brunei Darussalam	5	157	359	0	3	7	No cases
Fiji	3	49	55	0	2	2	Sporadic cases
Lao People's Democratic Republic	0	41	6	0	0	0	Sporadic cases
Papua New Guinea	0	780	87	0	9	1	Community transmission
Solomon Islands	0	17	25	0	0	0	No cases
Territoriesiii							

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
French Polynesia	376	16 926	60 255	6	114	406	Sporadic cases
Guam	54	7 148	42 352	2	123	729	Clusters of cases
New Caledonia	2	40	140	0	0	0	Sporadic cases
Marshall Islands	0	4	68	0	0	0	No cases
Northern Mariana Islands (Commonwealth of the)	0	122	2 120	0	2	35	Pending
Vanuatu	0	1	3	0	0	0	No cases
Wallis and Futuna	0	4	356	0	0	0	Sporadic cases
Global	**4 035 226**	**83 326 479**	**518**	**76 017**	**1 831 703**	**10**	

**See *data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions
- African Region
- Eastern Mediterranean Region
- European Region
- Region of the Americas
- South-East Asia Region
- Western Pacific Region

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.
Global totals include 745 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case.

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g. laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

World Health Organization

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 27 December 2020, 10 am CET

For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

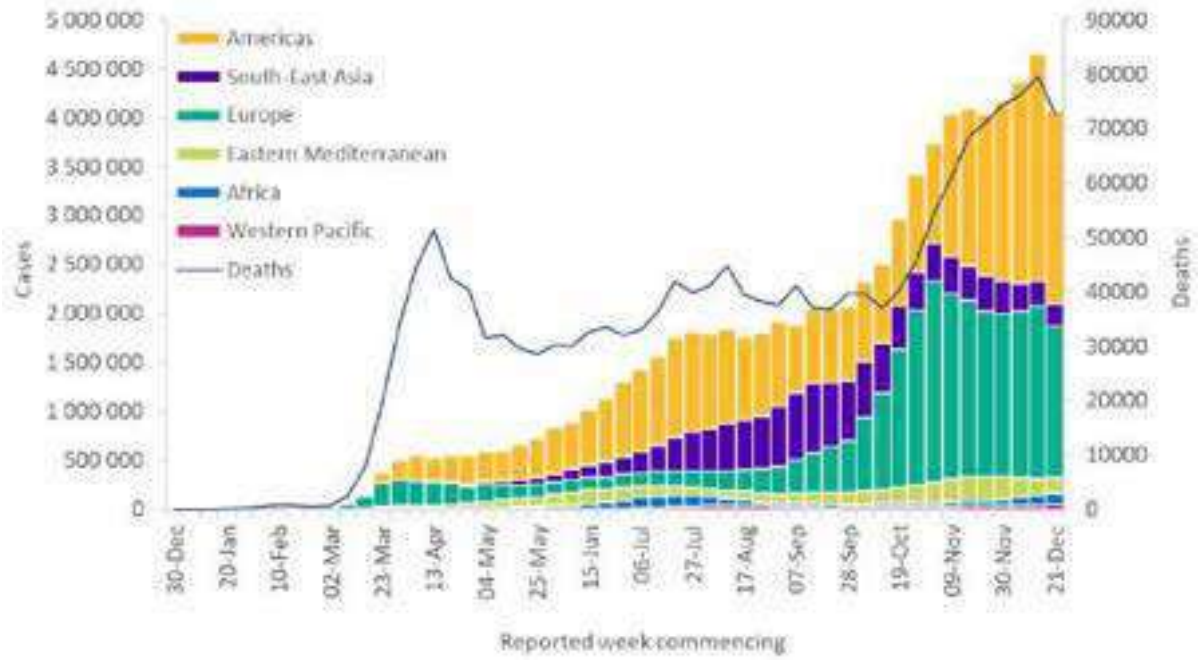
Global epidemiological situation

Globally in the past week, over 4 million new cases were reported. Although this is a 12% decrease compared to the previous week, this and other short-term trends in data should be interpreted with caution over the end-of-year holiday season, as numbers may be influenced by presentation, testing and reporting delays. New deaths decreased by 8% to 72 730 (Figure 1, Table 1). The Region of the Americas accounts for 48% of all new cases and 42% of all new deaths globally. While new cases and deaths remained high in the European Region, which accounted for 37% and 42% respectively, both decreased compared to the previous week. New cases and deaths declined in South-East Asia and Eastern Mediterranean regions. In the African Region, while both new cases and deaths remained low compared to other regions, there was a 20% increase in new cases and 37% in new deaths. In the Western Pacific Region, new cases increased by 13% and new deaths increased by 4%.

As of 27 December there have been over 79.2 million cases and over 1.7 million deaths reported since the start of the pandemic.

A variant of SARS-CoV-2 has been detected in South Africa through retrospective genomic analyses of the virus. Initial analysis indicates that the variant, known as 501Y.V2, may spread more readily between people. Investigations are ongoing to determine if it is associated with any change in the severity of infection, antibody response or vaccine efficacy.

Figure 1: COVID-19 cases reported weekly by WHO Region, and global deaths, as of 27 December 2020**



In the past week, the five countries reporting the highest number of cases were the United States of America (with over 1.3 million cases, a 19% decrease from the previous week), Brazil (over 285 000 cases, a 12% decrease), the United Kingdom of Great Britain and Northern Ireland (over 251 000 cases, a 45% increase), Russian Federation (over 201 000 cases, a 3% increase) and India (over 156 000 cases, a 10% decrease).

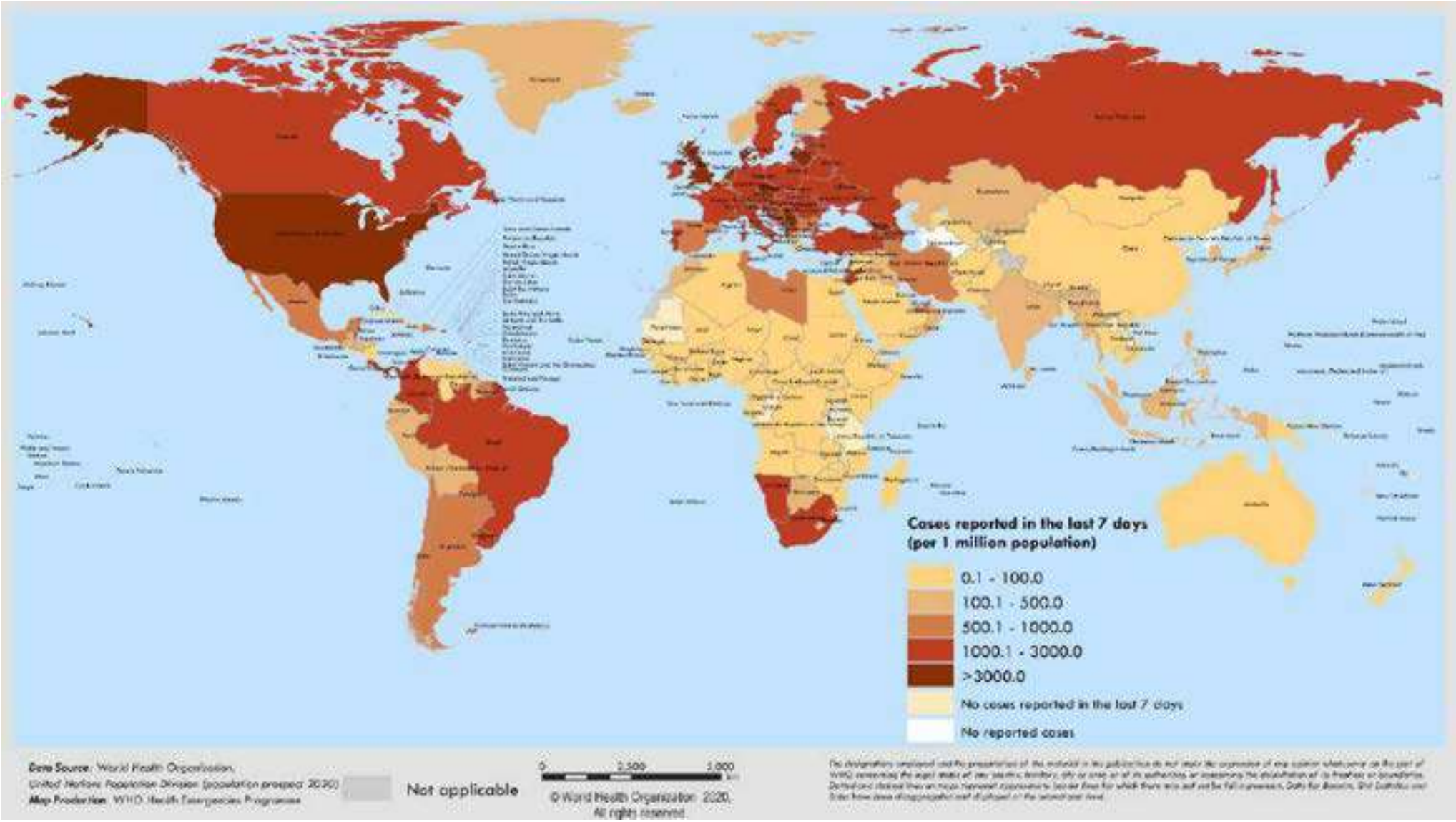
Additional Region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western Pacific Region.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 27 December 2020**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 965 774 (48%)	-15%	34 403 371 (43%)	31 142 (42%)	-3%	840 247 (47%)
Europe	1 545 682 (37%)	-12%	25 271 220 (31%)	31 005 (42%)	-15%	554 716 (31%)
South-East Asia	231 978 (5%)	-6%	11 842 422 (14%)	3 911 (5%)	-1%	180 737 (10%)
Eastern Mediterranean	157 595 (3%)	-9%	4 823 157 (6%)	3 482 (4%)	-10%	119 004 (6%)
Africa	114 530 (2%)	20%	1 831 227 (2%)	2 558 (3%)	37%	40 299 (2%)
Western Pacific	53 073 (1%)	13%	1 059 751 (1%)	663 (0%)	4%	19 558 (1%)
Global	**4 068 632 (100%)**	**-12%**	**79 231 893 (100%)**	**72 761 (100%)**	**-8%**	**1 754 574 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*
***For all figures included in this report please see data, table and figure notes*

Figure 2. COVID-19 cases per 1 million population reported in the last seven days by countries, territories and areas, 21 December through 27 December 2020**

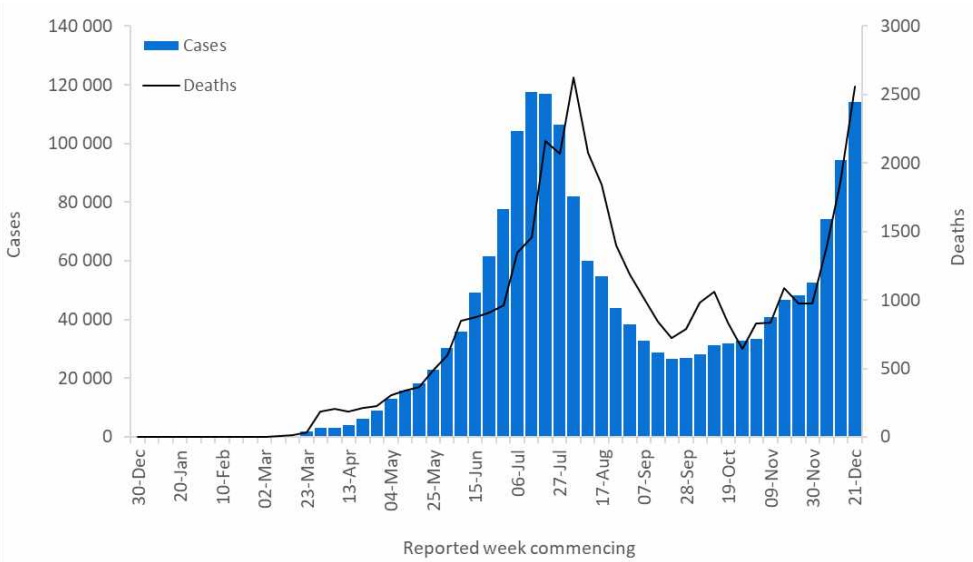


**See *data, table and figure notes*

Situation by WHO Region

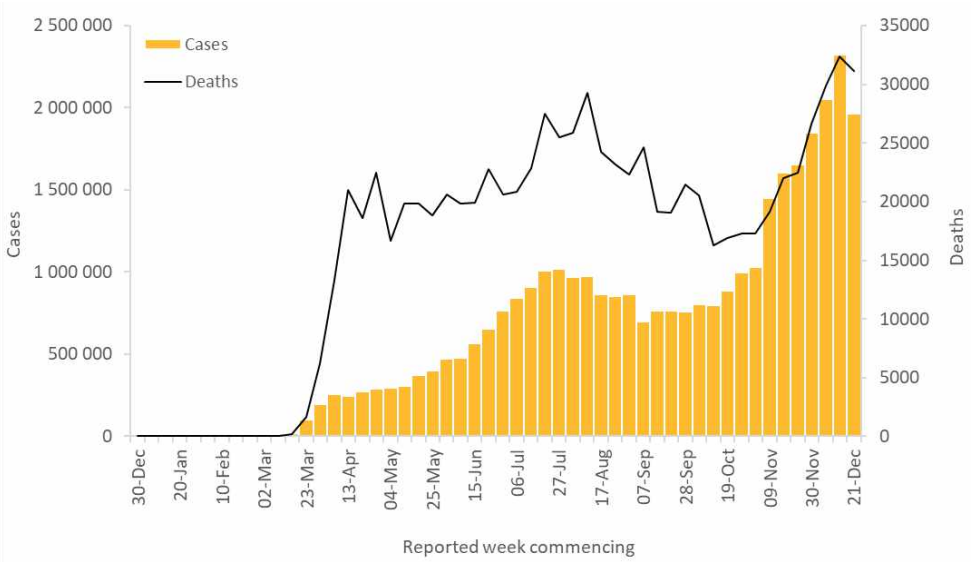
African Region

In the past week, over 114 000 new cases were reported in the African Region, a 20% increase compared to the previous week, and over 2500 deaths, a 37% increase over the previous week. South Africa continues to account for the greatest proportion (72%) of new weekly cases in the Region. In the past week, the highest number of new cases were reported from South Africa (82 434 new cases; 1390 new cases per 1 million population), Nigeria (5643 new cases; 27 new cases per 1 million), Algeria (3076 new cases, 70 new cases per 1 million) and Namibia (2961 new cases, 1165 new cases per 1 million). The highest numbers of new deaths were reported from South Africa (1982 new deaths; 33 new deaths per 1 million), the Democratic Republic of the Congo (197 new deaths; 2 new deaths per 1 million) and Algeria (63 new deaths; 1 new death per 1 million).



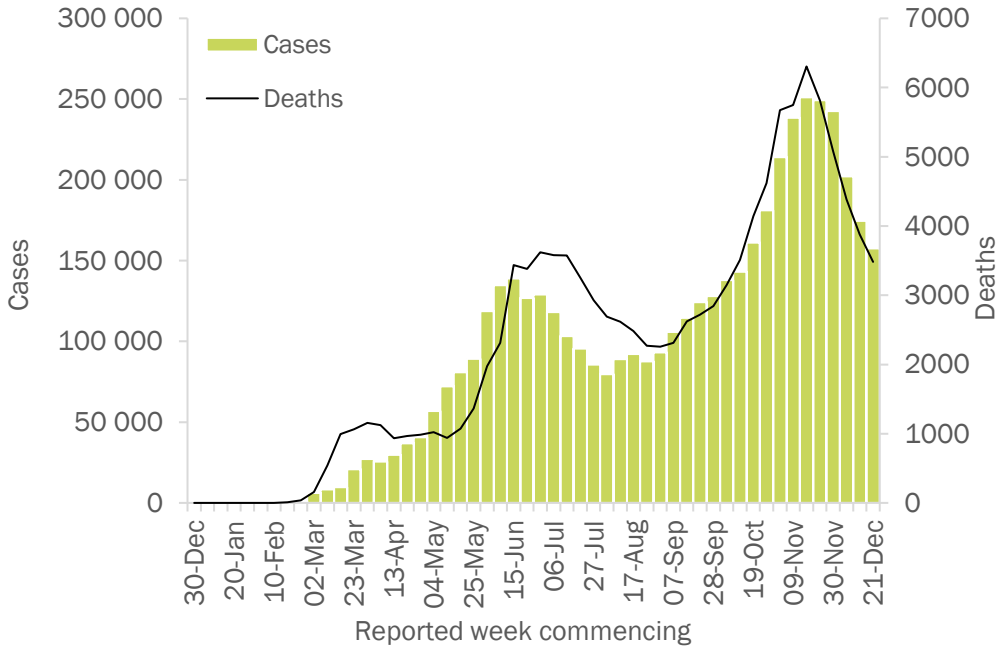
Region of the Americas

In the Region of the Americas, the number of new weekly cases was over 1 965 000 and 31 142 new deaths, which represent 15% and 3% decreases over the previous week, respectively. The United States of America accounted for 68% of all new cases in the Region. The highest new case and deaths counts were reported in the United States of America (1 334 155 new cases, 4031 new cases per 1 million), Brazil (285 582 new cases; 1344 new cases per 1 million) and Colombia (92 635 new cases, 1821 new cases per 1 million). The highest numbers of new deaths were reported from the United States of America (16 864 new deaths; 51 new deaths per 1 million), Brazil (2838 new deaths; 23 new deaths per 1 million) and Mexico (4588 new deaths; 36 new deaths per 1 million).



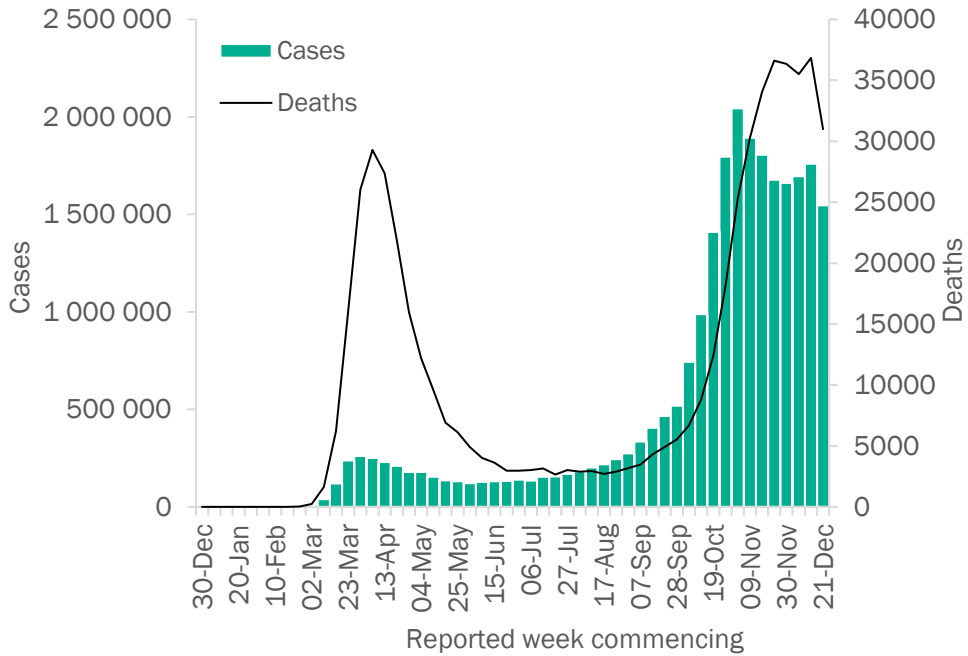
Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 157 000 new cases and over 3400 new deaths, reflecting a reduction of 9% and 10%, respectively compared to the previous week. Cases and deaths in the Region decreased for the fifth consecutive week. The highest number of new cases were reported from the Islamic Republic of Iran (42 891 new cases, 511 new cases per 1 million), Morocco (15 336 new cases, 415 new cases per 1 million) and Pakistan (14 809 new cases, 67 new cases per 1 million). These three countries accounted for the most new cases in the previous two weeks. The highest number of new deaths were reported from the Islamic Republic of Iran (1126 new deaths; 13 new deaths per 1 million), Pakistan (566 new deaths; 3 new deaths per 1 million) and Tunisia (300 new deaths; 25 new deaths per 1 million).



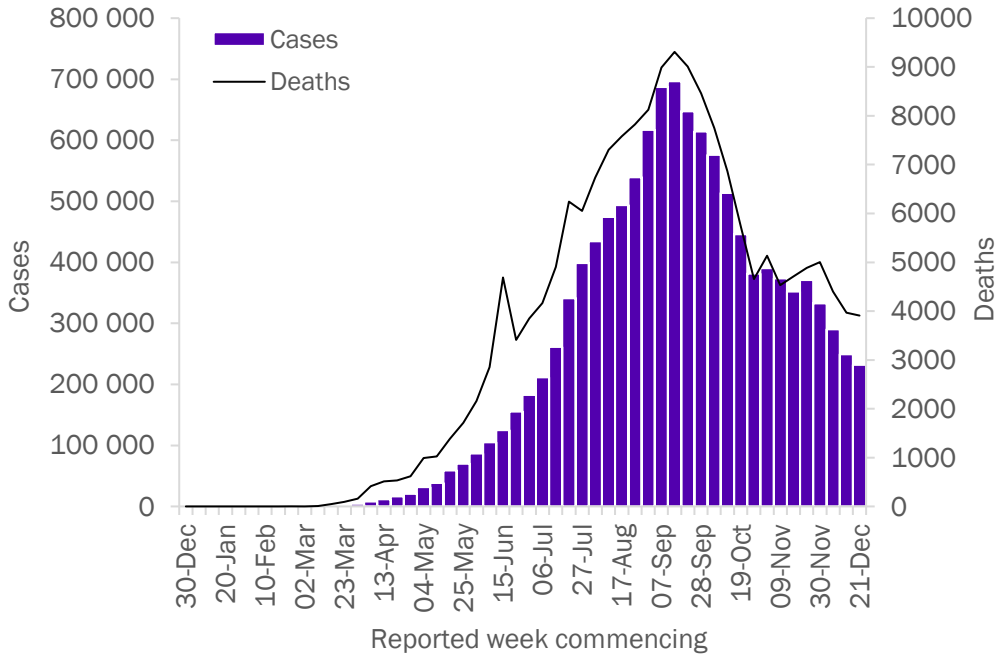
European Region

The number of new cases in the European Region remains high with over 1.5 million reported in the past week. However, the number of new cases has declined over the past week, decreasing by 12%, while deaths decreased by 15% to 31 000 new deaths. Despite the observed reductions, the European Region continues to account for the second highest number of new cases and deaths globally (37% and 42% respectively). Last week, the countries reporting the highest number of new cases were the United Kingdom of Great Britain and Northern Ireland (251 786 new cases, 3709 new cases per 1 million), the Russian Federation (201 871 new cases; 1383 new cases per 1 million population) and Germany (146 849 new cases; 1753 new cases per 1 million). The highest number of deaths were reported from the same countries, namely Russian Federation (3920 new deaths; 27 new deaths per 1 million), Germany (3729 new deaths; 45 new deaths per 1 million) and the United Kingdom (3330 new deaths; 49 new deaths per 1 million).



South-East Asia Region

In the South-East Asia Region, nearly 232 000 new cases were reported last week, a decrease of 6% compared to the previous week, while new deaths were nearly 4000, a slight decrease of 1%. There has been an overall decline in both cases and deaths since the peak in the week beginning 7 September. The countries reporting the highest number of both new cases and new deaths in the past week were India (156 627 new cases; 113 new cases per 1 million; 2145 new deaths; 2 new deaths per 1 million), Indonesia (48 889 new cases; 179 new cases per 1 million; 1335 new deaths; 5 new deaths per 1 million) and Bangladesh (8539 new cases; 52 new cases per 1 million; 186 new deaths; 1 new death per 1 million).



Western Pacific Region

In the Western Pacific Region, new cases (13%) and deaths (4%) continued to increase, a trend which has been seen over the past eight weeks. The Region reported over 53 000 new cases and nearly 700 new deaths. The highest new cases were reported in Japan (21 432 new cases; 169 new cases per 1 million), Malaysia (11 931 new cases; 369 new cases per 1 million) and the Philippines (10 961 new cases; 100 new cases per 1 million). The countries reporting the highest number of new deaths this week were Japan (340 new deaths; 3 new deaths per 1 million), the Philippines (156 new deaths; 1 new death per 1 million) and the Republic of Korea (134 new deaths; 3 new deaths per 1 million).

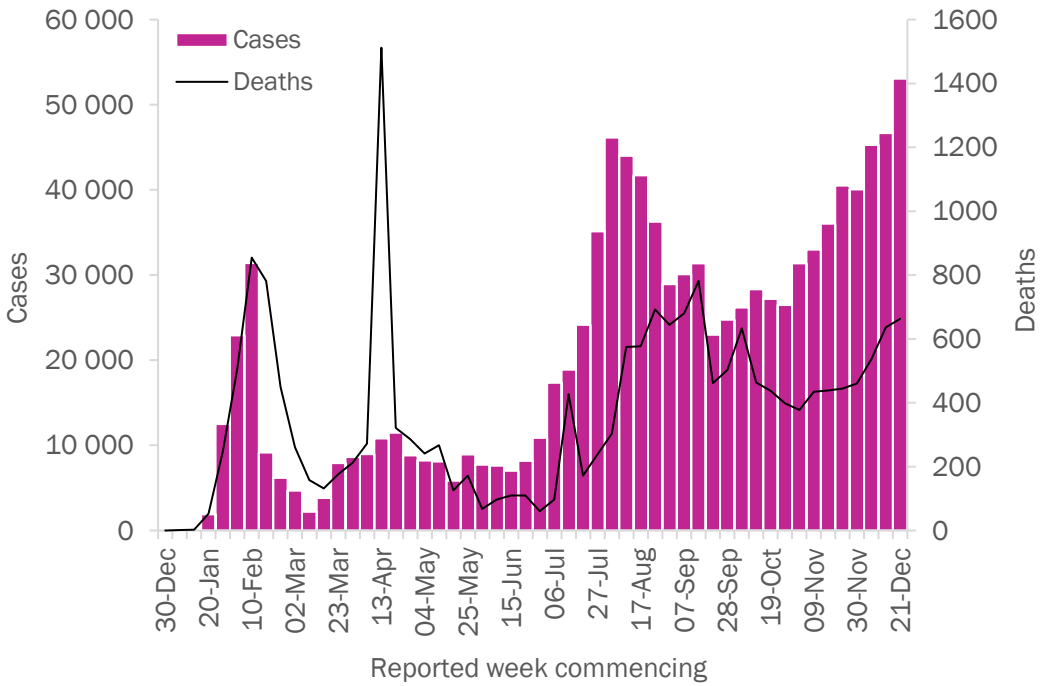


Table 2. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 27 December 2020**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Africa	**114 530**	**1 831 227**	**1 632**	**2 558**	**40 299**	**36**	
South Africa	82 434	994 911	16 775	1 982	26 521	447	Community transmission
Nigeria	5 643	83 576	405	29	1 247	6	Community transmission
Algeria	3 076	97 857	2 232	63	2 722	62	Community transmission
Namibia	2 961	21 398	8 421	16	187	74	Community transmission
Ethiopia	2 919	122 413	1 065	55	1 901	17	Community transmission
Uganda	2 861	33 563	734	15	245	5	Community transmission
Kenya	1 692	95 843	1 782	22	1 655	31	Community transmission
Burkina Faso	1 301	6 255	299	3	77	4	Community transmission
Democratic Republic of the Congo	1 070	16 280	182	197	566	6	Community transmission
Eswatini	1 062	8 367	7 212	26	163	140	Community transmission
Zambia	1 051	19 671	1 070	9	382	21	Community transmission
Senegal	853	18 523	1 106	26	387	23	Community transmission
Zimbabwe	812	12 963	872	23	341	23	Community transmission
Botswana	749	13 622	5 793	0	38	16	Community transmission
Mozambique	685	18 162	581	12	159	5	Community transmission
Ghana	633	54 286	1 747	2	333	11	Community transmission
Rwanda	585	7 817	604	13	72	6	Clusters of cases
Angola	523	17 149	522	13	399	12	Community transmission
Niger	442	2 803	116	7	89	4	Community transmission
Cameroon	428	26 277	990	0	448	17	Community transmission
Mali	410	6 574	325	29	249	12	Community transmission
Côte d'Ivoire	309	22 081	837	0	133	5	Community transmission
Lesotho	292	2 577	1 203	6	50	23	Community transmission
Eritrea	238	992	280	1	1	0	Sporadic cases
Malawi	190	6 343	332	1	188	10	Community transmission
Togo	159	3 555	429	2	68	8	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Cabo Verde	131	11 698	21 040	1	112	201	Community transmission
Chad	119	1 986	121	1	103	6	Community transmission
Guinea	114	13 646	1 039	0	80	6	Community transmission
Gabon	97	9 497	4 267	0	64	29	Community transmission
South Sudan	80	3 308	296	0	62	6	Community transmission
Comoros	72	715	822	0	7	8	Community transmission
Sierra Leone	63	2 549	320	1	76	10	Community transmission
Benin	53	3 205	264	0	44	4	Community transmission
Madagascar	46	17 633	637	1	260	9	Community transmission
Burundi	43	804	68	0	2	0	Community transmission
Equatorial Guinea	22	5 236	3 732	0	85	61	Community transmission
Liberia	21	1 800	356	0	83	16	Community transmission
Central African Republic	12	4 948	1 024	0	63	13	Community transmission
Seychelles	9	211	2 145	0	0	0	Sporadic cases
Gambia	4	3 792	1 569	0	123	51	Community transmission
Sao Tome and Principe	2	1 014	4 627	0	17	78	Community transmission
Congo	0	6 200	1 124	0	100	18	Community transmission
Guinea-Bissau	0	2 447	1 243	1	45	23	Community transmission
Mauritania	0	10 971	2 360	0	225	48	Community transmission
Mauritius	0	524	412	0	10	8	Clusters of cases
United Republic of Tanzania	0	509	9	0	21	0	Community transmission
Territories[iii]							
Réunion	205	8 909	9 951	0	42	47	Clusters of cases
Mayotte	59	5 767	21 139	1	54	198	Clusters of cases
Americas	**1 965 774**	**34 403 371**	**33 637**	**31 142**	**840 247**	**822**	
United States of America	1 334 155	18 648 989	56 341	16 864	328 014	991	Community transmission
Brazil	285 582	7 448 560	35 042	4 838	190 488	896	Community transmission
Colombia	92 635	1 574 707	30 948	1 671	41 690	819	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Mexico	70 697	1 372 243	10 643	4 588	121 837	945	Community transmission
Canada	43 952	539 298	14 289	741	14 781	392	Community transmission
Argentina	43 180	1 574 554	34 839	750	42 422	939	Community transmission
Panama	20 350	226 660	52 531	252	3 756	870	Community transmission
Chile	15 040	598 394	31 303	303	16 404	858	Community transmission
Peru	11 786	1 005 546	30 497	399	37 368	1 133	Community transmission
Dominican Republic	6 876	165 940	15 297	22	2 404	222	Community transmission
Paraguay	5 592	103 888	14 565	104	2 154	302	Community transmission
Costa Rica	5 518	162 990	31 996	90	2 086	409	Community transmission
Bolivia (Plurinational State of)	4 441	153 590	13 158	50	9 083	778	Community transmission
Uruguay	3 898	15 848	4 562	34	143	41	Community transmission
Ecuador	3 354	209 274	11 862	42	13 990	793	Community transmission
Guatemala	2 576	135 171	7 545	139	4 763	266	Community transmission
Honduras	2 447	118 659	11 980	38	3 061	309	Community transmission
Venezuela (Bolivarian Republic of)	2 208	111 603	3 925	31	1 010	36	Community transmission
El Salvador	1 424	44 619	6 879	55	1 297	200	Community transmission
Cuba	1 014	11 038	975	4	141	12	Clusters of cases
Belize	561	10 490	26 381	13	228	573	Community transmission
Jamaica	549	12 684	4 283	9	294	99	Community transmission
Suriname	421	5 880	10 023	2	119	203	Sporadic cases
Guyana	213	6 289	7 996	3	162	206	Clusters of cases
Haiti	172	9 846	863	1	235	21	Community transmission
Trinidad and Tobago	142	7 097	5 071	2	125	89	Community transmission
Bahamas	55	7 788	19 804	5	169	430	Clusters of cases
Nicaragua	42	4 790	723	1	164	25	Community transmission
Barbados	40	347	1 207	0	7	24	Clusters of cases
Saint Lucia	25	305	1 661	0	5	27	Sporadic cases
Grenada	22	116	1 031	0	0	0	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Dominica	8	96	1 334	0	0	0	Clusters of cases
Saint Vincent and the Grenadines	8	108	973	0	0	0	Sporadic cases
Antigua and Barbuda	3	155	1 583	0	5	51	Sporadic cases
Saint Kitts and Nevis	0	30	564	0	0	0	Sporadic cases
Territories[iii]							
Puerto Rico	5 232	72 443	25 322	90	1 432	501	Community transmission
Martinique	438	6 072	16 181	0	42	112	Community transmission
French Guiana	404	12 773	42 765	0	71	238	Community transmission
Curaçao	228	4 051	24 687	1	12	73	Community transmission
Aruba	104	5 228	48 967	0	47	440	Community transmission
Sint Maarten	76	1 370	31 948	0	26	606	Community transmission
United States Virgin Islands	69	1 979	18 951	0	23	220	Community transmission
Guadeloupe	63	8 620	21 543	0	155	387	Community transmission
Turks and Caicos Islands	55	844	21 799	0	6	155	Clusters of cases
Bermuda	45	561	9 009	0	9	145	Clusters of cases
Saint Martin	38	986	25 505	0	12	310	Community transmission
British Virgin Islands	7	93	3 076	0	1	33	Clusters of cases
Cayman Islands	7	318	4 839	0	2	30	Sporadic cases
Saint Barthélemy	7	189	19 120	0	0	0	Sporadic cases
Falkland Islands (Malvinas)	6	29	8 326	0	0	0	No cases
Bonaire, Sint Eustatius and Saba	5	182	6 941	0	3	114	
Anguilla	2	12	800	0	0	0	Sporadic cases
Saint Pierre and Miquelon	2	16	2 761	0	0	0	Sporadic cases
Montserrat	0	13	2 601	0	1	200	No cases
Eastern Mediterranean	**157 595**	**4 823 157**	**6 600**	**3 482**	**119 004**	**163**	
Iran (Islamic Republic of)	42 891	1 194 963	14 227	1 126	54 574	650	Community transmission
Morocco	15 336	430 562	11 665	295	7 204	195	Clusters of cases
Pakistan	14 809	469 482	2 125	566	9 816	44	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Jordan	13 559	286 356	28 065	184	3 729	365	Community transmission
Lebanon	12 902	169 472	24 829	109	1 379	202	Community transmission
Tunisia	11 079	130 230	11 019	300	4 426	374	Community transmission
United Arab Emirates	8 488	200 892	20 312	21	655	66	Community transmission
Iraq	7 661	590 779	14 688	87	12 767	317	Community transmission
Egypt	6 424	131 315	1 283	283	7 352	72	Clusters of cases
Libya	3 881	97 653	14 212	69	1 415	206	Community transmission
Kuwait	1 674	149 449	34 995	11	929	218	Community transmission
Bahrain	1 456	91 518	53 784	2	351	206	Clusters of cases
Afghanistan	1 312	51 848	1 332	104	2 158	55	Clusters of cases
Oman	1 271	128 290	25 122	8	1 491	292	Community transmission
Saudi Arabia	1 218	362 066	10 400	64	6 176	177	Sporadic cases
Qatar	1 045	142 903	49 601	1	244	85	Community transmission
Syrian Arab Republic	882	10 932	625	68	669	38	Community transmission
Sudan	216	23 316	532	7	1 468	33	Community transmission
Somalia	28	4 690	295	3	127	8	Sporadic cases
Djibouti	24	5 805	5 876	0	61	62	Clusters of cases
Yemen	5	2 096	70	0	607	20	Sporadic cases
Territories[iii]							
occupied Palestinian territory	11 434	148 540	29 117	174	1 406	276	Community transmission
Europe	**1 545 682**	**25 271 220**	**27 074**	**31 005**	**554 716**	**594**	
The United Kingdom	251 786	2 256 009	33 232	3 330	70 405	1 037	Community transmission
Russian Federation	201 871	3 050 248	20 901	3 920	54 778	375	Clusters of cases
Germany	146 849	1 640 858	19 584	3 729	29 778	355	Clusters of cases
Turkey	129 088	1 319 035	15 640	1 773	19 624	233	Community transmission
Italy	100 676	2 038 759	33 720	3 173	71 620	1 185	Clusters of cases
France	89 093	2 507 532	38 416	2 154	62 197	953	Community transmission
Netherlands	77 582	754 171	44 014	520	10 974	640	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Ukraine	61 541	1 025 989	23 460	1 189	17 774	406	Community transmission
Poland	55 099	1 257 799	33 234	1 721	27 118	717	Community transmission
Czechia	46 459	670 599	62 620	713	11 044	1 031	Community transmission
Spain	36 436	1 854 951	39 674	384	49 824	1 066	Community transmission
Serbia	26 839	323 367	46 436	351	2 983	428	Community transmission
Romania	25 816	613 760	31 904	812	15 108	785	Community transmission
Portugal	22 209	392 996	38 541	493	6 556	643	Clusters of cases
Sweden	21 038	396 048	39 216	69	8 279	820	Community transmission
Switzerland	20 636	426 199	49 245	461	6 508	752	Community transmission
Denmark	19 561	151 167	26 098	134	1 153	199	Community transmission
Lithuania	18 239	130 598	47 974	235	1 254	461	Community transmission
Slovakia	16 187	167 523	30 684	218	1 773	325	Clusters of cases
Azerbaijan	14 065	213 192	21 027	279	2 454	242	Clusters of cases
Austria	13 730	348 359	38 679	625	5 752	639	Community transmission
Belarus	13 343	184 922	19 570	60	1 376	146	Community transmission
Hungary	13 071	316 060	32 717	948	9 047	937	Community transmission
Georgia	12 967	221 605	55 552	283	2 377	596	Community transmission
Israel	12 342	383 715	44 332	63	3 138	363	Community transmission
Belgium	11 959	638 874	55 125	491	19 192	1 656	Community transmission
Croatia	9 968	204 930	49 919	494	3 671	894	Community transmission
Slovenia	9 167	114 192	54 928	128	2 530	1 217	Clusters of cases
Ireland	6 618	85 394	17 294	46	2 200	446	Community transmission
Republic of Moldova	6 418	140 996	34 952	156	2 883	715	Community transmission
Bulgaria	6 355	197 384	28 407	572	7 123	1 025	Clusters of cases
Latvia	5 522	35 819	18 990	88	515	273	Clusters of cases
Greece	4 629	135 114	12 963	451	4 553	437	Community transmission
Kazakhstan	4 566	196 216	10 450	0	2 669	142	Clusters of cases
Armenia	4 009	157 147	53 032	138	2 763	932	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Bosnia and Herzegovina	3 806	109 330	33 324	298	3 923	1 196	Community transmission
Estonia	3 598	25 392	19 142	30	204	154	Clusters of cases
North Macedonia	3 476	81 425	39 083	153	2 427	1 165	Community transmission
Albania	3 213	55 755	19 374	69	1 143	397	Clusters of cases
Montenegro	2 483	46 740	74 419	41	667	1 062	Clusters of cases
Norway	2 157	44 932	8 288	17	421	78	Clusters of cases
Cyprus	1 915	19 391	16 061	22	111	92	Clusters of cases
Luxembourg	1 709	45 776	73 127	30	470	751	Community transmission
Finland	1 502	34 084	6 152	35	524	95	Community transmission
Kyrgyzstan	1 251	80 373	12 319	18	1 348	207	Clusters of cases
Uzbekistan	945	76 751	2 293	1	613	18	Clusters of cases
Malta	620	12 241	27 723	19	206	467	Clusters of cases
Liechtenstein	273	1 998	52 390	4	26	682	Sporadic cases
Andorra	246	7 806	101 029	3	83	1 074	Community transmission
San Marino	157	2 264	66 710	2	57	1 680	Community transmission
Monaco	74	797	20 309	0	3	76	Sporadic cases
Iceland	62	5 683	16 654	0	28	82	Community transmission
Holy See	0	26	32 138	0	0	0	Sporadic cases
Tajikistan	0	13 182	1 382	0	89	9	Pending
Territories[iii]							
Kosovo	1 723	50 362	27 071	57	1 295	696	Community transmission
Gibraltar	350	1 534	45 531	0	6	178	Clusters of cases
Jersey	349	2 583	23 741	5	41	377	Community transmission
Faroe Islands	25	571	11 685	0	0	0	Sporadic cases
Greenland	7	26	458	0	0	0	No cases
Guernsey	6	297	4 700	0	13	206	Community transmission
Isle of Man	1	374	4 398	0	25	294	No cases
South-East Asia	**231 978**	**11 842 422**	**5 859**	**3 911**	**180 737**	**89**	

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
India	156 627	10 187 850	7 382	2 145	147 622	107	Clusters of cases
Indonesia	48 889	706 837	2 584	1 335	20 994	77	Community transmission
Bangladesh	8 539	508 099	3 085	186	7 428	45	Community transmission
Myanmar	7 082	121 280	2 229	181	2 579	47	Clusters of cases
Nepal	4 516	257 700	8 844	42	1 819	62	Clusters of cases
Sri Lanka	4 331	40 380	1 886	22	187	9	Clusters of cases
Thailand	1 689	6 020	86	0	60	1	Clusters of cases
Bhutan	151	597	774	0	0	0	Clusters of cases
Maldives	144	13 618	25 193	0	48	89	Clusters of cases
Timor-Leste	10	41	31	0	0	0	Sporadic cases
Western Pacific	**53 073**	**1 059 751**	**539**	**663**	**19 558**	**10**	
Japan	21 432	217 312	1 718	340	3 213	25	Clusters of cases
Malaysia	11 931	103 900	3 210	18	451	14	Clusters of cases
Philippines	10 961	469 005	4 280	156	9 067	83	Community transmission
Republic of Korea	7 211	56 872	1 109	134	808	16	Clusters of cases
China	608	96 324	65	7	4 777	3	Clusters of cases
Australia	168	28 296	1 110	0	908	36	Sporadic cases
Mongolia	129	1 082	330	0	0	0	Clusters of cases
Singapore	116	58 519	10 003	0	29	5	Sporadic cases
Viet Nam	29	1 440	15	0	35	0	Clusters of cases
New Zealand	28	1 788	371	0	25	5	Clusters of cases
Papua New Guinea	20	780	87	1	9	1	Community transmission
Cambodia	2	364	22	0	0	0	Sporadic cases
Brunei Darussalam	0	152	347	0	3	7	No cases
Fiji	0	46	51	0	2	2	Sporadic cases
Lao People's Democratic Republic	0	41	6	0	0	0	Sporadic cases
Solomon Islands	0	17	25	0	0	0	Sporadic cases
Territories[iii]							

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
French Polynesia	368	16 550	58 916	5	108	384	Sporadic cases
Guam	63	7 094	42 032	2	121	717	Clusters of cases
Northern Mariana Islands (Commonwealth of the)	6	122	2 120	0	2	35	Pending
New Caledonia	1	38	133	0	0	0	Sporadic cases
Marshall Islands	0	4	68	0	0	0	Sporadic cases
Vanuatu	0	1	3	0	0	0	No cases
Wallis and Futuna	0	4	356	0	0	0	Sporadic cases
Global	**4 068 632**	**79 231 893**	**522**	**72 761**	**1 754 574**	**9**	

**See *data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions
- African Region
- Eastern Mediterranean Region
- European Region
- Region of the Americas
- South-East Asia Region
- Western Pacific Region

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.
Global totals include 745 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case.

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g. laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

World Health Organization

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 20 December 2020, 10 am CET. Other information collected by epidemic intelligence activities and verified by WHO.

For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

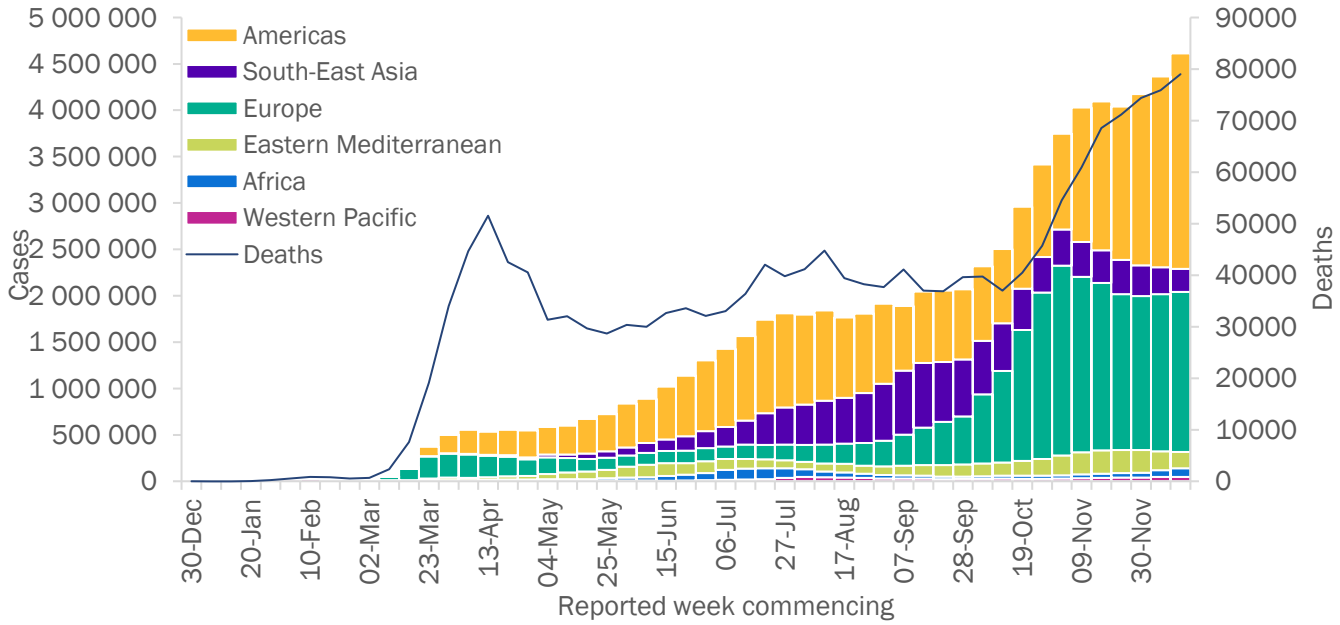
Global epidemiological situation

New COVID-19 cases and deaths continued to increase during the past week, by 6% and 4% respectively (Figure 1, Table 1). The Region of the Americas again accounted for the greatest proportion, reporting over 2.3 million new cases (half of the global cumulative), while the European Region reported the highest number of new deaths (36 286; 46%) in the past week. The African Region accounted for the greatest relative increase in new cases (27%) and deaths (34%) compared to the previous week. Increasing trends were also observed in the Western Pacific Region, while the South-East Asia and Eastern Mediterranean Regions were the only two that reported a decrease in both cases and deaths.

On 14 December 2020, authorities from the United Kingdom of Great Britain and Northern Ireland (United Kingdom) reported a new variant of SARS-CoV-2 to WHO. It was identified by viral genomic sequencing, and is referred to as SARS-CoV-2 Variant Under Investigation, year 2020, month 12, variant 01 (SARS-CoV-2 VUI 202012/01). Initial analysis indicates that the variant may spread more readily between people. Investigations are ongoing to determine if it is associated with any change in the severity of infection, antibody response or vaccine efficacy.

As of 20 December there have been over 75 million cases and over 1.6 million deaths since the start of the pandemic.

Figure 1: COVID-19 cases reported weekly by WHO Region, and global deaths, as of 20 December 2020**



**See *data table and figure notes*.

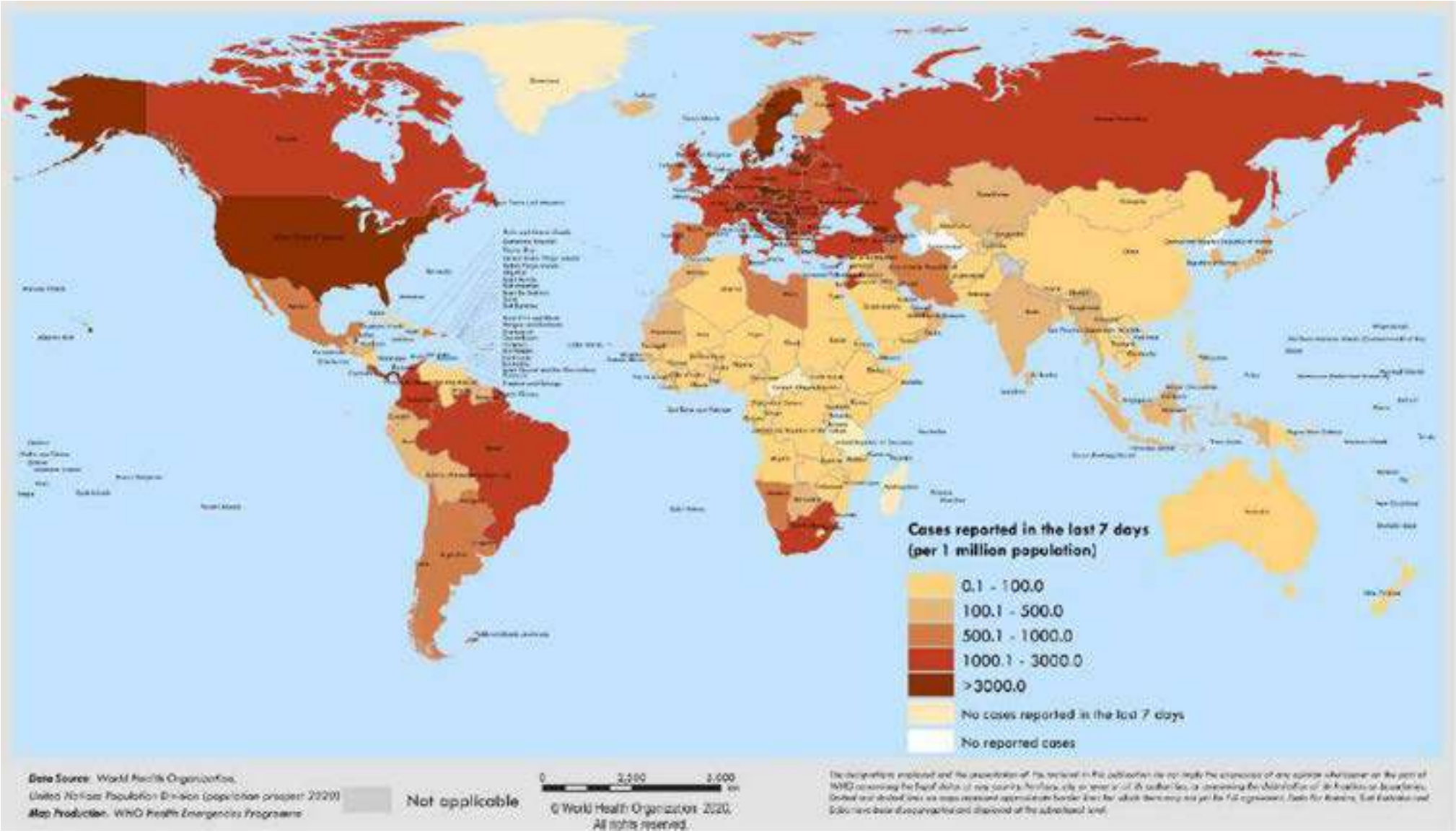
In the past week, the five countries reporting the highest number of cases globally were the United States of America with over 1.6 million cases, a 14% increase from the previous week, Brazil (326 751 new cases, an 8% increase from the previous week), Turkey (194 476 new cases, an 11% decrease from the previous week), the Russian Federation (194 449 new cases; less than a 1% increase from the previous week) and India (174 194 new cases; an 18% decrease from the previous week).

Additional Region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western Pacific Region.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 20 December 2020 **

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	2 321 202 (50%)	13%	32 437 597 (43%)	32 397 (41%)	9%	809 105 (48%)
Europe	1 726 941 (37%)	2%	23 691 857 (32%)	36 286 (46%)	3%	522 719 (31%)
South-East Asia	249 007 (5%)	-14%	11 610 444 (15%)	3 968 (5%)	-10%	176 826 (11%)
Eastern Mediterranean	174 325 (4%)	-14%	4 665 285 (6%)	3 852 (5%)	-12%	115 495 (7%)
Africa	94 653 (2%)	27%	1 716 697 (2%)	1 862 (2%)	34%	37 741 (2%)
Western Pacific	46 662 (1%)	3%	1 006 682 (1%)	636 (1%)	18%	18 895 (1%)
Global	**4 612 790 (100%)**	**6%**	**75 129 306 (100%)**	**79 001 (100%)**	**4%**	**1 680 794 (100%)**

Figure 2. COVID-19 cases per 1 million population reported in the last seven days by countries, territories and areas, 14 December through 20 December 2020**



**See *data, table and figure notes*

Situation by WHO Region

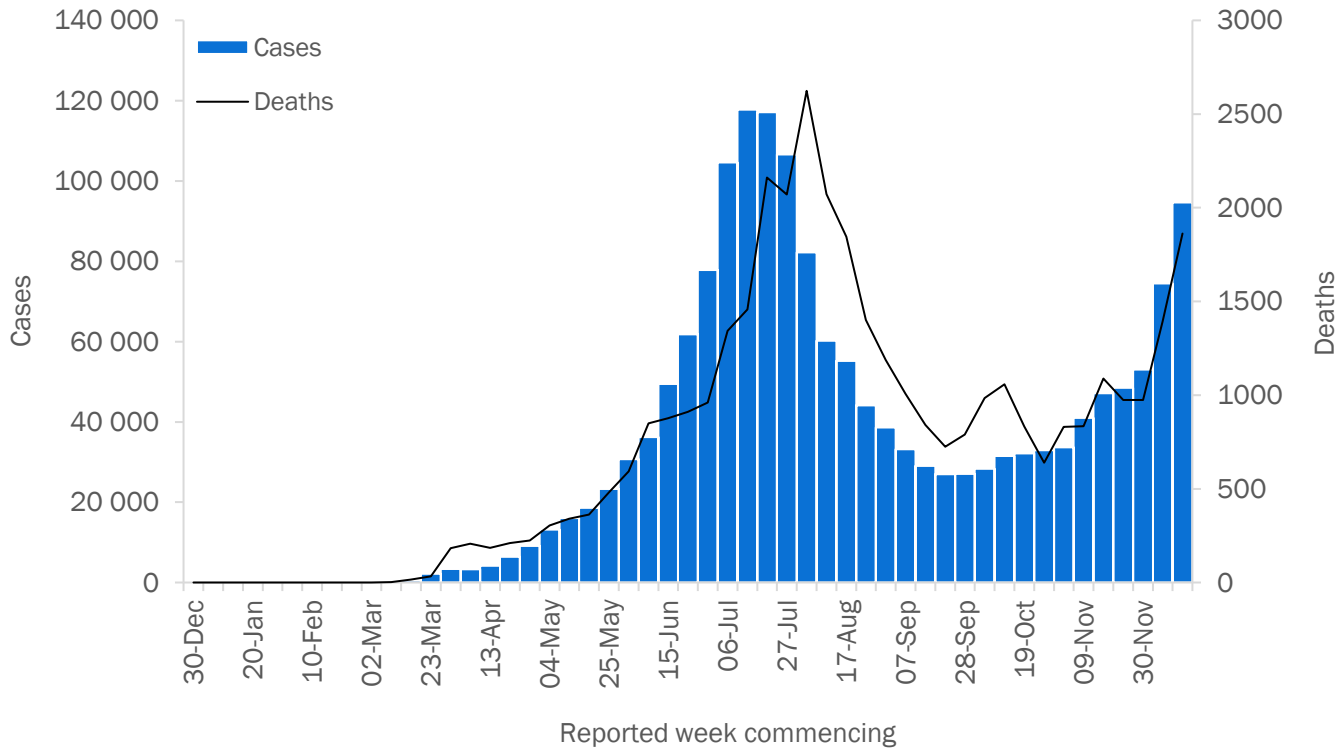
African Region

The African Region has continued to report a steady increase in new reported cases and deaths, with 27% and 34% increases respectively week on week. (Figure 3). The Region reported 94 653 new cases, constituting the highest overall change in case counts (Table 1). The number of new cases per 1 million population was 84 during the last week and a case fatality rate of 2.2%, since the start of the pandemic. The highest number of cases were reported from South Africa (59 512, 1 003 new cases per 1 million population), Nigeria (5 176, 25 new cases per 1 million population), Ethiopia (4 134, 36 cases per 1 million population), Kenya (3 846, 72 cases per 1 million population), Uganda (3 631, 79 cases per 1 million population) and Algeria (3 143, 72 cases per 1 million population).

South Africa continues to report high numbers of new cases and deaths, and has the highest case incidence (1003 new cases per 1 million population) within the region. As of 20 December 2020, the cases were mainly distributed in Gauteng (28%), Western Cape (19%), Eastern Cape (17%) and KwaZulu Natal (17%) provinces. New stay-at-home orders were implemented, as well as closures of some public beaches and parks, limiting alcohol selling hours and a curfew from 11pm to 4am. A new variant of SARS-CoV-2 was detected in South Africa and the changes observed may translate to higher transmissibility.

New cases reported in Eswatini have increased by 170%, bringing the cumulative to 7305 cases. The country reported an increased incidence of 509 new cases per million population compared to 189 cases per million population reported in the previous week. As of 14 December 2020, cases were mainly distributed in regions of Manzini (46%) and Hhohho (38%), according to the Ministry of Health. Reported deaths increased, though cumulative deaths remain low (137 deaths) compared to neighbouring countries, South Africa and Mozambique.

Figure 3: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, as of 20 December 2020**



**See *data, table and figure notes*

Region of the Americas

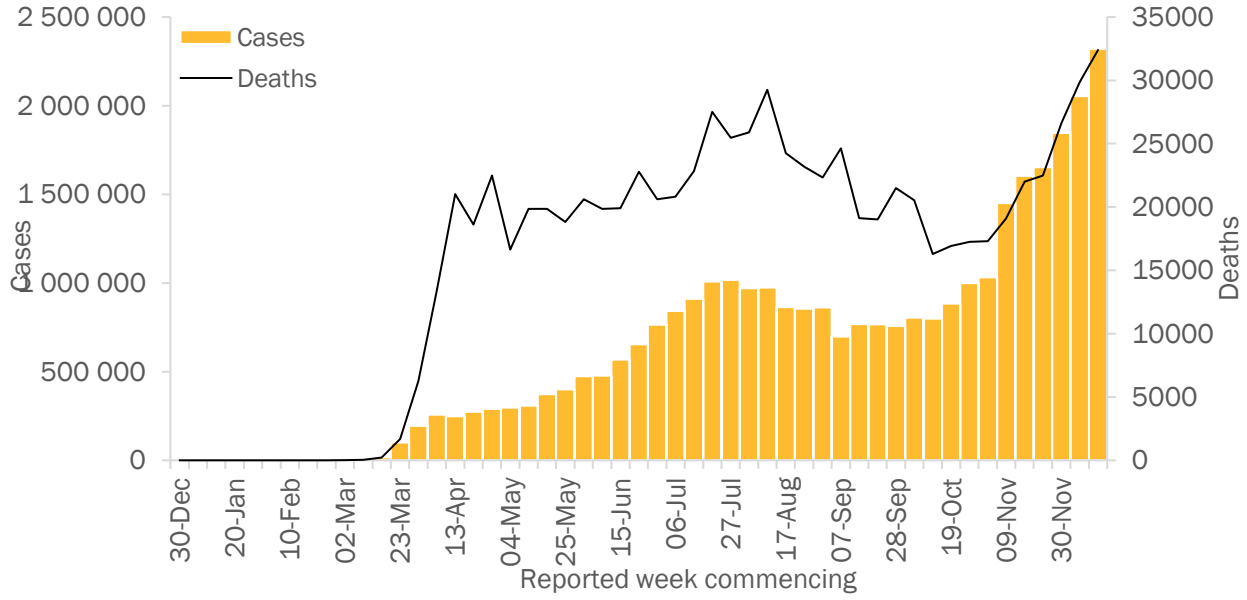
The Region of the Americas reported over 2.3 million new cases this week, a 13% increase from the previous week (Figure 4). The Region also reported over 32 000 deaths, a 9% increase from the previous week and a continuation in the a rapid rise in deaths since November. The United States of America continues to report an increasing number of new cases (over 1.65 million new cases; over 5000 new cases per 1 million population) – the highest incidence in the Region. The United States of America is followed by Brazil, Colombia, Mexico and Canada in cases reported last week. The five countries with the highest number of deaths per 1 million population were Belize (75 deaths per 1 million), the United States of America (54 deaths per 1 million), Panama (45 deaths per million), Mexico (33 deaths per 1 million), and Colombia (27 deaths per 1 million).

The number of new cases reported last week in Argentina (over 42 000, 930 per 1 million population) represents a 21% increase from last week and pushes the cumulative number of cases above 1.5 million. This is the first increase in the number of new cases since a continuous downward trend from the week of 19 October, when new weekly cases peaked at 103 000. Despite this increase in new cases, the number of new deaths continued to decline, to just over 1000 new deaths reported last week, a 3% decline compared to the previous week. Buenos Aires province has reported the highest number of cumulative cases and accounts for 43% of cases, followed by the province of Santa Fé, the city of Buenos Aires and Córdoba province. Since the beginning of the pandemic, 4.3 million cumulative people have been tested, with a current test positivity rate of 30%. The occupancy rate of intensive care beds stands at 54%.

The number of new cases reported by Panama has risen rapidly since the week of 9 November. Last week, a 31% rise was seen compared to the previous week, with 18 500 new cases reported (4300 new cases per 1 million population – the second highest in the Region after the United States of America). The number of new deaths has also risen by 26% in comparison to the previous week, with 195 new deaths reported (45 new deaths per 1 million population). Public health and social measures including curfews are being implemented over the end-of-year holiday period. The government has approved the use of the Pfizer vaccine against COVID-19 and expects to start receiving the first batch in the first quarter of 2021.

In the Dominican Republic, new cases reported stabilized during the last week, to just under 5500 new cases (500 new cases per 1 million), an 8% decline from last week. As of 13 December, 790 000 polymerase chain-reaction (PCR) tests had been conducted, with a current test positivity rate around 15%. Around 30% of COVID-19 intensive care unit beds are currently occupied. Of those who have died, one third were reported to have hypertension, while 21% were diabetic, according to authorities. As with Panama, curfews will be implemented over the end-of-year holiday period.

Figure 4: Number of COVID-19 cases and deaths reported weekly by the WHO Region of the Americas, as of 20 December 2020**



**See *data, table and figure notes*

Eastern Mediterranean Region

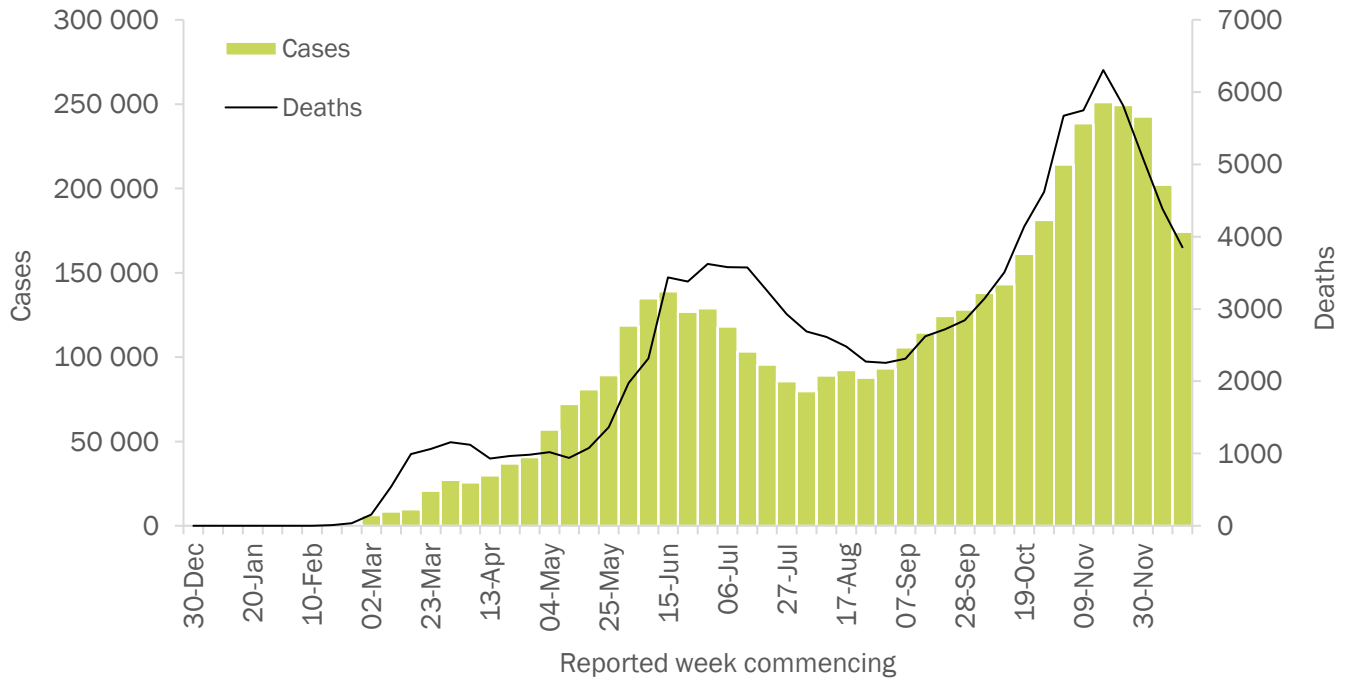
The number of new cases and deaths in the Eastern Mediterranean Region has decreased, for the fourth consecutive week (Figure 5). A cumulative 174 325 new cases (a 14% decrease compared to the previous week) and 3852 new deaths (a 12% decrease compared to the previous week) was reported in the past week. The countries reporting the highest number of new cases in the past week were the Islamic Republic of Iran (51 254 new cases; 610 new cases per 1 million population), Pakistan (19 617 new cases; 89 new cases per 1 million population) and Morocco (17 629 new cases; 478 per 1 million population). These three countries also accounted for the most deaths reported in the past week (table 2).

There has been a 40% increase in new cases in the Syrian Arab Republic in the past week, with over 1000 cases reported, while the number of new deaths increased by nearly 50%. Increases in new cases have been reported for the past eight weeks, and the case fatality rate is high, at just under 6%.

In Lebanon the number of new cases has increased by 20%, after five weeks of reporting decreases. The number of new deaths decreased by 21%. Most cases were male (54%) compared to female (46%), and the highest incidence per 100 000 population was reported in those aged 50-59 years since the start of the pandemic. Nationally, the cumulative incidence has been reported to be highest in the district of Aleyh (5 121 per 100 000 population), while the incidence in the past 14 days has been highest in the district of Zahleh (655 per 100 000 population). A new COVID-19 department was opened in the Othman Hospital in Kutermaya -- Al-Kharroub region of Lebanon -- along with an increase in the number of beds and intensive care units in two other hospitals: Al-Koura Hospital and Shaheen Hospital.

Both cases and deaths continued to increase in Egypt during the last week. The number of cases increased by 24%, representing the largest relative increase reported in the past two months. The number of new deaths increased by 16%. There was a cluster of cases reported among the youth national football team. The Minister of Health stated early in December that 56% of intensive care unit beds and 30% of ventilators are currently occupied, while the occupancy of beds for isolation is 24%. In an effort to address the rising number of cases and deaths, a grant will be used to scale up medical supplies.

Figure 5: Number of COVID-19 cases and deaths reported weekly by the WHO Eastern Mediterranean Region, as of 20 December 2020[**]



[*]See *data, table and figure notes*

European Region

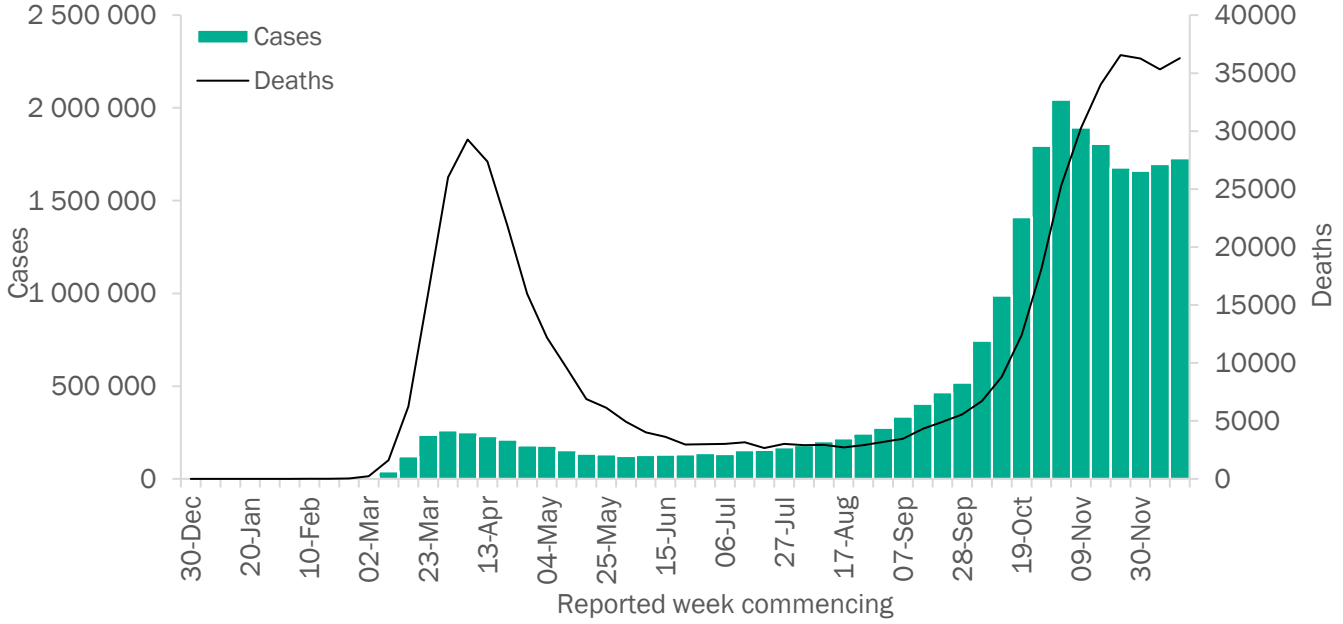
The increase in the number of new cases (2%) and deaths (3%) reported last week in the European Region remained very similar to the previous week (Figure 6). The highest number accounting for 33% of all cases reported in the Region, were in Turkey (194 476 new cases; 2306 new cases per 1 million population), the Russian Federation (194 449 new cases; 1332 new cases per 1 million population) and Germany (173 293 new cases; 2068 new cases per 1 million population). The highest number of new deaths were reported in Italy (4411 new deaths; 73 new deaths per 1 million population), Germany (4262 new deaths; 51 new deaths per 1 million population) and the Russian Federation (3917 new deaths; 27 new deaths per 1 million population).

For the ninth consecutive week, the number of cases and deaths increased in Estonia. Last week, while the number of new cases reported in Estonia increased by 27%, the number of new deaths increased by 18% . The country has reported peaks in new cases and deaths, with the most affected counties being Harju, Ida-Viru and Tartu. The average age of hospitalized cases was 67 years; 69 years for among females and 65 years among males. In response to these increases, public health and social measures were tightened on 14 December. Estonia has conducted over 565 000 PCR tests. The case fatality rate (0.8%) remains low, the test positivity rate is relatively high at 11%.

In Portugal, following three weeks of a decline in the incidence of cases and deaths, both remained relatively stable in the past week. The number of new cases in the country was highest in Mandim de Basto, Marvao and Chaves counties. As of 20 December, there were 3158 hospitalized cases, of which 502 (16%) are in intensive care unit. The number of new reported deaths in the country was the highest reported since the start of the pandemic.

The number of cases in Spain have decreased for the seventh consecutive week, dropping slightly (2%), with a much larger decrease in the number of new deaths (a 44% decrease). The regions with the highest incidence per 100 000 population were Palencia (172) and Girona (159), while Palencia also had the highest incidence per 100 000 in those aged over 65 years (247). Approximately 20% of intensive care unit beds in the country are occupied by COVID-19 patients.

Figure 6: Number of COVID-19 cases and deaths reported weekly by the WHO European Region, as of 20 December 2020**



**See *data, table and figure notes*

South-East Asia Region

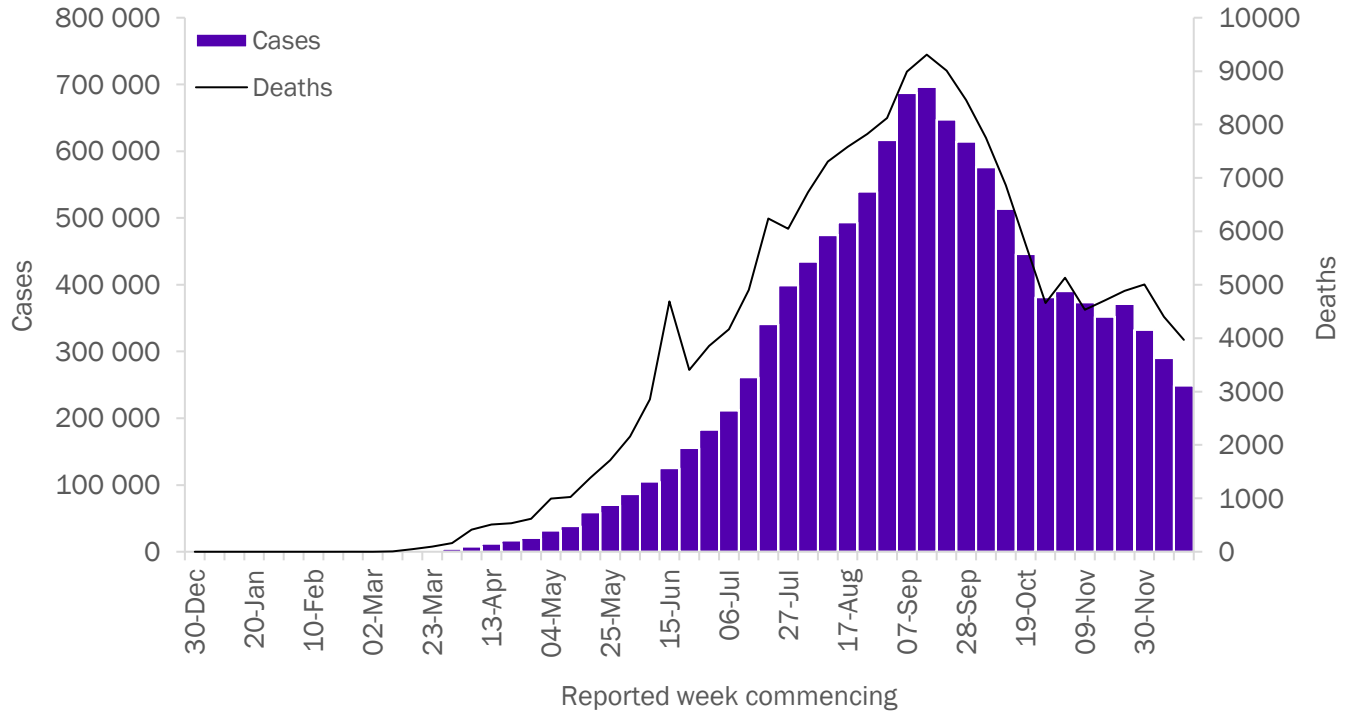
The Region reported just over 249 000 new cases and under 4000 new deaths, 14% and 10% decreases respectively (Figure 7). This continues the declines observed since the middle of September. Only two countries out of ten in the Region reported an increase in new cases (Thailand and Indonesia). India has now reported over 10 million cases, and despite the number of new cases falling by 18% this week, the country reported the fifth highest number of new cases globally (174 000 new cases, 126 new cases per 1 million population). In the Region, India was followed by Indonesia, Bangladesh, Myanmar and Nepal in the number of new cases and new deaths reported last week.

Myanmar reported 8300 new cases (150 new cases per 1 million population) last week, an 11% decline from the previous week. Although cases were first reported in Myanmar in March, fewer than 1000 cases were reported by mid-August. The number of weekly new cases started to rise at the end of August and has remained between 6000 and 11 000 since the end of September. The townships of Mingaladon, North Okkalapa, Hlaingtharya, and Insein, which are close to the capital, Yangon, have reported the highest numbers of cumulative cases. As of 20 December, 1.6 million PCR tests had been conducted, with a current test positivity rate of 4%.

Sri Lanka reported 3900 new cases (180 new cases per 1 million), a 20% decline from last week. Weekly new cases rose considerably in the beginning of October, and new weekly cases have remained between 2500 and 5000 since the end of October. The number of deaths due to COVID-19 has remained low, with a current case fatality rate of 0.5%. As of 13 December, 1 million PCR tests have been conducted, with a current positivity rate of 4%.

Thailand reported 139 new cases last week (2 new cases per 1 million population), a 16% increase from the previous reporting period. Thailand has been successful at keeping the number of new cases below 100 per week from the end of April to early November. However, since the week of 9 November, the number of new weekly cases has risen steadily. A new outbreak in Samut Sakhon province was reported on 21 December, and accounts for a considerable proportion of the number of new cases. There have been no new deaths reported since 2 November. As of 6 December, 1.3 million PCR tests have been conducted, with a test positivity rate of 0.3%.

Figure 7: Number of COVID-19 cases and deaths reported weekly by the WHO South-East Asia Region, as of 20 December 2020*



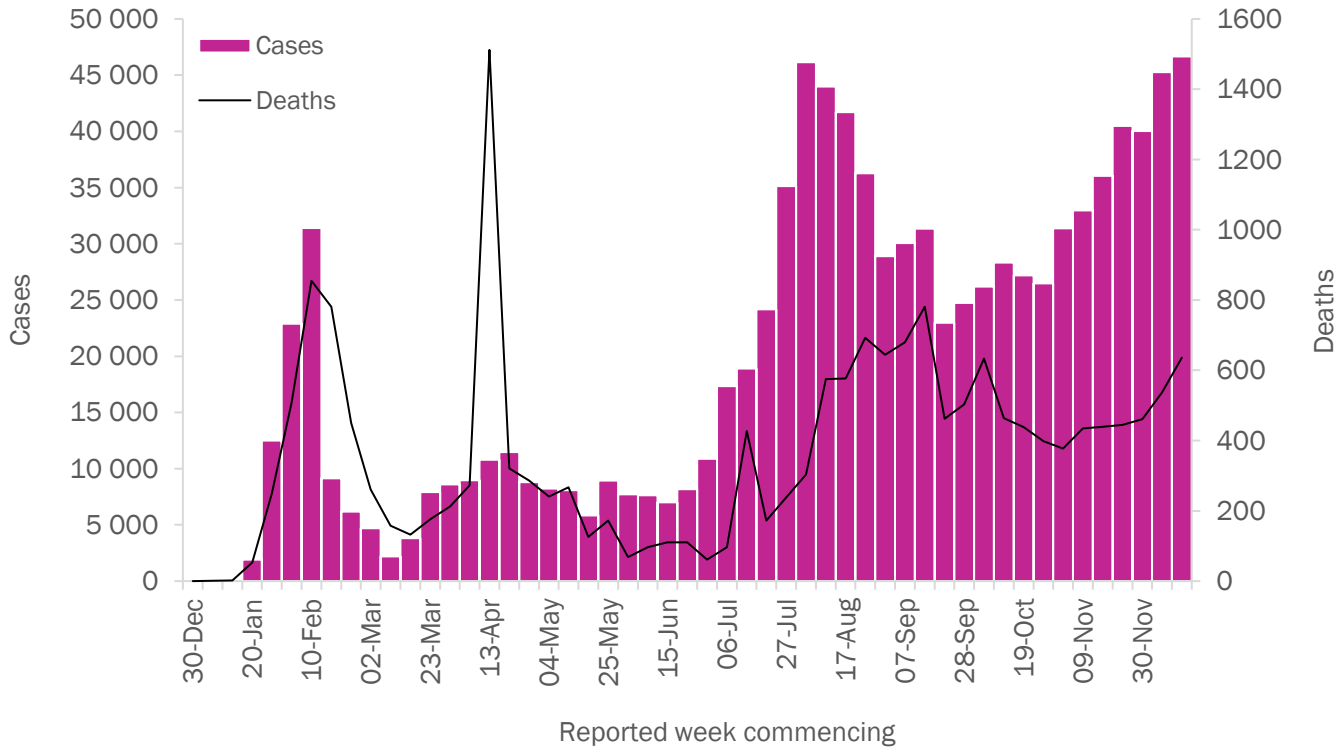
Western Pacific Region

The numbers of new cases and deaths reported in the Western Pacific Region have been increasing consistently but gradually over the past seven weeks. New weekly cases increased by 3% in the past week (Figure 8). The Region continues to report the lowest number of new cases compared to other regions, with 46 662 new cases and 636 deaths reported. Japan continued to report the highest number of new cases and deaths (18 593 and 311 respectively), followed by Malaysia (9723 new cases, 22 new deaths), Philippines (9713 new cases, 181 new deaths) and the Republic of Korea (6899 new cases, 94 new deaths).

The Republic of Korea reported 94 deaths, a 169% increase in new weekly deaths compared to the previous week with 35 deaths. Due to the increasing number of new cases since November 2020, the Seoul metropolitan area is facing challenges in the availability of critical care beds, with 580 patients waiting for beds in Seoul as of 18 December, of which nearly half have been waiting for at least two days. In response to the continued rise in number of new cases, the government toughened preventive measures in Seoul to Level 2.5, the second highest level under the five-tier system.

In the past week, Singapore reported the highest increase (55%) in new weekly cases in the region. While the country reported 90 new cases last week, all were imported and had been issued stay-at-home notices or were isolated on arrival, preventing further transmission in the community. The country will be moving from Phase 2 to Phase 3 of its reopening starting 28 December 2020, allowing gatherings of eight people ahead of the new year. Singapore approved the Pfizer-BioNTech vaccine and announced that they expect to have enough for the whole country by the third quarter of 2021.

Figure 8: Number of COVID-19 cases and deaths reported weekly by the WHO Western Pacific Region, data as of 20 December 2020**



**See *data, table and figure notes*

Key weekly updates

To mark the end of the Year of the Nurse and Midwife, WHO has unveiled the 2020 List of 100+ Outstanding Women Nurses and Midwives. This partnership between WHO, UNFPA, Nursing Now, the International Council of Nurses (ICN), the International Confederation of Midwives (ICM), and Women in Global Health (WGH) features the achievements and contributions of nurses and midwives from 43 countries and across six global regions, to recognize these women and the millions of nurses and midwives around the world.

COVAX now has agreements in place to access nearly two billion doses of several promising vaccine candidates, and laid the groundwork for further doses to be secured through contributions from donors. These agreements mean that all COVAX's 190 participating and eligible economies will be able to access doses to protect vulnerable groups in the first half of 2021. At least 1.3 billion donor-funded doses will be made available to 92 countries eligible for the Gavi COVAX AMC, targeting up to 20% of each country's population by the end 2021.

WHO and YouTube have partnered on a public service announcement to help battle COVID-19 fatigue.

The COVID-19 pandemic has had a negative impact on the living and working conditions of refugees and migrants according to a new WHO study, launched on 18 December, International Migrants Day. It shows that people living on the streets and in asylum centres are less likely than the general population to seek care if they have symptoms of COVID-19. More than half of those surveyed said that COVID-19 has caused them depression, worry, anxiety and loneliness.

WHO Publications:

- Emergency Use Designation of COVID-19 candidate vaccines: Ethical considerations
- Emergency Global Supply Chain System (COVID-19) catalogue
- Therapeutics and COVID-19: living guideline
- COVID-19 diagnostic testing in the context of international travel
- Risk assessment tool to inform mitigation measures for international travel in the context of COVID-19
- Considerations for implementing a risk-based approach to international travel in the context of COVID-19

Table 2. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 20 December 2020**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Africa	**94 653**	**1 716 697**	**1 530**	**1 862**	**37 741**	**34**	
South Africa	59 512	912 477	15 385	1 433	24 539	414	Community transmission
Nigeria	5 176	77 933	378	24	1 218	6	Community transmission
Ethiopia	4 134	119 494	1 039	67	1 846	16	Community transmission
Kenya	3 846	94 151	1 751	65	1 633	30	Community transmission
Uganda	3 631	30 702	671	10	230	5	Community transmission
Algeria	3 143	94 781	2 161	75	2 659	61	Community transmission
Namibia	2 340	18 437	7 256	11	171	67	Community transmission
Mauritania	1 292	10 971	2 360	31	225	48	Community transmission
Zimbabwe	1 070	12 151	818	13	318	21	Community transmission
Burkina Faso	1 060	4 954	237	3	74	4	Community transmission
Democratic Republic of the Congo	869	15 210	170	17	369	4	Community transmission
Ghana	720	53 653	1 727	4	331	11	Community transmission
Cameroon	706	25 849	974	5	448	17	Community transmission
Rwanda	704	7 232	558	3	59	5	Clusters of cases
Mozambique	665	17 477	559	7	147	5	Community transmission
Senegal	609	17 670	1 055	12	361	22	Community transmission
Eswatini	591	7 305	6 297	10	137	118	Community transmission
Zambia	529	18 620	1 013	9	373	20	Community transmission
Niger	505	2 361	98	5	82	3	Community transmission
Angola	465	16 626	506	20	386	12	Community transmission
Mali	443	6 164	304	29	220	11	Community transmission
Botswana	372	12 873	5 474	1	38	16	Community transmission
Cabo Verde	265	11 567	20 804	1	111	200	Community transmission
Togo	194	3 396	410	0	66	8	Community transmission
Congo	151	6 200	1 124	1	100	18	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Lesotho	135	2 285	1 067	0	44	21	Community transmission
Côte d'Ivoire	133	21 772	825	0	133	5	Community transmission
Chad	128	1 867	114	0	102	6	Community transmission
Guinea	112	13 532	1 030	1	80	6	Community transmission
Liberia	103	1 779	352	0	83	16	Community transmission
Eritrea	98	754	213	0	0	0	Sporadic cases
Malawi	87	6 153	322	1	187	10	Community transmission
Gabon	70	9 400	4 223	1	64	29	Community transmission
Benin	62	3 152	260	0	44	4	Community transmission
Sierra Leone	51	2 486	312	0	75	9	Community transmission
South Sudan	47	3 228	288	0	62	6	Community transmission
Burundi	32	761	64	1	2	0	Community transmission
Equatorial Guinea	29	5 214	3 716	0	85	61	Community transmission
Comoros	19	643	739	0	7	8	Community transmission
Seychelles	17	202	2 054	0	0	0	Sporadic cases
Mauritius	10	524	412	0	10	8	Clusters of cases
Gambia	6	3 788	1 567	0	123	51	Community transmission
Guinea-Bissau	3	2 447	1 243	0	44	22	Community transmission
Sao Tome and Principe	3	1 012	4 618	0	17	78	Community transmission
Central African Republic	0	4 936	1 022	0	63	13	Community transmission
Madagascar	0	17 587	635	0	259	9	Community transmission
United Republic of Tanzania	0	509	9	0	21	0	Community transmission
Territories[iii]							
Réunion	359	8 704	9 722	1	42	47	Clusters of cases
Mayotte	157	5 708	20 923	1	53	194	Clusters of cases
Americas	**2 321 202**	**32 437 597**	**31 715**	**32 397**	**809 105**	**791**	
United States of America	1 666 736	17 314 834	52 310	18 021	311 150	940	Community transmission
Brazil	326 751	7 162 978	33 699	5 213	185 650	873	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Colombia	73 163	1 482 072	29 127	1 350	40 019	786	Community transmission
Mexico	72 167	1 301 546	10 095	4 230	117 249	909	Community transmission
Canada	46 505	495 346	13 124	789	14 040	372	Community transmission
Argentina	42 046	1 531 374	33 883	1 066	41 672	922	Community transmission
Panama	18 531	206 310	47 815	195	3 504	812	Community transmission
Chile	13 573	583 354	30 516	255	16 101	842	Community transmission
Peru	12 817	993 760	30 140	425	36 969	1 121	Community transmission
Costa Rica	6 525	157 472	30 913	101	1 996	392	Community transmission
Paraguay	6 183	98 296	13 781	123	2 050	287	Community transmission
Dominican Republic	5 479	159 064	14 663	22	2 382	220	Community transmission
Ecuador	4 396	205 920	11 671	74	13 948	791	Community transmission
Guatemala	3 496	132 595	7 401	219	4 624	258	Community transmission
Uruguay	3 101	11 950	3 440	19	109	31	Community transmission
Venezuela (Bolivarian Republic of)	2 680	109 395	3 847	35	979	34	Community transmission
Honduras	2 504	116 212	11 733	52	3 023	305	Community transmission
Bolivia (Plurinational State of)	2 452	149 149	12 777	20	9 033	774	Community transmission
El Salvador	1 801	43 195	6 660	49	1 242	191	Community transmission
Belize	964	9 929	24 971	30	215	541	Community transmission
Cuba	670	10 024	885	0	137	12	Clusters of cases
Jamaica	527	12 135	4 098	14	285	96	Community transmission
Guyana	237	6 076	7 725	5	159	202	Clusters of cases
Haiti	183	9 674	848	1	234	21	Community transmission
Suriname	120	5 459	9 306	0	117	199	Sporadic cases
Trinidad and Tobago	103	6 955	4 970	1	123	88	Community transmission
Bahamas	74	7 733	19 665	1	164	417	Clusters of cases
Grenada	51	94	835	0	0	0	Sporadic cases
Nicaragua	39	4 748	717	1	163	25	Community transmission
Barbados	15	307	1 068	0	7	24	Clusters of cases
Saint Lucia	6	280	1 525	1	5	27	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Saint Vincent and the Grenadines	6	100	901	0	0	0	Sporadic cases
Antigua and Barbuda	5	152	1 552	1	5	51	Sporadic cases
Saint Kitts and Nevis	3	30	564	0	0	0	Sporadic cases
Dominica	1	88	1 222	0	0	0	Clusters of cases
Territories[iii]							
Puerto Rico	5 488	67 211	23 493	76	1 342	469	Community transmission
French Guiana	569	12 369	41 412	0	71	238	Community transmission
Curaçao	419	3 823	23 298	3	11	67	Community transmission
Bermuda	125	516	8 286	0	9	145	Clusters of cases
United States Virgin Islands	119	1 910	18 291	0	23	220	Community transmission
Aruba	113	5 124	47 993	1	47	440	Community transmission
Saint Martin	110	948	24 522	0	12	310	Community transmission
Guadeloupe	106	8 557	21 386	3	155	387	Community transmission
Sint Maarten	93	1 294	30 176	0	26	606	Community transmission
Martinique	81	5 634	15 013	1	42	112	Community transmission
Turks and Caicos Islands	20	789	20 378	0	6	155	Clusters of cases
Saint Barthélemy	18	182	18 412	0	0	0	Sporadic cases
Cayman Islands	13	311	4 732	0	2	30	Sporadic cases
British Virgin Islands	10	86	2 844	0	1	33	Clusters of cases
Bonaire	4	154	8 816	0	3	172	Sporadic cases
Falkland Islands (Malvinas)	4	23	6 604	0	0	0	No cases
Anguilla	0	10	667	0	0	0	Sporadic cases
Montserrat	0	13	2 601	0	1	200	No cases
Saba	0	5	3 342	0	0	0	No cases
Saint Pierre and Miquelon	0	14	2 416	0	0	0	Sporadic cases
Sint Eustatius	0	18	7 246	0	0	0	Sporadic cases
Eastern Mediterranean	**174 325**	**4 665 285**	**6 384**	**3 852**	**115 495**	**158**	

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Iran (Islamic Republic of)	51 254	1 152 072	13 716	1 499	53 448	636	Community transmission
Pakistan	19 617	454 673	2 058	526	9 250	42	Clusters of cases
Morocco	17 629	415 226	11 250	320	6 909	187	Clusters of cases
Jordan	15 522	272 797	26 737	210	3 545	347	Community transmission
Lebanon	11 325	156 570	22 939	80	1 270	186	Community transmission
Iraq	9 496	583 118	14 497	115	12 680	315	Community transmission
Tunisia	8 758	119 151	10 082	290	4 126	349	Community transmission
United Arab Emirates	8 649	192 404	19 454	25	634	64	Community transmission
Libya	3 892	93 772	13 647	68	1 346	196	Community transmission
Egypt	3 802	124 891	1 220	171	7 069	69	Clusters of cases
Kuwait	1 731	147 775	34 603	7	918	215	Community transmission
Afghanistan	1 584	50 536	1 298	94	2 054	53	Clusters of cases
Oman	1 350	127 019	24 873	20	1 483	290	Community transmission
Sudan	1 232	22 823	520	79	1 434	33	Community transmission
Saudi Arabia	1 099	360 848	10 365	76	6 112	176	Sporadic cases
Bahrain	1 098	90 062	52 929	1	349	205	Clusters of cases
Qatar	1 031	141 858	49 238	3	243	84	Community transmission
Syrian Arab Republic	1 009	10 050	574	95	601	34	Community transmission
Somalia	83	4 662	293	3	124	8	Sporadic cases
Djibouti	56	5 781	5 851	0	61	62	Clusters of cases
Yemen	4	2 091	70	0	607	20	Sporadic cases
Territories[iii]							
occupied Palestinian territory	14 104	137 106	26 876	170	1 232	242	Community transmission
Europe	**1 726 941**	**23 691 857**	**25 382**	**36 286**	**522 719**	**560**	
Turkey	194 476	1 189 947	14 109	1 652	17 851	212	Community transmission
Russian Federation	194 449	2 848 377	19 518	3 917	50 858	348	Clusters of cases
Germany	173 293	1 494 009	17 832	4 262	26 049	311	Clusters of cases
The United Kingdom	173 263	2 004 223	29 523	3 049	67 075	988	Community transmission
Italy	112 308	1 938 083	32 055	4 411	68 447	1 132	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
France	93 836	2 418 439	37 051	2 651	60 043	920	Community transmission
Poland	76 000	1 202 700	31 778	2 721	25 397	671	Community transmission
Netherlands	73 449	676 589	39 486	444	10 454	610	Community transmission
Ukraine	70 233	964 448	22 053	1 431	16 585	379	Community transmission
Czechia	45 061	624 140	58 282	796	10 331	965	Community transmission
Spain	44 895	1 797 236	38 440	584	48 926	1 046	Community transmission
Sweden	38 630	367 120	36 351	154	7 993	791	Community transmission
Romania	36 044	587 944	30 562	1 032	14 296	743	Community transmission
Serbia	35 091	296 528	42 582	357	2 632	378	Community transmission
Azerbaijan	27 704	199 127	19 639	292	2 175	215	Clusters of cases
Switzerland	26 394	402 264	46 480	539	5 981	691	Community transmission
Portugal	26 087	370 787	36 363	602	6 063	595	Clusters of cases
Denmark	24 490	131 606	22 721	84	1 019	176	Community transmission
Hungary	22 589	302 989	31 364	1 134	8 099	838	Community transmission
Croatia	22 439	194 962	47 491	615	3 177	774	Community transmission
Lithuania	19 258	112 359	41 274	204	1 019	374	Community transmission
Georgia	18 912	208 638	52 301	304	2 094	525	Community transmission
Slovakia	18 352	151 336	27 719	380	1 555	285	Clusters of cases
Austria	17 598	334 629	37 155	772	5 127	569	Community transmission
Belgium	16 803	625 928	54 008	585	18 616	1 606	Community transmission
Israel	16 748	371 373	42 906	96	3 075	355	Community transmission
Belarus	13 245	171 579	18 158	62	1 316	139	Community transmission
Bulgaria	12 077	191 029	27 492	925	6 551	943	Clusters of cases
Slovenia	9 519	105 013	50 513	319	2 347	1 129	Clusters of cases
Republic of Moldova	8 855	134 578	33 361	180	2 727	676	Community transmission
Greece	6 643	130 485	12 519	562	4 102	394	Community transmission
Armenia	5 500	153 825	51 911	144	2 630	888	Community transmission
Latvia	5 251	30 297	16 062	103	427	226	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Bosnia and Herzegovina	5 218	105 524	32 164	327	3 625	1 105	Community transmission
North Macedonia	4 862	77 949	37 415	178	2 274	1 091	Community transmission
Albania	4 800	52 542	18 258	85	1 074	373	Clusters of cases
Kazakhstan	4 692	190 969	10 171	0	2 609	139	Clusters of cases
Estonia	4 081	21 794	16 429	26	174	131	Clusters of cases
Ireland	3 020	78 776	15 954	31	2 154	436	Community transmission
Luxembourg	2 795	44 067	70 397	44	440	703	Community transmission
Norway	2 753	42 775	7 890	17	404	75	Clusters of cases
Cyprus	2 676	17 476	14 475	12	89	74	Clusters of cases
Finland	2 509	32 582	5 880	36	489	88	Community transmission
Montenegro	2 345	44 037	70 115	44	626	997	Clusters of cases
Kyrgyzstan	1 766	79 122	12 127	23	1 330	204	Clusters of cases
Uzbekistan	995	75 806	2 265	0	612	18	Clusters of cases
Malta	520	11 621	26 319	21	187	424	Clusters of cases
Tajikistan	325	13 182	1 382	2	89	9	Pending
Andorra	272	7 560	97 845	2	80	1 035	Community transmission
Liechtenstein	223	1 725	45 232	4	22	577	Sporadic cases
San Marino	175	2 107	62 084	4	55	1 621	Community transmission
Iceland	69	5 621	16 472	0	28	82	Community transmission
Monaco	52	723	18 423	0	3	76	Sporadic cases
Holy See	0	26	32 138	0	0	0	Sporadic cases
Territories[iii]							
Kosovo	2 564	48 639	26 145	62	1 238	665	Community transmission
Jersey	597	2 234	20 533	4	36	331	Community transmission
Gibraltar	114	1 184	35 143	1	6	178	Clusters of cases
Faroe Islands	21	546	11 174	0	0	0	Sporadic cases
Isle of Man	3	373	4 387	0	25	294	No cases
Guernsey	2	291	4 605	0	13	206	Community transmission
Greenland	0	19	335	0	0	0	No cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
South-East Asia	**249 007**	**11 610 444**	**5 744**	**3 968**	**176 826**	**87**	
India	174 194	10 031 223	7 269	2 458	145 477	105	Clusters of cases
Indonesia	46 317	657 948	2 405	1 006	19 659	72	Community transmission
Bangladesh	10 382	499 560	3 033	222	7 242	44	Community transmission
Myanmar	8 335	114 198	2 099	178	2 398	44	Clusters of cases
Nepal	5 591	253 184	8 689	88	1 777	61	Clusters of cases
Sri Lanka	3 914	36 049	1 683	16	165	8	Clusters of cases
Thailand	139	4 331	62	0	60	1	Clusters of cases
Maldives	126	13 474	24 927	0	48	89	Clusters of cases
Bhutan	9	446	578	0	0	0	Clusters of cases
Timor-Leste	0	31	24	0	0	0	Sporadic cases
Western Pacific	**46 662**	**1 006 682**	**512**	**636**	**18 895**	**10**	
Japan	18 593	195 880	1 549	311	2 873	23	Clusters of cases
Malaysia	9 723	91 969	2 842	22	433	13	Clusters of cases
Philippines	9 713	458 044	4 180	181	8 911	81	Community transmission
Republic of Korea	6 899	49 665	969	94	674	13	Clusters of cases
China	766	95 716	65	14	4 770	3	Clusters of cases
Australia	103	28 128	1 103	0	908	36	Sporadic cases
Singapore	90	58 403	9 983	0	29	5	Sporadic cases
Mongolia	47	953	291	0	0	0	Clusters of cases
Papua New Guinea	40	760	85	0	8	1	Community transmission
New Zealand	20	1 760	365	0	25	5	Clusters of cases
Viet Nam	16	1 411	14	0	35	0	Clusters of cases
Cambodia	3	362	22	0	0	0	Sporadic cases
Fiji	2	46	51	0	2	2	Sporadic cases
Brunei Darussalam	0	152	347	0	3	7	Sporadic cases
Lao People's Democratic Republic	0	41	6	0	0	0	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Solomon Islands	0	17	25	0	0	0	Sporadic cases
Territories[iii]							
French Polynesia	564	16 182	57 606	12	103	367	Sporadic cases
Guam	78	7 031	41 659	2	119	705	Clusters of cases
Northern Mariana Islands (Commonwealth of the)	3	116	2 015	0	2	35	Pending
New Caledonia	1	37	130	0	0	0	Sporadic cases
Wallis and Futuna	1	4	356	0	0	0	Sporadic cases
Marshall Islands	0	4	68	0	0	0	Sporadic cases
Vanuatu	0	1	3	0	0	0	No cases
Global	**4 612 790**	**75 129 306**	**592**	**79 001**	**1 680 794**	**10**	

**See *data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their cumulative counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. Retro-adjustments can also affect the percentage change reported in Table 1, with the percentages reflecting retro-adjustments made over the past week. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.
Global totals include 744 cases and 13 deaths reported from international conveyances.
The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its

authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Data for Bonaire, Sint Eustatius and Saba have been disaggregated and displayed at the subnational level.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case.

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g. laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorizations are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

World Health Organization

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 13 December 2020, 10 am CET. Other information collected by epidemic intelligence activities and verified by WHO.

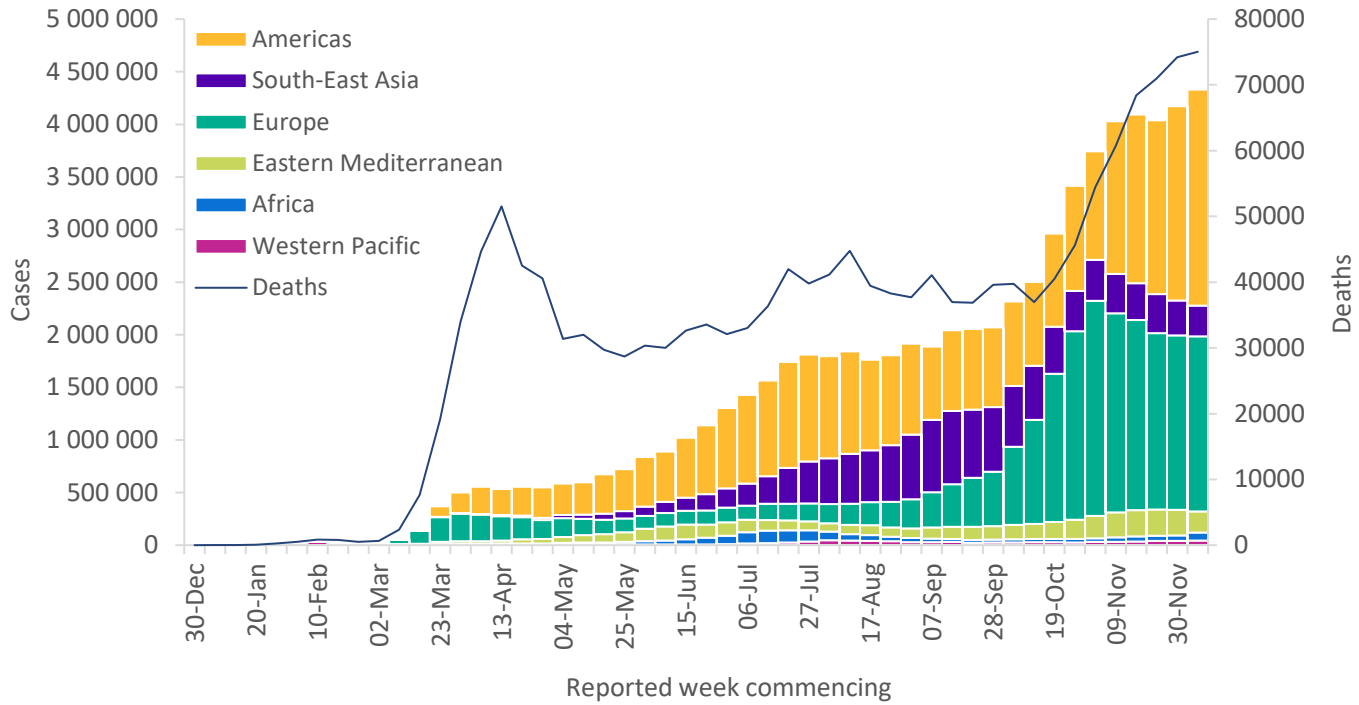
For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

In the past week the number of new COVID-19 cases and deaths continued to rise with 70 million cumulative cases and 1.6 million deaths globally since the start of the pandemic. The Regions of the Americas and Europe continue to shoulder the burden of the pandemic, accounting for 85% of new cases and 86% of new deaths globally. However as new cases and new deaths continue to rise in the Americas, in cases stabilised in Europe for the third week in a row, while deaths continued to decrease. The African and the Western-Pacific Regions have both shown renewed rises in November and December. This week the African Region reported a rise in new cases and new deaths of over 40% compared with the previous week. In the South-East Asia Region, the number of new cases and deaths continued to decline following a peak in September. The Eastern Mediterranean Region also reported a decline in new cases and deaths from a peak in mid-November.

Figure 1: COVID-19 cases reported weekly by WHO Region, and global deaths, as of 13 December 2020**



**See *data table and figure notes*.

In the past week, the five countries reporting the highest number of cases globally were the United States of America (reporting over 1.4 million cases, a 16% increase from the previous week), Brazil (300 000 new

cases, a 2% increase), Turkey (220 000 cases, no change from last week), India (210 000 cases, a 15% decrease), and the Russian Federation (193 000 new cases, a 1% increase).

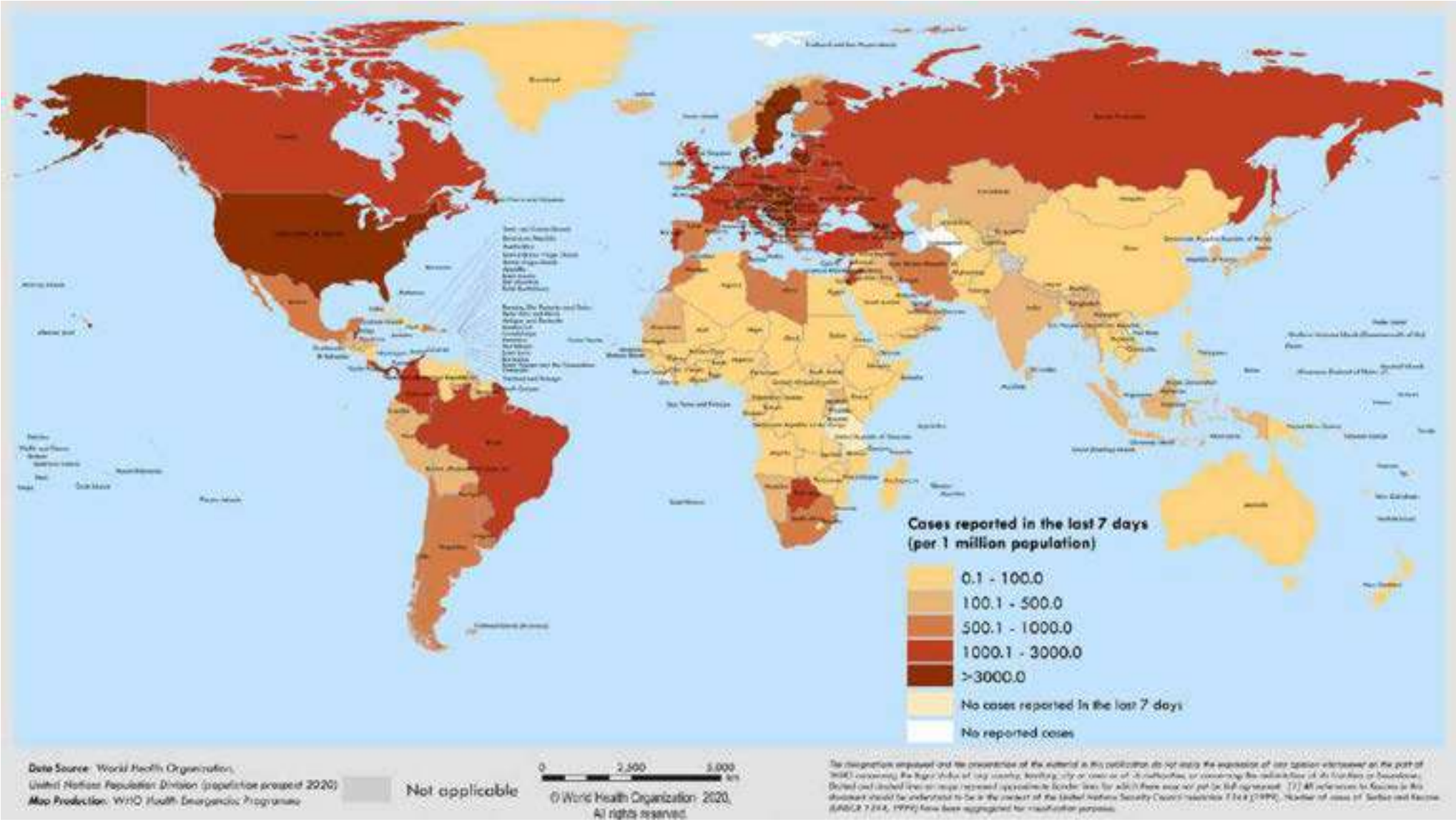
Additional Region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western Pacific Region.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 13 December 2020 **

WHO Region	New cases in last 7 days ( )	Change in new cases in last 7 days *	Cumulative cases ( )	New deaths in last 7 days ( )	Change in new deaths in last 7 days *	Cumulative deaths ( )
Americas	2 054 064 (47%)	11%	30 116 395 (43%)	29 856 (40%)	12%	776 708 (49%)
Europe	1 663 907 (38%)	0%	21 925 389 (31%)	34 475 (46%)	-4%	484 570 (30%)
South-East Asia	290 308 (7%)	-13%	11 361 437 (16%)	4 400 (6%)	-12%	172 858 (11%)
Eastern Mediterranean	201 880 (5%)	-17%	4 490 755 (6%)	4 377 (6%)	-14%	111 635 (7%)
Africa	74 489 (2%)	40%	1 622 096 (2%)	1 393 (2%)	43%	35 879 (2%)
Western Pacific	45 276 (1%)	13%	960 020 (1%)	537 (1%)	16%	18 259 (1%)
Global	**4 329 927 (100)**	**4**	**70 476 836 (100)**	**75 038 (100)**	**1**	**1 599 922 (100)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*
***See data, table and figure notes*

Figure 2. COVID-19 cases per 1 million population reported in the last seven days by countries, territories and areas, 7 December through 13 December 2020**



**See *data, table and figure notes*

Situation by WHO Region

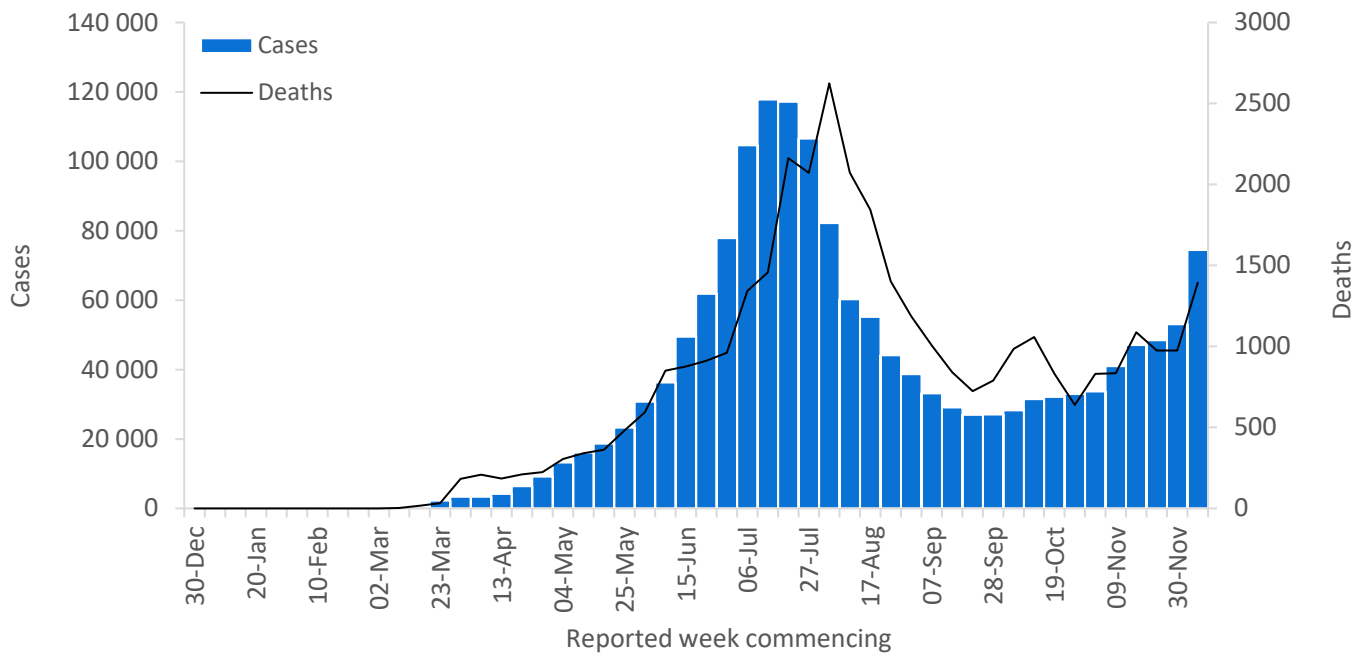
African Region

Following a decline in July and August and a plateau in September and October, the number of new cases and deaths has consistently increased since the beginning of November (Figure 3). In the last week, the number of new cases and deaths reported increased by 40% (to 74 500 new cases) and 43% (to 1 400 new deaths), respectively compared with the previous week. Several countries in the Region are reporting a resurgence in both cases and deaths including Mali, Namibia, Nigeria, Senegal and South Africa.

South Africa has reported the highest number of cumulative cases and deaths in the Region, with more than 850 000 confirmed cases and over 23 000 deaths. In the last week, 42 500 new cases (700 new cases per 1 million population) and 1 000 new deaths (18 new deaths per 1 million population) were reported. Four provinces including Eastern Cape, Gauteng, KwaZulu-Natal and Western Cape were most heavily affected, collectively accounting for 84% of all newly reported cases. The increase in affected provinces is expected to continue as the number of cases among those aged 15 to 19 years continues to increase. This increase could be partly attributed to end-of-school-year celebrations during which many adolescents gathered in large numbers.

In Uganda, the number of reported cases has continued to increase and in the last seven days, just under 5 000 cases were reported (100 new cases per 1 million population), a 118% increase from the previous week. The districts of Kampala, Kasese, Luwero, Mbarara and Wakiso have consistently reported the highest number of cases for the past three weeks, with Kampala the most affected. So far in the pandemic, a total of 1 516 cases, including 13 deaths, have been reported among health care workers, with the highest number reported in the week commencing 23 November, during which over 150 cases in health care workers were reported.

Figure 3: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, as of 13 December 2020**



**See *data, table and figure notes*

Region of the Americas

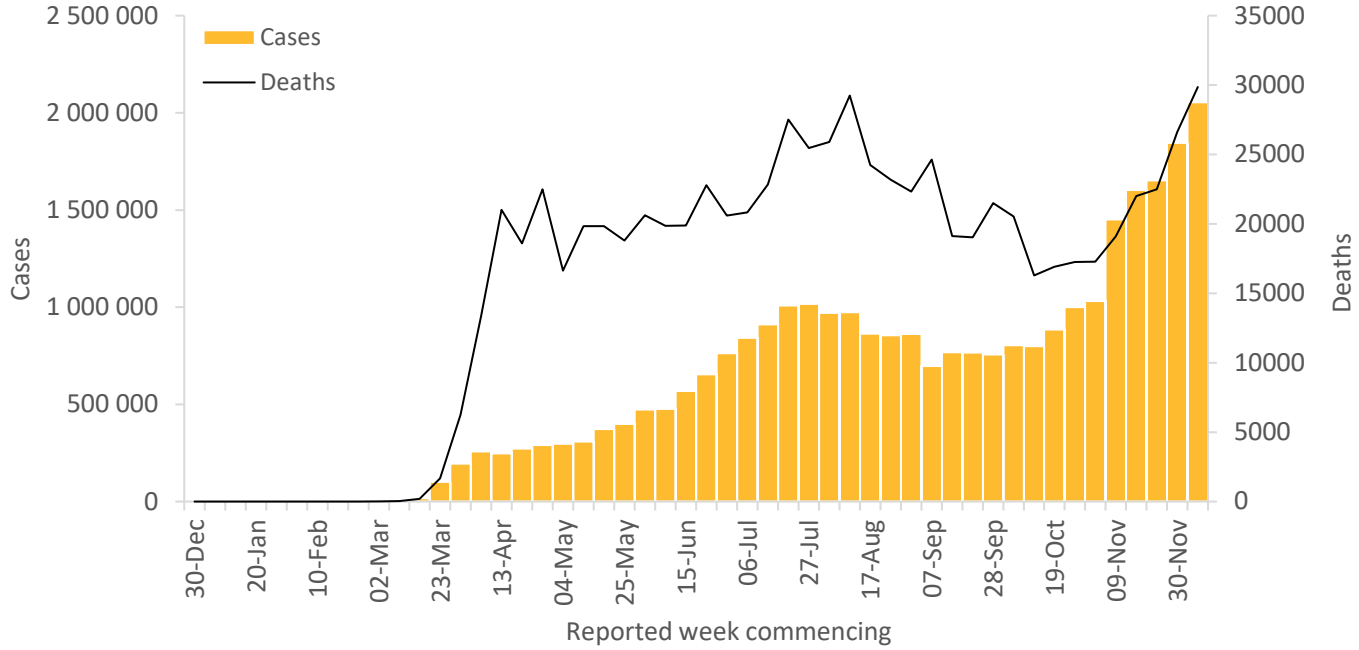
The Region of the Americas has consistently reported the largest proportion of cases and deaths globally, and in the past week accounted for 47% and 40% of global cases and deaths respectively. In the past week, over 2 million cases and nearly 30 000 deaths were reported, which is the highest reported in the Region since the start of the pandemic. This represents an 11% increase in cases and a 12% increase in deaths compared to the previous week.

Last week, the United States of America reported an increase of 16% in cases (1.45 million new cases, 4 400 new cases per 1 million population) and a 21% increase in deaths (16 600 new deaths, 50 new deaths per 1 million population), compared to the previous week, as cases continue to rise after the Thanksgiving holiday in November. The daily number of deaths reported exceeded 3 000 during the last week, higher than the peak observed in the spring. Further increases in cases and deaths are expected due to the upcoming holiday season with more people travelling into and around the country. Hospitalization rates for COVID-19 cases have grown considerably since the beginning of October. Kentucky, Georgia, Minnesota, Oklahoma and Texas are the most affected, with counties reporting high hospital occupancy rates.

Bermuda has reported a cumulative total of nearly 400 cases and nine deaths since the start of the pandemic. However, since the beginning of December, the number of cases has increased substantially. In the last week, 103 new cases were reported (1 650 new cases per 1 million population) a 150% increase from the previous week. Approximately 30% of the total number of cases have been imported. Visitors are not required to quarantine on arrival if they provide a valid negative COVID-19 test taken at least five days before arrival. Due to the rapid rise in cases, public health and social measures were implemented on 12 December including a curfew, early closure of businesses, and restrictions on gatherings.

Uruguay has reported a 48% increase in the number of new cases to 2 100 new cases (610 new cases per 1 million population) and a 67% increase in the number of deaths to 10 new deaths (3 new deaths per 1 million) in comparison to previous week. The test positivity rate has also increased in the last couple of weeks and is currently 5.1%. The capital, and largest city in Uruguay, Montevideo is the most affected area accounting for over 60% of cases.

Figure 4: Number of COVID-19 cases and deaths reported weekly by the WHO Region of the Americas, as of 13 December 2020**



**See *data, table and figure notes*

Eastern Mediterranean Region

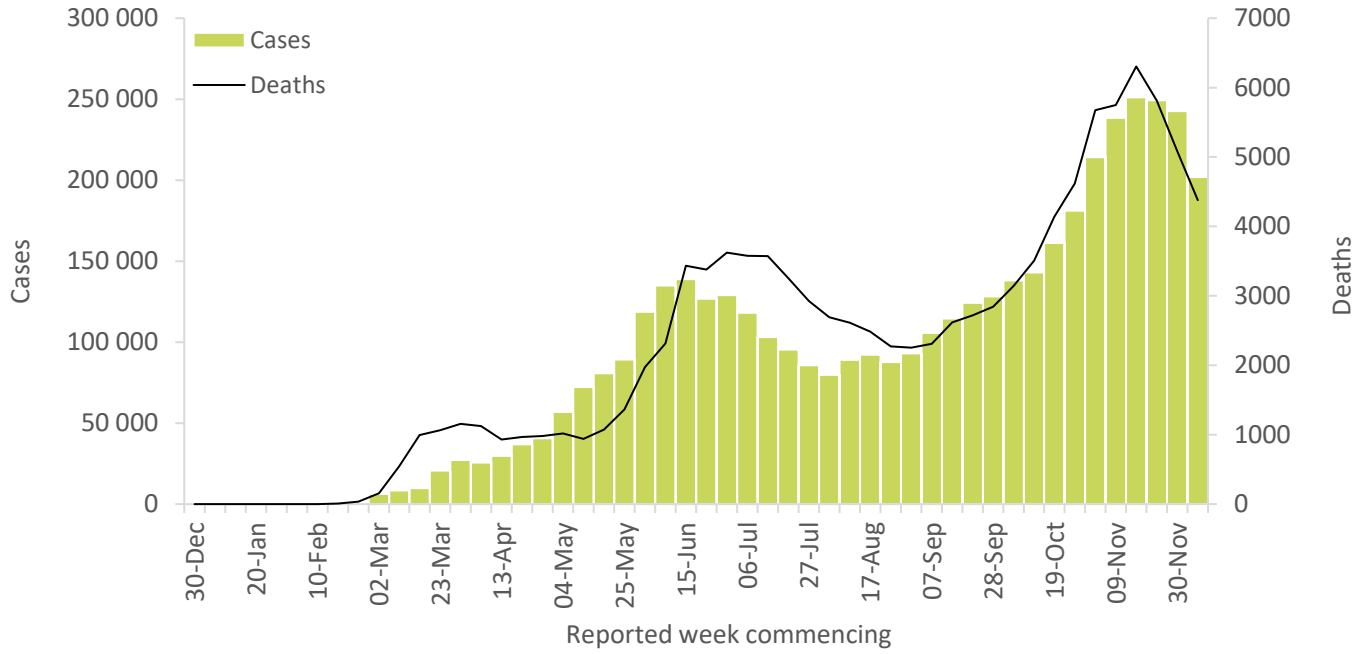
Compared with the previous reporting week, this week the Region reported a 17% decline in new cases to just over 200 000 cases and a 14% decline in new deaths to 4 400 deaths. This extends the decline observed since mid-November when new cases peaked at around 250 000 and new deaths at just over 6 000. The Islamic Republic of Iran, Pakistan, Morocco, Jordan, and the occupied Palestinian territory reported the highest number of cases, although all these countries except Pakistan reported declines in the number of new cases in the past week.

Pakistan reported 22 000 new cases (99 new cases per 1 million population) and 420 new deaths (2 new deaths per 1 million population). New weekly cases have risen since the week of 19 October, when 4 000 cases were reported. This week's new cases and deaths represent a 5% and 17% rise respectively compared to last week. Since the beginning of the pandemic, as of 6 December, Pakistan had conducted 5.7 million COVID-19 tests, with a current positivity rate of 7.5%. The Sindh and Punjab Regions account for around 73% of total cases, with around half of current active cases reported from the Sindh Region.

The United Arab Emirates reported 8 500 new cases (850 new cases per 1 million population) and 20 new deaths (2 new deaths per 1 million population). New cases per week have remained above 8 000 since 12 October. The United Arab Emirates is the first country to approve a vaccine produced by Sinopharm, based in China. In the next few weeks, Abu Dhabi is planning to further open the business, tourism and cultural sectors.

Tunisia reported 7 400 new cases (620 new cases per 1 million population) and 310 new deaths (26 new deaths per 1 million population). Similar to the United Arab Emirates, new cases per week have also remained high since the end of September and October, with more than 7 000 new weekly cases reported. Since the beginning of the pandemic, as of 6 December, 480 000 tests have been conducted, with a current positivity rate of 30%. National authorities have announced an extension to the night curfew until the end of the year.

Figure 5: Number of COVID-19 cases and deaths reported weekly by the WHO Eastern Mediterranean Region, as of 13 December 2020**



**See *data, table and figure notes*

European Region

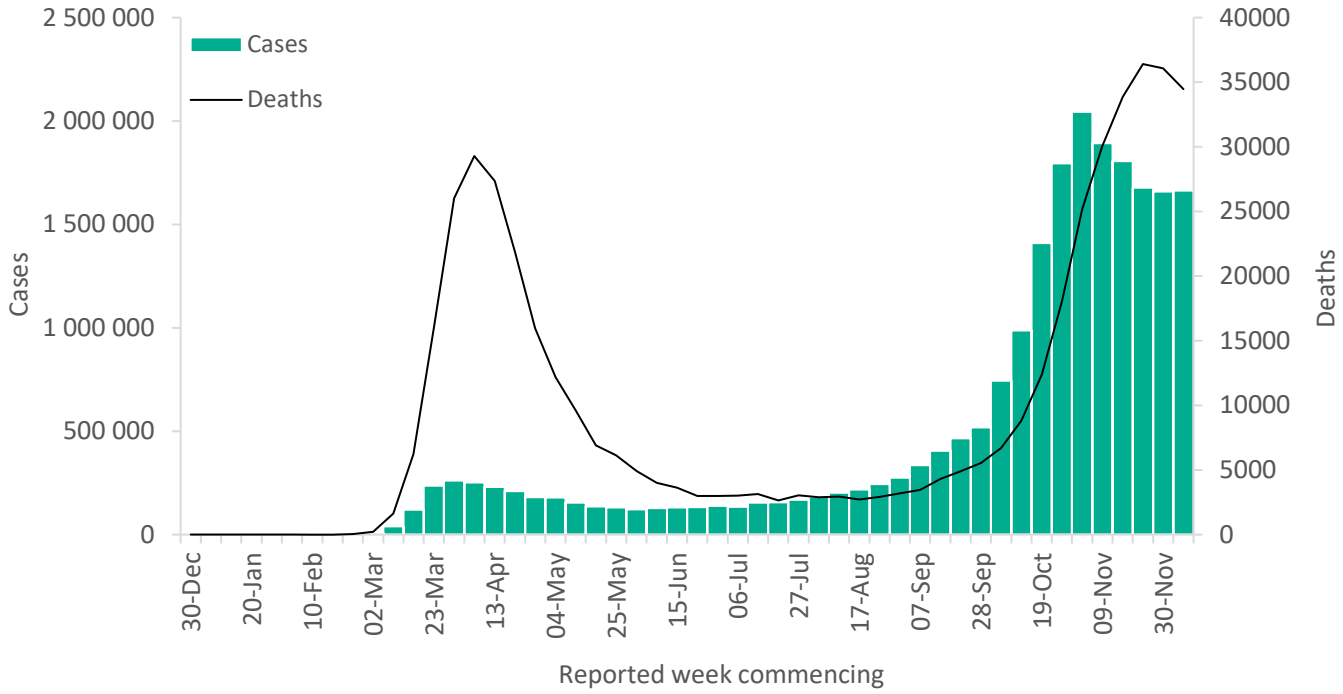
The number of new cases continued to stabilise for the third consecutive week in the European Region. There was also a decline in reported deaths for the second consecutive week, a decrease of 4% compared to the previous week. The number of new deaths reported this week, particularly in eastern and southern countries of the European Region, exceeded 60 per 1 million, the highest globally. In the past week, some countries have announced initial vaccination in the population, while others are preparing for the introduction of the vaccine. Despite this, it is important that public health and social measures, including hand hygiene, mask wearing, physical distancing and adequate ventilation, along with other measures, continue.

The Russian Federation reported 193 000 new cases (1 300 new cases per 1 million population), the second highest number of cases in the European Region after Turkey, and 3 800 new deaths (26 new deaths per 1 million population). The two most populous cities in the country, Moscow and St Petersburg, together with the Moscow and Nizhny Novgorod regions, are reporting the highest numbers of new cases. Since the first cases on 31 January, over 2.6 million cases and 46 000 deaths have now been reported - the fourth highest global total cases. The number of new cases and new deaths has increased over five-fold since the last week of August, when 33 500 new cases and 700 new deaths were reported. In the past week, 23 tests per 1 000 population were conducted resulting in a test positivity rate of around 6%.

Serbia reported 47 500 new cases (6 800 new cases per 1 million population) and 380 new deaths (55 new deaths per 1 million population). This was a slight decrease in new cases from the previous week during which over 50 000 new cases were reported. The number of cases has rapidly increased since September, when there were around 500 new cases per week. The percentage of COVID-19 tests that are positive has increased from less than 10% in September to over 30% last week during which 19 tests per 1000 population were conducted.

Sweden reported 32 000 new cases (3 200 new cases per 1 million population) and 128 new deaths (13 new deaths per 1 million population). New weekly cases have remained above 30 000 since 9 November. However, there was a substantial decrease in deaths reported this week with a 62% decrease compared to the previous week.

Figure 6: Number of COVID-19 cases and deaths reported weekly by the WHO European Region, as of 13 December 2020**



**See *data, table and figure notes*

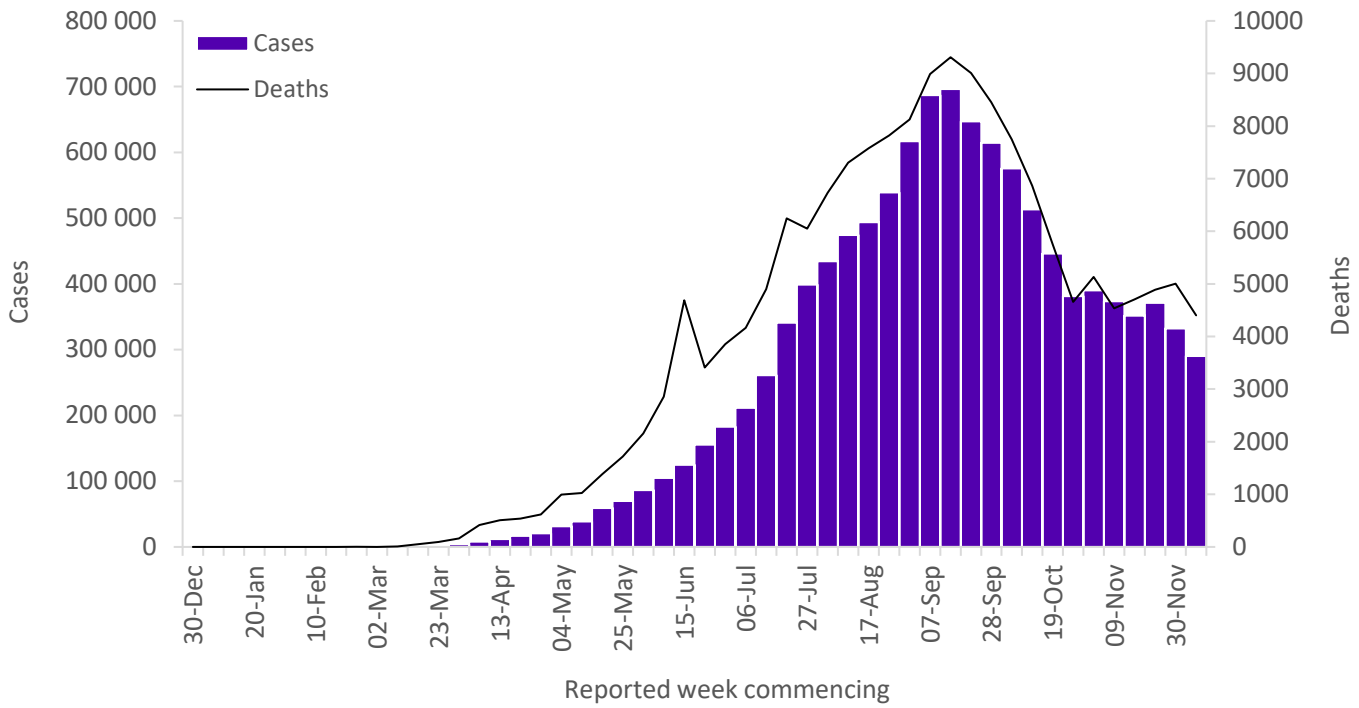
South-East Asia Region

In the South-East Asia Region, new cases reported (290 000) showed a 13% decline from the previous week and continued the general pattern of decreasing cases since early September. New deaths (4 400) decreased 12% in the past week, following a 3 week increase. Only three out of ten countries in the region (Sri Lanka, Indonesia and Thailand) reported an increase in new cases this week.

While India has consistently reported the highest number of cases and deaths in the Region, declining trends in both have been seen over the past month, with that trend continuing this week. The country reported decreases in both new cases (213 000, a 15% decrease) and new deaths (2 800, a 19% decrease) compared with the previous week. A recent study found that very few deaths were recorded in long-term care facilities across the three western Indian states of Gujarat, Rajasthan and Maharashtra, states that are among some of the most affected by the pandemic. India has conducted over 153 million tests since the start of the pandemic with 4.9 tests per 1000 population conducted in the previous week and a test positivity rate of around 3.2%.

In Indonesia, the trend in increasing new cases and deaths reported in the past 5 weeks, continued last week. While there was a very minor increase in the number of new cases (42 000, a 1% increase), the number of new deaths reported this week increased by 13% (to just over 1 000). In the week ending 6 December just 0.89 tests per 1000 population were conducted with a test positivity rate of 14.2%, suggesting the need to expand testing to ensure all cases are being detected. The highest number of cumulative cases is seen in the provinces of DKI Jakarta, Jawa Timur and Jawa Tengah.

Figure 7: Number of COVID-19 cases and deaths reported weekly by the WHO South-East Asia Region, as of 13 December 2020**



**See *data, table and figure notes*

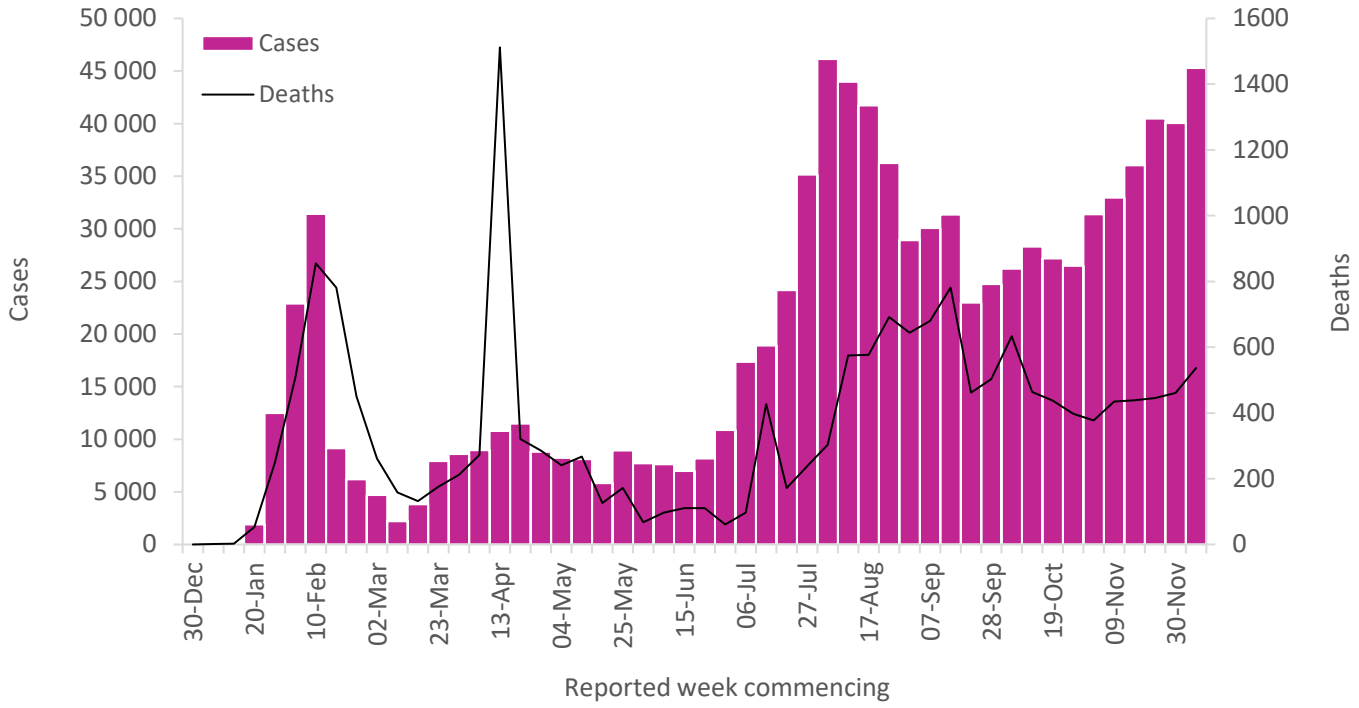
Western Pacific Region

Although cases and deaths in the region still continue to account for a very small proportion of the global total, a 13% increase in the number of new weekly cases (45 000) and a 16% increase in new weekly deaths (500) was observed in the past 7 days in the Western Pacific Region. With the exception of a slight decrease last week, this follows an increasing trend over the past six weeks. There are considerable regional differences, with around half of countries reporting decreases and half reporting increases in cases (notably Japan, Malaysia, and the Republic of Korea).

Japan continues to report the highest number of weekly new cases in the Region and this week reported record highs (17 200 cases, 136 new cases per 1 million), following increases over the previous eight weeks. In an effort to reduce increasing cases and demands on healthcare, the Japan Self-Defense Forces (JSDF) have sent health workers to Asahikawa city in Hokkaido Prefecture. Osaka prefecture has also requested additional support in healthcare capacity from the JSDF as it is the second most affected prefecture following Tokyo . In the previous week Japan conducted 1.9 tests per 1000 population with a test positivity rate of over 6%.

This is the fifth consecutive week the Republic of Korea has reported an increase in new cases, reaching the highest total of new weekly cases (5 200). The provinces reporting the highest incidence are Seoul and Gyeonggi-do. As a result of these increases, tighter public health and social measures in the Capital area have been implemented until the end of the year. In the past week, hospital bed shortages in the Seoul area have also been reported, with only 3 out of 62 hospital beds for critically ill patients in Seoul city currently available.

Figure 8: Number of COVID-19 cases and deaths reported weekly by the WHO Western Pacific Region, data as of 13 December 2020**



**See *data, table and figure notes*

Key weekly updates

Human Rights Day and Universal Health Coverage Day occurred this week. WHO Director-General Dr Tedros said that these days "are a reminder that as we rebuild from this crisis, we must do so on the foundation of human rights including the right to health." WHO, through the UHC Partnership, has profiled some successes in promoting UHC in Assam, Burkina Faso and Thailand.

Dr Tedros highlighted that since its creation, the ACT Accelerator has served to fast-track the development of rapid diagnostic tools and vaccines and helped to repurpose a common drug to help save lives amidst the pandemic. WHO has facilitated price and volume guarantees for over 120 million new high-quality rapid diagnostic tests and secured 2.9 million treatment courses of dexamethasone for low- and middle-income countries. WHO has also secured manufacturing capacity for one billion vaccine doses through the COVA facility and helped almost 100 countries carry out a vaccines readiness assessment. However, Dr Tedros highlighted the need for urgent financial and political action to fully finance the ACT Accelerator and ensure the equitable distribution of scarce assets.

At the 3rd Global Infodemic Management Conference civil society representatives advocated for a community-led approach to halt the spread of the COVID-19 Infodemic.

WHO welcomed the establishment of the Galien Prize Africa, which promotes research, innovation and commercialization in Africa of pharmaceutical, biotechnology and medical diagnostic products. The WHO Director-General highlighted that most African countries have succeeded in preventing or containing widespread community transmission but cautioned that with the concerning increase in cases and deaths in the region all countries must remain vigilant at this critical juncture in the pandemic for Africa.

Together with WHO, the United Nations Foundation and an alliance of the world's largest youth movements and organizations launched a new global youth mobilization to invest in and scale up youth-led solutions and engagements in response to COVID-19. Called the "Global Youth Mobilization for Generation Disrupted" the alliance is being led by the Big 6 Youth Organizations.

WHO has published the following documents in the past week:

- Public health considerations for elections and related activities in the context of the COVID-19 pandemic
- Evidence to recommendations for COVID-19 vaccines: Evidence framework
- COVID-19 vaccine introduction and deployment costing tool
- Checklist to support schools re-opening and preparation for COVID-19 resurgences or similar public health crises

Table 2. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 13 December 2020**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Africa	**74 489**	**1 622 096**	**1 446**	**1 393**	**35 879**	**32**	
South Africa	42 516	852 965	14 382	1 039	23 106	390	Community transmission
Uganda	4 883	27 071	592	14	220	5	Community transmission
Algeria	4 136	91 638	2 090	83	2 584	59	Community transmission
Nigeria	3 820	72 757	353	14	1 194	6	Community transmission
Ethiopia	2 620	115 360	1 003	34	1 779	15	Community transmission
Botswana	2 509	12 501	5 316	6	37	16	Community transmission
Kenya	2 321	90 305	1 679	50	1 568	29	Community transmission
Mauritania	1 255	9 679	2 082	22	194	42	Community transmission
Namibia	1 147	16 097	6 335	7	160	63	Community transmission
Ghana	837	52 933	1 704	2	327	11	Community transmission
Democratic Republic of the Congo	815	14 341	160	8	352	4	Community transmission
Burkina Faso	738	3 894	186	3	71	3	Community transmission
Mozambique	679	16 812	538	7	140	4	Community transmission
Cabo Verde	676	11 302	20 328	5	110	198	Community transmission
Senegal	664	17 061	1 019	12	349	21	Community transmission
Mali	659	5 721	283	28	191	9	Community transmission
Angola	625	16 161	492	12	366	11	Community transmission
Zimbabwe	464	11 081	746	14	305	21	Community transmission
Rwanda	444	6 528	504	5	56	4	Clusters of cases
Cameroon	391	25 143	947	0	443	17	Community transmission
Congo	275	6 049	1 096	5	99	18	Community transmission
Eswatini	219	6 714	5 787	5	127	109	Community transmission
Guinea	213	13 420	1 022	3	79	6	Community transmission
Côte d'Ivoire	198	21 639	820	1	133	5	Community transmission
Zambia	193	18 091	984	0	364	20	Community transmission

Togo	151	3 202	387	1	66	8	Community transmission
Gabon	76	9 330	4 192	3	63	28	Community transmission
Madagascar	74	17 587	635	4	259	9	Community transmission
Malawi	69	6 118	320	1	186	10	Community transmission
Niger	67	1 856	77	0	77	3	Community transmission
Benin	35	3 090	255	0	44	4	Community transmission
Burundi	35	729	61	0	1	0	Community transmission
Equatorial Guinea	26	5 185	3 696	0	85	61	Community transmission
Eritrea	24	656	185	0	0	0	Sporadic cases
Chad	17	1 739	106	0	102	6	Community transmission
Sierra Leone	15	2 435	305	1	75	9	Community transmission
South Sudan	15	3 181	284	1	62	6	Community transmission
Central African Republic	14	4 936	1 022	0	63	13	Community transmission
Lesotho	13	2 150	1 004	0	44	21	Community transmission
Gambia	12	3 782	1 565	0	123	51	Community transmission
Sao Tome and Principe	10	1 009	4 604	0	17	78	Community transmission
Comoros	9	624	718	0	7	8	Community transmission
Mauritius	9	514	404	0	10	8	Clusters of cases
Guinea-Bissau	3	2 444	1 242	0	44	22	Community transmission
Seychelles	3	185	1 881	0	0	0	Sporadic cases
Liberia	0	1 676	331	0	83	16	Community transmission
United Republic of Tanzania	0	509	9	0	21	0	Community transmission
Territories[iii]							
Mayotte	370	5 551	20 347	3	52	191	Clusters of cases
Réunion	145	8 345	9 321	0	41	46	Clusters of cases
Americas	**2 054 064**	**30 116 395**	**29 446**	**29 856**	**776 708**	**759**	
United States of America	1 456 800	15 648 098	47 275	16 626	293 129	886	Community transmission
Brazil	302 259	6 836 227	32 161	4 473	180 437	849	Community transmission
Mexico	72 609	1 229 379	9 535	4 156	113 019	877	Community transmission
Colombia	56 302	1 408 909	27 689	1 202	38 669	760	Community transmission
Canada	46 272	448 841	11 892	755	13 251	351	Community transmission
Argentina	34 697	1 489 328	32 953	1 094	40 606	898	Community transmission

Panama	14 172	187 779	43 520	155	3 309	767	Community transmission
Chile	11 113	569 781	29 806	254	15 846	829	Community transmission
Peru	10 083	980 943	29 751	349	36 544	1 108	Community transmission
Costa Rica	7 262	150 947	29 632	122	1 895	372	Community transmission
Dominican Republic	5 930	153 585	14 158	15	2 360	218	Community transmission
Paraguay	5 614	92 113	12 914	114	1 927	270	Community transmission
Ecuador	4 133	201 524	11 422	118	13 874	786	Community transmission
Honduras	3 748	113 708	11 480	30	2 971	300	Community transmission
Guatemala	3 747	129 099	7 206	166	4 405	246	Community transmission
Venezuela (Bolivarian Republic of)	2 838	106 715	3 753	31	944	33	Community transmission
Uruguay	2 118	8 849	2 547	10	90	26	Clusters of cases
El Salvador	1 676	41 394	6 382	40	1 193	184	Community transmission
Belize	1 582	8 965	22 546	15	185	465	Community transmission
Bolivia (Plurinational State of)	1 372	146 697	12 567	26	9 013	772	Community transmission
Cuba	640	9 354	826	1	137	12	Clusters of cases
Jamaica	545	11 608	3 920	10	271	92	Community transmission
Guyana	238	5 839	7 424	3	154	196	Clusters of cases
Haiti	121	9 491	832	0	233	20	Community transmission
Trinidad and Tobago	117	6 852	4 896	1	122	87	Community transmission
Bahamas	89	7 659	19 476	0	163	415	Clusters of cases
Nicaragua	38	4 709	711	1	162	24	Community transmission
Suriname	17	5 339	9 101	0	117	199	Sporadic cases
Saint Lucia	9	274	1 492	2	4	22	Sporadic cases
Barbados	7	292	1 016	0	7	24	Clusters of cases
Saint Vincent and the Grenadines	7	94	847	0	0	0	Sporadic cases
Saint Kitts and Nevis	5	27	508	0	0	0	Sporadic cases
Antigua and Barbuda	3	147	1 501	0	4	41	Sporadic cases
Dominica	2	87	1 208	0	0	0	Clusters of cases
Grenada	2	43	382	0	0	0	Sporadic cases
Territories[iii]							
Puerto Rico	6 191	61 723	21 575	81	1 266	443	Community transmission

Curaçao	664	3 404	20 744	1	8	49	Community transmission
French Guiana	393	11 800	39 507	0	71	238	Community transmission
United States Virgin Islands	158	1 791	17 151	0	23	220	Community transmission
Bermuda	103	391	6 279	0	9	145	Clusters of cases
Sint Maarten	96	1 201	28 007	1	26	606	Community transmission
Saint Martin	94	838	21 677	0	12	310	Community transmission
Aruba	88	5 011	46 934	1	46	431	Community transmission
Martinique	33	5 553	14 798	0	41	109	Community transmission
Guadeloupe	24	8 451	21 121	3	152	380	Community transmission
Turks and Caicos Islands	14	769	19 862	0	6	155	Clusters of cases
Saint Barthélemy	12	164	16 591	0	0	0	Sporadic cases
Cayman Islands	10	298	4 534	0	2	30	Sporadic cases
Bonaire	5	150	8 587	0	3	172	Sporadic cases
Sint Eustatius	4	18	7 246	0	0	0	Sporadic cases
Anguilla	3	10	667	0	0	0	Sporadic cases
British Virgin Islands	3	76	2 513	0	1	33	Clusters of cases
Falkland Islands (Malvinas)	2	19	5 455	0	0	0	No cases
Montserrat	0	13	2 601	0	1	200	No cases
Saba	0	5	3 342	0	0	0	No cases
Saint Pierre and Miquelon	0	14	2 416	0	0	0	Sporadic cases
Eastern Mediterranean	**201 880**	**4 490 755**	**6 145**	**4 377**	**111 635**	**153**	
Iran (Islamic Republic of)	71 832	1 100 818	13 106	1 933	51 949	618	Community transmission
Pakistan	21 865	435 056	1 970	421	8 724	39	Clusters of cases
Morocco	20 859	397 597	10 772	405	6 589	179	Clusters of cases
Jordan	19 762	257 275	25 215	325	3 335	327	Community transmission
Iraq	11 102	573 622	14 261	154	12 565	312	Community transmission
Lebanon	9 369	145 245	21 280	100	1 190	174	Community transmission
United Arab Emirates	8 479	183 755	18 579	20	609	62	Community transmission
Tunisia	7 402	110 393	9 341	310	3 836	325	Community transmission
Libya	4 351	89 880	13 081	59	1 278	186	Community transmission
Egypt	3 075	121 089	1 183	148	6 898	67	Clusters of cases
Kuwait	1 880	146 044	34 198	22	911	213	Community transmission

Sudan	1 639	21 386	488	46	1 347	31	Community transmission
Oman	1 340	125 669	24 609	28	1 463	286	Community transmission
Afghanistan	1 311	48 952	1 257	95	1 960	50	Clusters of cases
Bahrain	1 233	88 964	52 283	7	348	205	Clusters of cases
Saudi Arabia	1 223	359 749	10 333	82	6 036	173	Sporadic cases
Qatar	1 044	140 827	48 880	1	240	83	Community transmission
Syrian Arab Republic	721	9 041	517	64	506	29	Community transmission
Somalia	54	4 579	288	0	121	8	Sporadic cases
Djibouti	33	5 725	5 795	0	61	62	Clusters of cases
Yemen	6	2 087	70	0	607	20	Sporadic cases
Territories[iii]							
occupied Palestinian territory	13 300	123 002	24 111	157	1 062	208	Community transmission
Europe	**1 663 907**	**21 925 389**	**23 490**	**34 475**	**484 570**	**519**	
Turkey	219 115	995 471	11 803	1 494	16 199	192	Community transmission
Russian Federation	193 158	2 653 928	18 186	3 800	46 941	322	Clusters of cases
Germany	149 394	1 320 716	15 763	3 015	21 787	260	Clusters of cases
The United Kingdom	124 985	1 830 960	26 971	3 012	64 026	943	Community transmission
Italy	115 784	1 825 775	30 197	4 522	64 036	1 059	Clusters of cases
France	82 773	2 324 603	35 613	2 774	57 392	879	Community transmission
Ukraine	80 909	894 215	20 447	1 566	15 154	347	Community transmission
Poland	72 427	1 126 700	29 770	2 815	22 676	599	Community transmission
Netherlands	53 356	603 140	35 200	361	10 010	584	Community transmission
Serbia	47 594	261 437	37 542	384	2 275	327	Community transmission
Romania	43 555	551 900	28 688	1 078	13 264	689	Community transmission
Czechia	34 900	579 079	54 074	720	9 535	890	Community transmission
Sweden	32 348	320 098	31 695	128	7 514	744	Community transmission
Hungary	30 122	280 400	29 026	1 097	6 965	721	Community transmission
Azerbaijan	29 100	171 423	16 907	290	1 883	186	Clusters of cases
Spain	28 764	1 730 575	37 014	636	47 624	1 019	Community transmission
Georgia	27 251	189 726	47 560	286	1 790	449	Community transmission
Portugal	26 060	344 700	33 805	585	5 461	536	Clusters of cases
Switzerland	25 970	372 329	43 021	488	5 378	621	Community transmission

Croatia	25 069	172 523	42 025	460	2 562	624	Community transmission
Austria	18 800	317 031	35 201	681	4 355	484	Community transmission
Lithuania	18 452	93 101	34 200	189	815	299	Community transmission
Denmark	18 258	107 116	18 493	57	935	161	Community transmission
Bulgaria	18 108	178 952	25 754	897	5 626	810	Clusters of cases
Slovakia	17 522	132 984	24 358	194	1 175	215	Clusters of cases
Belgium	15 579	608 135	52 472	580	17 945	1 548	Community transmission
Belarus	13 055	158 334	16 756	56	1 254	133	Community transmission
Slovenia	10 706	95 481	45 928	204	1 448	697	Clusters of cases
Republic of Moldova	10 166	125 723	31 166	144	2 547	631	Community transmission
Greece	9 274	123 842	11 882	638	3 540	340	Community transmission
Israel	7 843	350 772	40 526	50	2 956	342	Community transmission
Bosnia and Herzegovina	6 538	100 306	30 573	376	3 298	1 005	Community transmission
Armenia	6 388	148 325	50 055	160	2 486	839	Community transmission
North Macedonia	5 776	73 087	35 081	195	2 096	1 006	Community transmission
Albania	5 594	47 742	16 590	100	989	344	Clusters of cases
Kazakhstan	5 424	185 513	9 880	0	2 542	135	Clusters of cases
Latvia	4 259	25 046	13 279	71	324	172	Clusters of cases
Luxembourg	4 255	41 272	65 932	51	396	633	Community transmission
Estonia	3 213	17 713	13 353	22	148	112	Clusters of cases
Montenegro	3 014	41 546	66 149	49	582	927	Clusters of cases
Finland	2 855	30 073	5 428	38	453	82	Community transmission
Norway	2 651	40 022	7 382	33	387	71	Clusters of cases
Cyprus	2 619	14 800	12 258	18	77	64	Clusters of cases
Kyrgyzstan	2 254	77 356	11 857	12	1 307	200	Clusters of cases
Ireland	1 808	75 756	15 342	26	2 123	430	Community transmission
Uzbekistan	907	74 811	2 235	1	612	18	Clusters of cases
Malta	678	11 101	25 141	17	166	376	Clusters of cases
Tajikistan	409	12 798	1 342	0	87	9	Pending
Andorra	283	7 288	94 325	0	78	1 010	Community transmission
San Marino	143	1 932	56 927	3	51	1 503	Community transmission
Liechtenstein	106	1 502	39 384	2	18	472	Sporadic cases

Iceland	76	5 552	16 270	1	28	82	Community transmission
Monaco	31	668	17 022	0	3	76	Sporadic cases
Holy See	0	26	32 138	0	0	0	Sporadic cases
Territories[iii]							
Kosovo	3 781	46 075	24 766	99	1 176	632	Community transmission
Jersey	399	1 637	15 046	0	32	294	Community transmission
Gibraltar	28	1 070	31 759	0	5	148	Clusters of cases
Faroe Islands	19	525	10 744	0	0	0	Sporadic cases
Greenland	1	19	335	0	0	0	No cases
Guernsey	1	289	4 573	0	13	206	Community transmission
Isle of Man	0	370	4 351	0	25	294	No cases
South-East Asia	**290 308**	**11 361 437**	**5 621**	**4 400**	**172 858**	**86**	
India	212 807	9 857 029	7 143	2 837	143 019	104	Clusters of cases
Indonesia	41 924	611 631	2 236	1 064	18 653	68	Community transmission
Bangladesh	13 299	489 178	2 970	213	7 020	43	Community transmission
Myanmar	9 343	105 863	1 946	161	2 220	41	Clusters of cases
Nepal	7 708	247 593	8 498	112	1 689	58	Clusters of cases
Sri Lanka	4 907	32 135	1 501	12	149	7	Clusters of cases
Maldives	189	13 348	24 694	1	48	89	Clusters of cases
Thailand	120	4 192	60	0	60	1	Clusters of cases
Bhutan	11	437	566	0	0	0	Sporadic cases
Timor-Leste	0	31	24	0	0	0	Sporadic cases
Western Pacific	**45 276**	**960 020**	**489**	**537**	**18 259**	**9**	
Japan	17 189	177 287	1 402	247	2 562	20	Clusters of cases
Malaysia	10 887	82 246	2 541	31	411	13	Clusters of cases
Philippines	10 262	448 331	4 091	204	8 730	80	Community transmission
Republic of Korea	5 220	42 766	834	35	580	11	Clusters of cases
China	790	94 950	65	3	4 756	3	Clusters of cases
Australia	69	28 025	1 099	0	908	36	Clusters of cases
Mongolia	64	906	276	0	0	0	Clusters of cases
Singapore	58	58 313	9 967	0	29	5	Sporadic cases
Papua New Guinea	49	720	80	1	8	1	Community transmission

Viet Nam	30	1 395	14	0	35	0	Clusters of cases
New Zealand	18	1 740	361	0	25	5	Clusters of cases
Cambodia	13	359	21	0	0	0	Sporadic cases
Lao People's Democratic Republic	2	41	6	0	0	0	Sporadic cases
Brunei Darussalam	1	152	347	0	3	7	Sporadic cases
Fiji	0	44	49	0	2	2	Sporadic cases
Solomon Islands	0	17	25	0	0	0	Sporadic cases
Territories[iii]							
French Polynesia	511	15 618	55 598	12	91	324	Sporadic cases
Guam	108	6 953	41 197	4	117	693	Clusters of cases
Northern Mariana Islands (Commonwealth of the)	4	113	1 963	0	2	35	Pending
New Caledonia	1	36	126	0	0	0	Sporadic cases
Marshall Islands	0	4	68	0	0	0	Sporadic cases
Vanuatu	0	1	3	0	0	0	Sporadic cases
Wallis and Futuna	0	3	267	0	0	0	Sporadic cases
Global	**4 329 927**	**70 476 836**	**555**	**75 038**	**1 599 922**	**10**	

**See *data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. Retro-adjustments can also affect the percentage change reported in Table 1, with the percentages reflecting retro-adjustments made over the past week. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

Global totals include 744 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case.

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g. laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorizations are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] “Territories” include territories, areas, overseas dependencies and other jurisdictions of similar status.

World Health Organization

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 6 December 2020, 10 am CET

For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

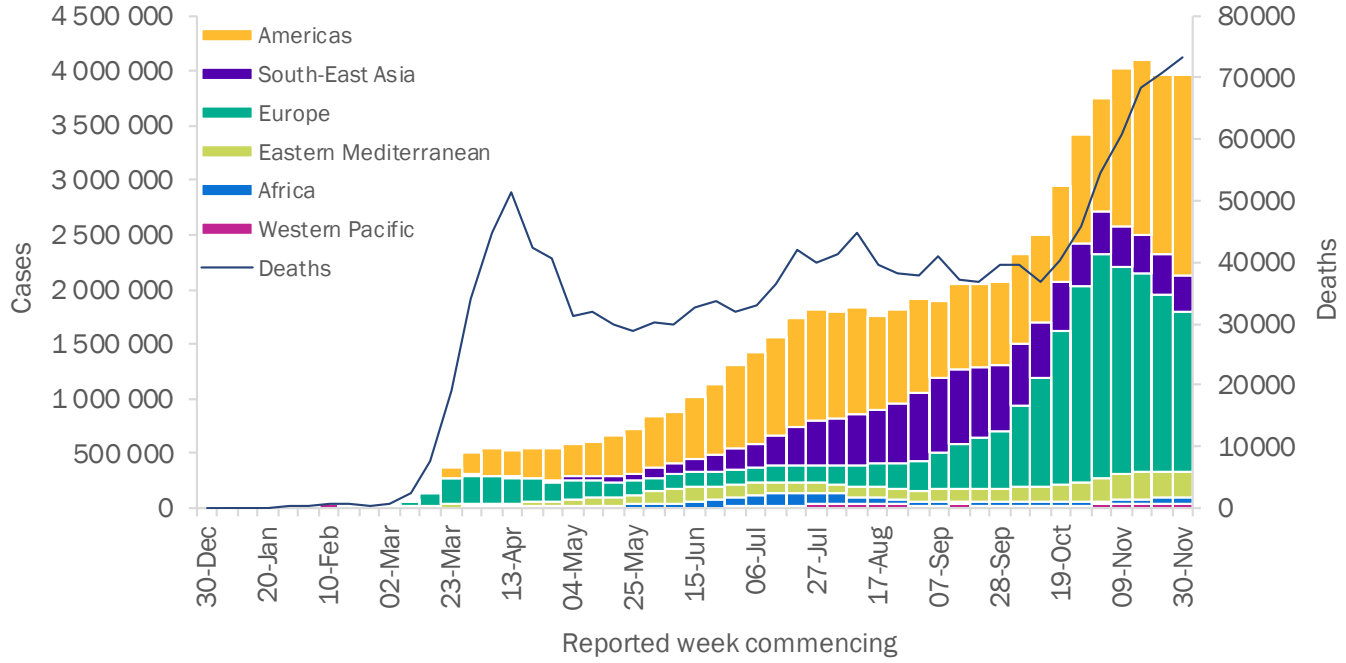
Global epidemiological situation

Global summary

The global incidence of new cases remained very similar to the previous week with just under 4 million new cases reported in the past seven days, while new deaths, globally, increased slightly to over 73 000 new deaths reported. New cases and deaths in the Region of the Americas account for nearly half of all new cases and over one third of all new deaths this week. While new cases remain high in the European Region, new deaths have decreased for a second week. New cases declined in South-East Asia and Eastern Mediterranean regions this week. Deaths decreased in the Eastern Mediterranean Region, and increased in the South-East Asia Region. In the African Region, while both new cases and deaths remain low compared to other regions, there was an increase of 9% in new cases. New deaths have remained stable over the past few weeks. In the Western Pacific Region, cases showed a small decline overall while new deaths increased slightly this week.

As of 7 December there have been over 65.8 million cases and over 1.5 million deaths reported since the start of the pandemic.

Figure 1: COVID-19 cases reported weekly by WHO Region, and global deaths, as of 6 December 2020**



***See data table and figure notes.1.5 m*

In the past week, the five countries reporting the highest number of cases were the United States of America (reporting over 1.2 million cases, a 9% increase from the previous week), Brazil (over 295 000 new cases, a 35% increase), India (over 251 000 cases, a 15% decrease), Russian Federation (over 191 000 new cases, a 6% increase) and Italy (over 145 000 new cases, a 21% decrease).

Additional Region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western Pacific Region.

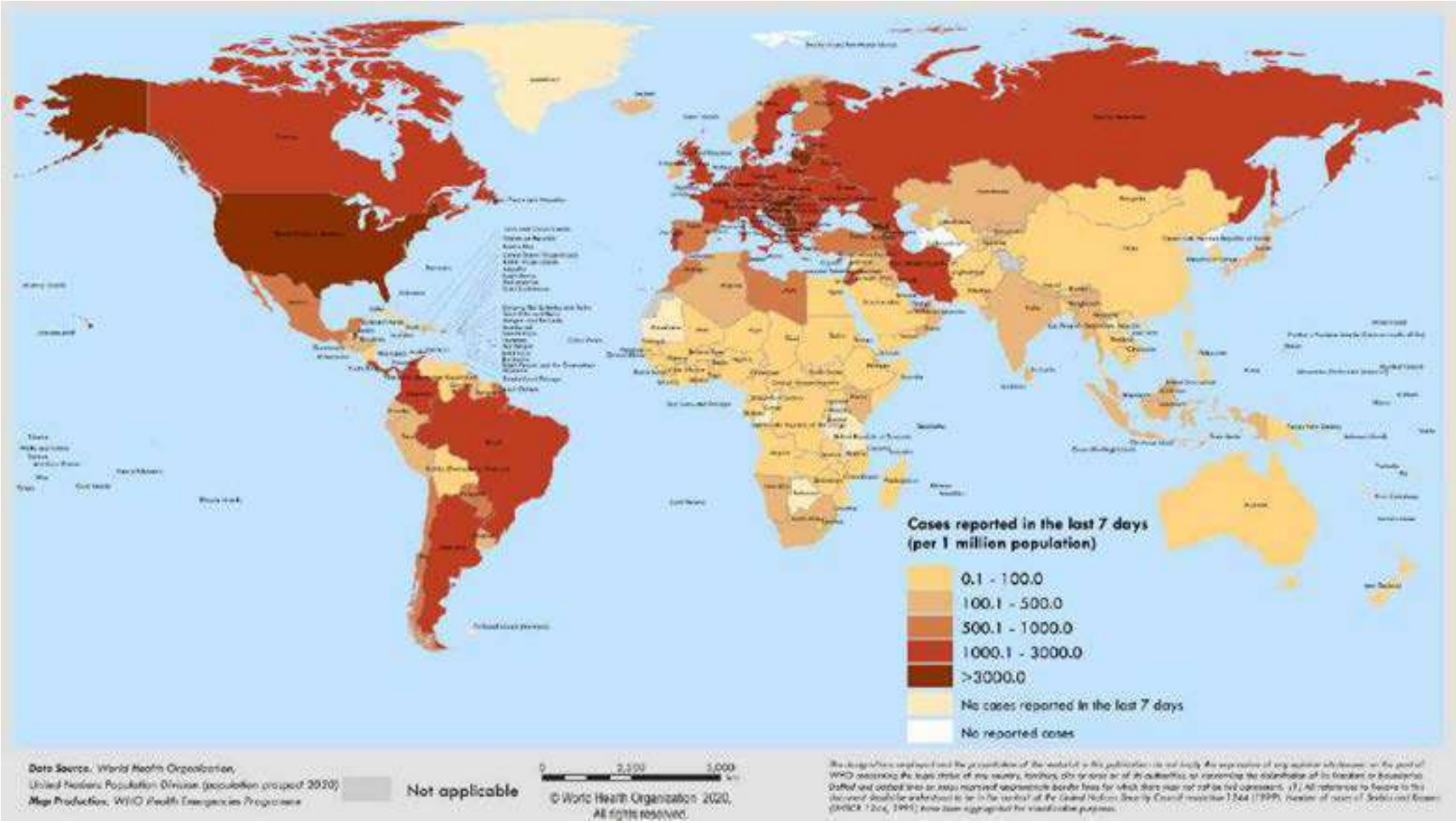
Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 6 December 2020**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 845 816 (46%)	12%	28 062 331 (43%)	26 624 (36%)	18%	746 852 (49%)
Europe	1 456 530 (37%)	-9%	19 986 964 (30%)	35 249 (48%)	-3%	448 867 (29%)
South-East Asia	332 396 (8%)	-10%	11 071 129 (17%)	5 004 (7%)	2%	168 458 (11%)
Eastern Mediterranean	242 563 (6%)	-3%	4 288 875 (7%)	5 084 (7%)	-13%	107 258 (7%)
Africa	53 083 (1%)	9%	1 547 607 (2%)	974 (1%)	0%	34 486 (2%)
Western Pacific	40 039 (1%)	-1%	914 744 (1%)	461 (1%)	4%	17 722 (1%)
Global	**3 970 427 (100%)**	**0%**	**65 872 391 (100%)**	**73 396 (100%)**	**4%**	**1 523 656 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*

***See data, table and figure notes*

Figure 2. COVID-19 cases per 1 million population reported in the last seven days by countries, territories and areas, 30 November through 6 December 2020**



**See *data, table and figure notes*

Situation by WHO Region

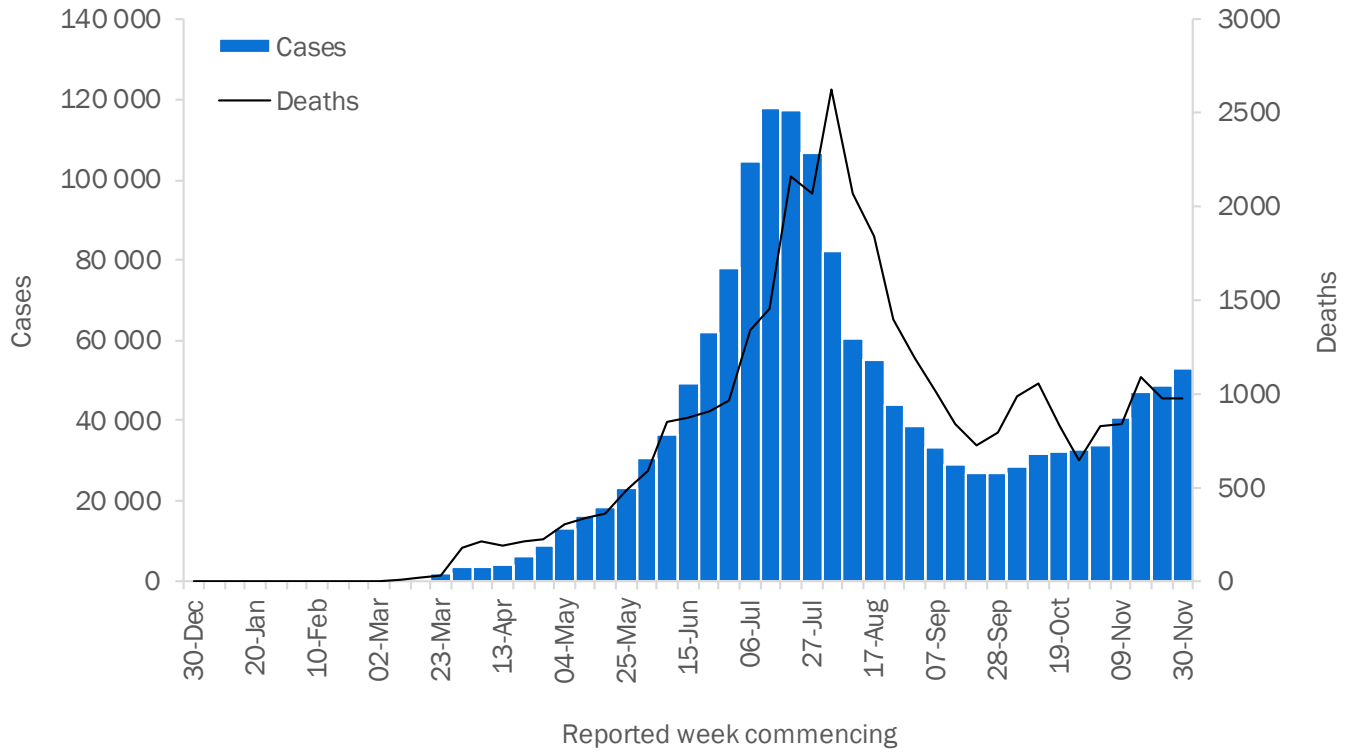
African Region

In the past seven days, over 53 000 new cases were reported in the African Region, a 9% increase compared to the previous week, while deaths remained similar to last week's at just under 1000 new reported deaths (Figure 3). South Africa continues to account for the greatest proportion (48%) of new weekly cases in the Region. In the past seven days, the highest number of new cases was reported from South Africa (25 310 new cases, 427 new cases per 1 million population), Algeria (6290 new cases, 143 new cases per 1 million population), Kenya (5379 new cases, 100 per 1 million population), Ethiopia (3810 new cases, 33 new cases per 1 million population) and Uganda (2244 new cases, 49 per 1 million population).

Over the past month, Kenya has reported its highest weekly cases and deaths. However, in the past week these numbers have declined by 13% and 8%, respectively, for both new cases and deaths. Case totals in the country have reached nearly 88 000 since the start of the pandemic and, with fatalities only being reported for hospital deaths, it is likely that cumulative deaths are being underreported. A study in July reported that for a country of 51 million people, there are only 537 Intensive Care Unit (ICU) beds and 256 ventilators. Nearly 75% of Kenya's ICU beds are in Nairobi and Mombasa. Thus far Kenya has conducted nearly 886 000 tests with a testing rate of 1.2 per 1000 population in the last week and a test positivity rate of 10%.

Cases in Nigeria have increased by 46% in the past seven days, the highest weekly case count reported since August. In the past seven days, 22 of the 37 states in Nigeria have reported new cases with the highest case numbers being reported in the states of Lagos, Federal Capital Territory, Plateau, Oyo and Kaduna. In a country of over 206 million persons, Nigeria has conducted over 803 000 tests throughout the pandemic. In the last reporting week, it had a testing rate of 0.17 per 1000 population and a test positivity rate of 4.6% Additionally, while the volume of in-bound international travel in the past week has remained within its normal parameters, the number of travelers with a positive result after seven days has increased by 68% (from 48 to 81).

Figure 3: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, as of 6 December 2020**



**See *data, table and figure notes*

Region of the Americas

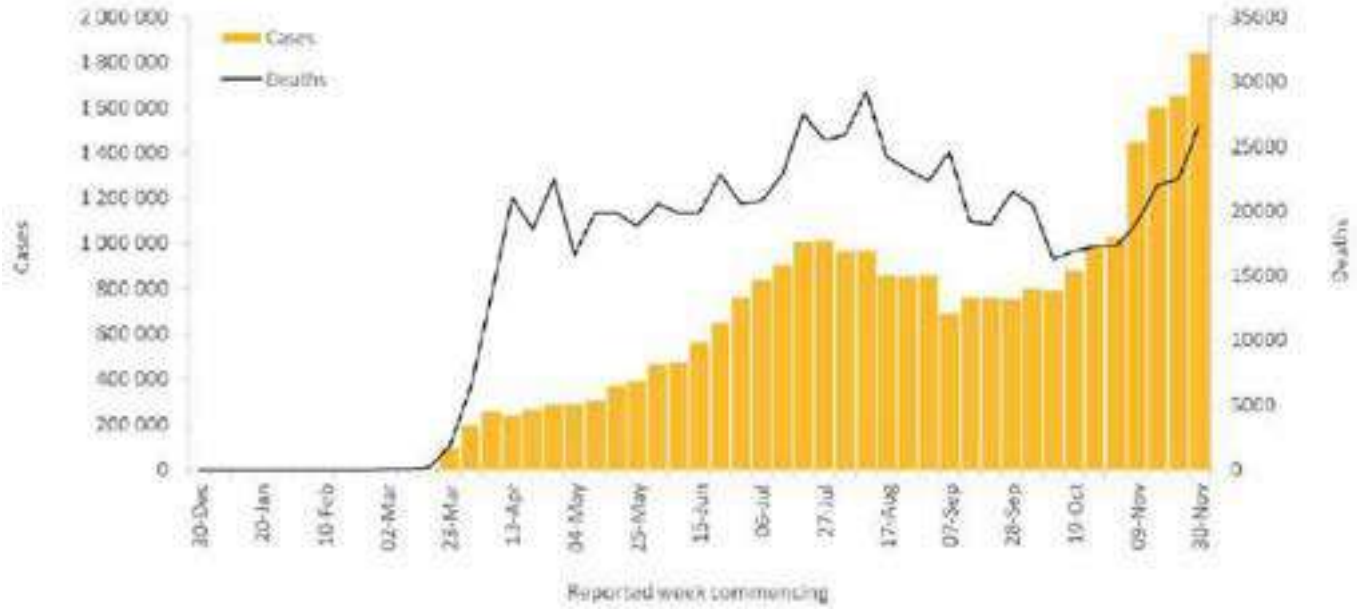
In the Region of the Americas, the weekly number of new cases reached 1 845 816 this week with 26 624 new deaths, accounting for 12% and 18% increases compared to the previous week, respectively (Figure 4). The United States of America accounted for 68% of all new cases reported in the past week in the Region. The highest new case and deaths counts were reported in the United States of America (1 251 632 new cases, 3781 new cases per 1 million), Brazil (295 618 new cases, 1391 new cases per 1 million), Mexico (66 095 new cases, 513 new cases per 1 million), Columbia (62 097 new cases, 1220 new cases per 1 million) and Argentina (47 354 new cases, 1048 new cases per 1 million).

In Brazil, a 35% increase in cases was observed in the past week, with 295 618 new cases (1391 cases per 1 million population), which was the highest number reported since mid-August. Upwards trends are being observed in all five regions, and to date, the Southeast Region, which includes the state of Sao Paulo, has reported the highest number of cumulative cases and deaths, followed by the Northeast Region. The number of new deaths was 3990, a 19% increase compared to the previous week. On 1 December, the government of Paraná in southern Brazil, which borders Paraguay and Argentina, introduced a night curfew.

In Mexico, 66 095 new cases (513 cases per 1 million population) were reported in the past week, a 2% increase compared to the previous week and the highest weekly case count since the beginning of the pandemic. There were 3990 new deaths reported, similar levels to the previous week. The government is urging citizens to stay home, and is planning to add hospital beds, medical equipment, and increase the number of doctors and nurses ahead of the holiday season.

The number of new cases in Canada continues to increase with 43 505 reported (1153 cases per 1 million population), a 13% increase from the previous week reaching the highest weekly number since the beginning of the pandemic. Six hundred and two new deaths were reported in the past week, a 7% increase compared to the previous week. In Manitoba province, which reported the fifth highest number of COVID-19 cases in Canada, outbreaks have been reported in a children's daycare center, at a hospital and at a care home in recent weeks. The province of Quebec plans to prohibit gatherings over the holidays in the maximum alert "red zones", which covers most of the state, as a result of the recent upward trend in cases.

Figure 4: Number of COVID-19 cases and deaths reported weekly by the WHO Region of the Americas, as of 6 December 2020**



**See *data, table and figure notes*

Eastern Mediterranean Region

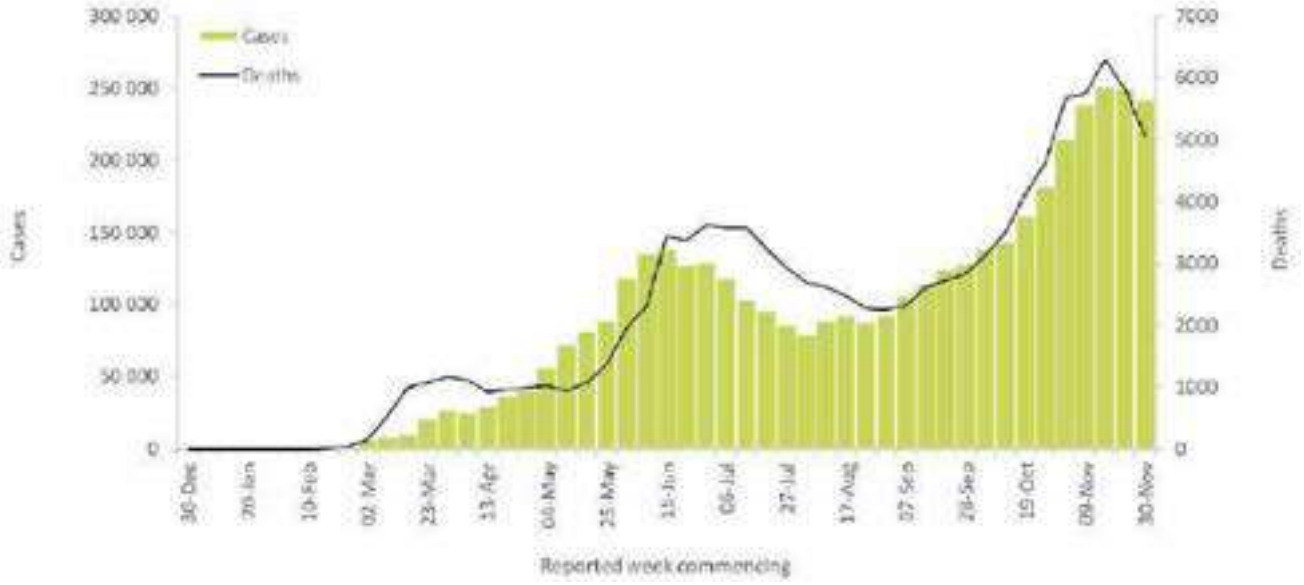
For the second consecutive week, both new cases and new deaths have declined. The Eastern Mediterranean Region reported over 240 000 new cases and over 5000 new deaths, reflecting a reduction of 2% and 12% respectively compared to the previous week (Figure 5). Increases in both new weekly cases and new weekly deaths were reported in Afghanistan, Egypt, occupied Palestinian territory, Oman and Somalia. The highest number of new cases were reported from the Islamic Republic of Iran (93 187 new cases, 1109 new cases per 1 million), Morocco (27 050 new cases, 733 new cases per 1 million), Jordan (26 804 new cases, 2627 new cases per 1 million), Pakistan (20 835 new cases, 94 new cases per 1 million) and Iraq (13 699 new cases, 341 new cases per 1 million).

In Lebanon, over 10 000 new cases (1500 per 1 million population) were reported in the past week. Since cases peaked in the beginning of November, small weekly decreases in new cases have been reported. Ninety-nine new deaths were reported this week compared to the 97 reported in the previous week. National health authorities stated on 3 December that ICUs for COVID-19 patients remain at critical capacity. Before the strengthening of public health and social measures (PHSM) came into effect in mid-November, the occupancy of ICU beds ranged between 80 and 90%. As an effect of these measures being implemented, occupancy has declined to the range of 65 to 70%. Despite the high occupancy in healthcare facilities, Lebanon has seen a decreasing trend in new cases and the country is gradually relaxing PHSM by reopening restaurants, postponing curfews and returning to face-to-face classes in some schools.

Morocco continued to show a decreasing trend in the past week, reporting a decrease of 6% in weekly new cases and 8% in weekly new deaths compared to the figures in the past week. The country reported over 27 000 new cases (733 cases per 1 million population) and over 400 new deaths (12 deaths per 1 million population). Since its peak of cases in mid-November, Morocco has shown a decreasing trend in cases for three consecutive weeks. National health authorities inaugurated a new field hospital in the region of Souss-Massa this week and established new hospital projects for treating COVID-19 patients planned for 2021 in the region of Rabat-Salé-Kenitrar.

Since mid-October, cases in Egypt have increased. In the current week, the country reported over 2800 new cases, a 13% increase compared to the past week (28 cases per 1 million population). As Egypt experiences a resurgence in COVID-19 infections, the country is strengthening public health and social measures by reducing the working hours for shops and limiting the number of employees and workers in government offices.

Figure 5: Number of COVID-19 cases and deaths reported weekly by the WHO Eastern Mediterranean Region, as of 6 December 2020**



**See *data, table and figure notes*

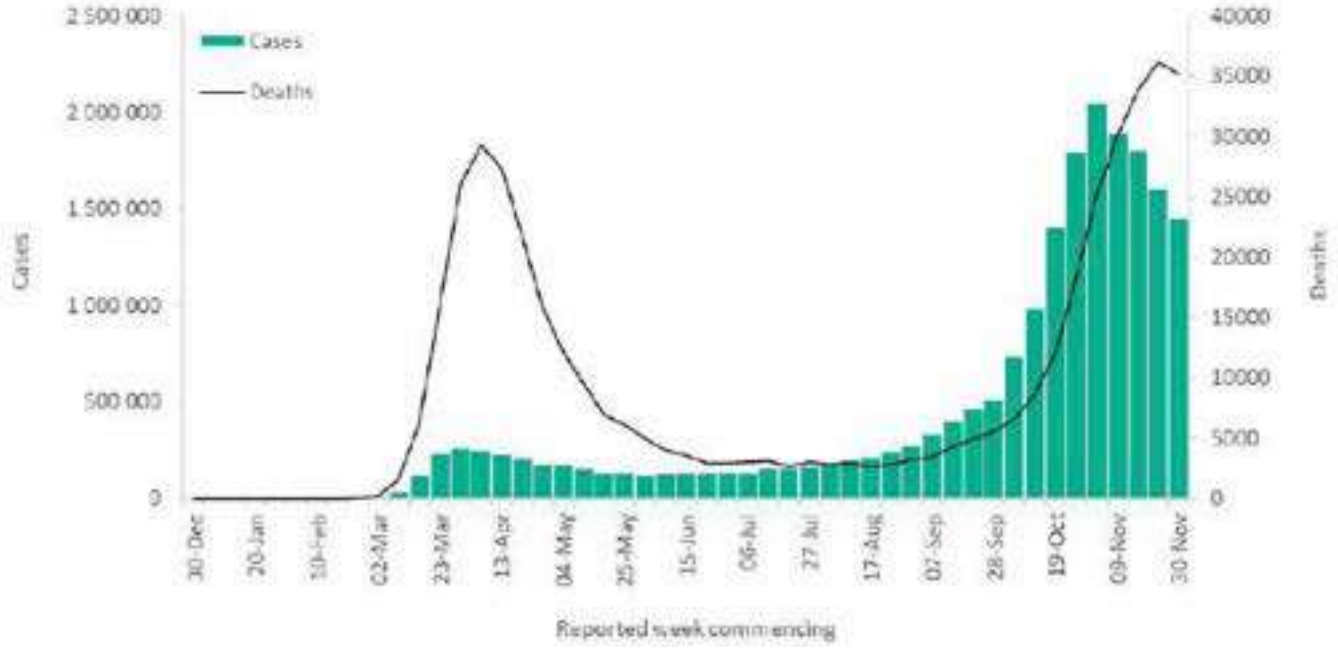
European Region

The number of new cases in the European Region remains high with over 1.4 million new cases reported in the past week (Figure 6). However, the number of new cases has has declined again, in line with the past four weeks, down 10% in comparison to the last seven days. While deaths also decreased in the Region in the past seven days, there were still almost 35 200 deaths reported. Despite the observed reductions, the European Region continues to account for the second highest number of new cases and deaths globally (37% and 48% respectively). Last week, the countries reporting the highest number of new cases were the Russian Federation (191 454 new cases, 1312 new cases per 1 million population), Italy (145 459 new cases, 2406 new cases per 1 million population), Germany (128 622 new cases, 1535 new cases per 1 million population) and the United Kingdom (100 799 new cases, 1485 per 1 million population).

In Germany, the weekly number of new cases have remained relatively unchanged compared to the previous week (3% increase), while the number of deaths has increased by 26%. An increase in both cases and deaths was seen in early October, which then seemed to have plateaued in the latter half of November. While the incidence in younger ages remains stable, it continues to increase in older age groups with an incidence of cases of 128 per 100 000 population in those aged 60 years and over. The distribution of cases and deaths varies across the country with the state of North-Rhine Westphalia consistently reporting the highest number of cases, while deaths are highest in Bavaria (30.9 per 100 000 population).

The United Kingdom continues to report high numbers of new cases and deaths, although overall incidence have decreased for the past three weeks. The country introduced tighter public health and social measures on 5 November. It has conducted nearly 39 million tests since the start of the pandemic. In the past week, the testing rate has been 29 tests per 1000 population with a test positivity rate of 5.8%. On 2 December, the United Kingdom became the first country to approve Pfizer/BioNTech's COVID-19 vaccine, with the first doses to be administered on 8 December. Vaccines will be available to about 70 hospital hubs across the country, and provided first to those aged over 80 years and health care workers.

Figure 6: Number of COVID-19 cases and deaths reported weekly by the WHO European Region, as of 6 December 2020**



**See *data, table and figure notes*

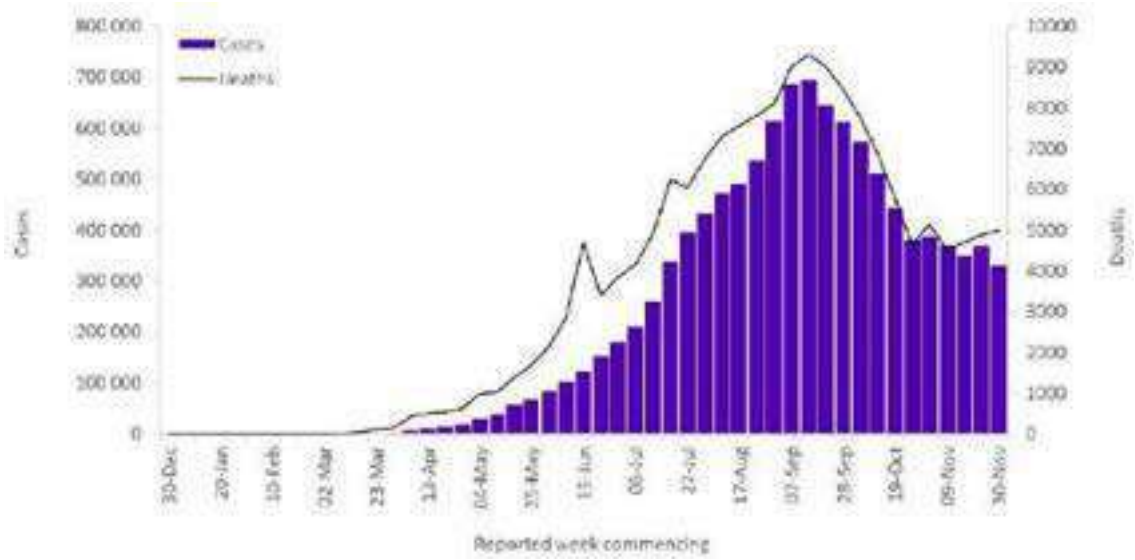
South-East Asia Region

In the South-East Asia Region, new cases reported last week declined 10% compared to the previous week (332 396 new cases, 164 new cases per 1 million population), although new weekly deaths showed a slight increase of 2% compared to the previous week (5004 new deaths, 2 new deaths per 1 million population) (Figure 7). The trends in cases and deaths are still largely driven by India, which reported 76% and 70% of new weekly cases and deaths respectively in the Region. A decrease in new weekly cases was reported in India, Nepal and the Maldives, whereas an increase was reported from Bhutan, Indonesia, Myanmar, Sri Lanka and Thailand. The highest number of new cases were reported from India (251 303 new cases, 182 new cases per 1 million), Indonesia (41 708 new cases, 152 new cases per 1 million) and Bangladesh (15 260 new cases, 93 new cases per 1 million).

In Nepal, over 9000 new cases (314 per 1 million population) were reported in the past week, a significant decrease of 24% compared to the previous week. In addition, the number of new deaths decreased by 17%, to 123 new deaths (4 deaths per 1 million population). As of 2 December, 77% of cases were reported from three provinces, Province 1, Bagmati province and Lumbini province. National authorities inaugurated 5 provincial infectious diseases hospitals and 309 basic hospitals at the municipal level across the country. In addition, health authorities are working with Kathmandu Municipality, one of the hardest hit areas, to institutionalize community based active surveillance and testing.

In Bangladesh, new weekly cases and deaths remained at similar levels as the previous week, with over 15 000 new cases (93 new cases per 1 million population) and 227 new deaths (1 death per 1 million population) reported in this week. As of 30 November, the bed occupancy rate for general beds and ICUs were 17.4% and 56.2% respectively, according to national health authorities. Moreover, on 5 December, the country started a new testing strategy, introducing the antigen rapid detection test (Antigen-RDT) in 10 of the 64 districts (Jashore, Brahmanbaria, Gaibandha, Joyupurhat, Madaripur, Meherpur, Munshiganj, Panchagarh, Patuakhali, and Sylhet). Among the samples tested, the proportion of infection detected by Antigen-RDT was 26.5%. The country will be gradually expanding antigen-based testing in areas where PCR testing is currently not implemented.

Figure 7: Number of COVID-19 cases and deaths reported weekly by the WHO South-East Asia Region, as of 6 December 2020**



**See *data, table and figure notes*

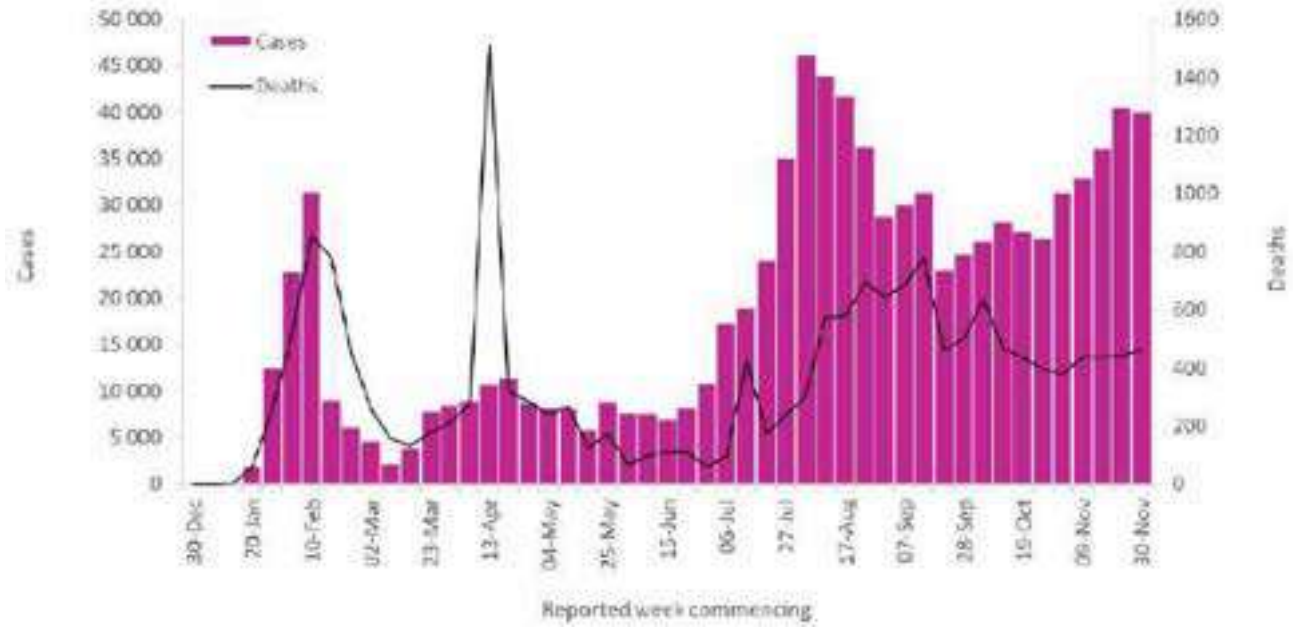
Western Pacific Region

Last week, in the Western Pacific Region, the weekly incidence of new cases was 40 039, with 461 new deaths, accounting for a 1% decrease in cases and a 4% increase in deaths compared to the previous week (Figure 8). Countries including the Republic of Korea and China reported an upward trend in weekly new cases, while countries including Malaysia, Guam and Mongolia reported a downward trend compared to the previous week. The highest new case and deaths counts were reported in Japan (15 445 new cases, 122 new cases per 1 million), Philippines (10 272 new cases, 94 new cases per 1 million) and Malaysia (8183 new cases, 253 new cases per 1 million).

In Malaysia, 8183 new weekly cases were reported, a 14% decrease compared to the previous week, but the levels continue to remain high since the rise of cases in September. The number of new weekly deaths reported were 26, an 18% increase compared to the previous week, but overall the trend continues to decline since death counts peaked in mid- to late October. Sabah state has reported the highest number of cumulative cases, followed by Selangor, Kuala Lumpur and Negeri Sembilan states. Among the new cases reported in the past week, there were cases linked to clusters in prisons and temporary detention centers in Kedah, Selangor, Negeri Sembilan, Sabah and Penang states. In addition to correctional facilities, clusters have also been identified in construction sites, factories and other workplaces, as well as in family settings.

China reported 831 cases (1 per 1 million population) in the past week, a 22% increase compared to the previous week, though cases remain at low levels. New weekly cases last exceeded 800 in the week commencing 27 July. Three deaths were reported in the pas week.

Figure 8: Number of COVID-19 cases and deaths reported weekly by the WHO Western Pacific Region, data as of 6 December 2020**



**See *data, table and figure notes*

Key weekly updates

At the United Nations General Assembly Special Session, WHO Director-General Dr Tedros Adhanom Ghebreyesus delivered four key areas in which leaders can invest to end the pandemic and build the post-pandemic world; vaccines, preparedness to prevent the next pandemic, health as the foundation of peace and prosperity and multilateralism to safeguard our common future.

Dr Tedros thanked donors for answering the initial call for funding the Gavi COVAX Advanced Market Commitment target of US $2 billion in 2020, and put forth WHO's unwavering commitment to equitable, timely and fair access to all the tools that can serve to mitigate and end the pandemic. He reminded all that the pandemic has "a long a way to run and decisions made by leaders and citizens in the coming days will determine both the course of the virus in the short term and when this pandemic will ultimately end."

At the release of the study on the global estimates of the need for rehabilitation, Dr Tedros highlighted the importance of the fight to restore full health and dignity for those affected by infectious disease including COVID-19, as well as noncommunicable disease, accidents, conflicts and many other health issues.

Water, sanitation and hygiene is a first line of defense against COVID-19 and many other diseases. In the opening remarks of the discussion between health, water and finance ministers, Dr Tedros emphasized that "investments in health – including water, sanitation, and hygiene – are the necessary foundation for productive, resilient and stable economies."

On World AIDS Day, Dr Tedros highlighted how "health and community workers who provide the bulk of HIV services now find themselves battling not just HIV, but COVID-19" and that preventing and testing HIV must reach groups in need by employing a people-centric approach with comprehensive and integrated health services.

As COVID-19 vaccines finally become within reach, vaccine acceptance is the next hurdle. People's behaviour for vaccine uptake is driven by an enabling environment for people to easily access affordable vaccines, harnessing social influences including from community leaders, and increasing individual motivation through open and transparent communication about the vaccine.

WHO launched a youth council to advise the Director-General on global health and development issues that impact young people. These challenges include the long-term consequences of the pandemic which will shape the world they live and work in for decades to come.

WHO has published the following documents:

- Mask use in the context of COVID-19;
- Health workforce policy and management in the context of the COVID-19 pandemic response;
- A prospective cohort study investigating maternal, pregnancy and neonatal outcomes for women and neonates infected with SARS-CoV-2;
- Feasibility, Potential Value and Limitations of Establishing a Closely Monitored Challenge Model of Experimental COVID-19 Infection and Illness in Healthy Young Adult Volunteers; and

Table 2. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 6 December 2020**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Africa	**53 083**	**1 547 607**	**1 379**	**974**	**34 486**	**31**	
South Africa	25 310	810 449	13 665	628	22 067	372	Community transmission
Algeria	6 290	87 502	1 995	108	2 501	57	Community transmission
Kenya	5 379	87 984	1 636	73	1 518	28	Community transmission
Ethiopia	3 810	112 740	981	50	1 745	15	Community transmission
Uganda	2 244	22 188	485	5	206	5	Community transmission
Nigeria	1 607	68 937	334	9	1 180	6	Community transmission
Democratic Republic of the Congo	919	13 526	151	11	344	4	Community transmission
Zimbabwe	795	10 617	714	16	291	20	Community transmission
Ghana	717	52 096	1 677	2	325	10	Community transmission
Namibia	665	14 950	5 884	3	153	60	Community transmission
Cameroon	635	24 752	932	6	443	17	Community transmission
Mozambique	547	16 133	516	4	133	4	Community transmission
Mali	495	5 062	250	14	163	8	Community transmission
Angola	449	15 536	473	9	354	11	Community transmission
Senegal	370	16 397	979	5	337	20	Community transmission
Burkina Faso	340	3 156	151	0	68	3	Community transmission
Niger	317	1 789	74	7	77	3	Community transmission
Zambia	309	17 898	974	7	364	20	Community transmission
Rwanda	212	6 084	470	4	51	4	Clusters of cases
Côte d'Ivoire	180	21 441	813	1	132	5	Community transmission
Madagascar	172	17 513	632	4	255	9	Community transmission
Guinea	168	13 207	1 006	0	76	6	Community transmission
Togo	125	3 051	369	1	65	8	Community transmission
Cabo Verde	100	10 626	19 112	1	105	189	Community transmission
Eswatini	89	6 495	5 598	1	122	105	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Benin	81	3 055	252	1	44	4	Community transmission
Liberia	81	1 676	331	0	83	16	Community transmission
Gabon	63	9 254	4 158	1	60	27	Community transmission
South Sudan	62	3 166	283	0	61	5	Community transmission
Chad	59	1 722	105	1	102	6	Community transmission
Eritrea	55	632	178	0	0	0	Sporadic cases
Gambia	36	3 770	1 560	0	123	51	Community transmission
Lesotho	28	2 137	998	0	44	21	Community transmission
Malawi	24	6 049	316	0	185	10	Community transmission
Guinea-Bissau	19	2 441	1 240	1	44	22	Community transmission
Sao Tome and Principe	14	999	4 558	0	17	78	Community transmission
Burundi	13	694	58	0	1	0	Community transmission
Seychelles	10	182	1 851	0	0	0	Sporadic cases
Sierra Leone	10	2 420	303	0	74	9	Community transmission
Central African Republic	9	4 922	1 019	0	63	13	Community transmission
Equatorial Guinea	6	5 159	3 677	0	85	61	Community transmission
Comoros	5	615	707	0	7	8	Community transmission
Mauritius	4	505	397	0	10	8	Clusters of cases
Botswana	0	9 992	4 249	0	31	13	Community transmission
Congo	0	5 774	1 046	0	94	17	Community transmission
Mauritania	0	8 424	1 812	0	172	37	Community transmission
United Republic of Tanzania	0	509	9	0	21	0	Community transmission
Territories[iii]							
Réunion	260	8 200	9 159	1	41	46	Clusters of cases
Mayotte	0	5 181	18 991	0	49	180	Clusters of cases
Americas	**1 845 816**	**28 062 331**	**27 437**	**26 624**	**746 852**	**730**	
United States of America	1 251 632	14 191 298	42 874	13 767	276 503	835	Community transmission
Brazil	295 618	6 533 968	30 739	3 990	175 964	828	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Mexico	66 095	1 156 770	8 972	3 990	108 863	844	Community transmission
Colombia	62 097	1 352 607	26 583	1 253	37 467	736	Community transmission
Argentina	47 354	1 454 631	32 185	1 296	39 512	874	Community transmission
Canada	43 505	402 569	10 666	602	12 496	331	Community transmission
Peru	12 536	970 860	29 445	356	36 195	1 098	Community transmission
Panama	11 863	173 607	40 236	124	3 154	731	Community transmission
Chile	9 727	558 668	29 225	270	15 592	816	Community transmission
Costa Rica	6 592	143 685	28 206	83	1 773	348	Community transmission
Ecuador	6 482	197 391	11 188	385	13 756	780	Community transmission
Paraguay	6 063	86 499	12 127	93	1 813	254	Community transmission
Dominican Republic	5 002	147 655	13 611	17	2 345	216	Community transmission
Guatemala	3 554	125 352	6 997	78	4 239	237	Community transmission
Honduras	2 826	109 960	11 102	42	2 941	297	Community transmission
Venezuela (Bolivarian Republic of)	2 353	103 877	3 653	25	913	32	Community transmission
Belize	1 796	7 383	18 568	29	170	428	Community transmission
Uruguay	1 428	6 731	1 938	6	80	23	Clusters of cases
El Salvador	1 313	39 718	6 123	46	1 153	178	Community transmission
Bolivia (Plurinational State of)	831	145 325	12 450	44	8 987	770	Community transmission
Cuba	541	8 714	769	3	136	12	Clusters of cases
Jamaica	394	11 063	3 736	10	261	88	Community transmission
Guyana	291	5 601	7 121	2	151	192	Clusters of cases
Trinidad and Tobago	149	6 735	4 812	3	121	86	Community transmission
Haiti	106	9 370	822	1	233	20	Community transmission
Bahamas	74	7 570	19 250	0	163	415	Clusters of cases
Nicaragua	42	4 671	705	1	161	24	Community transmission
Saint Lucia	19	265	1 443	0	2	11	Sporadic cases
Barbados	15	285	992	0	7	24	Clusters of cases
Suriname	11	5 322	9 072	0	117	199	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Antigua and Barbuda	3	144	1 470	0	4	41	Sporadic cases
Saint Vincent and the Grenadines	2	87	784	0	0	0	Sporadic cases
Dominica	0	85	1 181	0	0	0	Clusters of cases
Grenada	0	41	364	0	0	0	Sporadic cases
Saint Kitts and Nevis	0	22	414	0	0	0	Sporadic cases
Territories[iii]							
Puerto Rico	3 951	55 532	19 411	102	1 185	414	Community transmission
Curaçao	694	2 740	16 698	4	7	43	Community transmission
French Guiana	228	11 407	38 191	1	71	238	Community transmission
Aruba	132	4 923	46 110	0	45	421	Community transmission
Martinique	107	5 520	14 710	1	41	109	Community transmission
United States Virgin Islands	95	1 633	15 638	0	23	220	Community transmission
Guadeloupe	83	8 427	21 061	0	149	372	Community transmission
Sint Maarten	64	1 105	25 768	0	25	583	Community transmission
Saint Martin	54	744	19 245	0	12	310	Community transmission
Bermuda	41	288	4 625	0	9	145	Clusters of cases
Saint Barthélemy	25	152	15 377	0	0	0	Sporadic cases
Cayman Islands	14	288	4 382	0	2	30	Sporadic cases
Turks and Caicos Islands	7	755	19 500	0	6	155	Clusters of cases
Anguilla	3	7	467	0	0	0	Sporadic cases
Bonaire	3	145	8 301	0	3	172	Sporadic cases
British Virgin Islands	1	73	2 414	0	1	33	Clusters of cases
Falkland Islands (Malvinas)	0	17	4 881	0	0	0	No cases
Montserrat	0	13	2 601	0	1	200	No cases
Saba	0	5	3 342	0	0	0	No cases
Saint Pierre and Miquelon	0	14	2 416	0	0	0	Sporadic cases
Sint Eustatius	0	14	5 636	0	0	0	No cases
Eastern Mediterranean	**242 563**	**4 288 875**	**5 869**	**5 084**	**107 258**	**147**	

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Iran (Islamic Republic of)	93 187	1 028 986	12 251	2 530	50 016	595	Community transmission
Morocco	27 050	376 738	10 207	445	6 184	168	Clusters of cases
Jordan	26 804	237 513	23 278	384	3 010	295	Community transmission
Pakistan	20 835	413 191	1 871	361	8 303	38	Clusters of cases
Iraq	13 699	562 520	13 985	211	12 411	309	Community transmission
Lebanon	10 239	135 876	19 907	99	1 090	160	Community transmission
United Arab Emirates	8 774	175 276	17 722	20	589	60	Community transmission
Tunisia	8 011	102 991	8 714	373	3 526	298	Community transmission
Libya	4 256	85 529	12 447	66	1 219	177	Community transmission
Egypt	2 831	118 014	1 153	129	6 750	66	Clusters of cases
Kuwait	1 969	144 164	33 758	14	889	208	Community transmission
Sudan	1 937	19 747	450	52	1 301	30	Community transmission
Oman	1 750	124 329	24 347	44	1 435	281	Community transmission
Afghanistan	1 675	47 641	1 224	113	1 865	48	Clusters of cases
Saudi Arabia	1 615	358 526	10 298	84	5 954	171	Sporadic cases
Qatar	1 306	139 783	48 518	2	239	83	Community transmission
Bahrain	1 086	87 731	51 559	0	341	200	Clusters of cases
Syrian Arab Republic	605	8 320	475	33	442	25	Community transmission
Somalia	74	4 525	285	8	121	8	Sporadic cases
Djibouti	16	5 692	5 761	0	61	62	Clusters of cases
Yemen	3	2 081	70	2	607	20	Sporadic cases
Territories[iii]							
occupied Palestinian territory	14 841	109 702	21 504	114	905	177	Community transmission
Europe	**1 456 530**	**19 986 964**	**21 413**	**35 249**	**448 867**	**481**	
Russian Federation	191 454	2 460 770	16 862	3 614	43 141	296	Clusters of cases
Italy	145 459	1 709 991	28 282	5 151	59 514	984	Clusters of cases
Germany	128 622	1 171 322	13 980	2 649	18 772	224	Clusters of cases
The United Kingdom	100 799	1 705 975	25 130	2 984	61 014	899	Community transmission
Ukraine	90 627	813 306	18 597	1 375	13 588	311	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Poland	80 680	1 054 273	27 856	3 115	19 861	525	Community transmission
France	72 019	2 241 830	34 345	2 851	54 618	837	Community transmission
Serbia	50 808	213 843	30 708	407	1 891	272	Community transmission
Turkey	45 286	533 198	6 322	1 332	14 705	174	Community transmission
Romania	42 363	508 345	26 424	1 141	12 186	633	Community transmission
Hungary	38 751	250 278	25 908	1 196	5 868	607	Community transmission
Netherlands	37 089	549 784	32 086	336	9 649	563	Community transmission
Spain	35 761	1 684 647	36 032	767	46 252	989	Community transmission
Georgia	30 107	162 475	40 729	274	1 504	377	Community transmission
Azerbaijan	28 298	142 323	14 037	270	1 593	157	Clusters of cases
Portugal	27 934	318 640	31 249	513	4 876	478	Clusters of cases
Sweden	27 899	278 912	27 617	128	7 067	700	Community transmission
Czechia	25 530	544 179	50 815	761	8 815	823	Community transmission
Austria	23 956	298 231	33 113	852	3 674	408	Community transmission
Croatia	23 761	147 454	35 918	447	2 102	512	Community transmission
Switzerland	23 167	343 101	39 644	532	4 832	558	Community transmission
Bulgaria	19 097	160 844	23 148	980	4 729	681	Clusters of cases
Lithuania	14 456	74 649	27 421	133	626	230	Community transmission
Belgium	14 377	591 752	51 059	684	17 316	1 494	Community transmission
Belarus	11 955	145 279	15 375	55	1 198	127	Community transmission
Greece	11 534	114 568	10 992	679	2 902	278	Community transmission
Slovakia	10 830	115 462	21 148	183	981	180	Clusters of cases
Slovenia	10 511	84 775	40 778	331	1 244	598	Clusters of cases
Denmark	10 504	88 858	15 341	55	878	152	Community transmission
Republic of Moldova	9 705	115 557	28 646	134	2 403	596	Community transmission
Israel	8 607	342 929	39 620	58	2 906	336	Community transmission
Armenia	7 169	141 937	47 899	184	2 326	785	Community transmission
Bosnia and Herzegovina	7 058	93 768	28 581	346	2 922	891	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
North Macedonia	6 588	67 311	32 309	202	1 901	912	Community transmission
Kazakhstan	5 538	179 344	9 551	0	2 477	132	Clusters of cases
Albania	5 358	42 148	14 646	102	889	309	Clusters of cases
Latvia	4 226	20 787	11 021	60	253	134	Clusters of cases
Luxembourg	3 608	37 017	59 135	45	345	551	Community transmission
Finland	2 911	27 218	4 912	22	415	75	Community transmission
Estonia	2 802	14 500	10 931	17	126	95	Clusters of cases
Montenegro	2 767	37 981	60 473	43	530	844	Clusters of cases
Kyrgyzstan	2 675	75 102	11 511	29	1 295	198	Clusters of cases
Norway	2 624	37 371	6 893	26	354	65	Community transmission
Ireland	2 006	73 948	14 976	49	2 099	425	Community transmission
Cyprus	1 950	12 181	10 089	11	59	49	Clusters of cases
Uzbekistan	1 095	73 904	2 208	3	611	18	Clusters of cases
Malta	814	10 423	23 606	17	149	337	Clusters of cases
Andorra	395	7 005	90 662	2	78	1 010	Community transmission
Tajikistan	271	12 389	1 299	1	87	9	Pending
San Marino	203	1 789	52 714	3	48	1 414	Community transmission
Liechtenstein	123	1 396	36 605	1	16	420	Sporadic cases
Iceland	105	5 476	16 047	1	27	79	Community transmission
Monaco	27	637	16 232	0	3	76	Sporadic cases
Holy See	0	26	32 138	0	0	0	Sporadic cases
Territories[iii]							
Kosovo	3 906	42 294	22 734	98	1 077	579	Community transmission
Jersey	315	1 238	11 379	0	32	294	Community transmission
Gibraltar	43	1 042	30 928	0	5	148	Clusters of cases
Faroe Islands	4	506	10 355	0	0	0	Sporadic cases
Guernsey	2	288	4 557	0	13	206	Community transmission
Isle of Man	1	370	4 351	0	25	294	No cases
Greenland	0	18	317	0	0	0	No cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
South-East Asia	**332 396**	**11 071 129**	**5 477**	**5 004**	**168 458**	**83**	
India	251 303	9 644 222	6 989	3 486	140 182	102	Clusters of cases
Indonesia	41 708	569 707	2 083	943	17 589	64	Community transmission
Bangladesh	15 260	475 879	2 890	227	6 807	41	Community transmission
Myanmar	9 887	96 520	1 774	194	2 059	38	Clusters of cases
Nepal	9 162	239 885	8 233	123	1 577	54	Clusters of cases
Sri Lanka	4 727	27 228	1 272	30	137	6	Clusters of cases
Maldives	212	13 159	24 344	1	47	87	Clusters of cases
Thailand	106	4 072	58	0	60	1	Clusters of cases
Bhutan	30	426	552	0	0	0	Sporadic cases
Timor-Leste	1	31	24	0	0	0	Sporadic cases
Western Pacific	**40 039**	**914 744**	**466**	**461**	**17 722**	**9**	
Japan	15 445	160 098	1 266	209	2 315	18	Clusters of cases
Philippines	10 272	438 069	3 998	193	8 526	78	Community transmission
Malaysia	8 183	71 359	2 205	26	380	12	Clusters of cases
Republic of Korea	3 783	37 546	732	22	545	11	Clusters of cases
China	831	94 160	64	3	4 753	3	Clusters of cases
Mongolia	82	842	257	0	0	0	Clusters of cases
Australia	71	27 956	1 096	1	908	36	Clusters of cases
Singapore	50	58 255	9 958	0	29	5	Sporadic cases
Cambodia	31	346	21	0	0	0	Sporadic cases
New Zealand	26	1 722	357	0	25	5	Clusters of cases
Papua New Guinea	26	671	75	0	7	1	Community transmission
Viet Nam	24	1 365	14	0	35	0	Clusters of cases
Fiji	6	44	49	0	2	2	Sporadic cases
Brunei Darussalam	1	151	345	0	3	7	Sporadic cases
Lao People's Democratic Republic	0	39	5	0	0	0	Sporadic cases
Solomon Islands	0	17	25	0	0	0	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification[ii]
Territories[iii]							
French Polynesia	1 011	15 107	53 779	6	79	281	Sporadic cases
Guam	190	6 845	40 557	1	113	670	Clusters of cases
Northern Mariana Islands (Commonwealth of the)	4	109	1 894	0	2	35	Pending
New Caledonia	3	35	123	0	0	0	Sporadic cases
Marshall Islands	0	4	68	0	0	0	Sporadic cases
Vanuatu	0	1	3	0	0	0	Sporadic cases
Wallis and Futuna	0	3	267	0	0	0	Sporadic cases
Global	**3 970 427**	**65 872 391**	**509**	**73 396**	**1 523 656**	**9**	

**See *data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

Global totals include 741 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case.

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g. laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 29 November 2020, 10 am CET

For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

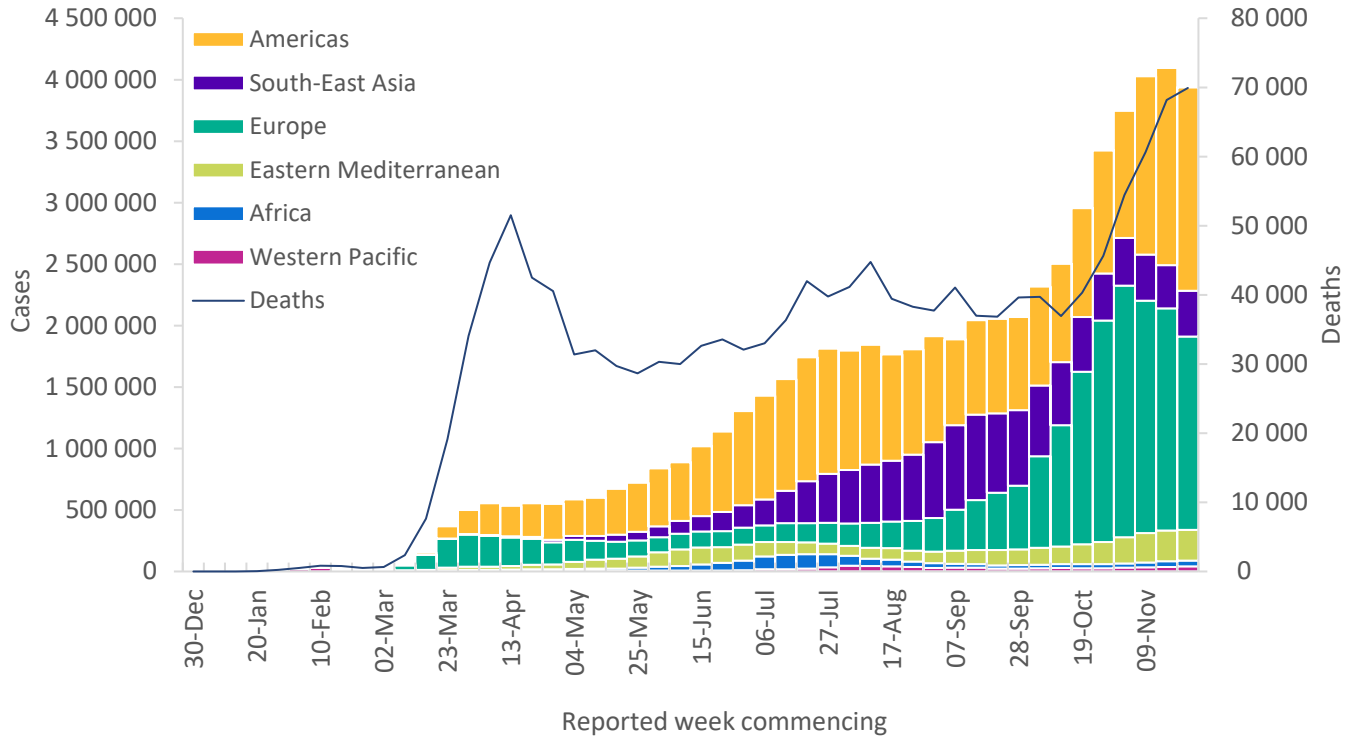
Global epidemiological situation

Global summary

In the past week, global case incidence remained high at approximately 4 million new cases, although a slight downward trend was observed (Figure 1). Weekly deaths, however, continued to rise, with over 69 000 new deaths reported globally. The Region of the Americas was the largest contributor for new weekly cases last week. Although the European Region reported a continued decrease in new weekly cases, it still accounts for the second greatest proportion of new weekly cases, while deaths rates have continued to increase and accounted for approximately half of the new global deaths in the past week. The Eastern Mediterranean Region registered a slight decline in both cases and deaths last week, after four months of continued increases. Relatively small increases were reported from the African and South-East Asia Regions, and more substantively from the Western Pacific Region last week.

As of 29 November, there have been over 61.8 million cases and over 1.4 million deaths reported globally since the start of the pandemic.

Figure 1: COVID-19 cases reported weekly by WHO Region, and global deaths, as of 29 November 2020**



**See *data table and figure notes*.

In the past week, the five countries reporting the highest number of cases were the United States of America (reporting over 1.1 million cases, a 0.3% increase from the previous week), India (over 297 000 cases, a 6% increase), Brazil (over 218 000 new cases, a 4% increase), Italy (over 184 000 new cases, a 22% decrease) and Russian Federation (over 179 000 new cases, a 10% increase).

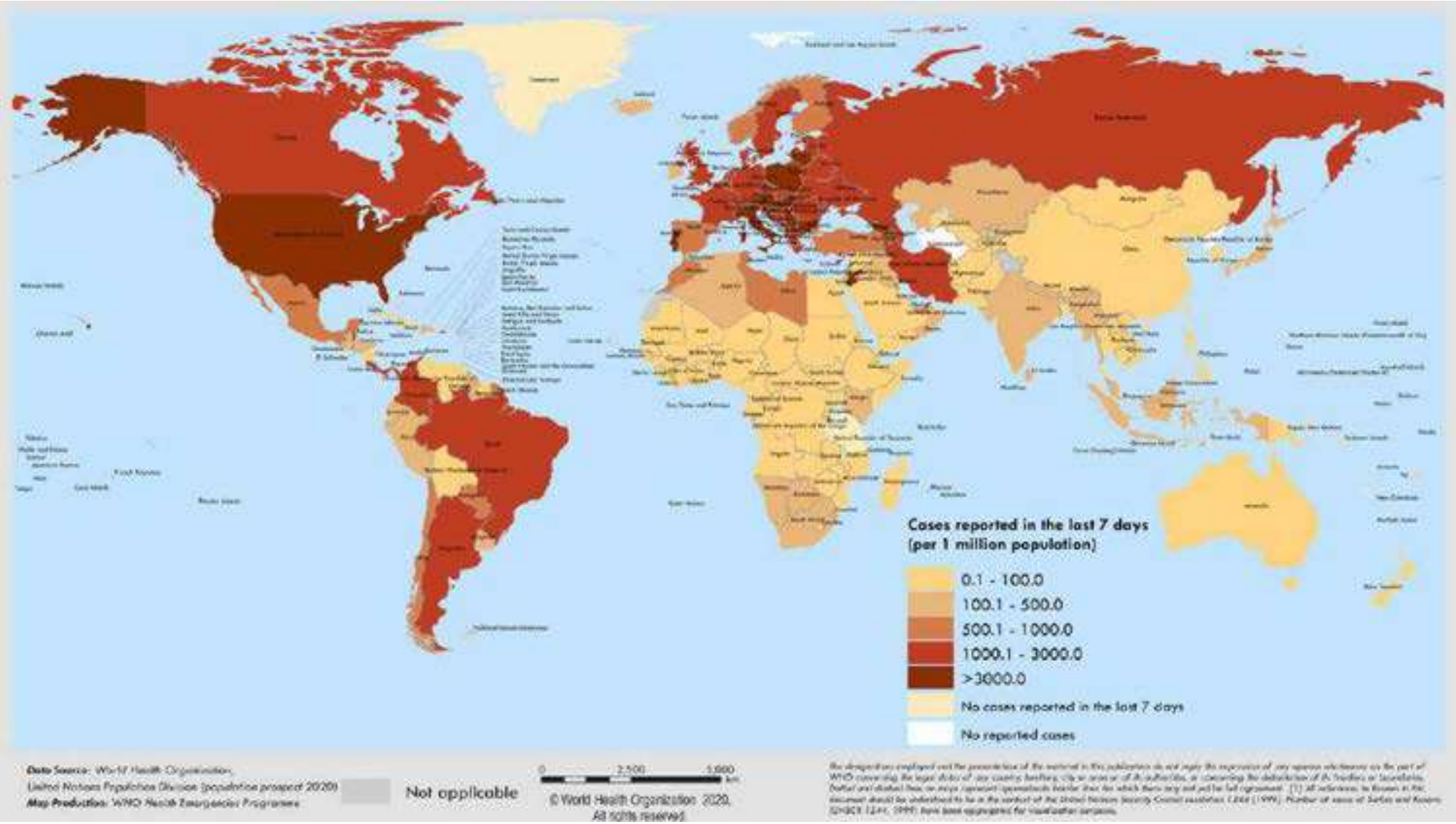
Additional Region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western Pacific Region.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 29 November 2020**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days*	Cumulative deaths (%)
Americas	1 652 915 (42%)	3%	26 216 515 (42%)	22 488 (32%)	2%	720 228 (50%)
Europe	1 573 354 (40%)	-13%	18 495 511 (30%)	35 321 (51%)	5%	412 362 (28%)
South-East Asia	371 180 (9%)	6%	10 738 733 (17%)	4 888 (7%)	4%	163 454 (11%)
Eastern Mediterranean	248 909 (6%)	-1%	4 045 906 (7%)	5 800 (8%)	-8%	102 160 (7%)
Africa	48 483 (1%)	3%	1 494 524 (2%)	974 (1%)	-10%	33 512 (2%)
Western Pacific	40 489 (1%)	12%	874 705 (1%)	445 (1%)	1%	17 261 (1%)
Global	**3 935 330 (100%)**	**-4%**	**61 866 635 (100%)**	**69 916 (100%)**	**3%**	**1 448 990 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*
***See data, table and figure notes*

Figure 2. COVID-19 cases per 1 million population reported in the last seven days by countries, territories and areas, 23 November through 29 November 2020**



**See *data, table and figure notes*

Situation by WHO Region

African Region

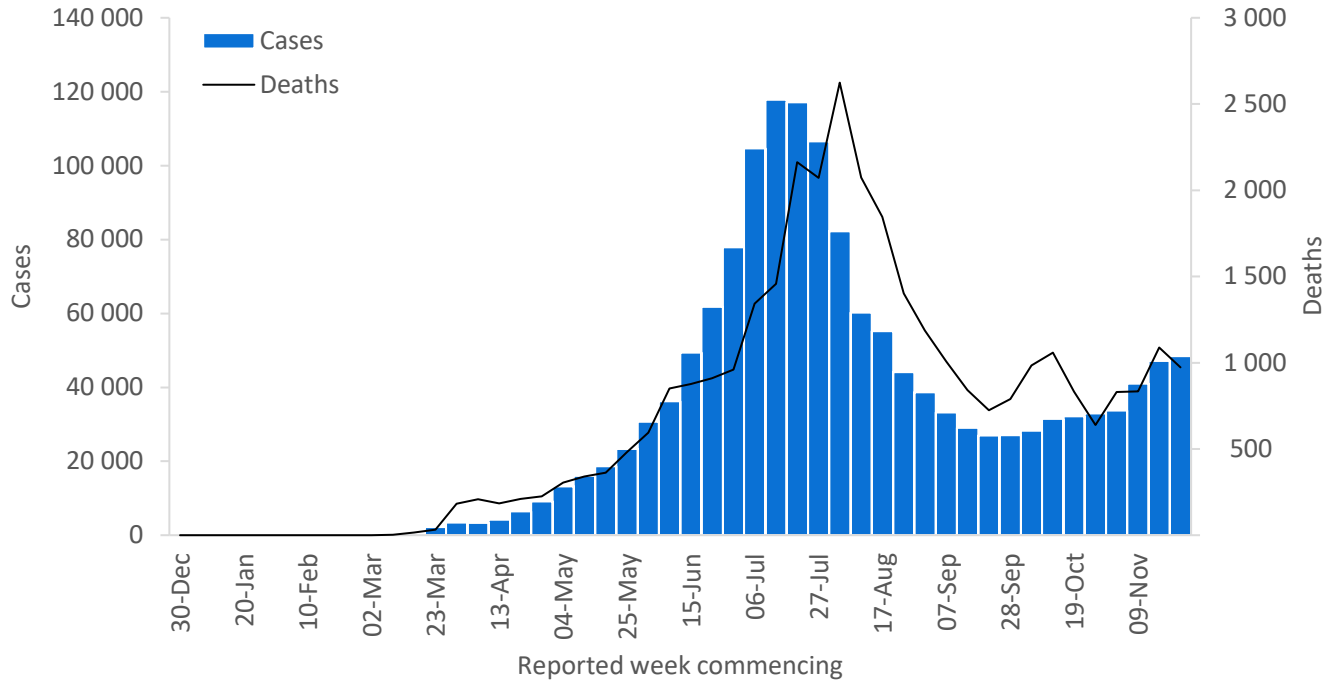
The African Region reported about 48 000 new cases and just under 1000 new deaths last week; a 3% and -10% change from the previous week, respectively (Figure 3). The highest number of new cases and deaths were reported from South Africa (19 730 new cases, 333 new cases per 1 million), Algeria (7438 new cases, 170 new cases per 1 million), Kenya (6201 new cases, 115 new cases per 1 million), Ethiopia (3578 new cases, 31 new cases per 1 million), and Uganda (2277 new cases, 50 new cases per 1 million), which collectively account for 81% of all new cases in the Region.

For the past three weeks, cases in South Africa have increased by over 20% week-on-week, and last week 19 730 new cases were reported (3500 more than the previous week). The rise in new cases in the Western Cape (including in Cape Town) and Eastern Cape provinces is a cause for concern. As of 30 November, Gauteng, the Western Cape, the Eastern Cape, and Kwa-Zulu-Natal provinces have reported 79% of total cumulative cases.

Ethiopia reported 3578 new cases (31 new cases per 1 million) and 59 deaths (0.5 new deaths per 1 million) in the past week. The number of new cases being reported from Ethiopia has fallen considerably since a peak at the end of August when there were over 10 000 new cases per week. This week the number of new cases rose by 18%, while new deaths fell by 17% from the previous week. The UN refugee agency (UNHCR) has warned that a full-scale humanitarian crisis is unfolding as thousands of refugees in the Tigray region seek safety in eastern Sudan. At the 70th Session of the WHO Regional Committee for Africa held last week, Ethiopia's Minister of Health highlighted the need to continue to be vigilant in COVID-19 testing, isolation and treatment, and maintaining strong communication on public health and social measures.

Cameroon reported 589 new cases (22 new cases per 1 million) and 2 new deaths (0.1 new deaths per 1 million) in the past week. Since first declaring cases on 6 March, new cases rose to peak at around 2000 cases per week at the end of June and in early July. However, the number of new cases declined in July and have averaged below 400 per week since early August. For the past two weeks cases have risen above this average, with 836 new cases two weeks ago and nearly 600 cases reported this last week. Last week UNHCR warned that as the pandemic continues, a lethal mix of state at home orders, deepening poverty and economic duress is unleashing a wave of violence against refugee, displaced and stateless women and girls. UNHCR report that in North-West and South-West Cameroon where the security situation remains volatile, a staggering 26% of gender-based violence incidents logged since the onset of the pandemic relate to children.

Figure 3: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, as of 29 November 2020**



**See *data, table and figure notes*

Region of the Americas

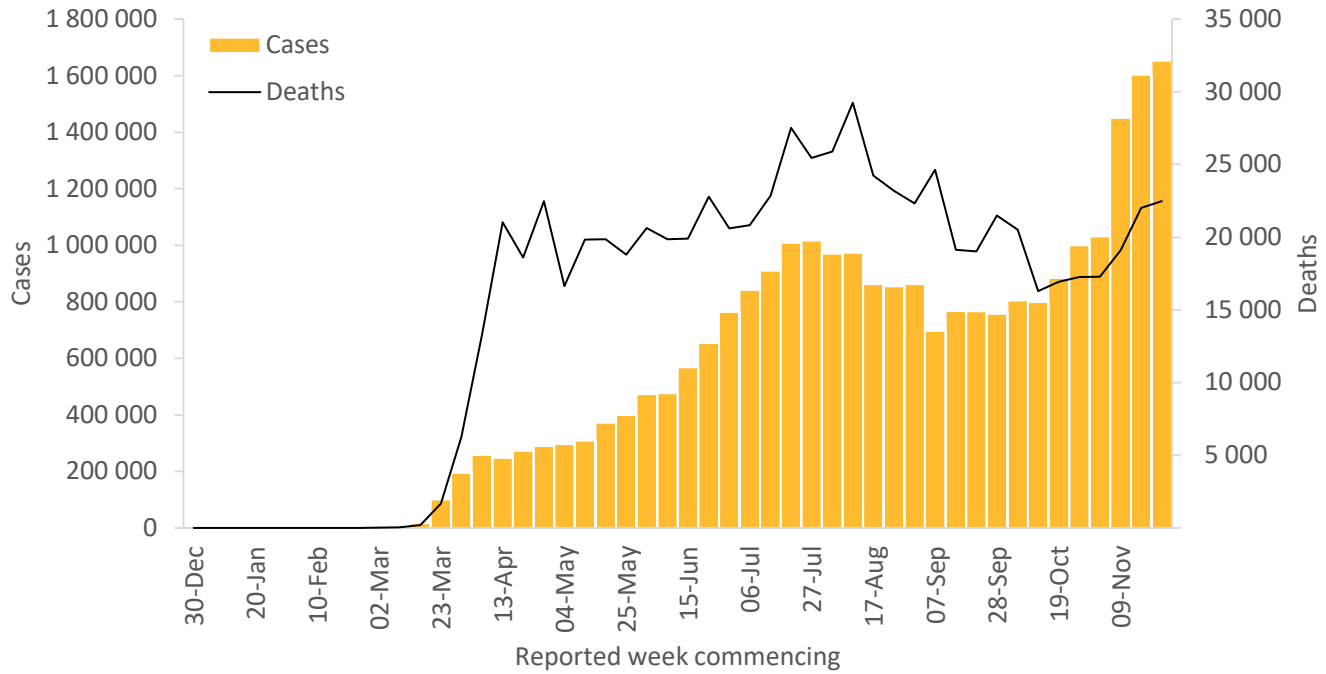
The Region of the Americas reported over 1.6 million new cases and 22 000 new deaths, a small increase of 3% and 2%, respectively (Figure 4). The highest number of new cases and deaths were reported from the United States of America (1.15 million new cases, 3476 new cases per 1 million), Brazil (218 000 new cases, 1026 new cases per 1 million), Mexico (64 000 new cases, 502 new cases per 1 million), Colombia (57 000 new cases, 1122 new cases per 1 million), and Argentina (48 000 new cases, 1067 new cases per 1 million). These five countries account for 93% of all new cases in the Region.

Colombia reported the fourth-highest number of new cases in the Region, with 57 000 cases (1122 new cases per 1 million). The number of new deaths increased by 2% from previous week to 1285 new deaths (25.3 new deaths per 1 million). Since the pandemic started, Colombia has seen at least one prominent peak in case incidence in August during which almost 78 000 cases per week were reported, followed by a moderate decline; however, the country has sustained over 50 000 new cases per week since early October. Bogot , Amazonas, and Barranquilla have reported the highest case incidence. Among active cases, 70% are at home, 26% in general hospitalization and 3% in intensive care units (ICUs). Men account for 64% of cases, and 77% of those who have died were aged 60 years and over. Colombia has extended its state of emergency by three months.

Peru reported 12 000 new cases (371 new cases per 1 million) and 355 new deaths (10.8 new deaths per 1 million); decreases of 9% and 6%, respectively from the previous week. Since new cases peaked in the week of 17 August at almost 60 000 cases , Peru has observed a consistent decline in cases. Preliminary results of a seroprevalence study in the capital, Lima suggest that around 35% of the population has been infected. To prepare for vaccination activities, 10 000 members of the armed forces are being trained to support immunization campaigns.

Chile reported 9798 new cases (513 new cases per 1 million) and 292 new deaths (15.3 new deaths per 1 million). New cases in Chile peaked in the week of 15 June with 69 000 cases. Since early August, between 9000 13 000 cases have been reported weekly, with an overall slow rate of decline. The Minister of Health reported that the numbers of hospitalized patients and patients admitted to ICU are also gradually declining. Magallanes Region has reported the highest cumulative incidence rates, followed by the Metropolitan, and Arica and Parinacota regions. The Ministry of Health has expressed concerns over increases in some southern regions, such as Los R os, Magallanes and La Araucan a. Chile reports that 5 million tests have been conducted, around 1 million tests per month. The Arturo Merino Ben tez airport was opened for foreigners last week. An upcoming election was scheduled for 29 November, although people with COVID-19 were not allowed to go to the polls.

Figure 4: Number of COVID-19 cases and deaths reported weekly by the WHO Region of the Americas, as of 29 November 2020**



**See *data, table and figure notes*

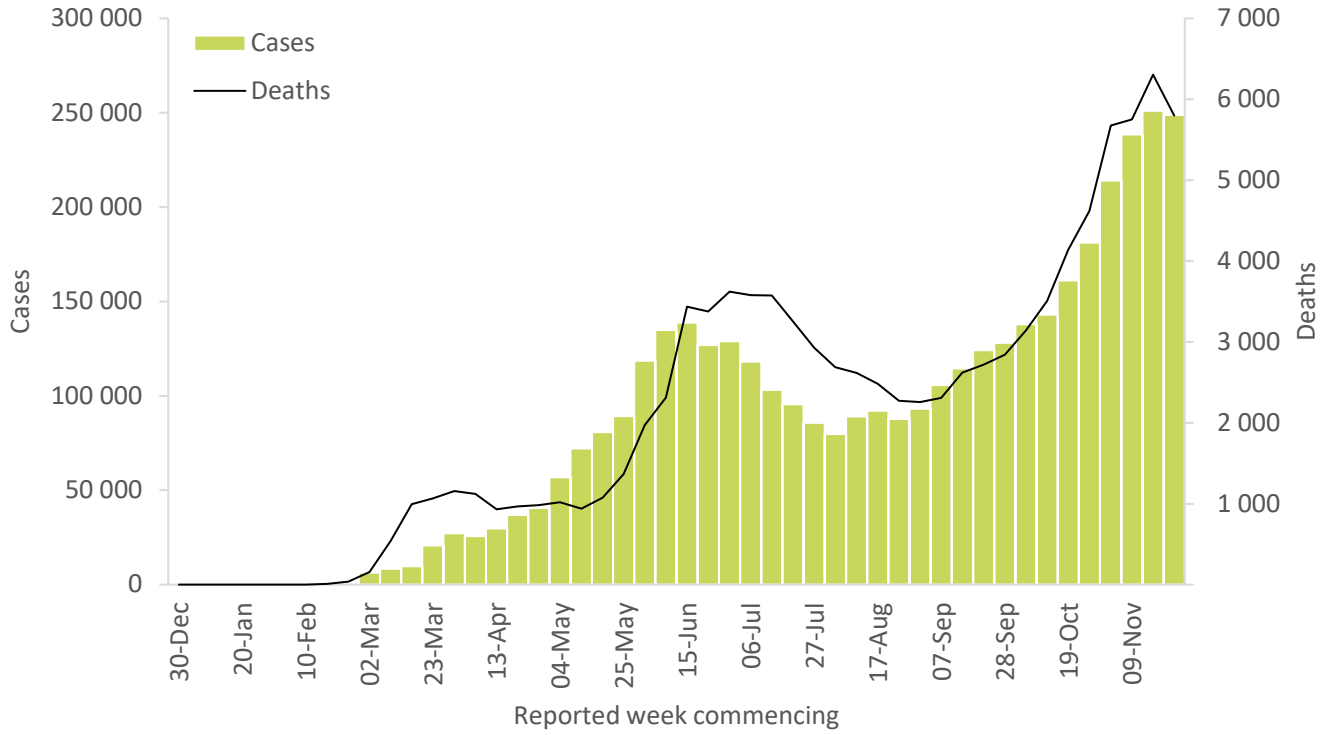
Eastern Mediterranean Region

After fifteen weeks of steady increases in weekly cases, both new cases (248 000) and new deaths (5800) have shown a slight reduction in the Eastern Mediterranean Region, of 1% and 8% respectively compared to the previous week (Figure 5). The highest number of new cases were reported from the Islamic Republic of Iran (94 500 new cases, 1125 new cases per 1 million), Jordan (32 500 new cases, 3200 new cases per 1 million), Morocco (29 000 new cases, 780 new cases per 1 million), Pakistan (21 000 new cases, 94 new cases per 1 million), and Iraq (15 000 new cases, 380 new cases per 1 million).

In the occupied Palestinian territory, including East Jerusalem, reported cases and deaths both increased by 43% in the past week, with over 12 000 new cases (2368 cases per 1 million) and 93 new deaths (18.2 new deaths per 1 million) reported. This represents the highest number of new cases reported per week in the territory since the outbreak began. The proportion of positive tests has increased slightly over the last three weeks along with an increase in the number of total tests conducted. In the Gaza strip, the current testing strategy is limited to symptomatic patients and their contacts, and a 5% COVID-19 infection rate among health workers. Health services continue to operate with 50% of beds in hospitals and 78% of ICU capacity occupied by COVID-19 patients.

The Islamic Republic of Iran continues to report the highest number of incident cases in the Region. The country has experienced an increasing trend in newly reported cases since the end of August with a 3% increase to 94 000 new cases (1124 cases per 1 million) in the last week. During this period, the number of weekly new deaths decreased by 4% to 3159 deaths (38 deaths per 1 million). As Iran approaches the 1 million case mark in the coming week, the country is strengthening public health and social measures to curb this trend by introducing curfews and partial movement restrictions based on the number of confirmed COVID-19 hospitalizations in respective cities and counties. COVID-19 PCR testing activity has substantially increased from an average of 6 samples/100,000 population/week during August, to 27 samples/100,000/week in the past 4 weeks (totaling over 6 million tests to date); however, positivity rates have also increased over the same period, from 10% to 32% in the past week.

Figure 5: Number of COVID-19 cases and deaths reported weekly by the WHO Eastern Mediterranean Region, as of 29 November 2020**



**See *data, table and figure notes*

European Region

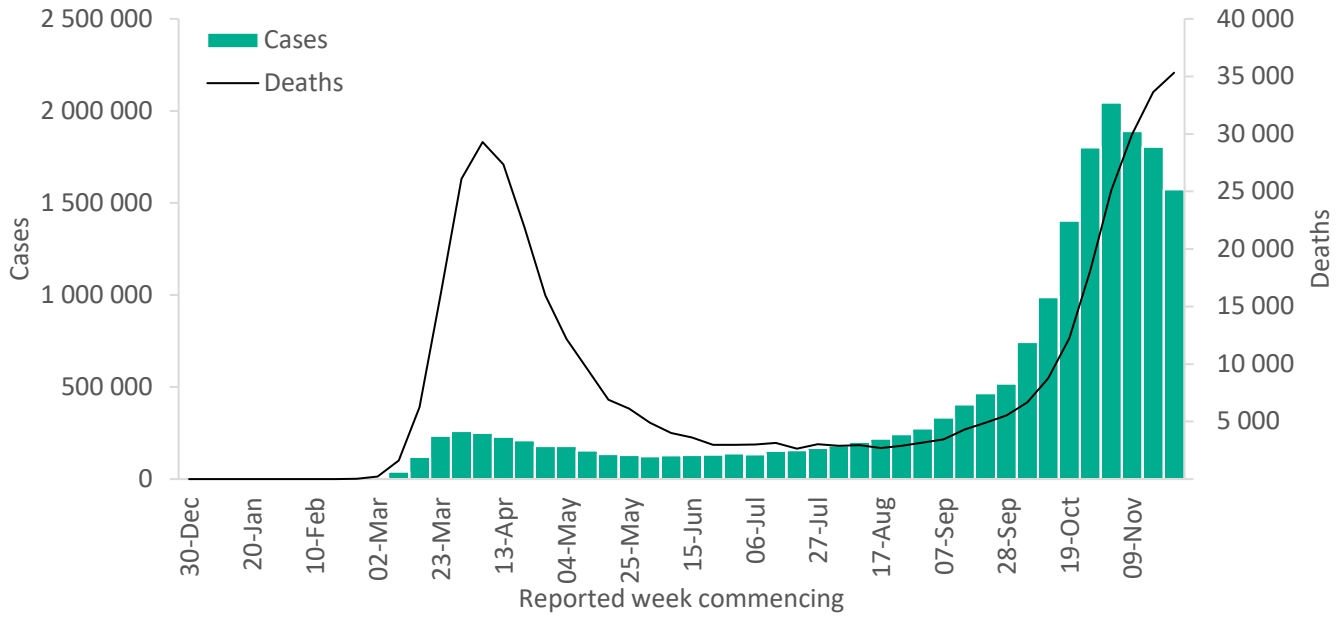
In the European Region, the number of new cases has been decreasing for three consecutive weeks, since its peak in the first week of November. In the past week, the number of new cases reported declined by 13% to over 1.5 million (Figure 6). Despite this reduction, the Region still accounts for 40% of new global cases and 50% of new global deaths as almost half of the countries within the region continue to show an increasing trend. Last week alone, over 35 000 new deaths were reported from the Region, bringing cumulative deaths to 412 000. The highest number of new cases were reported from Italy (184 000 new cases, 3000 new cases per 1 million), Russian Federation (180 000 new cases, 1200 new cases per 1 million), Poland (130 000 new cases, 3438 new cases per 1 million), Germany (124 000 new cases, 1500 new cases per 1 million), and the United Kingdom (112 000 new cases, 1647 new cases per 1 million).

In Turkey, upward trends in both cases and deaths have continued over the past week, with over 47 000 new cases (560 new cases per 1 million) and just over 1150 new deaths (14 new deaths per 1 million) reported. The country saw a 58% increase in new cases in the past week, with rising numbers previously seen mainly in Istanbul, Izmir and Bursa having now spread throughout the country. There have been concerted efforts to increase testing capacity following an upward trend in reported cases during the summer holiday period. To date, over 18.2 million tests have been conducted with a 3% positivity rate in the past week.

Serbia has reported a steady increase in the weekly number of cases and deaths since October. In the past week, 46 910 new cases (6700 new cases per 1 million) and 300 new deaths (45 new deaths per 1 million population) were reported. The country has conducted over 1.7 million tests to date, including around 137 000 people tested in the past week (20 tests/1000 population/week), of which 34% were positive. With over 7200 patients hospitalized and more than 250 on ventilation support at the end of last week, a clinic in the country will be converted into a COVID-19 hospital to provide intensive care and oxygen support to cope with the increase in number of cases requiring clinical care.

In Greece, after several weeks of an upward trend, cases have decreased by 27% with 12 913 new cases (1239 new cases per 1 million) reported. Whereas, a steep increase in the number of deaths continues, with 696 new deaths reported (67 new deaths per 1 million) in the past week. This number accounts for one third of the total deaths reported since the beginning of the outbreak. As the current situation is challenging the national health system, plans are underway to strengthen it at the national level and in the most affected areas in Thessaloniki, which is located in northern Greece, by ensuring that every patient receives the health care needed though hiring more health workers and increasing ICU capacity.

Figure 6: Number of COVID-19 cases and deaths reported weekly by the WHO European Region, as of 29 November 2020**



**See *data, table and figure notes*

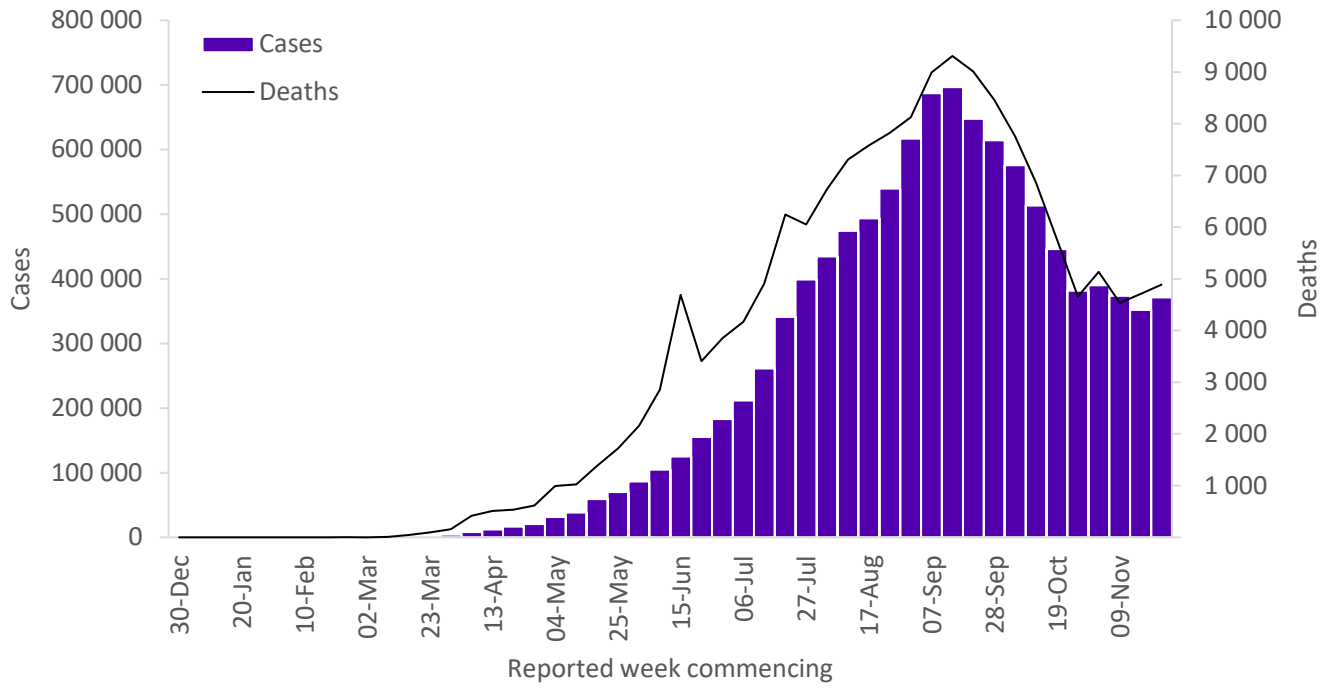
South-East Asia Region

In the South-East Asia Region, new weekly cases remained at similar levels as the previous four weeks with 371 180 cases reported in the past week. The trend in cases is largely driven by the number of cases in India, which reported 80% of new weekly cases in the Region. A decrease in new weekly cases was observed in Myanmar, Sri Lanka and the Maldives, whereas an increase was reported from Indonesia, Nepal, Thailand and Bhutan. There were 4888 deaths reported from seven countries in the past week, a 4% increase compared to the previous week. The highest number of new cases were reported from India (297 000 new cases, 215 new cases per 1 million), Indonesia (35 000 new cases, 127 new cases per 1 million), Bangladesh (15 000 new cases, 93 new cases per 1 million), Nepal (12 000 new cases, 415 new cases per 1 million) and Myanmar (8 800 new cases, 161 new cases per 1 million).

In India, 297 113 new cases (215 per 1 million population) were reported in the past week. Since cases peaked in the week commencing 14 September, weekly decreases in new cases have continued. There were 3469 deaths reported in the past week, a 3% decrease compared to the previous week, but the number of weekly deaths has remained relatively stable since late October. As of 27 November, 70% of active cases were reported from eight states and union territories, including Maharashtra, Kerala, Delhi, Rajasthan and Uttar Pradesh. Maharashtra has been the most affected state in terms of the number of cases and deaths reported. In Delhi, the number of new cases has decreased from 46 876 cases in the week commencing 9 November to 36 785 cases in the past week. State governments including Himachal Pradesh, Madhya Pradesh, Gujarat and Rajasthan have implemented night curfew in selected areas.

In Indonesia, 34 691 new cases (127 per 1 million population) were reported in the past week, bringing the cumulative cases to over half a million cases. A total of 872 new deaths were reported, a 39% increase compared to the previous week. Cases have been confirmed in 505 out of 514 districts and municipalities across all 34 provinces. As of 22 November, the test positivity rate in Indonesia was 14%. In Jakarta, local authorities extended public health and social measures for two additional weeks. In 98 referral hospitals in Jakarta, the average bed occupancy has increased from 56% to 73%, and the ICU occupancy has increased from 60% to 70% (591 of 841 beds occupied) in the past two weeks.

Figure 7: Number of COVID-19 cases and deaths reported weekly by the WHO South-East Asia Region, as of 29 November 2020**



**See *data, table and figure notes*

Western Pacific Region

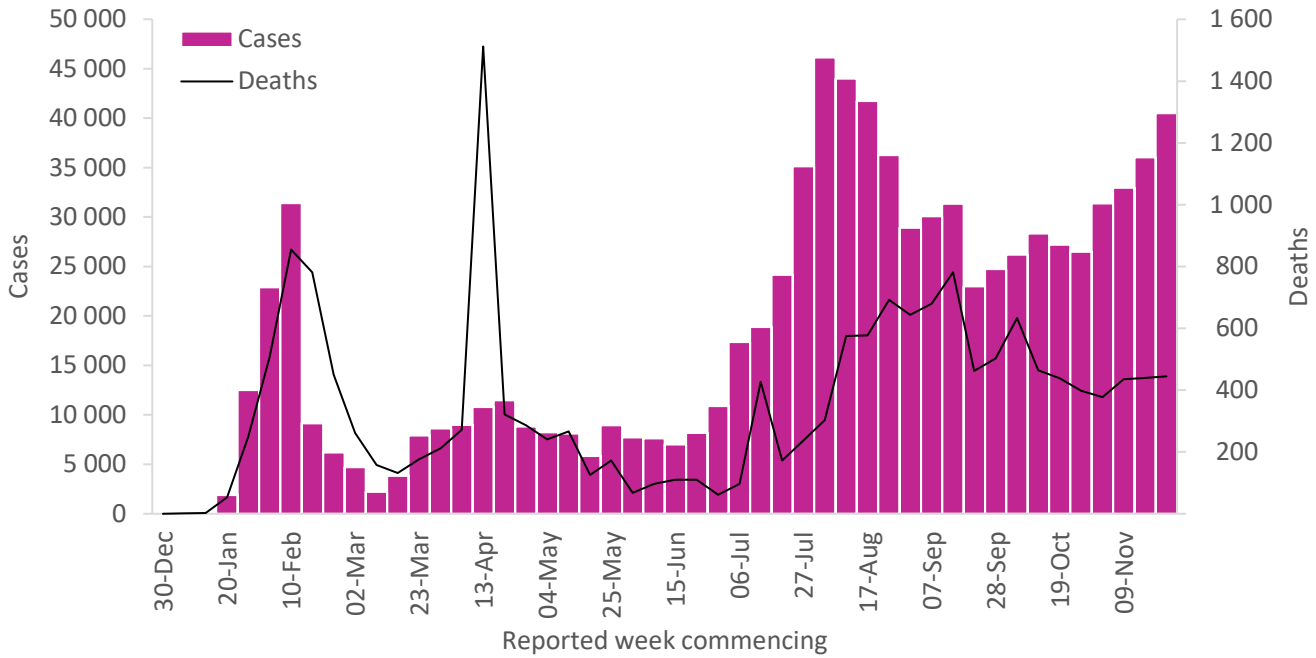
In the past week, the number of new cases reported in the Western Pacific Region increased by 12% with 40 550 cases, continuing the increase since the beginning of November (Figure 8). The number of weekly cases is lower than the highest peak observed in the Region in the week commencing 3 August. The number of deaths in the past week remained at similar levels compared to the previous two weeks with 445 deaths reported from eight countries including the Philippines and Japan which together comprised 87% of all deaths. The highest number of new cases were reported from Japan (14 500 new cases, 114 new cases per 1 million), Philippines (11 000 new cases, 100 new cases per 1 million), Malaysia (9500 new cases, 293 new cases per 1 million), Republic of Korea (3000 new cases, 60 new cases per 1 million) and French Polynesia (1100 new cases, 4000 new cases per 1 million).

The Philippines reported 10 945 cases (100 cases per 1 million) in the past week; a similar level to the previous week. The overall trend shows a gradual decrease since its peak in late July to early August. The country reported 253 new deaths in the past week, a 12% decrease compared to the previous week, although the Philippines has reported the highest cumulative deaths in the Region with 8333 deaths. As of 25 November, 55% of cumulative cases were male, and the most affected age group was 20 to 29 years (27%) followed by 30 to 39 years (24%). Out of 8215 confirmed deaths, 60% were male, with the most affected age group aged over 70 (34.5%) followed by 60 to 69 years (27.3%). The National Capital Region, which surrounds Manila, has reported 46% of cumulative cases, followed by Calabarzon Region (18%) in the south-east of Manila. National authorities have conditionally approved ending restrictions on Filipino healthcare workers to take up employment outside of the Philippines and are developing a contingency plan to rapidly respond to a possible surge following the upcoming holiday season.

The Republic of Korea reported 3091 new weekly cases (60 cases per 1 million), a sharp 41% increase compared to the previous week, reaching the highest weekly case count since early March. A total of 18 new weekly deaths were reported; in comparison, less than 20 deaths/week have been reported since late September. Sources of infections have diversified since the start of the pandemic, and younger groups are now at the center of the spread. Clusters have been traced to military facilities, educational institutions, sporting facilities, healthcare facilities, gatherings among friends, among others. In Seoul, the five-tier physical-distancing rules have been raised to the third-highest level amid rising cases in the metropolitan area. The government urged students to stop attending “cram schools” and private lessons ahead of college entrance exams in early December.

In French Polynesia, 1118 new cases were reported in the past week, a 12% decrease compared to the previous week, continuing a downward trend since the week commencing 9 November. Incidence is decreasing in Tahiti and other islands. Ten new deaths were reported in the past week, similar to the the previous week. While there are currently no national movement restrictions implemented, a curfew was introduced in October and there are inter-island movement restrictions in place.

Figure 8: Number of COVID-19 cases and deaths reported weekly by the WHO Western Pacific Region, data as of 29 November 2020**



**See *data, table and figure notes*

Key weekly updates

- With the latest positive news from vaccine trials "there is now real hope that vaccines in combination with other tried and tested public health measures will help to end the pandemic" said WHO Director-General Dr Tedros last week. WHO has updated the draft landscape of COVID-19 candidate vaccines, which shows that there are 49 candidate vaccines in clinical evaluation, 11 of which are at phase 3 evaluation. The urgency with which vaccines have been developed must be matched by the same urgency to distribute them fairly. Only a fundamental change in funding and approach will realize the full promise of the ACT Accelerator. US 4.3 billion is needed immediately to support the mass procurement and delivery of vaccines, tests and treatments. A further US 23.8 billion will be needed next year.

- At Friday's media briefing, Dr Tedros reminded people that even after vaccines are available, testing will continue to play a vital role for controlling the pandemic. Testing is at the heart of the response; it shows where the virus is. It must be strategic, in support of clear public health objectives, and based on a country's transmission scenario.

- Today, the world celebrates World AIDS day 2020 and WHO is calling on global leaders and citizens to rally for "global solidarity" to overcome the challenges posed by COVID-19 on the HIV response. In 2019, there were still 38 million people living with HIV infection. One in five people living with HIV were not aware of their infection and one in 3 people receiving HIV treatment experienced disruption. The COVID-19 pandemic has added to this disruption.

- Up to 5 million deaths a year could be averted if the global population was more active. At a time when many people are home bound due to COVID-19, new WHO Guidelines on physical activity and sedentary behaviour, emphasize that everyone, of all ages and abilities, can be physically active and that every type of movement counts.

- Under the COVID-19 pandemic restrictions, many families have become the sole providers of the nurturing care required for young children's development. While much is unknown about the pandemic's impact on children's development, early childhood development (ECD) data collected before the start of pandemic will provide countries with useful baselines to assess the potential effects of health and societal disruptions on young children and their families in the years to come. In order to track global progress on ECD, WHO, UNICEF and partners last week launched new expanded 2020 ECD Countdown to 2030 country profiles.

- WHO has published a checklist for countries to use to assess health service capacity. It allows for a rapid determination of current capacities of hospitals to respond to the COVID-19 pandemic and to identify gaps and major areas that require investment and action for the development of hospital readiness improvement plans.

- The COVID-19 pandemic is having a large-scale impact on international travel and trade, particularly in the aviation sector. WHO is conducting systematic reviews to synthesize available data and has published a document that describes the process that WHO will undertake.

Table 2. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 29 November 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Africa	**48 483**	**1 494 524**	**1 332**	**974**	**33 512**	**30**	
South Africa	19 730	785 139	13 238	594	21 439	361	Community transmission
Algeria	7 438	81 212	1 852	135	2 393	55	Community transmission
Kenya	6 201	82 605	1 536	79	1 445	27	Community transmission
Ethiopia	3 578	108 930	948	59	1 695	15	Community transmission
Uganda	2 277	19 944	436	33	201	4	Community transmission
Nigeria	1 102	67 330	327	5	1 171	6	Community transmission
Zimbabwe	702	9 822	661	10	275	19	Community transmission
Angola	674	15 087	459	9	345	10	Community transmission
Mozambique	605	15 586	499	6	129	4	Community transmission
Cameroon	589	24 117	909	2	437	16	Community transmission
Ghana	505	51 379	1 653	0	323	10	Community transmission
Namibia	474	14 285	5 622	7	150	59	Community transmission
Democratic Republic of The Congo	428	12 607	141	6	333	4	Community transmission
Botswana	398	9 992	4 249	0	31	13	Community transmission
Mali	361	4 567	226	6	149	7	Community transmission
Mauritania	349	8 424	1 812	3	172	37	Community transmission
Cabo Verde	292	10 526	18 932	0	104	187	Community transmission
Rwanda	252	5 872	453	1	47	4	Clusters of cases
Guinea	241	13 039	993	1	76	6	Community transmission
Eswatini	201	6 406	5 522	2	121	104	Community transmission

Zambia	195	17 589	957	1	357	19	Community transmission
Senegal	162	16 027	957	2	332	20	Community transmission
Togo	155	2 926	353	1	64	8	Community transmission
Congo	142	5 774	1 046	1	94	17	Community transmission
Côte D'Ivoire	135	21 261	806	2	131	5	Community transmission
Niger	121	1 472	61	0	70	3	Community transmission
Burkina Faso	113	2 816	135	0	68	3	Community transmission
Gabon	60	9 191	4 129	0	59	27	Community transmission
Benin	58	2 974	245	0	43	4	Community transmission
South Sudan	57	3 104	277	1	61	5	Community transmission
Lesotho	51	2 109	984	0	44	21	Community transmission
Liberia	41	1 595	315	1	83	16	Community transmission
Madagascar	31	17 341	626	1	251	9	Community transmission
Chad	30	1 663	101	0	101	6	Community transmission
Eritrea	26	577	163	0	0	<1	Sporadic cases
Equatorial Guinea	23	5 153	3 673	0	85	61	Community transmission
Malawi	22	6 025	315	0	185	10	Community transmission
Burundi	19	681	57	0	1	<1	Community transmission
Comoros	18	610	701	0	7	8	Community transmission
Seychelles	11	172	1 749	0	0	<1	Sporadic cases
Mauritius	10	501	394	0	10	8	Clusters of cases
Gambia	8	3 734	1 545	0	123	51	Community transmission
Sao Tome and Principe	6	985	4 494	0	17	78	Community transmission
Sierra Leone	5	2 410	302	0	74	9	Community transmission
Central African Republic	2	4 913	1 017	0	63	13	Community transmission

Guinea-Bissau	1	2 422	1 231	0	43	22	Community transmission
United Republic of Tanzania	0	509	9	0	21	<1	Community transmission
Territories[ii]							
Réunion	439	7 940	8 868	5	40	45	Clusters of cases
Mayotte	145	5 181	18 991	1	49	180	Clusters of cases
Americas	**1 652 915**	**26 216 515**	**25 633**	**22 488**	**720 228**	**704**	
United States of America	1 150 654	12 939 666	39 092	10 276	262 736	794	Community transmission
Brazil	218 186	6 238 350	29 349	3 361	171 974	809	Community transmission
Mexico	64 706	1 090 675	8 459	4 050	104 873	813	Community transmission
Colombia	57 066	1 290 510	25 362	1 285	36 214	712	Community transmission
Argentina	48 235	1 407 277	31 137	1 426	38 216	846	Community transmission
Canada	38 345	359 064	9 514	560	11 894	315	Community transmission
Peru	12 237	958 324	29 065	355	35 839	1 087	Community transmission
Chile	9 798	548 941	28 716	292	15 322	802	Community transmission
Panama	9 455	161 744	37 486	98	3 030	702	Community transmission
Costa Rica	7 675	137 093	26 912	82	1 690	332	Community transmission
Ecuador	6 033	190 909	10 821	232	13 371	758	Community transmission
Paraguay	5 378	80 436	11 277	73	1 720	241	Community transmission
Dominican Republic	4 883	142 653	13 150	20	2 328	215	Community transmission
Guatemala	3 381	121 798	6 798	87	4 161	232	Community transmission
Honduras	2 955	107 134	10 817	44	2 899	293	Community transmission
Venezuela (Bolivarian Republic of)	2 507	101 524	3 570	22	888	31	Community transmission
El Salvador	1 155	38 405	5 921	37	1 107	171	Community transmission
Uruguay	826	5 303	1 527	5	74	21	Clusters of cases
Bolivia (Plurinational State of)	640	144 494	12 378	43	8 943	766	Community transmission

Belize	531	5 587	14 051	34	141	355	Community transmission
Jamaica	429	10 669	3 603	14	251	85	Community transmission
Cuba	375	8 173	722	1	133	12	Clusters of cases
Trinidad and Tobago	325	6 586	4 706	5	118	84	Community transmission
Guyana	305	5 310	6 751	6	149	189	Clusters of cases
Bahamas	129	7 496	19 062	0	163	415	Clusters of cases
Haiti	50	9 264	812	0	232	20	Community transmission
Nicaragua	46	4 629	699	1	160	24	Community transmission
Saint Lucia	43	246	1 340	0	2	11	Sporadic cases
Suriname	22	5 311	9 053	1	117	199	Sporadic cases
Barbados	15	270	940	0	7	24	Clusters of cases
Dominica	13	85	1 181	0	0	<1	Clusters of cases
Saint Kitts and Nevis	3	22	414	0	0	<1	Sporadic cases
Antigua and Barbuda	2	141	1 440	0	4	41	Sporadic cases
Saint Vincent and the Grenadines	1	85	766	0	0	<1	Sporadic cases
Grenada	0	41	364	0	0	<1	Sporadic cases
Territories[ii]							
Puerto Rico	5 147	51 581	18 030	71	1 083	379	Community transmission
Curaçao	485	2 046	12 469	0	3	18	Community transmission
Martinique	322	5 413	14 424	1	40	107	Community transmission
French Guiana	165	11 179	37 428	0	70	234	Community transmission
Guadeloupe	119	8 344	20 854	5	149	372	Community transmission
Aruba	98	4 791	44 874	0	45	421	Community transmission
Sint Maarten	68	1 041	24 276	1	25	583	Community transmission

United States Virgin Islands	47	1 538	14 728	0	23	220	Community transmission
Turks and Caicos Islands	22	748	19 319	0	6	155	Clusters of cases
Bermuda	20	247	3 966	0	9	145	Clusters of cases
Cayman Islands	13	274	4 169	0	2	30	Sporadic cases
Bonaire	3	142	8 129	0	3	172	Sporadic cases
Anguilla	1	4	267	0	0	<1	Sporadic cases
Falkland Islands (Malvinas)	1	17	4 881	0	0	<1	No cases
British Virgin Islands	0	72	2 381	0	1	33	Clusters of cases
Montserrat	0	13	2 601	0	1	200	No cases
Saba	0	5	3 342	0	0	<1	No cases
Saint Barthélemy	0	127	12 848	0	0	<1	Sporadic cases
Saint Martin	0	690	17 848	0	12	310	Community transmission
Saint Pierre and Miquelon	0	14	2 416	0	0	<1	Sporadic cases
Sint Eustatius	0	14	5 636	0	0	<1	No cases
Eastern Mediterranean	**248 909**	**4 045 906**	**5 536**	**5 800**	**102 160**	**140**	
Iran (Islamic Republic of)	94 491	935 799	11 141	3 159	47 486	565	Community transmission
Jordan	32 548	210 709	20 651	454	2 626	257	Community transmission
Morocco	28 726	349 688	9 474	483	5 739	155	Clusters of cases
Pakistan	20 848	392 356	1 776	339	7 942	36	Clusters of cases
Iraq	15 266	548 821	13 645	275	12 200	303	Community transmission
Lebanon	10 395	125 637	18 407	97	991	145	Community transmission
United Arab Emirates	8 717	166 502	16 835	21	569	58	Community transmission
Tunisia	7 509	94 980	8 036	401	3 153	267	Community transmission
Libya	4 465	81 273	11 828	85	1 153	168	Community transmission
Egypt	2 507	115 183	1 126	86	6 621	65	Clusters of cases

Kuwait	2 461	142 195	33 296	12	875	205	Community transmission
Saudi Arabia	1 877	356 911	10 252	109	5 870	169	Sporadic cases
Afghanistan	1 463	45 966	1 181	77	1 752	45	Clusters of cases
Qatar	1 415	138 477	48 065	2	237	82	Community transmission
Oman	1 219	122 579	24 004	26	1 391	272	Community transmission
Sudan	1 217	17 404	397	36	1 235	28	Community transmission
Bahrain	1 054	86 645	50 920	3	341	200	Clusters of cases
Syrian Arab Republic	561	7 715	441	37	409	23	Community transmission
Somalia	69	4 451	280	5	113	7	Sporadic cases
Djibouti	15	5 676	5 745	0	61	62	Clusters of cases
Yemen	5	2 078	70	0	605	20	Sporadic cases
Territories[ii]							
Occupied Palestinian territory	12 081	94 861	18 595	93	791	155	Community transmission
Europe	**1 573 354**	**18 495 511**	**19 815**	**35 321**	**412 362**	**442**	
Italy	184 001	1 564 532	25 876	5 102	54 363	899	Clusters of cases
Russian Federation	179 987	2 269 316	15 550	3 348	39 527	271	Clusters of cases
Poland	130 118	973 593	25 725	3 458	16 746	442	Community transmission
Germany	124 431	1 042 700	12 445	2 101	16 123	192	Clusters of cases
The United Kingdom	111 789	1 605 176	23 645	3 404	58 030	855	Community transmission
Ukraine	97 935	722 679	16 525	1 262	12 213	279	Community transmission
France	80 458	2 169 811	33 242	3 597	51 767	793	Community transmission
Romania	53 174	465 982	24 222	1 129	11 045	574	Community transmission
Turkey	47 107	487 912	5 785	1 154	13 373	159	Community transmission
Serbia	46 910	163 035	23 412	316	1 484	213	Community transmission
Spain	42 528	1 628 208	34 824	939	44 668	955	Community transmission

Hungary	36 909	211 527	21 896	872	4 672	484	Community transmission
Portugal	34 736	290 706	28 510	539	4 363	428	Clusters of cases
Netherlands	34 017	512 695	29 921	455	9 313	544	Community transmission
Austria	33 366	274 275	30 453	667	2 822	313	Community transmission
Czechia	27 899	518 649	48 431	959	8 054	752	Community transmission
Georgia	27 636	132 368	33 182	254	1 230	308	Community transmission
Switzerland	24 305	317 017	36 630	598	4 236	489	Community transmission
Azerbaijan	24 127	114 025	11 246	216	1 323	130	Clusters of cases
Sweden	23 505	243 129	24 074	83	6 681	662	Community transmission
Croatia	23 283	123 693	30 130	351	1 655	403	Community transmission
Bulgaria	21 050	141 747	20 400	929	3 749	540	Clusters of cases
Lithuania	15 453	60 193	22 111	119	493	181	Community transmission
Belgium	15 447	576 499	49 743	807	16 536	1 427	Community transmission
Greece	12 913	103 034	9 885	696	2 223	213	Community transmission
Belarus	10 889	133 324	14 109	54	1 143	121	Community transmission
Slovenia	9 980	74 264	35 722	256	913	439	Clusters of cases
Slovakia	9 375	104 632	19 165	154	798	146	Clusters of cases
Republic of Moldova	9 163	105 852	26 240	139	2 269	562	Community transmission
Denmark	8 719	78 354	13 527	42	823	142	Community transmission
Armenia	8 544	134 768	45 480	190	2 142	723	Community transmission
Bosnia and Herzegovina	7 401	86 710	26 429	330	2 576	785	Community transmission
North Macedonia	7 092	60 723	29 146	212	1 699	816	Community transmission
Kazakhstan	6 421	173 806	9 256	60	2 477	132	Clusters of cases
Albania	4 594	36 790	12 784	102	787	273	Clusters of cases
Israel	4 071	332 192	38 379	47	2 831	327	Community transmission

Latvia	3 817	16 561	8 780	40	193	102	Clusters of cases
Luxembourg	3 647	33 409	53 371	40	300	479	Community transmission
Montenegro	3 428	34 887	55 547	48	487	775	Clusters of cases
Norway	3 309	34 747	6 409	22	328	61	Community transmission
Finland	3 091	24 307	4 387	18	393	71	Community transmission
Kyrgyzstan	2 846	72 427	11 101	35	1 266	194	Clusters of cases
Estonia	2 323	11 698	8 818	22	109	82	Clusters of cases
Ireland	1 799	71 942	14 570	28	2 050	415	Community transmission
Cyprus	1 775	10 231	8 474	5	48	40	Clusters of cases
Uzbekistan	1 257	72 809	2 175	5	608	18	Clusters of cases
Malta	588	9 501	21 518	21	128	290	Clusters of cases
Andorra	403	6 610	85 550	0	76	984	Community transmission
Tajikistan	264	12 118	1 271	0	86	9	Pending
Liechtenstein	164	1 273	33 380	7	15	393	Sporadic cases
San Marino	159	1 586	46 732	2	45	1 326	Community transmission
Iceland	102	5 371	15 740	0	26	76	Community transmission
Monaco	26	607	15 467	0	3	76	Sporadic cases
Holy See	0	26	32 138	0	0	<1	Sporadic cases
Territories[ii]							
Kosovo[1]	4 843	38 388	20 634	85	979	526	Community transmission
Jersey	117	923	8 483	0	32	294	Community transmission
Gibraltar	56	999	29 652	2	5	148	Clusters of cases
Faroe Islands	3	502	10 273	0	0	<1	Sporadic cases
Guernsey	3	286	4 526	0	13	206	Community transmission
Isle of Man	1	369	4 340	0	25	294	No cases

Greenland	0	18	317	0	0	<1	No cases
South-East Asia	**371 180**	**10 738 733**	**5 313**	**4 888**	**163 454**	**81**	
India	297 113	9 392 919	6 806	3 469	136 696	99	Clusters of cases
Indonesia	34 691	527 999	1 930	872	16 646	61	Community transmission
Bangladesh	15 338	460 619	2 797	230	6 580	40	Community transmission
Nepal	12 084	230 723	7 919	149	1 454	50	Clusters of cases
Myanmar	8 785	86 633	1 592	143	1 865	34	Clusters of cases
Sri Lanka	2 730	22 501	1 051	24	107	5	Clusters of cases
Maldives	369	12 947	23 952	1	46	85	Clusters of cases
Thailand	53	3 966	57	0	60	1	Clusters of cases
Bhutan	17	396	513	0	0	<1	Sporadic cases
Timor-Leste	0	30	23	0	0	<1	Sporadic cases
Western Pacific	**40 489**	**874 705**	**445**	**445**	**17 261**	**9**	
Japan	14 474	144 653	1 144	132	2 106	17	Clusters of cases
Philippines	10 945	427 797	3 904	253	8 333	76	Community transmission
Malaysia	9 497	63 176	1 952	22	354	11	Clusters of cases
Republic of Korea	3 030	33 763	659	18	523	10	Clusters of cases
China	681	93 329	63	1	4 750	3	Clusters of cases
Mongolia	178	760	232	0	0	<1	Sporadic cases
Australia	78	27 885	1 094	0	907	36	Clusters of cases
Singapore	57	58 205	9 949	1	29	5	Clusters of cases
Papua New Guinea	41	645	72	0	7	1	Community transmission
Viet Nam	35	1 341	14	0	35	<1	Clusters of cases
New Zealand	24	1 696	352	0	25	5	Clusters of cases
Lao People's Democratic Republic	14	39	5	0	0	<1	Sporadic cases

Cambodia	9	315	19	0	0	<1	Sporadic cases
Fiji	3	38	42	0	2	2	Sporadic cases
Brunei Darussalam	2	150	343	0	3	7	No cases
Solomon Islands	1	17	25	0	0	<1	Sporadic cases
Territories[ii]							
French Polynesia	1 118	14 096	50 180	10	73	260	Sporadic cases
Guam	300	6 655	39 431	8	112	664	Clusters of cases
Northern Mariana Islands (Commonwealth of The)	1	105	1 824	0	2	35	Pending
Wallis and Futuna	1	3	267	0	0	<1	Sporadic cases
Marshall Islands	0	4	68	0	0	<1	Sporadic cases
New Caledonia	0	32	112	0	0	<1	Sporadic cases
Vanuatu	0	1	3	0	0	<1	Sporadic cases
Global	**3 935 330**	**61 866 635**	**7 937**	**69 916**	**1 448 990**	**186**	

**See *data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases; efforts are underway to identify these for notation in the data table. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Global totals include 741 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas; classification is based on the highest category reported within a country/territory/area. Categories:

- No cases: with no confirmed cases;
- Sporadic cases: with one or more cases, imported or locally detected;
- Clusters of cases: experiencing cases, clustered in time, geographic location and/or by common exposures;
- Community transmission: experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel laboratory surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area;
- Pending: transmission classification has not been reported to WHO.

[ii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

Country, territory, or area-specific notes, updates and errata

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 22 November 2020, 10 am CET

For the latest data and information on COVID-19, please see:

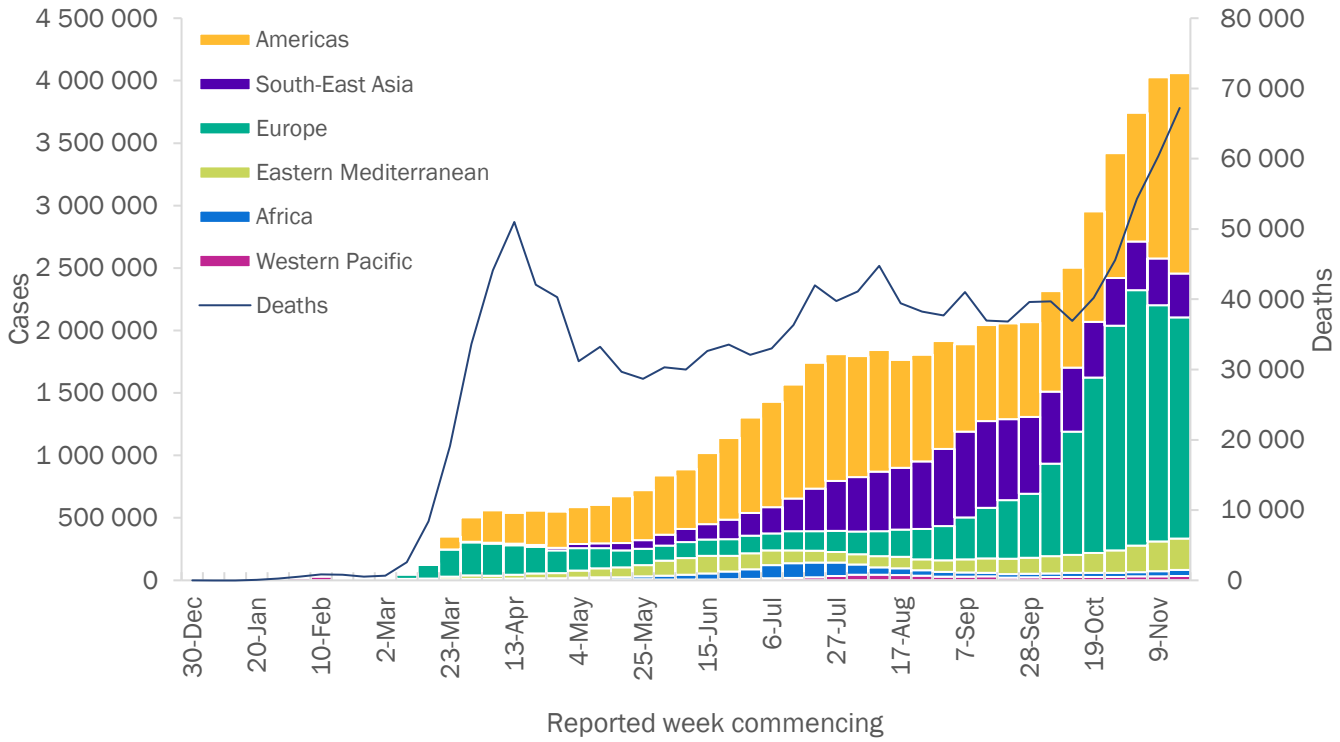
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

This past week, the global acceleration in case incidence has slowed down, with around 4 million new cases reported; however, death rates continue to increase with over 67 000 new deaths reported (Figure 1). The European and South East Asia Regions continued downward trends in weekly cases; however, the European Region remains the largest contributor to new cases and new deaths in the past 7 days. The Region of the Americas reported increases in both new cases and new deaths and the Region continues to account for the greatest proportion of cumulative cases and deaths. While cases numbers remain relatively low, the African Region reported the highest increase in new cases (15%) and deaths (30%) this week. The Eastern Mediterranean and Western Pacific regions also reported an increase in new cases and deaths this week.

As of 22 November there have been over 57.8 million cases and 1.3 million deaths reported globally since the start of the pandemic.

Figure 1: COVID-19 cases reported weekly by WHO Region, and global deaths, as of 22 November 2020**



**See *data table and figure notes*.

In the past week, the five countries reporting the highest number of cases were the United States of America (reporting over 1.1 million cases, a 14% increase from the previous week), India (over 280 000 cases,

an 8% decrease), Italy (over 230 000 new cases, a 3% decrease), Brazil (over 200 000 new cases, a 17% increase) and France (over 170 000 new cases, a 16% decrease).

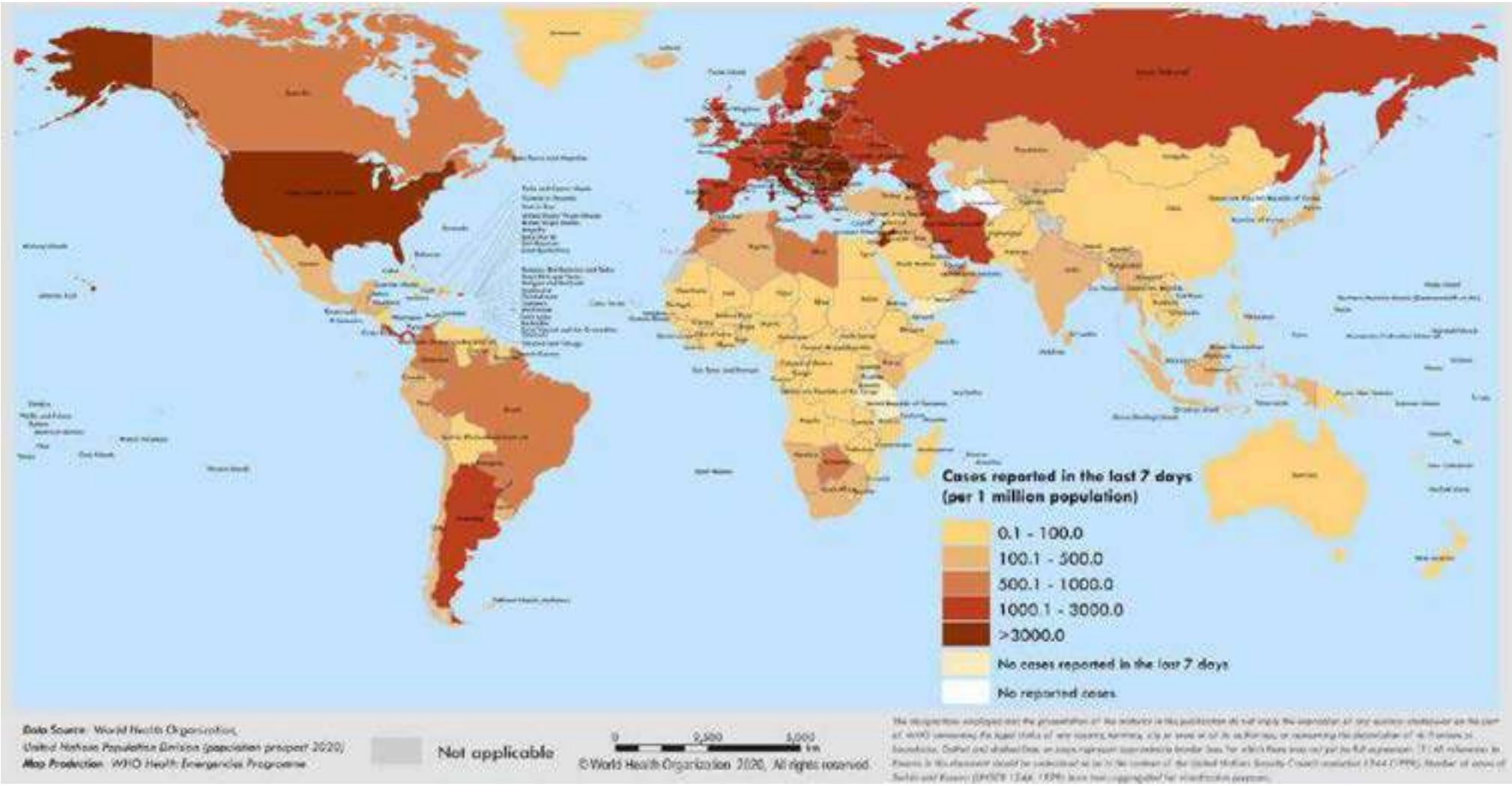
Additional Region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western Pacific Region.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 22 November 2020**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days*	Cumulative deaths (%)
Europe	1 771 673 (44%)	-6%	16 873 383 (29%)	32 684 (49%)	10%	375 368 (27%)
Americas	1 603 498 (39%)	11%	24 563 600 (42%)	22 005 (33%)	15%	697 740 (51%)
South-East Asia	351 822 (9%)	-6%	10 367 553 (18%)	4706 (7%)	4%	158 566 (12%)
Eastern Mediterranean	250 746 (6%)	5%	3 796 649 (7%)	6299 (9%)	10%	96 354 (7%)
Africa	47 106 (1%)	15%	1 446 041 (2%)	1088 (2%)	30%	32 538 (2%)
Western Pacific	36 046 (1%)	9%	834 216 (1%)	439 (1%)	1%	16 816 (1%)
Global	**4 060 891 (100%)**	**1%**	**57 882 183 (100%)**	**67 221 (100%)**	**11%**	**1 377 395 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*
***See data, table and figure notes*

Figure 2. COVID-19 cases per 1 million population reported in the last seven days by countries, territories and areas, 16 November through 22 November 2020**



**See *data, table and figure notes*

Situation by WHO Region

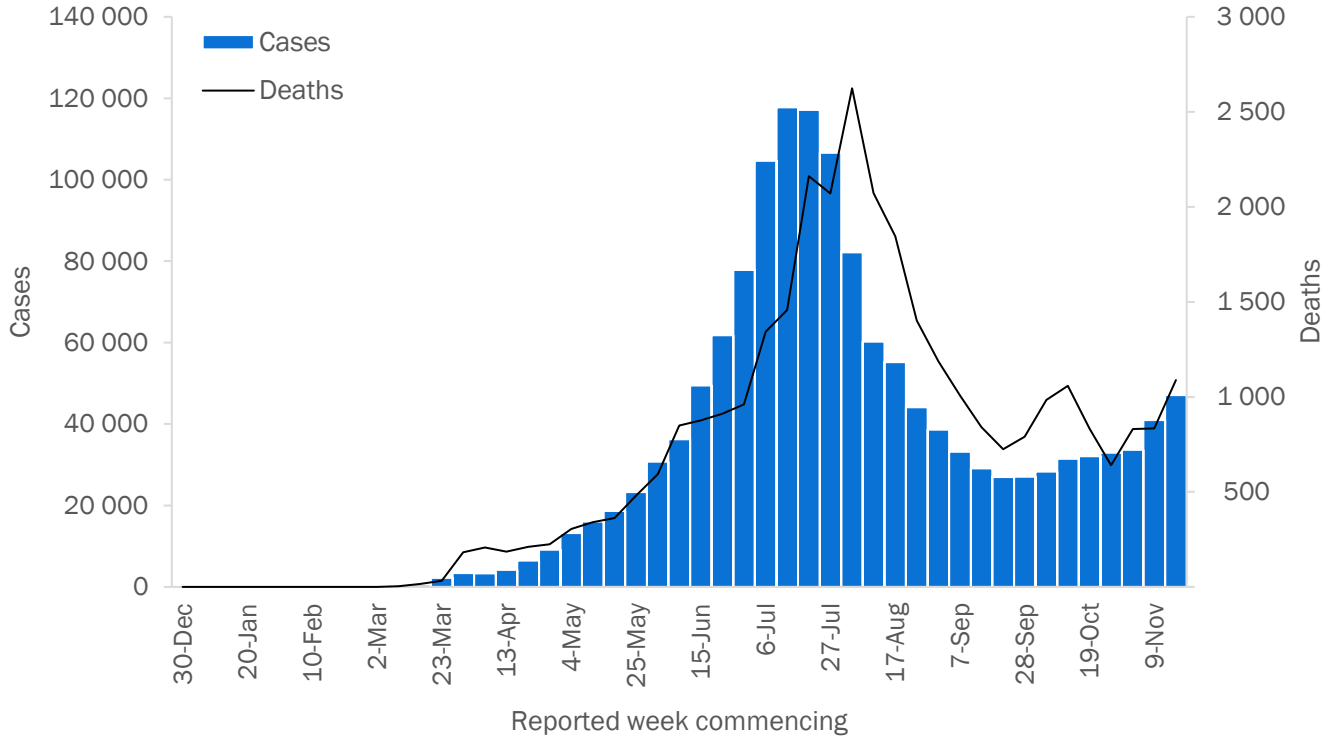
African Region

In the Region of the Americas, the weekly incidence of new cases reached over 47 000 this week with around 1000 new deaths reported, accounting for 15% and 30% relative increases when compared to the previous week, respectively (Figure 3). The highest new case and death counts were reported in South Africa, Algeria and Kenya.

In Rwanda this week, cases have increased by 25%, with 226 new cases (17.4 cases per 1 million population) reported. Local authorities are enhancing preventative measures in prisons and detention centres following three outbreaks reported in Kigali, Southern and Eastern provinces.

In Zimbabwe, 334 new cases (22.5 cases per 1 million population) were reported this week, with a gradual increase being observed in recent weeks after an initial wave of cases earlier this year. In Matabeleland Northern Province in the North West of the country, there have been reports of a cluster of confirmed cases affecting approximately 100 students at a boarding school, resulting in the closure of the school. Overall, the country has reported over 9 000 confirmed cases and nearly 300 deaths. The characteristics of the cases show most cases (57%) occur in those aged 20-40 years with a greater proportion of females in older age groups. Deaths are largely occurring in those aged 40-80 years and males account for a greater percentage of deaths in these age groups.

Figure 3: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, as of 22 November 2020**



**See *data, table and figure notes*

Region of the Americas

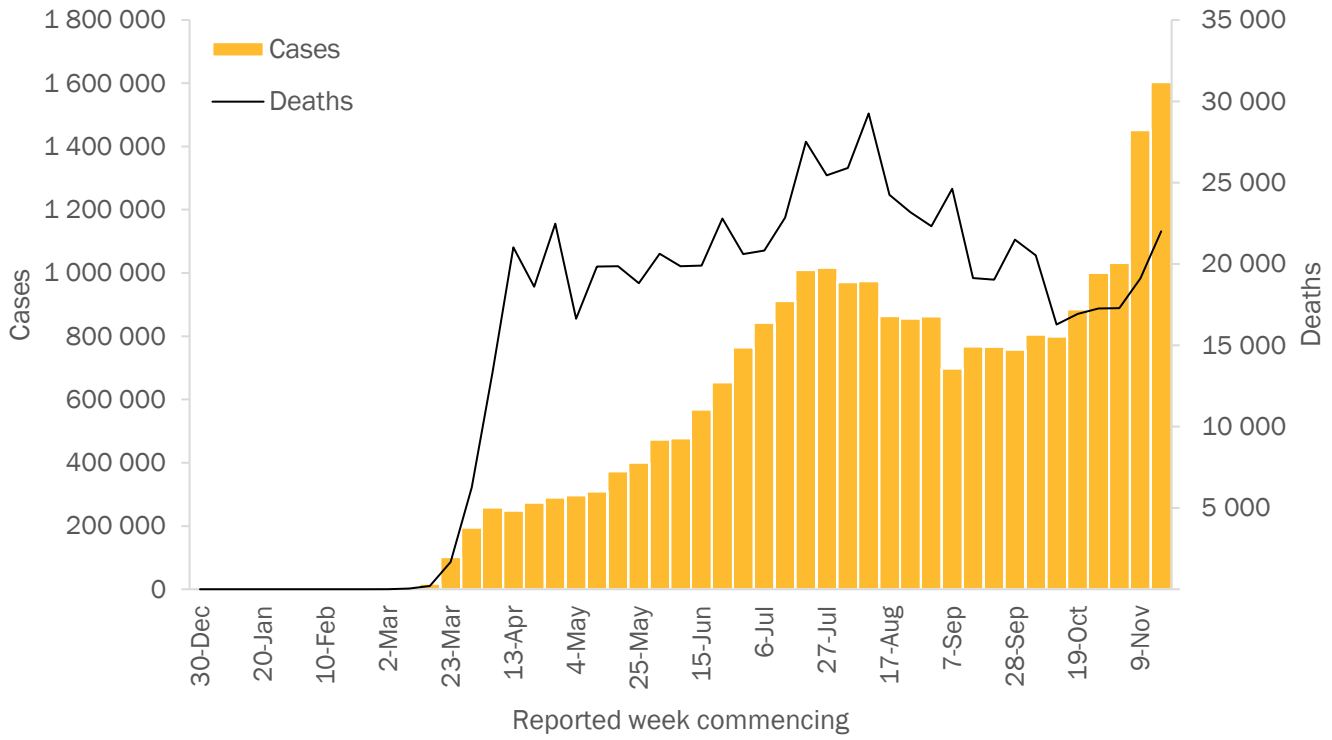
In the Region of the Americas, the weekly incidence of new cases reached over 1.6 million this week with over 22 000 new deaths reported, accounting for 11% and 15% relative increases when compared to the previous week (Figure 4). The majority of these were reported from the United States of America, with over 1.1 million new cases (9918 cases per 1 million population), followed by Brazil and Mexico.

Cases in the United States of America continue to rise, showing a 14% increase in the past 7 days, while deaths increased by 23%. The three states reporting the highest number of cases were Illinois, Texas and California. With the Thanksgiving holiday on 26 November, many states are implementing additional public health and social measures, and the United States Centres for Disease Control and Prevention have discouraged domestic travel. Nonetheless, the Transportation Security Administration (TSA) screened more than 2 million air passengers on 20 and 21 November, in the two days after the federal government issued a travel warning and it is estimated that some 50 million Americans may be travelling this Thanksgiving.

On the island of Puerto Rico, relatively low levels of transmission have been sustained over several months with 4600 new cases (91 cases per 1 million population) reported last week. However, weekly deaths have trended upwards in recent weeks, from a low of 26 new deaths/week observed in last October, to 90 new deaths reported last week. The highest numbers of cases in the country have been reported in the Metro, Bayam n and Caguas health regions. Women account for a slightly higher proportion of cases (54%), with an overall median age of 41.5 years.

While Argentina currently accounts for the third-highest number of weekly cases (over 62 000 new cases, 1745 cases per 1 million population) and deaths (around 3 200), both new cases and new deaths have been trending downwards since mid-October. There has however, been a slight increase in cases in eight neighborhoods of the Buenos Aires metropolitan area (Balverna, Boca, Colegiales, Contitucion, Nunez, Palermo, Parque Chacabuco and Vila Urquiza) and cases have stopped decreasing in Cordoba and Rosario; raising concerns that this may signal a broader shift in trend in the coming weeks.

Figure 4: Number of COVID-19 cases and deaths reported weekly by the WHO Region of the Americas, as of 22 November 2020**



**See *data, table and figure notes*

Eastern Mediterranean Region

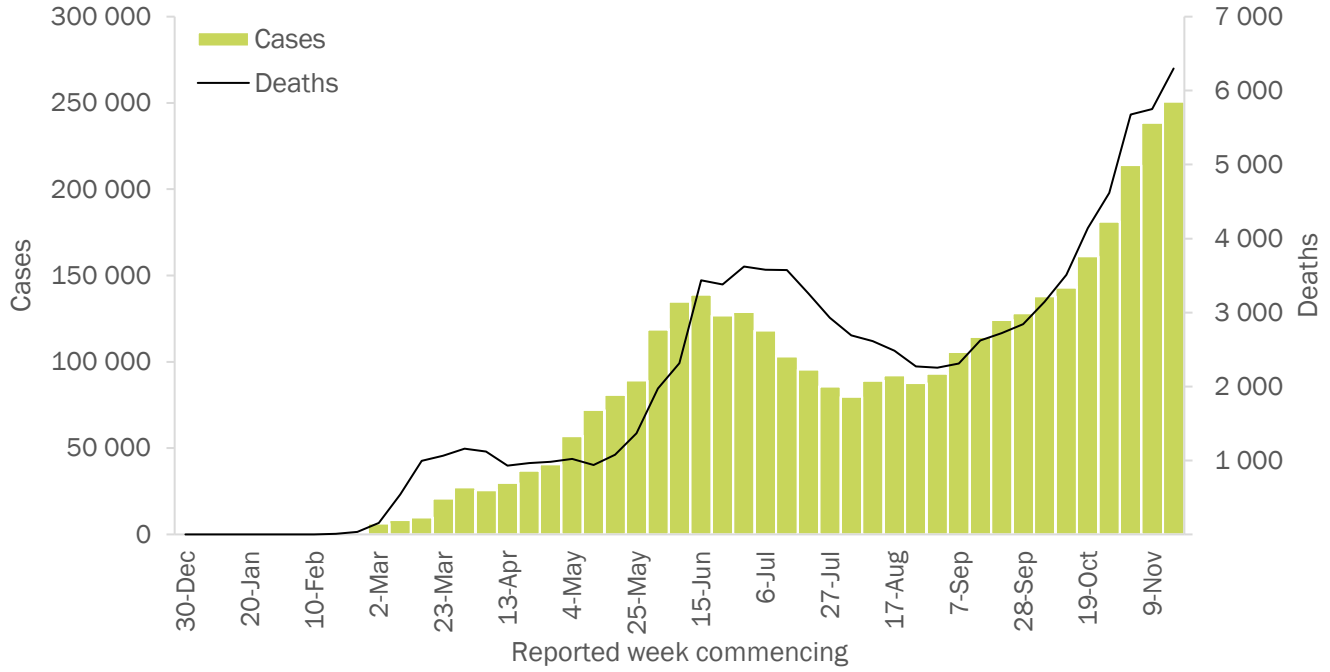
The number of new weekly cases (250 746) and deaths (6299) continues to rise in the Eastern Mediterranean Region, 5% and 10% higher respectively than the previous week (Figure 5). Since August, the number of new weekly cases and deaths has risen in the Region, when fewer than 80 000 new cases and 2500 new deaths were reported per week. Iran, Jordan, Morocco, Pakistan, Iraq and Lebanon reported the highest numbers new cases.

The number of new cases in Iraq has declined by 20% over the past week to 16 640 cases (1092 cases per 1 million population). The number of weekly new cases has declined since the week of 19 October when there were 25 629 new cases. The number of new deaths has also declined steadily and Iraq reported an 11% decline from last week to only 302 deaths. WHO concluded a COVID-19 prevention and awareness campaign that targeted approximately 4 million people, including refugees and internally displaced people in the Kurdistan region.

Jordan is reporting 36 800 new cases this week, a 1% rise from last week and the second -highest number of incident cases in the Region (after the Islamic Republic of Iran). The number of new weekly cases has continued to increase since August, when there were fewer than 50 cases reported. Jordan has the highest number of new cases per 1 million population in the Region with 3 612 new cases per 1 million. Last week nearly half of cases were reported from the capital, Amman, followed by Irbid, Aqaba, and Zarqa. Although most cases have been in the 25-34 age group, around 80% of deaths last week were in those aged 55 and over. Jordan also has the highest number of new deaths per 1 million population in the region with 45.9 deaths per 1 million population. The number of weekly deaths has increased since August, but in the past week declined by 11% to 468 new deaths.

The number of new cases in the occupied Palestinian territory, including east Jerusalem, increased by 78% last week to 8 430 new cases (1652 cases per 1 million population). This represents the highest number of new cases since the pandemic began, and is higher than the previous peak of over 6200 cases reported in the third week of September. Gaza remains a pressing concern as it is ill-equipped to face a major spike in cases due to poor living conditions and a fragile healthcare system.

Figure 5: Number of COVID-19 cases and deaths reported weekly by the WHO Eastern Mediterranean Region, as of 22 November 2020**



**See *data, table and figure notes*

European Region

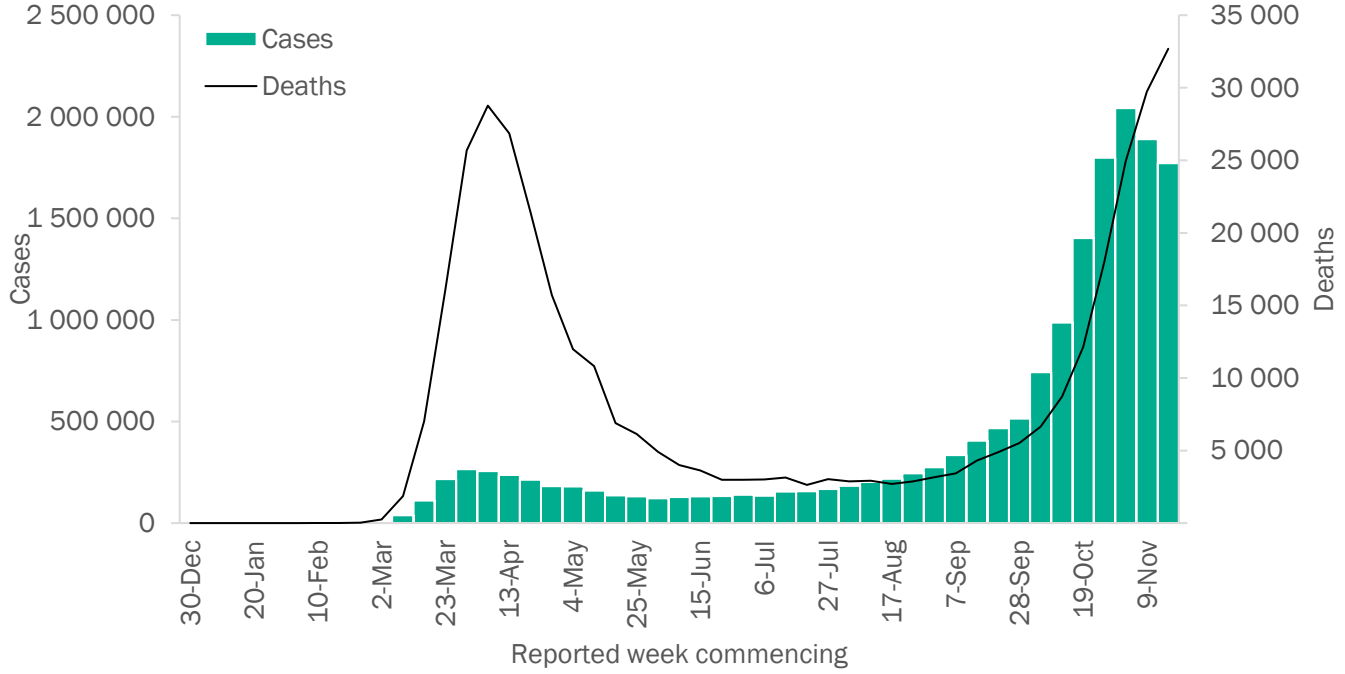
In the past week, the number of new cases reported in the European Region declined by 6% to 1.77 million, after a decline of 10% in the previous week (Figure 6); in a sign that the re-introduction of stricter public health and social measures in a number of countries over the last few weeks is beginning to slow down transmission. Despite this reduction in new cases, the Region still accounts for 44% of global new cases and 49% of global new deaths. New deaths in the Region have continued to rise with 32 684 new deaths reported in the past week.

This week, Italy reported the highest number of new cases in the Region and third-highest globally, with 235 979 new cases (3902 cases per 1 million population); however, cases may have peaked given the slight (3%) decline reported. The number of new deaths increased by 26% to 4578 new deaths (75 deaths per 1 million population). The northern Italy provinces of Valle d'Aosta, Bolzano and Piemonte report the highest number of cases. Media reports have highlighted concerns of the large number of COVID-19 patients in intensive care, and the growing number of health worker infections, straining local healthcare capacities.

The number of new cases in the United Kingdom fell by 13% from last week to 149 027 new cases (2195 cases per 1 million population), while the number of new deaths remained similar. This decline in new cases represents the first weekly decline since late August. Since 24 August, the number of COVID-19 tests conducted daily has increased from 179 000 to 330 000 on 13 November (7 -day daily average). The number of patients admitted to hospital has also grown from fewer than 100 per day at the end of August, to 1 600 on 14 November; however, this is considerably lower than hospitalizations in early April, when there were over 3000 patients admitted daily. The United Kingdom currently has the fifth- highest number of new cases in the European Region, and the eighth highest number worldwide, however, per capita case incidence remains lower than many other countries in the Region.

Poland reported 152 357 new cases (4026 cases per 1 million population), a 10% fall from last week. The number of new deaths has risen by 35% to 3243 new deaths (or 85 new deaths per 1 million population). Cumulative cases have been highest in the south of Poland, in the provinces of Silesia and Lesser Poland, and in central Poland, in the provinces of Mazowieckie and Greater Poland.

Figure 6: Number of COVID-19 cases and deaths reported weekly by the WHO European Region, as of 22 November 2020**



**See *data, table and figure notes*

South-East Asia Region

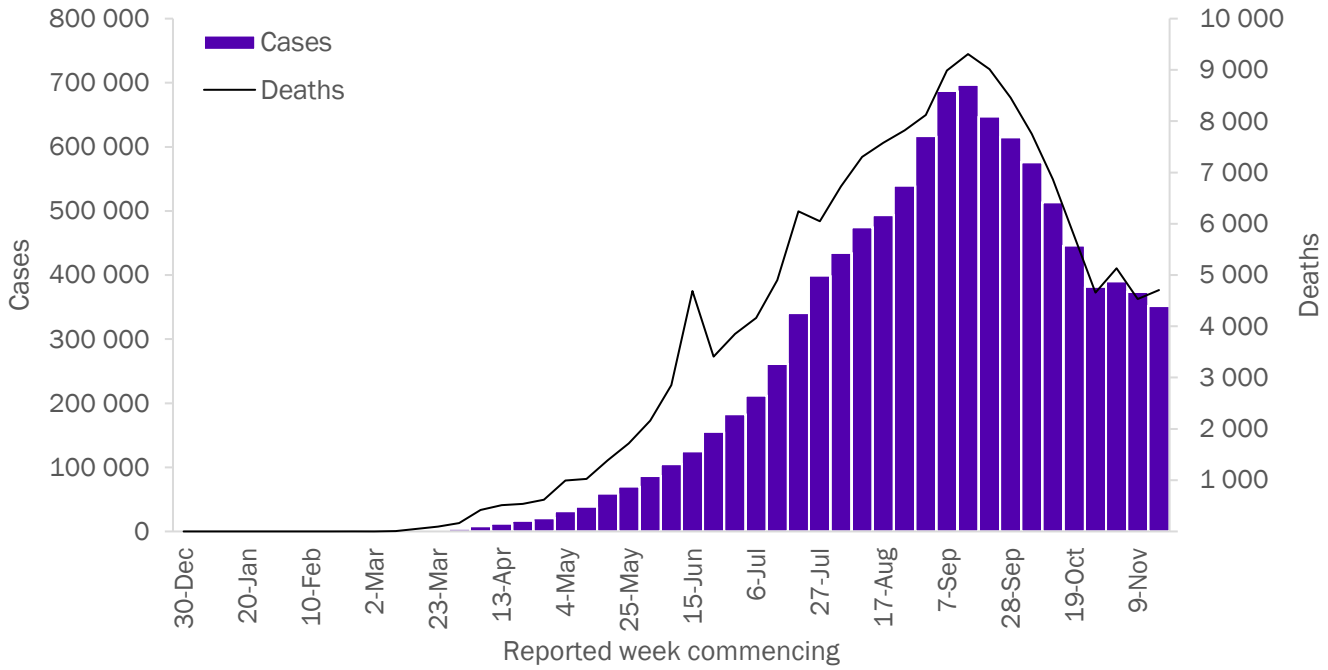
The South-East Asia Region has observed a continued decline in the number of weekly new cases since mid-September with over 351 000 cases reported, while the number of weekly new deaths has remained at similar levels over the past four weeks with 4 706 deaths (Figure 7). The regional trend is largely driven by the decline in cases in India, which comprises 80% of the Region's new weekly cases. Countries with the highest number of weekly new cases were India, Indonesia, Bangladesh, Nepal and Myanmar.

In Myanmar, a 74% increase in cases was observed in the past week, with over 11 000 new cases (204 cases per 1 million population) reported. The number of total new deaths was 188, a 36% increase compared to the previous week. This trend is a change from the decrease in cases observed since the week commencing 12 October. The government has extended the existing COVID-19 prevention measures until the end of November, including the temporary suspension of international and domestic flights. Health authorities are concerned about a potential increase in cases following gatherings which occurred during the recent election and are closely monitoring the situation.

In Sri Lanka, 3580 new cases (167 cases per 1 million population) were reported in the past week, a 29% increase compared to the previous week and the highest number of cases reported in a week since the beginning of the pandemic. The number of new deaths reported was 30, continuing the upward trend in the number of deaths observed in the past five weeks. Due to increasing cases, public health and social measures have been introduced. In the Colombo and Gampaha Districts in Western Province, there are movement restrictions in 18 divisions which will be continued in the coming weeks, as well as in eight districts where restrictions will be lifted this week.

In Bangladesh, a gradual increase in the weekly number of cases observed since October continued, with over 14 000 new cases (90 cases per 1 million population) in the past week (a 26% increase compared to the previous week). Although there had been a downward trend in deaths since the beginning of September, a 43% increase was reported in the past week with 177 new deaths compared to the previous week. National authorities have closed schools and educational institutions since 17 March. Most school children in Bangladesh do not have access to the internet, so the government is broadcasting lessons on television, and universities are providing classes online. Despite relatively stable testing, the proportion of positive tests has slightly increased over the past month, suggesting an increase in cases and spread of the disease.

Figure 7: Number of COVID-19 cases and deaths reported weekly by the WHO South-East Asia Region, as of 22 November 2020**



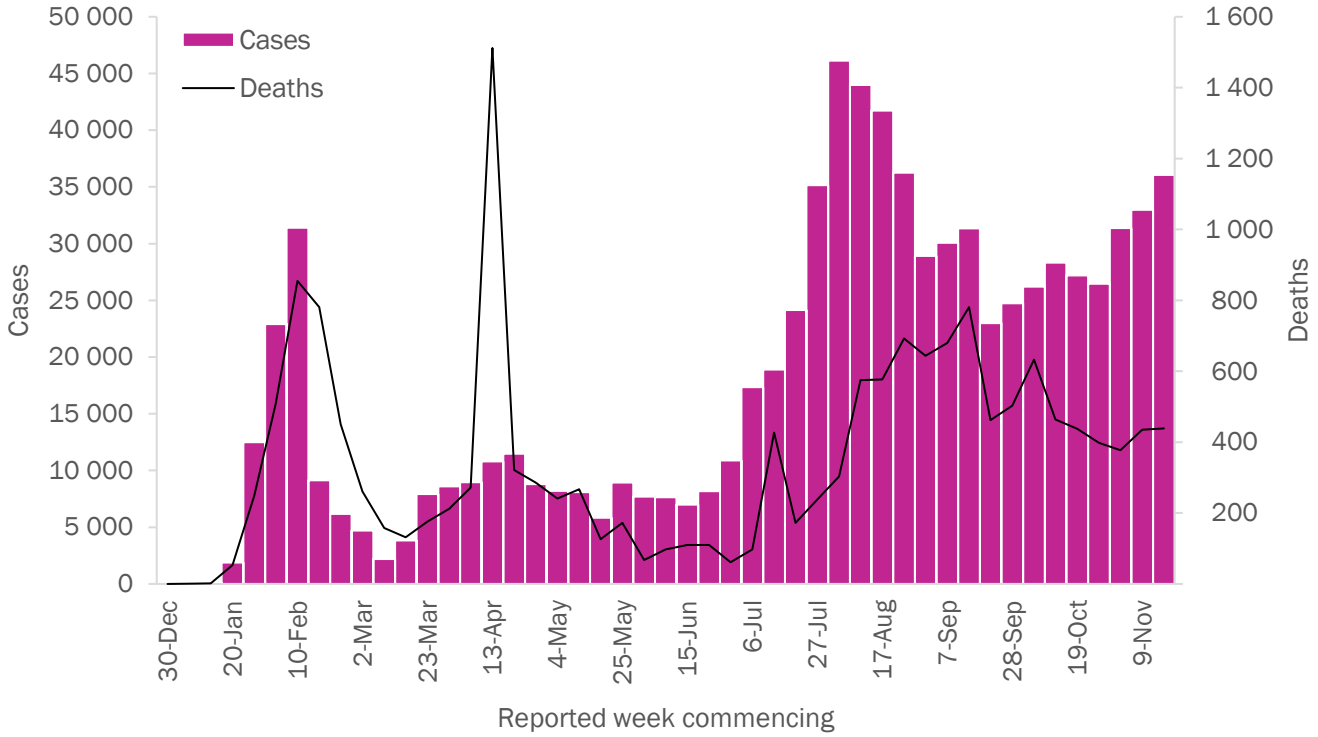
Western Pacific Region

Over the past week, the Western Pacific Region recorded over 36 000 cases and 439 deaths. The Region observed a continued increase of cases, with a 9% increase compared to the previous week, while deaths remained stable compared to the previous week. Varying patterns of trends were observed in the Region, where countries including Japan, Republic of Korea, Mongolia and Australia reported an increase in cases compared to the previous week, whereas countries including the Philippines, French Polynesia, Guam, China and Singapore observed a decreasing trend. Japan, Philippines, Malaysia, Republic of Korea and French Polynesia reported the largest number of new weekly reported cases.

Japan reported the largest number of daily cases since the beginning of the outbreak with over 2000 cases reported per day for five consecutive days, and 13 502 new cases (107 cases per 1 million population) reported in the past week, a 41% increase from the previous week. There has been a resurgence in cases over the past three weeks following a relatively stable number of cases in September and October. The largest number of daily cases to date were observed in prefectures including Tokyo and surrounding prefectures, Osaka and Hokkaido. The COVID-19 alert level in Tokyo Prefecture has been raised to the red level, which is the highest of the four categories. The number of newly reported deaths in the past week was 91, which was an increase by 28%.

Mongolia observed a sharp upward trend with 166 new weekly cases (51 cases per 1 million population), following a period of low levels ranging from 0 to 17 weekly cases from July to October. The number reported this week was more than twice the number reported in the previous week. On 11 November, Mongolia reported its first case of COVID-19 transmission in the community. Although there have been many imported cases reported, this case in the capital city of Ulaanbaatar was the first instance of transmission within the country. Two separate clusters were detected soon after in Selenge province which borders the Russian Federation. One of the clusters in Selenge was traced back to an event in early November, which has led to local clusters with linked cases in the provinces of Darkhan-Uul, Govisumber, Orkhon and Dornogovi. Mongolia declared a state of emergency on 12 November. No deaths have been reported in Mongolia since the beginning of the pandemic.

Figure 8: Number of COVID-19 cases and deaths reported weekly by the WHO Western Pacific Region, data as of 22 November 2020**



**See *data, table and figure notes*

Key weekly updates

- WHO and other UN agencies issued a Joint Statement on Data Protection and Privacy in the COVID-19 Response, calling for the use of data and technology in the COVID-19 response in a way that respects the right to privacy under international law, data protection and privacy principles, as well as the right to health, and economic and social development.
- In his opening remarks at the Member States briefing on COVID-19, WHO Director-General Dr Tedros thanked Member States for their continued solidarity in the response to COVID-19 and for the successful 73rd session of the World Health Assembly which was conducted under challenging circumstances.
- In his opening remarks at the 20 November 2020 media briefing on COVID-19, Dr Tedros highlighted the positive news from vaccine trials in the past week and reminded that "we must continue to use the tools we have to interrupt the chains of transmission and save lives now". He also emphasized that the pandemic is a "stark reminder of the intimate relationship between humans, animals and the planet we share. We cannot protect and promote human health without paying attention to the health of animals and the health of our environment".
- Diagnostic testing is an essential part of the comprehensive strategy to control COVID-19. The COVID-19 Reference Laboratory Network, established in six WHO regions in early 2020, has supported strengthening diagnostic capacity across the world. This feature story offers a look inside laboratories responding to COVID-19.
- WHO launched the Global Strategy to Accelerate the Elimination of Cervical Cancer, in which 194 countries committed to eliminat cervical cancer . Although COVID-19 has posed challenges to providing health services related to cancer, the strategy aims to reduce new cervical cancer cases by more than 40%; and reduce deaths by 5 million by 2050 through vaccination, screening and treatment.

WHO has published the following documents:

- Guidance on developing a national deployment and vaccination Planning for COVID-19 vaccines, which is intended to guide national governments in developing and updating their national deployment and vaccination plan for COVID-19 vaccines.
- Maintaining surveillance of influenza and monitoring SARS-CoV-2 adapting Global Influenza surveillance and Response System (GISRS) and sentinel systems during the COVID-19 pandemic, which is interim guidance for countries to monitor the circulation of influenza and SARS-CoV-2 viruses. It includes updated considerations for addressing disruptions in influenza sentinel surveillance, extending influenza surveillance to include COVID-19 wherever possible, as well as provides updated algorithms for testing influenza and SARS-CoV-2.
- Priority medical devices list for the COVID-19 response and associated technical specifications, which describes the medical devices required for the clinical management of COVID-19, selected and prioritized according to the latest evidence and guidelines.
- Diagnostics, therapeutics, vaccine readiness, and other health products for COVID-19, which was developed to assess present and surge capacities for the treatment of COVID-19 in health facilities.
- Continuity of essential health services: Facility assessment tool, which can be used by countries to rapidly assess the capacity of health facilities to maintain essential health services during the pandemic.
- Therapeutics and COVID-19: living guideline, which contains new information for clinicians including a new conditional recommendation against the use of remdesivir in hospitalized patients with COVID-19, regardless of disease severity.

Table 2. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 22 November 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Africa	**47 106**	**1 446 041**	**1 289**	**1 088**	**32 538**	**29**	
South Africa	16 227	765 409	12 906	639	20 845	351	Community transmission
Algeria	7 799	73 774	1 682	133	2 258	51	Community transmission
Kenya	7 131	76 404	1 421	117	1 366	25	Community transmission
Ethiopia	3 031	105 352	916	71	1 636	14	Community transmission
Uganda	1 878	17 667	386	24	168	4	Community transmission
Botswana	1 369	9 594	4 080	4	31	13	Community transmission
Nigeria	1 232	66 228	321	3	1 166	6	Community transmission
Angola	1 039	14 413	439	14	336	10	Community transmission
Ghana	856	50 874	1 637	3	323	10	Community transmission
Cameroon	836	23 528	886	2	435	16	Community transmission
Mozambique	641	14 981	479	13	123	4	Community transmission
Cabo Verde	454	10 234	18 407	2	104	187	Community transmission
Democratic Republic of The Congo	420	12 179	136	9	327	4	Community transmission
Namibia	362	13 811	5 435	5	143	56	Community transmission
Mali	338	4 206	208	4	143	7	Community transmission
Zimbabwe	334	9 120	614	8	265	18	Community transmission
Zambia	297	17 394	946	6	356	19	Community transmission
Rwanda	226	5 620	434	4	46	4	Clusters of cases
Guinea	213	12 798	975	1	75	6	Community transmission
Mauritania	190	8 075	1 737	4	169	36	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Côte D'Ivoire	181	21 126	801	1	129	5	Community transmission
Togo	166	2 771	335	3	63	8	Community transmission
Congo	117	5 632	1 021	1	93	17	Community transmission
Eswatini	112	6 205	5 348	0	119	103	Community transmission
Lesotho	91	2 058	961	0	44	21	Community transmission
Senegal	86	15 865	948	3	330	20	Community transmission
Madagascar	77	17 310	625	1	250	9	Community transmission
Benin	72	2 916	241	0	43	4	Community transmission
Gabon	69	9 131	4 102	1	59	27	Community transmission
Burkina Faso	68	2 703	129	0	68	3	Community transmission
Eritrea	58	551	155	0	0	<1	Sporadic cases
Liberia	56	1 554	307	0	82	16	Community transmission
Niger	50	1 351	56	0	70	3	Community transmission
South Sudan	44	3 047	272	1	60	5	Community transmission
Chad	42	1 633	99	1	101	6	Community transmission
Malawi	39	6 003	314	0	185	10	Community transmission
Burundi	34	662	56	0	1	<1	Community transmission
Equatorial Guinea	26	5 130	3 656	0	85	61	Community transmission
Gambia	24	3 726	1 542	1	123	51	Community transmission
Mauritius	21	491	386	0	10	8	Sporadic cases
Comoros	18	592	681	0	7	8	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Sierra Leone	16	2 405	301	0	74	9	Community transmission
Sao Tome and Principe	15	979	4 467	1	17	78	Community transmission
Central African Republic	11	4 911	1 017	0	63	13	Community transmission
Seychelles	3	161	1 637	0	0	<1	Sporadic cases
Guinea-Bissau	2	2 421	1 230	0	43	22	Community transmission
United Republic of Tanzania	0	509	9	0	21	<1	Community transmission
Territories[ii]							
Réunion	620	7 501	8 378	6	35	39	Clusters of cases
Mayotte	115	5 036	18 459	2	48	176	Clusters of cases
Americas	**1 603 498**	**24 563 600**	**24 017**	**22 005**	**697 740**	**682**	
United States of America	1 147 581	11 789 012	35 616	9 918	252 460	763	Community transmission
Brazil	209 512	6 020 164	28 322	3 876	168 613	793	Community transmission
Argentina	62 664	1 359 042	30 070	1 745	36 790	814	Community transmission
Colombia	50 747	1 233 444	24 241	1 260	34 929	686	Community transmission
Canada	33 401	320 719	8 498	506	11 334	300	Community transmission
Mexico	28 576	1 025 969	7 957	3 199	100 823	782	Community transmission
Peru	13 437	946 087	28 694	378	35 484	1 076	Community transmission
Chile	9 467	539 143	28 203	253	15 030	786	Community transmission
Panama	7 812	152 289	35 295	76	2 932	680	Community transmission
Costa Rica	7 295	129 418	25 405	71	1 608	316	Community transmission
Ecuador	5 249	184 876	10 479	142	13 139	745	Community transmission
Paraguay	4 666	75 058	10 523	91	1 647	231	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Dominican Republic	4 545	137 770	12 700	26	2 308	213	Community transmission
Guatemala	3 698	118 417	6 610	154	4 074	227	Community transmission
Venezuela (Bolivarian Republic of)	2 576	99 017	3 482	22	866	30	Community transmission
Honduras	2 100	104 179	10 518	35	2 855	288	Community transmission
El Salvador	892	37 250	5 743	31	1 070	165	Community transmission
Bolivia (Plurinational State of)	785	143 854	12 324	65	8 900	762	Community transmission
Uruguay	594	4 477	1 289	5	69	20	Clusters of cases
Jamaica	460	10 240	3 458	8	237	80	Community transmission
Belize	341	5 056	12 715	22	107	269	Community transmission
Guyana	281	5 005	6 363	5	143	182	Clusters of cases
Trinidad and Tobago	281	6 261	4 474	2	113	81	Community transmission
Cuba	230	7 798	688	1	132	12	Clusters of cases
Bahamas	204	7 367	18 734	8	163	415	Clusters of cases
Nicaragua	50	4 583	692	1	159	24	Community transmission
Haiti	46	9 214	808	0	232	20	Community transmission
Saint Lucia	43	203	1 106	0	2	11	Sporadic cases
Suriname	21	5 289	9 016	2	116	198	Sporadic cases
Grenada	9	41	364	0	0	<1	Sporadic cases
Antigua and Barbuda	6	139	1 419	0	4	41	Sporadic cases
Barbados	6	255	887	0	7	24	Clusters of cases
Saint Vincent and the Grenadines	6	84	757	0	0	<1	Sporadic cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Dominica	4	72	1 000	0	0	<1	Clusters of cases
Saint Kitts and Nevis	0	19	357	0	0	<1	No cases
Territories[ii]							
Puerto Rico	4 662	46 434	16 231	91	1 012	354	Community transmission
Martinique	359	5 091	13 566	2	39	104	Community transmission
Curaçao	346	1 561	9 513	1	3	18	Community transmission
French Guiana	170	11 014	36 875	0	70	234	Community transmission
Guadeloupe	127	8 225	20 556	5	144	360	Community transmission
Sint Maarten	59	973	22 690	1	24	560	Community transmission
United States Virgin Islands	57	1 491	14 278	0	23	220	Community transmission
Aruba	54	4 693	43 956	2	45	421	Community transmission
Saint Martin	35	690	17 848	0	12	310	Community transmission
Saint Barthélemy	18	127	12 848	0	0	<1	Sporadic cases
Turks and Caicos Islands	10	726	18 751	0	6	155	Clusters of cases
Cayman Islands	7	261	3 971	1	2	30	Sporadic cases
Bermuda	5	227	3 645	0	9	145	Sporadic cases
Bonaire	3	139	7 957	0	3	172	Sporadic cases
Falkland Islands (Malvinas)	1	16	4 594	0	0	<1	No cases
Anguilla	0	3	200	0	0	<1	No cases
British Virgin Islands	0	72	2 381	0	1	33	Clusters of cases
Montserrat	0	13	2 601	0	1	200	No cases
Saba	0	5	3 342	0	0	<1	No cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Saint Pierre and Miquelon	0	14	2 416	0	0	<1	Sporadic cases
Sint Eustatius	0	14	5 636	0	0	<1	No cases
Eastern Mediterranean	**250 746**	**3 796 649**	**5 195**	**6 299**	**96 354**	**132**	
Iran (Islamic Republic of)	91 783	841 308	10 016	3 293	44 327	528	Community transmission
Jordan	36 856	178 161	17 461	468	2 172	213	Community transmission
Morocco	32 751	320 962	8 696	559	5 256	142	Clusters of cases
Pakistan	17 047	371 508	1 682	494	7 603	34	Clusters of cases
Iraq	16 640	533 555	13 265	302	11 925	296	Community transmission
Lebanon	10 975	115 242	16 884	88	894	131	Community transmission
United Arab Emirates	8 650	157 785	15 953	20	548	55	Community transmission
Tunisia	8 132	87 471	7 401	473	2 752	233	Community transmission
Libya	4 180	76 808	11 178	73	1 068	155	Community transmission
Kuwait	3 393	139 734	32 720	28	863	202	Community transmission
Egypt	2 129	112 676	1 101	93	6 535	64	Clusters of cases
Saudi Arabia	2 084	355 034	10 198	120	5 761	165	Sporadic cases
Oman	1 918	121 360	23 765	39	1 365	267	Community transmission
Qatar	1 492	137 062	47 574	1	235	82	Community transmission
Afghanistan	1 468	44 503	1 143	70	1 675	43	Clusters of cases
Sudan	1 111	15 839	361	74	1 193	27	Community transmission
Bahrain	1 068	85 591	50 301	5	338	199	Clusters of cases
Syrian Arab Republic	541	7 154	409	31	372	21	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Somalia	81	4 382	276	1	108	7	Sporadic cases
Djibouti	16	5 661	5 730	0	61	62	Clusters of cases
Yemen	1	2 073	70	2	605	20	Sporadic cases
Territories[ii]							
Occupied Palestinian territory	8 430	82 780	16 227	65	698	137	Community transmission
Europe	**1 771 673**	**16 873 383**	**18 077**	**32 684**	**375 368**	**402**	
Italy	235 979	1 380 531	22 833	4 578	49 261	815	Clusters of cases
France	171 008	2 089 353	32 009	4 257	48 170	738	Community transmission
Russian Federation	163 504	2 089 329	14 317	2 993	36 179	248	Clusters of cases
Poland	152 357	843 475	22 287	3 243	13 288	351	Community transmission
The United Kingdom	149 027	1 493 387	21 998	2 860	54 626	805	Community transmission
Germany	127 766	918 269	10 960	1 537	14 022	167	Clusters of cases
Ukraine	88 887	624 744	14 285	1 348	10 951	250	Community transmission
Spain	64 540	1 556 730	33 296	1 191	42 619	912	Community transmission
Romania	59 623	412 808	21 458	1 103	9 916	515	Community transmission
Portugal	44 704	255 970	25 103	519	3 824	375	Clusters of cases
Austria	42 693	240 909	26 749	526	2 155	239	Community transmission
Netherlands	36 751	478 678	27 936	426	8 858	517	Community transmission
Serbia	35 039	116 125	16 676	179	1 168	168	Community transmission
Hungary	33 657	174 618	18 076	703	3 800	393	Community transmission
Czechia	32 521	490 750	45 826	1 037	7 095	663	Community transmission
Turkey	29 750	440 805	5 227	801	12 219	145	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Switzerland	29 038	289 483	33 448	546	3 567	412	Community transmission
Georgia	25 054	104 732	26 254	273	976	245	Community transmission
Sweden	23 307	208 295	20 625	99	6 406	634	Community transmission
Bulgaria	23 262	120 697	17 370	729	2 820	406	Clusters of cases
Belgium	19 148	556 808	48 044	970	15 522	1 339	Community transmission
Croatia	18 566	100 410	24 459	298	1 304	318	Community transmission
Greece	17 611	90 121	8 646	492	1 527	147	Community transmission
Azerbaijan	16 469	89 898	8 866	161	1 107	109	Clusters of cases
Lithuania	11 353	44 740	16 435	108	374	137	Community transmission
Belarus	11 129	123 999	13 123	57	1 096	116	Community transmission
Slovenia	10 162	64 284	30 922	157	657	316	Clusters of cases
Slovakia	9 690	95 257	17 447	134	644	118	Clusters of cases
Armenia	8 887	126 224	42 597	189	1 952	659	Community transmission
Denmark	8 557	69 635	12 022	24	781	135	Community transmission
Bosnia and Herzegovina	8 409	79 309	24 174	389	2 246	685	Community transmission
Republic of Moldova	7 917	96 689	23 969	124	2 130	528	Community transmission
North Macedonia	7 569	53 631	25 742	206	1 487	714	Community transmission
Kazakhstan	5 377	166 625	8 874	0	2 365	126	Clusters of cases
Albania	4 963	32 196	11 188	73	685	238	Clusters of cases
Norway	4 212	31 438	5 799	12	306	56	Community transmission
Israel	3 871	327 327	37 817	13	2 744	317	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Luxembourg	3 831	29 762	47 545	41	260	415	Community transmission
Montenegro	3 121	30 780	49 008	43	434	691	Clusters of cases
Kyrgyzstan	3 077	69 581	10 665	32	1 231	189	Clusters of cases
Ireland	2 617	70 143	14 205	44	2 022	409	Community transmission
Latvia	2 513	12 744	6 756	32	153	81	Clusters of cases
Estonia	2 227	9 375	7 067	7	87	66	Clusters of cases
Finland	2 114	21 216	3 829	6	375	68	Community transmission
Uzbekistan	1 450	71 552	2 138	5	603	18	Clusters of cases
Cyprus	1 405	8 456	7 004	4	43	36	Clusters of cases
Malta	643	8 560	19 387	9	104	236	Clusters of cases
Andorra	482	6 207	80 334	1	76	984	Community transmission
Tajikistan	281	11 854	1 243	1	86	9	Pending
San Marino	174	1 427	42 047	1	43	1 267	Community transmission
Liechtenstein	139	1 109	29 079	4	8	210	Sporadic cases
Iceland	83	5 269	15 441	1	26	76	Community transmission
Monaco	33	581	14 805	1	3	76	Sporadic cases
Holy See	0	26	32 138	0	0	<1	Sporadic cases
Territories[ii]							
Kosovo[1]	4 972	33 545	18 031	95	894	481	Community transmission
Gibraltar	67	943	27 990	2	3	89	Clusters of cases
Jersey	78	806	7 408	0	32	294	Community transmission
Isle of Man	5	368	4 328	0	25	294	No cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Guernsey	1	283	4 478	0	13	206	Community transmission
Faroe Islands	2	499	10 212	0	0	<1	Sporadic cases
Greenland	1	18	317	0	0	<1	No cases
South-East Asia	**351 822**	**10 367 553**	**5 129**	**4 706**	**158 566**	**78**	
India	281 227	9 095 806	6 591	3 592	133 227	97	Clusters of cases
Indonesia	30 301	493 308	1 804	626	15 774	58	Community transmission
Bangladesh	14 785	445 281	2 704	177	6 350	39	Community transmission
Myanmar	11 114	77 848	1 431	188	1 722	32	Clusters of cases
Nepal	10 340	218 639	7 504	90	1 305	45	Clusters of cases
Sri Lanka	3 580	19 771	923	30	83	4	Clusters of cases
Maldives	424	12 578	23 269	3	45	83	Clusters of cases
Thailand	47	3 913	56	0	60	1	Clusters of cases
Bhutan	4	379	491	0	0	<1	Sporadic cases
Timor-Leste	0	30	23	0	0	<1	Sporadic cases
Western Pacific	**36 046**	**834 216**	**425**	**439**	**16 816**	**9**	
Japan	13 502	130 179	1 029	91	1 974	16	Clusters of cases
Philippines	10 515	416 852	3 804	289	8 080	74	Community transmission
Malaysia	7 470	53 679	1 658	26	332	10	Clusters of cases
Republic of Korea	2 187	30 733	599	12	505	10	Clusters of cases
China	220	92 648	63	0	4 749	3	Clusters of cases
Mongolia	166	582	178	0	0	<1	Sporadic cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Australia	96	27 807	1 090	0	907	36	Clusters of cases
Viet Nam	41	1 306	13	0	35	<1	Clusters of cases
Singapore	32	58 148	9 939	0	28	5	Clusters of cases
New Zealand	27	1 672	347	0	25	5	Clusters of cases
Cambodia	4	306	18	0	0	<1	Sporadic cases
Papua New Guinea	4	604	68	0	7	1	Community transmission
Lao People'S Democratic Republic	1	25	3	0	0	<1	Sporadic cases
Brunei Darussalam	0	148	338	0	3	7	No cases
Fiji	0	35	39	0	2	2	Sporadic cases
Solomon Islands	0	16	23	0	0	<1	Sporadic cases
Territories[ii]							
French Polynesia	1 272	12 978	46 200	10	63	224	Sporadic cases
Guam	501	6 355	37 654	11	104	616	Clusters of cases
Marshall Islands	3	4	68	0	0	<1	Sporadic cases
New Caledonia	2	32	112	0	0	<1	Sporadic cases
Northern Mariana Islands (Commonwealth of The)	2	104	1 807	0	2	35	Pending
Wallis and Futuna	1	2	178	0	0	<1	Sporadic cases
Vanuatu	0	1	3	0	0	<1	Sporadic cases
Grand total	**4 060 891**	**57 882 183**	**7 426**	**67 221**	**1 377 395**	**177**	

**See *data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases; efforts are underway to identify these for notation in the data table. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Global totals include 741 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps

represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas; classification is based on the highest category reported within a country/territory/area. Categories:

- No cases: with no confirmed cases;
- Sporadic cases: with one or more cases, imported or locally detected;
- Clusters of cases: experiencing cases, clustered in time, geographic location and/or by common exposures;
- Community transmission: experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel laboratory surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area;
- Pending: transmission classification has not been reported to WHO.

[ii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

Country, territory, or area-specific notes, updates and errata

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 15 November 2020, 10 am CEST

For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

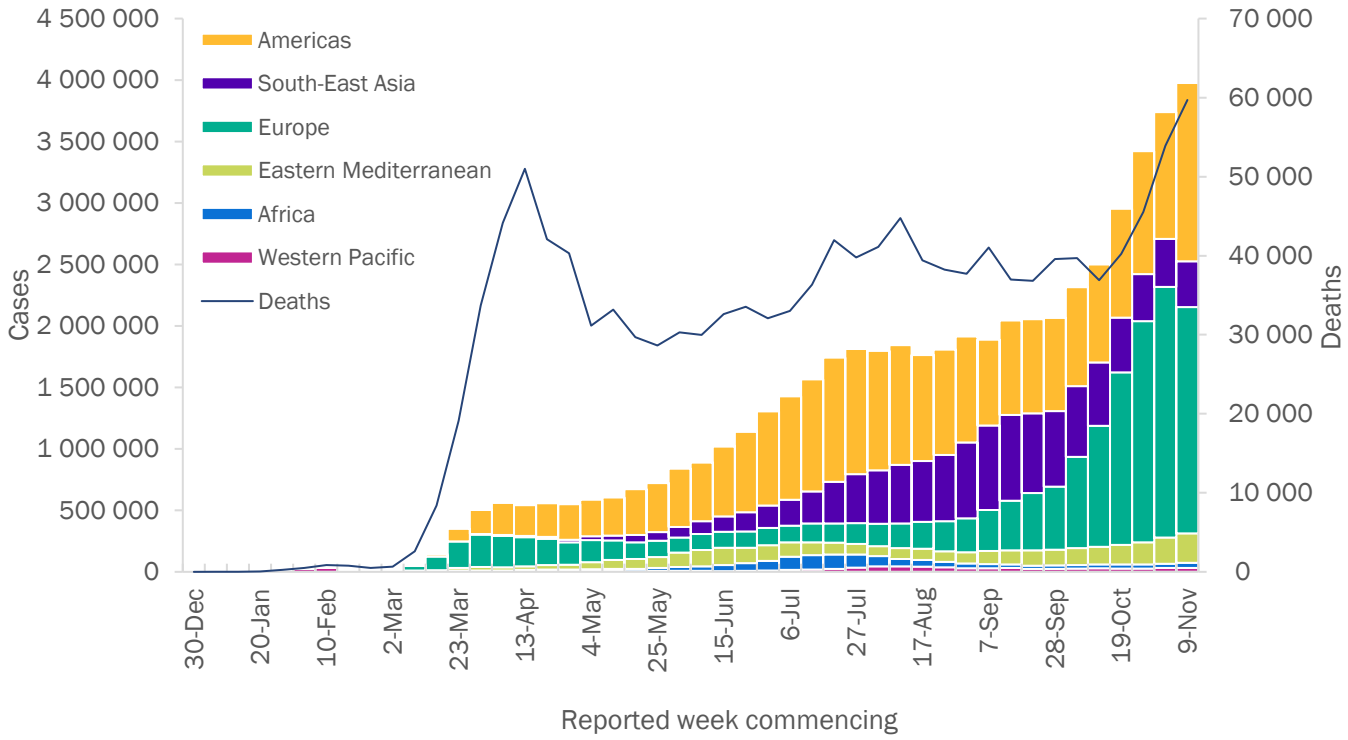
Global epidemiological situation

The number of new cases being reported globally continues to rise (Figure 1), with almost 4 million new cases in the past week (9 15 November) alone. The number of new deaths globally has also grown by 11%, with almost 60 000 new deaths reported, of which 81% were in Europe and the Americas (Table 1).

Although the European Region continues to report the highest number of new cases globally (46%), it has seen a 10% fall in the past week following the strengthening of public health and social measures across the region. However, the number of new deaths in Europe has increased substantially with over 29 000 new deaths reported in the past week. The Region of the Americas reported a sharp upward trend, with a 41% increase in new cases in the past week. The Eastern Mediterranean, African and Western Pacific Regions also reported increases in the number of new cases. The South-East Asia Region, on the other hand, reported a decline in the number of new cases and new deaths.

As of 15 November, over 53.7 million cases and 1.3 million deaths have been reported globally.

Figure 1: COVID-19 cases reported weekly by WHO Region, and global deaths, as of 15 November 2020**



**See *data table and figure notes*.

Countries reporting the highest number of cases in the past week included: the United States of America (reporting over 1 million new cases, a 47% increase compared to the previous week), India (306 000 cases, 5% decrease), Italy (242 000 cases, 9% increase), France (203 000 cases, 47% decrease), and Brazil (179 000 cases, 57% increase).

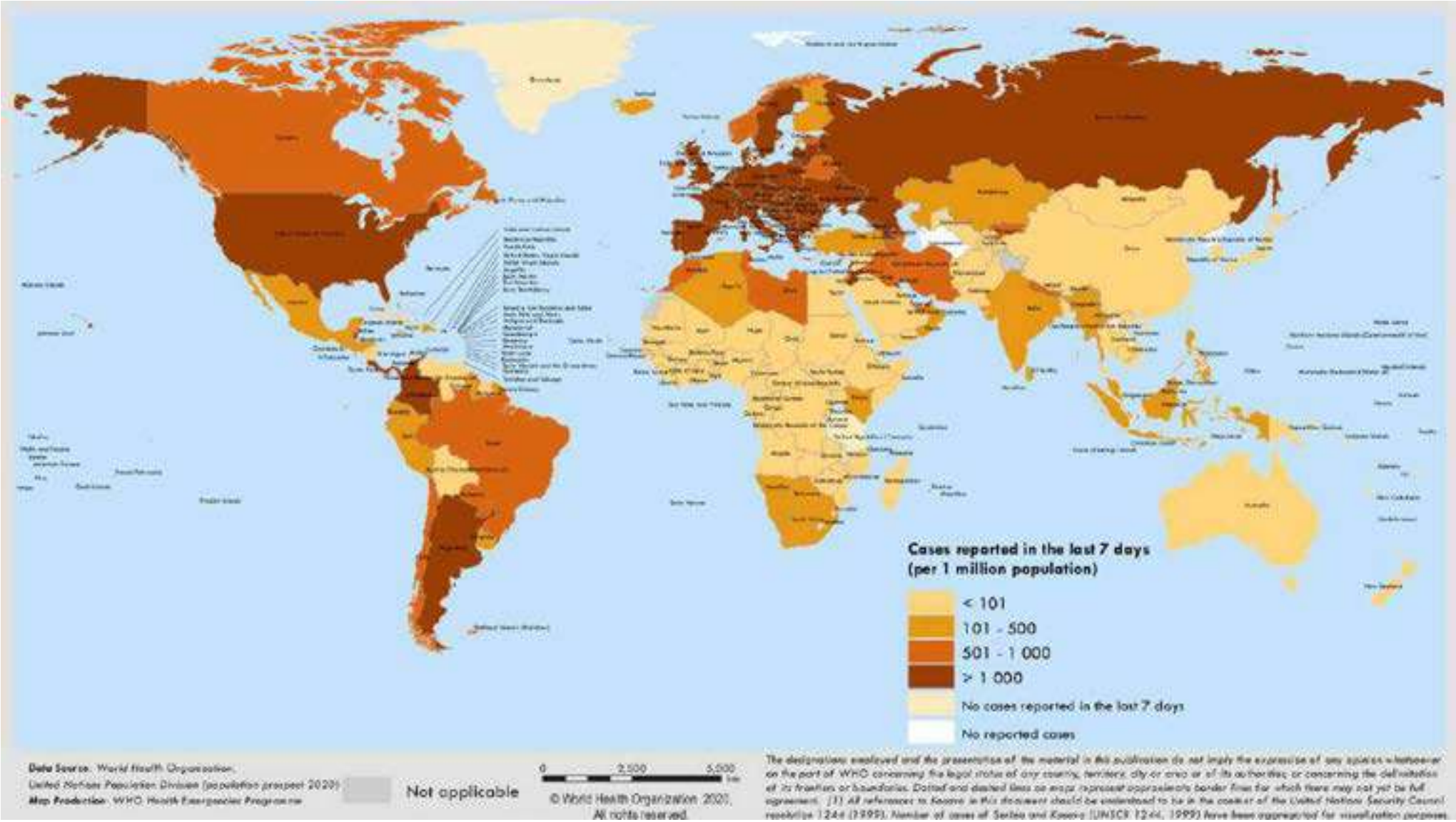
Additional Region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western Pacific Region.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 15 November 2020**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days*	Cumulative deaths (%)
Europe	1 840 086 (46%)	-10%	15 047 248 (28%)	29 043 (49%)	18%	341 488 (26%)
Americas	1 450 998 (36%)	41%	22 960 102 (43%)	19 106 (32%)	11%	675 735 (52%)
South-East Asia	373 786 (9%)	-4%	10 015 731 (19%)	4 534 (8%)	-12%	153 860 (12%)
Eastern Mediterranean	238 390 (6%)	11%	3 545 801 (7%)	5 747 (10%)	1%	90 052 (7%)
Africa	40 990 (1%)	22%	1 398 935 (3%)	834 (1%)	<1%	31 450 (2%)
Western Pacific	32 973 (1%)	5%	798 170 (1%)	435 (1%)	15%	16 377 (1%)
Global	**3 977 223 (100%)**	**6%**	**53 766 728 (100%)**	**59 699 (100%)**	**11%**	**1 308 975 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*
***See data, table and figure notes*

Figure 2. COVID-19 cases per million population reported in the last seven days by countries, territories and areas, 9 November through 15 November 2020**



**See *data, table and figure notes*

Situation by WHO Region

African Region

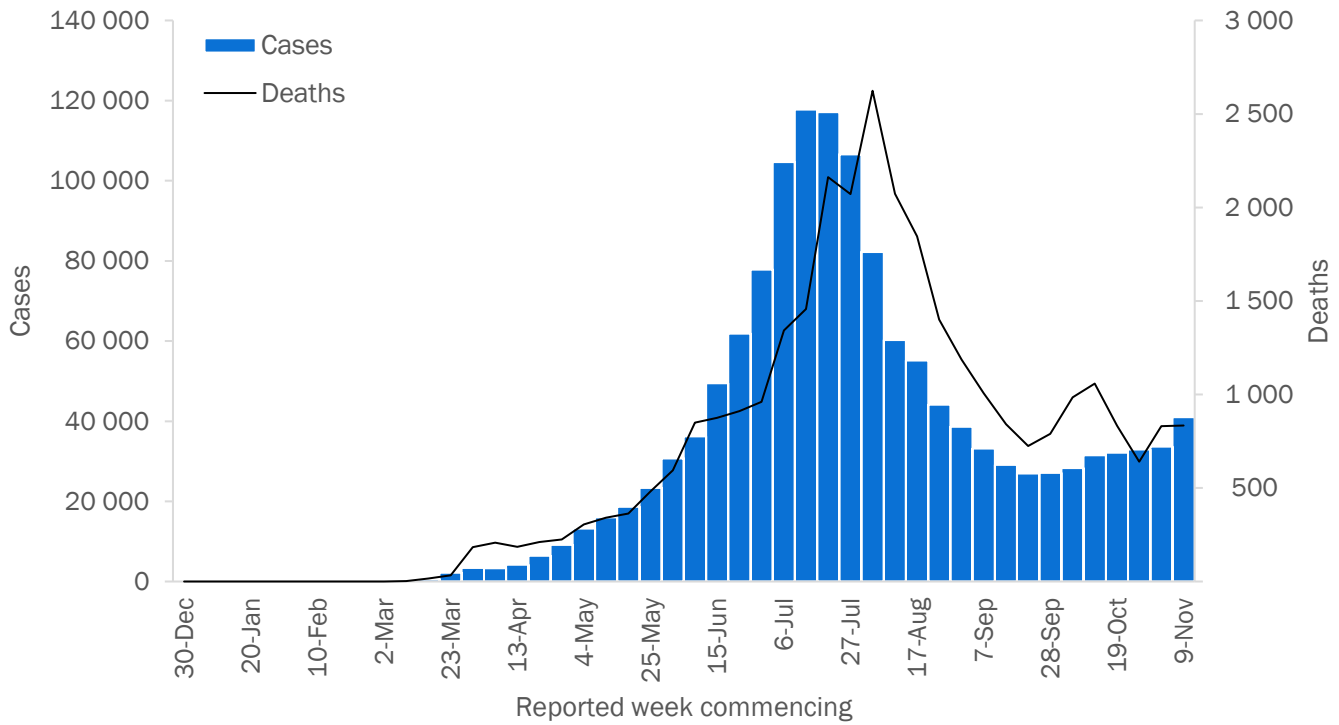
In the African Region, the gradual increase in the number of new weekly cases since last September continued, with 40 990 new cases reported, a 22% increase compared to the previous week (Figure 3). Death rates across the region remained similar to the previous week. South Africa, Kenya, Algeria and Ethiopia reported the largest number of new weekly cases in the region.

Algeria reported a sharp (131%) increase in the past week, with 5806 new cases detected (132 cases per 1 million population) and 114 new deaths reported. Local authorities also reported a substantial rise in hospitalisations in October, most notably in the north-eastern and north-central provinces. On 8 November, the Algerian Government implemented 12 additional new public health and social measures to mitigate this surge, including the reinstatement of a night-time curfew, closure of vehicle markets for 15 days, banning public and family gatherings, and postponing the start of university classes and vocational training until 15 December.

In Angola, the incidence of new cases continued to decline, with 1039 new cases (32 cases per 1 million population) reported in the past week, a 32% decrease compared to the previous week. Nineteen new deaths were reported in the past week. As of 14 November, 66% of confirmed cases reported in Angola were male and 86% were individuals aged 20 to 69 years. The capital city of Luanda has been considered the epicentre of the outbreak in the country, with 78% of cumulative cases and 84% of deaths to date.

On 11 November, the South African government further eased public health and social measures as the national incidence of new cases remains relative steady, with about 13 000 new cases (224 cases per 1 million population) reported in the past week, while rates of COVID-19 associated hospitalizations and deaths continue to fall. However, the government warned of potential resurgence, highlighting recent spikes in cases observed in Nelson Mandela Bay Metropolitan area, Eastern Cape Province, potentially triggered by outbreaks in educational institutions and among people attending large gatherings.

Figure 3: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, as of 15 November 2020**



**See *data, table and figure notes*

Region of the Americas

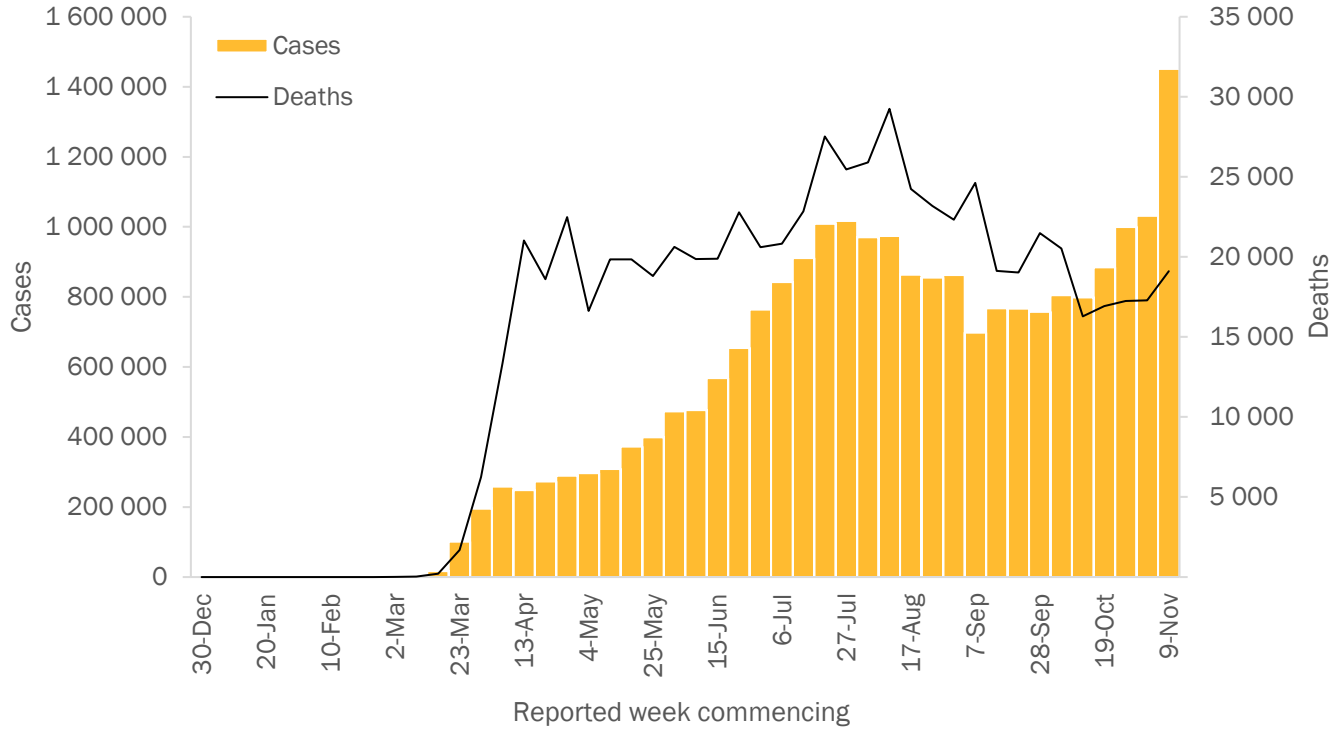
Cases and deaths in the Region of the Americas continue to rise (Figure 4), with cases increasing over 40% and deaths over 10% in the past 7 days.

The United States of America reported the largest number of cases in the Region, with over 1 million cases (3036 cases per 1 million population) in the past week, amounting to nearly 11 million cumulative cases since the start of the pandemic.

In Canada, upward trends in both cases and deaths have continued, with over 30 000 new cases (835 new cases per 1 million population) and just under 400 new deaths (10 new deaths per 1 million population) in the past week. Increased activity has also been reported among vulnerable populations and settings (such as elderly adults and Indigenous communities, and in a range of settings including long-term care and assisted living facilities, schools, congregate living settings, industrial work settings and social gatherings). Overall, nearly 300 000 confirmed cases and 11 000 deaths have been reported from Canada since the start of the pandemic.

Mexico reported 42 465 new cases this past week (328 new cases per 1 million population), a 16% increase compared to the previous week. There have been reports of increased hospitalizations in the northern state of, this region has been placed under the highest Coronavirus alert level, joining the neighbouring region of Chihuahua, which borders the United States of America. Death rates in the country increased by 9% in the past week, with 3301 new deaths reported.

Figure 4: Number of COVID-19 cases and deaths reported weekly by the WHO Region of the Americas, as of 15 November 2020**



**See *data, table and figure notes*

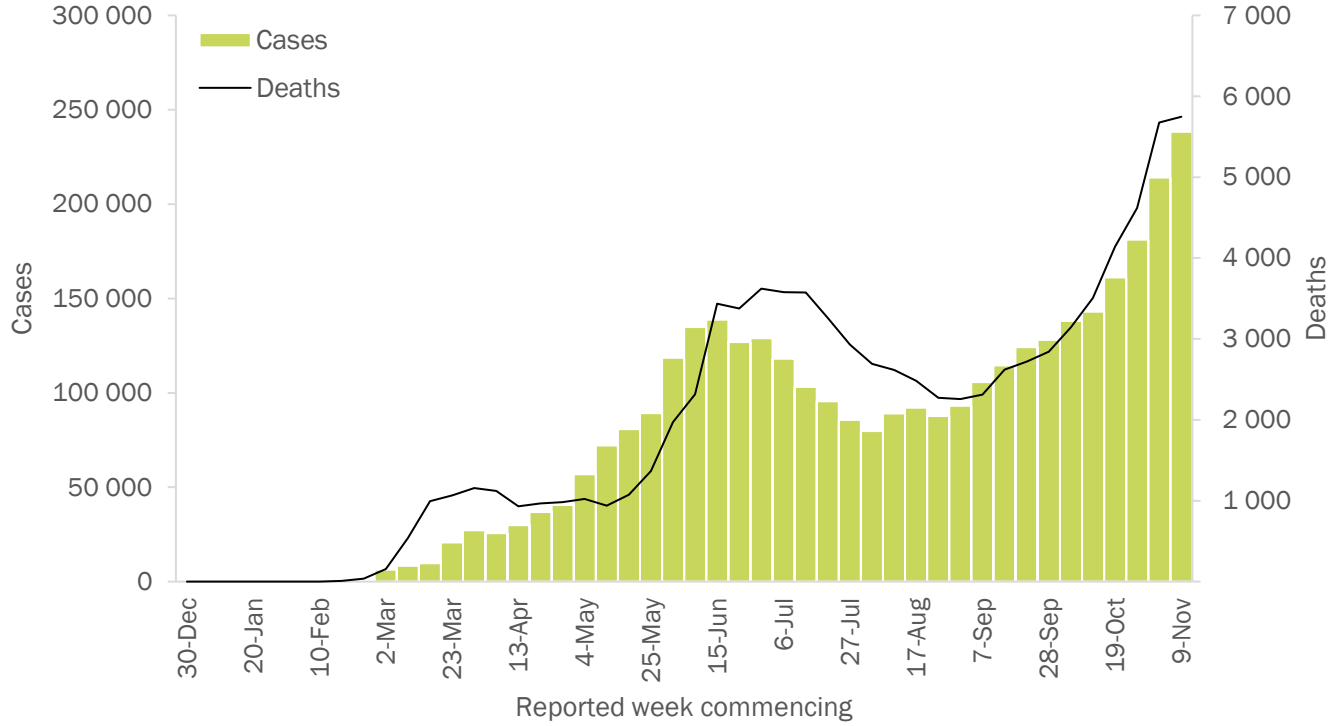
Eastern Mediterranean Region

The incidence of new cases continued to increase in the Eastern Mediterranean Region (Figure 5), with over 238 000 new cases this past week, an 11% increase on the previous week, while the number of reported deaths was similar. Countries which reported the greatest number of new cases included Iran, Jordan and Morocco.

In Pakistan, a resurgence is being observed with over 12 000 (58 cases per 1 million population) new cases reported in the past week a 45% increase on the previous week. The weekly number of deaths also rose by 21%, with 166 reported. Country officials have strengthened public health and social measures in light of these increases. Considering the large population of Pakistan (over 220 million people), concerted efforts to reduce transmission have thus far been relatively successful.

In Afghanistan, a 65% increase was observed this past week, with 1002 new cases (26 cases per 1 million population) reported. As of 12 November, test positivity rates in the country were estimated at over 33%, highlighting the limitations in the testing capacity, testing criteria and willingness of people to come forward for testing, with stigma considered as a major factor in the decision not to get tested. Men accounted for more than 69% of the total confirmed cases, and most recorded deaths were among men aged 50-79 years, which may in part be due to men being over-represented in testing.

Figure 5: Number of COVID-19 cases and deaths reported weekly by the WHO Eastern Mediterranean Region, as of 15 November 2020**



***See data, table and figure notes*

European Region

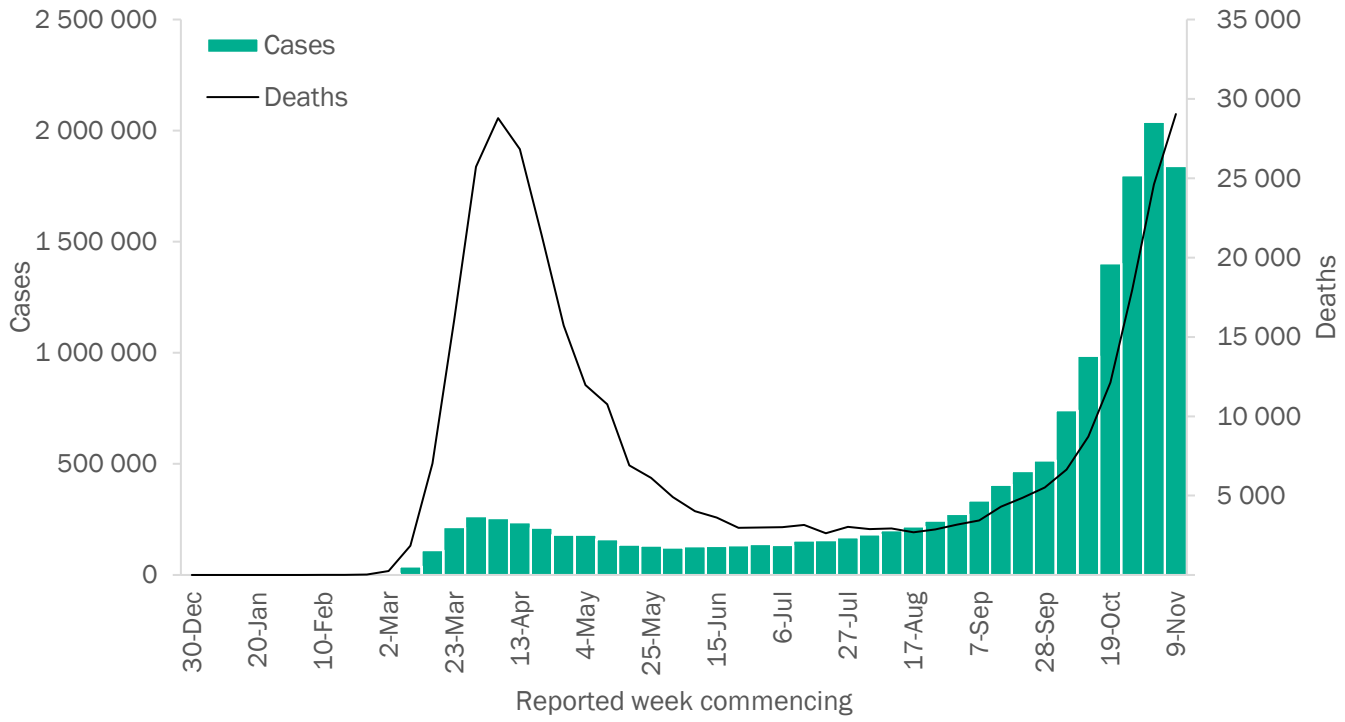
Over the past week, the European Region recorded 46% of all cases and 49% of all deaths reported globally, with nearly 2 million new cases and almost 30 000 new deaths. However, in the past week, for the first time in over three months, the region observed a decline of 10% in weekly cases (Figure 6). At the same time, deaths continued to increase, with an 18% increase the past week in comparison to the previous week.

Varying patterns were seen in Europe with decreases in cases being observed in 24 countries in the past 7 days, ranging from a 2% to over 40% decrease in new cases in these 24 countries compared to the previous week. Whereas in other countries, weekly increases in new cases ranging from 1% to over 40% were reported. The countries reporting the highest number of cases in the past week were Italy, France, the United Kingdom, Poland, the Russian Federation, Germany, Spain, Ukraine, Romania, and Austria. Among these ten countries, Austria reported the sharpest increase, with new cases this week 30% higher compared to the previous week. The countries with the highest weekly mortality rates, exceeding 60 deaths per 1 million population, were Czechia, Bosnia and Herzegovina, Belgium, North Macedonia, Armenia, Hungary, Bulgaria, Poland, France, Croatia and Montenegro. The United Kingdom was the first country in the region to record over 50 000 cumulative deaths.

The Russian Federation recorded its highest case and death counts, with over 150 000 cases (1038 cases per 1 million population) and over 2600 deaths reported in the past week. Public health interventions were strengthened across many regions. Moscow expanded public health and social measures, including switching universities to online learning and limiting the time during which restaurants and bars can serve customers.

Lithuania was also among the countries which reached a peak in cases and deaths over the past week, with more than 10 500 new cases (3919 cases per 1 million population). Similar to other countries in the region, Lithuania expanded public health and social measures in the first weeks of November. Additionally, Lithuania is adapting its hospital network to meet growing demands through expanding bed capacity and will set up a temporary hospital in a large exhibition center in Vilnius.

Figure 6: Number of COVID-19 cases and deaths reported weekly by the WHO European Region, as of 15 November 2020**



**See *data, table and figure notes*

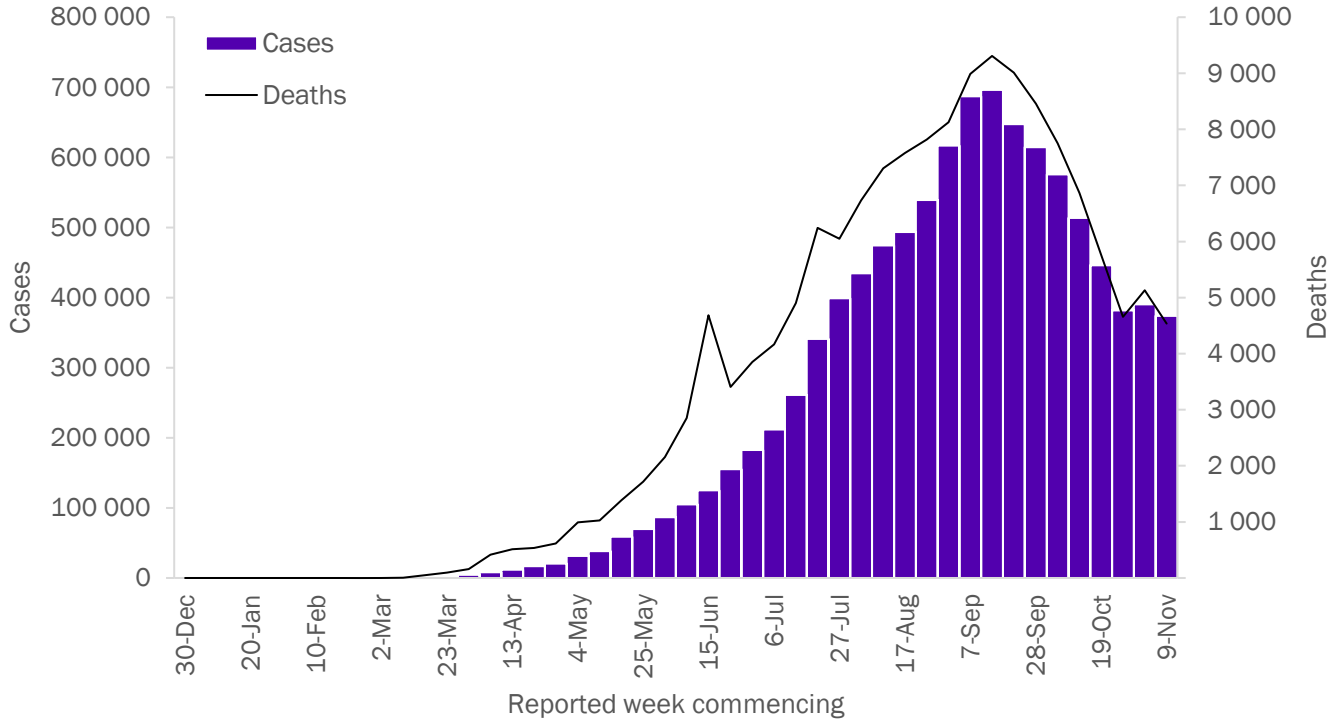
South-East Asia Region

The South-East Asia Region observed six weeks of continued decline in cases and deaths from the second half of September until the end of October (Figure 7). New weekly cases fell from over 690 000 to around 380 000, and new weekly deaths decreased from over 9300 in the week commencing on 14 September to under 4600 in the past week. Since the start of November, weekly cases have stabilized under 400 000 for the past three weeks, with 373 786 cases reported in the past week. Weekly deaths have also remained relatively stable, with 4534 deaths reported in the past week. Countries with highest number of weekly new cases per million population in the past week included Nepal, Maldives and India.

The regional trend continues to be strongly influenced by India, which consistently reports the highest numbers of cases and deaths in the Region. After a period of sharp decline, cases and deaths in India have stabilized since the end of October. In the past week, further decreases of 5% in cases and 12% in deaths were observed, with 306 825 cases (222 cases per 1 million population) and 3 514 deaths reported. At the end of the week, the states of Maharashtra, Kerala and Delhi reported the highest numbers of new cases, with over 80 000 in Maharashtra and almost 40 000 in Delhi.

Indonesia reported the second highest number of cases in the Region in the past week. Until 8 November, Indonesia had observed a weekly decline in cases for six consecutive weeks, with weekly cases falling from over 30 000 in the week commencing on 21 September to under 23 800 in the week commencing 2 November. However, in the past week, the country registered over 29 000 new cases (107 cases per 1 million population), a 23% increase from last week. Towards the end of the week, Indonesia registered over 5200 daily cases for two consecutive days. On both days, Jakarta and Jawa Tengah Provinces reported the highest case numbers in the country, surpassing 1000 each day.

Figure 7: Number of COVID-19 cases and deaths reported weekly by the WHO South-East Asia Region, as of 15 November 2020**



**See *data, table and figure notes*

Western Pacific Region

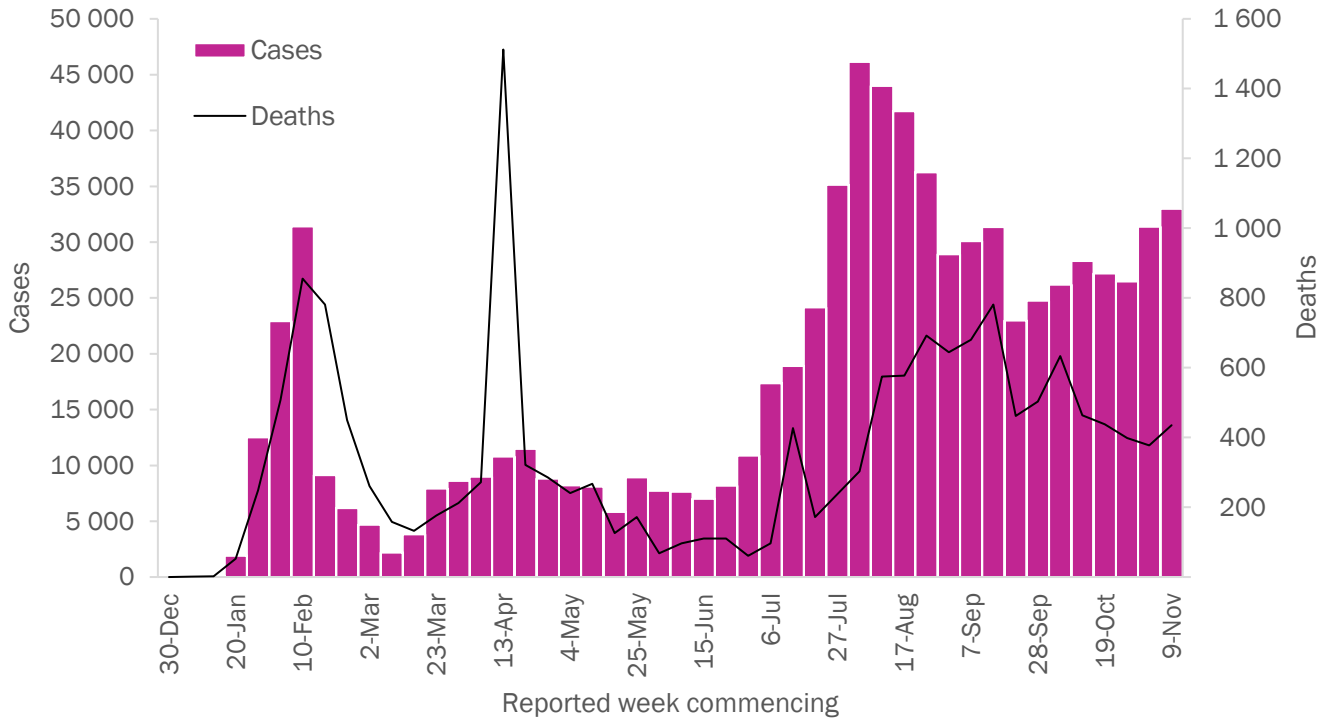
The number of cases continues to gradually rise in the Western Pacific Region (Figure 8), which reported nearly 33 000 new cases and over 400 deaths in the past week. New cases increased by 5% and new deaths increased by 15% compared to the previous week. This reporting period is the second consecutive week that the Western Pacific Region reported more than 30 000 new cases per week since mid-September. The Philippines, Japan, Malaysia and French Polynesia reported the highest number of cases in the region.

Guam reported 820 new cases (4859 cases per 1 million population) in the past week, more than double the number of cases reported the previous week, and the highest weekly count since the beginning of the pandemic. Four new deaths were reported, bringing the total to 93 cumulative deaths. In a correctional facility, 60 inmates and one officer tested positive for COVID-19 in the past week and are currently in isolation.

Malaysia reported 6852 new cases in the past week (212 case per 1 million population). Although the number of cases decreased by 12% compared to the previous week, there has been a general upward trend since the beginning of September. Twenty-four new deaths were reported in the past week, bringing the cumulative total to 306 deaths. Selangor State, which is the most populous state in the country with approximately 19% of the population, reported 28% of cases, followed by Kuala Lumpur which reported 16% of cases. Many cases reported in the past week were linked to previously reported clusters in Sabah State, which reported the highest number of local transmissions, including cases identified by close-contact screenings and existing clusters.

In Vanuatu, the first confirmed case was reported on 10 November. The case was a young adult who returned on 4 November from the United States of America. The case, who was asymptomatic, tested positive during routine testing on the fifth day of quarantine. In accordance with the preparedness and response plan, the case will remain in isolation until health clearance is given. Health authorities initiated contact tracing with close contacts, and intensified risk communication and community engagement activities.

Figure 8: Number of COVID-19 cases and deaths reported weekly by the WHO Western Pacific Region, data as of 15 November 2020**



**See *data, table and figure notes*

Key weekly updates

- In his opening remarks at the resumed 73rd session of the World Health Assembly (WHA 73), WHO Director-General Dr Tedros highlighted how the "world has come together as never before to ensure that the life-saving tools being developed to combat COVID-19 are developed, produced and allocated fairly as global public goods, and not private commodities that become one more reason some people are left behind".
- In his closing remarks at WHA 73, he welcomed the preliminary results of vaccine clinical trials released in the week: Never in history has vaccine research progressed so quickly". On 16 November, at an Executive Board meeting, he also emphasized that a vaccine will complement the other tools we have, not replace them: "A vaccine on its own will not end the pandemic".
- A report by the Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme concluded that over the last four years, the WHE Programme has demonstrated its capacity to manage multiple emergencies and has helped affirm WHO's position as a global health leader."
- Donor commitments to the Access to COVID-19 Tools (ACT) Accelerator have reached US 5.1 billion following new contributions at the Paris Peace Forum. This concerted global effort among heads of state, global health leaders, scientists and the private sector is helping secure a way to end the acute phase of the pandemic by deploying the tests, treatments and vaccines the world needs to fight the pandemic. However, an additional US 4.2 billion is needed urgently this year, with a further US 23.9 billion required in 2021, if tools are to be deployed across the world as they become available.
- At the Paris Peace Forum, the Director-General outlined three fundamental shifts that WHO believes all countries must make: (1) Invest in basic public health systems, which are the bedrock for preventing, preparing for, detecting and responding to outbreaks; (2) Take a One Health approach. The COVID-19 pandemic is a stark reminder of the close links between the health of humans, animals and the planet we share; (3) Go beyond the health sector: the pandemic has affected every sector.
- WHO has announced the establishment of the Council on the Economics of Health for All, composed of leading economists and health experts, to put "Health for All" at the center of how we think about value creation and economic growth. "The COVID-19 pandemic has demonstrated the consequences of chronic under-investment in public health. But we don't just need more investment; we must also rethink how we value health" said the WHO Director-General.
- 2021 has been designated as the International Year of Health and Care Workers, in recognition of the dedication and sacrifice of the millions of health and care workers at the forefront of the pandemic.
- The special edition of the timeless hit *e re amily*, is now available for download worldwide from digital music stores such as iTunes, Spotify and Amazon Music. The song is being released as an inspiring call for global solidarity to respond to the COVID-19 pandemic and to generate proceeds in benefit of the WHO Foundation to address the most pressing global health challenges of our time.
- WHO has published the following documents:
  - Immunization as an essential health service: guiding principles for immunization activities during the COVID-19 pandemic and other times of severe disruption, which provides support to countries in their decision-making regarding provision or resumption of immunization services during events such as COVID-19, natural disasters or humanitarian emergencies.
  - The Emergency Global Supply Chain System (COVID-19) catalogue which lists all medical devices, including personal protective equipment, medical equipment, medical consumables, single use devices, and laboratory and test-related devices that may be requested through the COVID-19 Supply Portal.
  - Technical specifications of personal protective equipment for COVID-19, which provides guidance on the quality, performance characteristics and related standards of personal protective equipment to be used in the context of COVID-19.

Table 2. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 15 November 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Africa	**40 990**	**1 398 935**	**1 247**	**834**	**31 450**	**28**	
South Africa	13 276	749 182	12 632	417	20 206	341	Community transmission
Kenya	7 504	69 273	1 288	146	1 249	23	Community transmission
Algeria	5 806	65 975	1 505	114	2 125	48	Community transmission
Ethiopia	3 117	102 321	890	47	1 565	14	Community transmission
Uganda	1 723	15 789	345	13	144	3	Community transmission
Ghana	1 230	50 018	1 610	0	320	10	Community transmission
Nigeria	1 206	64 996	315	7	1 163	6	Community transmission
Angola	1 039	13 374	407	19	322	10	Community transmission
Mozambique	763	14 340	459	11	110	4	Community transmission
Cabo Verde	489	9 780	17 590	2	102	183	Community transmission
Botswana	390	8 225	3 498	0	27	11	Community transmission
Cameroon	350	22 692	855	4	433	16	Community transmission
Zimbabwe	315	8 786	591	7	257	17	Community transmission
Namibia	279	13 449	5 293	4	138	54	Community transmission
Democratic Republic of The Congo	243	11 759	131	3	318	4	Community transmission
Mali	192	3 868	191	2	139	7	Community transmission
Zambia	189	17 097	930	1	350	19	Community transmission
Guinea	185	12 585	958	1	74	6	Community transmission
Rwanda	181	5 394	416	6	42	3	Clusters of cases
Togo	163	2 605	315	3	60	7	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Mauritania	160	7 885	1 696	2	165	35	Community transmission
Côte D'Ivoire	144	20 945	794	2	128	5	Community transmission
Congo	136	5 515	999	0	92	17	Community transmission
Madagascar	122	17 233	622	5	249	9	Community transmission
Senegal	111	15 779	942	1	327	20	Community transmission
Eswatini	104	6 093	5 252	2	119	103	Community transmission
Benin	99	2 844	235	0	43	4	Community transmission
Burkina Faso	70	2 635	126	1	68	3	Community transmission
South Sudan	60	3 003	268	0	59	5	Community transmission
Niger	59	1 301	54	1	70	3	Community transmission
Liberia	56	1 498	296	0	82	16	Community transmission
Chad	48	1 591	97	1	100	6	Community transmission
Gabon	40	9 062	4 071	3	58	26	Community transmission
Central African Republic	21	4 900	1 015	1	63	13	Community transmission
Gambia	21	3 702	1 532	2	122	50	Community transmission
Mauritius	18	470	370	0	10	8	Sporadic cases
Comoros	17	574	660	0	7	8	Community transmission
Malawi	16	5 964	312	1	185	10	Community transmission
Sierra Leone	16	2 389	299	0	74	9	Community transmission
Burundi	14	628	53	0	1	<1	Community transmission
Equatorial Guinea	12	5 104	3 638	0	85	61	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Guinea-Bissau	6	2 419	1 229	2	43	22	Community transmission
Lesotho	4	1 967	918	0	44	21	Community transmission
Seychelles	4	158	1 607	0	0	<1	Sporadic cases
Eritrea	2	493	139	0	0	<1	Sporadic cases
Sao Tome and Principe	2	964	4 399	0	16	73	Community transmission
United Republic of Tanzania	0	509	9	0	21	<1	Community transmission
Territories[ii]							
Réunion	617	6 881	7 686	2	29	32	Clusters of cases
Mayotte	371	4 921	18 038	1	46	169	Clusters of cases
Americas	**1 450 998**	**22 960 102**	**22 449**	**19 106**	**675 735**	**661**	
United States of America	1 004 852	10 641 431	32 149	8 042	242 542	733	Community transmission
Brazil	179 471	5 810 652	27 337	2 722	164 737	775	Community transmission
Argentina	67 564	1 296 378	28 684	1 909	35 045	775	Community transmission
Colombia	54 964	1 182 697	23 244	1 264	33 669	662	Community transmission
Mexico	42 265	997 393	7 736	3 301	97 624	757	Community transmission
Canada	31 509	287 318	7 613	392	10 828	287	Community transmission
Peru	15 147	932 650	28 286	323	35 106	1 065	Community transmission
Chile	9 699	529 676	27 708	278	14 777	773	Community transmission
Panama	6 717	144 477	33 484	86	2 856	662	Community transmission
Costa Rica	6 706	122 123	23 973	84	1 537	302	Community transmission
Ecuador	6 141	179 627	10 181	182	12 997	737	Community transmission
Paraguay	3 911	70 392	9 869	84	1 556	218	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Guatemala	3 669	114 719	6 403	109	3 920	219	Community transmission
Dominican Republic	3 580	133 225	12 281	19	2 282	210	Community transmission
Honduras	2 503	102 079	10 306	79	2 820	285	Community transmission
Venezuela (Bolivarian Republic of)	2 136	96 441	3 392	23	844	30	Community transmission
El Salvador	1 213	36 358	5 605	33	1 039	160	Community transmission
Bolivia (Plurinational State of)	726	143 069	12 256	54	8 835	757	Community transmission
Belize	699	4 715	11 858	18	85	214	Community transmission
Uruguay	513	3 883	1 118	3	64	18	Clusters of cases
Jamaica	308	9 780	3 303	11	229	77	Community transmission
Cuba	301	7 568	668	1	131	12	Clusters of cases
Guyana	267	4 724	6 006	5	138	175	Clusters of cases
Bahamas	247	7 163	18 215	4	155	394	Clusters of cases
Trinidad and Tobago	182	5 980	4 273	0	111	79	Community transmission
Nicaragua	53	4 533	684	1	158	24	Community transmission
Saint Lucia	50	160	871	2	2	11	Sporadic cases
Haiti	41	9 168	804	0	232	20	Community transmission
Suriname	41	5 268	8 980	2	114	194	Sporadic cases
Barbados	7	249	866	0	7	24	Clusters of cases
Dominica	5	68	945	0	0	<1	Clusters of cases
Antigua and Barbuda	3	133	1 358	1	4	41	Sporadic cases
Grenada	2	32	284	0	0	<1	Sporadic cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Saint Vincent and the Grenadines	2	78	703	0	0	<1	Sporadic cases
Saint Kitts and Nevis	0	19	357	0	0	<1	No cases
Territories[ii]							
Puerto Rico	4 205	41 772	14 601	59	921	322	Community transmission
Martinique	517	4 732	12 610	4	37	99	Community transmission
Guadeloupe	195	8 098	20 239	6	139	347	Community transmission
Curaçao	185	1 215	7 404	0	2	12	Community transmission
French Guiana	140	10 844	36 306	0	70	234	Community transmission
Aruba	75	4 639	43 450	4	43	403	Community transmission
Saint Martin	51	655	16 943	0	12	310	Community transmission
Sint Maarten	44	914	21 314	1	23	536	Community transmission
United States Virgin Islands	44	1 434	13 732	0	23	220	Community transmission
Saint Barthélemy	19	109	11 027	0	0	<1	Sporadic cases
Bermuda	13	222	3 565	0	9	145	Sporadic cases
Turks and Caicos Islands	9	716	18 493	0	6	155	Clusters of cases
Cayman Islands	4	254	3 865	0	1	15	Sporadic cases
Falkland Islands (Malvinas)	2	15	4 307	0	0	<1	No cases
Bonaire	1	136	7 786	0	3	172	Sporadic cases
Anguilla	0	3	200	0	0	<1	No cases
British Virgin Islands	0	72	2 381	0	1	33	Clusters of cases
Montserrat	0	13	2 601	0	1	200	No cases
Saba	0	5	3 342	0	0	<1	No cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Saint Pierre and Miquelon	0	14	2 416	0	0	<1	Sporadic cases
Sint Eustatius	0	14	5 636	0	0	<1	Sporadic cases
Eastern Mediterranean	**238 390**	**3 545 801**	**4 852**	**5 747**	**90 052**	**123**	
Iran (Islamic Republic of)	76 275	749 525	8 924	3 202	41 034	489	Community transmission
Jordan	36 503	141 305	13 849	523	1 704	167	Community transmission
Morocco	36 026	288 211	7 808	500	4 697	127	Clusters of cases
Iraq	20 896	516 915	12 851	340	11 623	289	Community transmission
Pakistan	12 708	354 461	1 605	166	7 109	32	Clusters of cases
Lebanon	11 170	104 267	15 276	93	806	118	Community transmission
Tunisia	9 796	79 339	6 713	431	2 279	193	Community transmission
United Arab Emirates	8 103	149 135	15 079	14	528	53	Community transmission
Libya	5 589	72 628	10 570	75	995	145	Community transmission
Kuwait	5 136	136 341	31 926	27	835	196	Community transmission
Saudi Arabia	2 721	352 950	10 138	116	5 641	162	Sporadic cases
Oman	2 275	119 442	23 390	40	1 326	260	Community transmission
Egypt	1 585	110 547	1 080	87	6 442	63	Clusters of cases
Qatar	1 557	135 570	47 056	2	234	81	Community transmission
Bahrain	1 259	84 523	49 673	4	333	196	Clusters of cases
Afghanistan	1 002	43 035	1 105	49	1 605	41	Clusters of cases
Sudan	471	14 626	334	0	1 116	25	Community transmission
Syrian Arab Republic	466	6 613	378	28	341	19	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Somalia	72	4 301	271	0	107	7	Sporadic cases
Djibouti	40	5 645	5 714	0	61	62	Clusters of cases
Yemen	2	2 072	69	1	603	20	Sporadic cases
Territories[ii]							
Occupied Palestinian territory	4 738	74 350	14 574	49	633	124	Community transmission
Europe	**1 840 086**	**15 047 248**	**16 121**	**29 043**	**341 488**	**366**	
Italy	242 062	1 144 552	18 930	3 620	44 683	739	Clusters of cases
France	203 984	1 918 345	29 389	4 064	43 913	673	Community transmission
The United Kingdom	172 915	1 344 360	19 803	2 878	51 766	763	Community transmission
Poland	169 478	691 118	18 261	2 409	10 045	265	Community transmission
Russian Federation	151 491	1 925 825	13 197	2 649	33 186	227	Clusters of cases
Germany	131 998	790 503	9 435	1 196	12 485	149	Clusters of cases
Spain	87 401	1 458 591	31 197	1 380	40 769	872	Community transmission
Ukraine	75 526	535 857	12 253	1 153	9 603	220	Community transmission
Romania	56 186	353 185	18 359	1 020	8 813	458	Community transmission
Austria	51 714	198 216	22 008	311	1 629	181	Community transmission
Czechia	47 009	458 229	42 789	1 377	6 058	566	Community transmission
Switzerland	39 278	256 186	29 601	496	2 956	342	Community transmission
Netherlands	38 013	441 927	25 791	482	8 432	492	Community transmission
Portugal	37 726	211 266	20 719	457	3 305	324	Clusters of cases
Hungary	31 345	140 961	14 592	659	3 097	321	Community transmission
Belgium	27 430	531 184	45 833	1 100	14 303	1 234	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Bulgaria	22 950	97 435	14 023	459	2 091	301	Clusters of cases
Georgia	21 925	79 678	19 974	228	703	176	Community transmission
Sweden	20 701	177 355	17 561	52	6 164	610	Community transmission
Serbia	20 451	81 086	11 644	109	989	142	Community transmission
Turkey	19 316	411 055	4 874	615	11 418	135	Community transmission
Greece	17 701	72 510	6 957	286	1 035	99	Community transmission
Croatia	17 140	81 844	19 936	254	1 006	245	Community transmission
Slovakia	11 900	85 567	15 673	159	510	93	Clusters of cases
Armenia	10 913	117 337	39 597	204	1 763	595	Community transmission
Lithuania	10 668	33 387	12 264	63	266	98	Community transmission
Slovenia	9 851	54 122	26 033	122	500	241	Clusters of cases
Bosnia and Herzegovina	9 688	70 900	21 610	367	1 857	566	Community transmission
Azerbaijan	9 681	73 429	7 242	122	946	93	Clusters of cases
Belarus	7 587	112 870	11 945	35	1 039	110	Community transmission
North Macedonia	7 280	46 062	22 109	171	1 281	615	Community transmission
Republic of Moldova	7 097	88 772	22 006	115	2 006	497	Community transmission
Denmark	6 848	61 078	10 545	17	757	131	Community transmission
Kazakhstan	4 736	160 612	8 554	0	2 306	123	Clusters of cases
Norway	4 001	27 226	5 022	9	294	54	Community transmission
Montenegro	3 795	26 888	42 811	48	385	613	Clusters of cases
Kyrgyzstan	3 685	66 504	10 193	22	1 199	184	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Albania	3 528	27 233	9 463	55	612	213	Clusters of cases
Israel	3 496	322 371	37 244	45	2 716	314	Community transmission
Luxembourg	3 450	25 931	41 425	34	219	350	Community transmission
Ireland	2 671	67 526	13 675	33	1 978	401	Community transmission
Latvia	2 351	10 231	5 424	25	121	64	Clusters of cases
Finland	1 717	19 102	3 448	7	369	67	Community transmission
Uzbekistan	1 509	70 102	2 095	17	598	18	Clusters of cases
Estonia	1 215	7 148	5 388	7	80	60	Clusters of cases
Cyprus	1 180	7 051	5 840	12	39	32	Clusters of cases
Malta	878	7 917	17 930	23	95	215	Clusters of cases
Andorra	406	5 725	74 096	0	75	971	Community transmission
Tajikistan	279	11 573	1 213	2	85	9	Pending
Liechtenstein	205	970	25 435	1	4	105	Sporadic cases
San Marino	152	1 253	36 920	0	42	1 238	Community transmission
Iceland	123	5 186	15 197	7	25	73	Community transmission
Monaco	62	545	13 887	0	2	51	Sporadic cases
Holy See	0	26	32 138	0	0	<1	Sporadic cases
Territories[ii]							
Kosovo[1]	5 191	28 573	15 359	65	799	429	Community transmission
Gibraltar	106	876	26 001	1	1	30	Clusters of cases
Jersey	85	728	6 691	0	32	294	Community transmission
Isle of Man	6	363	4 269	1	25	294	No cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Guernsey	4	282	4 462	0	13	206	Community transmission
Faroe Islands	2	497	10 171	0	0	<1	Sporadic cases
Greenland	0	17	299	0	0	<1	No cases
South-East Asia	**373 786**	**10 015 731**	**4 955**	**4 534**	**153 860**	**76**	
India	306 825	8 814 579	6 387	3 514	129 635	94	Clusters of cases
Indonesia	29 171	463 007	1 693	608	15 148	55	Community transmission
Nepal	16 663	208 299	7 149	128	1 215	42	Clusters of cases
Bangladesh	11 732	430 496	2 614	124	6 173	37	Community transmission
Myanmar	6 386	66 734	1 227	138	1 534	28	Clusters of cases
Sri Lanka	2 772	16 191	756	19	53	2	Clusters of cases
Maldives	192	12 154	22 485	3	42	78	Clusters of cases
Thailand	29	3 866	55	0	60	1	Clusters of cases
Bhutan	16	375	486	0	0	<1	Sporadic cases
Timor-Leste	0	30	23	0	0	<1	Sporadic cases
Western Pacific	**32 973**	**798 170**	**406**	**435**	**16 377**	**8**	
Philippines	12 376	406 337	3 708	306	7 791	71	Community transmission
Japan	9 591	116 677	923	71	1 883	15	Clusters of cases
Malaysia	6 852	46 209	1 428	24	306	9	Clusters of cases
Republic of Korea	1 119	28 546	557	15	493	10	Clusters of cases
China	233	92 428	63	1	4 749	3	Clusters of cases
Singapore	62	58 116	9 934	0	28	5	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Australia	59	27 711	1 087	0	907	36	Clusters of cases
Mongolia	59	416	127	0	0	<1	Sporadic cases
Viet Nam	52	1 265	13	0	35	<1	Clusters of cases
New Zealand	19	1 645	341	0	25	5	Clusters of cases
Cambodia	7	302	18	0	0	<1	Sporadic cases
Papua New Guinea	3	600	67	0	7	1	Community transmission
Solomon Islands	3	16	23	0	0	<1	Sporadic cases
Fiji	1	35	39	0	2	2	Sporadic cases
Brunei Darussalam	0	148	338	0	3	7	No cases
Lao People's Democratic Republic	0	24	3	0	0	<1	Sporadic cases
Territories[ii]							
French Polynesia	1 711	11 706	41 672	14	53	189	Sporadic cases
Guam	820	5 854	34 685	4	93	551	Clusters of cases
Northern Mariana Islands (Commonwealth of The)	4	102	1 772	0	2	35	Pending
New Caledonia	1	30	105	0	0	<1	Sporadic cases
Vanuatu	1	1	3	0	0	<1	Sporadic cases
Marshall Islands	0	1	17	0	0	<1	Sporadic cases
Wallis and Futuna	0	1	89	0	0	<1	Sporadic cases
Grand total	**3 977 223**	**53 766 728**	**6 898**	**59 699**	**1 308 975**	**168**	

**See *data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases; efforts are underway to identify these for notation in the data table. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Global totals include 741 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps

represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas; classification is based on the highest category reported within a country/territory/area. Categories:

- No cases: with no confirmed cases;
- Sporadic cases: with one or more cases, imported or locally detected;
- Clusters of cases: experiencing cases, clustered in time, geographic location and/or by common exposures;
- Community transmission: experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel laboratory surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area;
- Pending: transmission classification has not been reported to WHO.

[ii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

Country, territory, or area-specific notes, updates and errata

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 8 November 2020, 10 am CEST

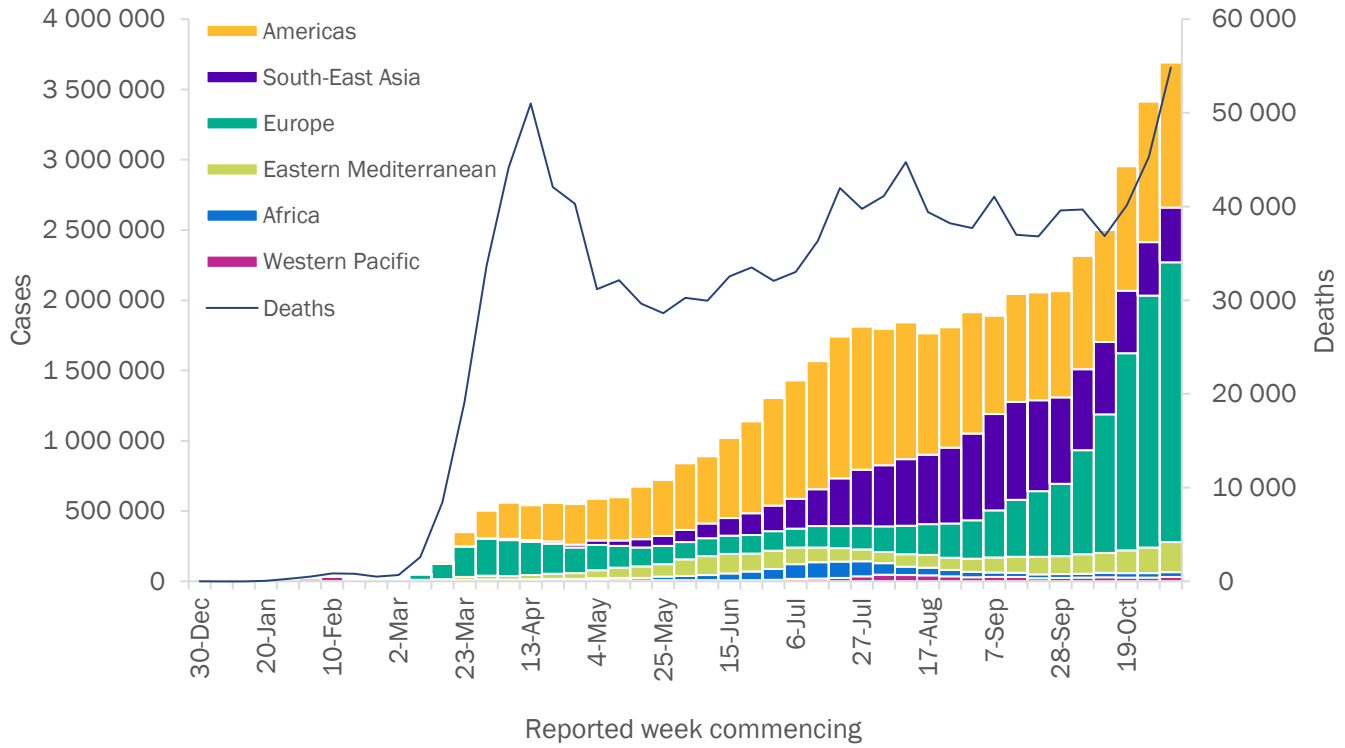
For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

In the past week, the global number of cases of COVID-19 has increased by 8% compared to the previous week, totalling more than 3.6 million new cases, while new deaths have increased by 21% to over 54 000. This brings the cumulative numbers to over 49.7 million reported cases and over 1.2 million deaths globally since the start of the pandemic. The European Region continues to account for the greatest proportion of new cases and deaths in the past 7 days, the Region reported over half (54%) of all new cases and nearly half (47%) of new deaths. Although it still accounts for only 2% of the global total number of cases and deaths, this week the Western Pacific Region showed the largest relative proportional increase in new cases (19%) compared to the previous week followed by the Eastern Mediterranean Region (18%) and the European region (11%). The three regions reporting the highest proportional increases in newly reported deaths in the past 7 days compared to the previous week are Europe (44%), Africa (30%) and the Eastern Mediterranean (23%). The Western Pacific Region was the only region to report a decrease in deaths (5%) this week compared to the previous week.

Figure 1: Number of COVID-19 cases reported weekly by WHO Region, and global deaths, as of 8 November 2020**



**See *data table and figure notes*.

The five countries reporting the highest number of cases in the past week were The United States of America, France, India, Italy and the United Kingdom.

Additional Region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western Pacific Region.

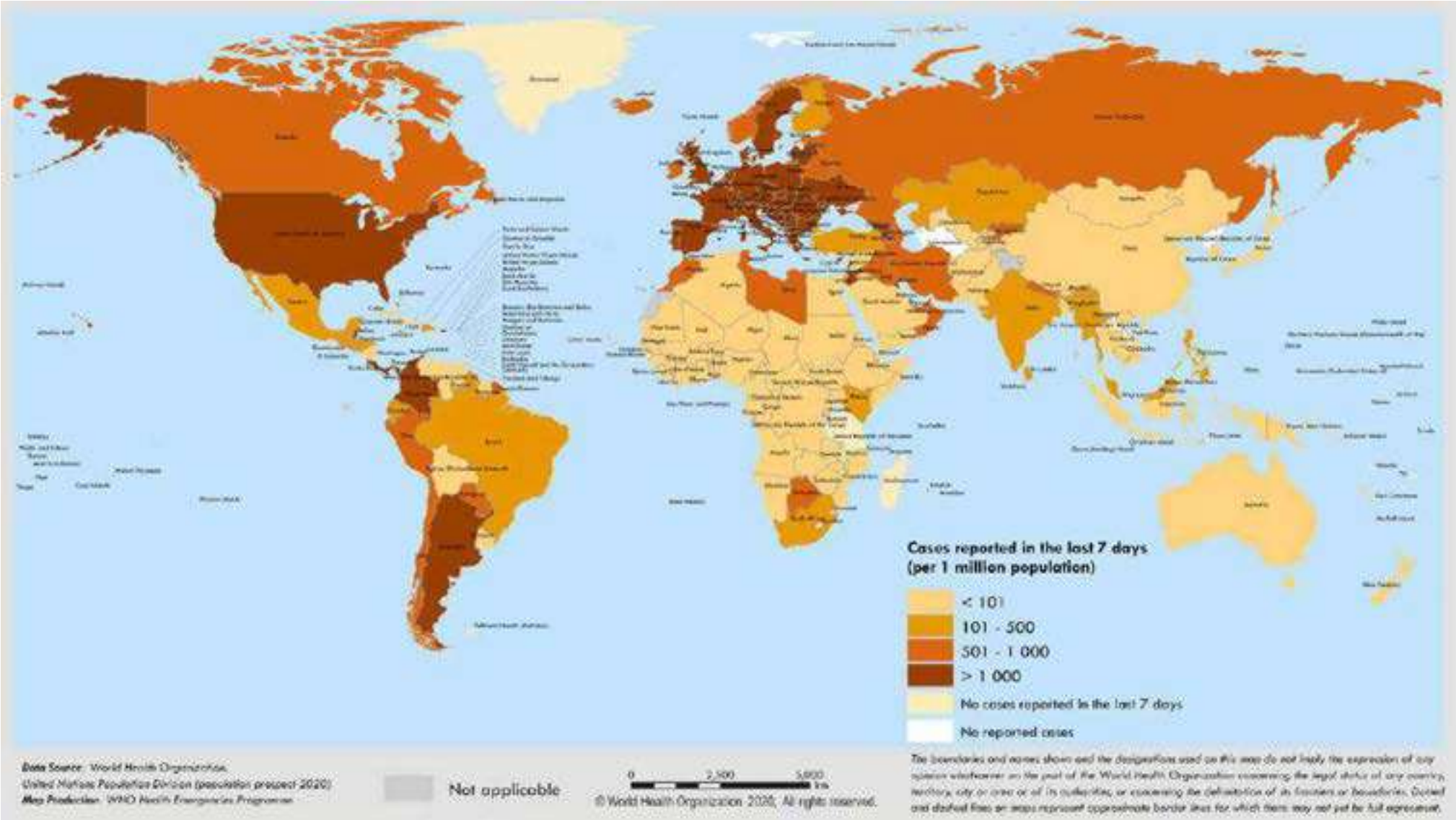
Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 8 November 2020**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days*	Cumulative deaths (%)
Europe	1 989 636 (54%)	11%	13 144 973 (26%)	25 531 (47%)	44%	311 542 (25%)
Americas	1 031 573 (28%)	3%	21 509 104 (43%)	17 289 (32%)	<1%	656 629 (53%)
South-East Asia	390 157 (11%)	2%	9 641 945 (19%)	5 132 (9%)	10%	149 326 (12%)
Eastern Mediterranean	214 072 (6%)	18%	3 307 411 (7%)	5 675 (10%)	23%	84 305 (7%)
Africa	33 687 (1%)	2%	1 357 945 (3%)	831 (2%)	30%	30 616 (2%)
Western Pacific	31 370 (1%)	19%	765 197 (2%)	377 (1%)	-5%	15 942 (1%)
Global	**3 690 495 (100%)**	**8%**	**49 727 316 (100%)**	**54 835 (100%)**	**21%**	**1 248 373 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*

***See data, table and figure notes*

Figure 2. COVID-19 cases per million population reported in the last seven days by countries, territories and areas, 2 October through 8 November 2020**



**See *data, table and figure notes*

Situation by WHO Region

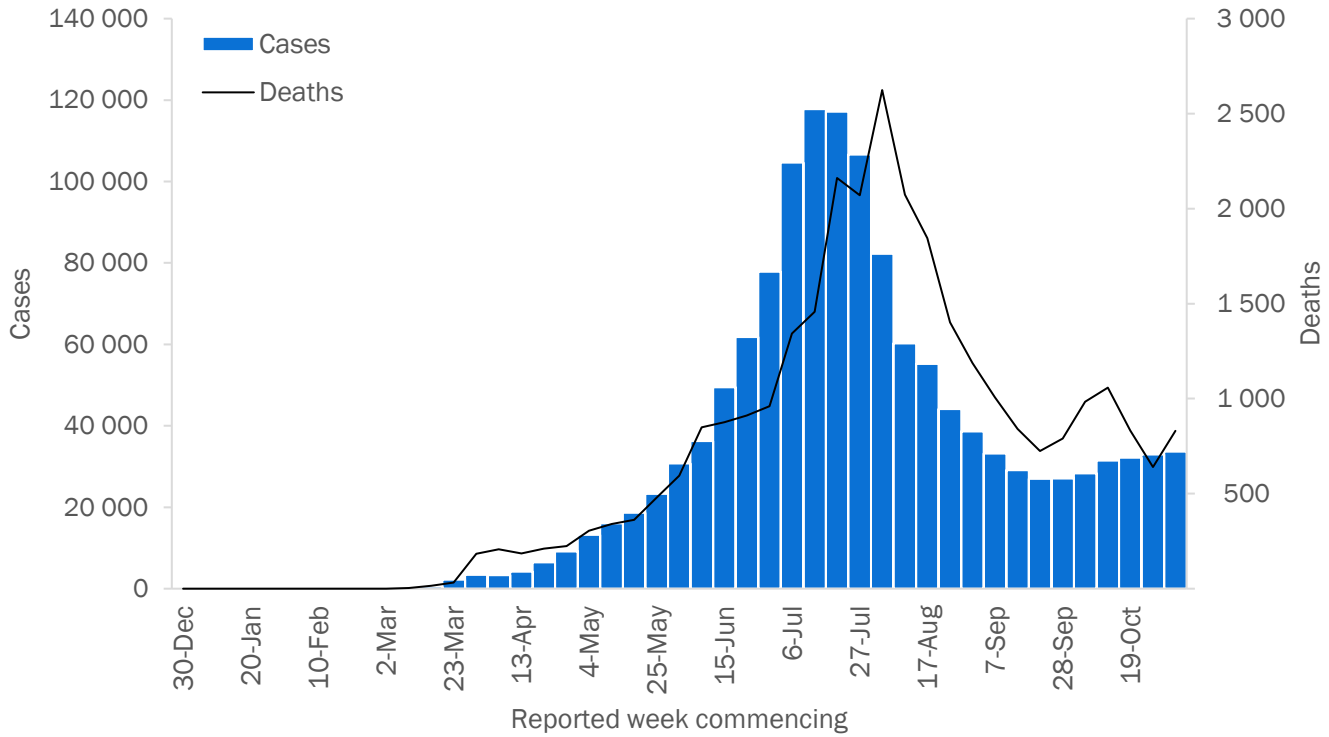
African Region

The number of new cases continues to increase very gradually in the African Region, which reported nearly 34 000 new cases and 831 new deaths in the past week. The number of new deaths reported in the last 7 days was 30% higher than it was in the previous week, driven largely by increases seen in South Africa, Kenya, and Uganda.

South Africa continues to report the highest number of new cases and deaths in the Region, accounting for nearly a third of new cases and over half of new deaths. The number of new cases reported by South Africa peaked mid-July, the height of winter, when there were more than 86 000 cases reported weekly. By September, South Africa was reporting fewer than 15 000 cases per week, and in the past week there were nearly 10 500 cases reported (176 new cases per million population). The number of deaths has also fallen from over 1 500 deaths per week at the end of July and beginning of August, to 513 deaths reported in the past week (although this is 55% higher than it was in the previous week). As of 31 October, five provinces reported over 80% of cases: Gauteng, KwaZulu-Natal, Western Cape, Eastern Cape, and Free State. The median age of COVID-19 cases in South Africa is 39 years, and 58% of cases are female. The reason for this higher prevalence among females could be due to females being more represented in certain occupations in education and health sectors where they may be at greater risk of infection, as well as differences in health seeking behavior.

Kenya is reporting the second- highest number of weekly new cases in the African Region. The number of new cases rose at the end of July, with 4 700 cases in the week beginning 27 July. The number of cases then has risen considerably in October, rising from 1 000 new cases in the first week of October (28 September-4 October) to 6 577 cases (122 new cases per million) in the past week.

Figure 3: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, as of 8 November 2020**



**See *data, table and figure notes*

Region of the Americas

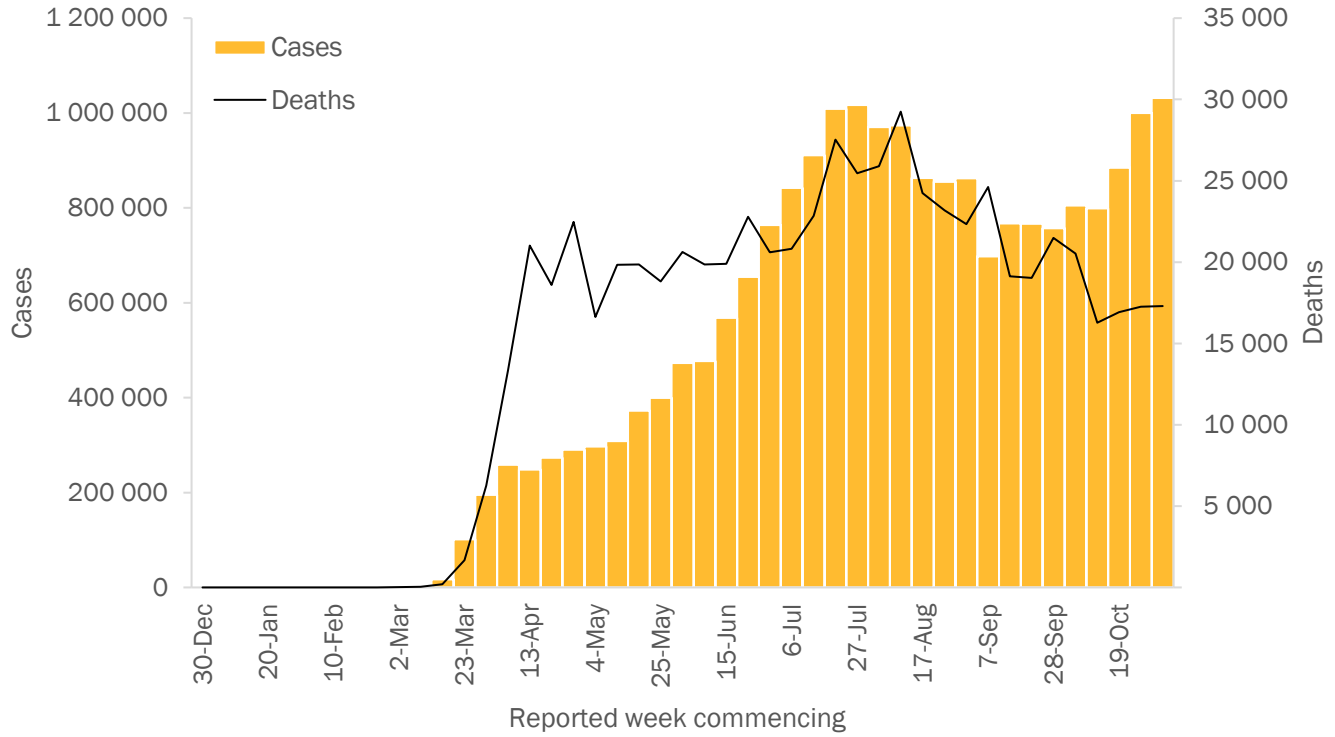
The Region of the Americas reported over 1 million new cases in the last week, a 3% increase as compared to the previous past week. The Region accounted for 32% of all deaths reported globally in the past week (n 17 289). The United States of America, Brazil, Argentina, Colombia and Mexico reported the highest number of new cases in the last 7 days.

Brazil has reported over 5.6 million cumulative cases and over 162 000 cumulative deaths since the beginning of the pandemic. The number of cases reported per week peaked in the week of July 27 at 319 119 cases and has gradually decreased since then, although the absolute number remains high. In the last week Brazil reported 114 523 new cases and 2 538 deaths which represent 30% and 16% decreases respectively compared to the previous week. The Southeast region of the country reported the highest cumulative numbers of cases and deaths with over 1.9 million cases and 73 261 deaths, followed by the Northeast region with over 1.4 million cases and 42 480 deaths, as of 4 November 2020. In Rio de Janeiro, businesses, beaches, private schools and nurseries have reopened with restrictions.

Martinique reported the highest surge in cases since the beginning of the pandemic in the week beginning 26 October, with 1 024 cases reported. In the past week, 397 new cases (1 058 new cases per 1 million population) were reported, which is a 61% decrease compared to the previous week. This decrease was the first downward trend in weekly cases since the week beginning 21 September. On 30 October, movement and travel restrictions were instated to limit contact and travel in Martinique. Schools, excluding higher education institutions, remain open with reinforced public health measures.

In Belize, the number of new cases reported surpassed 500 for the first time since the beginning of the outbreak, with 554 new cases and nine new deaths reported in the past week bringing the total deaths in the country to 67. As of 8 November, approximately 45% of confirmed cases were female, and the highest number of cases were reported from Orange Walk district followed by Belize district.

Figure 4: Number of COVID-19 cases and deaths reported weekly by the WHO Region of the Americas, as of 8 November 2020**



**See *data, table and figure notes*

Eastern Mediterranean Region

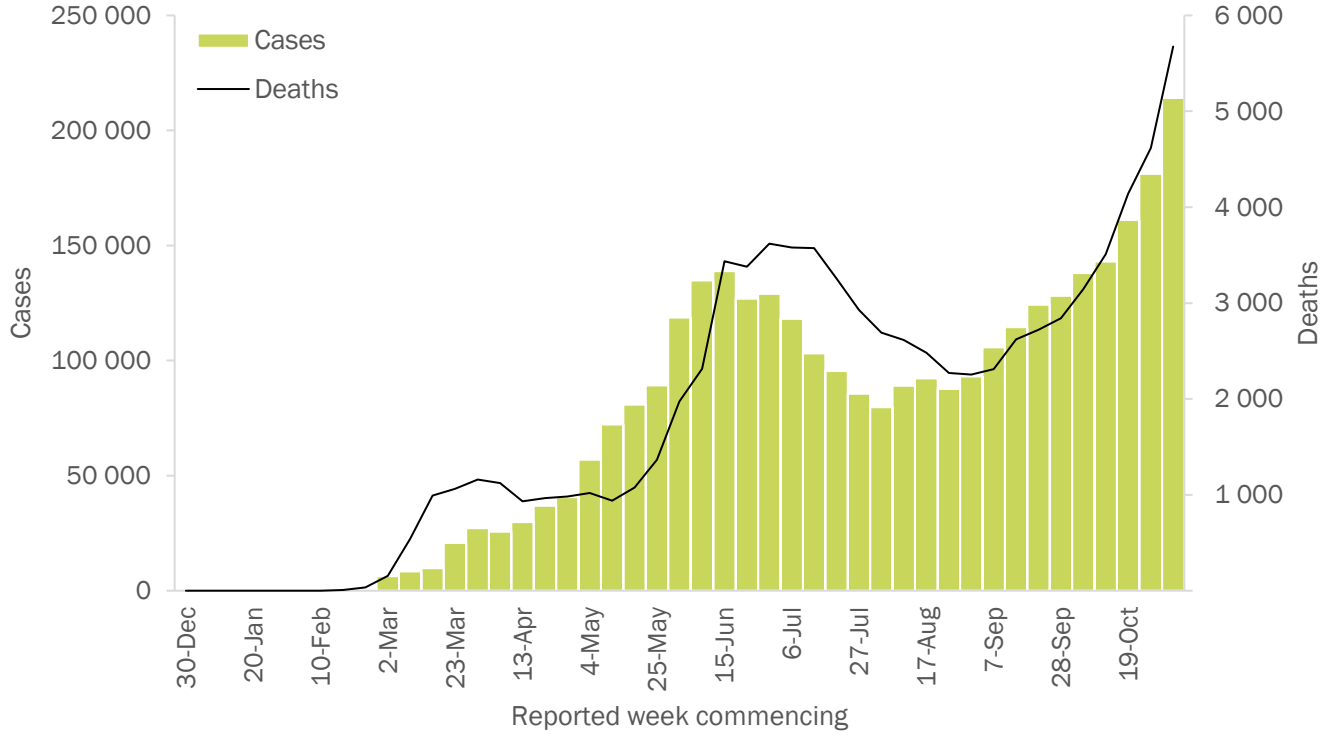
In the Eastern Mediterranean Region, the weekly number of new cases increased by 18% compared to the previous week, bringing the cumulative number of cases to over 3.3 million. In the past week, the number of new deaths in the region increased by 23%, bringing the cumulative number of deaths to over 84 000. The Islamic Republic of Iran, Morocco, Jordan, Iraq and Lebanon reported the highest number of new cases in the last seven days.

Iraq reported 23 389 new cases in the past week (581 new cases per 1 million population). The weekly number of new cases has remained over 23 000 since the week beginning 10 August. The number of deaths per week peaked in the week of 29 June and has gradually decreased to 373 per week (9.3 deaths per 1 million population) in the current reporting period.

Lebanon has recorded 11 869 new cases (1 739 new cases per 1 million population) and 76 new deaths (11.1 new deaths per 1 million population) in the past week. There has been an upward trend of cases and deaths in the past eight weeks in Lebanon.

In Tunisia, 8 428 new cases were reported in the past week, which was just over a 10% decrease compared to the previous week. There were 500 new deaths reported in the past week, which was an 8% increase compared to the previous week. On 29 October, Tunisian authorities stated that classes in elementary and middle schools will be suspended and premises disinfected.

Figure 5: Number of COVID-19 cases and deaths reported weekly by the WHO Eastern Mediterranean Region, as of 8 November 2020**



**See *data, table and figure notes*

European Region

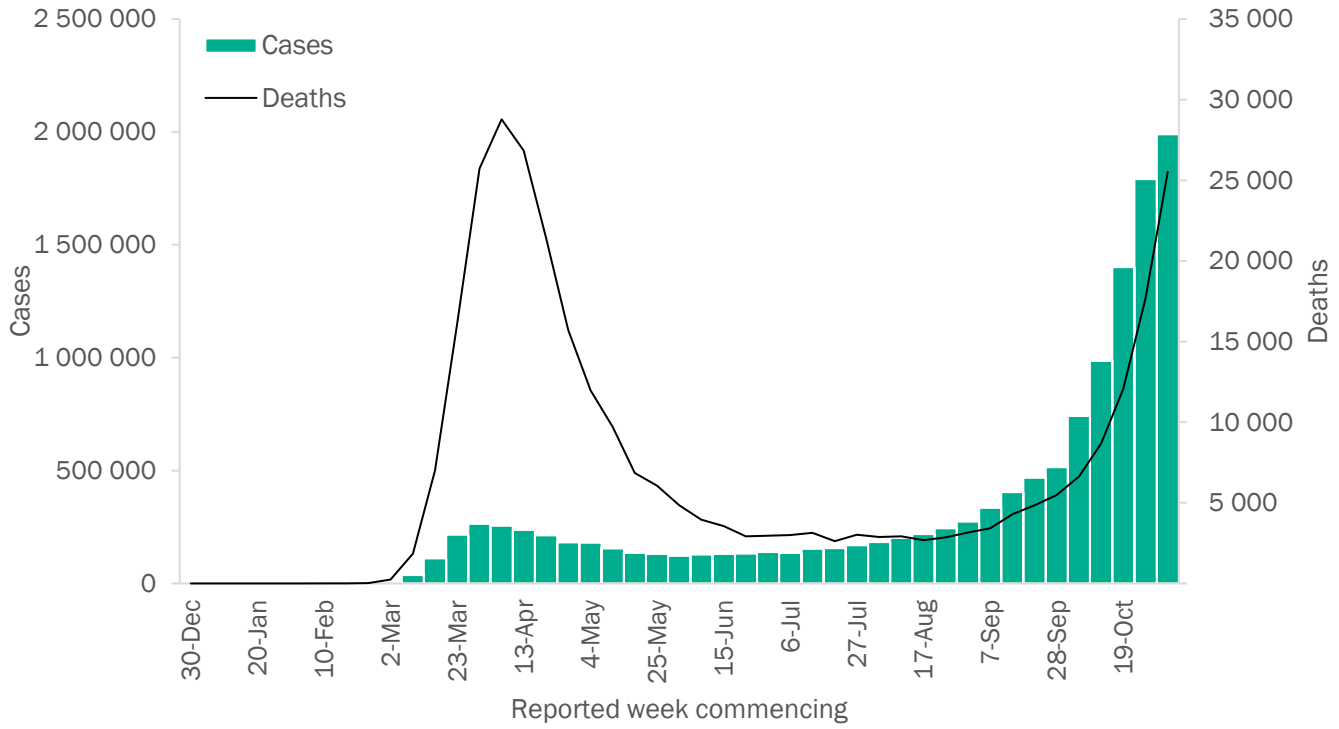
The number of new cases and deaths reported in the European Region continues to increase exponentially with 11% and 44% more cases and deaths respectively in the past week compared to the previous week, a record of weekly number of cases since the beginning of the epidemic. Moreover, test positivity rates have been steadily increasing since August and have shown a marked escalation in recent weeks.

This week, the region recorded 54% of all new cases and 47% of all new deaths reported globally bringing cumulative counts in the region to over 13 million cases and 311 000 deaths. Deaths have increased markedly in the past 7 days with France, Spain and Italy reporting the highest counts of new deaths while Czechia, Belgium and Slovenia reported the highest mortality rates per capita. Most of the Member States in the European Region self-characterise their current transmission pattern as either community transmission (55%, n 34) or clusters of cases (32%, n 20).

Over the past three weeks, Denmark has registered an increase in weekly incidence of COVID-19 cases reaching almost 1 400 new cases per 1 million population (14% increase on the previous week). Since June 2020, 214 human cases of COVID-19 have been identified in Denmark with SARS-CoV-2 variants associated with farmed minks, including 12 cases with a unique variant, reported on 5 November. In the past few days, the Danish Prime Minister announced a planned cull of all mink in the country and imposed stricter public health and social measures in the area where the variants associated with farmed mink have been detected in humans.

This week, Spain became the country with the sixth highest number of COVID-19 cases globally, recording over 2 000 new cases per 1 million population and bringing cumulative counts in the country to an excess of 1.3 million cases and almost 40 000 deaths. In the last weeks, the number of COVID-19 patients admitted to hospital has increased steadily and as of 6 November, 6 of the 17 Autonomous Communities in Spain have reached over 40% Intensive Care Unit (ICU) occupancy. Over the last week, a majority of outbreaks affecting 10 people or more in the country continue to be located in care homes for the elderly.

Figure 6: Number of COVID-19 cases and deaths reported weekly by the WHO European Region, as of 8 November 2020**



**See *data, table and figure notes*

South-East Asia Region

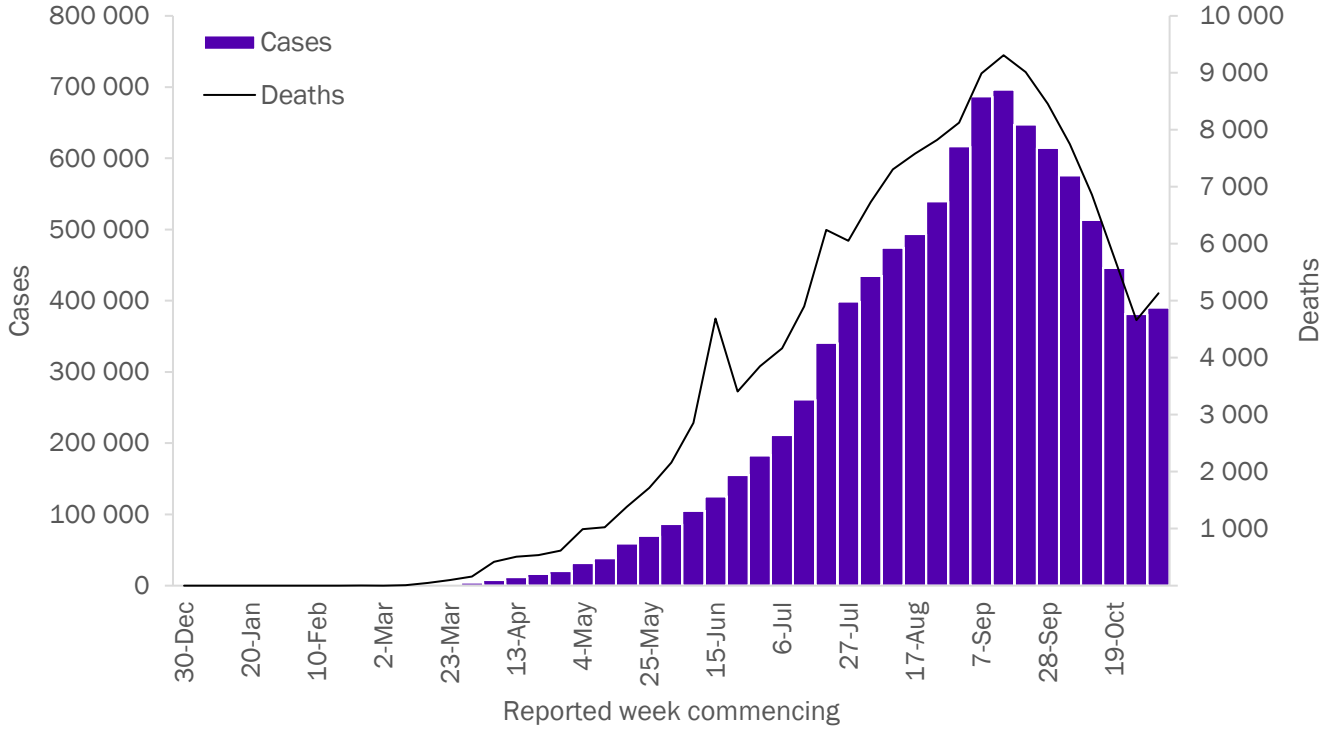
The South-East Asia Region had observed a continued declining trend in new cases and deaths over the past six weeks. However, in the past 7 days, almost 400 000 new cases (a weekly increase of 2%) and over 5 000 deaths (a weekly increase of 10%) were reported in the region. The countries reporting the highest numbers of new cases in the South-East Asia region continue to be India, Indonesia and Nepal, while the highest mortality rates were recorded in Nepal and Myanmar.

The only country in the region this week to report a substantial increase in new deaths has been Nepal. In the past week, Nepal reported its highest weekly increase in the number of new deaths with 5 deaths per 1 million population (58% increase compared to the previous week). Moreover, in the past 7 days, Nepal had the highest incidence of new cases per 1 million population (717 new cases per 1 million population) in the region. On 5 November, Nepal reported over 400 cases in ICUs across the country. In the past week and for the first time in seven months, the country reopened to those intending to climb or trek mountain trails.

While India is still reporting the highest number of new cases and deaths in the region, trends in these numbers for the country have stabilized in the past week. Even though the country has reached a total of over 9.5 million cases and almost 127 000 deaths cumulatively, in the past week, India recorded 230 new cases and 3 deaths per 1 million population. The most affected regions in the country are Maharashtra, Karnataka and Andra Pradesh while the regions with the highest number of active cases as of 8 November are Maharashtra, Kerala and Delhi.

A stablisation in the incidence of cases and deaths has also been observed in Bangladesh in the past few weeks recording less than 70 new cases and less than 1 death per 1 million population in the past week (11 000 cases and 126 new deaths). In Cox's Bazar District, which hosts one of the world's largest refugee settlements, the incidence trends have remained relatively low since early July with a cumulative total of 5 255 COVID-19 cases reported as of 4 November 2020.

Figure 7: Number of COVID-19 cases and deaths reported weekly by the WHO South-East Asia Region, as of 8 November 2020**



***See data, table and figure notes*

Western Pacific Region

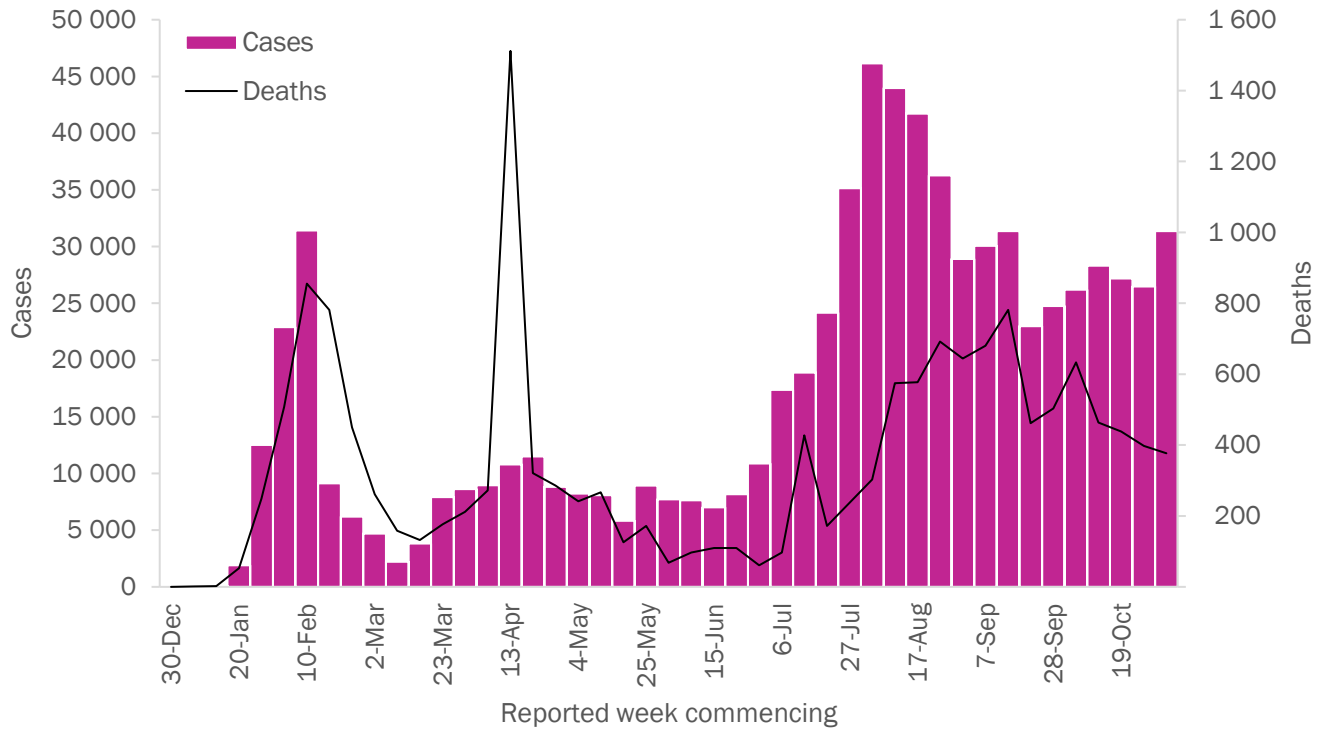
The number of new cases reported in the last week in the Western Pacific (31 370) rose by the highest percentage globally, with a 19% increase compared to the previous week. Despite this increase, the number of new cases reported represents 1% of new cases reported globally last week. The number of new deaths was 5% lower than the previous week. The Philippines, Malaysia, Japan and French Polynesia continue to report the highest numbers of new cases in the Region: the Philippines reported 13 232 new cases (121 new cases per million); Malaysia reported 7 809 new cases (241 new cases per million); and Japan reported 5 940 new cases (47 new cases per million).

The number of new cases in Japan peaked in the week of 3 August with over 10 000 cases. The number of new cases then dropped until the week of 21 September when just over 3 000 cases were reported. However, it has since been rising, and there were 5 940 new cases reported in the past week (a 29% increase from the previous week). Despite this increase last week, Japan reported 47 new cases per 1 million population, a relatively low number. Similarly, the number of new deaths in Japan remains very low and decreased by 16% compared with the previous week to 46 deaths, with only 0.4 deaths per million population.

COVID-19 cases started rising in French Polynesia from only a few cases at the beginning of August to 2 733 new cases reported last week. The number of new cases rose by 95% from the previous week.

Cases in the Republic of Korea have gradually increased in October, from around 500 new cases per week at the start of the month to 799 new cases reported in the week of 26 October. Last week the Republic of Korea reported 792 new cases which is a 1% decrease in comparison to the previous week.

Figure 8: Number of COVID-19 cases and deaths reported weekly by the WHO Western Pacific Region, data as of 8 November 2020**



**See *data, table and figure notes*

Key weekly updates

- As health leaders gather virtually for the resumed 73rd session of the World Health Assembly, WHO has three messages to share:
  1. We can beat COVID-19 with science, solutions and solidarity: many countries and cities have successfully prevented or controlled transmission with a comprehensive, evidence-based approach
  2. We must not backslide on our critical health goals: health is the foundation of social, economic and political stability
  3. We must prepare for the next pandemic now: countries with robust health emergency preparedness infrastructure have been able to act quickly to contain and control the spread of the SARS-CoV-2 virus

- WHO has published the following documents:
  - An update to the guidance on critical preparedness, readiness and response actions, including further subclassifications of transmission scenarios within the community transmission category; and updated guidance on contact tracing, laboratory testing, infection prevention and control, public health and social measures and health services.
  - An update to the guidance on considerations for implementing and adjusting public health and social measures (PHSM) in the context of COVID-19. PHSM are being implemented and adjused across the globe to limit transmission and reduce mortality and morbidity from COVID-19.
  - An update to guidance on health facility assessments, to inform the prioritization of actions and decision-making at health facility, subnational and national levels.
  - The Terms of References for a WHO-convened Global Study of the Origins of SARS-CoV-2. This outlines two phases of studies: Short term studies (Phase 1) will be conducted to better understand how the virus might have started circulating in Wuhan, China. Building on the findings of these short-term studies, and the scientific literature, longer term studies will be developed (Phase 2).
  - A policy brief on readiness for influenza during the COVID-19 pandemic, which provides a concise summary of information and considerations for key issues policymakers may face. The document also includes links to relevant guidance and resources for monitoring the situation, preventing seasonal influenza, reducing severe complications and mortality, protecting specific populations, and communicating to and engaging with the public.

- UNICEF and the World Health Organization issued an urgent call to action to avert major measles and polio epidemics as COVID-19 continues to disrupt immunization services worldwide, leaving millions of vulnerable children at heightened risk of preventable childhood diseases. WHO estimates that $655 million US dollars is needed to address dangerous immunization gaps in children in non-Gavi eligible countries.
- WHO and the International Coalition of Medicines Regulatory Authorities have released a joint statement on the need for improved global regulatory alignment on COVID-19 medicines and vaccines. Therapeutics and vaccines against COVID-19 can only be rapidly approved if applications are supported by robust and sound scientific evidence that allows medicine regulators to conclude on a positive benefit-risk balance for these products.

Table 2. Number of COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, as of 8 November 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Africa	**33 687**	**1 357 945**	**1 210**	**831**	**30 616**	**27**	
South Africa	10 454	735 906	12 408	513	19 789	334	Community transmission
Kenya	6 577	61 769	1 149	107	1 103	21	Community transmission
Ethiopia	3 035	99 204	863	49	1 518	13	Community transmission
Algeria	2 518	60 169	1 372	55	2 011	46	Community transmission
Uganda	1 571	14 066	308	20	131	3	Community transmission
Angola	1 530	12 335	375	19	303	9	Community transmission
Botswana	1 193	7 835	3 332	3	27	11	Community transmission
Nigeria	937	63 790	309	12	1 156	6	Community transmission
Ghana	733	48 788	1 570	0	320	10	Community transmission
Mozambique	708	13 577	434	7	99	3	Community transmission
Cameroon	549	22 342	842	3	429	16	Community transmission
Cabo Verde	498	9 291	16 711	5	100	180	Community transmission
Zambia	476	16 908	920	0	349	19	Community transmission
Guinea	328	12 400	944	1	73	6	Community transmission
Namibia	235	13 170	5 183	1	134	53	Community transmission
Democratic Republic of The Congo	211	11 516	129	8	315	4	Community transmission
Togo	146	2 442	295	2	57	7	Community transmission
Mali	122	3 676	182	1	137	7	Community transmission
Côte D'Ivoire	109	20 801	789	2	126	5	Community transmission
Zimbabwe	104	8 471	570	7	250	17	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Benin	102	2 745	226	2	43	4	Community transmission
Congo	89	5 379	975	0	92	17	Community transmission
Rwanda	76	5 213	402	1	36	3	Clusters of cases
Eswatini	72	5 989	5 162	0	117	101	Community transmission
Burkina Faso	65	2 565	123	0	67	3	Community transmission
Mauritania	62	7 725	1 661	0	163	35	Community transmission
Chad	60	1 543	94	1	99	6	Community transmission
Gabon	54	9 022	4 053	0	55	25	Community transmission
Senegal	52	15 668	936	2	326	19	Community transmission
Eritrea	28	491	138	0	0	<1	Sporadic cases
Comoros	27	557	641	0	7	8	Community transmission
Burundi	25	614	52	0	1	<1	Community transmission
Niger	22	1 242	51	0	69	3	Community transmission
Malawi	18	5 948	311	0	184	10	Community transmission
Sao Tome and Principe	17	962	4 390	0	16	73	Community transmission
South Sudan	17	2 943	263	0	59	5	Community transmission
Lesotho	16	1 963	916	1	44	21	Community transmission
Liberia	16	1 442	285	0	82	16	Community transmission
Central African Republic	13	4 879	1 010	0	62	13	Community transmission
Gambia	11	3 681	1 523	1	120	50	Community transmission
Mauritius	11	452	355	0	10	8	Sporadic cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Sierra Leone	7	2 373	297	0	74	9	Community transmission
Equatorial Guinea	4	5 092	3 629	2	85	61	Community transmission
Guinea-Bissau	0	2 413	1 226	0	41	21	Community transmission
Madagascar	0	17 111	618	0	244	9	Community transmission
Seychelles	0	154	1 566	0	0	<1	Sporadic cases
United Republic of Tanzania	0	509	9	0	21	<1	Community transmission
Territories[ii]							
Réunion	605	6 264	6 996	5	27	30	Clusters of cases
Mayotte	184	4 550	16 678	1	45	165	Clusters of cases
Americas	**1 031 573**	**21 509 104**	**21 030**	**17 289**	**656 629**	**642**	
United States of America	684 493	9 636 579	29 113	6 315	234 500	708	Community transmission
Brazil	114 523	5 631 181	26 492	2 538	162 015	762	Community transmission
Argentina	71 635	1 228 814	27 189	2 344	33 136	733	Community transmission
Colombia	64 582	1 127 733	22 163	1 270	32 405	637	Community transmission
Mexico	36 317	955 128	7 408	3 034	94 323	732	Community transmission
Canada	23 810	255 809	6 778	326	10 436	277	Community transmission
Peru	17 323	917 503	27 827	372	34 783	1 055	Community transmission
Chile	9 721	519 977	27 201	292	14 499	758	Community transmission
Costa Rica	6 551	115 417	22 657	82	1 453	285	Community transmission
Ecuador	5 294	173 486	9 833	145	12 815	726	Community transmission
Panama	4 893	137 760	31 928	82	2 770	642	Community transmission
Paraguay	3 885	66 481	9 321	85	1 472	206	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Guatemala	3 111	111 050	6 199	82	3 811	213	Community transmission
Venezuela (Bolivarian Republic of)	2 716	94 305	3 316	28	821	29	Community transmission
Honduras	2 688	99 576	10 054	72	2 741	277	Community transmission
Dominican Republic	2 627	129 645	11 951	18	2 263	209	Community transmission
El Salvador	1 700	35 145	5 418	31	1 006	155	Community transmission
Bolivia (Plurinational State of)	712	142 343	12 194	66	8 781	752	Community transmission
Belize	554	4 016	10 100	9	67	168	Community transmission
Cuba	380	7 267	642	2	130	11	Clusters of cases
Jamaica	378	9 472	3 199	12	218	74	Community transmission
Guyana	314	4 457	5 667	9	133	169	Clusters of cases
Uruguay	288	3 370	970	3	61	18	Clusters of cases
Bahamas	272	6 916	17 587	9	151	384	Clusters of cases
Trinidad and Tobago	130	5 798	4 143	4	111	79	Community transmission
Haiti	73	9 127	800	0	232	20	Community transmission
Nicaragua	56	4 480	676	1	157	24	Community transmission
Saint Lucia	32	110	599	0	0	<1	Sporadic cases
Suriname	26	5 227	8 910	1	112	191	Community transmission
Dominica	13	63	875	0	0	<1	Clusters of cases
Barbados	6	242	842	0	7	24	Clusters of cases
Antigua and Barbuda	3	130	1 327	0	3	31	Sporadic cases
Grenada	2	30	267	0	0	<1	No cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Saint Vincent and the Grenadines	2	76	685	0	0	<1	Sporadic cases
Saint Kitts and Nevis	0	19	357	0	0	<1	No cases
Territories[ii]							
Martinique	397	4 215	11 232	2	33	88	Community transmission
French Guiana	168	10 704	35 837	0	70	234	Community transmission
Guadeloupe	161	7 903	19 751	7	133	332	Community transmission
Aruba	92	4 564	42 748	2	39	365	Community transmission
Curaçao	86	1 030	6 277	1	2	12	Community transmission
Sint Maarten	65	870	20 288	0	22	513	Community transmission
United States Virgin Islands	14	1 390	13 311	2	23	220	Community transmission
Saint Martin	13	604	15 624	3	12	310	Community transmission
Bermuda	10	209	3 356	0	9	145	Sporadic cases
Cayman Islands	10	250	3 804	0	1	15	Sporadic cases
Turks and Caicos Islands	4	707	18 260	0	6	155	Clusters of cases
Saint Pierre and Miquelon	2	14	2 416	0	0	<1	Sporadic cases
Bonaire	1	135	7 728	0	3	172	Sporadic cases
Saint Barthélemy	1	90	9 105	0	0	<1	Sporadic cases
Anguilla	0	3	200	0	0	<1	No cases
British Virgin Islands	0	72	2 381	0	1	33	Clusters of cases
Falkland Islands (Malvinas)	0	13	3 732	0	0	<1	No cases
Montserrat	0	13	2 601	0	1	200	No cases
Saba	0	5	3 342	0	0	<1	No cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Sint Eustatius	0	14	5 636	0	0	<1	Sporadic cases
Puerto Rico	- 28 561	37 567	13 131	40	862	301	Community transmission
Eastern Mediterranean	**214 072**	**3 307 411**	**4 526**	**5 675**	**84 305**	**115**	
Iran (Islamic Republic of)	60 478	673 250	8 016	2 968	37 832	450	Community transmission
Morocco	33 101	252 185	6 832	502	4 197	114	Clusters of cases
Jordan	32 195	104 802	10 272	352	1 181	116	Community transmission
Iraq	23 389	496 019	12 332	373	11 283	281	Community transmission
Lebanon	11 869	93 097	13 640	76	713	104	Community transmission
Pakistan	8 760	341 753	1 547	137	6 943	31	Clusters of cases
Tunisia	8 428	69 543	5 884	500	1 848	156	Community transmission
United Arab Emirates	8 403	141 032	14 259	19	514	52	Community transmission
Libya	5 944	67 039	9 756	63	920	134	Community transmission
Kuwait	5 279	131 205	30 723	29	808	189	Community transmission
Saudi Arabia	2 947	350 229	10 060	123	5 525	159	Sporadic cases
Oman	2 733	117 167	22 944	78	1 286	252	Community transmission
Bahrain	1 619	83 264	48 933	8	329	193	Clusters of cases
Qatar	1 457	134 013	46 515	0	232	81	Community transmission
Egypt	1 407	108 962	1 065	89	6 355	62	Clusters of cases
Afghanistan	608	42 033	1 080	20	1 556	40	Clusters of cases
Syrian Arab Republic	419	6 147	351	25	313	18	Community transmission
Sudan	351	14 155	323	279	1 116	25	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Somalia	288	4 229	266	3	107	7	Sporadic cases
Djibouti	44	5 605	5 673	0	61	62	Clusters of cases
Yemen	3	2 070	69	2	602	20	Sporadic cases
Territories[ii]							
Occupied Palestinian territory	4 350	69 612	13 646	29	584	114	Community transmission
Europe	**1 989 636**	**13 144 973**	**14 083**	**25 531**	**311 542**	**334**	
France	382 553	1 714 361	26 264	3 376	39 849	610	Community transmission
Italy	223 060	902 490	14 927	2 445	41 063	679	Clusters of cases
The United Kingdom	159 781	1 171 445	17 256	2 333	48 888	720	Community transmission
Poland	158 909	521 640	13 783	2 005	7 636	202	Community transmission
Russian Federation	137 553	1 774 334	12 158	2 302	30 537	209	Clusters of cases
Germany	125 575	658 505	7 860	808	11 289	135	Clusters of cases
Spain	95 732	1 328 832	28 421	2 584	38 833	831	Community transmission
Czechia	76 118	411 220	38 400	1 430	4 681	437	Community transmission
Ukraine	64 891	460 331	10 526	1 144	8 450	193	Community transmission
Romania	55 660	296 999	15 438	825	7 793	405	Community transmission
Netherlands	53 150	403 914	23 573	565	7 950	464	Community transmission
Belgium	52 215	500 685	43 201	1 194	13 029	1 124	Community transmission
Switzerland	50 152	211 160	24 399	338	2 404	278	Community transmission
Austria	39 918	146 502	16 266	221	1 318	146	Community transmission
Portugal	32 261	173 540	17 019	341	2 848	279	Clusters of cases
Hungary	30 417	109 616	11 347	619	2 438	252	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Bulgaria	21 641	74 485	10 720	353	1 632	235	Clusters of cases
Georgia	17 026	57 753	14 477	140	475	119	Community transmission
Turkey	16 372	391 739	4 645	551	10 803	128	Community transmission
Slovakia	16 003	73 667	13 493	132	351	64	Clusters of cases
Greece	15 558	54 809	5 258	123	749	72	Clusters of cases
Croatia	15 388	64 704	15 761	206	752	183	Community transmission
Sweden	14 429	146 461	14 502	26	6 022	596	Community transmission
Armenia	14 170	106 424	35 915	196	1 559	526	Community transmission
Serbia	13 681	60 635	8 707	60	880	126	Community transmission
Bosnia and Herzegovina	11 122	61 212	18 658	256	1 490	454	Community transmission
Slovenia	9 964	44 271	21 295	147	378	182	Clusters of cases
Azerbaijan	8 479	63 748	6 287	94	824	81	Clusters of cases
Lithuania	7 895	22 719	8 346	38	203	75	Community transmission
Denmark	7 879	54 230	9 363	19	740	128	Community transmission
North Macedonia	7 205	38 782	18 615	116	1 110	533	Community transmission
Belarus	5 824	105 283	11 142	19	1 004	106	Community transmission
Republic of Moldova	5 635	81 675	20 247	106	1 891	469	Community transmission
Kazakhstan	5 013	155 876	8 302	47	2 306	123	Clusters of cases
Luxembourg	4 548	22 481	35 913	28	185	296	Community transmission
Norway	3 662	23 225	4 284	3	285	53	Clusters of cases
Israel	3 607	318 077	36 748	84	2 641	305	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Ireland	3 399	64 855	13 134	32	1 945	394	Community transmission
Montenegro	3 378	23 070	36 732	24	337	537	Clusters of cases
Kyrgyzstan	3 376	62 819	9 629	27	1 177	180	Clusters of cases
Albania	2 830	23 705	8 237	48	557	194	Clusters of cases
Latvia	1 986	7 880	4 178	25	96	51	Clusters of cases
Uzbekistan	1 538	68 593	2 049	13	581	17	Clusters of cases
Cyprus	1 505	5 871	4 863	2	28	23	Clusters of cases
Finland	1 272	17 385	3 138	4	362	65	Community transmission
Estonia	1 028	5 933	4 473	0	73	55	Clusters of cases
Malta	997	7 039	15 942	12	74	168	Clusters of cases
Andorra	563	5 319	68 841	0	75	971	Community transmission
Tajikistan	277	11 294	1 184	1	83	9	Pending
Liechtenstein	232	765	20 059	0	3	79	Sporadic cases
Iceland	198	5 063	14 837	6	18	53	Community transmission
San Marino	143	1 101	32 442	0	42	1 238	Community transmission
Monaco	124	483	12 308	0	2	51	Sporadic cases
Holy See	0	26	32 138	0	0	<1	Sporadic cases
Territories[ii]							
Kosovo[1]	3 583	23 382	12 568	63	734	395	Community transmission
Gibraltar	77	770	22 855	0	0	<1	Clusters of cases
Jersey	69	643	5 910	0	32	294	Community transmission
Guernsey	11	278	4 399	0	13	206	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Isle of Man	4	357	4 198	0	24	282	No cases
Faroe Islands	0	495	10 130	0	0	<1	Sporadic cases
Greenland	0	17	299	0	0	<1	No cases
South-East Asia	**390 157**	**9 641 945**	**4 770**	**5 132**	**149 326**	**74**	
India	323 672	8 507 754	6 165	4 010	126 121	91	Clusters of cases
Indonesia	23 748	433 836	1 586	671	14 540	53	Community transmission
Nepal	20 893	191 636	6 577	150	1 087	37	Clusters of cases
Bangladesh	11 080	418 764	2 543	126	6 049	37	Community transmission
Myanmar	7 642	60 348	1 109	159	1 396	26	Clusters of cases
Sri Lanka	2 756	13 419	627	14	34	2	Clusters of cases
Maldives	303	11 962	22 130	1	39	72	Clusters of cases
Thailand	53	3 837	55	1	60	1	Clusters of cases
Bhutan	10	359	465	0	0	<1	Sporadic cases
Timor-Leste	0	30	23	0	0	<1	Sporadic cases
Western Pacific	**31 370**	**765 197**	**390**	**377**	**15 942**	**8**	
Philippines	13 232	393 961	3 595	264	7 485	68	Community transmission
Malaysia	7 809	39 357	1 216	33	282	9	Clusters of cases
Japan	5 940	107 086	847	46	1 812	14	Clusters of cases
Republic of Korea	792	27 427	535	12	478	9	Clusters of cases
China	274	92 195	63	2	4 748	3	Clusters of cases
Australia	62	27 652	1 084	0	907	36	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Singapore	39	58 054	9 923	0	28	5	Clusters of cases
Viet Nam	33	1 213	12	0	35	<1	Clusters of cases
New Zealand	23	1 626	337	0	25	5	Clusters of cases
Mongolia	11	357	109	0	0	<1	Sporadic cases
Papua New Guinea	8	597	67	0	7	1	Community transmission
Solomon Islands	5	13	19	0	0	<1	Sporadic cases
Cambodia	4	295	18	0	0	<1	Sporadic cases
Brunei Darussalam	0	148	338	0	3	7	No cases
Fiji	0	34	38	0	2	2	Sporadic cases
Lao People'S Democratic Republic	0	24	3	0	0	<1	Sporadic cases
Territories[ii]							
French Polynesia	2 733	9 995	35 581	10	39	139	Sporadic cases
Guam	402	5 034	29 827	10	89	527	Clusters of cases
Northern Mariana Islands (Commonwealth of The)	2	98	1 703	0	2	35	Pending
New Caledonia	1	29	102	0	0	<1	Sporadic cases
Marshall Islands	0	1	17	0	0	<1	Sporadic cases
Wallis and Futuna	0	1	89	0	0	<1	Sporadic cases
Global	**3 690 495**	**49 727 316**	**6 379**	**54 835**	**1 248 373**	**160**	

**See *data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region

- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases; efforts are underway to identify these for notation in the data table. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Global totals include 741 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas; classification is based on the highest category reported within a country/territory/area. Categories:

- No cases: with no confirmed cases;
- Sporadic cases: with one or more cases, imported or locally detected;
- Clusters of cases: experiencing cases, clustered in time, geographic location and/or by common exposures;
- Community transmission: experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel laboratory surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area;
- Pending: transmission classification has not been reported to WHO.

[ii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

Country, territory, or area-specific notes, updates and errata

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 1 November 2020, 10 am CEST

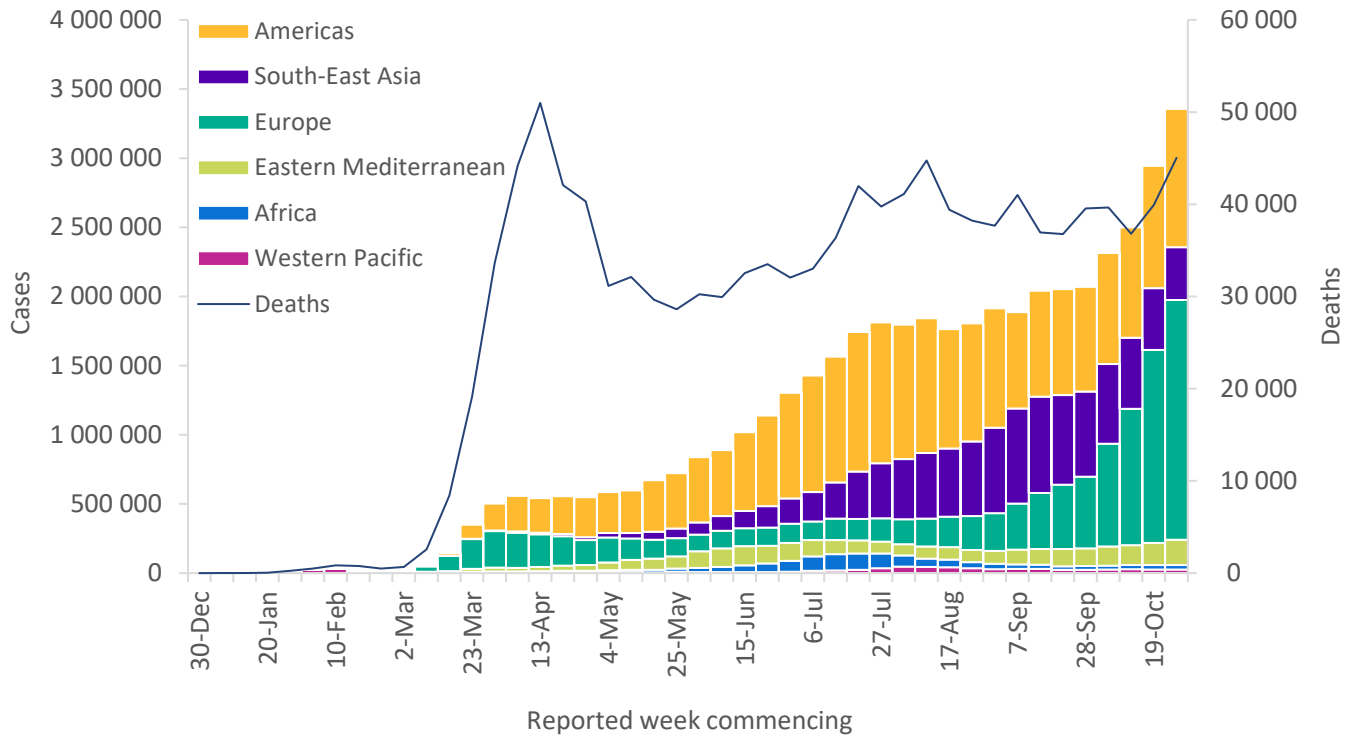
For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

In the past week, over 3.3 million new cases have been reported globally (Figure 1). As of 1 November, nearly 46 million cases and 1.2 million deaths have been reported globally. The further acceleration in the incidence of new cases was most notable in European Region, which reported half of global new cases (over 1.7 million cases - a 22% increase from the previous week. Moreover, the region also reported a substantial rise in the number of new deaths (a 46% increase compared with the previous week), with Europe and the Americas now each reporting over 17 000 new deaths in the last 7 days.) The Americas and the Eastern-Mediterranean Regions have also seen relatively smaller rises in the number of reported cases. The South-East Asia Region has continued to report a decline in new cases and deaths, while case incidence continues to fluctuate around similar rates compared to recent weeks in the African and Western Pacific Regions (Table 1).

Figure 1: Number of COVID-19 cases reported weekly by WHO Region, and global deaths, as of 1 November 2020**



**See *data table and figure notes*.

Despite regional variations, the countries reporting the highest number of cases in the past week remain the same as in the previous four weeks: The United States of America, India and France. Since the start of the pandemic, nine countries have reported more than 1 million confirmed cases: the United States, India, Brazil,

Russian Federation, France, Spain, Argentina, Colombia, and the United Kingdom. Five have reported over 40 000 cumulative deaths: the United States, Brazil, India, Mexico, and the United Kingdom.

Additional Region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western-Pacific Region.

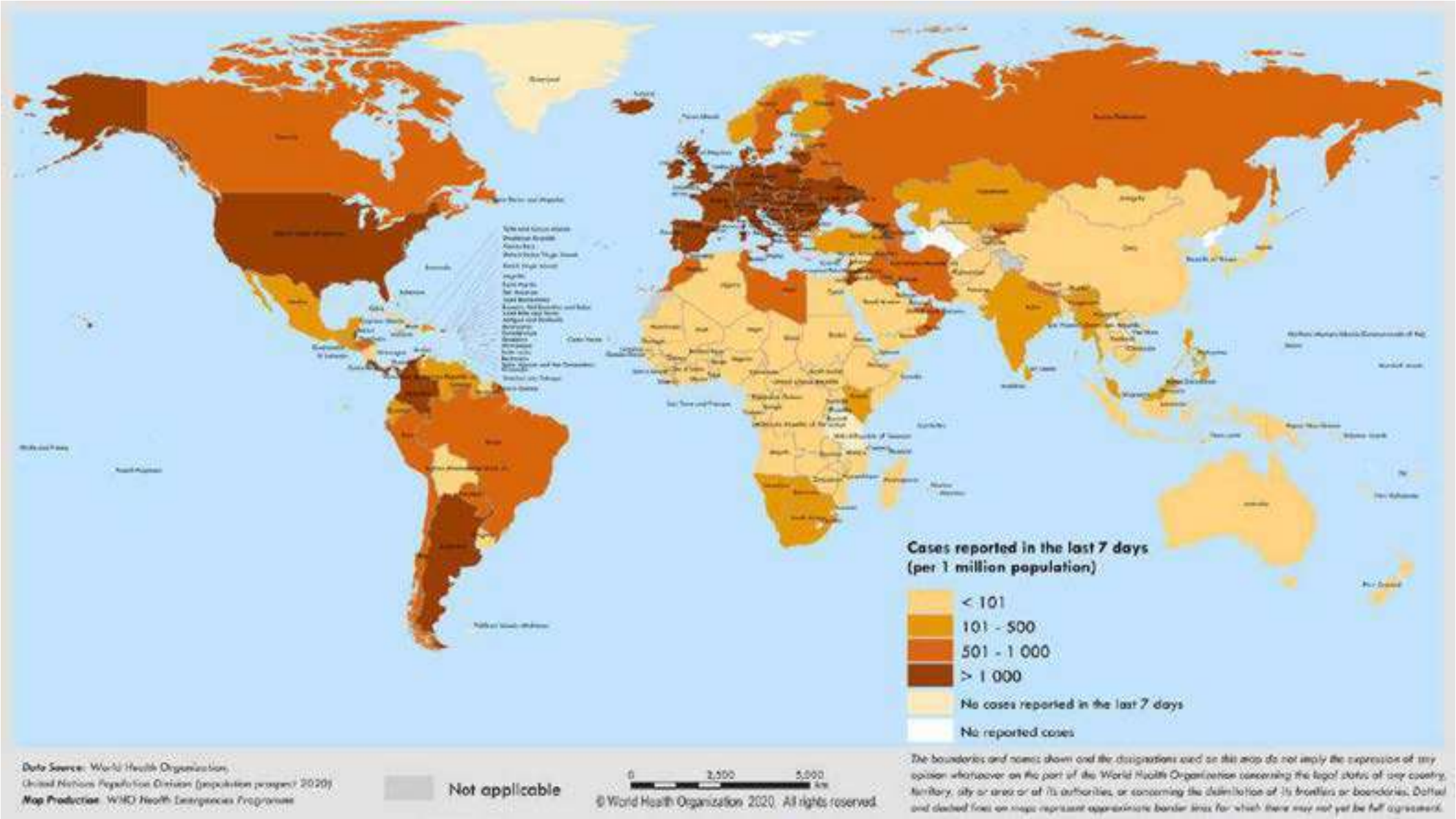
Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 1 November 2020**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days*	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days*	Cumulative deaths (%)
Europe	1 732 918 (52%)	24%	11 088 612 (24%)	17 396 (39%)	46%	285 402 (24%)
Americas	999 652 (30%)	13%	20 477 535 (45%)	17 267 (38%)	2%	639 353 (54%)
South-East Asia	381 422 (11%)	-14%	9 251 788 (20%)	4 657 (10%)	-19%	144 194 (12%)
Eastern Mediterranean	181 857 (5%)	14%	3 092 037 (7%)	4 693 (10%)	16%	78 599 (7%)
Africa	32 943 (1%)	3%	1 324 258 (3%)	640 (1%)	-23%	29 785 (2%)
Western Pacific	26 473 (1%)	-3%	733 828 (2%)	398 (1%)	-9%	15 565 (1%)
Global	**3 355 265 (100%)**	**14%**	**45 968 799 (100%)**	**45 051 (100%)**	**13%**	**1 192 911 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*

***See data, table and figure notes*

Figure 2. COVID-19 cases per million population reported in the last seven days by countries, territories and areas, 26 October through 1 November 2020**



**See *data, table and figure notes*

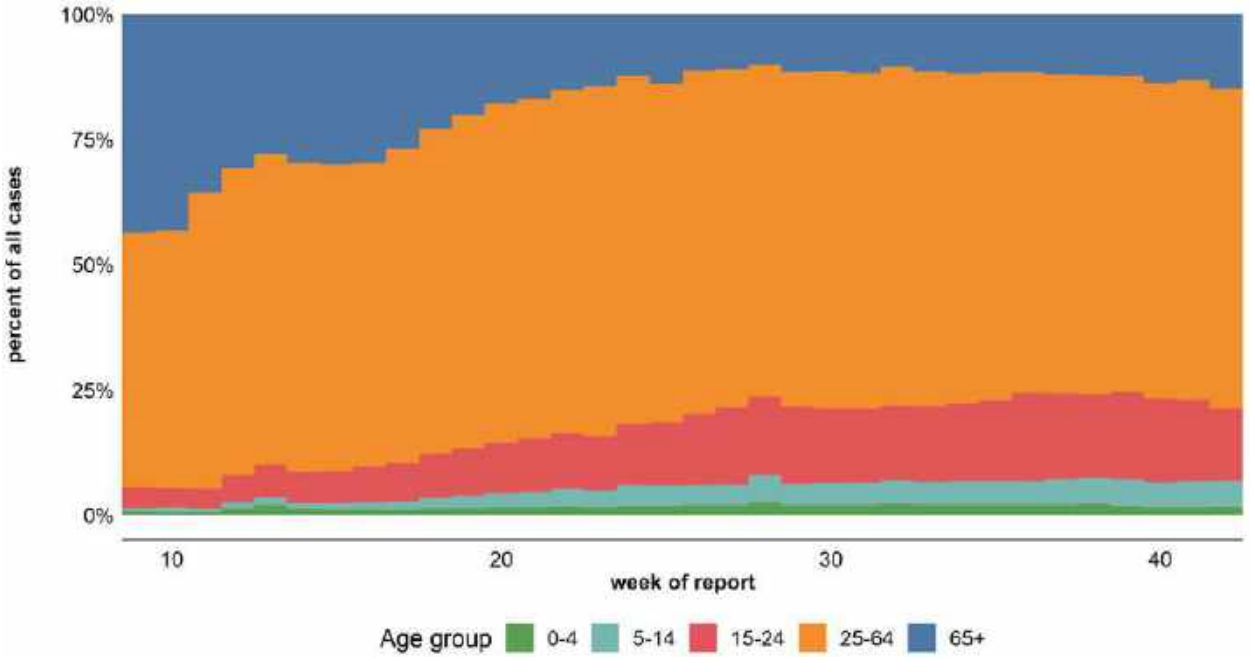
Special Focus: An age and gender analysis of COVID-19

Based on WHO's surveillance system, using both case report form data and weekly aggregated data shared by Member States, an analysis has been conducted and is presented here, covering 124 countries from five out of six WHO Regions which have provided sufficient data. The data covers the period 31 December 2019 to 18 October 2020, and includes data on 18 156 074 patients.

Age distribution over time

Since the start of the pandemic, an increase in the proportion of confirmed cases in younger population groups has been observed over time (Figure 3). Most notably, the proportion of cases among adolescents and young adults aged 15-24 years increased from 4% at the beginning of the epidemic (week 9-10) to 14% during week 42, and those aged 25-64 increased from 50% to 65% over the same period. Slight increases were also observed in the proportion of cases among children aged 0-4 years (from 0.5% to 2%), and 5-14 years (from 1% to 5%). Concurrently, we observed a decrease and then stabilization of the proportion of cases aged 65 years and older, from 40% in the early stages of the epidemic, down to 15% in recent weeks.

Figure 3: Distribution of confirmed COVID-19 cases by age by epidemiological week reported, combined data from WHO Case Report Form and Weekly Aggregate Surveillance Systems as of 18 October 2020 (n 18 156 074).



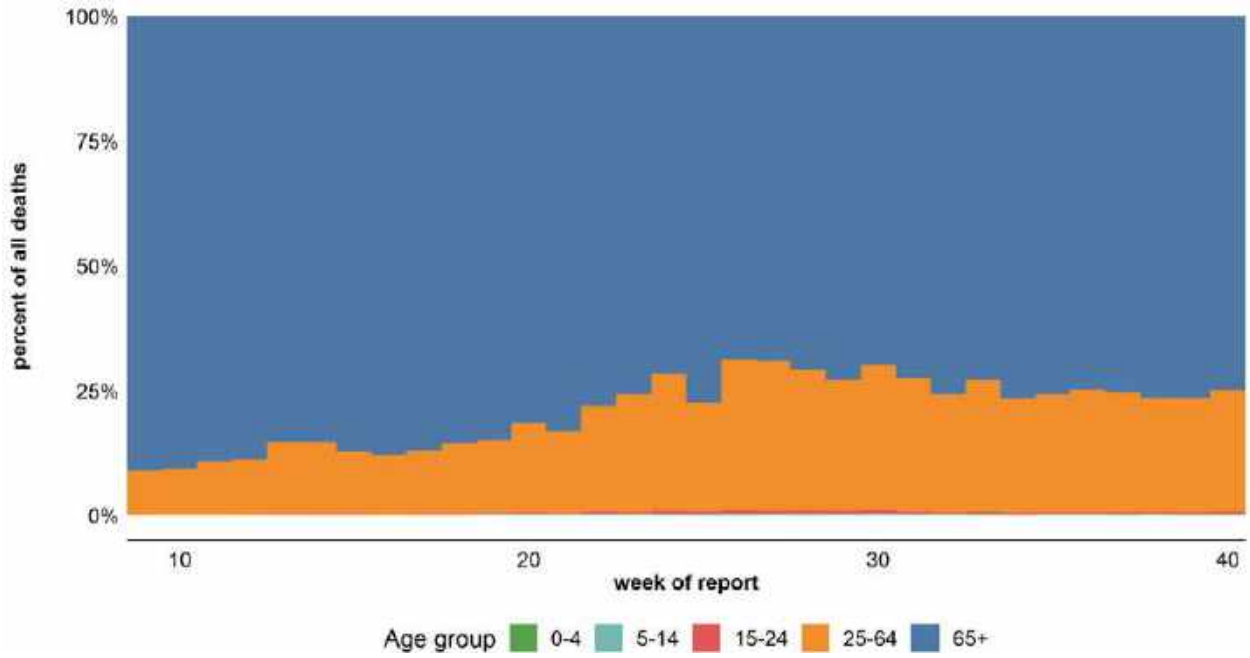
Changes in age distribrution trends are likely linked to several factors, including increased surveillance and access to testing. Early in the pandemic, surveillance and limited testing capacity was often focused on patients with severe disease, who were more likely to be elderly hospitalized patients. Surveilance and testing capacities were expanded and became more accessible to cases with mild or no symptoms. The decrease in proportion of elder cases could also be linked to the implementation of infection prevention and control measures in long term care facilities, and an increase in transmission among younger age groups.

The evolution of reported deaths by age (Figure 4) shows a slow increase in the proportion of reported deaths aged 25-64 years, ranging from roughly 10% in the early stages, peaking at 30% in the summer, and now around 25%. Reported deaths in those aged 65 years and older decreased from close to 90% in the early stages to 75% in the most recent weeks. These data support previous observations that older people, who often have

co-morbidities, remain the most vulnerable to COVID-19 morbidity and mortality. The proportion of reported deaths in the youngest age groups, 0-4 and 5-14 years, remain under 0.2%.

Critically, while most people with COVID-19 recover after 2 to 6 weeks, there is increasing documentation of the long term effects of COVID-19, including among younger and non-vulnerable groups.

Figure 4: Distribution of confirmed COVID-19 deaths by age by epidemiological week reported, combined data from WHO Case Report Form and Weekly Aggregate Surveillance Systems as of 18 October 2020 (n 459 943).



Gender distribution

Our overall data show that men and women each comprise 50% of cases; however, this proportion varies greatly between countries. A higher proportion of cases tends to be observed among men in countries where men are frequently exposed outside the household as a result of economic factors, or have differential access to testing and healthcare. In countries where women are involved in healthcare and social careers, the proportion of confirmed COVID-19 cases is higher. These gender differentials can also vary among age groups.

There is a notable difference in the death rate between sexes, with males accounting for 59% of deaths recorded. Differences in risks of exposure, behavior and risk perception, such as smoking and healthcare-seeking behaviors, as well as differences in some co-morbid conditions, may impact the outcomes of COVID-19 and contribute to male female differences in disease severity.

Situation by WHO Region

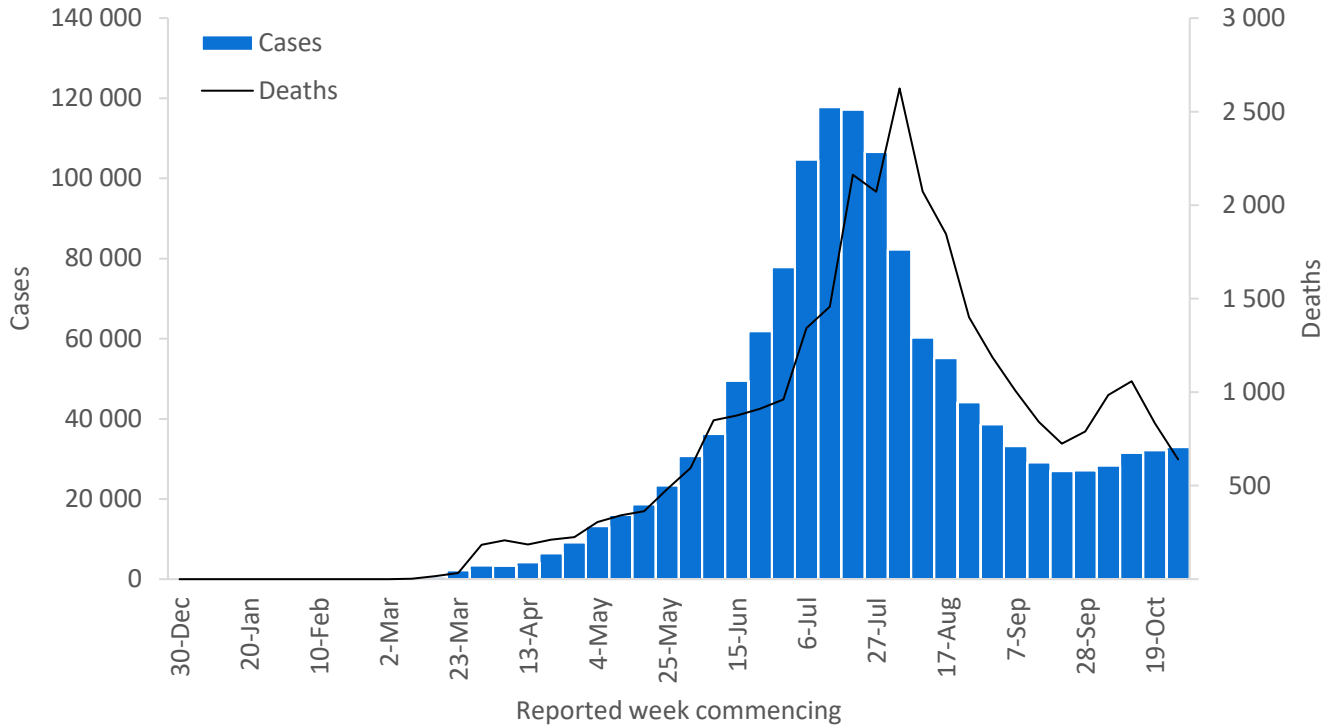
African Region

The African Region continued a four-week trend with a gradual increase in the number of new cases reported in the past 7 days (Figure 5), reporting almost 33 000 new cases 1% of new global cases in the past week. Although the number of new cases has increased slightly , the number of new reported deaths has continued to decline since a spike was observed three weeks ago following the retrospective capturing of a large number deaths in South Africa. South Africa, Kenya, and Ethiopia continue to report the highest numbers of new cases, while the highest number of new deaths per million population in the region was reported by South Africa (6 new cases per million population).

In Nigeria, after a peak in cases at the end of June and in July, weekly new cases have decreased gradually since September. In the past week, 923 new confirmed cases (4 cases per million population) were reported, while deaths have remained relatively low. Nigeria has a relatively low testing rate and is currently conducting 1.2 diagnostic tests per 10 000 population per week. The test positivity rate has remained relatively stable for the last 7 weeks and is currently 4%.

This past week Uganda recorded a new highest daily increase in COVID-19 cases, with over 430 cases reported on 30 October and close to 1200 cases (26 cases per million population) reported during the week. With almost half of the new cases reported from the capital, Kampala remains the most affected region. From the beginning of the epidemic, a total of 862 healthcare workers have been infected and 8 have died (7% of overall cases and deaths). Health Authorities in Kampala, in collaboration with WHO, are taking a data and equity-oriented approach to the COVID-19 response and city authorities have been assessing the susceptibility of local communities to the impact of the virus with a new COVID-19 vulnerability framework.

Figure 5: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, as of 1 November 2020**



**See *data, table and figure notes*

Region of the Americas

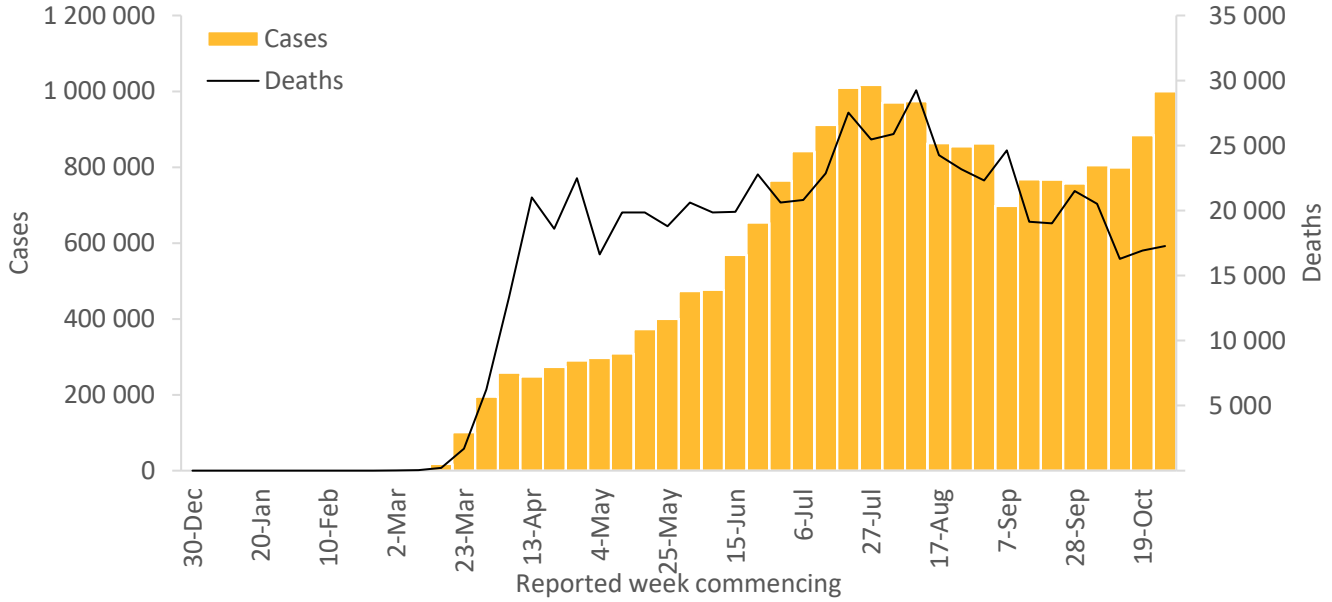
Although the Region as a whole reported a 13% rise in cases compared with last week (Figure 6), continued declines were observed in many countries, especially in South America. The United States of America, Brazil, and Argentina continue to report the highest number of new cases, with the United States reporting a 26% increase this week to over 500 000 new cases (1650 cases per million population). The overall change in the number of new deaths being reported in the Region, a 2% increase, is much lower than the rapid rise seen in the European Region.

Colombia has now reported over 1 million cumulative cases and 31 000 cumulative deaths. Cases in Colombia peaked in the week of 10 August at 77 915 cases, dropping to 43 000 cases in the week of 28 September, but have risen in October, with 64 200 new cases (1250 cases per million population) and 1300 new deaths reported this week. Approximately 40% of cases are aged 20-39 years. Although 30% of cases are in people aged 60 years and older, this age group accounts for 76% of deaths. A total of 64% of deaths are male. As of 25 October, around 38% of hospital beds are occupied by COVID-19 patients.

In Mexico, the number of new weekly cases rose to just under 47 000 at the end of July. Although cases have fallen since then, they have remained above 30 000 per week (295 new cases per million population reported last week) . On 28 October, the Ministry of Health reported that the median age of cases is 43, with Mexico City, State of Mexico, Nuevo Le n, Guanajuato, and Sonora reporting the highest number of cumulative cases. Mexico City has recorded 17% of cumulative cases and has the highest number of active cases (3,000 cases), followed by Nuevo Le n, Guanajuato, State of Mexico, and Coahuila, which all have more than 1 000 active cases. Men account for f 64% of deaths a, with a median age of 63 years. Based on a recent study on excess deaths, the Ministry of Health has said that as many as an additional 50 000 excess deaths can be attributed to COVID-19.

In Peru, case incidence has continued to fall since reaching a peak in the week of 17 August when there were just under 60 000 cases. In the past week, 17 000 new cases (520 cases per million population) and 370 new deaths were reported. Around 45% of cases have been reported from one department the region of the capital Lima. The Ministry of Health reports that as of 28 October, 4.4 million people have been tested for COVID-19. As of 28 October, there are 5419 patients hospitalized for COVID-19, of which 1052 were in intensive care. The government has approved a decree extending the state of national emergency through November.

Figure 6: Number of COVID-19 cases and deaths reported weekly by the WHO Region of the Americas, as of 1 November 2020**



**See *data, table and figure notes*

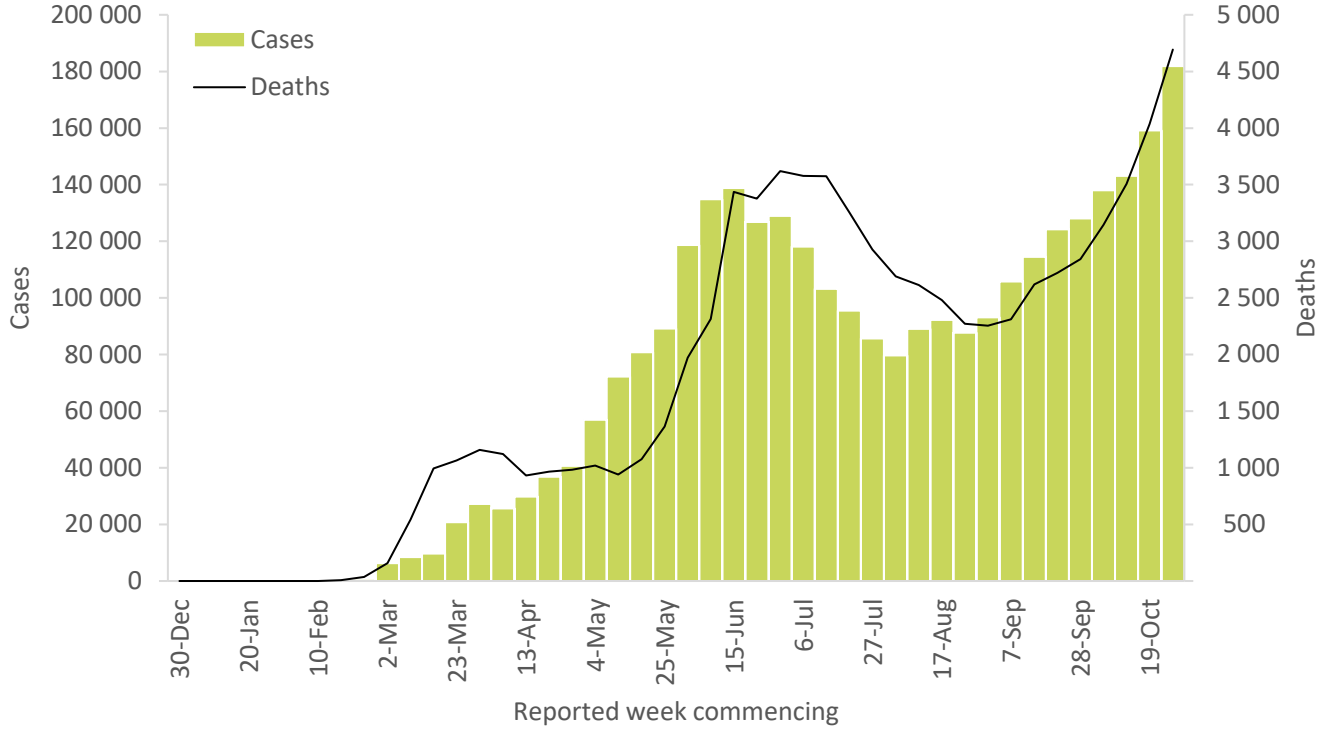
Eastern Mediterranean Region

Over the past two months, the Eastern Mediterranean Region has observed a steady increase in the number of new COVID-19 cases recorded (Figure 7), with 182 000 reported in the past week (accounting for 5% of all cases reported globally). In the past 7 days, there has been a 10% increase in the number of deaths reported with a total of 4 700 new deaths. The Region shows a mixed pattern with countries at different epidemic stages and experiencing different outcomes. Countries reporting the highest number of cases over the past week include the Islamic Republic of Iran, Morocco and Iraq, all reporting over 550 new cases per 1 million population in the past 7 days. The countries with the highest number of new deaths per million population in the past week are Tunisia, the Islamic Republic of Iran and Jordan, with over 28 new deaths per million population.

Since early September, the incidence of COVID-19 cases and deaths in the Islamic Republic of Iran has been increasing gradually, reaching over 50 000 new cases (600 cases per million population) and 2500 new deaths in the past week. The country has the highest mortality rate overall in the Eastern Mediterranean Region with a total of 415 deaths per million population since the beginning of the pandemic. In the past week, the Islamic Republic of Iran extended public health and social measures in the capital of Tehran and across the country, as health authorities declared that they were recording a death from the virus every four minutes. Some hospitals have exceeded bed capacity to treat new patients. The closure of schools, mosques, shops, restaurants and other public institutions in Tehran, that was due to end on 26 October, will now be extended until 20 November.

Morocco has been experiencing a gradual increase in cases and deaths since the beginning of August. This past week, the country registered a new record in new cases with over 24 600 new cases and 440 new deaths. Currently, the country's COVID-19 fatality rate is around 1.7%. Casablanca-Settat is the most affected region with the majority of cases coming from the city of Casablanca. According to local authorities, this week the reproductive number has stabilized at 0.8%. The test positivity rate has raised from 11% to 16% in just three weeks. More restrictive measures have been applied in the region of Casablanca-Settat following the rise in the incidence of COVID-19. Other regions have also adopted new measures including earlier closure of shopping centres.

Figure 7: Number of COVID-19 cases and deaths reported weekly by the WHO Eastern Mediterranean Region, as of 1 November 2020**



**See *data, table and figure notes*

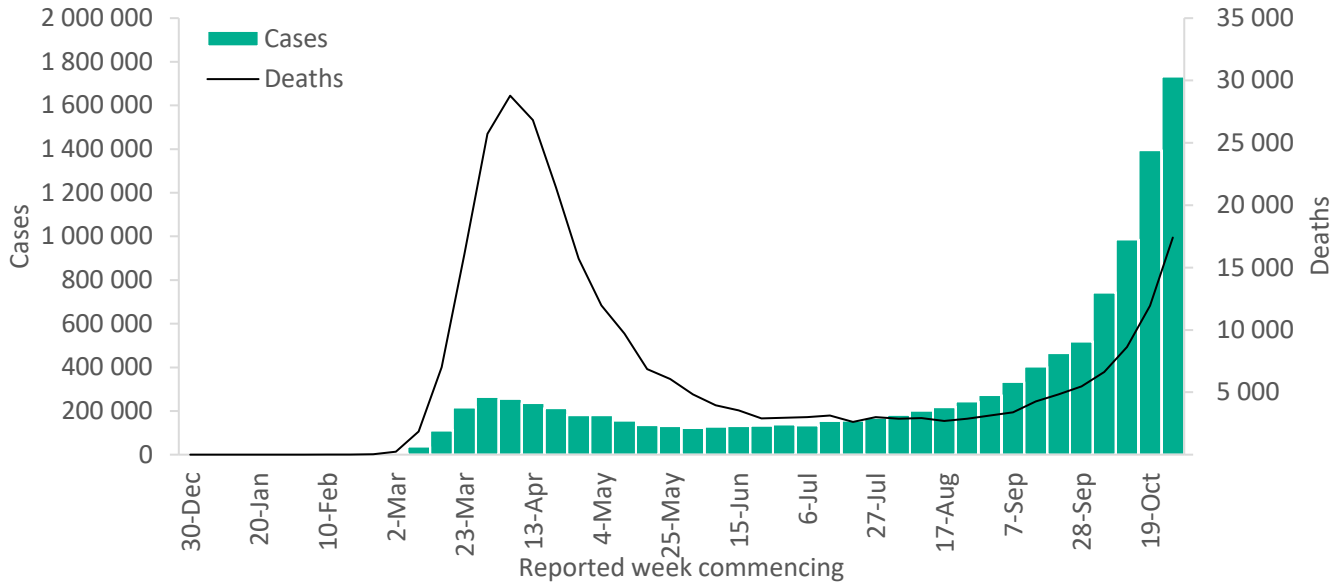
European Region

The European Region has seen a 22% increase in new cases and a 43% increase in new deaths in the past 7 days compared with the previous week (Figure 8). France, Italy, and the United Kingdom reported the highest numbers of new cases, although Andorra, Czechia, and Belgium reported the highest per population incidence. France accounted for the third-highest number of new cases globally, with over 275 000 cases reported in the past week (4200 cases per million population): a 27% increase from the previous week. The number of new cases has increased since August, in line with much of Europe; however, in October there has been a considerable escalation . As of 29 October, there were 24 000 hospitalizations, with 3500 in intensive care, with the Ile-de-France and Auvergne-Rhône-Alpes regions having the highest numbers of hospitalizations. The COVID-19 occupancy rate of intensive care beds is rising rapidly. The increases in indicators are most marked among people aged 65 and over. The President of the Republic announced the reinstatement of stricter public health and social measures from 30 October to 1 December.

Belgium and Italy have both seen rapid rises in cases, and reported the 2nd and 9th highest number of new cases in Europe, respectively. New cases in Belgium fell by 21% from last week to 82 500 new cases, while those in Italy rose by 72% from last week to 175 000 new cases. Despite the fall seen in Belgium, it still has one of the world's highest incidences of new cases per million population , with 7 000 new cases per million. Italy's incidence is lower at 2800 cases per million. Belgium has instituted a second phase of national containment measures. Italy and several other European countries have been experienced an increasing number of protests over government restrictions.

In Switzerland, the number of new cases has grown considerably in October, rising from fewer than 2500 new weekly cases reported from mid-April through to the end of September, and fewer than a hundred cases reported in some weeks, to 50 000 new cases in the past week. Switzerland has the fifth- highest incidence of new cases per million population in the Region (5800 cases per million population). The weekly number of hospitalizations has also risen considerably. While weekly testing rates have increased, test positivity rates have also increased from 15% to 22.5% (as of 25 October). Since the beginning of September, the median age of cases has been steadily increasing from 33 to 42 years, as of 25 October. Switzerland has progressively implemented strict public health and social measures in recent weeks, with a new range of national restrictions coming into effect on 29 October, with several cantons implementing additional measures.

Figure 8: Number of COVID-19 cases and deaths reported weekly by the WHO European Region, as of 1 November 2020**



**See *data, table and figure notes*

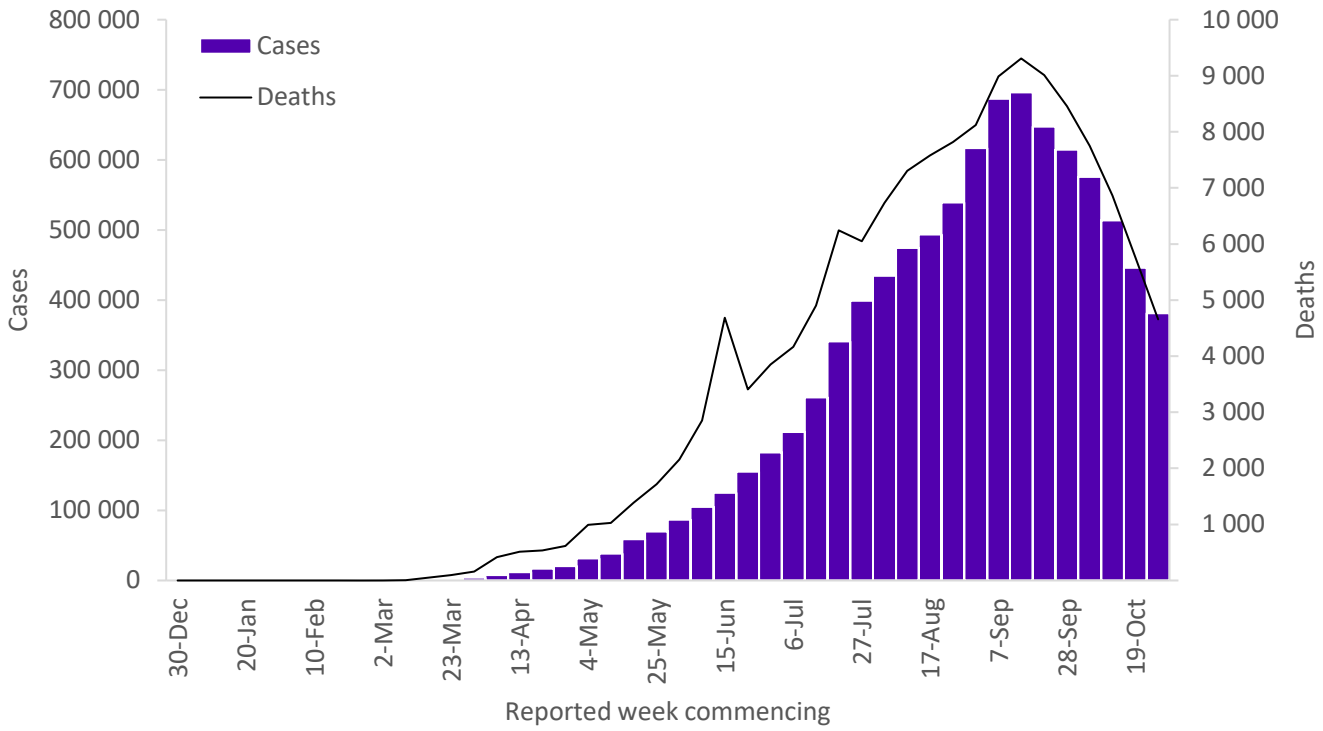
South-East Asia Region

New cases and deaths in the South-East Asia Region this week have continued to decline (Figure 9) . This is mainly due to a decline in reported cases in India, which contributes over 80% of all cases in the Region. Additionally, large rates of decrease have been reported seen in Nepal, Indonesia, and Bhutan. There have been over 380 000 new cases reported in the past 7 days, bringing the cumulative amount of cases to over 9.2 million.

In contrast to other countries in the region, Sri Lanka reported a 53% increase in the past 7 days from 2046 new cases to 3142 new cases (147 cases per million population). This follows a cluster detected in a garment factory on 3 October. A curfew was imposed in Colombo District and other high-risk areas from 29 October to 2 November. Additionally, active cases have been admitted to dedicated COVID-19 treatment hospitals, where 4764 patients were admitted to 37 hospitals as of 28 October. The government is also upgrading around 60 divisional hospitals as isolation and treatment centers to add more bed capacity.

Indonesia has been showing a decreasing trend of new cases for the last 4 weeks. The country reported around 24 000 new cases (88.1 per 1 million population) in the last past 7 days, and over 410 000 cumulative cases to date. WHO, in collaboration with the Ministry of Health and the National COVID-19 Task Force, has conducted a series of focus group discussions for a detailed review of challenges and possible solutions for enhancing contact tracing.

Figure 9: Number of COVID-19 cases and deaths reported weekly by the WHO South-East Asia Region, as of 1 November 2020**



**See *data, table and figure notes*

Western Pacific Region

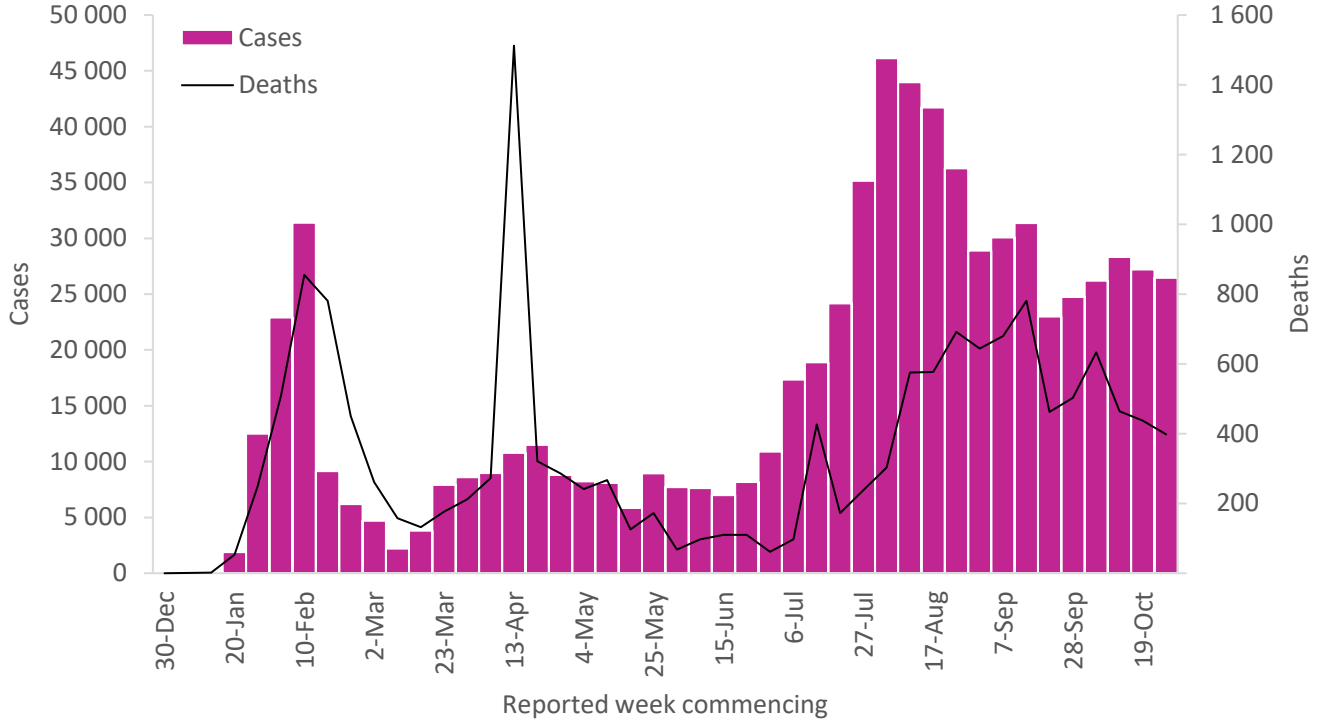
The Western Pacific Region continues to account for the fewest cases and deaths reported globally, with declines observed in the past 2 weeks (Figure 10). There have been over 26 000 new cases (13.5 new cases per million population) reported in the past 7 days, resulting in almost 734 000 cumulative cases to date.

The Philippines continues to report the highest number of new cases (12 910 cases) and new deaths (287 deaths), representing almost 50% of new cases and 75% of new deaths in the region in the last 7 days; although incidence remains relatively low compared to other countries (117 new cases per million).

The Marshall Islands reported their first two COVID-19 cases this week on 28 October. According to the national authorities, the two cases were identified on a military base on Kwajalein Atoll, although they were not epidemiologically linked.

Over 240 new cases have been reported in China in the past 7 days, an increase of 32% compared with the previous week. A cluster of new cases related to local factories was identified in the autonomous region of injiang between 24 and 28 October. Local authorities confirmed 45 cases and 138 asymptomatic cases, after 4 746 500 residents of Kashgar were tested.

Figure 10: Number of COVID-19 cases and deaths reported weekly by the WHO Western Pacific Region, data as of 1 November 2020**



**See *data, table and figure notes*

Key weekly updates

- The fifth meeting of the IHR (2005) Emergency Committee on COVID-19 took place on Thursday, 29 October 2020. They advised that the pandemic still constituted aPpublic Health Emergency of International Concern, and urged a focus on response efforts based on lessons learned and g science. The Emergency Committee C provided d advice for WHO and countries to focus on in the coming months and expressed appreciation for WHO's leadership and response activities. It will reconvene in 3 months' time.
- To a significant number of people, COVID-19 poses a range of serious long-term effects, and post COVID-19 symptoms and complications have been reported in both non-hospitalised and hospitalised patients. In a media briefing on 30 October, WHO Director-General Dr Tedros said "What's really concerning is the vast spectrum of symptoms that fluctuate over time, often overlap and can affect any system in the body. From fatigue, a cough and shortness of breath, to inflammation and injury of major organs - including the lungs and heart, and even neurological and psychological effects. Although we're still learning about the virus, what's clear is that this is not just a virus that kills people. While people do recover, it can be slow sometimes weeks or months and it is not always a linear route to recovery."
- Several vaccines are now in final phase three trials. If proved safe and effective they will be rolled out through the ACT Accelerator's vaccine arm the COVA Facility, which is now supported by 186 countries. The COVA Facility is speeding up the search for an effective vaccine for all countries. At the same time, it is supporting the building of manufacturing capabilities, and procuring doses ahead of time so that 2 billion doses can be fairly distributed by the end of 2021.
- Progress on gender equality has been made in all 12 key areas identified in the 1995 Beijing Declaration and Platform for Action on Women but for millions of girls and women around the world today, this visionary agenda is still far from reality. The *British Medical Journal* has commissioned a special series of papers on "Women's Health and Gender Inequalities" with support from WHO, the Human Reproduction Programme and the United Nations University International Institute for Global Health. The COVID-19 pandemic is limiting or reversing gains made towards gender equality. WHO strongly urges investment in women's health and is marking the 25th anniversary of the Beijing Declaration with a number of activities.

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Africa	**32943**	**1324258**	**1180**	**640**	**29785**	**27**	
South Africa	11 206	725 452	12 232	332	19 276	325	Community transmission
Kenya	6 402	55 192	1 026	100	996	19	Community transmission
Ethiopia	3 311	96 169	837	50	1 469	13	Community transmission
Algeria	2 021	57 651	1 315	59	1 956	45	Community transmission
Angola	1 779	10 805	329	17	284	9	Community transmission
Uganda	1 198	12 495	273	12	111	2	Community transmission
Mozambique	974	12 869	412	7	92	3	Community transmission
Nigeria	923	62 853	305	15	1 144	6	Community transmission
Botswana	719	6 642	2 824	3	24	10	Community transmission
Cabo Verde	471	8 793	15 815	1	95	171	Community transmission
Guinea	403	12 072	919	1	72	5	Community transmission
Ghana	365	48 055	1 547	4	320	10	Community transmission
Namibia	356	12 935	5 091	0	133	52	Community transmission
Zambia	315	16 432	894	1	349	19	Community transmission
Côte D'Ivoire	287	20 692	784	3	124	5	Community transmission
Cameroon	223	21 793	821	1	426	16	Community transmission
Democratic Republic of The Congo	184	11 305	126	3	307	3	Community transmission
Madagascar	143	17 111	618	0	244	9	Community transmission
Togo	134	2 296	277	3	55	7	Community transmission
Zimbabwe	98	8 367	563	7	243	16	Community transmission
Benin	86	2 643	218	0	41	3	Community transmission
Mali	82	3 554	175	4	136	7	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Rwanda	77	5 137	397	1	35	3	Clusters of cases
Senegal	73	15 616	933	3	324	19	Community transmission
Eswatini	70	5 917	5 100	1	117	101	Community transmission
Burkina Faso	56	2 500	120	2	67	3	Community transmission
Chad	49	1 483	90	2	98	6	Community transmission
Gabon	49	8 968	4 029	1	55	25	Community transmission
Malawi	43	5 930	310	1	184	10	Community transmission
South Sudan	43	2 926	261	3	59	5	Community transmission
Congo	37	5 290	959	0	92	17	Community transmission
Burundi	33	589	50	0	1	<1	Community transmission
Liberia	31	1 426	282	0	82	16	Community transmission
Sierra Leone	21	2 366	297	0	74	9	Community transmission
Comoros	13	530	609	0	7	8	Community transmission
Lesotho	13	1 947	909	0	43	20	Community transmission
Gambia	11	3 670	1 519	0	119	49	Community transmission
Guinea-Bissau	10	2 413	1 226	0	41	21	Community transmission
Equatorial Guinea	9	5 088	3 627	0	83	59	Community transmission
Mauritius	6	441	347	0	10	8	Sporadic cases
Niger	5	1 220	50	0	69	3	Community transmission
Sao Tome and Principe	5	945	4 312	1	16	73	Community transmission
Central African Republic	4	4 866	1 008	0	62	13	Community transmission
Eritrea	2	463	131	0	0	<1	Sporadic cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Seychelles	2	154	1 566	0	0	<1	Sporadic cases
Mauritania	1	7 663	1 648	0	163	35	Community transmission
United Republic of Tanzania	0	509	9	0	21	<1	Community transmission
Territories[ii]							
Réunion	510	5 659	6 321	2	22	25	Clusters of cases
Mayotte	90	4 366	16 004	0	44	161	Clusters of cases
Americas	**999652**	**20477535**	**20022**	**17267**	**639353**	**625**	
United States of America	548 965	8 952 086	27 045	5 678	228 185	689	Community transmission
Brazil	163 002	5 516 658	25 953	3 006	159 477	750	Community transmission
Argentina	87 811	1 157 179	25 604	2 454	30 792	681	Community transmission
Colombia	64 209	1 063 151	20 894	1 333	31 135	612	Community transmission
Mexico	38 036	918 811	7 126	2 977	91 289	708	Community transmission
Canada	20 267	231 999	6 147	222	10 110	268	Community transmission
Peru	17 064	900 180	27 301	378	34 411	1 044	Community transmission
Chile	9 714	510 256	26 692	315	14 207	743	Community transmission
Ecuador	8 578	168 192	9 533	128	12 670	718	Community transmission
Costa Rica	7 040	108 866	21 371	106	1 371	269	Community transmission
Honduras	5 006	96 888	9 782	57	2 669	269	Community transmission
Panama	5 001	132 867	30 794	66	2 688	623	Community transmission
Paraguay	4 337	62 596	8 776	109	1 387	194	Community transmission
Guatemala	3 307	107 939	6 025	120	3 729	208	Community transmission
Venezuela (Bolivarian Republic of)	3 173	91 589	3 221	34	793	28	Community transmission
Dominican Republic	3 000	127 018	11 709	25	2 245	207	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Bolivia (Plurinational State of)	1 019	141 631	12 133	107	8 715	747	Community transmission
El Salvador	860	33 445	5 156	31	975	150	Community transmission
Jamaica	424	9 094	3 071	20	206	70	Community transmission
Belize	412	3 462	8 707	11	58	146	Community transmission
Bahamas	376	6 644	16 895	12	142	361	Clusters of cases
Cuba	353	6 887	608	0	128	11	Clusters of cases
Uruguay	323	3 082	887	5	58	17	Clusters of cases
Guyana	183	4 143	5 267	7	124	158	Clusters of cases
Trinidad and Tobago	181	5 668	4 050	3	107	76	Community transmission
Nicaragua	62	4 424	668	1	156	24	Community transmission
Suriname	46	5 201	8 866	2	111	189	Community transmission
Haiti	39	9 054	794	1	232	20	Community transmission
Saint Lucia	26	78	425	0	0	<1	Sporadic cases
Dominica	12	50	695	0	0	<1	Clusters of cases
Barbados	9	236	821	0	7	24	Clusters of cases
Antigua and Barbuda	5	127	1 297	0	3	31	Sporadic cases
Grenada	1	28	249	0	0	<1	No cases
Saint Vincent and the Grenadines	1	74	667	0	0	<1	Sporadic cases
Saint Kitts and Nevis	0	19	357	0	0	<1	No cases
Territories[ii]							
Puerto Rico	4 848	66 128	23 115	28	822	287	Community transmission
Martinique	1 024	3 818	10 174	4	31	83	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Guadeloupe	413	7 742	19 349	24	139	347	Community transmission
French Guiana	160	10 536	35 275	1	70	234	Community transmission
Curaçao	141	944	5 753	0	1	6	Community transmission
Aruba	83	4 472	41 886	1	37	347	Community transmission
Saint Martin	53	591	15 288	1	9	233	Community transmission
United States Virgin Islands	30	1 376	13 177	0	21	201	Community transmission
Sint Maarten	29	805	18 772	0	22	513	Community transmission
Saint Barthélemy	12	89	9 004	0	0	<1	Sporadic cases
Bermuda	9	199	3 196	0	9	145	Sporadic cases
Turks and Caicos Islands	4	703	18 157	0	6	155	Clusters of cases
Bonaire, Sint Eustatius and Saba	3	153	5 835	0	3	114	Sporadic cases
Cayman Islands	1	240	3 652	0	1	15	Sporadic cases
Anguilla	0	3	200	0	0	<1	No cases
British Virgin Islands	0	72	2 381	0	1	33	Clusters of cases
Falkland Islands (Malvinas)	0	13	3 732	0	0	<1	No cases
Montserrat	0	13	2 601	0	1	200	No cases
Saint Pierre and Miquelon	0	16	2 761	0	0	<1	Sporadic cases
Eastern Mediterranean	**181857**	**3092037**	**4231**	**4693**	**78599**	**108**	
Iran (Islamic Republic of)	50 067	612 772	7 296	2 544	34 864	415	Community transmission
Morocco	24 623	219 084	5 936	440	3 695	100	Clusters of cases
Iraq	23 477	472 630	11 750	342	10 910	271	Community transmission
Jordan	21 857	72 607	7 116	289	829	81	Community transmission
Lebanon	11 322	81 228	11 901	75	637	93	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Tunisia	9 408	59 813	5 061	440	1 317	111	Community transmission
United Arab Emirates	8 865	132 629	13 410	20	495	50	Community transmission
Libya	6 721	61 095	8 891	67	857	125	Community transmission
Pakistan	5 937	332 993	1 507	79	6 806	31	Clusters of cases
Kuwait	4 999	125 926	29 487	35	779	182	Community transmission
Saudi Arabia	2 730	347 282	9 975	121	5 402	155	Sporadic cases
Oman	2 597	114 434	22 409	61	1 208	237	Community transmission
Bahrain	1 670	81 645	47 982	9	321	189	Clusters of cases
Qatar	1 591	132 556	46 010	3	232	81	Community transmission
Egypt	1 158	107 555	1 051	79	6 266	61	Clusters of cases
Afghanistan	657	41 425	1 064	25	1 536	39	Clusters of cases
Syrian Arab Republic	369	5 728	327	21	288	16	Community transmission
Sudan	62	13 804	315	0	837	19	Community transmission
Somalia	44	3 941	248	2	104	7	Sporadic cases
Djibouti	31	5 561	5 629	0	61	62	Clusters of cases
Yemen	3	2 067	69	0	600	20	Community transmission
Territories[ii]							
Occupied Palestinian territory	3 669	65 262	12 793	41	555	109	Community transmission
Europe	**1732918**	**11088612**	**11880**	**17396**	**285402**	**306**	
France	275 866	1 331 808	20 403	2 111	36 473	559	Community transmission
Italy	174 921	679 430	11 237	1 408	38 618	639	Clusters of cases
The United Kingdom	157 650	1 011 664	14 902	1 810	46 555	686	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Russian Federation	122 904	1 636 781	11 216	2 185	28 235	193	Clusters of cases
Poland	120 785	362 731	9 584	1 280	5 631	149	Community transmission
Germany	103 749	532 930	6 361	449	10 481	125	Clusters of cases
Belgium	99 051	445 795	38 465	889	11 734	1 012	Community transmission
Spain	92 281	1 185 678	25 360	854	35 878	767	Community transmission
Czechia	84 305	335 102	31 292	1 174	3 251	304	Community transmission
Netherlands	70 033	350 764	20 471	376	7 385	431	Community transmission
Ukraine	58 030	395 440	9 042	1 017	7 306	167	Community transmission
Switzerland	50 405	153 728	17 763	159	2 035	235	Community transmission
Romania	35 546	241 339	12 545	650	6 968	362	Community transmission
Austria	26 814	106 584	11 834	119	1 097	122	Community transmission
Portugal	25 170	141 279	13 855	210	2 507	246	Clusters of cases
Hungary	19 952	79 199	8 198	394	1 819	188	Community transmission
Slovakia	16 863	57 664	10 562	60	219	40	Clusters of cases
Turkey	15 583	375 367	4 451	525	10 252	122	Community transmission
Croatia	15 357	49 316	12 013	117	546	133	Community transmission
Bulgaria	15 282	52 844	7 605	195	1 279	184	Clusters of cases
Armenia	14 417	92 254	31 133	183	1 363	460	Community transmission
Slovenia	13 030	34 307	16 502	50	231	111	Clusters of cases
Georgia	12 296	40 727	10 209	134	335	84	Community transmission
Bosnia and Herzegovina	10 332	50 090	15 268	159	1 234	376	Community transmission
Sweden	10 015	124 355	12 313	9	5 938	588	Community transmission
Greece	9 259	39 251	3 766	62	626	60	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Belarus	8 292	99 459	10 526	40	985	104	Community transmission
Serbia	8 082	46 954	6 743	31	820	118	Community transmission
Denmark	6 940	46 351	8 002	21	721	124	Community transmission
Azerbaijan	6 256	55 269	5 451	66	730	72	Clusters of cases
Ireland	5 348	61 456	12 446	31	1 913	387	Community transmission
Lithuania	5 246	14 824	5 445	36	165	61	Community transmission
North Macedonia	5 183	31 577	15 157	97	994	477	Community transmission
Republic of Moldova	4 951	76 040	18 850	116	1 785	442	Community transmission
Luxembourg	4 220	17 933	28 648	13	157	251	Community transmission
Israel	4 054	313 533	36 223	146	2 517	291	Community transmission
Kyrgyzstan	3 693	59 443	9 111	16	1 150	176	Clusters of cases
Kazakhstan	3 400	150 863	8 035	32	2 251	120	Clusters of cases
Norway	2 331	19 563	3 609	3	282	52	Clusters of cases
Montenegro	2 090	18 958	30 185	47	313	498	Clusters of cases
Albania	2 017	20 875	7 254	36	509	177	Clusters of cases
Uzbekistan	1 855	67 055	2 003	21	568	17	Clusters of cases
Finland	1 461	16 113	2 908	5	358	65	Community transmission
Latvia	1 427	5 894	3 125	17	71	38	Clusters of cases
Cyprus	922	4 366	3 616	1	26	22	Clusters of cases
Andorra	718	4 756	61 554	6	75	971	Community transmission
Malta	667	6 042	13 684	12	62	140	Clusters of cases
Estonia	554	4 905	3 698	0	73	55	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Iceland	471	4 865	14 257	1	12	35	Community transmission
Tajikistan	281	11 017	1 155	1	82	9	Pending
Liechtenstein	193	533	13 976	2	3	79	Sporadic cases
San Marino	114	958	28 228	0	42	1 238	Community transmission
Monaco	63	359	9 148	0	2	51	Sporadic cases
Holy See	0	26	32 138	0	0	<1	Sporadic cases
Territories[ii]							
Kosovo[1]	2 085	19 799	10 642	20	671	361	Community transmission
Gibraltar	52	693	20 569	0	0	<1	Clusters of cases
Jersey	44	574	5 276	0	32	294	Community transmission
Faroe Islands	5	495	10 130	0	0	<1	Sporadic cases
Isle of Man	5	353	4 151	0	24	282	No cases
Guernsey	2	267	4 225	0	13	206	Community transmission
Greenland	0	17	299	0	0	<1	No cases
South-East Asia	**381422**	**9251788**	**4577**	**4657**	**144194**	**71**	
India	319 271	8 184 082	5 930	3 577	122 111	88	Clusters of cases
Indonesia	24 108	410 088	1 499	664	13 869	51	Community transmission
Nepal	15 510	170 743	5 860	95	937	32	Clusters of cases
Bangladesh	10 177	407 684	2 475	143	5 923	36	Community transmission
Myanmar	8 918	52 706	969	171	1 237	23	Clusters of cases
Sri Lanka	3 142	10 663	498	6	20	1	Clusters of cases
Maldives	238	11 659	21 569	1	38	70	Clusters of cases
Thailand	48	3 784	54	0	59	1	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Bhutan	9	349	452	0	0	<1	Sporadic cases
Timor-Leste	1	30	23	0	0	<1	Sporadic cases
Western Pacific	**26 473**	**733828**	**374**	**398**	**15565**	**8**	
Philippines	12 910	380 729	3 474	287	7 221	66	Community transmission
Malaysia	5 806	31 548	975	28	249	8	Clusters of cases
Japan	4 612	101 146	800	55	1 766	14	Clusters of cases
Republic of Korea	799	26 635	520	9	466	9	Clusters of cases
China	246	91 921	62	0	4 746	3	Clusters of cases
Australia	91	27 590	1 082	2	907	36	Clusters of cases
Singapore	50	58 015	9 917	0	28	5	Clusters of cases
New Zealand	24	1 603	332	0	25	5	Clusters of cases
Viet Nam	20	1 180	12	0	35	<1	Clusters of cases
Mongolia	9	346	106	0	0	<1	Sporadic cases
Papua New Guinea	6	589	66	0	7	1	Community transmission
Cambodia	4	291	17	0	0	<1	Sporadic cases
Solomon Islands	4	8	12	0	0	<1	Sporadic cases
Fiji	1	34	38	0	2	2	Sporadic cases
Brunei Darussalam	0	148	338	0	3	7	Sporadic cases
Lao People'S Democratic Republic	0	24	3	0	0	<1	Sporadic cases
Territories[ii]							
French Polynesia	1 403	7 262	25 852	9	29	103	Sporadic cases
Guam	477	4 632	27 445	8	79	468	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Northern Mariana Islands (Commonwealth of The)	8	96	1 668	0	2	35	Pending
Marshall Islands	2	2	34	0	0	<1	Sporadic cases
New Caledonia	1	28	98	0	0	<1	Sporadic cases
Wallis and Futuna	0	1	89	0	0	<1	Sporadic cases
Global	**3 355 265**	**45 968 799**	**5 897**	**45 051**	**1 192 911**	**153**	

**See *data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region

- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases; efforts are underway to identify these for notation in the data table. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

Global totals include 741 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas; classification is based on the highest category reported within a country/territory/area. Categories:

- No cases: with no confirmed cases;
- Sporadic cases: with one or more cases, imported or locally detected;
- Clusters of cases: experiencing cases, clustered in time, geographic location and/or by common exposures;
- Community transmission: experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel laboratory surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area;
- Pending: transmission classification has not been reported to WHO.

[ii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

Country, territory, or area-specific notes, updates and errata

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 25 October 2020, 10 am CEST

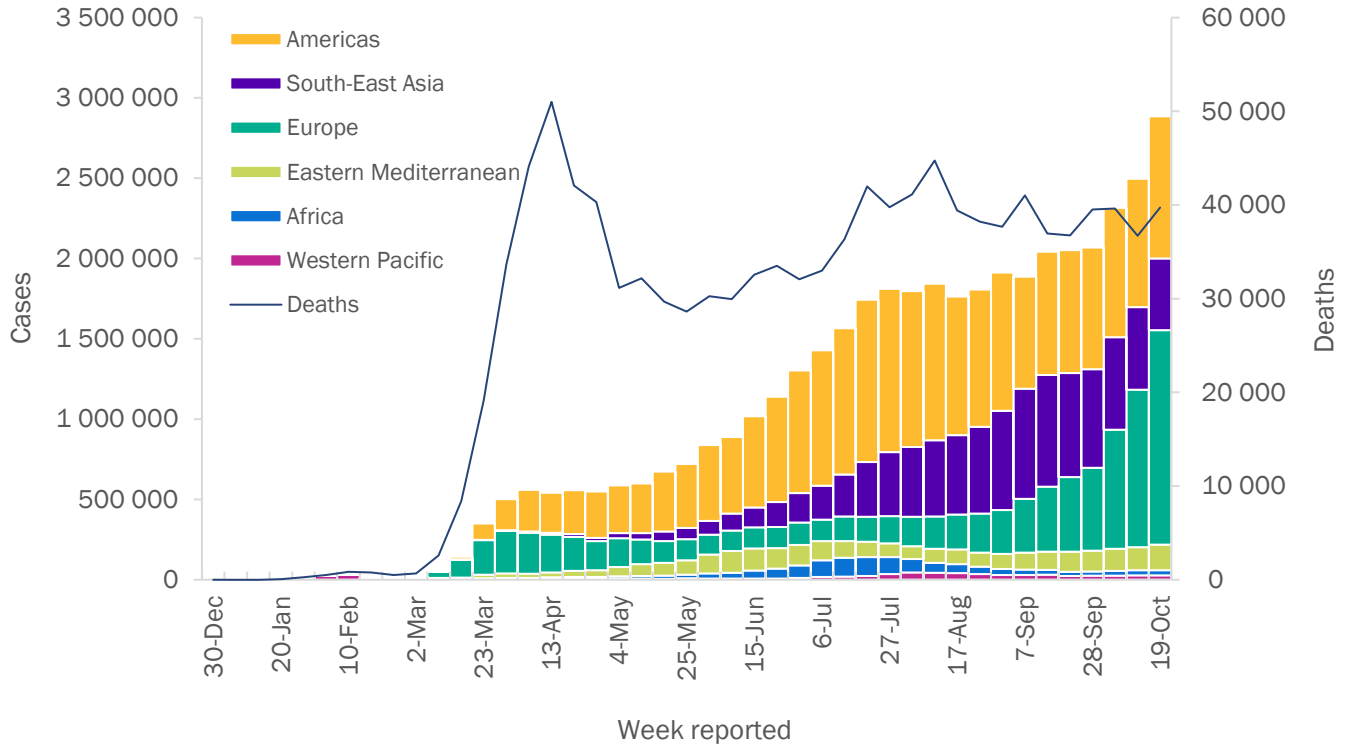
For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

In the past week the highest number of new COVID-19 cases have been reported globally, amounting to over 2 million new cases in the past 7 days (Figure 1), the shortest intervals for this exponential increase since the start of the pandemic, while the number of new deaths is comparable to previous weeks. As of 25 October, over 42 million cases and 1.1 million deaths have been reported globally, with over 2.8 million new cases and nearly 40 000 new deaths reported over the past week.

Figure 1: Number of COVID-19 cases reported weekly by WHO Region, and global deaths, 30 December 2019 through 25 October 2020**



**See *data table and figure notes*.

For the second consecutive week the European Region accounts for the greatest proportion of reported new cases, with over 1.3 million new cases reported this past week a 33% increase in cases compared to the previous week contributing nearly half of all new cases reported worldwide this week (46%) (Table 1). Similarly, the number of deaths continues to increase in the region with a 35% increase from last week and accounting for nearly one third of all new deaths globally. Although not as substantial, increases in reported new cases were also observed in the Region of the Americas, Eastern-Mediterranean and African regions. Declines in cases and deaths continued to be reported in the South-East Asia region while the Western Pacific region has shown a slight decline in new cases and deaths in the past 7 days.

Despite regional variations the countries reporting the highest number of cases in the past week remain the same as the previous 3 weeks: India, the United States of America, France, Brazil and the United Kingdom.

Additional Region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western-Pacific Region.

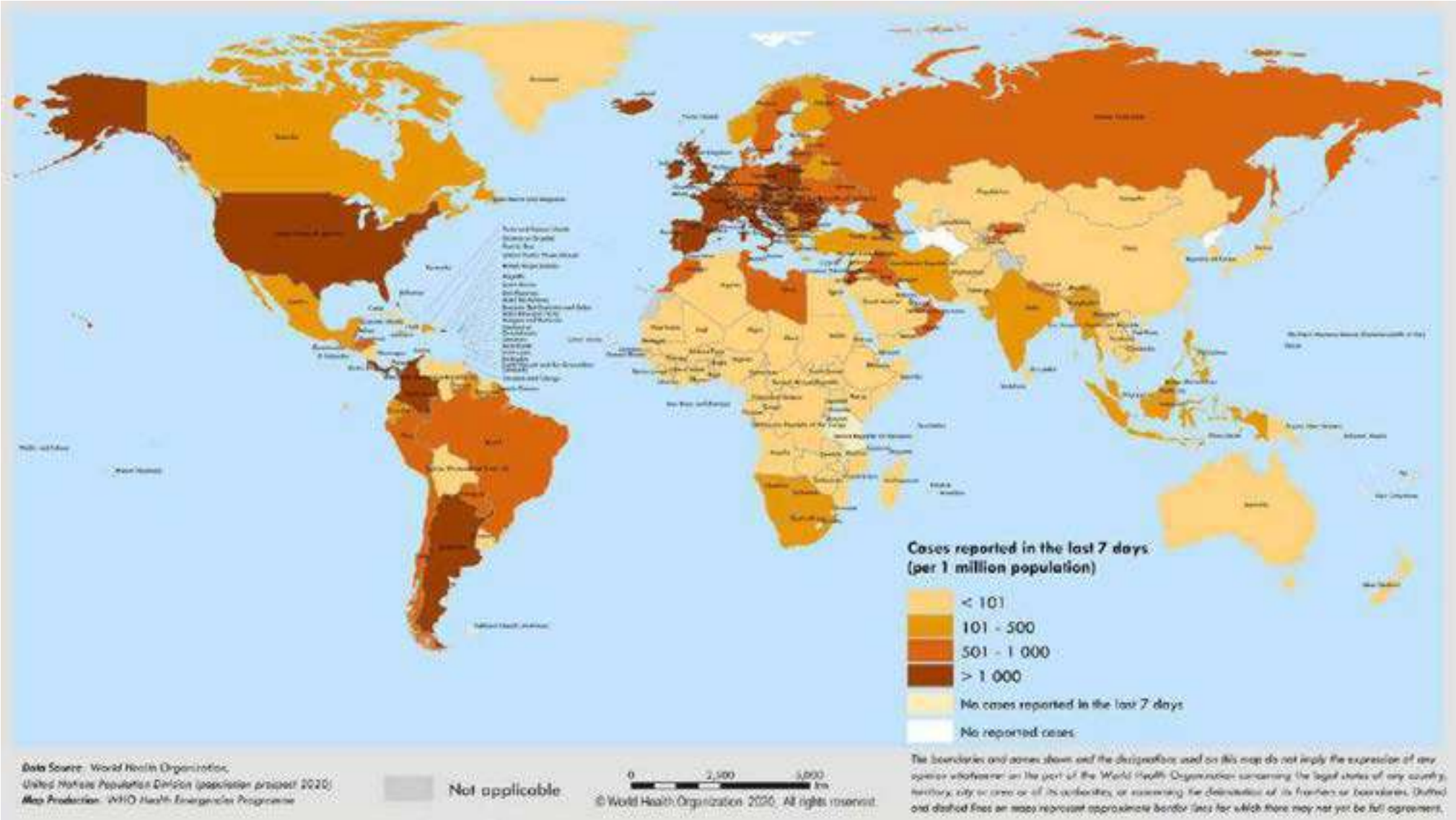
Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 25 October 2020**

WHO Region	New cases in last 7 days ( )	Change in new cases in last 7 days	Cumulative cases ( )	New deaths in last 7 days ( )	Change in new deaths in last 7 days*	Cumulative deaths ( )
Europe	1 335 914 (46%)	36%	9 664 042 (22%)	11 733 (30%)	37%	270 972 (23%)
Americas	884 318 (31%)	11%	19 737 794 (46%)	16 918 (43%)	4%	625 973 (54%)
South-East Asia	445 886 (15%)	-13%	8 969 707 (21%)	5 756 (14%)	-16%	140 827 (12%)
Eastern Mediterranean	159 166 (6%)	11%	2 955 552 (7%)	4 035 (10%)	15%	75 133 (6%)
Africa	32 123 (1%)	2%	1 298 315 (3%)	832 (2%)	-21%	29 277 (3%)
Western Pacific	27 197 (1%)	-4%	715 300 (2%)	438 (1%)	-6%	15 314 (1%)
† Other	-	-	741 (<1%)	-	-	13 (<1%)
Global	**2 884 604 (100)**	**16**	**43 341 451 (100)**	**39 712 (100)**	**8**	**1 157 509 (100)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*

***See data, table and figure notes*

Figure 2. COVID-19 cases per million population reported in the last seven days by countries, territories and areas, 19 October through 25 October 2020**



**See *data, table and figure notes*

Situation by WHO Region

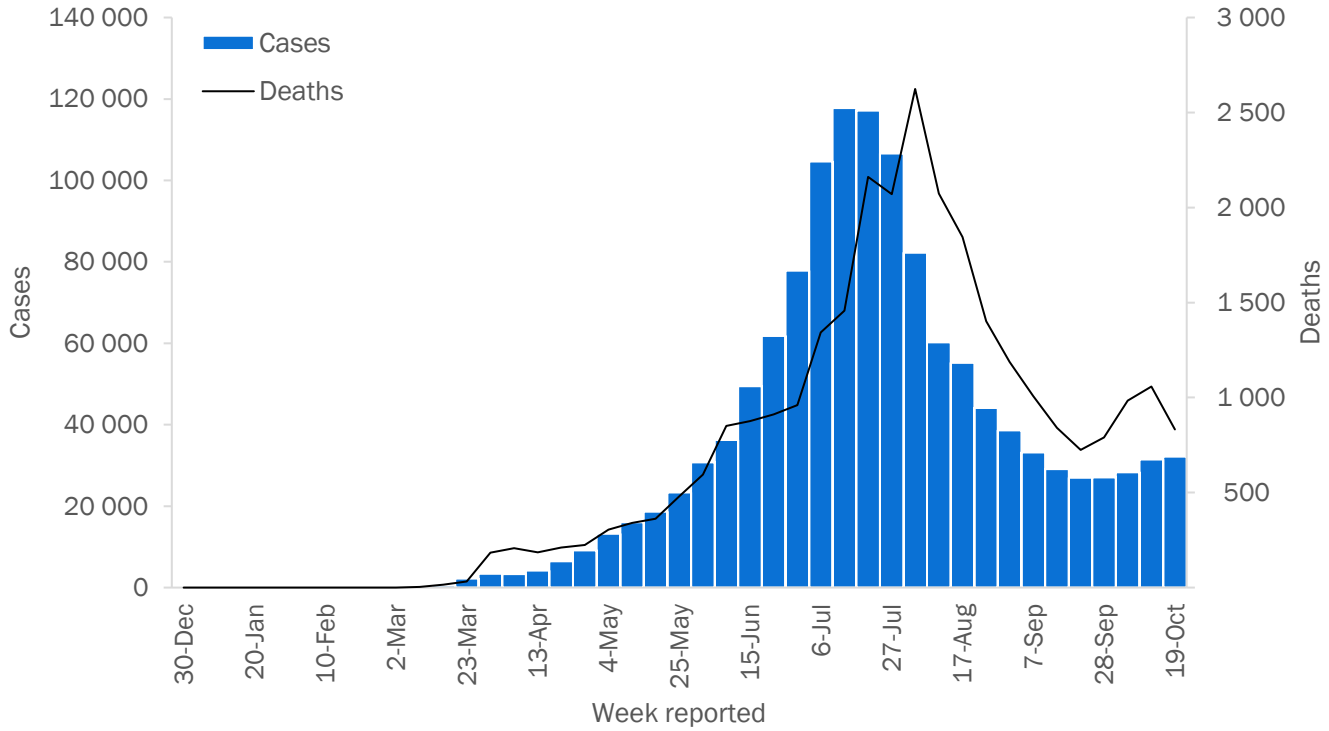
African Region

With 32 000 new cases and 800 new deaths over the past week, the Region accounts for around 1% of new global cases and 2% of new global deaths (Table 1). South Africa, Kenya, and Ethiopia continue to report the highest numbers of new cases. The Region shows a mixed pattern with countries at different epidemic stages and experiencing different outcomes. Despite this, COVID-19 continues to contribute an added burden to public health, strained already stretched health systems and caused socio-economic pressures.

Cases in Ethiopia have declined from peaks in August when there were over 10 000 cases a week, to just over 4 400 new cases reported in the past week (38 new cases per 1 million population), a 12% decrease compared to the previous 7 days. The number of new cases in Ethiopia are the third highest in the WHO African region. Deaths in the country have increased slightly (6%) in the past week although overall numbers remain low (n 73) and the rate of new deaths is less than one (0.6) per 1 million population. Ethiopia, as well as other countries in the Horn of Africa, are facing a triple threat of floods from unusually heavy rains, desert locust crop destruction and the impacts of COVID-19-all threatening food security.

With 4 594 new cases over the past week (85 new cases per 1 million population), a 51% increase from last week, Kenya is now reporting the second highest numbers of new cases in the Region and has witnessed a dramatic rise since the week of 28 September when there were only 1 000 new cases reported. It is just shy of its previous peak at the end of July, when there were 4 700 new cases Although deaths have increased at a much lower rate (9%) and new deaths are just over one per 1 million population (1.3). Oxygen is one of the most essential medicines for saving patients with COVID-19, as well as many other conditions. One of the main barriers to medical oxygen is the high transport costs of the cylinders to the health facilities. In Kenya, a private sector company has positioned oxygen plants near clusters of health facilities and uses a milk delivery system to deliver oxygen to more than 140 clinics. WHO is committed to working in solidarity with all governments, partners and the private sector to scale up sustainable oxygen supply.

Figure 3: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, as of 25 October 2020**



**See *data, table and figure notes*

Region of the Americas

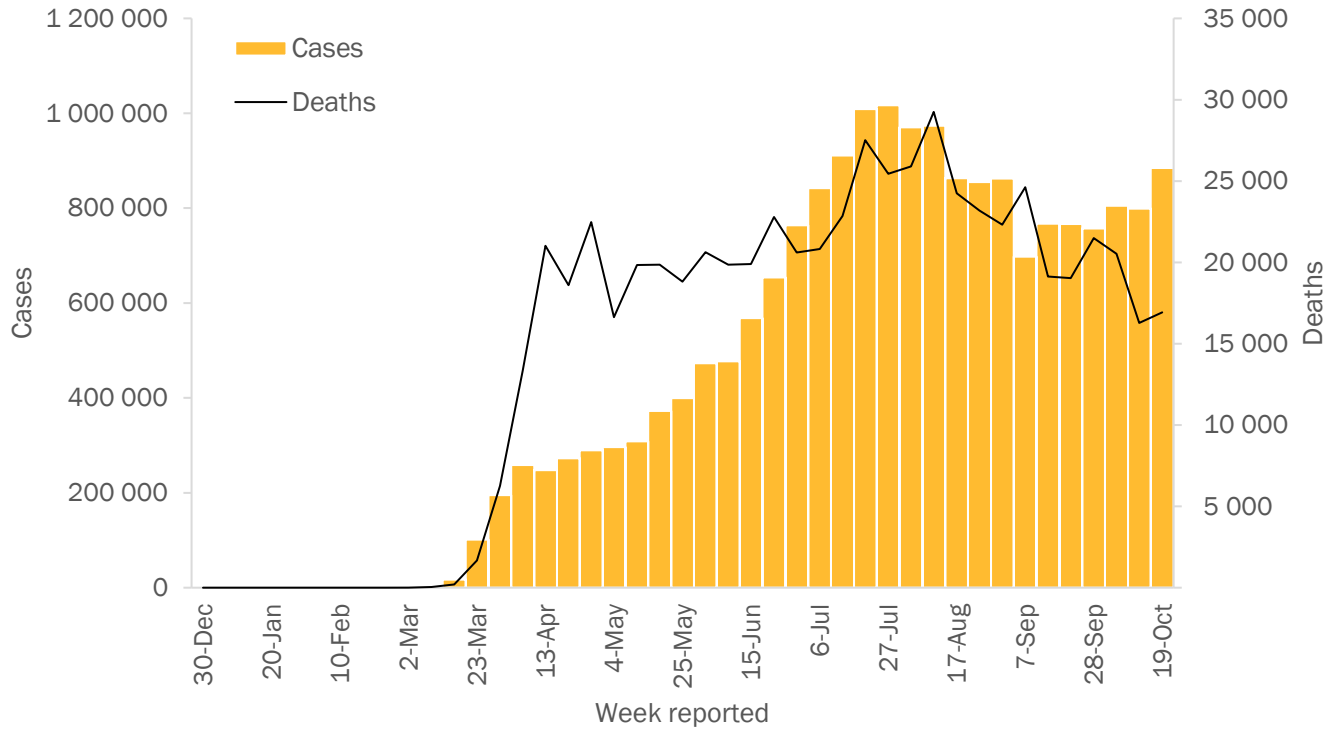
The Region of the Americas reported 880 000 new cases (31% of the global total) and 17 000 new deaths (43% of the global total) over the past week. The United States, Brazil, and Argentina continue to report the highest number of new cases (78% of regional new cases) and new deaths (67% of regional new deaths) in the Region.

The number of new weekly cases in the United States has risen since the week beginning 7 September, when there were 240 000 confirmed cases, to over 400 000 confirmed cases over the past week. Cases are now approaching the previous epidemic peak in July. At 1 318 new cases per million population, the incidence is lower in comparison to several European countries, such as the United Kingdom (2 200 cases per million) and France (3 300 cases per million). According to a US CDC report, the number of deaths from COVID-19 might underestimate the total impact of the pandemic on mortality, with an estimated 300 000 excess deaths occurring from late January through 3 October 2020, of which 200 000 excess deaths can be attributed to COVID-19.

Colombia has reported just over 1 million cumulative cases since the start of the pandemic, with the number of weekly new cases remaining stable with approximately 53 000 new cases (1 053 new cases per 1 million population) and 1 100 new deaths (23 new deaths per 1 million population) reported this week. Cases in Colombia peaked in the week of 10 August at 77 915 cases, dropping to 43 000 cases in the week of 28 September, but have risen in October.

In the week beginning 28 September, Canada exceeded its previous peak of roughly 12 000 new cases per week observed in late April. In October the number of cases has continued to rise, with over 17 000 new cases in the last week (467 new cases per 1 million population). The number of new deaths per week has also risen in October, with 166 deaths reported for the past week, although these numbers are far lower than they were in April and May when over 1 000 weekly new deaths were reported. Quebec and Ontario, which account for approximately 60% of the population of Canada, account for nearly 80% of cases. There have been reports suggesting that this rise may be partly attributable to social gatherings during Thanksgiving, which was celebrated in Canada on 12 October.

Figure 4: Number of COVID-19 cases and deaths reported weekly by the WHO Region of the Americas, as of 25 October 2020**



**See *data, table and figure notes*

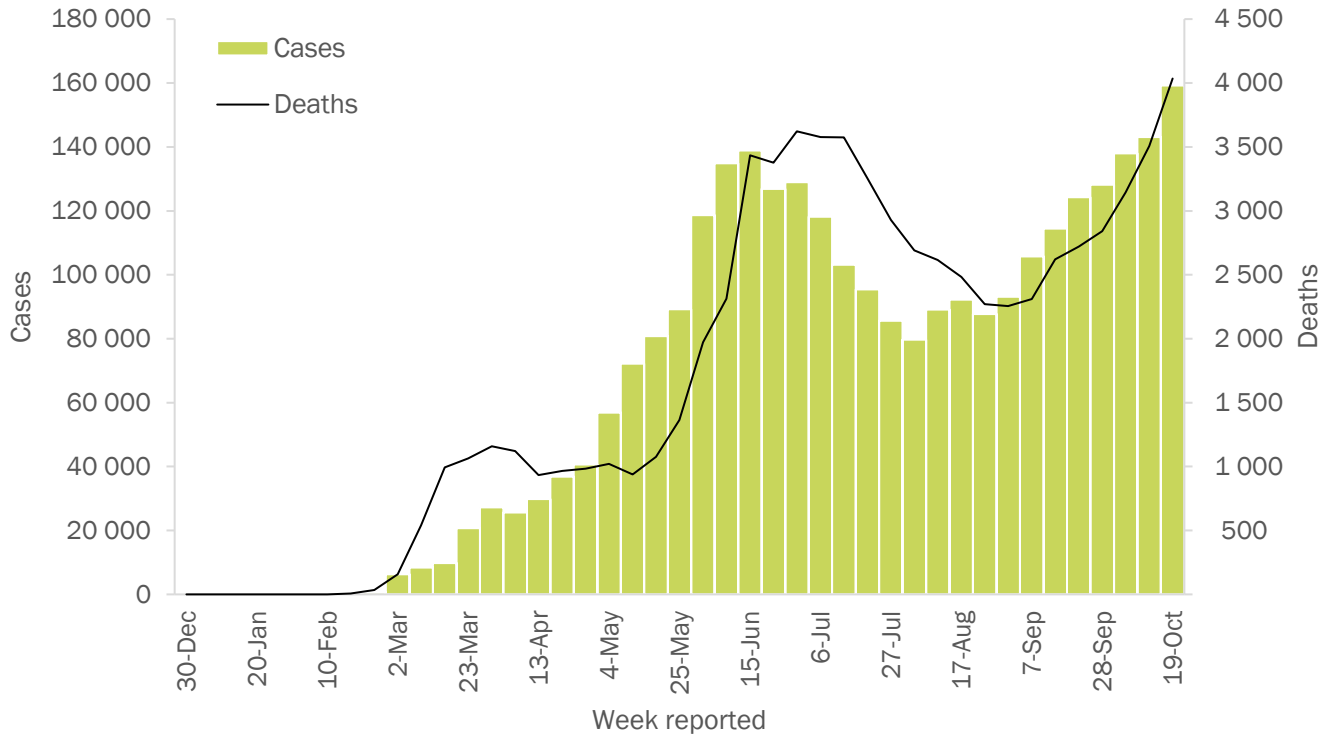
Eastern Mediterranean Region

In the past 7 days there have been 159 000 new cases and 4 000 deaths reported in the Eastern Mediterranean region. This represents a 6% increase in cases from last week and there has been a steady increasing trend seen in the region over the past two months. While Iran continues to report the highest number of new cases in the region, the highest number of new cases per 1 million population is seen in Jordan, while the highest new deaths and new deaths per 1 million population remain highest in Iran.

Jordan has reported an acceleration of new cases this past week and reached a peak of reported daily new cases in the past seven days. Bahrain reports the second highest new cases per 1 million population (1 413) and the highest cumulative cases of 47 001 per 1 million population. Increased public health and safety measures are seen throughout the country and the Ministry of Health for the Kingdom of Bahrain have recently published two new guidance documents, the first addressing health requirements to be applied in establishments serving shisha to contain and prevent the spread of the Coronavirus (COVID-19) and the other aims to establish health measures to be observed by restaurants and coffee shops to mitigate the spread of COVID-19.

While the number of new cases in Djibouti remains low, there has been an increasing trend in new cases for the past three weeks. New cases reported in the country last week showed a 480% increase (from 5 to 29) compared to three weeks ago, week beginning 28 September. This week Djibouti reported 78 new cases, a 169% increase from the previous week. These steady increases in new cases are not at previous peaks seen in June, when there were 975 cases in the first week of June, but are still of concern. As a result the Ministry of Health announced they will be closing land borders from 20 October for 15 days.

Figure 5: Number of COVID-19 cases and deaths reported weekly by the WHO Eastern Mediterranean Region, as of 25 October 2020**



**See *data, table and figure notes*

European Region

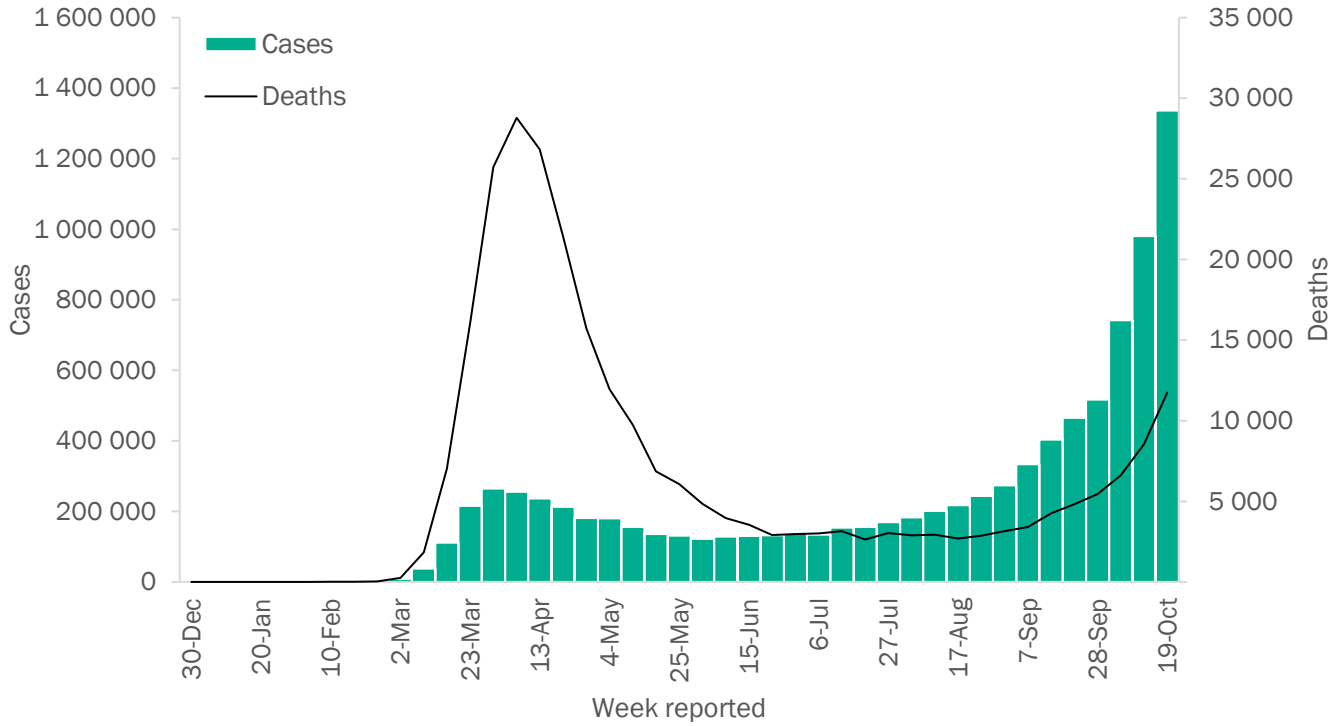
The number of new cases and deaths reported in the European region are increasing exponentially, with 36% and 37% increase in cases and deaths respectively compared to the previous week, the highest percentage increase reported in a single week in the region. Although the number of deaths is gradually increasing, the proportion of deaths to cases remains relatively low, compared to the early phase of the pandemic in the spring.

Approximately 1.3 million cases and 11 700 deaths were reported in the last 7 days, accounting for 46% and 30% respectively of the total number of cases and deaths reported globally. France accounted for the greatest number of new cases, over 200 000 cases, reported in the past 7 days. In the last week, hospitalizations due to COVID-19 and ICU occupancy increased in 21 countries across the region, compared to the previous week, however, current figures represent about 25% of the numbers reported during the peak level early in the pandemic. Based on surveillance data reported, an estimated 18% of reported COVID-19 cases have been hospitalized, with 7% of hospitalized patients requiring ICU and/or respiratory support.

In the United Kingdom, new cases have increased by 30% in the past week. The number of hospitalizations in Wales has sharply increased in the last week, increasing the pressure on frontline staff. There was also a steep increase in the number of ICU admissions among COVID-19 cases aged over 65 years old in England. Other countries reporting high hospitalization rates include Czechia, where new deaths per 1 million population are currently the highest (67)since the start of the pandemic and hospitals are expected to be at maximum capacity by mid-November and Italy where hospitals in Milan are stretched to capacity and temporary clinics have been reopened to manage the burden on the health system.

In the last week, Slovenia reported their highest daily increase in the number of new cases, 1 964, the rapid rise in cases has resulted in the health care system being stretched to capacity. To reduce transmission, the country was split into red and orange zones based on reported case numbers and Public Health and Social Measures were implemented accordingly..

Figure 6: Number of COVID-19 cases and deaths reported weekly by the WHO European Region, as of 25 October 2020**



**See *data, table and figure notes*

South-East Asia Region

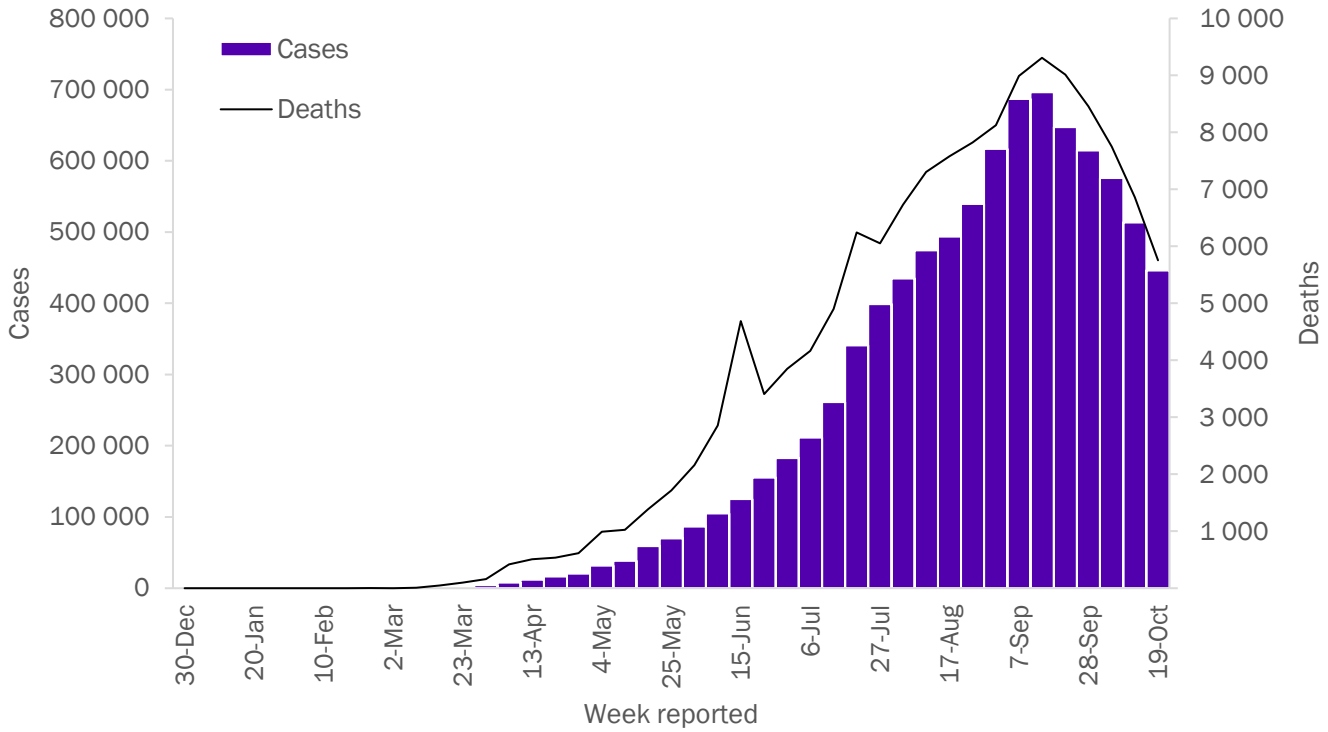
A continued declining trend in new cases and deaths was observed in the South-East Asia this week, this decline in new cases and deaths has been a weekly trend for the past five weeks with the largest decrease in new cases (decrease of 13%) and deaths (decrease of 16%) seen in the past 7 days. Steady decreases in cases have been seen in the past month in India, Indonesia, Myanmar, Maldives and Bhutan with other countries in the region continuing to fluctuate.

The only country in the region this week to report a substantial increase in new cases has been Sri Lanka reporting 2 046 new cases (96 new cases per 1 million population) compared to 847 new cases (40 new cases per 1 million population) last week. In an effort to decrease the burden at one of its largest hospitals, government authorities have decided to restrict the number of all outpatients patients visiting the Colombo National Hospital. As an alternative a landline and mobile service to obtain medicines at the clinics of the Colombo National Hospital.

While India is still reporting the highest number of new cases and deaths in the region, trends in these numbers for the country continue to decrease. India have reported 370 260 new cases (268 new cases per 1 million population) a decrease of 16% in the past week. 4 503 new deaths (3.3 new deaths per 1 million population) were reported this week amounting to a 21% decrease in new deaths compared to the previous 7 days. With upcoming cultural events such as Diwali, the Ministry of Culture issued a detailed standard operating procedure (SOP) for cultural functions to facilitate organization of cultural events during the COVID-19 pandemic.

Sustained declining trends have also been observed in the Maldives, with new cases down 24% from last week and continuing to be seen mostly from Greater Malé region. Additionally nearly all cases belong to known and existing clusters

Figure 7: Number of COVID-19 cases and deaths reported weekly by the WHO South-East Asia Region, as of 25 October 2020**



**See *data, table and figure notes*

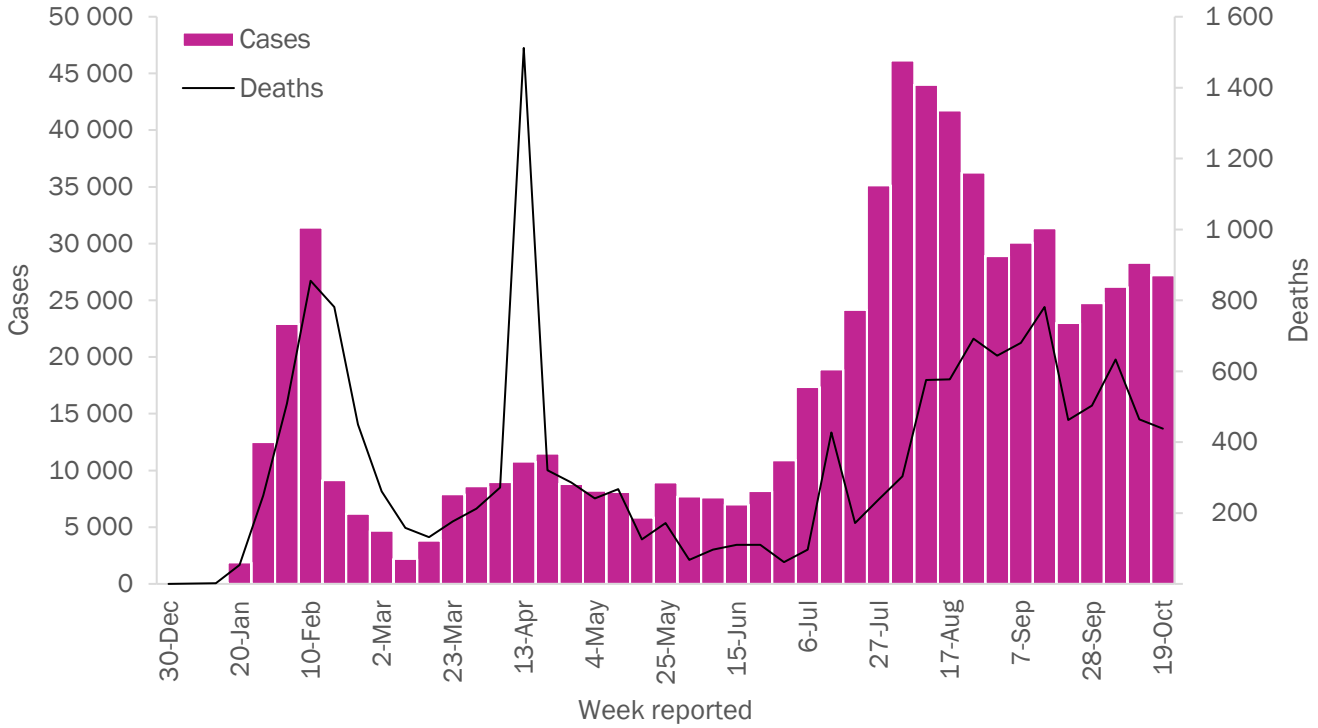
Western Pacific Region

Following a three-week increase in the number of cases reported in the Western Pacific region, the number of weekly new cases decreased by 4% in the last 7 days. The decrease in the number of cases observed was predominantly driven by the decrease reported in Papua New Guinea (94% decrease) and the Philippines (23% decrease). Similarly, the number of deaths reported in the last 7 days decreased by 6%. Approximately 27 000 cases and 430 deaths were reported in the region, accounting for just 1% of the total number of cases and deaths reported globally.

The number of cases and deaths in Malaysia has consistently increased in recent weeks, and in the last 7 days, an average of 873 cases and 6 deaths were reported daily, amounting to 189 new cases and 1.3 new deaths per 1 million population. This resulted in an increase of 35% and 64% of cases and deaths respectively compared with the previous week. The rapid increase in cases and deaths is putting the public health system under immense pressure.

Despite the decrease in cases reported in the Philippines, the country accounted for about 50% of the total number of cases and 75% of the total number of deaths reported in the region in the last 7 days. Relative to the country's population, new cases (123) and new deaths (3) per 1 million population remain low compared to other countries in the region. Heavy flooding, affecting over 35 000 households have been reported in the island of Mindanao, resulting in the evacuation of more than 12 000 people. This could affect COVID-19 response measures in the region as many displaced families are staying in makeshift tents. Mindanao also continues to report new health worker infections and an overall increasing trend in COVID-19 cases.

Figure 8: Number of COVID-19 cases and deaths reported weekly by the WHO Western Pacific Region, data as of 25 October 2020**



**See *data, table and figure notes*

Key weekly updates

- "We are at a critical juncture in this pandemic We urge leaders to take immediate action, to prevent further unnecessary deaths, essential health services from collapsing and schools shutting again." stressed the WHO Director-General Dr Tedros as part of the regular press briefing on COVID-19 on 23 October. Dr Tedros expanded that as the northern hemisphere enters winter, cases are accelerating, particularly in Europe and North America. The next few months are going to be very tough and some countries are on a dangerous track. WHO is calling on governments to carry out five key actions:

    1. Assess the current outbreak situation in your country based on the latest data
    2. For those countries where cases, hospitalizations and ICU rates are rising, make the necessary adjustments and course correct as quickly as possible.
    3. Be clear and honest with the public about the status of the pandemic in your country and what is needed from every citizen to get through this pandemic together.
    4. Put systems in place to make it easier for citizens to comply with the measures that are advised.
    5. Improve contact tracing systems and focus on isolating all cases and quarantining contacts, to avoid mandatory stay at home orders for everyone.

- WHO has updated its draft landscape of COVID-19 candidate vaccines, which lists 44 candidate vaccines in clinical evaluation. At a press briefing last week, Dr Soumya Swaminathan, WHO Chief Scientist, said "We're looking at the beginning of next year really to start seeing data for many of the trials though we may see one or two before the end of the year but the majority will start reporting in early 2021.Manycompanies are already manufacturing several million doses so as soon as the results are out, if it's promising, companies will be able to start providing those doses to the COVA facility which will then distribute based on the fair allocation framework that we have developed "

- WHO has published an assessment tool for laboratories implementing SARS-CoV-2 testing to assess the capacity of laboratories that have implemented or intend to implement testing for SARS-CoV-2, the virus that causes coronavirus disease (COVID-19).

- The 10th annual global celebration of Global Media and Information Literacy (MIL) Week will take place from 24 to 31 October 2020, under the theme "Resisting Disinfodemic: Media and Information Literacy for everyone and, by everyone". Through Global MIL Week, UNESCO and WHO are joining forces to tackle disinformation and misinformation. WHO and the Wikimedia Foundation, the nonprofit that administers Wikipedia, also announced a collaboration to expand the public's access to the latest and most reliable information about COVID-19.

- The World Health Summit, a leading global health conference and network of civil society, academia, politics and the private sector, will take place this week as a fully digital, interactive conference with a free-to-view programme. As part of this, a new book, Health: A Political Choice Act Now, Together, has been launched that calls on world leaders and politicians to unite in their response to the COVID-19 pandemic and other threats to health and the global economy.

- As many countries prepare to celebrate the Day of the Dead or All Souls Day on 2 November, WHO reminds people of the importance of physical distancing, mask wearing, hand hygiene, coughing safely into your arm, avoiding crowds and meeting people outside where possible and when you have to be inside with others open windows and ensure good ventilation with non-recirculating air.

Table 2. Number of COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, as of 25 October 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Africa	**32 123**	**1 298 315**	**1 157**	**832**	**29 277**	**26**	
South Africa	12 115	716 759	12 085	536	19 008	320	Community transmission
Kenya	4 594	49 997	930	71	920	17	Community transmission
Ethiopia	4 424	93 707	815	73	1 437	12	Community transmission
Angola	1 564	9 644	293	26	270	8	Community transmission
Algeria	1 427	55 630	1 269	51	1 897	43	Community transmission
Mozambique	1 188	12 161	389	11	88	3	Community transmission
Uganda	842	11 557	253	3	101	2	Community transmission
Cabo Verde	684	8 423	15 150	9	94	169	Community transmission
Botswana	681	5 923	2 519	1	21	9	Community transmission
Nigeria	623	62 111	301	6	1 132	5	Community transmission
Ghana	517	47 690	1 535	6	316	10	Community transmission
Zambia	328	16 200	881	2	348	19	Community transmission
Namibia	316	12 675	4 988	2	133	52	Community transmission
Guinea	191	11 669	889	1	71	5	Community transmission
Senegal	175	15 565	930	4	322	19	Community transmission
Zimbabwe	159	8 303	559	5	242	16	Community transmission
Madagascar	154	16 968	613	6	244	9	Community transmission
Côte D'Ivoire	130	20 470	776	0	122	5	Community transmission
Cameroon	129	21 793	821	2	426	16	Community transmission
Democratic Republic of The Congo	122	11 173	125	2	305	3	Community transmission
Togo	113	2 187	264	1	52	6	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Lesotho	101	1 940	906	1	43	20	Clusters of cases
Congo	97	5 253	952	0	92	17	Community transmission
Mali	93	3 499	173	0	133	7	Community transmission
Rwanda	89	5 073	392	0	34	3	Clusters of cases
Eswatini	82	5 863	5 054	1	116	100	Community transmission
Burkina Faso	70	2 459	118	0	67	3	Community transmission
Chad	69	1 441	88	3	96	6	Community transmission
Benin	61	2 557	211	0	41	3	Community transmission
Mauritania	59	7 663	1 648	0	163	35	Community transmission
South Sudan	41	2 890	258	1	56	5	Community transmission
Gabon	38	8 937	4 015	0	54	24	Community transmission
Eritrea	36	461	130	0	0	<1	Sporadic cases
Malawi	35	5 894	308	2	183	10	Community transmission
Mauritius	28	439	345	0	10	8	Sporadic cases
Comoros	21	517	595	0	7	8	Community transmission
Liberia	18	1 416	280	0	82	16	Community transmission
Sierra Leone	18	2 346	294	1	74	9	Community transmission
Burundi	14	558	47	0	1	<1	Clusters of cases
Guinea-Bissau	14	2 403	1 221	0	41	21	Community transmission
Gambia	10	3 660	1 514	1	119	49	Community transmission
Equatorial Guinea	9	5 079	3 620	0	83	59	Community transmission
Sao Tome and Principe	8	941	4 294	0	15	68	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Central African Republic	7	4 863	1 007	0	62	13	Community transmission
Niger	6	1 215	50	0	69	3	Clusters of cases
Seychelles	4	152	1 546	0	0	<1	Sporadic cases
United Republic of Tanzania	0	509	9	0	21	<1	Community transmission
Territories[ii]							
Réunion	373	5 361	5 988	3	22	25	Clusters of cases
Mayotte	246	4 321	15 839	1	44	161	Clusters of cases
Americas	**884 318**	**19 737 794**	**19 298**	**16 918**	**625 973**	**612**	
United States of America	436 392	8 548 111	25 825	5 436	223 699	676	Community transmission
Brazil	153 356	5 394 128	25 377	3 257	157 134	739	Community transmission
Argentina	103 759	1 090 589	24 130	2 615	28 896	639	Community transmission
Colombia	53 588	1 015 885	19 965	1 186	30 154	593	Community transmission
Mexico	39 114	891 160	6 912	2 608	88 924	690	Community transmission
Peru	20 699	888 715	26 954	385	34 149	1 036	Community transmission
Canada	17 626	216 104	5 726	166	9 946	264	Community transmission
Chile	10 539	503 598	26 344	304	14 003	733	Community transmission
Costa Rica	7 478	103 088	20 237	97	1 282	252	Community transmission
Ecuador	7 192	161 635	9 161	167	12 553	711	Community transmission
Honduras	5 191	93 214	9 411	56	2 623	265	Community transmission
Paraguay	4 777	59 594	8 355	112	1 309	184	Community transmission
Panama	4 368	129 200	29 944	76	2 633	610	Community transmission
Guatemala	3 604	104 894	5 855	94	3 651	204	Community transmission
Dominican Republic	3 093	124 843	11 508	25	2 225	205	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Venezuela (Bolivarian Republic of)	2 658	89 565	3 150	34	773	27	Community transmission
El Salvador	1 129	32 925	5 076	27	953	147	Community transmission
Bolivia (Plurinational State of)	1 050	140 853	12 067	169	8 645	741	Community transmission
Bahamas	640	6 466	16 443	14	132	336	Clusters of cases
Jamaica	475	8 749	2 955	18	192	65	Community transmission
Cuba	364	6 595	582	3	128	11	Clusters of cases
Belize	322	3 145	7 909	4	50	126	Community transmission
Uruguay	309	2 851	821	2	53	15	Clusters of cases
Guyana	288	4 023	5 115	10	119	151	Clusters of cases
Trinidad and Tobago	246	5 511	3 938	9	105	75	Community transmission
Haiti	90	9 026	792	0	232	20	Community transmission
Nicaragua	65	4 362	658	1	155	23	Community transmission
Suriname	42	5 170	8 813	0	109	186	Community transmission
Saint Lucia	19	54	294	0	0	<1	Sporadic cases
Antigua and Barbuda	9	124	1 266	0	3	31	Sporadic cases
Barbados	8	233	811	0	7	24	Clusters of cases
Saint Vincent and the Grenadines	6	73	658	0	0	<1	Sporadic cases
Dominica	5	38	528	0	0	<1	Clusters of cases
Grenada	0	28	249	0	0	<1	No cases
Saint Kitts and Nevis	0	19	357	0	0	<1	No cases
Territories[ii]							
Puerto Rico	4 630	63 135	22 069	33	804	281	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Martinique	528	2 800	7 461	2	27	72	Community transmission
Guadeloupe	207	7 474	18 679	4	127	317	Community transmission
French Guiana	137	10 385	34 769	0	69	231	Community transmission
Curaçao	130	858	5 229	0	1	6	Community transmission
Aruba	104	4 420	41 399	4	36	337	Community transmission
Sint Maarten	39	784	18 283	0	22	513	Community transmission
United States Virgin Islands	17	1 348	12 909	0	21	201	Community transmission
Saint Martin	7	542	14 020	0	8	207	Community transmission
Cayman Islands	6	239	3 637	0	1	15	Sporadic cases
Bermuda	5	190	3 051	0	9	145	Sporadic cases
Saint Barthélemy	5	83	8 397	0	0	<1	Sporadic cases
Turks and Caicos Islands	2	701	18 105	0	6	155	Clusters of cases
Anguilla	0	3	200	0	0	<1	No cases
Bonaire, Sint Eustatius and Saba	0	150	5 721	0	3	114	Sporadic cases
British Virgin Islands	0	72	2 381	0	1	33	Clusters of cases
Falkland Islands (Malvinas)	0	13	3 732	0	0	<1	No cases
Montserrat	0	13	2 601	0	1	200	No cases
Saint Pierre and Miquelon	0	16	2 761	0	0	<1	Sporadic cases
Eastern Mediterranean	**159 166**	**2 955 552**	**4 044**	**4 035**	**75 133**	**103**	
Iran (Islamic Republic of)	36 215	574 856	6 844	2 197	32 953	392	Community transmission
Iraq	25 629	455 398	11 322	370	10 671	265	Community transmission
Morocco	23 550	199 745	5 412	377	3 373	91	Clusters of cases
Jordan	14 629	55 055	5 396	210	624	61	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Tunisia	9 863	52 399	4 434	251	983	83	Community transmission
United Arab Emirates	9 377	126 234	12 763	16	480	49	Community transmission
Lebanon	8 959	72 186	10 576	45	579	85	Community transmission
Libya	5 584	57 223	8 328	65	801	117	Community transmission
Kuwait	5 444	122 317	28 642	50	749	175	Community transmission
Pakistan	4 037	328 602	1 488	73	6 739	31	Clusters of cases
Oman	3 541	113 354	22 197	76	1 190	233	Community transmission
Saudi Arabia	2 698	345 232	9 917	116	5 313	153	Sporadic cases
Bahrain	2 404	80 533	47 329	19	316	186	Clusters of cases
Qatar	1 738	131 432	45 619	6	230	80	Community transmission
Egypt	1 100	106 707	1 043	78	6 211	61	Clusters of cases
Afghanistan	482	40 937	1 052	15	1 518	39	Clusters of cases
Syrian Arab Republic	326	5 461	312	22	272	16	Community transmission
Djibouti	78	5 541	5 608	0	65	66	Sporadic cases
Somalia	33	3 941	248	3	104	7	Sporadic cases
Sudan	31	13 747	314	1	837	19	Community transmission
Yemen	5	2 064	69	3	600	20	Community transmission
Territories[ii]							
Occupied Palestinian territory	3 443	62 588	12 269	42	525	103	Community transmission
Europe	**1 335 914**	**9 664 042**	**10 353**	**11 733**	**270 972**	**290**	
France	217 797	1 134 296	17 378	1 243	34 721	532	Community transmission
The United Kingdom	148 582	894 694	13 179	1 166	44 998	663	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Russian Federation	114 543	1 547 774	10 606	1 863	26 589	182	Clusters of cases
Italy	101 973	542 789	8 977	736	37 479	620	Clusters of cases
Belgium	90 817	333 624	28 786	390	10 899	940	Community transmission
Czechia	81 970	268 370	25 060	725	2 365	221	Community transmission
Spain	78 180	1 046 132	22 375	706	34 752	743	Community transmission
Poland	74 716	263 929	6 974	827	4 483	118	Community transmission
Germany	67 207	449 275	5 362	255	10 098	121	Clusters of cases
Netherlands	60 936	301 249	17 581	281	7 062	412	Community transmission
Ukraine	38 538	355 601	8 131	682	6 590	151	Community transmission
Romania	29 325	212 492	11 046	506	6 470	336	Community transmission
Switzerland	29 096	120 680	13 944	54	1 913	221	Community transmission
Portugal	18 054	121 133	11 880	135	2 343	230	Clusters of cases
Austria	15 275	85 048	9 443	71	988	110	Community transmission
Turkey	14 106	363 999	4 316	503	9 874	117	Community transmission
Armenia	13 143	80 410	27 136	99	1 222	412	Community transmission
Hungary	12 957	63 642	6 588	283	1 535	159	Community transmission
Slovakia	12 533	45 155	8 271	77	165	30	Clusters of cases
Georgia	10 954	32 127	8 054	65	238	60	Community transmission
Croatia	9 198	37 208	9 063	74	452	110	Community transmission
Slovenia	8 861	24 080	11 583	28	188	90	Clusters of cases
Bulgaria	8 454	40 132	5 776	116	1 136	163	Clusters of cases
Ireland	7 430	58 067	11 760	33	1 885	382	Community transmission
Israel	6 852	310 105	35 827	181	2 435	281	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Sweden	5 216	110 594	10 951	2	5 933	587	Community transmission
Greece	5 060	31 496	3 022	64	581	56	Clusters of cases
Bosnia and Herzegovina	4 939	40 894	12 465	85	1 086	331	Community transmission
Azerbaijan	4 696	50 486	4 979	41	679	67	Clusters of cases
Denmark	4 470	41 412	7 150	21	708	122	Community transmission
Republic of Moldova	4 437	71 811	17 802	100	1 700	421	Community transmission
Belarus	4 104	93 707	9 917	20	961	102	Community transmission
Kyrgyzstan	3 706	56 738	8 697	23	1 136	174	Clusters of cases
Luxembourg	3 242	14 399	23 002	11	147	235	Community transmission
North Macedonia	3 193	27 199	13 055	73	934	448	Community transmission
Serbia	2 926	39 827	5 719	15	793	114	Community transmission
Lithuania	2 309	10 949	4 022	16	136	50	Community transmission
Albania	2 084	19 445	6 757	25	480	167	Clusters of cases
Uzbekistan	2 076	65 765	1 965	22	554	17	Clusters of cases
Kazakhstan	1 990	147 615	7 862	41	2 219	118	Clusters of cases
Finland	1 519	14 970	2 702	2	354	64	Community transmission
Montenegro	1 138	16 950	26 988	30	270	430	Clusters of cases
Norway	1 096	17 908	3 303	1	279	51	Clusters of cases
Malta	1 091	5 373	12 169	5	50	113	Clusters of cases
Latvia	1 075	4 757	2 522	12	60	32	Clusters of cases
Cyprus	1 065	3 636	3 012	0	25	21	Clusters of cases
Andorra	661	4 325	55 976	10	72	932	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Iceland	396	4 504	13 199	0	11	32	Community transmission
Estonia	299	4 428	3 338	5	73	55	Clusters of cases
Tajikistan	281	10 819	1 134	1	81	8	Pending
Liechtenstein	123	413	10 829	0	1	26	Sporadic cases
Monaco	36	310	7 899	0	2	51	Sporadic cases
San Marino	35	852	25 105	0	42	1 238	Community transmission
Holy See	0	26	32 138	0	0	<1	Sporadic cases
Territories[ii]							
Kosovo[1]	1 003	18 105	9 732	9	656	353	Community transmission
Gibraltar	97	667	19 798	0	0	<1	Clusters of cases
Jersey	39	530	4 871	0	32	294	Community transmission
Faroe Islands	7	490	10 028	0	0	<1	Sporadic cases
Guernsey	7	266	4 209	0	13	206	Community transmission
Greenland	1	17	299	0	0	<1	No cases
Isle of Man	0	348	4 093	0	24	282	No cases
South-East Asia	**445 886**	**8 969 707**	**4 437**	**5 756**	**140 827**	**70**	
India	370 260	7 946 429	5 758	4 503	119 502	87	Clusters of cases
Indonesia	28 218	392 934	1 437	774	13 411	49	Community transmission
Nepal	25 929	159 830	5 486	115	862	30	Clusters of cases
Bangladesh	10 212	400 251	2 430	134	5 818	35	Community transmission
Myanmar	8 913	46 200	849	228	1 122	21	Clusters of cases
Sri Lanka	2 046	8 413	393	1	16	1	Clusters of cases
Maldives	243	11 532	21 334	1	37	68	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Thailand	50	3 746	54	0	59	1	Clusters of cases
Bhutan	15	342	443	0	0	<1	Sporadic cases
Timor-Leste	0	30	23	0	0	<1	Sporadic cases
Western Pacific	**27 197**	**715 300**	**364**	**438**	**15 314**	**8**	
Philippines	13 481	371 630	3 391	331	7 039	64	Community transmission
Malaysia	6 115	27 805	859	41	236	7	Clusters of cases
Japan	3 878	97 498	771	41	1 725	14	Clusters of cases
Republic of Korea	637	26 043	508	13	460	9	Clusters of cases
China	185	91 725	62	0	4 746	3	Clusters of cases
Australia	116	27 527	1 079	1	905	35	Clusters of cases
Singapore	61	57 973	9 909	0	28	5	Clusters of cases
New Zealand	49	1 585	329	0	25	5	Clusters of cases
Viet Nam	34	1 169	12	0	35	<1	Clusters of cases
Mongolia	17	339	103	0	0	<1	Sporadic cases
Cambodia	4	288	17	0	0	<1	Sporadic cases
Papua New Guinea	2	588	66	0	7	1	Community transmission
Brunei Darussalam	1	148	338	0	3	7	Sporadic cases
Fiji	1	33	37	0	2	2	Sporadic cases
Lao People'S Democratic Republic	1	24	3	0	0	<1	Sporadic cases
Solomon Islands	1	4	6	0	0	<1	Sporadic cases
Territories[ii]							
French Polynesia	2 062	6 493	23 114	6	26	93	Sporadic cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Guam	549	4 308	25 525	5	75	444	Clusters of cases
Northern Mariana Islands (Commonwealth of The)	2	92	1 598	0	2	35	Pending
Wallis and Futuna	1	1	89	0	0	<1	Sporadic cases
New Caledonia	0	27	95	0	0	<1	Sporadic cases
Subtotal for all regions	**2 884 604**	**43 340 710**		**39 712**	**1 157 496**		
Other[†]	0	741		0	13		
Grand total	**2 884 604**	**43 341 451**	**5 560**	**39 712**	**1 157 509**	**148**	

[**]*See data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases; efforts are underway to identify these for notation in the data table. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines

on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas; classification is based on the highest category reported within a country/territory/area. Categories:

- No cases: with no confirmed cases;
- Sporadic cases: with one or more cases, imported or locally detected;
- Clusters of cases: experiencing cases, clustered in time, geographic location and/or by common exposures;
- Community transmission: experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel laboratory surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area;
- Pending: transmission classification has not been reported to WHO.

[ii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

[†] Other: includes cases reported from international conveyances.

Country, territory, or area-specific notes, updates and errata

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

COVID-19 Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 18 October 2020, 10 am CEST

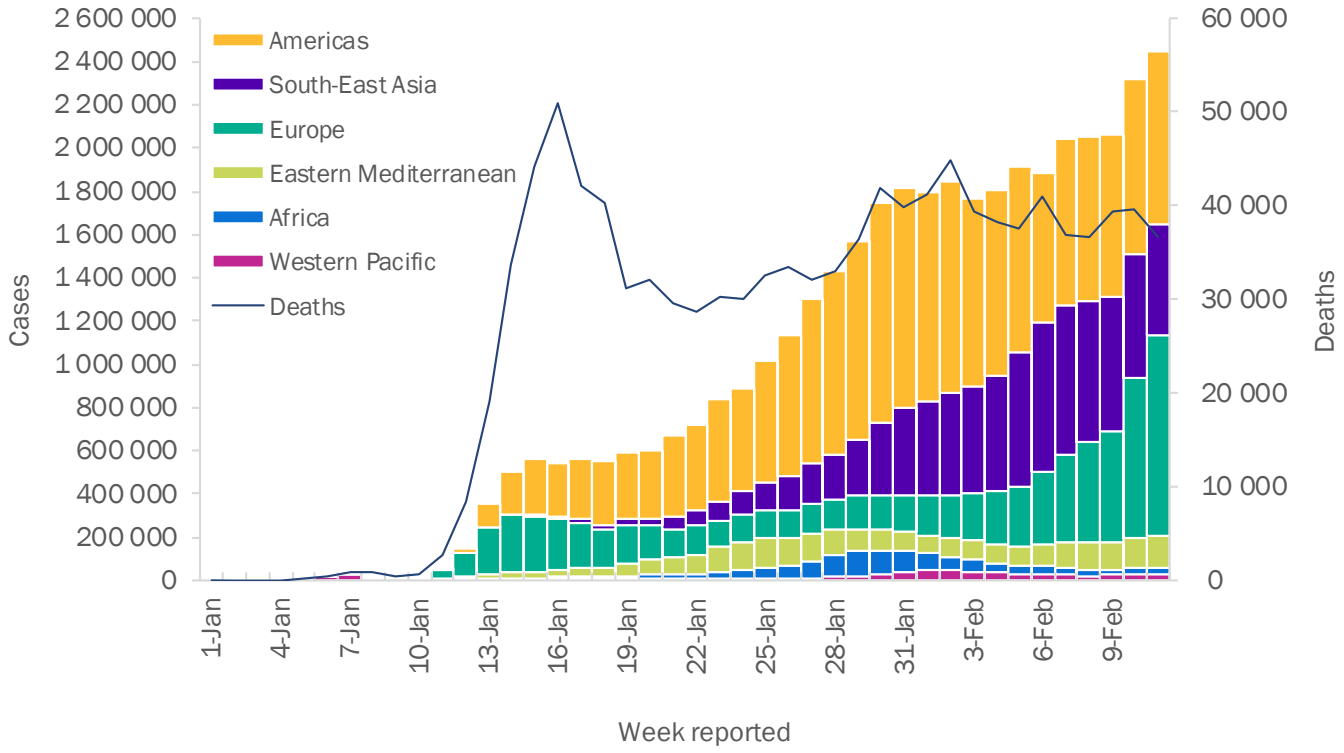
For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

The incidence of new COVID-19 cases has continued to accelerate, while the incidence of new deaths has remained relatively stable (Figure 1). As of 18 October, over 40 million cases and 1.1 million deaths have been reported globally, with over 2.4 million new cases and 36 000 new deaths reported over the past week.

Figure 1: Number of COVID-19 cases reported weekly by WHO Region, and global deaths, 30 December 2019 through 18 October 2020**



**See *data table and figure notes*.

The European Region has continued to report a rapid increase in cases and deaths, with over 927 000 new cases reported this past week – a 25% weekly increase in cases compared to the previous week – contributing 38% of all new cases reported worldwide (Table 1). Similarly, the number of deaths continues to climb with a 29% increase from last week. Increases, although more gradual, were also observed in the African, Eastern-Mediterranean and Western Pacific Regions. Declines continued to be reported in the Region of the Americas and the South-East Asia Region; although the incidence of new infections remains high, and collectively these two regions contribute over half of new cases and deaths observed globally.

The countries reporting the highest number of cases in the past week remain the same as last week: India, the United States of America, France, Brazil and the United Kingdom.

Additional Region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western-Pacific Region.

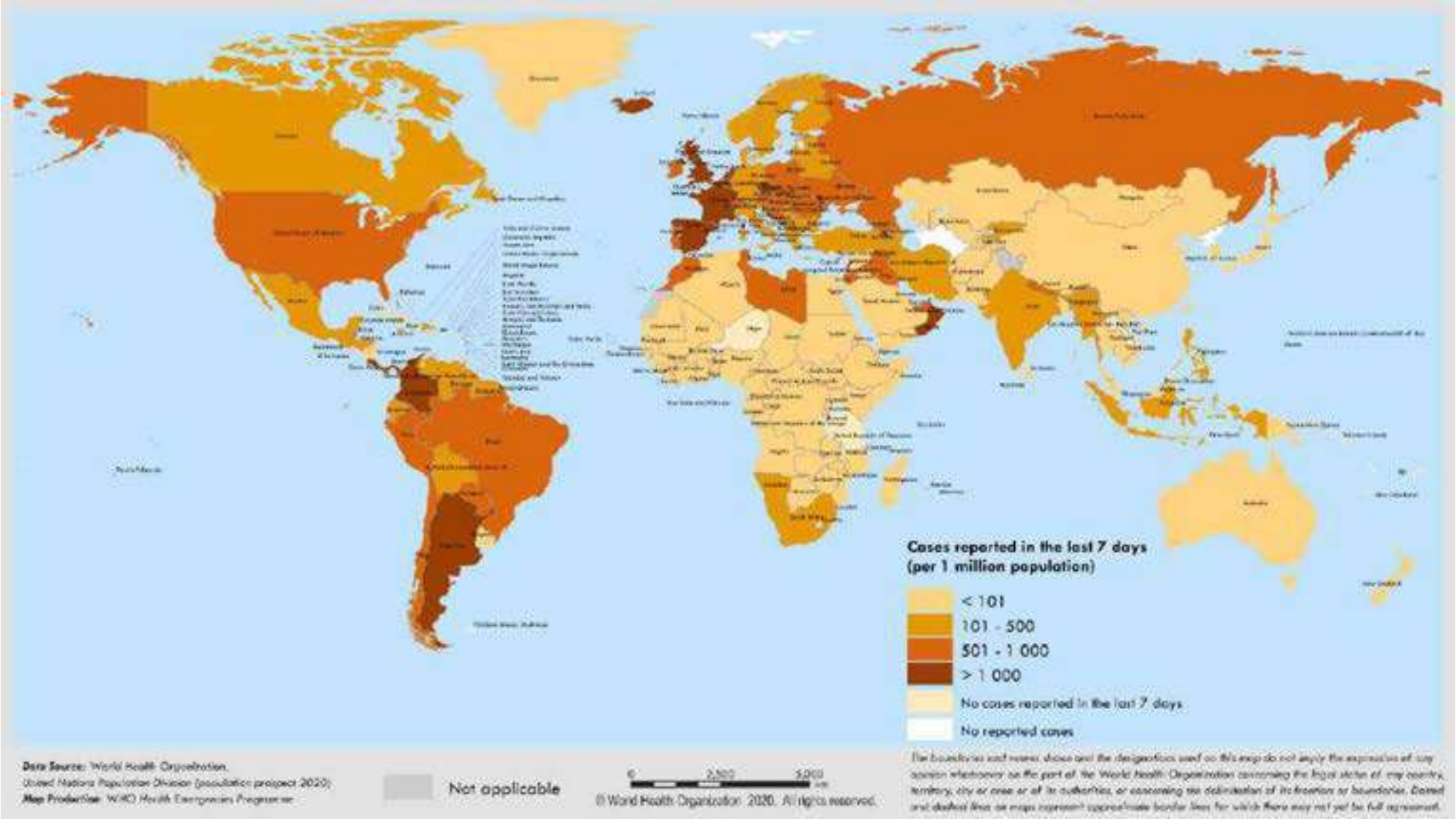
Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 18 October 2020**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days*	Cumulative deaths (%)
Europe	927 433 (38%)	25%	8 027 954 (20%)	8 386 (23%)	29%	256 540 (23%)
Americas	798 794 (33%)	-1%	18 800 094 (47%)	16 283 (45%)	-21%	608 727 (55%)
South-East Asia	513 444 (21%)	-11%	8 546 666 (21%)	6 864 (19%)	-11%	135 275 (12%)
Eastern Mediterranean	144 133 (6%)	4%	2 786 477 (7%)	3 492 (10%)	10%	70 902 (6%)
Africa	31 473 (1%)	11%	1 267 664 (3%)	1 058 (3%)	8%	28 469 (3%)
Western Pacific	28 317 (1%)	8%	688 737 (2%)	464 (1%)	-27%	14 823 (1%)
† Other	-	-	741 (<1%)	-	-	13 (<1%)
Global	**2 443 594 (100%)**	**6%**	**40 118 333 (100%)**	**36 547 (100%)**	**-8%**	**1 114 749 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*

***See data, table and figure notes*

Figure 2. COVID-19 cases per million population reported in the last seven days by countries, territories and areas, 12 October through 18 October 2020**



**See *data, table and figure notes*

Situation by WHO Region

African Region

Continuing trends in the previous week, the Region reported an increase in both cases and deaths in the last 7 days, with an 11% increase in new cases and an 8% increase in new deaths (Figure 3). The pattern of increasing cases continues to be driven by South Africa and Ethiopia, with Kenya, and Botswana also reporting notable increases.

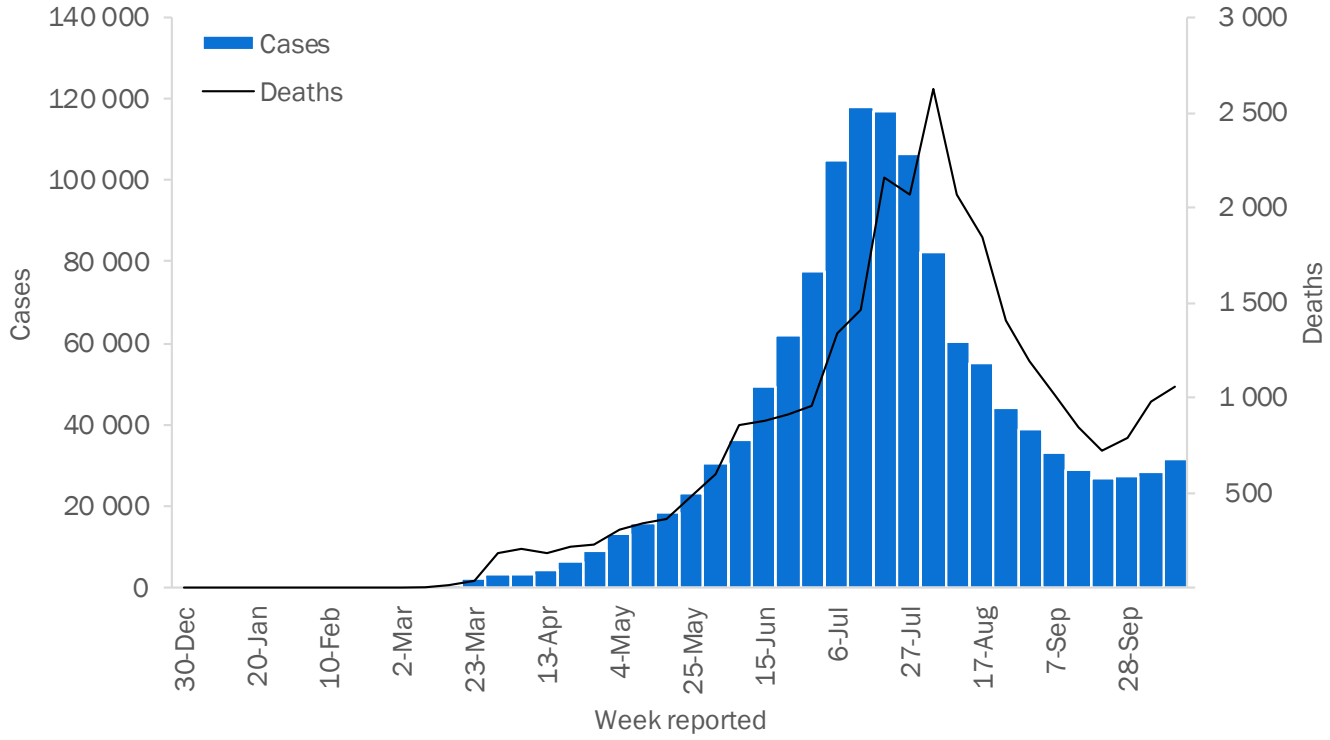
The majority of countries in the region are reporting community transmission of COVID-19 (n=39; 78%), with a further 7 (14%) classifying transmission as clusters of cases (n=7; 14%), 3 (6%) as sporadic cases, and 1 (2%) as reporting no active cases.

An unusually high number of cases was reported from Botswana this week, with over 1800 cases reported in one day. This was largely attributed to a backlog of tests administered from 2–13 October, mostly from in and around the capital city of Gaborone.

South Africa has accounted for approximately 70% of deaths in the Region in the past week. The high number of deaths being reported is partially attributed to a mortality audit, and many of these deaths are retrospectively reported.

Mauritania reported a large increase from last week (12 to 80 cases), all reported from the capital, Nouakchott. Although this is a higher number of cases than Mauritania has reported in recent weeks, it remains lower than the daily numbers reported in July.

Figure 3: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, as of 18 October 2020**



**See *data, table and figure notes*

Region of the Americas

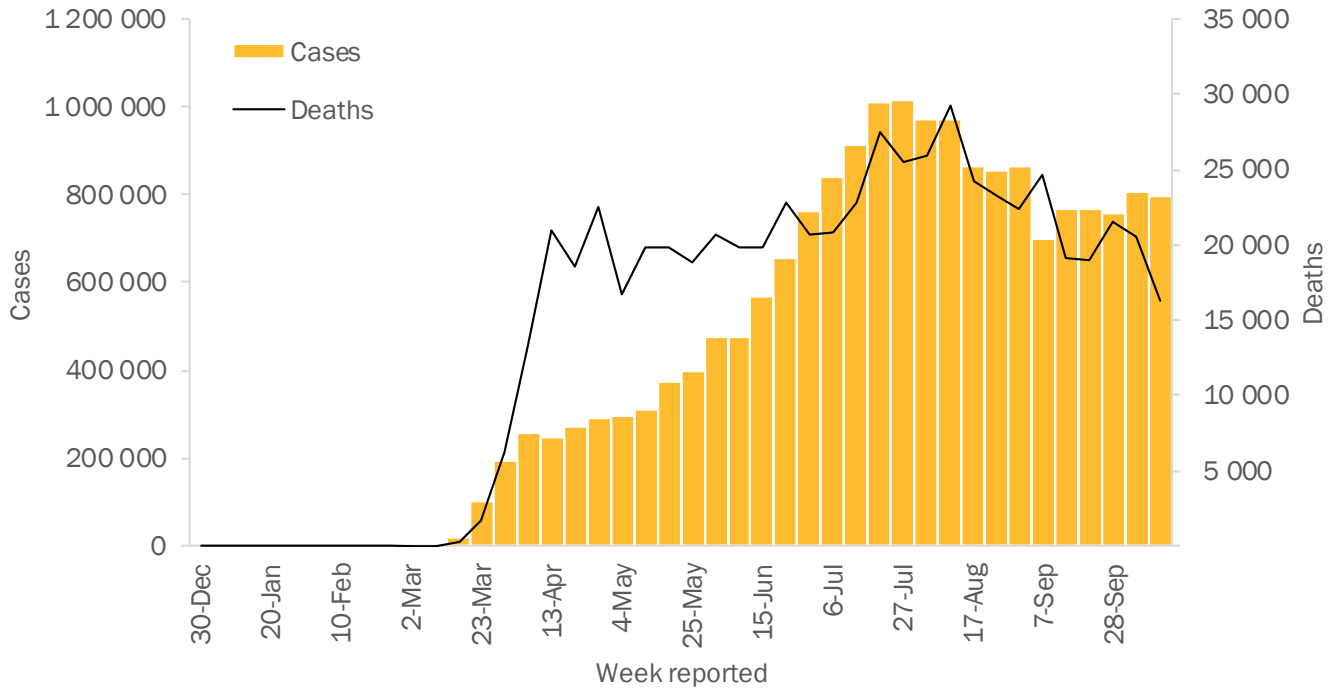
A slight decrease in new cases was reported across the Region over the past week (Figure 4) in comparison to the previous week. The United States of America, Brazil, Argentina, Colombia and Mexico continue to register the highest number of weekly new cases in the region, while the highest incidence of new cases per million population was reported in Argentina, Bahamas, Costa Rica and Saint Martin, all with more than 1600 cases per million in the past 7 days. A marked decline in the incidence of deaths in the region continued this past week with just over 16 000 new deaths, compared with 20 000 new deaths last week. The Region, accounts for a third (n=798 794, 33%) of new cases and almost half (45%) of new deaths reported globally in the past week. Most countries and territories in the region self characterize their current transmission pattern as community transmission (n=34, 64%), with 8 (15%) classified as clusters of cases, 7 (13%) as sporadic cases, and 5 (9%) as no cases.

Argentina remains the country in the Region with the highest number of new cases and new deaths per million population with over 2000 new cases per million inhabitants in the past week. Even though the weekly incidence of new COVID-19 cases is increasing gradually, a decreasing trend in the number of new deaths has been reported in the past two weeks, dropping from 6000 deaths per week at the end of September to less than 2500 deaths in the past week.

Guatemala continues to register a gradual decline in the incidence of new cases, however, an 88% increase in new deaths (from 80 to 150 deaths) was reported the past 7 days. COVID-19 test positivity rates have also remained relatively high for the last 12 weeks with over 10% of samples testing positive. The highest incidence of cases and deaths was reported in the capital, Guatemala City, and has reached over 530 deaths per million population.

Peru has the second-highest rate of deaths per 1 million population in the Region with 1021 deaths per million inhabitants. However, in the last week, modest decreases in case and death rates continued. Some regions have reported declines of 50% and the regions of Puno, Madre de Dios, Amazonas and Moquegua registered declines of 70% in the weekly incidence of COVID-19.

Figure 4: Number of COVID-19 cases and deaths reported weekly by the WHO Region of the Americas, as of 18 October 2020**



**See *data, table and figure notes*

Eastern Mediterranean Region

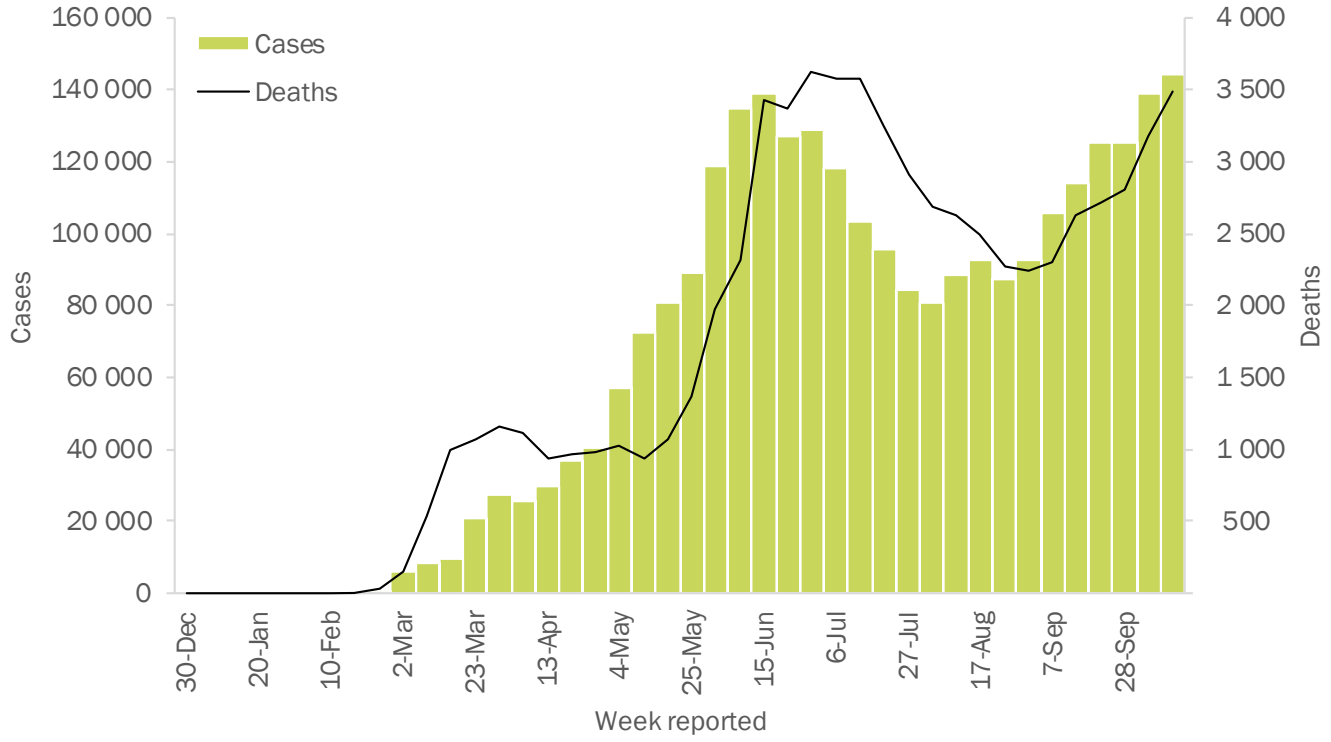
A gradual increase of new cases and deaths was reported by the Eastern Mediterranean Region over the past week (Figure 5), reaching the highest weekly incidence reported since the beginning of the pandemic, with almost 150 000 new confirmed cases from 22 countries. In the past week, The Islamic Republic of Iran, Iraq and Morocco are reported the highest number of new cases while Bahrain, Lebanon and Jordan report the highest incidence, with over 1500 new cases per million population.

A majority of the countries in the region continue to self-characterise their current transmission pattern as community transmission (n=14, 64%), with 5 countries reporting clusters of cases and sporadic cases being reported in Somalia, Djibouti and Saudi Arabia. During the past week, Tunisia updated their classification from clusters of cases to community transmission.

The Islamic Republic of Iran remains the most affected country in the region with Tehran, the capital city, being the most affected area. In this reporting period, Iran has recorded new weekly records, with over 30 000 new cases (360 cases per million population) and over 1,800 deaths (22 new deaths per million population) reported, bringing cumulative counts in the country to over 534 000 cases and 30 000 deaths.

Libya has shown a surge in cases, recording over 6,000 new cases (900 cases per million population). Test positivity rates also continue to gradually increase, with approximately 1 in 4 samples tested returning a positive result.

Figure 5: Number of COVID-19 cases and deaths reported weekly by the WHO Eastern Mediterranean Region, as of 18 October 2020**



**See *data, table and figure notes*

European Region

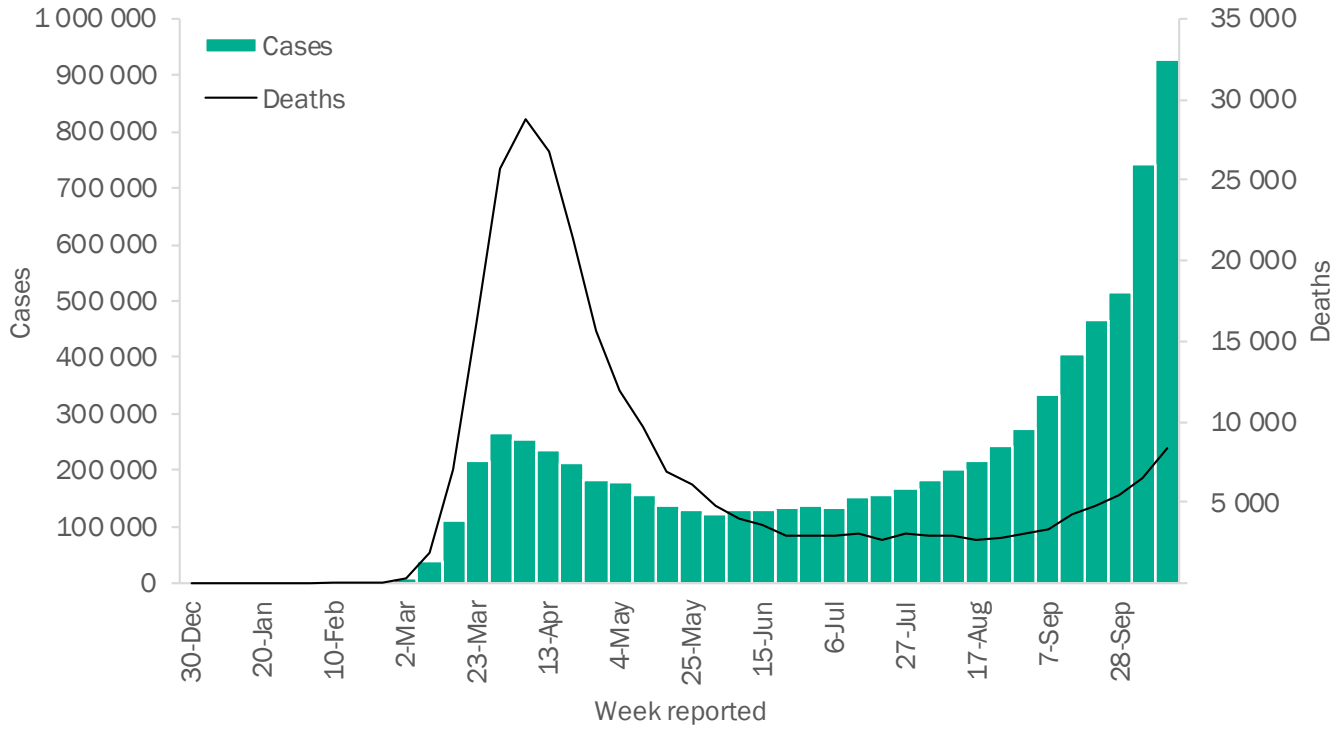
This week, the European Region again reports the highest increase in cases and deaths thus far – 25% and 29%, respectively compared to the previous week. In addition, the Region reported the greatest proportion of new cases globally (38%, n=927 433). A media briefing by WHO Regional Director for Europe highlighted that the region is currently reporting over three times more cases per day compared to the April peak, with hospital admissions rising, although the number of daily deaths remains five times lower than they were in April.

France, the United Kingdom, the Russian Federation, Czechia and Italy continue to report a high incidence of new cases. Collectively, these five countries contribute to over half of all reported cases this week in the Region.

A majority of the countries in the region self-characterise their current transmission pattern as community transmission (n=34, 55%), with a further 20 (33%) countries reporting clusters of cases, 4 (6%) clusters of cases, 3 (<1%) no cases, and one pending classification. During the past week North Macedonia updated their classification from clusters of cases to community transmission.

Slovenia reported a 150% increase in cases this week (n=4890) – the highest one-week increase the country has experienced so far. In addition, Slovenia reported 1924 deaths, compared to only one death last week. In response to this recent increase in cases and deaths, as of 19 October, the Slovenian government has declared a 30-day state of emergency with a daily curfew.

Figure 6: Number of COVID-19 cases and deaths reported weekly by the WHO European Region, as of 18 October 2020**



***See data, table and figure notes*

South-East Asia Region

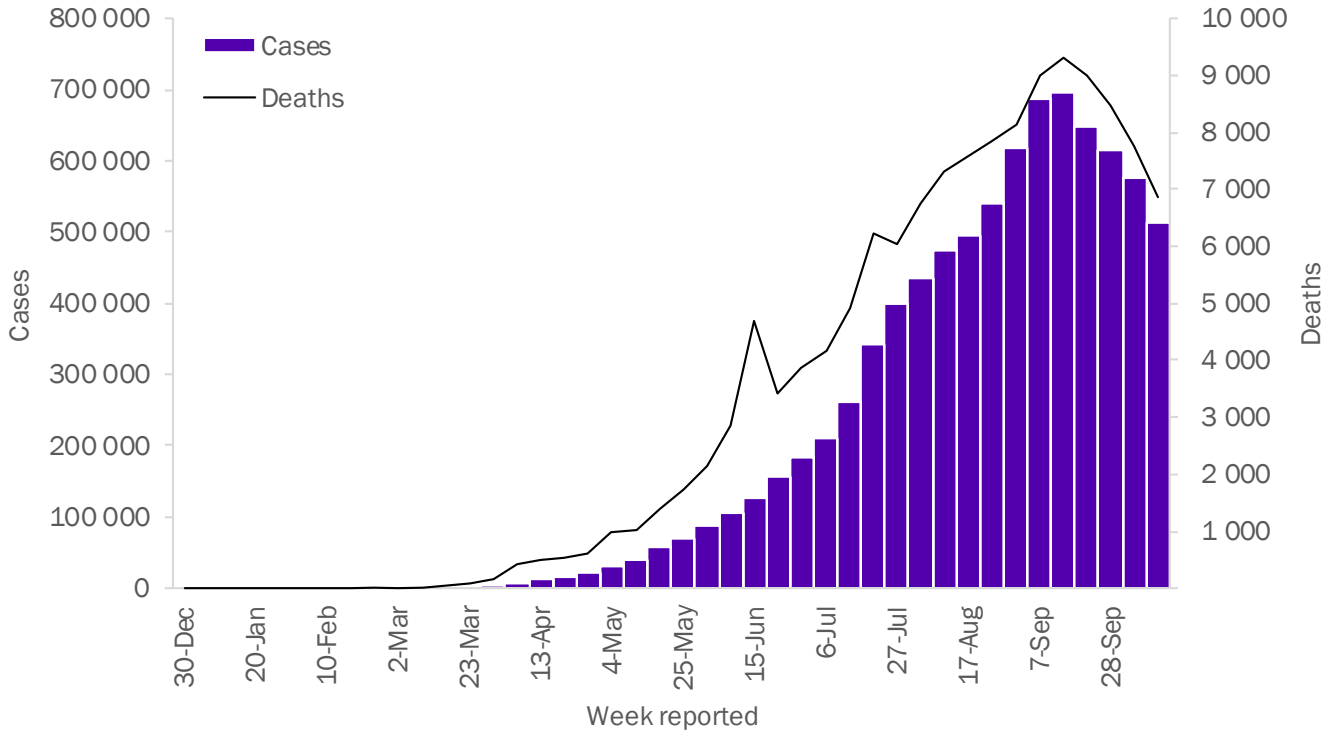
Overall, the region continues to show a decline in cases and deaths (Figure 7), with Nepal being the only country which reported an increase in both new weekly cases (12%) and new deaths (31%) in comparison to the previous week. Nepal reported 810 new cases per one million population, the highest in the region, followed by the Maldives (590) and India (319). Most countries in the region self-characterise their current transmission pattern as cluster of cases (n=6, 55%), with two countries reporting community transmission and a further two reporting sporadic cases.

Bangladesh reported an 8% increase in new weekly cases. Among the 386 086 cases reported as of 16 October, the majority (81%) were adults aged 21–60 years, and almost three-quarters (72%) were male. During the same timeframe, the country has conducted 2.13 million diagnostic tests, or 12 900 tests per million population.

Myanmar reported a 6% increase in new weekly deaths compared to last week. The majority of the cases and deaths continue to be reported from Yangon Region. Here, the Government has further extended stay at home orders for 44 townships from 8–21 October. On 3 October, Myanmar published standard operating procedures for testing of COVID-19 with antigen-based rapid diagnostic kits, and began using these in Yangon Region on 29 September, followed by other regions and states.

Thailand continues to report relatively low numbers of cases. The country has become one of the first countries in the world to complete an assessment of how its health system has so far responded to COVID-19. The review highlights success factors and provides recommendations across nine areas, or "pillars" of the national response.

Figure 7: Number of COVID-19 cases and deaths reported weekly by the WHO South-East Asia Region, as of 18 October 2020**



**See *data, table and figure notes*

Western Pacific Region

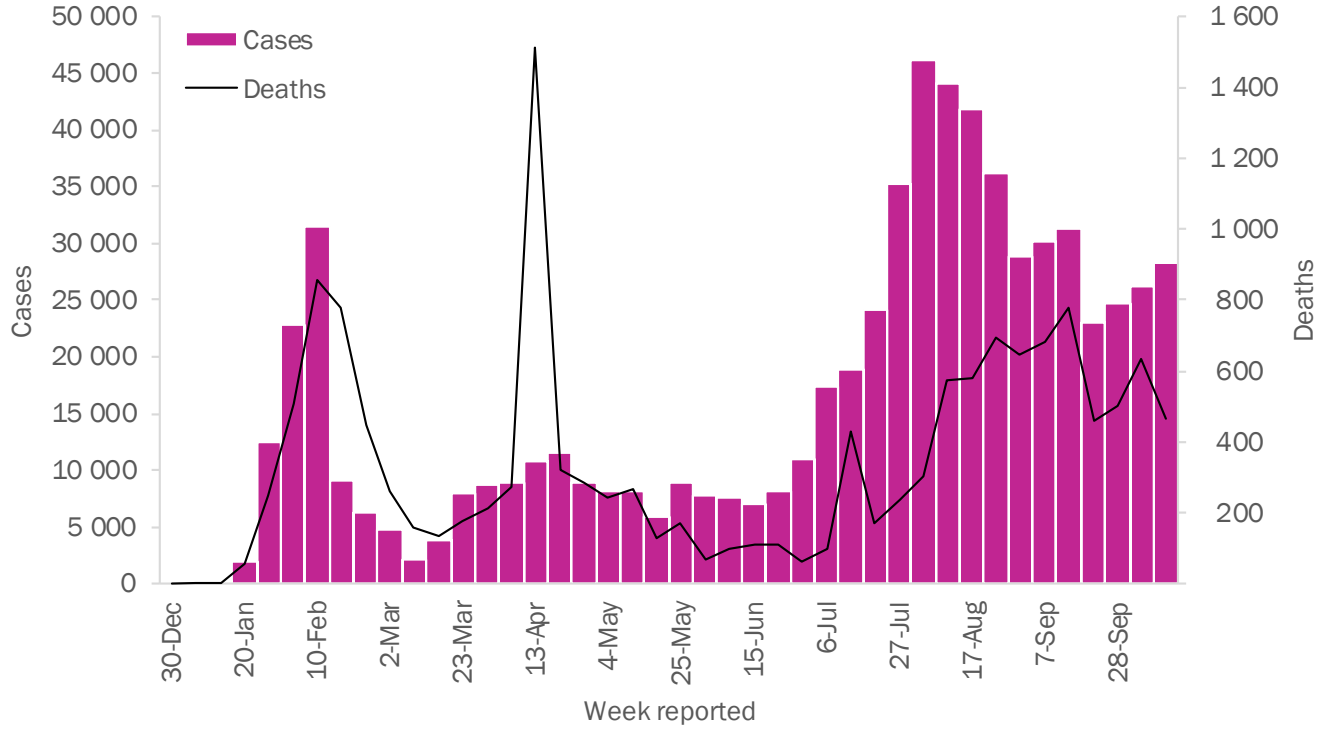
Overall, one percent of all new weekly cases and deaths were reported from the Western-Pacific Region. The region reported an 8% increase in new weekly cases and 27% decrease in new weekly deaths as compared to the previous week. The majority of new cases continue to be reported from the Philippines, Malaysia and Japan. Whereas French Polynesia and Guam reported the highest incidence of new cases – 3713 and 3258 new cases per one million inhabitants, respectively. Papua New Guinea reported an increase of over 200% in weekly cases as compared to the previous week, with 31 new cases and 581 total confirmed cases.

Only two out of countries and territories in the region self-characterize their current transmission pattern as community transmission, with a further 9 (24%) countries reporting clusters of cases, and 7 (18%) countries reporting sporadic cases. The majority (n=19, 50%) of countries and territories report no active cases, and one territory is pending classification.

Malaysia reported a 51% increase in cases and deaths as compared to last week, with the majority of cases reported from Sabah State. The Ministry of Health have taken several measures reduce transmission and increasing test capacity in the state – daily RT-PCR tests increased from 1350 in July to 2600 as of 17 October.

Wallis and Futuna, reported its first positive case of COVID-19 to WHO on 19 October. As this falls outside of the reporting period of this update, the island territory will be reflected in next week's update.

Figure 8: Number of COVID-19 cases and deaths reported weekly by the WHO Western Pacific Region, data as of 18 October 2020**



***See data, table and figure notes*

Key weekly updates

- **Therapeutics**: The Solidarity Therapeutics Trial have produced conclusive evidence on whether selected repurposed drugs are effective for COVID-19. Interim results from the Solidarity Therapeutics Trial, coordinated by WHO, indicate that remdesivir, hydroxychloroquine, lopinavir/ritonavir and interferon regimens appear to have little or no effect on 28-day mortality or the in-hospital course of COVID-19 among hospitalised patients.
- **A call of Solidarity**: Kim Sledge and the World We Want have partnered with WHO Foundation to re-record the unity anthem, "We Are Family", in response to COVID-19 and to bring focus on global public health needs. A special edition cover of Sister Sledge's hit "We Are Family" will be released in a new and inspiring call for global solidarity to respond to the COVID-19 pandemic and to generate proceeds to address the most pressing global health challenges of our time. In support of the song's release, people worldwide are invited to submit videos of themselves singing We Are Family for inclusion in a compilation video for release on 7 December 2020.
- **Briefings**: WHO Director-General Dr Tedros, in his regular media briefing on 12 October, expressed concern around the concept of reaching so-called "herd immunity" by the letting the virus spread – "never in the history of public health has herd immunity been used as a strategy for responding to an outbreak, let alone a pandemic. It is scientifically and ethically problematic". Furthermore, in a media briefing on 16 October, Dr Tedros highlighted the rising number of cases of COVID-19 globally, especially in Europe where, although the number of deaths reported is much lower than in March, hospitalisations are increasing.
- **Health System Strengthening**: WHO published a Handbook for public health capacity-building at ground crossings and cross-border collaboration. The objectives of the handbook are to introduce principles of strategic risk assessment for prioritizing preparedness and response capacity building; highlight issues to consider when selecting ground crossings for designation under the International Health Regulations (2005, IHR); and, support the establishment and maintenance of cross-border collaboration to improve coordination and communication.
- **Food security, public health and livelihoods**: On 13 October, WHO with the International Labour Organization (ILO), Food and Agriculture Organization (FAO), and the International Fund for Agriculture Development (IFAD) released a joint statement on the Impact of COVID-19 on people's livelihoods, their health and our food systems. The pandemic has been affecting the entire food system and has laid bare its fragility. Border closures, trade restrictions and confinement measures have been preventing farmers from accessing markets, including for buying inputs and selling their produce, and agricultural workers from harvesting crops, thus disrupting domestic and international food supply chains and reducing access to healthy, safe and diverse diets. According to the policy brief published by the United Nations, in the long run, we face possible disruptions to the functioning of food systems, with severe consequences for health and nutrition.

Table 2. Number of COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, as of 18 October 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Africa	**31 473**	**1 267 664**	**1 130**	**1 058**	**28 469**	**25**	
South Africa	11 235	705 254	11 891	735	18 492	312	Community transmission
Ethiopia	5 005	89 860	782	69	1 365	12	Community transmission
Kenya	3 038	45 076	838	65	839	16	Community transmission
Botswana	2 023	5 242	2 229	2	20	9	Community transmission
Algeria	1 263	54 616	1 245	51	1 865	43	Community transmission
Angola	1 216	7 829	238	23	248	8	Community transmission
Nigeria	1 204	61 558	299	8	1 125	5	Community transmission
Uganda	917	10 691	234	10	97	2	Community transmission
Mozambique	863	11 080	354	4	75	2	Community transmission
Cabo Verde	725	7 800	14 029	11	87	156	Community transmission
Guinea	482	11 518	877	1	70	5	Community transmission
Zambia	374	15 897	865	10	346	19	Community transmission
Namibia	372	12 326	4 851	3	131	52	Community transmission
Cameroon	281	21 570	813	3	425	16	Community transmission
Côte D'Ivoire	239	20 324	770	1	121	5	Community transmission
Ghana	186	47 372	1 525	4	310	10	Community transmission
Democratic Republic of The Congo	159	11 051	123	26	303	3	Community transmission
Senegal	155	15 432	922	4	319	19	Community transmission
Burkina Faso	133	2 387	114	5	65	3	Community transmission
Zimbabwe	116	8 159	549	2	232	16	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Togo	114	2 071	250	2	51	6	Community transmission
Madagascar	112	16 810	607	1	238	9	Community transmission
Mali	106	3 407	168	0	132	7	Community transmission
Eswatini	105	5 788	4 989	2	116	100	Community transmission
Benin	85	2 496	206	0	41	3	Community transmission
Mauritania	80	7 621	1 639	2	163	35	Community transmission
Rwanda	79	4 992	385	4	34	3	Clusters of cases
Chad	74	1 390	85	1	93	6	Community transmission
Gabon	66	8 884	3 991	0	54	24	Community transmission
Lesotho	66	1 833	856	2	42	20	Clusters of cases
South Sudan	65	2 847	254	0	55	5	Community transmission
Congo	38	5 156	934	2	92	17	Community transmission
Malawi	31	5 860	306	1	181	9	Community transmission
Sierra Leone	27	2 331	292	1	73	9	Community transmission
Gambia	21	3 655	1 512	1	118	49	Community transmission
Burundi	18	550	46	0	1	<1	Clusters of cases
Liberia	14	1 381	273	0	82	16	Community transmission
Mauritius	12	407	320	0	10	8	Sporadic cases
Eritrea	11	425	120	0	0	<1	Sporadic cases
Sao Tome and Principe	10	933	4 257	0	15	68	Clusters of cases
Niger	9	1 211	50	0	69	3	Clusters of cases
Equatorial Guinea	7	5 074	3 617	0	83	59	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Comoros	5	502	577	0	7	8	Community transmission
Guinea-Bissau	4	2 403	1 221	1	41	21	Community transmission
Central African Republic	1	4 858	1 006	0	62	13	Community transmission
Seychelles	1	148	1 505	0	0	<1	Sporadic cases
United Republic of Tanzania	0	509	9	0	21	<1	Community transmission
Territories[ii]							
Réunion	285	4 921	5 496	1	17	19	Clusters of cases
Mayotte	41	4 159	15 245	0	43	158	Clusters of cases
Americas	**798 794**	**18 800 094**	**18 381**	**16 283**	**608 727**	**595**	
United States of America	382 981	8 065 615	24 367	4 842	218 131	659	Community transmission
Brazil	144 412	5 235 344	24 630	3 575	153 905	724	Community transmission
Argentina	94 141	989 680	21 898	2 498	26 267	581	Community transmission
Colombia	51 054	959 572	18 858	1 121	28 970	569	Community transmission
Mexico	31 910	851 227	6 602	2 197	86 167	668	Community transmission
Peru	19 062	868 675	26 346	490	33 759	1 024	Community transmission
Canada	15 989	198 148	5 250	137	9 760	259	Community transmission
Chile	10 408	493 305	25 806	316	13 676	715	Community transmission
Costa Rica	8 295	95 514	18 750	113	1 183	232	Community transmission
Ecuador	5 594	153 423	8 696	187	12 395	703	Community transmission
Paraguay	5 207	54 724	7 672	121	1 188	167	Community transmission
Panama	4 657	124 745	28 911	72	2 564	594	Community transmission
Honduras	4 139	88 435	8 929	64	2 568	259	Community transmission
Venezuela (Bolivarian Republic of)	4 062	86 636	3 047	41	736	26	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Guatemala	3 484	101 599	5 671	150	3 541	198	Community transmission
Dominican Republic	2 911	121 667	11 216	28	2 203	203	Community transmission
El Salvador	1 505	31 666	4 882	30	926	143	Community transmission
Bolivia (Plurinational State of)	1 336	139 771	11 974	177	8 481	727	Community transmission
Bahamas	673	5 773	14 680	10	123	313	Clusters of cases
Jamaica	636	8 321	2 810	30	173	58	Community transmission
Guyana	314	3 734	4 747	7	109	139	Clusters of cases
Belize	301	2 813	7 074	8	44	111	Community transmission
Cuba	222	6 258	553	2	127	11	Clusters of cases
Uruguay	199	2 531	729	2	51	15	Clusters of cases
Trinidad and Tobago	198	5 297	3 785	5	96	69	Community transmission
Suriname	95	5 130	8 745	3	109	186	Community transmission
Nicaragua	72	4 297	649	1	154	23	Community transmission
Haiti	65	8 925	783	1	231	20	Community transmission
Barbados	14	222	773	0	7	24	Clusters of cases
Saint Lucia	4	36	196	0	0	<1	Sporadic cases
Grenada	3	27	240	0	0	<1	No cases
Saint Vincent and the Grenadines	3	67	604	0	0	<1	Sporadic cases
Antigua and Barbuda	2	119	1 215	0	3	31	Sporadic cases
Dominica	1	33	458	0	0	<1	Clusters of cases
Saint Kitts and Nevis	0	19	357	0	0	<1	No cases
Territories[ii]							

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Puerto Rico	3 286	57 950	20 256	33	768	268	Community transmission
Guadeloupe	639	7 122	17 799	16	111	277	Community transmission
Martinique	415	2 266	6 038	3	25	67	Community transmission
Curaçao	141	744	4 534	0	1	6	Community transmission
Aruba	135	4 322	40 481	1	34	318	Community transmission
French Guiana	95	10 268	34 378	0	69	231	Community transmission
Saint Martin	65	531	13 735	0	8	207	Community transmission
Sint Maarten	38	753	17 560	0	22	513	Community transmission
Cayman Islands	13	233	3 545	0	1	15	Sporadic cases
Saint Barthélemy	7	72	7 284	0	0	<1	Sporadic cases
United States Virgin Islands	5	1 335	12 784	1	21	201	Community transmission
Bonaire, Sint Eustatius and Saba	2	150	5 721	1	3	114	Community transmission
Turks and Caicos Islands	2	698	18 028	0	6	155	Clusters of cases
Bermuda	1	185	2 971	0	9	145	Sporadic cases
British Virgin Islands	1	72	2 381	0	1	33	Clusters of cases
Anguilla	0	3	200	0	0	<1	No cases
Falkland Islands (Malvinas)	0	13	3 732	0	0	<1	No cases
Montserrat	0	13	2 601	0	1	200	No cases
Saint Pierre and Miquelon	0	16	2 761	0	0	<1	Sporadic cases
Eastern Mediterranean	**144 133**	**2 786 477**	**3 813**	**3 492**	**70 902**	**97**	
Iran (Islamic Republic of)	30 237	534 631	6 365	1 830	30 712	366	Community transmission
Iraq	23 400	430 678	10 707	408	10 317	256	Community transmission
Morocco	21 070	175 749	4 761	306	2 976	81	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Jordan	12 055	38 937	3 816	149	380	37	Community transmission
Tunisia	9 283	40 542	3 430	170	626	53	Community transmission
United Arab Emirates	9 254	116 517	11 781	16	466	47	Community transmission
Lebanon	8 726	62 944	9 222	62	526	77	Community transmission
Libya	6 159	49 949	7 269	76	732	107	Community transmission
Kuwait	4 915	116 832	27 357	39	710	166	Community transmission
Oman	4 167	110 594	21 657	62	1 114	218	Community transmission
Pakistan	3 520	323 459	1 464	68	6 659	30	Clusters of cases
Saudi Arabia	2 910	342 583	9 840	147	5 201	149	Sporadic cases
Bahrain	2 284	78 224	45 972	20	302	177	Clusters of cases
Qatar	1 449	129 671	45 008	4	224	78	Community transmission
Egypt	910	105 547	1 031	69	6 130	60	Clusters of cases
Syrian Arab Republic	360	5 134	293	24	251	14	Community transmission
Afghanistan	342	40 287	1 035	11	1 497	38	Clusters of cases
Djibouti	29	5 469	5 535	0	61	62	Sporadic cases
Somalia	17	3 864	243	0	99	6	Sporadic cases
Sudan	26	13 724	313	0	836	19	Community transmission
Yemen	4	2 060	69	1	599	20	Community transmission
Territories[ii]							
Occupied Palestinian territory	3 016	59 082	11 581	30	484	95	Community transmission
Europe	**927 433**	**8 027 954**	**8 601**	**8 386**	**256 540**	**275**	
France	146 777	867 978	13 298	670	33 204	509	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
The United Kingdom	114 584	722 413	10 642	819	43 646	643	Community transmission
Russian Federation	100 616	1 415 316	9 698	1 590	24 366	167	Clusters of cases
Czechia	54 820	173 885	16 237	357	1 422	133	Community transmission
Italy	53 042	414 241	6 851	334	36 543	604	Clusters of cases
Netherlands	51 713	228 234	13 320	170	6 751	394	Community transmission
Spain	50 877	936 560	20 031	597	33 775	722	Community transmission
Belgium	47 949	222 160	19 169	199	10 413	898	Community transmission
Poland	45 592	175 766	4 644	552	3 573	94	Community transmission
Germany	39 110	366 299	4 372	162	9 789	117	Clusters of cases
Ukraine	37 837	303 638	6 943	635	5 673	130	Community transmission
Romania	24 065	180 388	9 377	454	5 872	305	Community transmission
Switzerland	13 997	74 227	8 577	29	1 822	211	Community transmission
Portugal	12 481	99 911	9 798	95	2 181	214	Clusters of cases
Israel	11 861	301 024	34 778	199	2 138	247	Community transmission
Turkey	11 647	347 493	4 120	446	9 296	110	Community transmission
Austria	9 810	65 557	7 279	49	910	101	Community transmission
Slovakia	9 471	29 835	5 465	21	88	16	Clusters of cases
Hungary	8 626	47 768	4 945	188	1 173	121	Community transmission
Armenia	8 243	65 460	22 091	61	1 091	368	Community transmission
Ireland	6 964	49 962	10 118	28	1 852	375	Community transmission
Georgia	5 683	18 663	4 678	51	143	36	Community transmission
Bulgaria	5 237	29 503	4 246	81	986	142	Clusters of cases
Republic of Moldova	4 890	67 050	16 621	111	1 584	393	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Slovenia	4 890	13 683	6 582	12	161	77	Clusters of cases
Croatia	4 829	25 580	6 231	38	363	88	Community transmission
Belarus	4 040	87 698	9 281	34	929	98	Community transmission
Sweden	3 280	103 200	10 219	8	5 918	586	Community transmission
Bosnia and Herzegovina	3 218	34 120	10 400	60	984	300	Community transmission
Denmark	2 859	35 392	6 110	12	680	117	Community transmission
Greece	2 854	25 370	2 434	64	509	49	Clusters of cases
Kyrgyzstan	2 814	52 526	8 051	26	1 111	170	Clusters of cases
North Macedonia	2 646	23 628	11 341	39	834	400	Community transmission
Azerbaijan	2 565	44 964	4 435	15	626	62	Clusters of cases
Uzbekistan	2 230	63 430	1 895	22	529	16	Clusters of cases
Montenegro	1 746	15 730	25 045	32	236	376	Clusters of cases
Kazakhstan	1 733	145 473	7 748	42	2 178	116	Clusters of cases
Finland	1 553	13 424	2 423	5	351	63	Community transmission
Albania	1 543	17 055	5 926	32	451	157	Clusters of cases
Serbia	1 261	36 160	5 193	12	776	111	Community transmission
Luxembourg	1 111	10 646	17 007	3	133	212	Community transmission
Lithuania	1 078	7 726	2 838	9	113	42	Community transmission
Norway	915	16 136	2 976	3	278	51	Clusters of cases
Latvia	796	3 450	1 829	3	44	23	Clusters of cases
Andorra	681	3 377	43 707	4	59	764	Community transmission
Malta	601	4 282	9 698	4	45	102	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Iceland	538	4 055	11 883	1	11	32	Community transmission
Cyprus	393	2 644	2 190	0	25	21	Clusters of cases
Tajikistan	275	10 493	1 100	1	80	8	Pending
Estonia	206	4 078	3 074	0	68	51	Clusters of cases
Liechtenstein	79	224	5 874	0	1	26	Sporadic cases
Monaco	24	265	6 753	0	2	51	Sporadic cases
San Marino	18	784	23 101	0	42	1 238	Community transmission
Holy See	14	26	32 138	0	0	<1	Sporadic cases
Territories[ii]							
Kosovo[1]	624	16 848	9 056	7	643	346	Community transmission
Gibraltar	76	558	16 562	0	0	<1	Clusters of cases
Jersey	42	491	4 513	0	32	294	Community transmission
Faroe Islands	6	485	9 925	0	0	<1	Sporadic cases
Isle of Man	3	348	4 093	0	24	282	No cases
Greenland	0	16	282	0	0	<1	No cases
Guernsey	0	258	4 083	0	13	206	Community transmission
South-East Asia	**513 444**	**8 546 666**	**4 228**	**6 864**	**135 275**	**67**	
India	440 745	7 597 063	5 505	5 697	115 197	83	Clusters of cases
Indonesia	28 810	365 240	1 335	666	12 617	46	Community transmission
Nepal	23 620	136 036	4 669	113	757	26	Clusters of cases
Bangladesh	10 222	390 206	2 369	146	5 681	34	Community transmission
Myanmar	8 811	37 205	684	240	914	17	Clusters of cases
Sri Lanka	847	5 625	263	0	13	1	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Maldives	319	11 232	20 779	2	37	68	Clusters of cases
Thailand	50	3 700	53	0	59	1	Clusters of cases
Bhutan	19	330	428	0	0	<1	Sporadic cases
Timor-Leste	1	29	22	0	0	<1	Sporadic cases
Western Pacific	**28 317**	**688 736**	**351**	**464**	**14 823**	**8**	
Philippines	17 412	359 169	3 278	365	6 675	61	Community transmission
Malaysia	4 531	21 363	660	25	190	6	Clusters of cases
Japan	3 744	93 480	739	43	1 676	13	Clusters of cases
Republic of Korea	593	25 333	494	12	447	9	Clusters of cases
China	185	91 546	62	0	4 746	3	Clusters of cases
Australia	139	27 399	1 074	7	905	35	Clusters of cases
Singapore	38	57 915	9 899	1	28	5	Clusters of cases
Papua New Guinea	31	581	65	0	7	1	Community transmission
Viet Nam	19	1 140	12	0	35	<1	Clusters of cases
New Zealand	15	1 531	317	0	25	5	Clusters of cases
Mongolia	5	324	99	0	0	<1	Sporadic cases
Solomon Islands	2	3	4	0	0	<1	Sporadic cases
Brunei Darussalam	1	147	336	0	3	7	No cases
Cambodia	0	285	17	0	0	<1	Sporadic cases
Fiji	0	32	36	0	2	2	Sporadic cases
Lao People'S Democratic Republic	0	23	3	0	0	<1	Sporadic cases
Territories[ii]							

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
French Polynesia	1 043	4 610	16 411	4	16	57	Sporadic cases
Guam	550	3 742	22 172	7	66	391	Clusters of cases
Northern Mariana Islands (Commonwealth of The)	9	86	1 494	0	2	35	Pending
New Caledonia	0	27	95	0	0	<1	Sporadic cases
Subtotal for all regions	**2 443 594**	**40 117 591**		**36 547**	**1 114 736**		
Other[†]	0	741		0	13		
Grand total	**2 443 594**	**40 118 332**	**5 147**	**36 547**	**1 114 749**	**143**	

[**]*See data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases; efforts are underway to identify these for notation in the data table. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines

on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas; classification is based on the highest category reported within a country/territory/area. Categories:

- No cases: with no confirmed cases;
- Sporadic cases: with one or more cases, imported or locally detected;
- Clusters of cases: experiencing cases, clustered in time, geographic location and/or by common exposures;
- Community transmission: experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel laboratory surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area;
- Pending: transmission classification has not been reported to WHO.

[ii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

[†] Other: includes cases reported from international conveyances.

Country, territory, or area-specific notes, updates and errata

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

World Health Organization

Coronavirus disease (COVID-19)

Data as received by WHO from national authorities, as of 11 October 2020, 10 am CEST

For the latest data and information on COVID-19, please see:

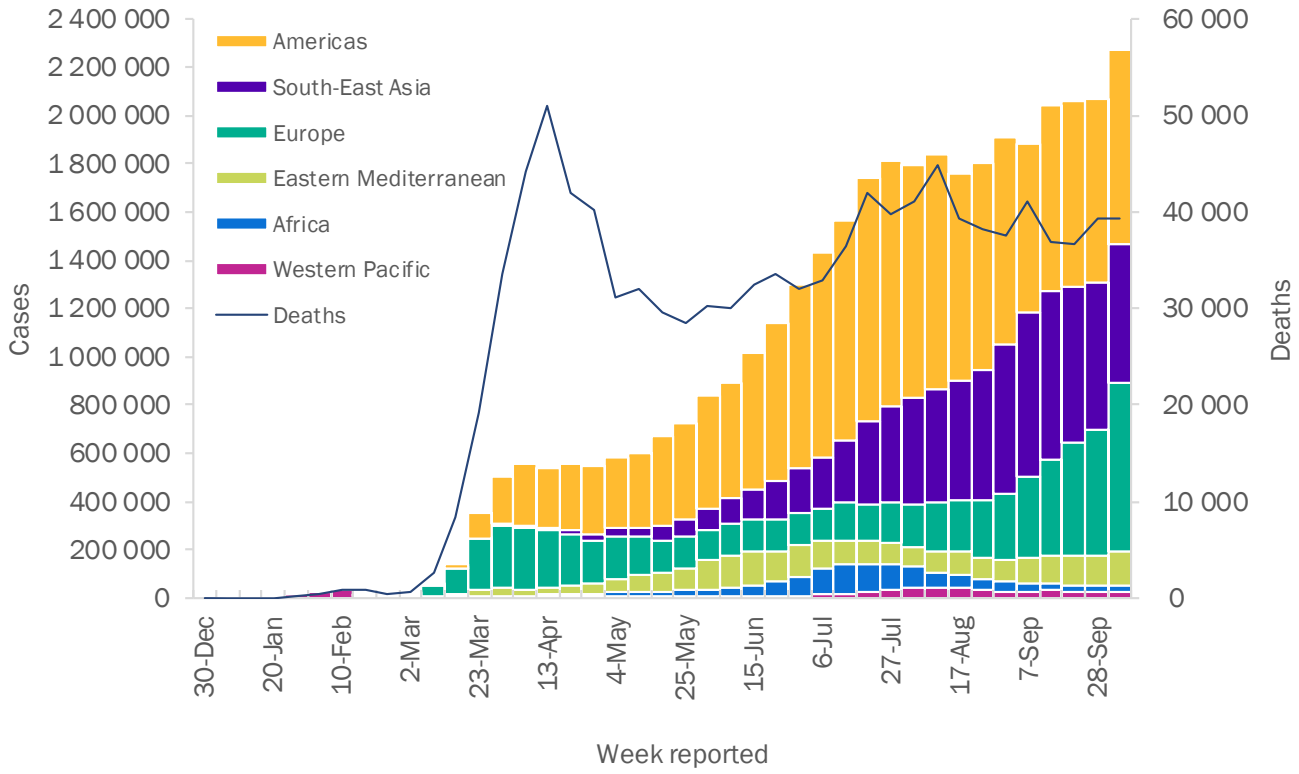
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update
- This will be the final Weekly Epidemiology Update published on a Monday, beginning next week 20 October, these updates will be published on a Tuesday.

Global epidemiological situation

Since the last Weekly Epidemiological Update issued on 5 October, over 2.2 million new cases and 39,000 deaths of COVID-19 have been reported across all six WHO regions. This is the highest number of reported cases so far in a single week.

From 30 December through 11 October, over 37 million COVID-19 cases and 1 million deaths have been reported globally. Nearly half of these cases (48%) and deaths (55%) continue to be reported in the Region of the Americas with the United States of America, Brazil and Argentina accounting for the greatest numbers of new cases and deaths in the region.

Figure 1: Number of COVID-19 cases reported weekly by WHO Region, and global deaths, 30 December 2019 through 11 October 2020**



**See *data table and figure notes*.

By WHO region, the European Region reported the greatest increase (34%) in cases in the past week while the African Region reported a substantial rise in deaths, with a 27% increase compared to the previous week. Within the African Region, South Africa continues to register more than half (56%, 690 896) of all reported confirmed cases.

For the third week in a row, the South-East Asia Region reported a decline in new cases and deaths, 6% and 8% respectively, compared to the previous week. The decline is mainly due to decreases in reported cases in India and Bangladesh.

For the second week in a row, the Regions of the Eastern Mediterranean and the Western Pacific reported increases in cases and deaths.

Overall, during the reporting period, all the Regions showed an increase in cases except the South-East Asia Region.

Countries reporting the highest number of cases in the past seven days include; India, the United States of America, Brazil, the United Kingdom and France.

Additional Region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western-Pacific Region.

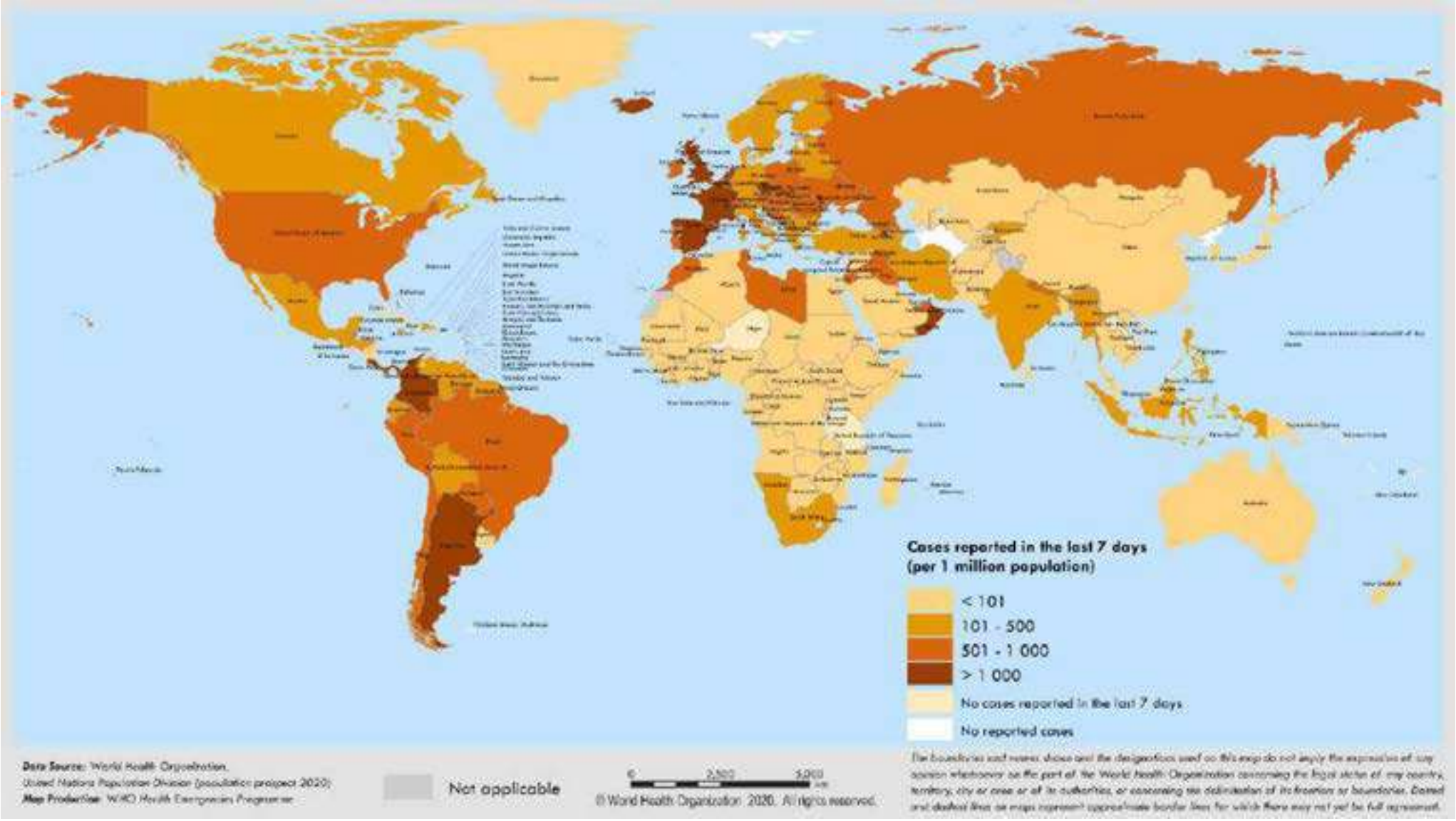
Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 11 October 2020**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days*	Cumulative deaths (%)
Americas	804 735 (35%)	6%	17 794 771 (48%)	20 509 (52%)	-5%	588 867 (55%)
South-East Asia	575 763 (25%)	-6%	7 911 036 (21%)	7 750 (20%)	-8%	126 917 (12%)
Europe	694 275 (31%)	34%	6 918 265 (19%)	6 172 (16%)	16%	246 709 (23%)
Eastern Mediterranean	138 751 (6%)	10%	2 605 478 (7%)	3 173 (8%)	13%	66 329 (6%)
Africa	29 169 (1%)	11%	1 227 719 (3%)	991 (3%)	27%	27 255 (3%)
Western Pacific	26 199 (1%)	6%	651 841 (2%)	633 (2%)	26%	14 265 (1%)
† Other	-	-	741 (<1%)	-	-	13 (<1%)
Global	**2 268 892 (100%)**	**10%**	**37 109 851 (100%)**	**39 228 (100%)**	**<1%**	**1 070 355 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*

***See data, table and figure notes*

Figure 2. COVID-19 cases per million population reported in the last seven days by countries, territories and areas, 5 October through 11 October 2020**



**See *data, table and figure notes*

Situation by WHO Region

African Region

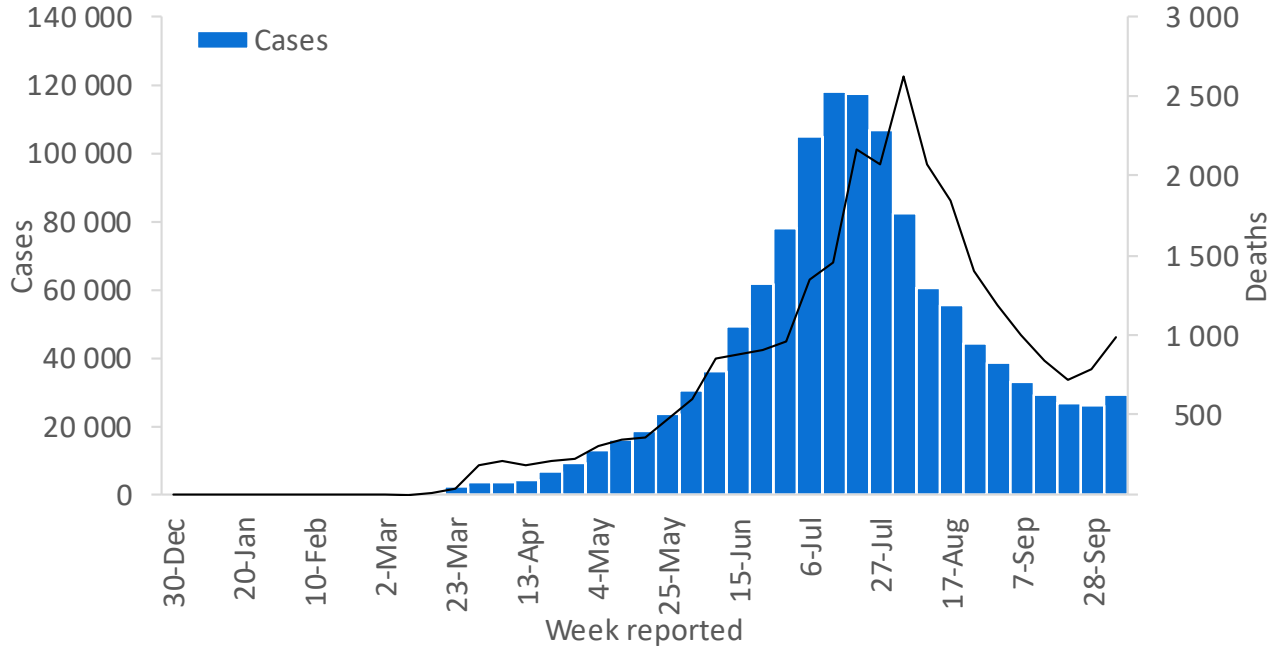
Although the Region had seen a slow but continuous decline in newly- reported cases since mid-July, there were 11% more cases reported in the last 7 days compared to the prior week, reaching a total of over 1 200 000 cases (Figure 1, Figure 3). The current figures in the region represent 1% of confirmed COVID-19 cases and 3% of deaths reported worldwide in the past week. The increase in the number of newly- confirmed cases is partially attributed to the higher number of countries reporting an increase in cases (21 countries), compared to the previous week (14 countries). Although there are a greater number of countries reporting increases, the pattern of increasing cases is driven by South Africa and Ethiopia, which continue to report the highest numbers of new cases in the last 7 days, followed by Kenya, Uganda, and Algeria. Continuing the trend from last week, the number of reported deaths increased this week with South Africa accounting for the majority of the new deaths in the Region (74%).

The current transmission pattern in the majority of the 47 Member States in the African Region is reported as community transmission (n=39, 83%), with five reporting clusters of cases, and only Seychelles, Mauritius and Eritrea currently reporting sporadic cases.

South Sudan has reported a decrease in the number of newly -reported cases with an epidemiological link, with 29% in the past week, compared to 67% the week prior. This is attributed to a decrease in the proportion of cases that have been detected at a border crossing, where a history of travel can inform an epidemiological link.

This past week, Mozambique registered 795 new cases (25 per million population) bringing the total figure to almost 10 000 cases. Nevertheless, the country has registered a gradual decline over the last three weeks including a 39 and 40% decrease in new cases and deaths respectively in the past week, suggesting the epidemic may be slowing down in the country. While the number of tests per 1000 inhabitants has remained quite stable at 0.3 over the last 10 weeks, the test positivity rate has dropped this week to 9%. Schools have reopened with special measures to prevent further spread of the virus.

Figure 3: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, as of 11 October 2020**



Region of the Americas

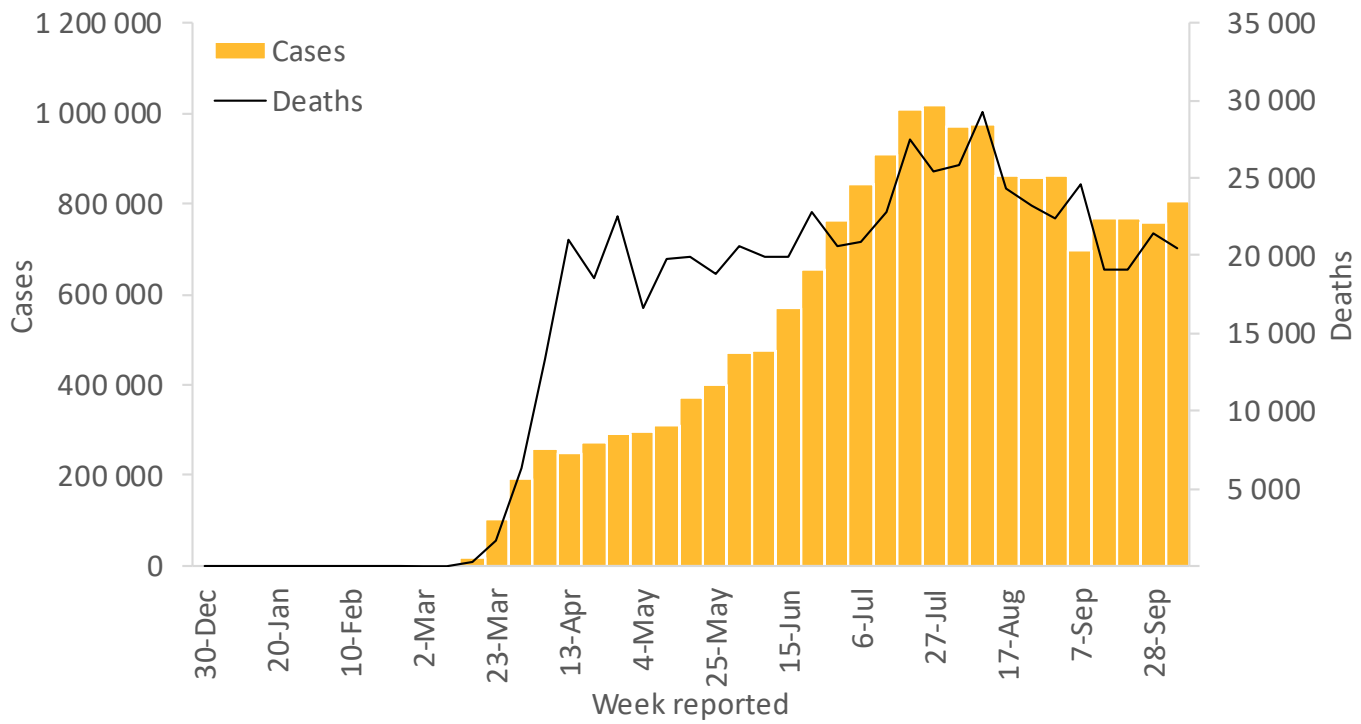
The Region of the Americas reported over 800 000 new cases in the last seven days, a 6% increase in the number of new cases in the past week which is a bigger increase than the increase reported in the previous week. greater change than the week prior. The United States of America, Brazil, Argentina, Mexico, and Colombia registered the highest number of newly- reported cases ik.
The Region also continues to account for a majority of all deaths reported globally in the past week (n=20 500, 52%). Mexico, the United States of America, Brazil, Argentina and Colombia registered the highest number of new deaths.

This past week, the United States of America reported the largest increase in newly -reported cases since early August, with over 327 000 cases reported. Ten of the 50 states reported the highest one-day increases in cases since their first reported case, including many in the Midwest and the Southwest, and three states reported their largest- ever one-day increase in new deaths.

The number of newly- reported cases has been increasing in Canada since mid-September, with an increase of 26.7% cases and 14.3% deaths in the past week. Most of the cases and deaths were reported in Québec and Ontario. Outbreaks in long-term care and retirement residences continue to account for most outbreaks in Canada to date. Since mid-July, incidence rates in those 20 to 39 years of age have remained consistently higher than all other age groups. Since mid-September, an increasing trend in the daily number of cases 20 to 39 years of age hospitalized has been observed.

Costa Rica, with the second- highest incidence of cases per million population in the Region s r, has now reached over 86 000 cases and over 1 000 deaths. During the last 5 weeks, the country had reached a plateau with comparable figures of reported cases and deaths. The country has reported over 107 COVID-19 hospitalizations per million inhabitants of which over a third of them are in intensive care units.

Figure 4: Number of COVID-19 cases and deaths reported weekly by the WHO Region of the Americas, as of 11 October 2020**



**See *data, table and figure notes*

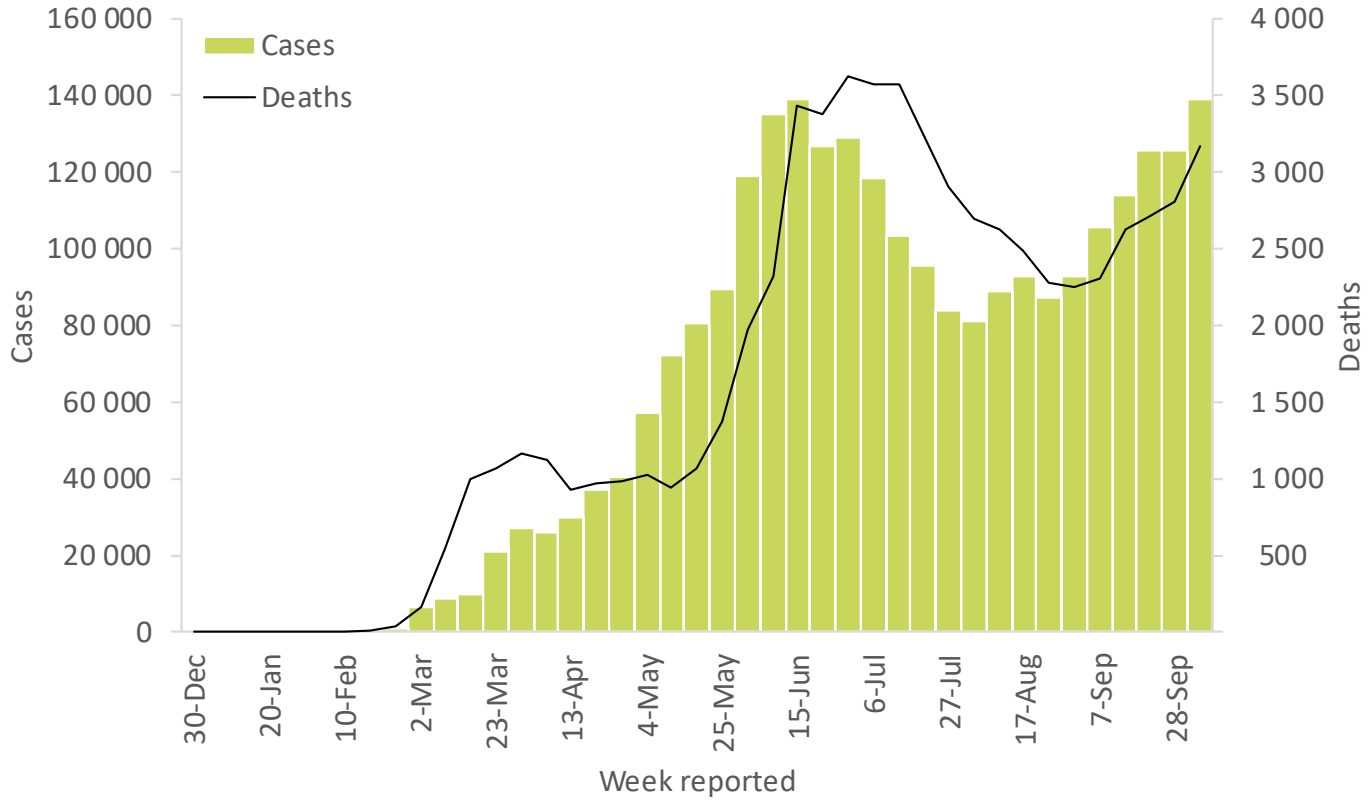
Eastern Mediterranean Region

In the Eastern Mediterranean region the weekly number of new cases and deaths have increased by 10% and 13% respectively in comparison to the previous week. The Islamic Republic of Iran is the worst affected country in the region, accounting for 20% of all new cases reported this week.

The number of new cases in Oman have more than doubled in the last week (from approximately 2 600 to over 5 500) amounting to an increase of more than 60%. This past week a 100 bed field hospital for COVID-19 patients along with an isolation center in the city of Sohar, the capital and largest city of the Al Batinah North Governorate and another isolation ward in Sur Hospital in the South Sharqiya region were opened to help mitigate the rising number of COVID-19 cases in the country.

In Tunisia, there have been peak new cases (over 2 500) and deaths (over 40) also reported this week and the country plans to impose increased public health and safety measures including bans on gatherings, cutting public sector work hours and imposing curfews in an effort to interrupt transmission.

Figure 5: Number of COVID-19 cases and deaths reported weekly by the WHO Eastern Mediterranean Region, as of 11 October 2020**



**See *data, table and figure notes*

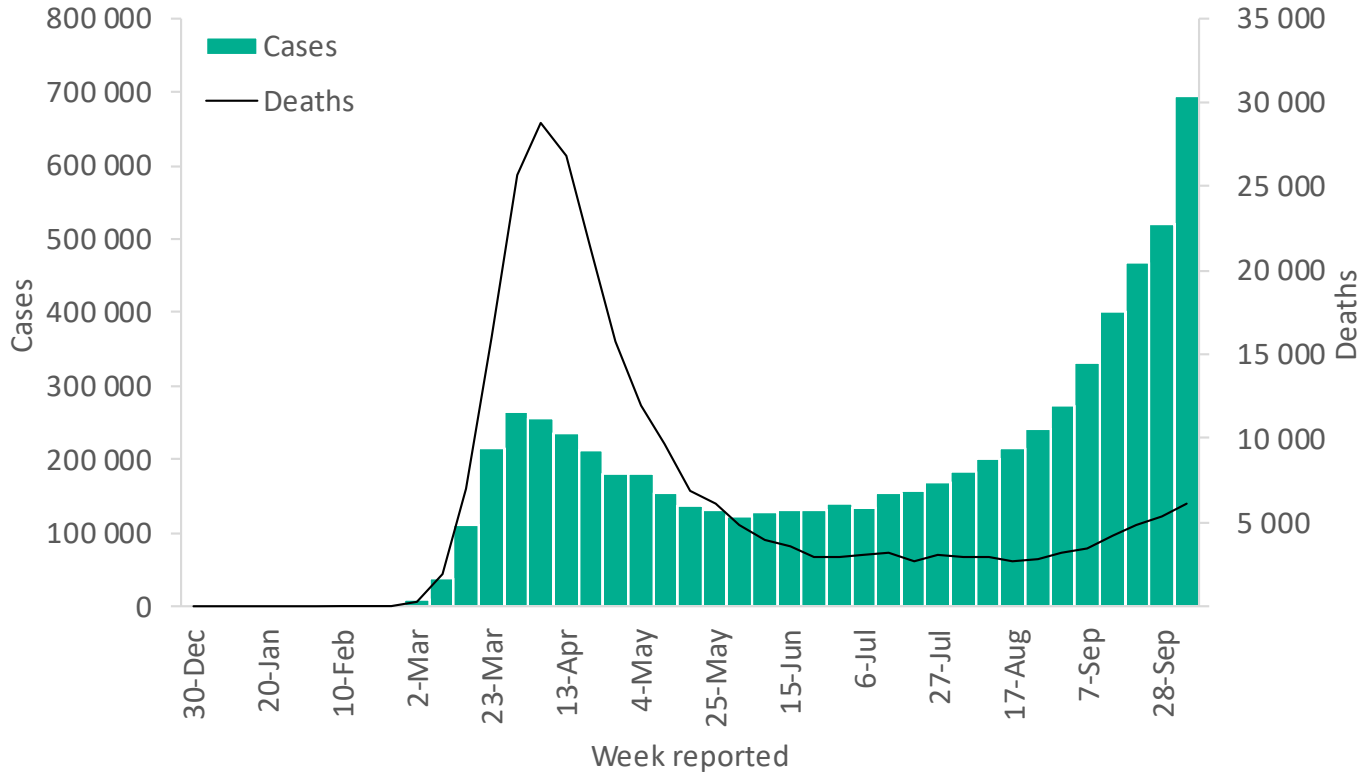
European Region

The Region registered the highest weekly incidence of COVID-19 cases since the beginning of the pandemic with almost 700 000 new cases reported. The weekly incidence in cases and deaths increased by 34% and 16% respectively in comparison to the previous week (Figure 6). The Region is the second most active, contributing almost a third (n=694 275, 31%) of new weekly cases reported globally. The United Kingdom, France, the Russian Federation and Spain account for over half of all new cases reported in the region (n= 355 455, 51%).

Latvia, Faroe Islands and Iceland have reported the greatest percentage increase in new cases in the past week while a marked decrease was reported in Isle of Man, Malta and Spain. The majority of the countries in the region self-characterise their current transmission pattern as community transmission (n=30, 56%) or clusters of cases (n=20, 37%) with only Liechtenstein, Monaco and the Holy See reporting sporadic transmission.

Spain, with over 50 000 cases reported in the past week, is showing a noticeable decline in the weekly incidence of cases and deaths of 24% and 19% respectively. In the past week, over 740 000 polymerase chain reaction (PCR) diagnostic tests were carried out (16 tests per 1000 inhabitants per week). As of 08 of October, the bed occupancy in intensive care unit ranged between 7% and 39% across all regions.
The incidence of cases and deaths in Poland increased this week by 93% and 104% respectively compared to the previous week, with almost 23 500 new cases and 370 deaths reported. Poland is tightening public health and social measures in response to these marked increases in an effort to avoid another lockdown. A coordination hospital will be created in each provide to manage the surge in COVID-19 patients.

Figure 6: Number of COVID-19 cases and deaths reported weekly by the WHO European Region, as of 11 October 2020**



**See *data, table and figure notes*

South-East Asia Region

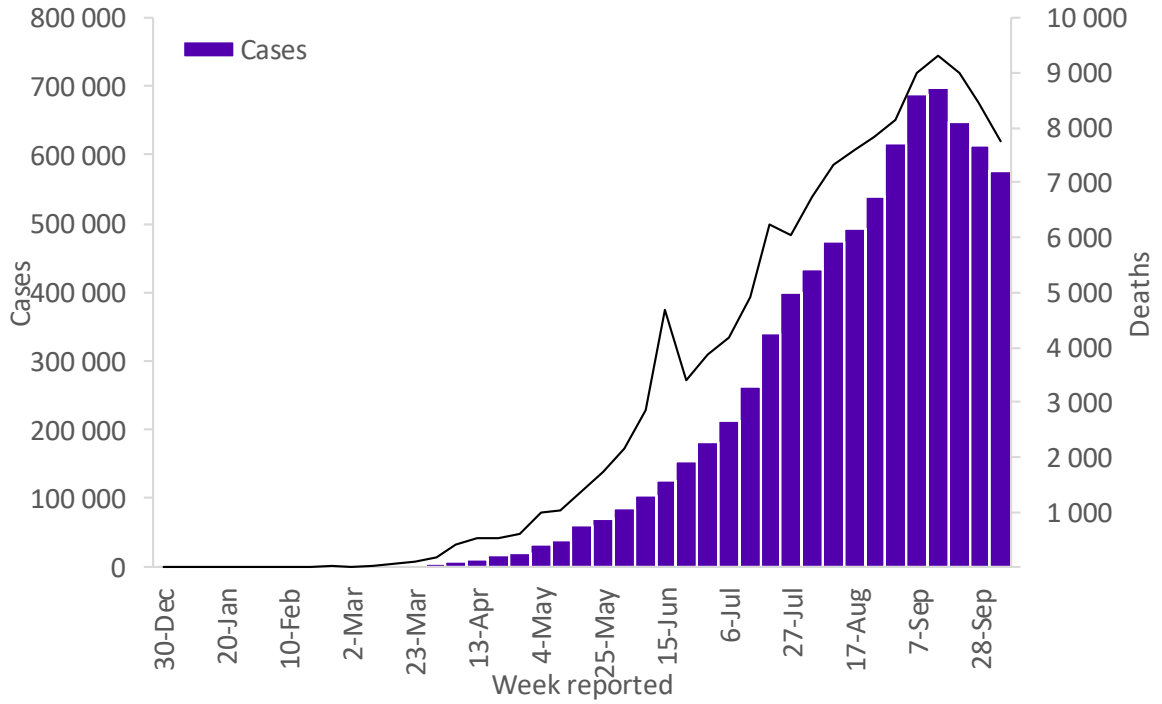
The gradual decline in incidence of cases and deaths in the South East Asia Region continued during the past week. The Region, nevertheless, remains among the most active, accounting for 25% of cases and 20% of deaths newly reported globally in the past seven days (Figure 7).

The countries reporting the highest number of new cases in the South-East Asia Region continue to be India, Indonesia and Nepal, while Sri Lanka and Bhutan are showing the highest increase in the proportion of new cases in the past week compared to the previous week. Across the ten countries in the region, only Myanmar and Nepal reported an increase in the number of new deaths in the past week compared to the previous week.The countries reporting the highest number of new deaths per million population are India and Myanmar, with 5 and 4 new deaths per million population respectively. In contrast to the other regions with currently high case incidence, most of the 10 Member States in the South-East Asian Region self-report their current transmission pattern as either clusters of cases (n=6) or sporadic cases (n=2), with only Bangladesh and Indonesia currently reporting community transmission.

Sri Lanka reported over 1200 new confirmed cases in the past epidemiological week, a substantial increase compared to the 46 cases confirmed the previous reporting week. In a recent development, a large cluster of cases (831 cases as on 7 October 2020) was reported in an apparel manufacturing factory in Gamphana district about 50 km from Colombo. The exact epidemiological link is currently under investigation

The reported number of cases increased rapidly in Nepal in the past week, with over 21 000 new cases and 86 new deaths reported. Although the test positivity rate has raised from 5 to 15% in just 8 weeks, there has also been an expansion in testing activity, which is currently around 3 samples tested / 1000 persons per week.

Figure 7: Number of COVID-19 cases and deaths reported weekly by the WHO South-East Asia Region, as of 11 October 2020**



**See *data, table and figure notes*

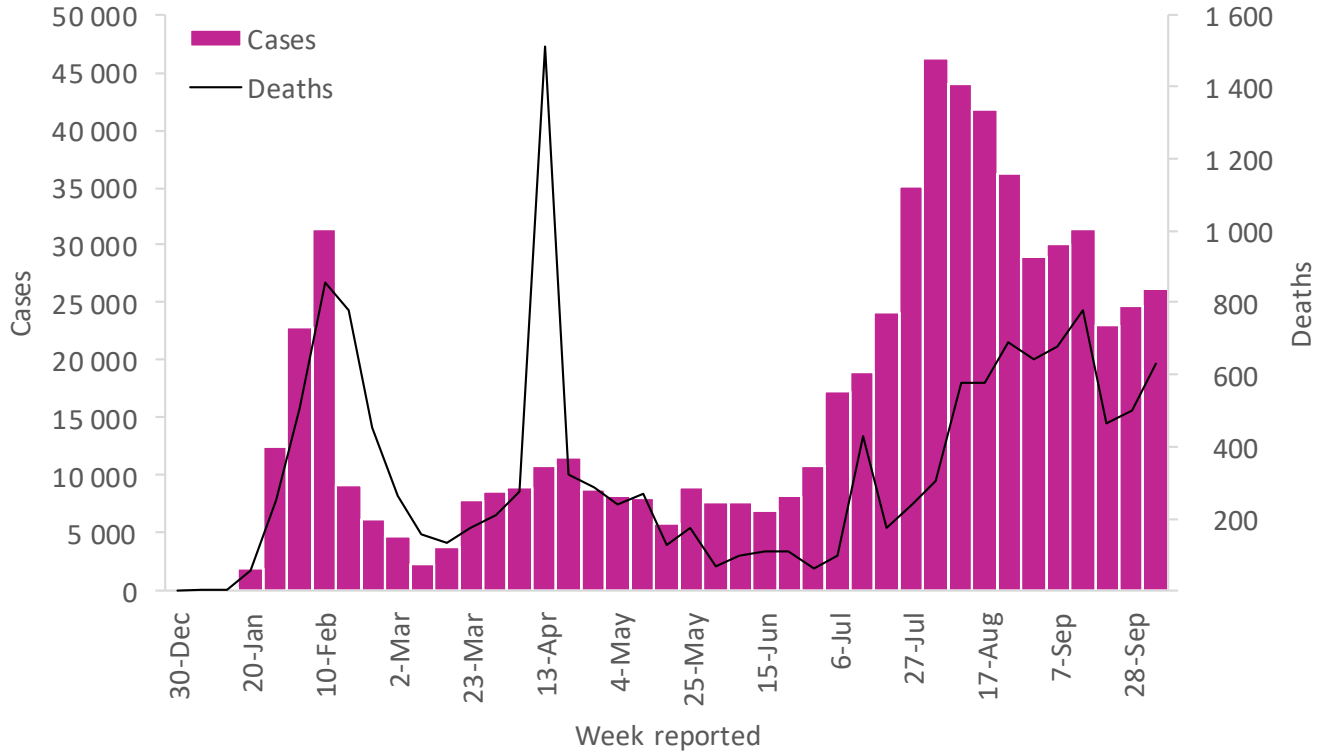
Western Pacific Region

The Western Pacific region accounts for the least number of reported cases globally this week, however the region has experienced an increase of 6% in newly- reported cases and a 26% increase in reported deaths in the past seven days.

New cases in the Philippines have stabilized over the past 3 weeks with around 18 000 cases reported weekly, lower than the peak of around 30 000 weekly new cases in early to mid- August however it does continue to account for the greatest number of new cases in the region. Reports suggest clustering of cases has occurred in several workplaces in Davao Region following the easing of lockdown restrictions under the modified general community quarantine and reopening of the economy measures, with most of the clusters reported in 12 establishments. As of October 12, the total number of cases in Davao Region is 3,743 with 686 cases reported in the past two weeks and Davao City (the capital) contributing 65% of the total cases in the region. There are also reports of near capacity utilization of ICU and Ward beds, in the major hospital in the region last week.

In French Polynesia, there were peak new cases this week, a 62% increase from last week, with reports suggesting most cases were detected from the main island of Tahiti, with cases spreading to adjacent islands of Moorea and even reaching several outer islands, including Raivavae, Arutua, and Nuku Hiva. Deaths in French Polynesia remain low and have not increased in the past week. The positivity rate of COVID-19 tests is currently high, at 26.3%, however only symptomatic persons are being tested.

Figure 8: Number of COVID-19 cases and deaths reported weekly by the WHO Western Pacific Region, data as of 11 October 2020**



**See *data, table and figure notes*

Surveillance update of the impact of COVID-19 on health workers

Delivering the diagnostic, treatment, and vaccine interventions for COVID-19, while maintaining essential health services, requires a healthy, trained, competent, equipped, protected, well-managed, and appropriately staffed multi-disciplinary healthcare workforce. Health and social care workers both salaried and volunteer, face multiple challenges due to COVID-19, leading to either an increased workload or absences from work. Challenges include: pre-existing workforce shortages; repurposing of staff to the COVID-19 response;infections and deaths; quarantine and self-isolation requirements; stress and burn-out; shortages of critical equipment and supplies, such as personal protective equipment (PPE); inadequate training; labour disputes; and having to care for infected friends and family. A comprehensive assessment of the impact of COVID-19 on health and social care workers should utilize standardized measurements and reporting to adequately qualify the impact. Internationally agreed indicators exist, and they form part of WHO's ongoing surveillance and communications activities. Health and social workers, in contact with COVID-19 patients and/or who care for COVID-19 patients, are at a higher risk of infection than the general population. Mitigating and reducing this risk, and following WHO guidance (see below), is essential.

WHO collects case-based surveillance data from Member States using Case Report Forms (CRFs) via the WHO global surveillance for COVID-19. As of 14 September 2020, the CRF database contained 8 233 444 forms, representing 28.4% of the cases recorded globally by that date. The CRFs facilitate a descriptive analysis of infections, hospitalizations, clinical outcomes, and sub-population analysis (such as occupation notified as health worker).

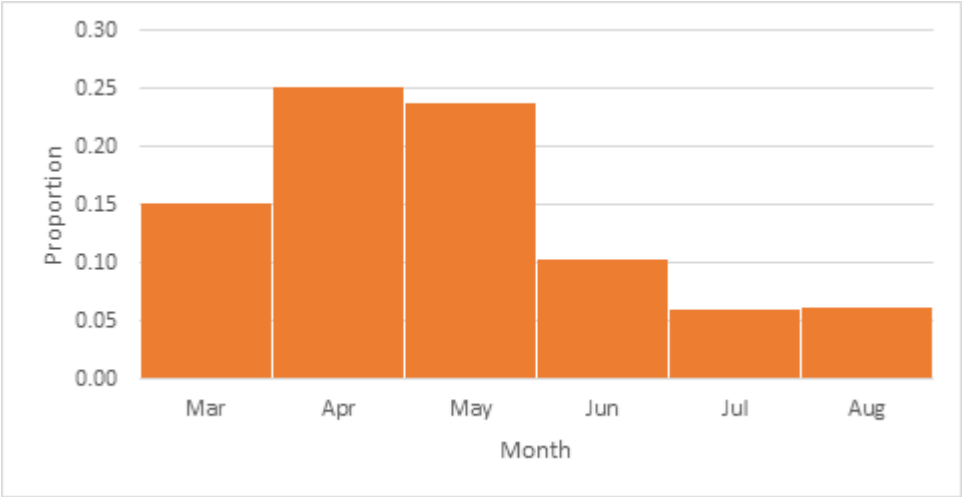
An analysis of health worker (HW) information was conducted on 281 083 HWs from amongst 1 932 941 CRFs that indicated HW[1] status (23.5% of all CRFs) from 83 countries. These data, covering primarily European and American countries, estimate that around 14% of COVID-19 cases reported to WHO are identified as occurring in health workers. There are wide differences in the reported proportion of HW affected between countries. The overall mean estimate of infections amongst HWs illustrates a clear over representation of cases, given that they represent less than 3% of the population, globally, and less than 8% on average in high income countries.

Encouragingly, the data indicate that there has been a substantial decline in HW infection since the beginning of the epidemic, independent of the overall change in incidence of cases. In many countries, this is likely due to the increased availability of PPE and better adherence to infection prevention and control (IPC) guidance. Figure 9 shows monthly trends in HW infection, using data from selected European countries[2]. The trends show that in the last 3 months prior to the analysis the proportion of cases amongst HWs was closer to their share of the general population.

[1] For the purposes of the case-based surveillance, 'health workers' were defined as those working "any job in a health care setting".

[2] Data covering only countries reporting at least 70% of cases in CRF, with at least 70% of CRFs having a known HW status, with at least 500 HW infections reported.

Figure 9. Share of health workers amongst total reported infections in selected countries, by month of reporting, March-August 2020



The mean age of COVID-19 cases of HWs was 40 years (IQR 31-49), lower than the mean age of non-HWs, 46 years (IQR 31-60). The distribution of HW infections in women (67%) and men (29%) (4% unknown sex) is proportionate to the global share of women and men in the health workforce. This is notably different from the ratio of infections in females versus males for the general population, where males account for 53% of cases.

WHO compared the proportions of COVID-19 case-patients with comorbidities, hospitalization and death as an outcome by age categories and sex in HWs and non-HWs, using information from five countries in the Americas and Europe with complete data. A total of 13% (n = 37 446) of HW case-patients reported underlying comorbidities (Figure 10), including diabetes and cardiovascular diseases, such as hypertension. Of HW case-patients, 5% (n = 15 141) required hospitalization (Figure 11), and of these, 5.3% (n = 799) required oxygen therapy. Overall, 0.5% (n = 1417) of the HW cases were fatal (Figure 12). As per the data analyzed, HWs showed a lower proportion of comorbidities, hospitalizations and deaths than non-HWs, even when accounting for age and sex differences between the two populations (see figures below). These differences were especially pronounced for those aged 50 years and above.

Further analyses are warranted to explain differences seen between infections in health-workers and the general public.

WHO guidance and resources:

To support health and social care workers and health-facilities in managing the COVID-19 pandemic, WHO has produced guidance on Risk assessment and management of exposure of health care workers, Infection prevention and control during health care when coronavirus disease (COVID-19) is suspected or confirmed, Advice on the use of masks in the context of COVID-19, Rational use of PPE for COVID-19 and considerations during severe shortages, IPC in long-term care facilities, Rights, roles and responsibilities of health workers, including key considerations for occupational safety and health; the guidance is being continuously revised as new scientific information emerges. WHO has also produced a surveillance protocol targeting health workers who are found positive to COVID-19; as well as a WHO Academy online learning app for COVID-19.

Figure 10. Proportion of COVID-19 cases with comorbidities by age group and sex, amongst health workers and non-health workers (n=1 159 169)

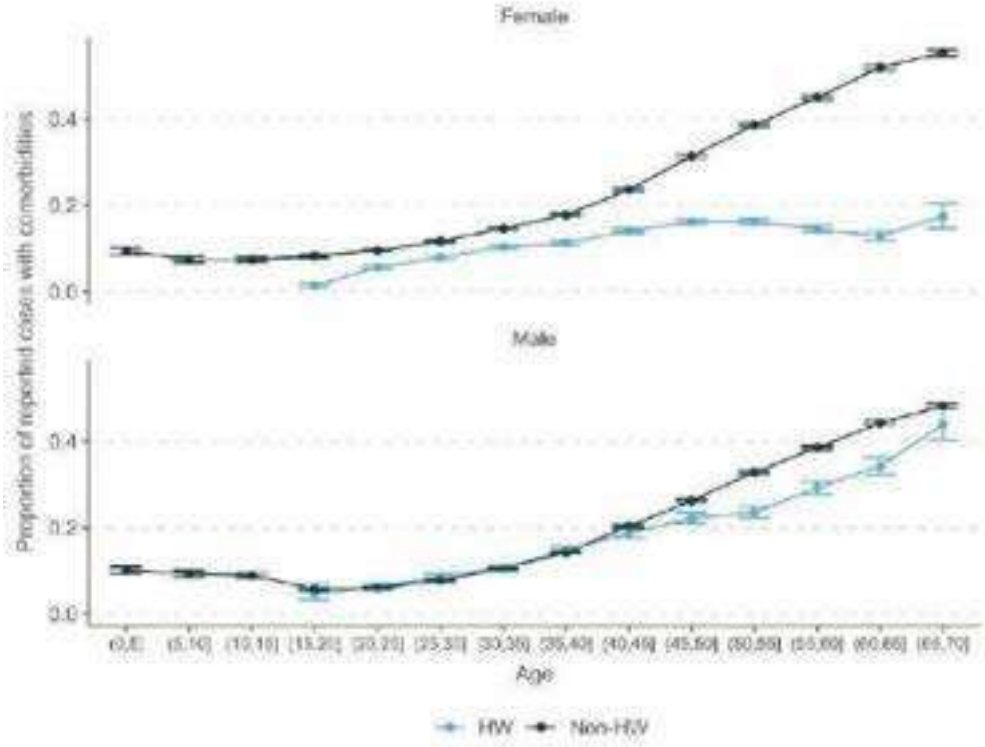


Figure 11. Proportion of hospitalized COVID-19 cases by age group and sex, amongst health workers and non-health workers (n=1 159 169)

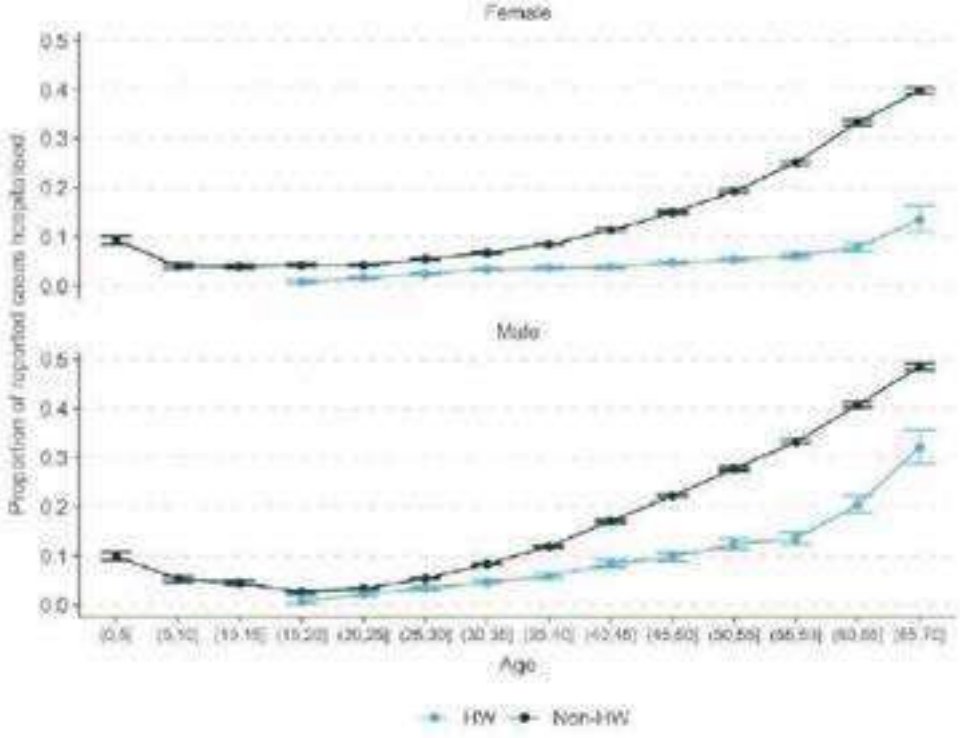
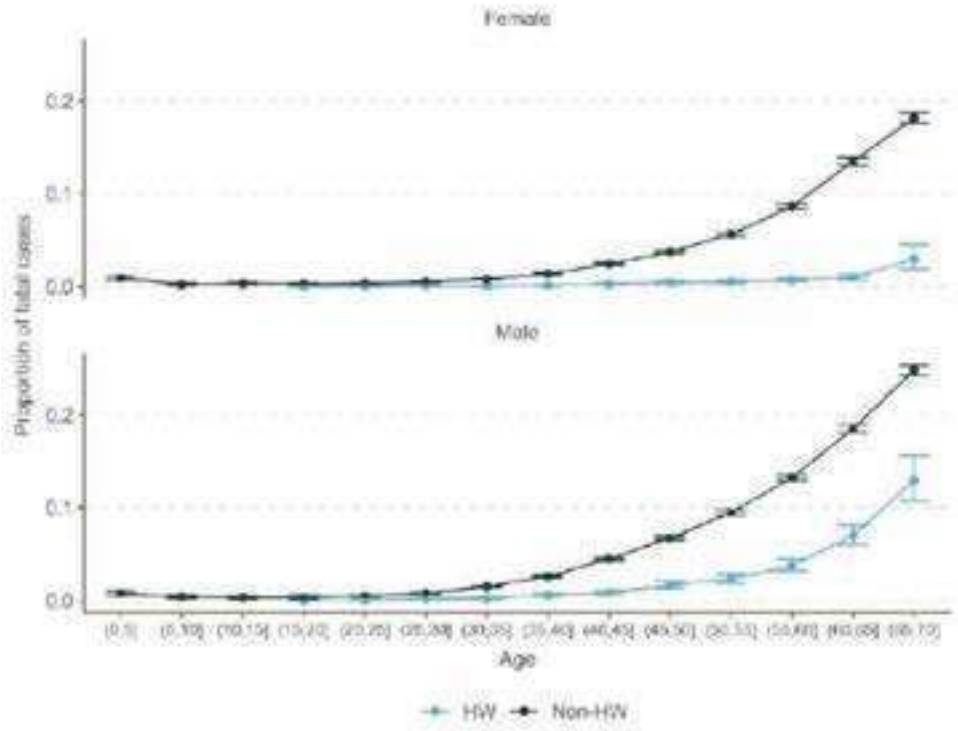


Figure 12. Proportion of fatal COVID-19 cases by age group and sex, amongst health workers and non-health workers (n=1 159 169)



Key weekly updates

- At WHOs Executive Board meeting, WHO Director-General Dr Tedros highlighted some of WHO's key actions over the course of the pandemic:
    - Declaring a Public Health Emergency of International (PHEIC) Concern on 30 January;
    - Publishing the first Strategic Preparedness and Response Plan 4 days later;
    - Developing and publishing the first protocol for developing a PCR test and assisting in the development of the first diagnostic test;
    - Producing and shipping the diagnostic tests within a month of declaring the outbreak, with millions of tests distributed to more than 150 countries since then;
    - Publishing more than 400 guidance documents for individuals, communities, schools, businesses, industries, health workers, health facilities and governments;
    - Building country capacity by providing free training in 133 COVID-19 courses on OpenWHO.org;
    - Working closely with governments to write national plans and identify needs, and to match those needs with more than 600 partners and 74 donors through the COVID-19 Partners Platform;
    - Sending expert missions to more than 130 countries to provide operational and technical support;
    - Sourcing, validating, purchasing and delivering masks, gloves, respirators, gowns, goggles, swabs, tests, reagents, thermometers, oxygen concentrators, ventilators and more, to 177 countries and territories;
    - Enrolling more than 12,000 patients in the WHO Solidarity Therapeutics Trial, in nearly 500 hospitals in 29 countries; and
    - Launching the Access to COVID-19 Tools Accelerator, which is working on diagnostics, treatment, vaccines and health system strengthening. It includes COVAX which is supporting the development of 9 vaccines, with more in the pipeline and aims to fairly distribute 2 billion vaccine doses by the end of 2021.

- "The pandemic must be a turning point for all of us; a catalyst for making universal health coverage a reality, and not just an aspiration", urged Dr Tedros at a side event of the 75th session of the United Nations General Assembly. According to the WHO global pulse survey, 90% of countries report disruptions to essential health services since COVID-19, with low- and middle-income countries reporting the greatest difficulties.

- Close to a billion people are living with a mental disorder and 1 person dies every 40 seconds by suicide. A recent WHO survey found that the COVID-19 pandemic has disrupted or halted critical mental health services in 93% of countries worldwide while the demand for mental health is increasing. To celebrate World Mental Health Day (Saturday 10 October), WHO, in collaboration with United for Global Mental Health and the World Federation for Mental Health, encouraged people from all countries to support a global movement calling for greater investment in mental health.

- More than 200,000 additional stillbirths could occur over the next 12 months in 117 low- and middle-income countries due to severe COVID-related disruptions in health care services according to the first ever joint report on stillbirth estimates. Around 2 million babies are stillborn every year, with the majority of these deaths avoided with high-quality care antenatally and during birth.

- The International Day of the Girl, celebrated on Sunday 11 October, focuses on the importance, power, and potential of girls around the world. COVID-19 represents a huge challenge for adolescents and young people, and especially for girls and young women. Young people need to be a key part of the solution to this global crisis, working jointly with their communities and health authorities to help break the chain of infection.

Table 2. Number of COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, as of 11 October 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Africa	**29169**	**1227719**	**1094**	**991**	**27255**	**24**	
South Africa	11 180	690 896	11 649	735	17 673	298	Community transmission
Ethiopia	6 441	83 429	726	70	1 277	11	Community transmission
Kenya	2 235	41 158	765	35	760	14	Community transmission
Uganda	1 047	9 538	209	7	86	2	Community transmission
Algeria	945	52 940	1 207	39	1 795	41	Community transmission
Angola	876	6 246	190	29	218	7	Community transmission
Nigeria	816	60 103	292	2	1 115	5	Community transmission
Mozambique	795	9 844	315	6	70	2	Community transmission
Cabo Verde	617	6 913	12 434	12	74	133	Community transmission
Zambia	585	15 415	839	3	336	18	Community transmission
Cameroon	322	21 160	797	2	420	16	Community transmission
Namibia	319	11 891	4 680	5	128	50	Community transmission
Guinea	261	10 996	837	3	69	5	Community transmission
Côte D'Ivoire	243	20 036	760	0	120	5	Community transmission
Ghana	219	46 987	1 512	5	306	10	Community transmission
Madagascar	173	16 702	603	5	237	9	Community transmission
Senegal	162	15 213	909	1	313	19	Community transmission
Burkina Faso	153	2 241	107	2	60	3	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Zimbabwe	136	7 994	538	1	229	15	Community transmission
Eswatini	130	5 660	4 879	2	113	97	Community transmission
Lesotho	128	1 767	825	2	40	19	Clusters of cases
Mali	103	3 273	162	1	132	7	Community transmission
Togo	95	1 935	234	1	49	6	Community transmission
Democratic Republic of The Congo	89	10 840	121	2	276	3	Community transmission
Chad	80	1 291	79	7	92	6	Community transmission
Benin	54	2 411	199	0	41	3	Community transmission
South Sudan	51	2 777	248	5	55	5	Community transmission
Botswana	47	3 219	1 369	2	18	8	Community transmission
Sierra Leone	41	2 300	288	0	72	9	Community transmission
Rwanda	40	4 892	378	1	30	2	Clusters of cases
Gambia	38	3 628	1 501	2	117	48	Community transmission
Malawi	38	5 821	304	1	180	9	Community transmission
Congo	29	5 118	927	1	90	16	Community transmission
Guinea-Bissau	23	2 385	1 212	1	40	20	Community transmission
Equatorial Guinea	18	5 063	3 609	0	83	59	Community transmission
Gabon	18	8 815	3 960	0	54	24	Community transmission
Eritrea	16	414	117	0	0	<1	Sporadic cases
Liberia	16	1 363	269	0	82	16	Community transmission
Mauritius	14	395	311	0	10	8	Sporadic cases
Mauritania	12	7 523	1 618	0	161	35	Community transmission
Burundi	11	524	44	0	1	<1	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Central African Republic	9	4 854	1 005	0	62	13	Community transmission
Sao Tome and Principe	9	922	4 207	0	15	68	Clusters of cases
Comoros	7	491	565	0	7	8	Community transmission
Seychelles	5	147	1 495	0	0	<1	Sporadic cases
Niger	0	1 200	50	0	69	3	Clusters of cases
United Republic of Tanzania	0	509	9	0	21	<1	Community transmission
Territories[ii]							
Réunion	313	4 491	5 016	0	16	18	Clusters of cases
Mayotte	210	3 989	14 622	1	43	158	Clusters of cases
Americas	**804735**	**17794771**	**17399**	**20509**	**588867**	**576**	
United States of America	327 514	7 583 748	22 911	4 863	212 229	641	Community transmission
Brazil	175 365	5 055 888	23 786	4 251	149 639	704	Community transmission
Argentina	91 779	871 468	19 282	2 626	23 225	514	Community transmission
Mexico	56 661	809 751	6 280	5 015	83 507	648	Community transmission
Colombia	52 769	894 300	17 576	1 098	27 495	540	Community transmission
Peru	21 791	843 355	25 578	549	33 158	1 006	Community transmission
Canada	15 458	178 117	4 719	176	9 585	254	Community transmission
Chile	11 124	479 595	25 088	353	13 272	694	Community transmission
Costa Rica	8 224	86 053	16 893	125	1 055	207	Community transmission
Ecuador	6 477	146 828	8 322	591	12 188	691	Community transmission
Paraguay	5 591	48 275	6 768	155	1 045	147	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Panama	4 879	118 841	27 543	68	2 474	573	Community transmission
Venezuela (Bolivarian Republic of)	4 876	81 696	2 873	41	684	24	Community transmission
Honduras	4 283	82 552	8 335	106	2 492	252	Community transmission
Dominican Republic	4 088	118 014	10 879	39	2 167	200	Community transmission
Guatemala	3 796	97 544	5 445	80	3 365	188	Community transmission
Bolivia (Plurinational State of)	2 007	138 226	11 841	217	8 262	708	Community transmission
Jamaica	764	7 559	2 553	19	138	47	Community transmission
Bahamas	623	4 955	12 600	10	106	270	Clusters of cases
El Salvador	593	29 951	4 618	30	887	137	Community transmission
Guyana	390	3 358	4 269	15	100	127	Clusters of cases
Belize	347	2 427	6 104	7	35	88	Community transmission
Trinidad and Tobago	334	5 043	3 603	12	90	64	Community transmission
Cuba	168	5 948	525	1	123	11	Clusters of cases
Uruguay	154	2 251	648	1	49	14	Clusters of cases
Suriname	119	5 018	8 554	1	106	181	Community transmission
Nicaragua	79	4 225	638	2	153	23	Community transmission
Haiti	68	8 860	777	1	230	20	Community transmission
Barbados	9	205	713	0	7	24	Clusters of cases
Antigua and Barbuda	5	111	1 133	0	3	31	Sporadic cases
Saint Lucia	2	29	158	0	0	<1	Sporadic cases
Dominica	1	32	445	0	0	<1	Clusters of cases
Grenada	0	24	213	0	0	<1	No cases
Saint Kitts and Nevis	0	19	357	0	0	<1	No cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Saint Vincent and the Grenadines	0	64	577	0	0	<1	Sporadic cases
Territories[ii]							
Puerto Rico	2 989	53 364	18 653	47	728	254	Community transmission
Guadeloupe	580	6 483	16 202	2	77	192	Community transmission
Martinique	308	1 851	4 933	1	22	59	Community transmission
Aruba	152	4 150	38 870	4	31	290	Community transmission
Curaçao	133	532	3 242	0	1	6	Community transmission
French Guiana	115	10 144	33 963	2	69	231	Community transmission
Saint Martin	54	466	12 054	0	8	207	Community transmission
Sint Maarten	31	699	16 301	0	22	513	Community transmission
Bonaire, Sint Eustatius and Saba	24	148	5 644	1	2	76	Sporadic cases
Cayman Islands	7	220	3 348	0	1	15	Sporadic cases
Bermuda	3	184	2 955	0	9	145	Sporadic cases
Saint Barthélemy	3	65	6 576	0	0	<1	
Anguilla	0	3	200	0	0	<1	No cases
British Virgin Islands	0	71	2 348	0	1	33	Clusters of cases
Falkland Islands (Malvinas)	0	13	3 732	0	0	<1	No cases
Montserrat	0	13	2 601	0	1	200	No cases
Saint Pierre and Miquelon	0	16	2 761	0	0	<1	Sporadic cases
Turks and Caicos Islands	0	695	17 950	0	6	155	Clusters of cases
United States Virgin Islands	- 2	1 324	12 679	0	20	192	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Eastern Mediterranean	**138751**	**2605478**	**3565**	**3173**	**66329**	**91**	
Iran (Islamic Republic of)	28 134	496 253	5 908	1 547	28 293	337	Community transmission
Iraq	24 193	400 124	9 948	443	9 790	243	Community transmission
Morocco	18 613	149 841	4 060	279	2 572	70	Clusters of cases
Tunisia	10 315	31 259	2 645	180	456	39	Clusters of cases
Jordan	9 249	23 998	2 352	93	181	18	Community transmission
Lebanon	9 078	52 558	7 700	57	455	67	Community transmission
United Arab Emirates	7 373	105 133	10 630	17	443	45	Community transmission
Libya	5 599	41 686	6 067	45	623	91	Community transmission
Oman	5 544	104 129	20 391	74	1 009	198	Community transmission
Pakistan	4 316	318 932	1 444	57	6 570	30	Clusters of cases
Kuwait	4 110	110 568	25 891	35	655	153	Community transmission
Bahrain	2 977	75 287	44 245	15	273	160	Clusters of cases
Saudi Arabia	2 947	338 944	9 736	168	5 018	144	Sporadic cases
Qatar	1 439	127 778	44 351	3	219	76	Community transmission
Egypt	812	104 387	1 020	70	6 040	59	Clusters of cases
Afghanistan	458	39 799	1 022	15	1 477	38	Clusters of cases
Syrian Arab Republic	344	4 673	267	17	221	13	Community transmission
Somalia	102	3 847	242	0	99	6	Sporadic cases
Sudan	12	13 670	312	0	836	19	Community transmission
Yemen	10	2 055	69	6	596	20	Community transmission
Djibouti	5	5 423	5 489	0	61	62	Sporadic cases
Territories[ii]							

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Occupied Palestinian territory	3 121	55 134	10 808	52	442	87	Community transmission
Europe	**694275**	**6918265**	**7412**	**6172**	**246709**	**264**	
The United Kingdom	110 827	590 848	8 704	443	42 760	630	Community transmission
France	110 665	691 368	10 592	480	32 449	497	Community transmission
Russian Federation	83 717	1 298 718	8 899	1 239	22 597	155	Clusters of cases
Spain	50 246	861 112	18 418	550	32 929	704	Community transmission
Netherlands	36 333	168 082	9 809	118	6 558	383	Community transmission
Ukraine	34 573	261 035	5 969	575	4 972	114	Community transmission
Czechia	28 769	109 374	10 213	194	905	85	Community transmission
Italy	26 743	349 494	5 780	172	36 140	598	Clusters of cases
Israel	23 808	286 109	33 055	201	1 877	217	Community transmission
Germany	23 627	322 864	3 854	86	9 615	115	Clusters of cases
Poland	23 498	121 638	3 214	368	2 972	79	Community transmission
Belgium	22 667	156 838	13 533	112	10 175	878	Community transmission
Romania	18 338	152 403	7 922	411	5 358	279	Community transmission
Turkey	11 017	334 031	3 961	394	8 778	104	Community transmission
Portugal	7 327	85 574	8 392	72	2 067	203	Clusters of cases
Austria	6 666	54 685	6 072	49	858	95	Community transmission
Slovakia	6 476	18 797	3 443	7	61	11	Clusters of cases
Hungary	6 021	36 596	3 788	111	933	97	Community transmission
Switzerland	5 967	60 230	6 959	10	1 793	207	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Republic of Moldova	5 874	61 762	15 311	105	1 458	361	Community transmission
Ireland	4 046	41 714	8 448	11	1 821	369	Community transmission
Armenia	3 955	56 451	19 050	43	1 020	344	Community transmission
Georgia	3 676	11 794	2 957	35	85	21	Community transmission
Belarus	3 171	83 023	8 786	40	891	94	Community transmission
Sweden	2 804	98 451	9 748	5	5 894	584	Community transmission
Denmark	2 780	32 082	5 539	13	667	115	Community transmission
Croatia	2 531	19 932	4 855	24	317	77	Community transmission
Uzbekistan	2 473	60 894	1 819	24	503	15	Clusters of cases
Greece	2 465	22 078	2 118	31	436	42	Clusters of cases
Bulgaria	2 353	23 871	3 435	46	887	128	Clusters of cases
Bosnia and Herzegovina	2 109	30 343	9 249	50	920	280	Community transmission
North Macedonia	1 953	20 555	9 866	32	785	377	Clusters of cases
Slovenia	1 924	8 254	3 970	1	141	68	Clusters of cases
Kyrgyzstan	1 802	49 230	7 546	19	1 085	166	Clusters of cases
Kazakhstan	1 788	143 632	7 649	0	2 106	112	Clusters of cases
Finland	1 336	11 580	2 090	1	346	62	Community transmission
Azerbaijan	1 191	41 752	4 118	13	608	60	Clusters of cases
Albania	1 114	15 231	5 293	24	416	145	Clusters of cases
Norway	1 072	15 221	2 808	0	275	51	Clusters of cases
Lithuania	882	5 963	2 190	9	103	38	Community transmission
Serbia	843	34 685	4 981	9	762	109	Community transmission
Montenegro	669	12 917	20 566	11	190	303	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Luxembourg	651	9 360	14 953	5	130	208	Community transmission
Iceland	588	3 460	10 139	0	10	29	Community transmission
Andorra	586	2 696	34 893	2	55	712	Community transmission
Latvia	577	2 596	1 376	2	40	21	Clusters of cases
Malta	542	3 681	8 337	4	41	93	Clusters of cases
Tajikistan	285	10 180	1 067	2	79	8	Pending
Estonia	269	3 846	2 899	1	68	51	Clusters of cases
Cyprus	175	1 986	1 645	3	25	21	Clusters of cases
San Marino	16	766	22 571	0	42	1 238	Community transmission
Liechtenstein	15	138	3 619	0	1	26	Sporadic cases
Monaco	11	233	5 937	0	1	25	Sporadic cases
Holy See	0	12	14 833	0	0	<1	Sporadic cases
Territories[ii]							
Kosovo[1]	372	16 087	8 647	15	635	341	Community transmission
Gibraltar	52	468	13 891	0	0	<1	Clusters of cases
Jersey	28	449	4 127	0	32	294	Community transmission
Faroe Islands	4	477	9 762	0	0	<1	Sporadic cases
Isle of Man	4	345	4 057	0	24	282	No cases
Greenland	2	16	282	0	0	<1	No cases
Guernsey	2	258	4 083	0	13	206	Community transmission
South-East Asia	**575763**	**7911036**	**3914**	**7750**	**126917**	**63**	

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
India	504 433	7 053 806	5 111	6 552	108 334	79	Clusters of cases
Indonesia	29 446	328 952	1 203	710	11 765	43	Community transmission
Nepal	21 114	105 684	3 627	86	614	21	Clusters of cases
Myanmar	9 561	26 064	479	227	598	11	Clusters of cases
Bangladesh	9 508	377 073	2 290	175	5 500	33	Community transmission
Sri Lanka	1 233	4 628	216	0	13	1	Clusters of cases
Maldives	394	10 859	20 089	0	34	63	Clusters of cases
Thailand	51	3 636	52	0	59	1	Clusters of cases
Bhutan	23	306	397	0	0	<1	Sporadic cases
Timor-Leste	0	28	21	0	0	<1	Sporadic cases
Western Pacific	**26199**	**651841**	**332**	**633**	**14265**	**7**	
Philippines	17 596	336 926	3 075	560	6 238	57	Community transmission
Japan	3 573	88 912	703	30	1 627	13	Clusters of cases
Malaysia	3 008	15 096	466	18	155	5	Clusters of cases
Republic of Korea	515	24 606	480	11	432	8	Clusters of cases
China	184	91 305	62	0	4 746	3	Clusters of cases
Australia	123	27 244	1 068	4	897	35	Clusters of cases
Singapore	66	57 866	9 891	0	27	5	Clusters of cases
New Zealand	17	1 515	314	0	25	5	Clusters of cases
Viet Nam	11	1 107	11	0	35	<1	Clusters of cases
Papua New Guinea	10	550	61	0	7	1	Community transmission
Cambodia	5	283	17	0	0	<1	Sporadic cases
Mongolia	2	315	96	0	0	<1	Sporadic cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Brunei Darussalam	0	146	334	0	3	7	No cases
Fiji	0	32	36	0	2	2	Sporadic cases
Lao People'S Democratic Republic	0	23	3	0	0	<1	Sporadic cases
Solomon Islands	0	1	1	0	0	<1	Sporadic cases
Territories[ii]							
French Polynesia	728	2 754	9 804	2	10	36	Sporadic cases
Guam	357	3 056	18 107	8	59	350	Clusters of cases
Northern Mariana Islands (Commonwealth of The)	4	77	1 338	0	2	35	Pending
New Caledonia	0	27	95	0	0	<1	Sporadic cases
Subtotal for all regions	**2 268 892**	**37 109 110**		**39 228**	**1 070 342**		
Other[†]	0	741		0	13		
Grand total	**2 268 892**	**37 109 851**	**4 761**	**39 228**	**1 070 355**	**137**	

**See *data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases; efforts are underway to identify these for notation in the data table. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines

on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas; classification is based on the highest category reported within a country/territory/area. Categories:

- No cases: with no confirmed cases;
- Sporadic cases: with one or more cases, imported or locally detected;
- Clusters of cases: experiencing cases, clustered in time, geographic location and/or by common exposures;
- Community transmission: experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel laboratory surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area;
- Pending: transmission classification has not been reported to WHO.

[ii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

[†] Other: includes cases reported from international conveyances.

Country, territory, or area-specific notes, updates and errata

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

Coronavirus disease (COVID-19)

Data as received by WHO from national authorities, as of 04 October 2020, 10 am CEST

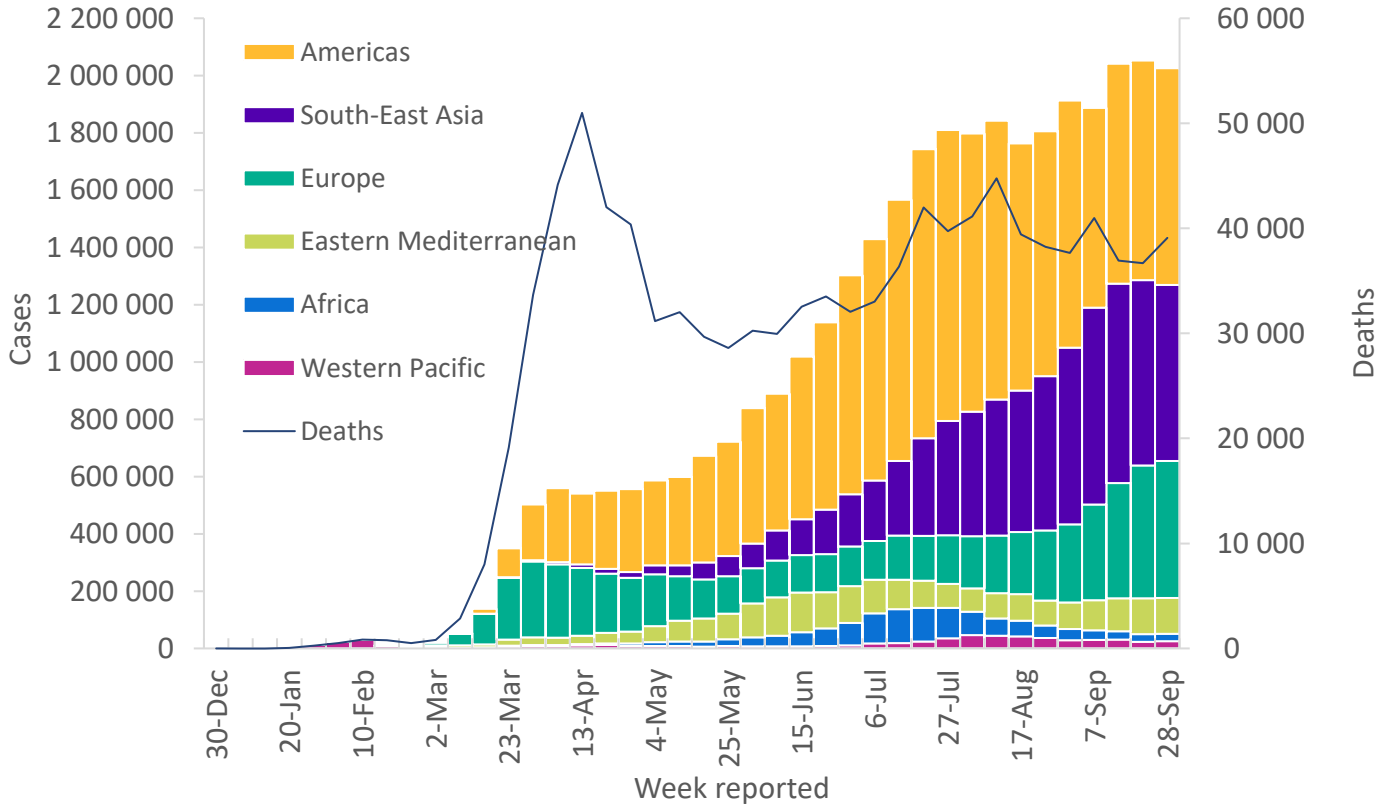
For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

The number of new cases per week has remained stable at 2 million for the past three weeks (Figure 1), with the cumulative total of over 34.8 million cases. Over 1 million deaths have now been reported globally, of which the majority were reported in the Region of the Americas (55%), followed by Europe (23%). In the past week, the regions of the Americas, South-East Asia, and Europe account for 91% of new cases. Five countries (namely India, the United States of America, Brazil, Argentina and France) reported 60% of new global cases this past week, while Israel registered the highest incidence (3717 new cases per 1 million population). Globally, the highest percentage of cases have been reported in the 25-39 age group, with approximately 50% of cases in the 25-64 age group. However, the percentage of deaths increases with age, and approximately 75% of deaths are in those aged 65 years and above.

Figure 1: Number of COVID-19 cases reported weekly by WHO Region, and global deaths, 30 December 2019 through 04 October 2020**



**See *data table and figure notes.*

Although globally the number of new cases was similar to the number of cases in the previous week, there is considerable variation on a country- by-country basis. In several countries, the number of new cases is rising again, and in many (most notably within the European Region) the second wave is exceeding previous peaks; this can be partly attributed to enhancements in surveillance capacities over time. In other countries we have seen a gradual decline in new cases from earlier peaks in August, for example in Brazil, Colombia and Peru. In India and the Philippines, the number of new cases appear to have stabilized, but they are still reporting high numbers. There are also examples of countries that have consistently shown an increasing incidence as their first wave continues; these include Indonesia, Iraq, and Myanmar, although Indonesia is reporting a slight drop this week. South Africa and Australia are examples of countries that have successfully managed to reduce the number of new cases and have seen large reductions from earlier peaks.

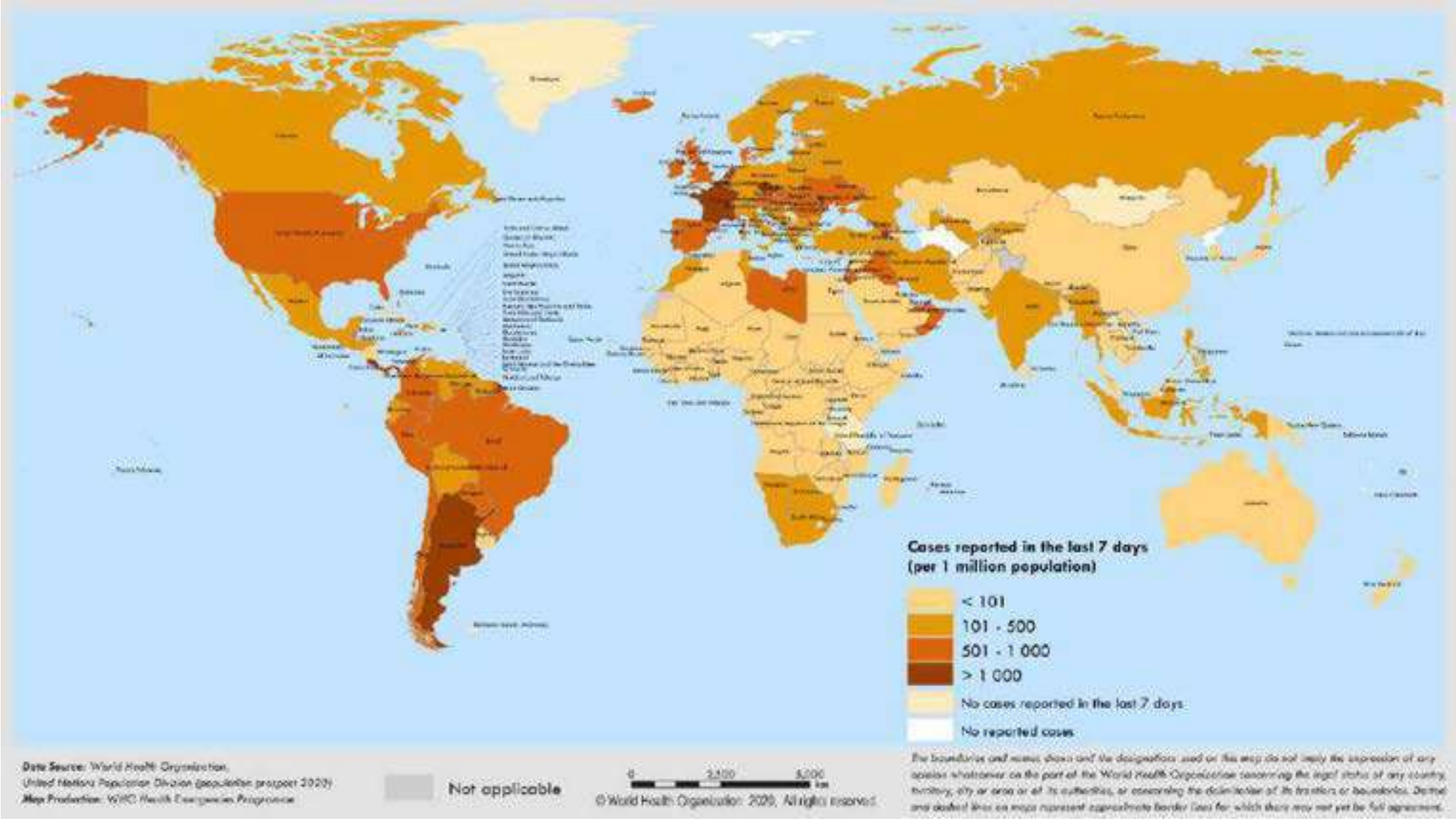
Additional region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western-Pacific Region.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 04 October 2020**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days*	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days*	Cumulative deaths (%)
Americas	756 926 (37%)	-1%	16 990 036 (49%)	21 494 (55%)	13%	568 358 (55%)
South-East Asia	614 502 (30%)	-5%	7 335 273 (21%)	8 456 (22%)	-6%	119 167 (12%)
Europe	478 119 (24%)	3%	6 187 384 (18%)	5 039 (13%)	6%	240 148 (23%)
Eastern Mediterranean	125 567 (6%)	<1%	2 466 722 (7%)	2 804 (7%)	3%	63 156 (6%)
Africa	26 208 (1%)	-3%	1 198 550 (3%)	783 (2%)	8%	26 264 (3%)
Western Pacific	24 751 (1%)	8%	625 642 (2%)	503 (1%)	9%	13 632 (1%)
† Other	-	-	741 (<1%)	-	-	13 (<1%)
Global	**2 026 073 (100%)**	**-1%**	**34 804 348 (100%)**	**39 079 (100%)**	**7%**	**1 030 738 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*
***See data, table and figure notes*

Figure 2. COVID-19 cases per million population reported in the last seven days by countries, territories and areas, 28 September through 4 October 2020**



**See *data, table and figure notes*.

Situation by WHO Region

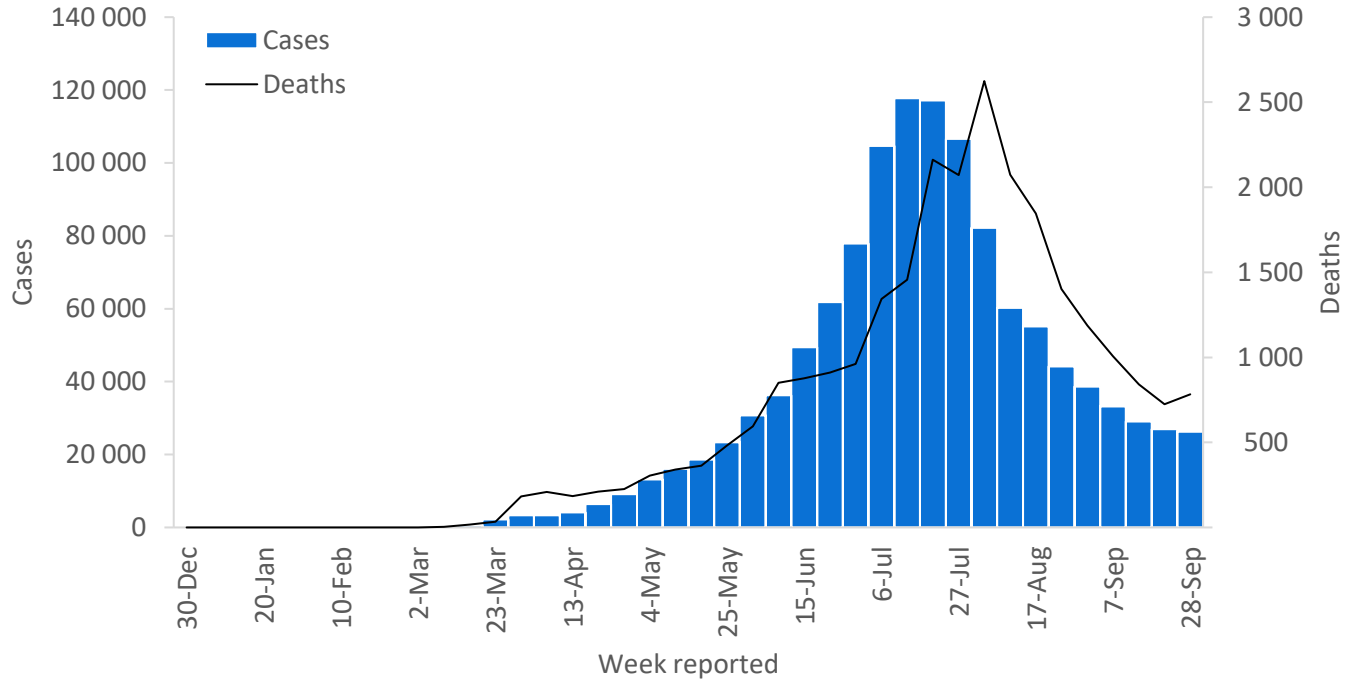
African Region

South Africa and Ethiopia continue to report the highest numbers of new cases in Africa, followed by Mozambique, Uganda, and Nigeria. Africa has seen a continuous decline in case incidence since mid-July; however, this trend is now slowing (Figure 3). For the first week since early August, the number of new deaths has risen – led by South Africa with a 29% increase in deaths in the past week.

South Africa also has the second- highest mortality rate in the Region – 11 461 deaths per 1 million population. The provinces of Gauteng and the Western Cape have reported the most cases and deaths to date; however, these regions, as well as the country itself, have maintained sustained declines in the daily incidence since the end of July. Despite this, weekly case numbers have continued to rise in less populated provinces. The country moved to Alert Level 1 as of 21 September (the least strigent of the five alert levels applied by the South African Goverment), with all sectors of the economy now open with strict adherence to public health protocols. A WHO surge team of experts, including infectious disease specialists and epidemiologists, is currently in South Africa, and is continuing to work with the National Department of Health.

New weekly cases have risen in Angola from 400 in the week of 7 September to 698 cases in the past week, a 74% increase, although the number of new cases has declined by 10% from the past week. Angola recently upgraded their self-reported transmission classification from 'clusters of cases' to 'community transmission'. Luanda province remains the epicentre with around 90% of all cases. A total of 16 out of the 18 provinces have reported confirmed cases. WHO has trained around 90 community health mobilizers now operating across Luanda.

Figure 3: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, as of 4 October 2020**



**See data, table and figure notes

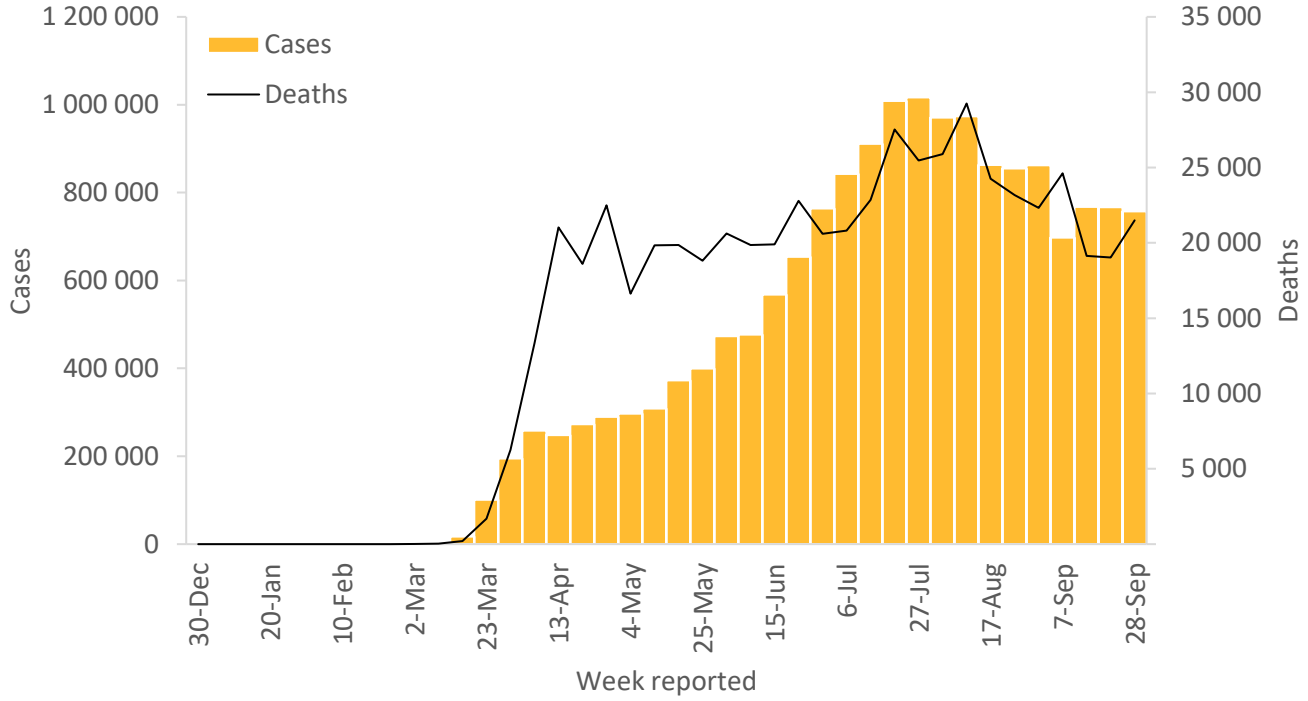
Region of the Americas

A similar incidence of new cases was reported across the Region over the past week (Figure 4) in comparison to previous week. The United States of America, Brazil, Argentina, Colombia, Mexico and Peru registered the highest number of weekly new cases.

The United States of America continues to record approximately 300 000 new cases per week (894 new cases per 1 million population). Declines observed over July and August have stagnated in recent weeks, with several states reporting sharp rises in case numbers – most notably in Midwest states. Canada is also showing a large increase in new cases and new deaths compared with last week, at 43% and 208% respectively. Likewise, Argentina continues to report an increase in cases and deaths, with cumulative deaths exceeding 20 000 last week after a backlog of over 3000 reported deaths from Buenos Aires. Since peaking at just over 300 000 new weekly cases in the week of 27 July, new cases in Brazil have fallen to 190 000 new cases in the past week (898 new cases per 1 million population). Weekly new cases have also fallen in Colombia and Peru.

In the Region of the Americas, as in other Regions, older persons are far more likely to experience severe disease following infection. Brazil reported that 76% of COVID-19 related deaths during February to September 2020 were in adults aged 60 years and older. In Peru, people over the age of 70 years had the highest COVID-19 mortality rates during March-May 2020 and estimates from Canada show that more than 80% of COVID-19 deaths have occurred in long-term-care facilities. WHO has published guidance on Preventing and managing COVID-19 across long-term care services with an annex providing a comprehensive set of actions for policymakers, national and local decision-makers and other actors.

Figure 4: Number of COVID-19 cases and deaths reported weekly by the WHO Region of the Americas, as of 04 October 2020**



**See *data, table and figure notes*

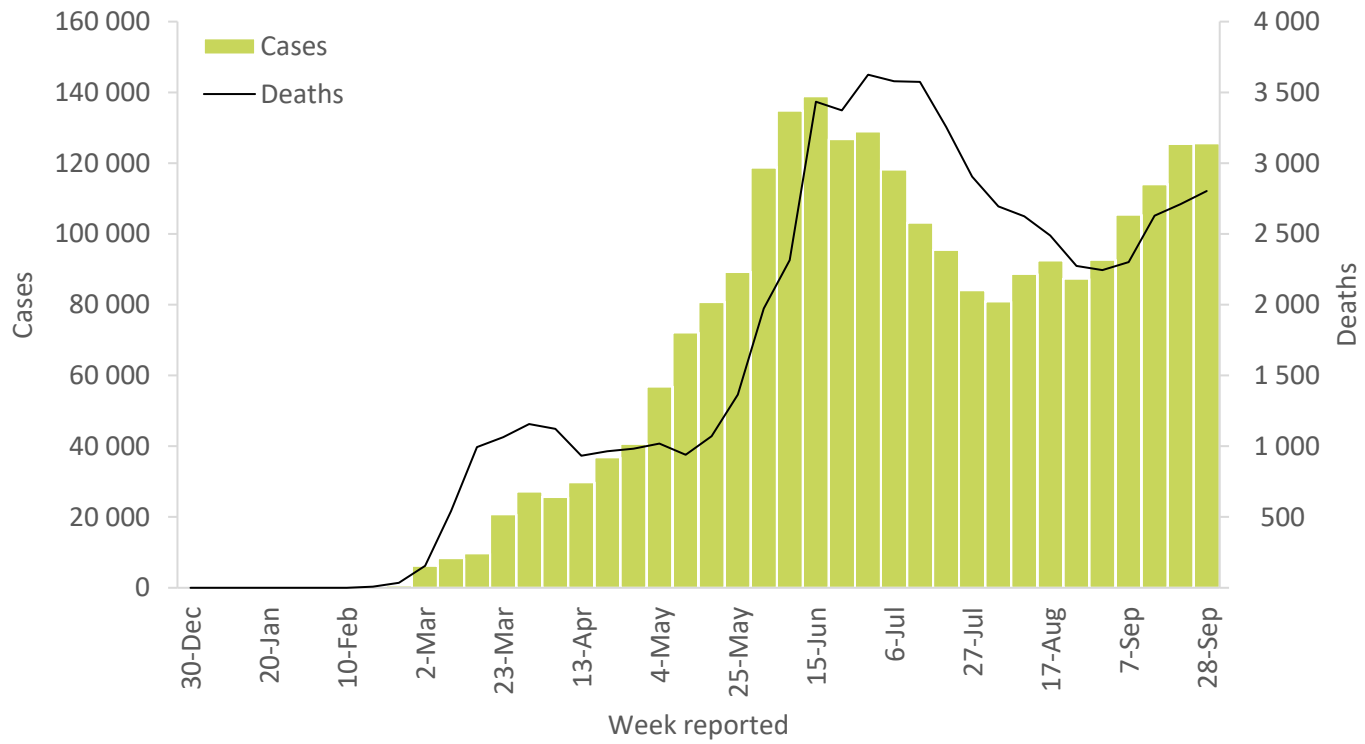
Eastern Mediterranean Region

A similar incidence of new cases was reported from the Eastern Mediterranean Region over the past week (Figure 5) in comparison to previous week. Iraq, Iran, Morocco, and Lebanon are reporting the highest numbers of new cases for the past week. Iraq has reported over 20 000 cases per week since the beginning of August and this week just under 30 000 cases new cases (745 cases per 1 million population) were reported. In Jordan, case incidence has almost doubled each week for the past five weeks, with over 6600 new cases (a 90% increase on the previous week) reported last week.

Since the start of September, the Islamic Republic of Iran has shown an upward trend in weekly new cases and is reporting their highest number of new cases – 25 000 new cases (298 cases per 1 million population) – since the beginning of the pandemic.

Lebanon reported a 19% increase in new cases compared with the previous week and has one of the highest rates of new cases in the Region (1209 new cases per 1 million population). On 29 September, WHO also launched an initiative to rebuild the Ministry of Public Health's Central Drug Warehouse in Qarantina, Lebanon, which was destroyed by the Beirut port blast on 4 August.

Figure 5: Number of COVID-19 cases and deaths reported weekly by the WHO Eastern Mediterranean Region, as of 04 October 2020**



**See *data, table and figure notes*

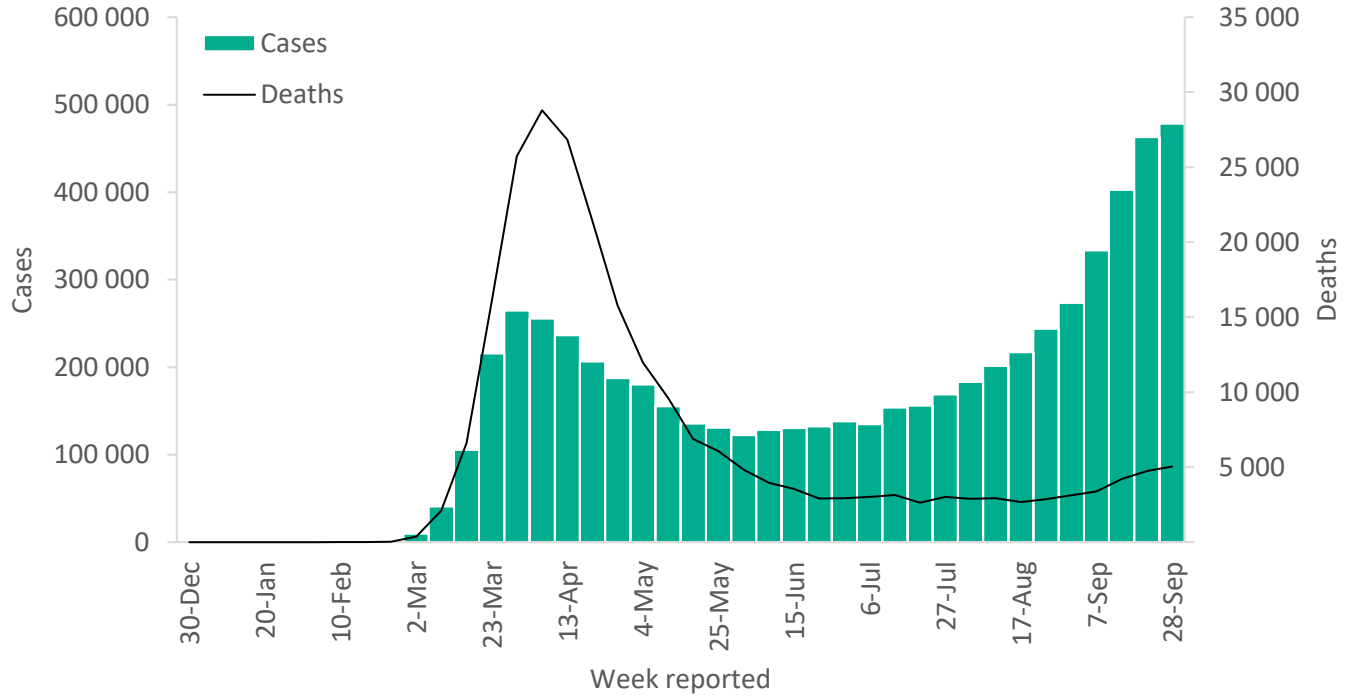
European Region

The incidence of new cases has continued to increase in the European Region overall (Figure 6). France, the Russian Federation, the United Kingdom, Spain, and Israel reported the highest numbers of new cases in the past week. The numbers of new cases and new deaths in the Russian Federation, the United Kingdom, Ukraine and several other countries in Europe are showing considerable increases compared with last week. The Netherlands, Czechia, Germany, and Italy have also reported sizable increases. Israel continues to have the highest incidence of new cases per 1 million population in the Region and globally, with over 32 000 cases reported in the past week (3717 new cases per 1 million population).

With over 1.2 million COVID-19 cases, and over 63 000 new cases in the past week (436 cases per 1 million population), the Russia Federation is reporting the second highest number of new cases in Europe and the sixth highest number globally. Russia's weekly new cases peaked at 75 000 cases in the week of 4 May, with a gradual decrease observed through late August, but rapid increases observed in the last three weeks.

In contrast to other European countries, Ukraine did not observe a large first peak, but has reported a continuous increase in new cases since mid-June. Over 27 000 new cases were reported in the past week (636 new cases per 1 million population), a 21% rise from the week before. Since the start of the outbreak, WHO has supported the Ministry of Health to further develop three key areas of its health system: health financing, service delivery, and governance. In September, WHO experts worked together with national authorities to make sure rehabilitation services are fully functional and well-integrated into health care.

Figure 6: Number of COVID-19 cases and deaths reported weekly by the WHO European Region, as of 04 October 2020**

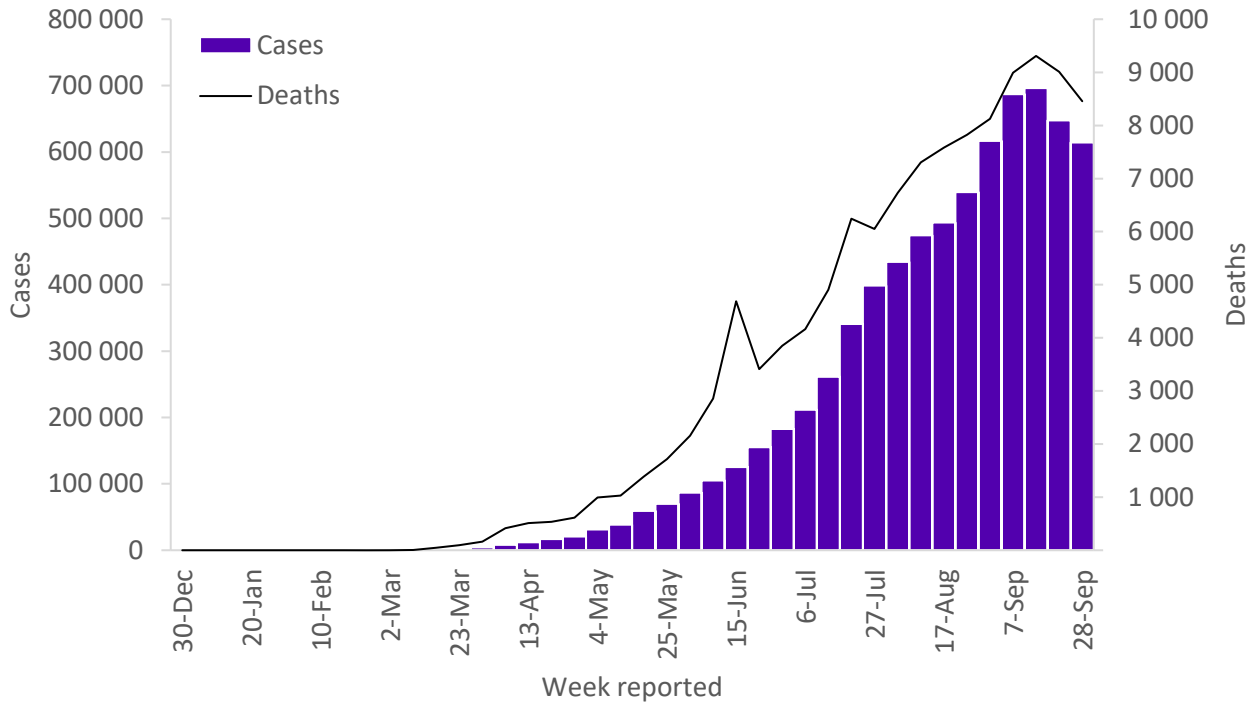


**See *data, table and figure notes*

South-East Asia Region

A gradual decline in case and deaths incidence in the South-East Asia Region continued during the past week (Figure 7). Nevertheless, the Region contrbutes almost a third (n=614 502, 30%) of new cases reported global in the past week. At the same time, current weekly case incidence (304 per 1 million population) is markedly lower than that which is currently observed in the Americas and Europe.

Figure 7: Number of COVID-19 cases and deaths reported weekly by the WHO South-East Asia Region, as of 04 October 2020**



**See *data, table and figure notes*

India, reporting over 500 000 new cases per week since late-August, again contributed the majority of incident cases in the Region (91%) and globally (27%) last week, bringing cumulative counts in the country to an excess of 6.5 million cases and 100 000 deaths (10% of the global total). Over several months, case numbers in India rose rapidly, with Maharashtra, Andhra Pradesh, Karnataka, Tamil Nadu, and Uttar Pradesh reporting the highest numbers of cases. This increase occurred with a concurrent expansion in testing activity, which has since stabilized at 7–8 million samples tested per week (or 5.2–5.8 samples tested/1000 persons/week) in the past five weeks. Weekly incidence of new cases is gradually easing, falling to 403 new cases per 1 million population (556 841 cases) this past week, after peaking three weeks ago, while test positivity rates fell marginally to 7.1%.

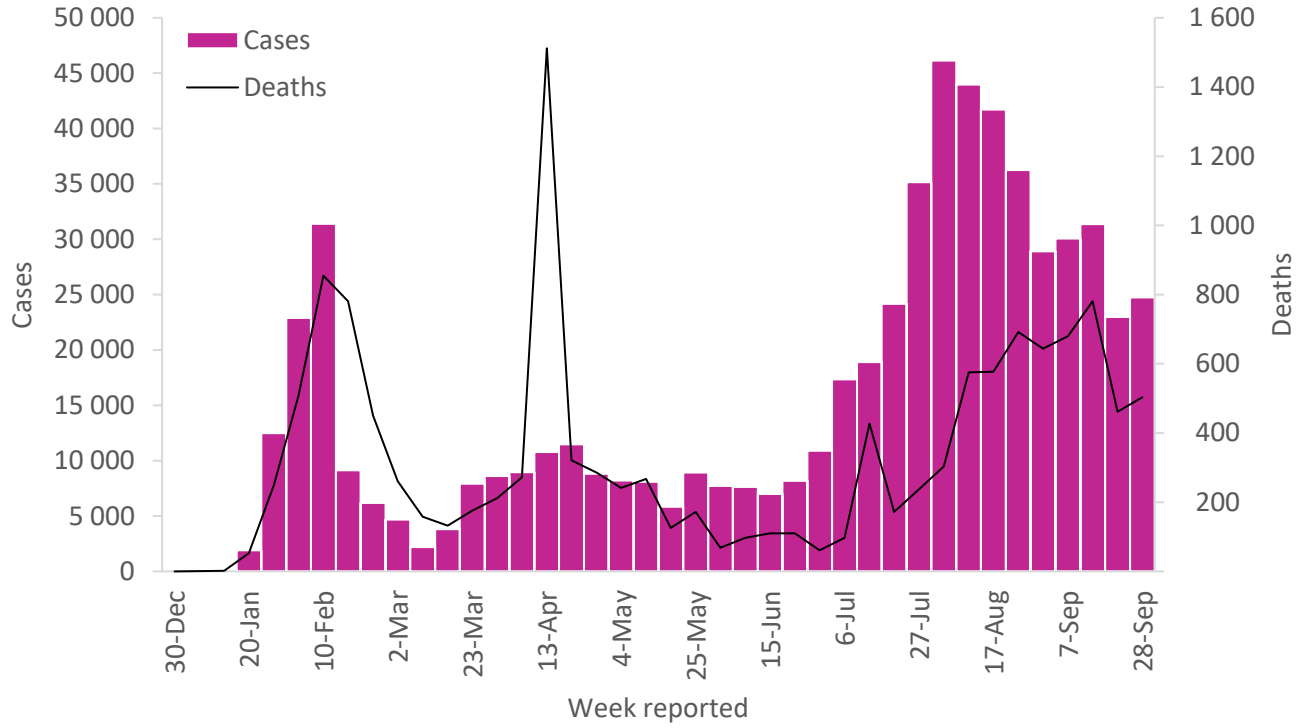
Indonesia is currently the second most affected country in the Region, nearing 300 000 cases to date, including over 28 000 new cases (or 103 new cases per 1 million population) in the past week. Almost 60% of cases to date have been reported from the island of Java, which includes the capital Jakarta. Suspected case numbers have risen sharply in recent weeks; however, testing capacity has thus far been unable to meet demand, with approximately 23% (n=30 940 people) people tested among some 132 000 suspected cases reported on 30 September. Among four provinces that achieved a benchmark of 1 person tested/1000 population/week during September, weekly test positivity rates ranged markedly from less than 5% to over 40%, highlighting the heterogeneity in both surveillance capacity and COVID-19 activities across the island.

In Myanmar, COVID-19 incidence has risen sharply, with cumulative counts almost doubling each week since mid-August, and over 6500 new cases (or 120 new cases per 1 million population) reported in the past week. Rakhine State and the country's largest city, Yangon has reported around 75% of cases, and has been hardest hit to date, with a possibility of community transmission in areas. On 20 September, Myanmar announced a stay-home order for its biggest city Yangon.

Western Pacific Region

In the Western Pacific Region, the weekly number of new cases reported continues to fluctuate (Figure 8). The Philippines, Japan, and Malaysia are reporting the highest numbers of new cases, with Malaysia reporting an increase of 119% in new cases compared with last week.

Figure 8: Number of COVID-19 cases and deaths reported weekly by the WHO Western Pacific Region, data as of 04 October 2020**



**See *data, table and figure notes*

Around three-quarters (73%) of new cases in the region were from the Philippines. Although weekly new cases in the Phillipines peaked in the week of 10 August, the incidence of new cases remains relatively high compared to others in the Region, with over 18 000 new cases in the past week (165 cases per 1 million population). Data as of 29 September shows that 50% of cases are in the age group 20-39 years, while 60% of deaths are in those aged 60 years and over. There is community transmission in all regions of the country, with three regions - National Capital Region, Region 3, and Region 4A – showing higher transmission intensity. The National Capital Region continues to report the most cases, with half of national cases, where Metro Manila mayors have recommended the extension of the general community quarantine status for the month of October.

In Malaysia, the weekly number of new cases has been increasing for the past 3 weeks, with 1319 cases reported in the past week (40 new cases per 1 million population). The state of Sabah has been the worst affected in recent weeks, accounting for 77% of cases reported in September. A number of

clusters in other states have also been linked to travellers from Sabah. Malaysia has a nationwide recovery movement control order (RMCO) in place and most communities and services are operating under these limited restrictions. However, targeted enhanced movement control orders (TEMCO), the most stringent form of community and business restrictions, have been implemented in a number of areas with high levels of community transmission.

The Solomon Islands recorded their first COVID-19 case: a student returning from the Philippines on a repatriation flight. The Solomon Islands have planned to use repatriation flights to return students studying in the Philippines and Indonesia. Since early January 2020, WHO has been working closely alongside Pacific Governments and Ministries of Health, in collaboration with partners, to ensure that countries are well prepared to respond to the threat of COVID-19.

Key weekly updates

- **Diagnostics**: WHO issued the first and second Emergency Use Listing for a quality antigen based rapid diagnostic test. WHO published guidance highlights the value of these tests in areas where community transmission is widespread and where nucleic acid amplification-based diagnostic testing is either unavailable or where test results are significantly delayed. On 28 September, the Access to COVID-19 Tools (ACT) Accelerator announced 120 million high-quality, affordable COVID-19 antigen rapid tests to be made available to low- and middle-income countries.

- **Diagnostics**: WHO published the final version of Target Product Profiles (TPP) for priority diagnostics. These TPPs describe the desirable and minimal acceptable profiles for four tests: (i) point of care tests for suspected cases and their close contacts where reference assay testing is unavailable, or turnaround times obviate clinical utility; (ii) tests for diagnosis or confirmation of acute or subacute infection, suitable for low or high-volume needs; (iii) point of care test for prior infection; and (iv) tests for prior infection for moderate to high volume needs.

- **COVAX**: The Director-General Dr Tedros, in his regular media briefing on 2 October, highlighted 168 have joined COVAX. Through the ACT Accelerator and COVAX Facility, any vaccines that are proven to be safe and effective will be rolled out equitably across the world.

- **International Day of Older Persons**: On 1 October, the International Day of Older Persons, WHO launched a package of tools, including a digital application to help health and social workers provide better care for older people . A data portal was also launched that will compile data on global indicators for monitoring the health and well-being of people aged 60 and over. Globally, older persons and those receiving long term care, accounts for a majority of COVID-19 severe cases and deaths.
- **Mental Health**: Billions of people around the world have been affected by the COVID-19 pandemic, which is having an added impact on people's mental health. On 10 October, World Mental Health Day, WHO is organizing a *Big Event for Mental Health*. The advocacy event will focus on the urgent need to address the world's chronic under-investment in mental health – a problem that has been thrown into the spotlight during the COVID-19 pandemic.

- **Preparedness**: During the United Nations General Assembly, a high-level event on 'Sustainable preparedness for health security and resilience: Adopting a whole-of-society approach and breaking the "panic-then-forget" cycle' was organized and co-hosted by Finland, France and Indonesia, along with the WHO. As the world crossed a grim milestone with over a million lives lost to COVID-19, with many more expected to have died from unprecedented disruptions to health systems. The event highlighted the need for sustainable health emergency preparedness as COVID-19 will not be the world's last health emergency.

Table 2. Number of COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, as of 04 October 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Africa	**26208**	**1198550**	**181**	**783**	**26264**	**4**	
South Africa	10 218	679 716	11 461	562	16 938	286	Community transmission
Ethiopia	4 288	76 988	670	42	1 207	10	Community transmission
Mozambique	1 292	9 049	290	10	64	2	Community transmission
Uganda	1 127	8 491	186	8	79	2	Community transmission
Nigeria	1 089	59 287	288	7	1 113	5	Community transmission
Algeria	1 081	51 995	1 186	45	1 756	40	Community transmission
Kenya	1 052	38 923	724	36	725	13	Community transmission
Angola	698	5 370	163	18	189	6	Community transmission
Namibia	654	11 572	4 554	3	123	48	Community transmission
Cabo Verde	595	6 296	11 324	6	62	112	Community transmission
Ghana	546	46 768	1 505	2	301	10	Community transmission
Madagascar	272	16 529	597	3	232	8	Community transmission
Botswana	251	3 172	1 349	3	16	7	Community transmission
Côte D'Ivoire	237	19 793	750	0	120	5	Community transmission
Zambia	218	14 830	807	1	333	18	Community transmission
Guinea	187	10 735	817	0	66	5	Community transmission
Senegal	182	15 051	899	6	312	19	Community transmission
Burkina Faso	159	2 088	100	2	58	3	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Democratic Republic of The Congo	159	10 751	120	3	274	3	Community transmission
Eswatini	111	5 530	4 767	3	111	96	Community transmission
Togo	104	1 840	222	2	48	6	Community transmission
Cameroon	103	20 838	785	0	418	16	Community transmission
Mali	90	3 170	157	1	131	6	Community transmission
Congo	81	5 089	922	0	89	16	Community transmission
Lesotho	81	1 639	765	3	38	18	Clusters of cases
Gabon	69	8 797	3 952	0	54	24	Community transmission
Zimbabwe	55	7 858	529	1	228	15	Community transmission
Sierra Leone	51	2 259	283	0	72	9	Community transmission
Mauritania	49	7 511	1 615	0	161	35	Community transmission
Rwanda	41	4 852	375	0	29	2	Clusters of cases
South Sudan	40	2 726	244	1	50	4	Community transmission
Central African Republic	39	4 845	1 003	0	62	13	Community transmission
Guinea-Bissau	38	2 362	1 200	0	39	20	Community transmission
Chad	34	1 211	74	2	85	5	Community transmission
Benin	32	2 357	194	1	41	3	Community transmission
Burundi	29	513	43	0	1	<1	Clusters of cases
Gambia	26	3 590	1 486	5	115	48	Community transmission
Eritrea	23	398	112	0	0	<1	Sporadic cases
Equatorial Guinea	17	5 045	3 596	0	83	59	Community transmission
Malawi	17	5 783	302	0	179	9	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Mauritius	14	381	300	0	10	8	Sporadic cases
Comoros	10	484	557	0	7	8	Community transmission
Liberia	9	1 347	266	0	82	16	Community transmission
Niger	6	1 200	50	0	69	3	Clusters of cases
Sao Tome and Principe	2	913	4 166	0	15	68	Clusters of cases
Seychelles	1	142	1 444	0	0	<1	Sporadic cases
United Republic of Tanzania	0	509	9	0	21	<1	Community transmission
Territories[ii]							
Réunion	493	4 178	4 667	5	16	18	Clusters of cases
Mayotte	238	3 779	13 852	2	42	154	Clusters of cases
Americas	**756926**	**16990036**	**2521**	**21494**	**568358**	**84**	
United States of America	296 082	7 256 234	21 922	4 888	207 366	626	Community transmission
Brazil	190 910	4 880 523	22 961	4 851	145 388	684	Community transmission
Argentina	88 454	779 689	17 251	5 391	20 599	456	Community transmission
Colombia	43 214	841 531	16 539	1 294	26 397	519	Community transmission
Mexico	32 232	753 090	5 841	2 648	78 492	609	Community transmission
Peru	26 980	821 564	24 917	572	32 609	989	Community transmission
Chile	12 492	468 471	24 506	328	12 919	676	Community transmission
Canada	12 203	162 659	4 310	154	9 409	249	Community transmission
Costa Rica	7 013	77 829	15 278	118	930	183	Community transmission
Ecuador	6 370	140 351	7 955	324	11 597	657	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Venezuela (Bolivarian Republic of)	5 547	76 820	2 702	52	643	23	Community transmission
Paraguay	5 458	42 684	5 984	129	890	125	Community transmission
Panama	4 531	113 962	26 412	95	2 406	558	Community transmission
Honduras	4 429	78 269	7 902	115	2 386	241	Community transmission
Guatemala	4 046	93 748	5 233	72	3 285	183	Community transmission
Bolivia (Plurinational State of)	2 997	136 219	11 670	245	8 045	689	Community transmission
Dominican Republic	2 969	113 926	10 502	35	2 128	196	Community transmission
El Salvador	943	29 358	4 526	31	857	132	Community transmission
Jamaica	941	6 795	2 295	31	119	40	Community transmission
Bahamas	542	4 332	11 016	7	96	244	Clusters of cases
Trinidad and Tobago	424	4 709	3 365	8	78	56	Community transmission
Cuba	368	5 780	510	2	122	11	Clusters of cases
Belize	272	2 080	5 231	5	28	70	Community transmission
Guyana	259	2 968	3 773	12	85	108	Clusters of cases
Uruguay	130	2 097	604	1	48	14	Clusters of cases
Haiti	108	8 792	771	2	229	20	Community transmission
Suriname	82	4 899	8 351	3	105	179	Community transmission
Nicaragua	81	4 146	626	2	151	23	Community transmission
Antigua and Barbuda	8	106	1 082	0	3	31	Sporadic cases
Dominica	7	31	431	0	0	<1	Clusters of cases
Barbados	6	196	682	0	7	24	Clusters of cases
Grenada	0	24	213	0	0	<1	No cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Saint Kitts and Nevis	0	19	357	0	0	<1	No cases
Saint Lucia	0	27	147	0	0	<1	Sporadic cases
Saint Vincent and the Grenadines	0	64	577	0	0	<1	Sporadic cases
Territories[ii]							
Puerto Rico	4 962	50 375	17 608	39	681	238	Community transmission
Guadeloupe	949	5 903	14 753	33	75	187	Community transmission
Martinique	245	1 543	4 112	1	21	56	Community transmission
Aruba	242	3 998	37 446	2	27	253	Community transmission
French Guiana	166	10 029	33 578	2	67	224	Community transmission
Curaçao	84	399	2 432	0	1	6	Community transmission
Sint Maarten	50	668	15 578	0	22	513	Community transmission
Bonaire, Sint Eustatius and Saba	39	124	4 729	0	1	38	Sporadic cases
United States Virgin Islands	30	1 326	12 698	1	20	192	Community transmission
Saint Martin	29	412	10 657	0	8	207	Community transmission
Turks and Caicos Islands	15	695	17 950	1	6	155	Clusters of cases
Saint Barthélemy	14	62	6 272	0	0	<1	
Cayman Islands	3	213	3 241	0	1	15	Sporadic cases
Anguilla	0	3	200	0	0	<1	No cases
Bermuda	0	181	2 907	0	9	145	Sporadic cases
British Virgin Islands	0	71	2 348	0	1	33	Clusters of cases
Falkland Islands (Malvinas)	0	13	3 732	0	0	<1	No cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Montserrat	0	13	2 601	0	1	200	No cases
Saint Pierre and Miquelon	0	16	2 761	0	0	<1	Sporadic cases
Eastern Mediterranean	**125567**	**2466722**	**351**	**2804**	**63156**	**9**	
Iraq	29 962	375 931	9 346	412	9 347	232	Community transmission
Iran (Islamic Republic of)	25 033	468 119	5 573	1 352	26 746	318	Community transmission
Morocco	15 987	131 228	3 555	252	2 293	62	Clusters of cases
Lebanon	8 252	43 480	6 370	58	398	58	Community transmission
United Arab Emirates	7 142	97 760	9 884	15	426	43	Community transmission
Jordan	6 688	14 749	1 446	45	88	9	Community transmission
Tunisia	4 830	20 944	1 772	62	276	23	Clusters of cases
Pakistan	4 341	314 616	1 424	56	6 513	29	Clusters of cases
Libya	4 259	36 087	5 252	79	578	84	Community transmission
Bahrain	3 535	72 310	42 496	19	258	152	Clusters of cases
Kuwait	3 259	106 458	24 928	23	620	145	Community transmission
Saudi Arabia	3 207	335 997	9 651	195	4 850	139	Sporadic cases
Oman	2 678	98 585	19 305	50	935	183	Community transmission
Qatar	1 489	126 339	43 852	2	216	75	Community transmission
Egypt	839	103 575	1 012	101	5 970	58	Clusters of cases
Syrian Arab Republic	291	4 329	247	16	204	12	Community transmission
Somalia	157	3 745	236	0	99	6	Sporadic cases
Afghanistan	114	39 341	1 011	9	1 462	38	Clusters of cases
Sudan	43	13 653	311	0	836	19	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Yemen	11	2 045	69	2	590	20	Community transmission
Djibouti	9	5 418	5 484	0	61	62	Sporadic cases
Territories[ii]							
occupied Palestinian territory	3 441	52 013	10 196	56	390	76	Community transmission
Europe	**478119**	**6187384**	**905**	**5039**	**240148**	**35**	
France	77 045	580 703	8 896	455	31 969	490	Community transmission
Russian Federation	63 563	1 215 001	8 326	1 034	21 358	146	Clusters of cases
The United Kingdom	50 740	480 021	7 071	346	42 317	623	Community transmission
Spain	40 587	789 932	16 895	519	32 086	686	Clusters of cases
Israel	32 179	255 160	29 479	194	1 629	188	Community transmission
Ukraine	27 828	226 462	5 178	438	4 397	101	Community transmission
Netherlands	23 228	131 749	7 689	83	6 440	376	Community transmission
Czechia	17 311	80 605	7 527	120	711	66	Community transmission
Germany	15 097	299 237	3 572	72	9 529	114	Clusters of cases
Italy	14 647	322 751	5 338	150	35 968	595	Clusters of cases
Romania	12 830	134 065	6 969	260	4 947	257	Community transmission
Poland	12 160	98 140	2 593	180	2 604	69	Community transmission
Belgium	11 656	127 529	11 004	62	10 044	867	Community transmission
Turkey	10 048	323 014	3 830	455	8 384	99	Community transmission
Hungary	6 561	30 575	3 165	86	822	85	Community transmission
Republic of Moldova	5 354	55 888	13 854	74	1 353	335	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Portugal	5 308	78 247	7 674	51	1 995	196	Clusters of cases
Austria	5 079	48 019	5 332	22	809	90	Community transmission
Slovakia	3 721	12 321	2 257	10	54	10	Clusters of cases
Uzbekistan	3 468	58 421	1 746	25	479	14	Clusters of cases
Ireland	3 108	37 668	7 629	8	1 810	367	Community transmission
Armenia	3 096	52 496	17 716	26	977	330	Community transmission
Denmark	3 089	29 302	5 059	6	654	113	Community transmission
Georgia	2 864	8 118	2 035	22	50	13	Community transmission
Belarus	2 563	79 852	8 451	38	851	90	Community transmission
Switzerland	2 516	54 263	6 270	6	1 783	206	Community transmission
Greece	2 385	19 613	1 882	29	405	39	Clusters of cases
Sweden	2 283	94 283	9 336	2	5 895	584	Community transmission
Bulgaria	1 521	21 518	3 097	52	841	121	Clusters of cases
Montenegro	1 514	12 083	19 238	16	174	277	Clusters of cases
Bosnia and Herzegovina	1 439	28 234	8 606	62	870	265	Community transmission
Croatia	1 394	17 401	4 239	24	293	71	Community transmission
North Macedonia	1 259	18 602	8 929	32	753	361	Clusters of cases
Kazakhstan	1 219	141 484	7 535	0	2 075	111	Clusters of cases
Kyrgyzstan	1 177	47 428	7 270	3	1 066	163	Clusters of cases
Slovenia	1 139	6 330	3 045	4	140	67	Clusters of cases
Albania	964	14 117	4 905	17	392	136	Clusters of cases
Lithuania	786	5 081	1 866	5	94	35	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Norway	743	14 149	2 610	5	275	51	Clusters of cases
Finland	667	10 244	1 849	2	345	62	Community transmission
Azerbaijan	666	40 561	4 000	10	595	59	Clusters of cases
Serbia	530	33 842	4 860	7	753	108	Community transmission
Estonia	412	3 577	2 696	3	67	51	Clusters of cases
Luxembourg	398	8 709	13 913	1	125	200	Community transmission
Latvia	365	2 019	1 070	2	38	20	Clusters of cases
Tajikistan	290	9 895	1 037	2	77	8	Pending
Andorra	274	2 110	27 309	0	53	686	Community transmission
Iceland	271	2 872	8 416	0	10	29	Community transmission
Malta	210	3 139	7 109	8	37	84	Clusters of cases
Cyprus	127	1 811	1 500	0	22	18	Clusters of cases
Monaco	12	222	5 657	0	1	25	Sporadic cases
Liechtenstein	6	123	3 225	0	1	26	Sporadic cases
San Marino	4	750	22 099	0	42	1 238	Community transmission
Holy See	0	12	14 833	0	0	<1	Sporadic cases
Territories[ii]							
Kosovo[1]	333	15 715	8 447	11	620	333	Community transmission
Faroe Islands	13	473	9 680	0	0	<1	Sporadic cases
Gibraltar	52	416	12 348	0	0	<1	Clusters of cases
Jersey	19	421	3 869	0	32	294	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Guernsey	0	256	4 051	0	13	206	Community transmission
Isle of Man	1	341	4 010	0	24	282	No cases
Greenland	0	14	247	0	0	<1	No cases
South-East Asia	**614502**	**7335273**	**1272**	**8456**	**119167**	**21**	
India	556 841	6 549 373	4 746	7 279	101 782	74	Clusters of cases
Indonesia	28 167	299 506	1 095	747	11 055	40	Community transmission
Nepal	12 749	84 570	2 903	61	528	18	Clusters of cases
Bangladesh	9 692	367 565	2 232	196	5 325	32	Community transmission
Myanmar	6 512	16 503	303	173	371	7	Clusters of cases
Maldives	420	10 465	19 360	0	34	63	Clusters of cases
Thailand	62	3 585	51	0	59	1	Clusters of cases
Sri Lanka	46	3 395	159	0	13	1	Clusters of cases
Bhutan	12	283	367	0	0	<1	Sporadic cases
Timor-Leste	1	28	21	0	0	<1	Sporadic cases
Western Pacific	**24751**	**625642**	**108**	**503**	**13632**	**2**	
Philippines	18 074	319 330	2 914	394	5 678	52	Community transmission
Japan	3 649	85 339	675	52	1 597	13	Clusters of cases
Malaysia	1 319	12 088	373	4	137	4	Clusters of cases
Republic of Korea	480	24 091	470	20	421	8	Clusters of cases
China	155	91 121	62	0	4 746	3	Clusters of cases
Singapore	115	57 800	9 880	0	27	5	Clusters of cases
Australia	105	27 121	1 064	23	893	35	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 1 million population	Transmission classification
Viet Nam	27	1 096	11	0	35	<1	Clusters of cases
New Zealand	21	1 498	311	0	25	5	Clusters of cases
Papua New Guinea	8	540	60	0	7	1	Community transmission
Cambodia	2	278	17	0	0	<1	Sporadic cases
Solomon Islands	1	1	1	0	0	<1	No cases
Brunei Darussalam	0	146	334	0	3	7	Sporadic cases
Fiji	0	32	36	0	2	2	Sporadic cases
Lao People'S Democratic Republic	0	23	3	0	0	<1	Sporadic cases
Mongolia	0	313	95	0	0	<1	Sporadic cases
Territories[ii]							
French Polynesia	447	2 026	7 212	2	8	28	Sporadic cases
Guam	345	2 699	15 992	8	51	302	Clusters of cases
Northern Mariana Islands (Commonwealth of The)	3	73	1 268	0	2	35	Pending
New Caledonia	0	27	95	0	0	<1	Sporadic cases
Subtotal for all regions	**2 026 073**	**34 803 607**		**39 079**	**1 030 725**		
Other[†]	0	741		0	13		
Grand total	**2 026 073**	**34 804 348**	**4 465**	**39 079**	**1 030 738**	**132**	

**See *data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases; efforts are underway to identify these for notation in the data table. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines

on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas; classification is based on the highest category reported within a country/territory/area. Categories:

- No cases: with no confirmed cases;
- Sporadic cases: with one or more cases, imported or locally detected;
- Clusters of cases: experiencing cases, clustered in time, geographic location and/or by common exposures;
- Community transmission: experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel laboratory surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area;
- Pending: transmission classification has not been reported to WHO.

[ii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

[†] Other: includes cases reported from international conveyances.

Country, territory, or area-specific notes, updates and errata

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

World Health Organization

Coronavirus disease (COVID-19)

Data as received by WHO from national authorities, as of 27 September 2020, 10 am CEST

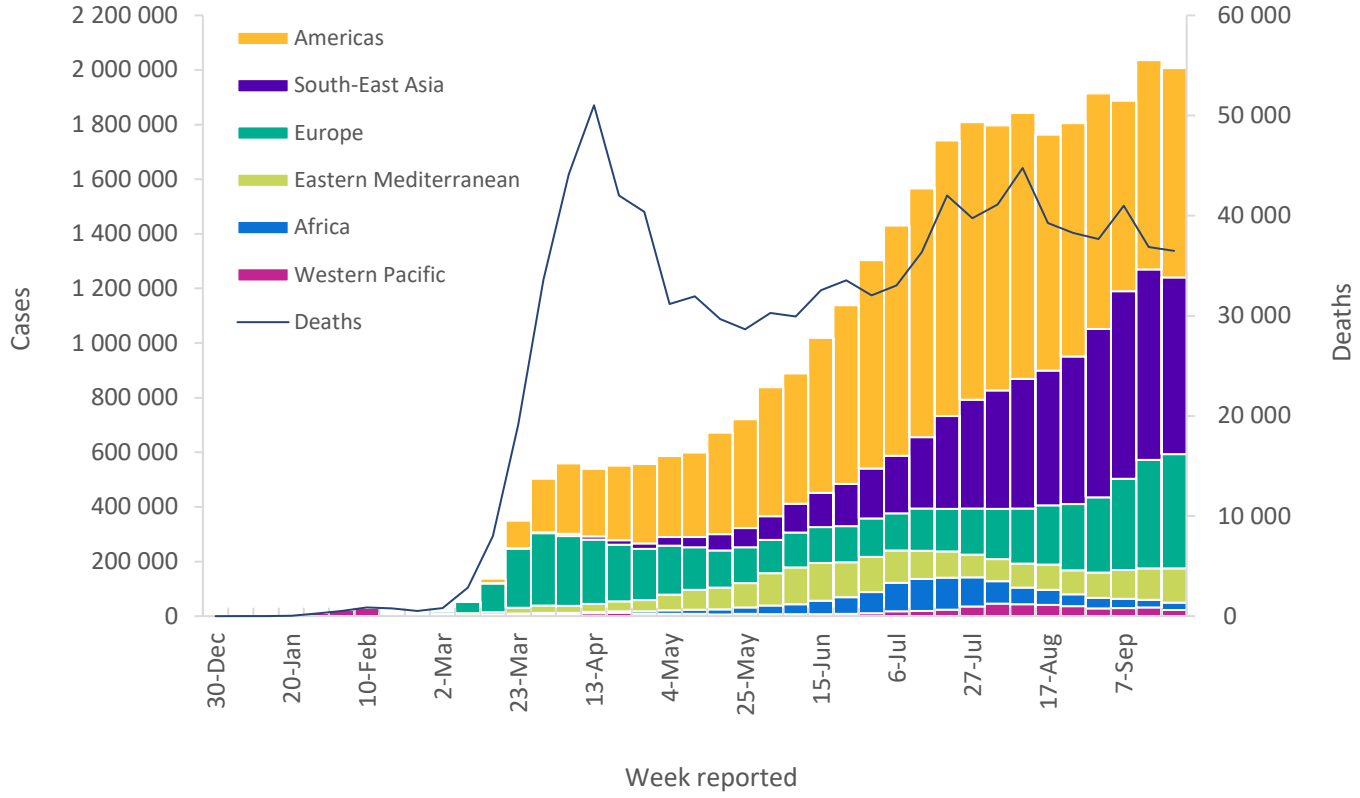
For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

To date, over 32.7 million COVID-19 cases and 991 000 deaths have been reported to WHO. During the week of 21 27 September, there were more than 2 million new cases and 36 000 new deaths reported, which is similar to the numbers reported the previous week. Cumulative deaths are expected to exceed one million in the coming week.

Figure 1: Number of COVID-19 cases reported weekly by WHO Region, and global deaths, 30 December 2019 through 27 September 2020**



**See *data table and figure notes*.

The Region of the Americas continues to carry the highest incidence of COVID-19 globally (Table 1), reporting similar numbers of new cases and deaths as the previous week. The Region accounts for 38% of all new cases and 52% of all new deaths reported in the past seven days. The Eastern Mediterranean Region showed the greatest increase (9%) in cases in the past week, while the European Region reported a substantial rise in deaths, with a 9% increase compared to the previous week. The WHO African,

Western Pacific and South-East Asia Regions reported decreases in the new case and deaths over the past week.

Additional region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western-Pacific Region.

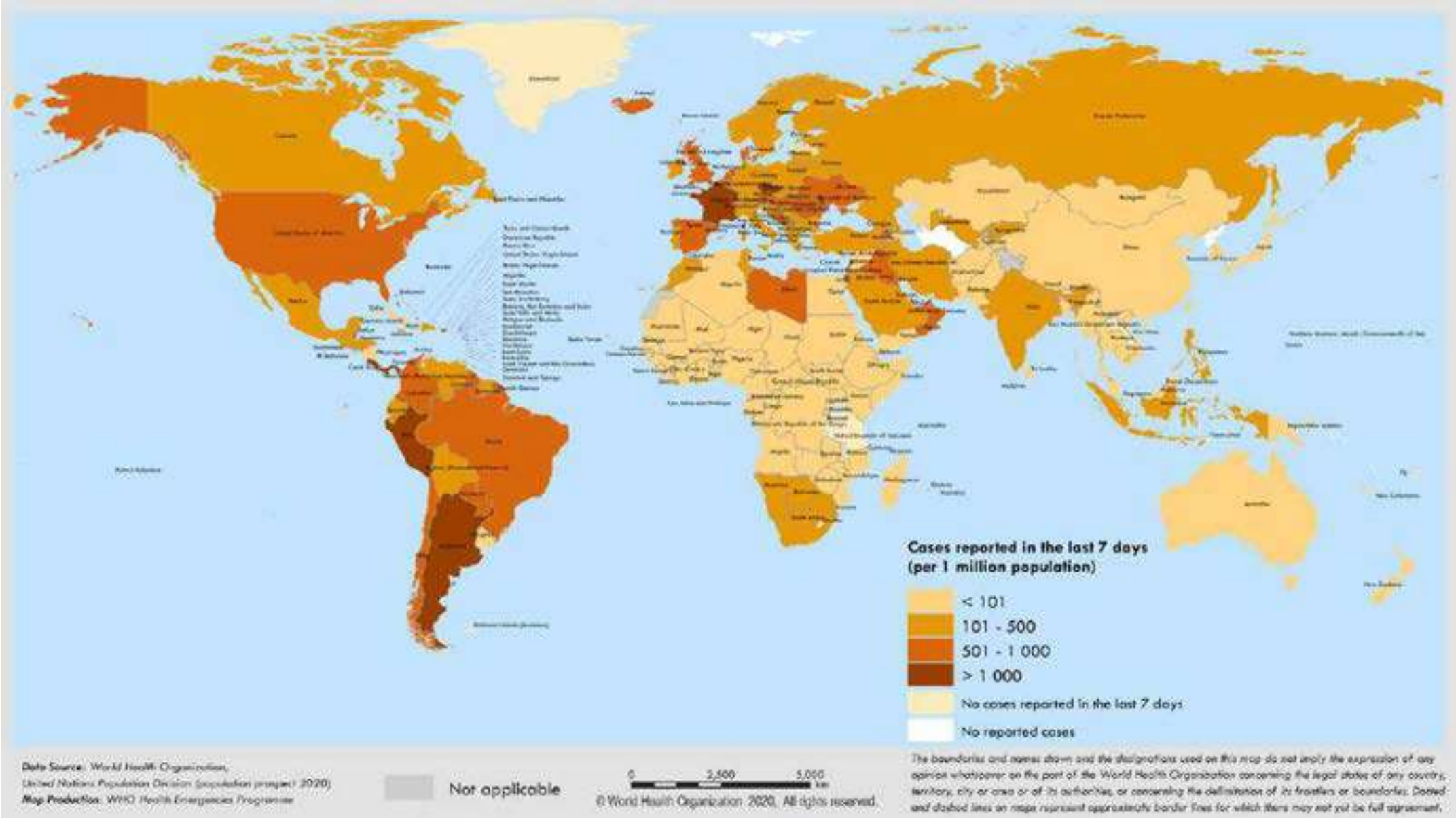
Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 27 September 2020**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days*	Cumulative deaths (%)
Americas	766 526 (38%)	<1%	16 233 110 (50%)	19 027 (52%)	-1%	546 864 (55%)
South-East Asia	647 309 (32%)	-7%	6 720 771 (21%)	9 011 (25%)	-3%	110 711 (11%)
Europe	418 719 (21%)	5%	5 662 875 (17%)	4 547 (12%)	9%	234 681 (24%)
Eastern Mediterranean	124 482 (6%)	9%	2 340 215 (7%)	2 704 (7%)	3%	60 345 (6%)
Africa	26 945 (1%)	-7%	1 172 342 (4%)	724 (2%)	-14%	25 481 (3%)
Western Pacific	22 986 (1%)	-27%	600 891 (2%)	462 (1%)	-41%	13 129 (1%)
† Other	-	-	741 (<1%)	-	-	13 (<1%)
Global	**2 006 967 (100%)**	**-1%**	**32 730 945 (100%)**	**36 475 (100%)**	**-1%**	**991 224 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*

***See data, table and figure notes*

Figure 2. COVID-19 cases per million population reported in the last seven days by countries, territories and areas, 21 through 27 September 2020**



**See data, table and figure notes.

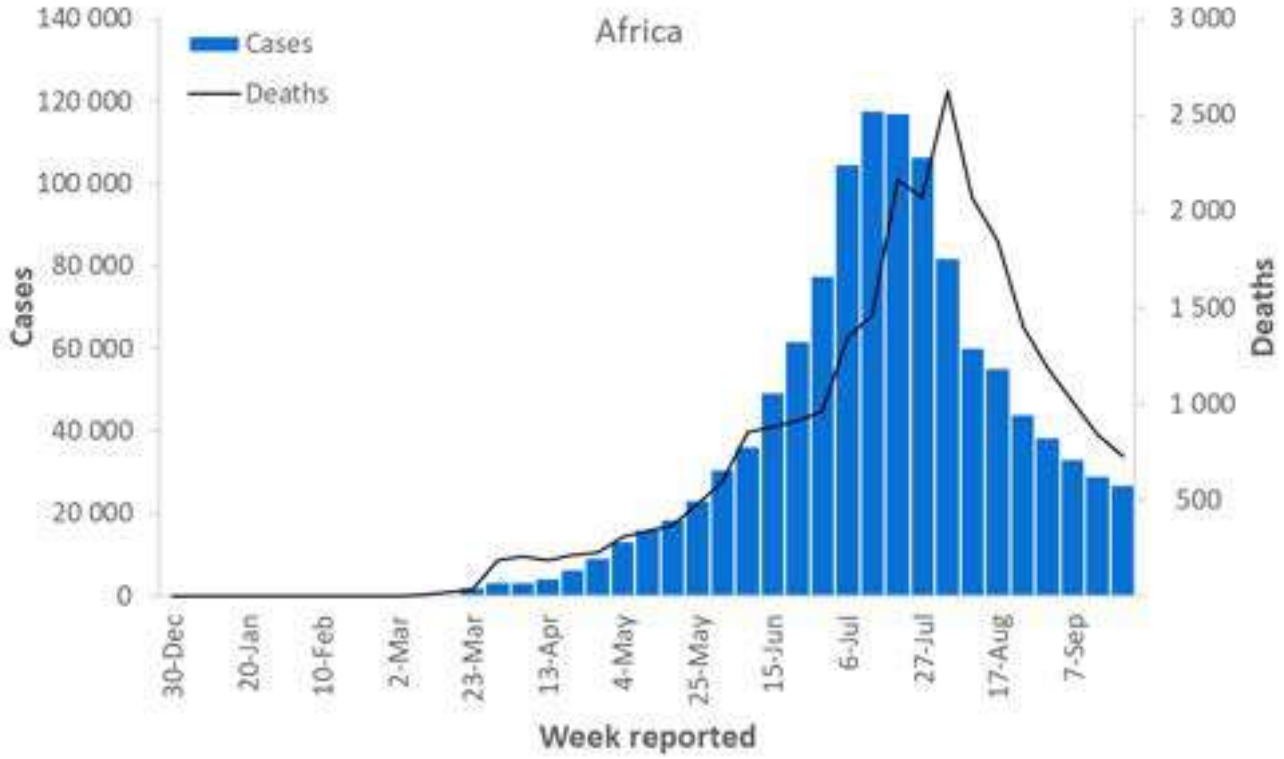
Situation by WHO Region

African Region

The African Region continues its decreasing trend for the seventh week, reporting a 7% decrease in new cases and a 14% decrease in new deaths. During the past week, 33 of the 49 affected countries reported either a decrease in deaths or no deaths. South Africa continues to report the highest number of new cases and new deaths followed by Ethiopia, Uganda, Algeria and Mozambique. South Africa also has the highest number of cumulative cases and deaths per one million population in the Region, followed by Cabo Verde which has reported increasing numbers of cases and deaths over the past month.

Cases in Mozambique have consistently increased over the last four weeksstretching health system capacity. More than half of the new cases (and total cases) are in the capital city, Maputo. Mozambique's overall case rate, however, remains relatively low: 248 cases per million population and two deaths per million population.

Figure 3: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, as of 27 September 2020**



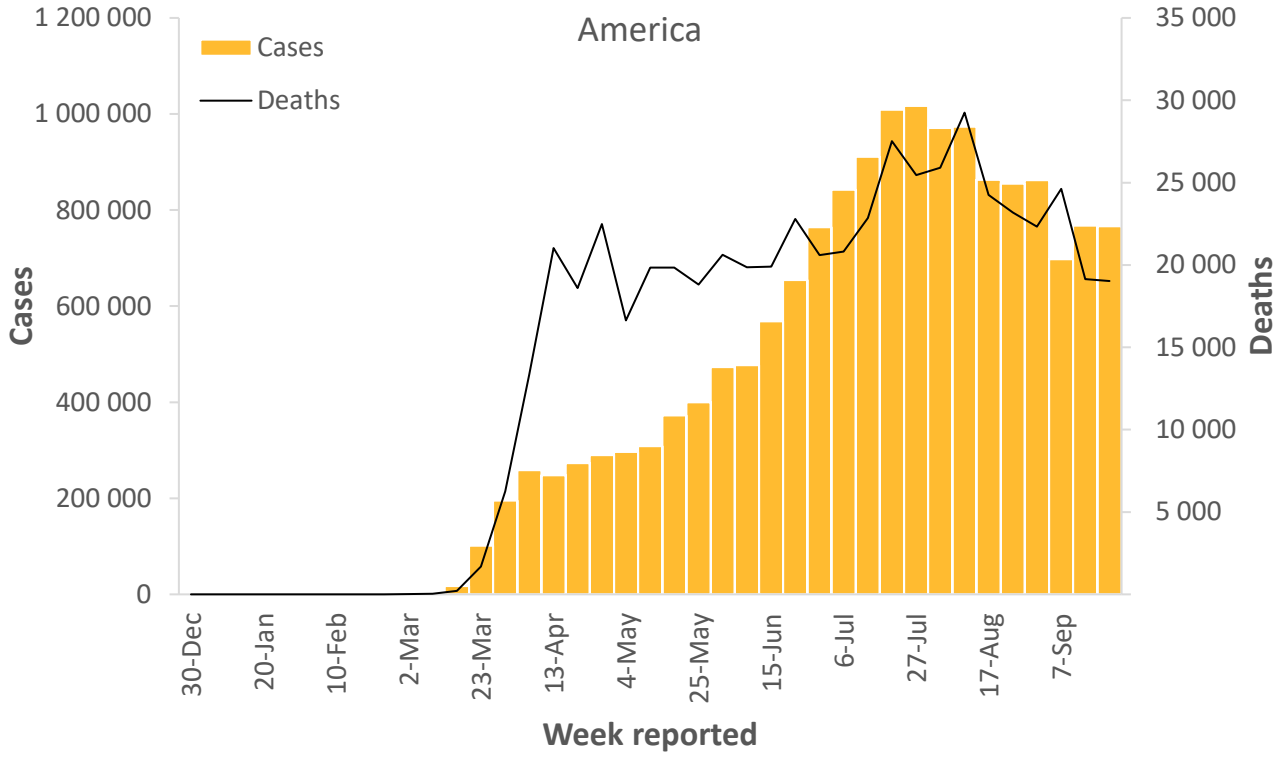
**See *data, table and figure notes*

Region of the Americas

The Region of the Americas remains the most affected WHO Region, accounting for 50% of all reported cases and 55% of deaths. The Region reported similar numbers of new cases and deaths this past week as compared to the previous week and accounts for 38% of new cases and 52% of new deaths.

The United States of America, Brazil, Argentina and Colombia continue to report the highest number of new cases in the past week. Mexico reported the sixth highest number of new cases and third highest number of new deaths.

Figure 4: Number of COVID-19 cases and deaths reported weekly by the WHO Region of the Americas, as of 27 September 2020**

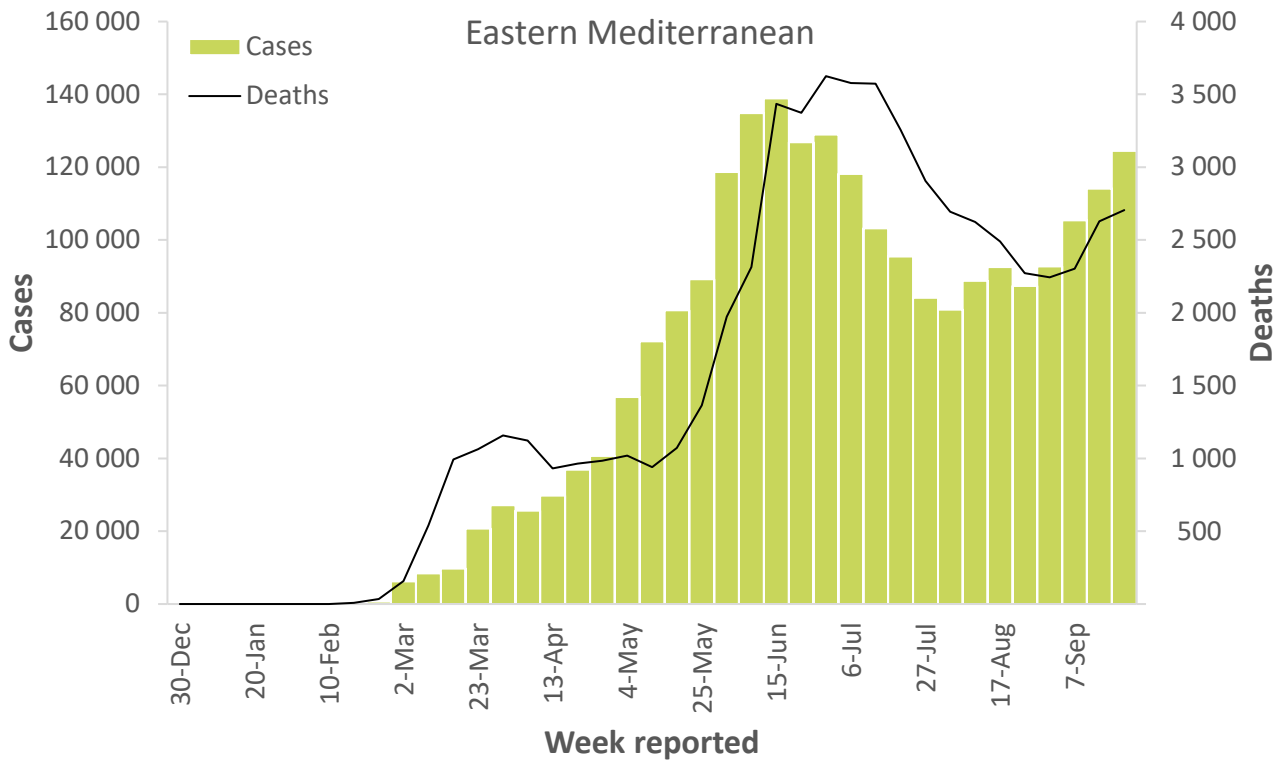


**See *data, table and figure notes*

Eastern Mediterranean Region

Over the past month, the number of new cases and deaths reported in the Eastern Mediterranean Region has consistently increased, with a 9% and 3% increase respectively. The highest numbers of new cases were reported by Iraq, Iran and Morocco. Somalia, Jordan, United Arab Emirates and Tunisia reported the greatest relative increase in cases compared to the previous week. While Iraq reported the highest number of new deaths, Bahrain and Jordan reported the greatest increase in deaths compared to the previous week.

Figure 5: Number of COVID-19 cases and deaths reported weekly by the WHO Eastern Mediterranean Region, as of 27 September 2020**



**See *data, table and figure notes*

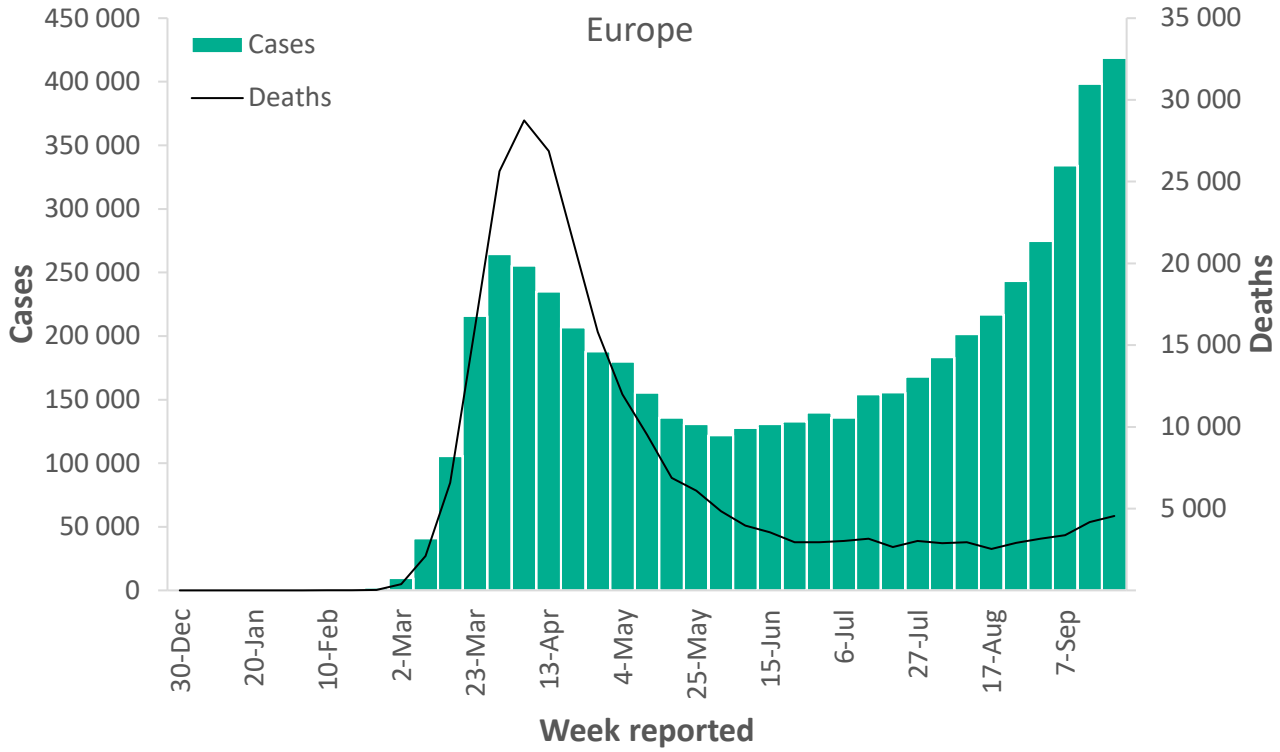
European Region

While the number of new cases and deaths reported in the European Region continued to increase in the past seven days, the rate slowed (Figure 6), with only a 5% increase in new cases and 9% increase in new deaths reported (compared to 11% and 27% increase, respectively, the previous week). France, the Russian Federation, Spain and the United Kingdom continue to report the highest numbers of new cases. Turkey reported the third highest deaths in last seven days after the Russian Federation and Spain.

In France, the highest 7-day incidence was observed in the regions of le-de-France , Hauts-de-France and Provence-Alpes-Côte d'Azur the latter including the city of Marseille, which has emerged as the epicenter of the country's second wave in recent weeks. While the number of hospitalized cases has doubled in the past 10 days, hospitalization numbers remain a magnitude smaller than observed earlier this year and hospital stays have tended to be shorter. Nonetheless, test positivity rates have continued to trend upwards (reaching 7.4% on 27 September), and 58/101 departments are now classified in the red zone indicating very high levels of infection.

In the United Kingdom, there has been an increase in the number of people testing positive for COVID-19 in all age groups, with the regions of Greater Glasgow and Clyde , the North West and the North East reporting the highest incidence in the past week. Wales has reported the highest rates of infection to date (727.7 per 100 000 population), followed by England (664), Northern Ireland (566.6) and Scotland (504.7).

Figure 6: Number of COVID-19 cases and deaths reported weekly by the WHO European Region, as of 27 September 2020**

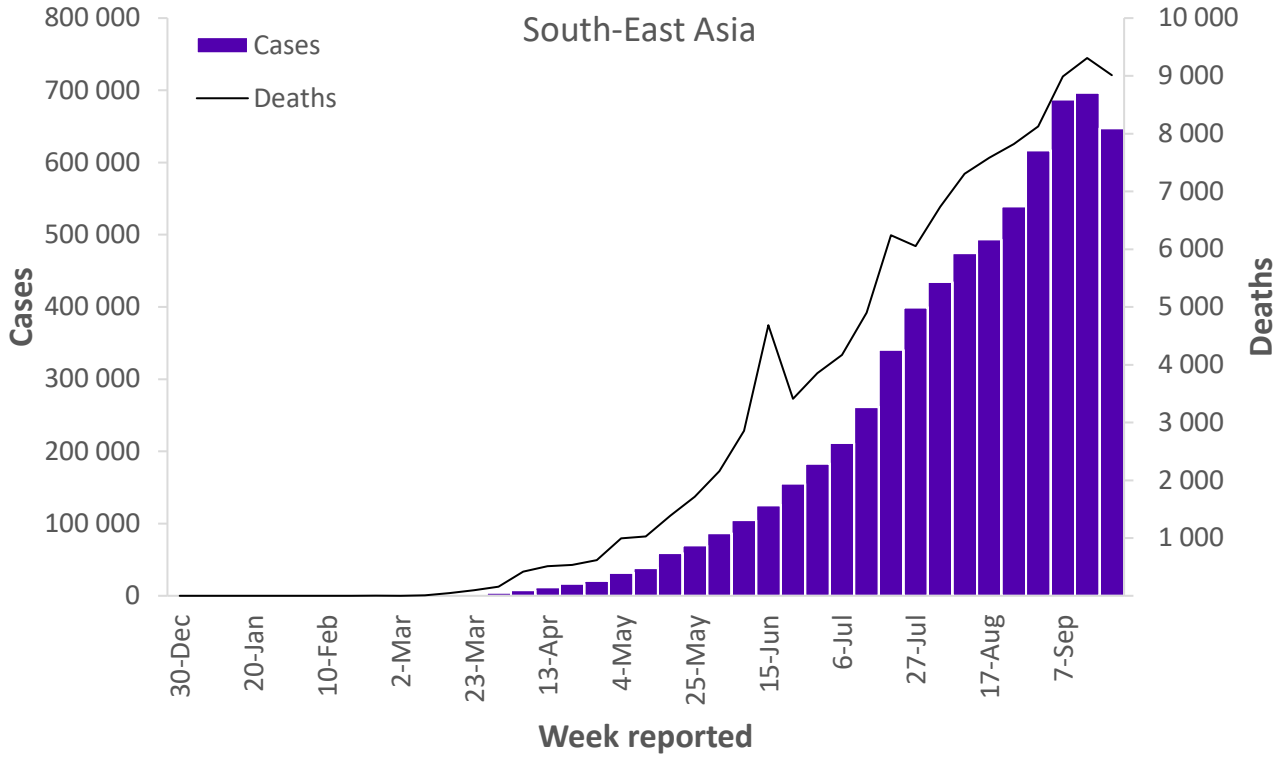


**See *data, table and figure notes*

South-East Asia Region

The South-East Asia Region is the second most affected Region, accounting for 21% and 11% of cumulative cases and deaths, respectively. While the Region had been reporting increasing cases and deaths since March, in the past week, a 7% decrease in new cases and a 3% decrease in new deaths were observed. The countries reporting the highest number of new cases continue to be India, Indonesia and Bangladesh, while Myanmar reported the highest increase in cases (92% increase) and deaths (80% increase) compared to the previous week.

Figure 7: Number of COVID-19 cases and deaths reported weekly by the WHO South-East Asia Region, as of 27 September 2020**



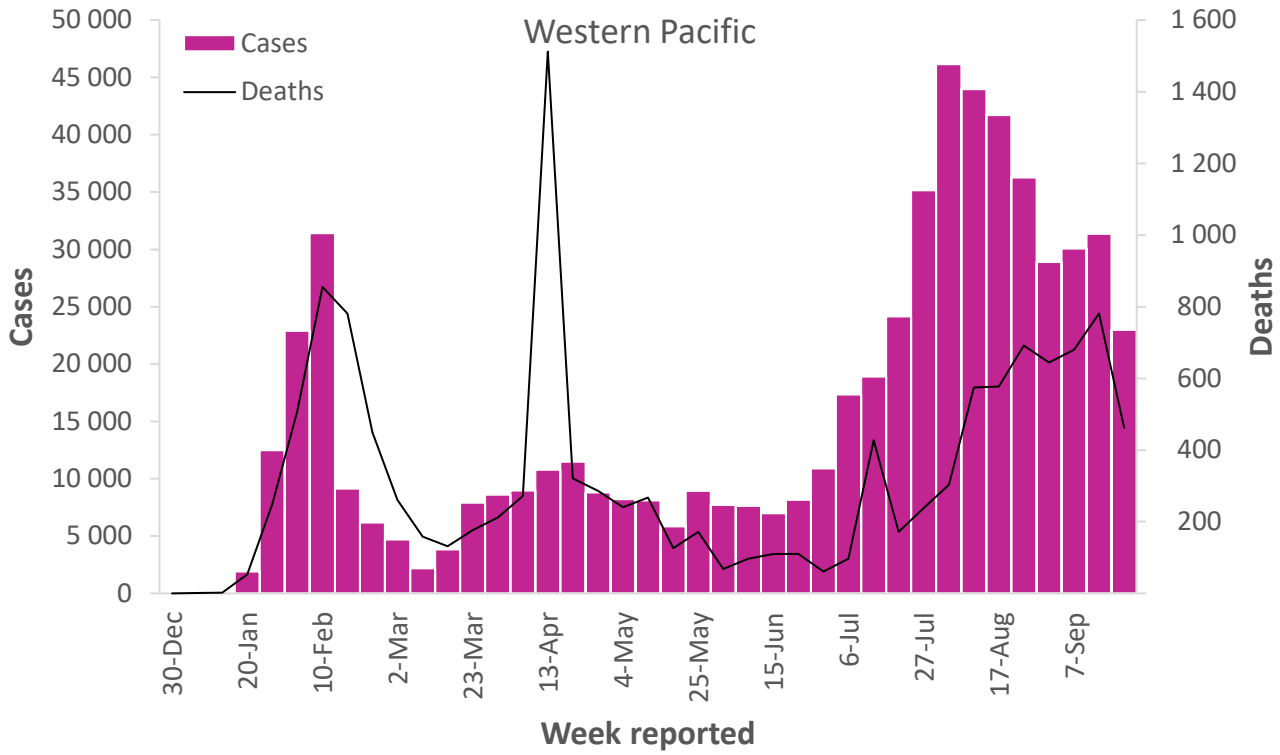
**See *data, table and figure notes*

Western Pacific Region

Overall, the Western Pacific Region continues to show the lowest cumulative cases, accounting for just 2% of global cases and 1% of all deaths. The Philippines and Japan account for the highest number of new cases and new deaths in the Region. All countries in the Region except Malaysia, Papua New Guinea, and Guam reported decreases in new cases, as compared to the previous week. Only Malaysia reported an increase in new deaths.

Incidence of COVID-19 in Papua New Guinea remains low. An 8-fold increase was reported in August (396 cases) compared to July (52 cases). The number of cases reported so far in September (73 cases) is lower but there may be other undetected cases since the testing and overall health care capacity in the country are limited.

Figure 8: Number of COVID-19 cases and deaths reported weekly by the WHO Western Pacific Region, data as of 27 September 2020**



**See *data, table and figure notes*

Key weekly updates

- COVID-19: Nearly 33 million cases and one million deaths in 9 months. As Dr Mike Ryan, Executive Director of WHO's Health Emergencies Programme said at the press conference on Friday 25 September, "the realities of getting a vaccine out there in the next nine months is a big task for everyone involved. There is a lot that can be done to save lives, both in terms of disease control, existing life-saving measures and the innovations that are coming down the pipe. Are we willing to make the investments now that are needed in the ACT Accelerator, especially in COVA "
- A total of 67 higher income economies have joined the COVA Facility, with another 34 expected to sign, joining 92 low- and middle-income economies eligible for support for the procurement of vaccines. However, so far only a tenth of the 35 billion needed for scale-up and impact have been received, a small investment considering that the global economy is expected to contract by trillions of US dollars this year alone. WHO's aim is to have two billion doses of vaccine available by the end of 2021.
- A new report from Every Woman Every Child, "Protect the Progress: Rise, Refocus, Recover, 2020" warns that the COVID-19 crisis is exacerbating existing inequities, with reported disruptions in essential health interventions disproportionately impacting the most vulnerable women and children. There is no doubt that the pandemic has set back global efforts to improve the health and well-being of women and children, but that should only serve to strengthen our resolve, said Dr Tedros Adhanom Ghebreyesus, WHO Director-General.
- WHO has released a video series, Science in 5, in which experts explain the science about specific issues related to COVID-19. So far five episodes have been released on subjects including herd immunity, SARS-CoV2, myths vs science, and reopening schools. Watch these short videos on WHO's YouTube, Instagram, Facebook, Twitter, and LinkedIn accounts or listen to the podcasts.
- On 23 September, WHO together with the UN, specialised agencies and partners called on countries to develop and implement action plans to promote the timely dissemination of science-based information and prevent the spread of false information while respecting freedom of expression.
- WHO has published the Emergency Global Supply Chain System (COVID-19) catalogue, which lists all medical devices, including personal protective equipment, medical equipment, medical consumables, single use devices, laboratory and test-related devices that may be requested through the COVID-19 Supply Portal.

Table 2. Number of COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, as of 27 September 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Africa	**26945**	**1172342**	**177**	**724**	**25481**	**4**	
South Africa	9 842	669 498	11 288	436	16 376	276	Community transmission
Ethiopia	4 569	72 700	632	76	1 165	10	Community transmission
Uganda	1 347	7 364	161	8	71	2	Community transmission
Algeria	1 291	50 914	1 161	46	1 711	39	Community transmission
Mozambique	1 220	7 757	248	13	54	2	Community transmission
Nigeria	1 053	58 198	282	11	1 106	5	Community transmission
Kenya	1 042	37 871	704	43	689	13	Community transmission
Angola	771	4 672	142	24	171	5	Community transmission
Namibia	626	10 918	4 297	9	120	47	Community transmission
Zambia	588	14 612	795	3	332	18	Community transmission
Cabo Verde	515	5 701	10 254	6	56	101	Community transmission
Côte d'Ivoire	356	19 556	741	0	120	5	Community transmission
Botswana	354	2 921	1 242	0	13	6	Community transmission
Ghana	345	46 222	1 488	2	299	10	Community transmission
Cameroon	304	20 735	781	2	418	16	Community transmission
Guinea	262	10 548	803	3	66	5	Community transmission
Madagascar	237	16 257	587	10	229	8	Community transmission
Senegal	181	14 869	888	4	306	18	Community transmission
Eswatini	174	5 419	4 671	4	108	93	Community transmission
Lesotho	168	1 558	727	2	35	16	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Rwanda	140	4 811	371	4	29	2	Clusters of cases
Burkina Faso	132	1 929	92	0	56	3	Community transmission
Zimbabwe	131	7 803	525	2	227	15	Community transmission
Democratic Republic of The Congo	105	10 592	118	3	271	3	Community transmission
Mauritania	97	7 462	1 605	0	161	35	Community transmission
Togo	96	1 736	210	5	46	6	Community transmission
Mali	74	3 080	152	2	130	6	Community transmission
Gambia	60	3 564	1 475	2	110	46	Community transmission
Sierra Leone	49	2 208	277	0	72	9	Community transmission
Malawi	48	5 766	301	0	179	9	Community transmission
Benin	45	2 325	192	0	40	3	Community transmission
South Sudan	44	2 686	240	0	49	4	Community transmission
Gabon	32	8 728	3 921	1	54	24	Community transmission
Chad	28	1 177	72	2	83	5	Community transmission
Equatorial Guinea	26	5 028	3 584	0	83	59	Community transmission
Congo	22	5 008	908	0	89	16	Community transmission
Guinea-Bissau	21	2 324	1 181	0	39	20	Community transmission
Central African Republic	13	4 806	995	0	62	13	Community transmission
Niger	12	1 194	49	0	69	3	Clusters of cases
Burundi	11	484	41	0	1	<1	Clusters of cases
Eritrea	11	375	106	0	0	<1	Sporadic cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Comoros	4	474	545	0	7	8	Community transmission
Liberia	3	1 338	265	0	82	16	Community transmission
Sao Tome and Principe	3	911	4 157	0	15	68	Clusters of cases
Seychelles	2	141	1 434	0	0	<1	Sporadic cases
Mauritius	0	367	289	0	10	8	Sporadic cases
United Republic of Tanzania	0	509	9	0	21	<1	Community transmission
Territories[ii]							
Réunion	491	3 685	4 116	1	11	12	Clusters of cases
Mayotte	0	3 541	12 979	0	40	147	Clusters of cases
Americas	**766526**	**16233110**	**2409**	**19027**	**546864**	**81**	
United States of America	298 149	6 960 152	21 027	5 036	202 478	612	Community transmission
Brazil	194 430	4 689 613	22 063	4 744	140 537	661	Community transmission
Argentina	77 577	691 235	15 294	2 503	15 208	336	Community transmission
Colombia	47 846	798 317	15 689	1 253	25 103	493	Community transmission
Peru	38 172	794 584	24 099	754	32 037	972	Community transmission
Mexico	31 904	720 858	5 591	3 041	75 844	588	Community transmission
Chile	11 305	455 979	23 853	337	12 591	659	Community transmission
Canada	8 545	150 456	3 986	50	9 255	245	Community transmission
Costa Rica	8 442	70 816	13 902	126	812	159	Community transmission
Ecuador	8 361	133 981	7 594	184	11 273	639	Community transmission
Venezuela (Bolivarian Republic of)	6 099	71 273	2 506	61	591	21	Community transmission
Paraguay	5 099	37 226	5 219	150	761	107	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Panama	4 552	109 431	25 362	82	2 311	536	Community transmission
Guatemala	4 550	89 702	5 007	108	3 213	179	Community transmission
Dominican Republic	3 257	110 957	10 228	49	2 093	193	Community transmission
Honduras	3 229	73 840	7 455	125	2 271	229	Community transmission
Bolivia (Plurinational State of)	3 171	133 222	11 413	250	7 800	668	Community transmission
Jamaica	1 096	5 854	1 977	28	88	30	Community transmission
El Salvador	987	28 415	4 381	18	826	127	Community transmission
Bahamas	613	3 790	9 638	20	89	226	Clusters of cases
Guyana	607	2 709	3 444	11	73	93	Clusters of cases
Trinidad and Tobago	546	4 285	3 062	10	70	50	Community transmission
Cuba	357	5 412	478	7	120	11	Clusters of cases
Belize	218	1 808	4 547	3	23	58	Community transmission
Suriname	126	4 817	8 211	6	102	174	Community transmission
Nicaragua	86	4 065	614	2	149	22	Community transmission
Haiti	84	8 684	762	6	227	20	Community transmission
Uruguay	77	1 967	566	1	47	14	Clusters of cases
Barbados	5	190	661	0	7	24	Clusters of cases
Antigua and Barbuda	3	98	1 001	0	3	31	Sporadic cases
Saint Kitts and Nevis	2	19	357	0	0	<1	No cases
Dominica	0	24	333	0	0	<1	Clusters of cases
Grenada	0	24	213	0	0	<1	No cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Saint Lucia	0	27	147	0	0	<1	Sporadic cases
Saint Vincent and the Grenadines	0	64	577	0	0	<1	Sporadic cases
Territories[ii]							
Puerto Rico	4 420	45 413	15 874	37	642	224	Community transmission
Guadeloupe	1 528	4 954	12 381	16	42	105	Community transmission
Aruba	374	3 756	35 180	2	25	234	Community transmission
Martinique	176	1 298	3 459	2	20	53	Community transmission
French Guiana	171	9 863	33 022	0	65	218	Community transmission
Curaçao	105	315	1 920	0	1	6	Community transmission
United States Virgin Islands	54	1 296	12 411	0	19	182	Community transmission
Saint Martin	53	383	9 907	2	8	207	Community transmission
Sint Maarten	53	618	14 412	3	22	513	Community transmission
Bonaire, Sint Eustatius and Saba	49	85	3 242	0	1	38	Sporadic cases
Saint Barthélemy	25	48	4 856	0	0	<1	Sporadic cases
Turks and Caicos Islands	13	680	17 563	0	5	129	Clusters of cases
Saint Pierre and Miquelon	5	16	2 761	0	0	<1	Sporadic cases
Bermuda	3	181	2 907	0	9	145	Sporadic cases
Cayman Islands	2	210	3 195	0	1	15	Sporadic cases
Anguilla	0	3	200	0	0	<1	No cases
British Virgin Islands	0	71	2 348	0	1	33	Clusters of cases
Falkland Islands (Malvinas)	0	13	3 732	0	0	<1	No cases
Montserrat	0	13	2 601	0	1	200	No cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Eastern Mediterranean	**124482**	**2340215**	**333**	**2704**	**60345**	**9**	
Iraq	30 372	345 969	8 601	444	8 935	222	Community transmission
Iran (Islamic Republic of)	24 043	443 086	5 275	1 276	25 394	302	Community transmission
Morocco	15 425	115 241	3 122	246	2 041	55	Clusters of cases
Lebanon	6 931	35 228	5 161	54	340	50	Community transmission
United Arab Emirates	6 376	90 618	9 162	7	411	42	Community transmission
Tunisia	5 442	15 178	1 284	52	207	18	Clusters of cases
Pakistan	4 604	310 275	1 405	41	6 457	29	Clusters of cases
Libya	4 594	31 828	4 632	73	499	73	Community transmission
Bahrain	4 276	68 775	40 418	18	239	140	Clusters of cases
Oman	4 154	95 907	18 781	67	885	173	Community transmission
Kuwait	4 150	103 199	24 165	16	597	140	Community transmission
Jordan	3 521	8 061	790	13	43	4	Community transmission
Saudi Arabia	3 519	332 790	9 559	197	4 655	134	Sporadic cases
Qatar	1 704	124 850	43 335	5	214	74	Community transmission
Egypt	836	102 736	1 004	119	5 869	57	Clusters of cases
Syrian Arab Republic	273	4 038	231	18	188	11	Community transmission
Somalia	187	3 588	226	1	99	6	Sporadic cases
Afghanistan	183	39 227	1 008	12	1 453	37	Clusters of cases
Sudan	71	13 606	310	0	836	19	Community transmission
Djibouti	8	5 409	5 475	0	61	62	Sporadic cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Yemen	4	2 034	68	2	588	20	Community transmission
Territories[ii]							
Occupied Palestinian territory	3 809	48 572	9 521	43	334	65	Community transmission
Europe	**418719**	**5662875**	**829**	**4547**	**234681**	**34**	
France	82 803	503 658	7 716	405	31 514	483	Community transmission
Russian Federation	48 039	1 151 438	7 890	906	20 324	139	Clusters of cases
Spain	45 123	716 481	15 324	539	31 232	668	Clusters of cases
The United Kingdom	38 919	429 281	6 324	212	41 971	618	Community transmission
Israel	25 816	214 071	24 732	98	1 395	161	Community transmission
Ukraine	22 956	198 634	4 542	402	3 959	91	Community transmission
Netherlands	16 680	108 521	6 333	91	6 357	371	Community transmission
Czechia	14 988	63 294	5 910	92	591	55	Community transmission
Germany	12 725	284 140	3 391	71	9 457	113	Clusters of cases
Turkey	11 618	312 966	3 711	484	7 929	94	Community transmission
Italy	11 535	308 104	5 096	126	35 818	592	Clusters of cases
Romania	9 685	121 235	6 302	285	4 687	244	Community transmission
Belgium	7 827	112 709	9 725	23	9 974	861	Community transmission
Poland	7 650	85 980	2 272	142	2 424	64	Community transmission
Hungary	6 024	24 014	2 486	53	736	76	Community transmission
Austria	4 992	42 940	4 768	22	787	87	Community transmission
Portugal	4 914	72 939	7 153	45	1 944	191	Clusters of cases
Denmark	4 366	26 213	4 526	13	648	112	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Republic of Moldova	4 198	50 534	12 527	78	1 279	317	Community transmission
Uzbekistan	3 718	54 953	1 642	25	454	14	Clusters of cases
Switzerland	2 576	51 747	5 979	13	1 777	205	Community transmission
Sweden	2 526	90 923	9 003	8	5 880	582	Community transmission
Greece	2 250	17 228	1 653	45	376	36	Clusters of cases
Slovakia	2 054	8 600	1 575	5	44	8	Clusters of cases
Ireland	2 022	34 560	6 999	10	1 802	365	Community transmission
Armenia	1 969	49 400	16 671	21	951	321	Community transmission
Bosnia and Herzegovina	1 903	26 795	8 167	62	808	246	Community transmission
Belarus	1 828	77 289	8 179	37	813	86	Community transmission
Kazakhstan	1 827	140 175	7 465	44	2 043	109	Clusters of cases
Georgia	1 752	5 254	1 317	9	28	7	Community transmission
Montenegro	1 445	10 284	16 374	22	158	252	Clusters of cases
Croatia	1 282	16 007	3 899	25	269	66	Community transmission
Bulgaria	1 178	19 997	2 878	34	789	114	Clusters of cases
Albania	927	13 153	4 571	17	375	130	Clusters of cases
Slovenia	882	5 191	2 497	3	136	65	Clusters of cases
Azerbaijan	853	39 895	3 935	11	585	58	Clusters of cases
Kyrgyzstan	835	46 251	7 089	0	1 063	163	Clusters of cases
North Macedonia	786	17 343	8 324	32	721	346	Clusters of cases
Norway	761	13 406	2 473	3	270	50	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Finland	655	9 577	1 728	4	343	62	Community transmission
Lithuania	631	4 295	1 578	2	89	33	Community transmission
Luxembourg	593	8 311	13 277	0	124	198	Community transmission
Serbia	472	33 312	4 784	6	746	107	Community transmission
Tajikistan	302	9 605	1 007	2	75	8	Pending
Iceland	294	2 601	7 622	0	10	29	Community transmission
Estonia	290	3 165	2 386	0	64	48	Clusters of cases
Andorra	272	1 836	23 762	0	53	686	Community transmission
Malta	230	2 929	6 634	12	29	66	Clusters of cases
Latvia	139	1 654	877	0	36	19	Clusters of cases
Cyprus	104	1 684	1 395	0	22	18	Clusters of cases
Monaco	14	210	5 351	0	1	25	Sporadic cases
Liechtenstein	5	117	3 068	0	1	26	Sporadic cases
San Marino	4	746	21 981	0	42	1 238	Community transmission
Holy See	0	12	14 833	0	0	<1	Sporadic cases
Territories[ii]							
Kosovo[1]	423	15 382	8 268	8	609	327	REF
Faroe Islands	29	460	9 414	0	0	<1	Sporadic cases
Gibraltar	18	364	10 804	0	0	<1	Clusters of cases
Jersey	9	402	3 695	0	32	294	Community transmission
Guernsey	2	256	4 051	0	13	206	Community transmission
Isle of Man	1	340	3 998	0	24	282	No cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Greenland	0	14	247	0	0	<1	No cases
South-East Asia	**647309**	**6720771**	**1166**	**9011**	**110711**	**19**	
India	591 913	5 992 532	4 342	7 751	94 503	68	Clusters of cases
Indonesia	30 652	271 339	992	860	10 308	38	Community transmission
Bangladesh	10 501	357 873	2 173	216	5 129	31	Community transmission
Nepal	9 024	71 821	2 465	66	467	16	Clusters of cases
Myanmar	4 728	9 991	184	117	198	4	Clusters of cases
Maldives	396	10 045	18 583	1	34	63	Clusters of cases
Sri Lanka	66	3 349	156	0	13	1	Clusters of cases
Thailand	17	3 523	50	0	59	1	Clusters of cases
Bhutan	12	271	351	0	0	<1	Sporadic cases
Timor-Leste	0	27	20	0	0	<1	Sporadic cases
Western Pacific	**22986**	**600891**	**104**	**462**	**13129**	**2**	
Philippines	17 796	301 256	2 749	354	5 284	48	Community transmission
Japan	3 033	81 690	646	45	1 545	12	Clusters of cases
Republic of Korea	636	23 611	461	18	401	8	Clusters of cases
Malaysia	602	10 769	333	3	133	4	Clusters of cases
Australia	131	27 016	1 059	26	870	34	Clusters of cases
Singapore	127	57 685	9 860	0	27	5	Clusters of cases
China	126	90 966	62	2	4 746	3	Clusters of cases
Papua New Guinea	16	532	59	1	7	1	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
New Zealand	13	1 477	306	0	25	5	Clusters of cases
Mongolia	2	313	95	0	0	<1	Sporadic cases
Brunei Darussalam	1	146	334	0	3	7	No cases
Cambodia	1	276	17	0	0	<1	Sporadic cases
Viet Nam	1	1 069	11	0	35	<1	Clusters of cases
Fiji	0	32	36	0	2	2	Sporadic cases
Lao People'S Democratic Republic	0	23	3	0	0	<1	Sporadic cases
Territories[ii]							
French Polynesia	261	1 579	5 621	4	6	21	Sporadic cases
Guam	237	2 354	13 948	9	43	255	Clusters of cases
Northern Mariana Islands (Commonwealth of The)	2	70	1 216	0	2	35	Pending
New Caledonia	1	27	95	0	0	<1	Sporadic cases
Subtotal for all regions	**2 006 967**	**32 730 204**	**4 217**	**36 475**	**991 211**	**128**	
Other[†]	0	741		0	13		
Grand total	**2 006 967**	**32 730 945**		**36 475**	**991 224**		

**See *data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases; efforts are underway to identify these for notation in the data table. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines

on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas; classification is based on the highest category reported within a country/territory/area. Categories:

- No cases: with no confirmed cases;
- Sporadic cases: with one or more cases, imported or locally detected;
- Clusters of cases: experiencing cases, clustered in time, geographic location and/or by common exposures;
- Community transmission: experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel laboratory surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area;
- Pending: transmission classification has not been reported to WHO.

[ii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

[†] Other: includes cases reported from international conveyances.

Country, territory, or area-specific notes, updates and errata

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

Erratum, 29 September 2020: Incorrect epidemic curve x-axis labels appeared in the Weekly Epidemiological Update published 28 September. These have been corrected here.

Coronavirus disease (COVID-19)

Data as received by WHO from national authorities, as of 10 am CEST 20 September 2020

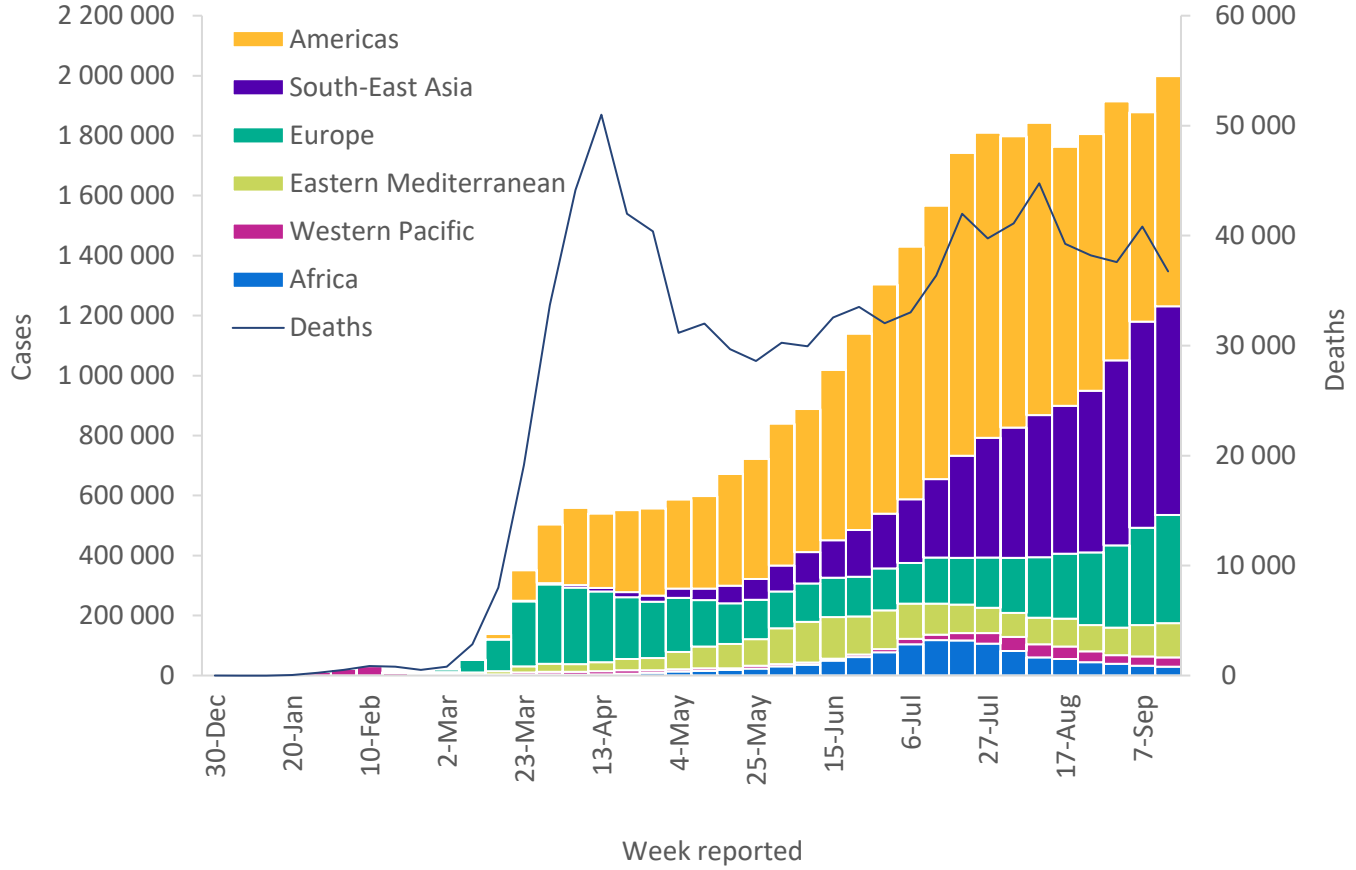
For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- Rolling updates on COVID-19
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

To date, over 30.6 million COVID-19 cases and 950 000 deaths have been reported to WHO.
From 14 through 20 September, there were almost 2 million new cases of COVID-19, which represents a 6% increase compared to the previous week, and the highest number of reported cases in a single week since the beginning of the epidemic. During the same period, there was a 10% decrease in the number of deaths, with 36 764 deaths reported in the past seven days (Figure 1).

Figure 1: Number of COVID-19 cases reported weekly by WHO Region, and global deaths, 30 December 2019 through 20 September 2020**



**See *data table and figure notes*.

With the exception of the African Region, an increase in the weekly case incidence was reported across all WHO regions in the last seven days (Table 1, Figure 2). Overall, the Region of the Americas continues to carry the highest burden of COVID-19 globally, accounting for over 38% of all new cases reported in the past seven days, although the region has reported a 22% decrease in new deaths. The WHO European Region showed the greatest rise in deaths in the past week, with a 27% increase compared to the previous week.

The WHO South-East Asia Region has continued to report an increase in new COVID-19 deaths, with over 9000 deaths in the past week, accounting for 25% of all reported deaths and surpassing 100 000 total COVID-19 deaths since the beginning of the pandemic. In addition, the region accounts for 35% of new cases reported in the past week. The Eastern Mediterranean and Western Pacific regions have both reported a slight increase in reported cases and deaths over the last three weeks. The African Region continues to show a marked decline with decreases of 12% and 16% in reported cases and deaths respectively in the past week.

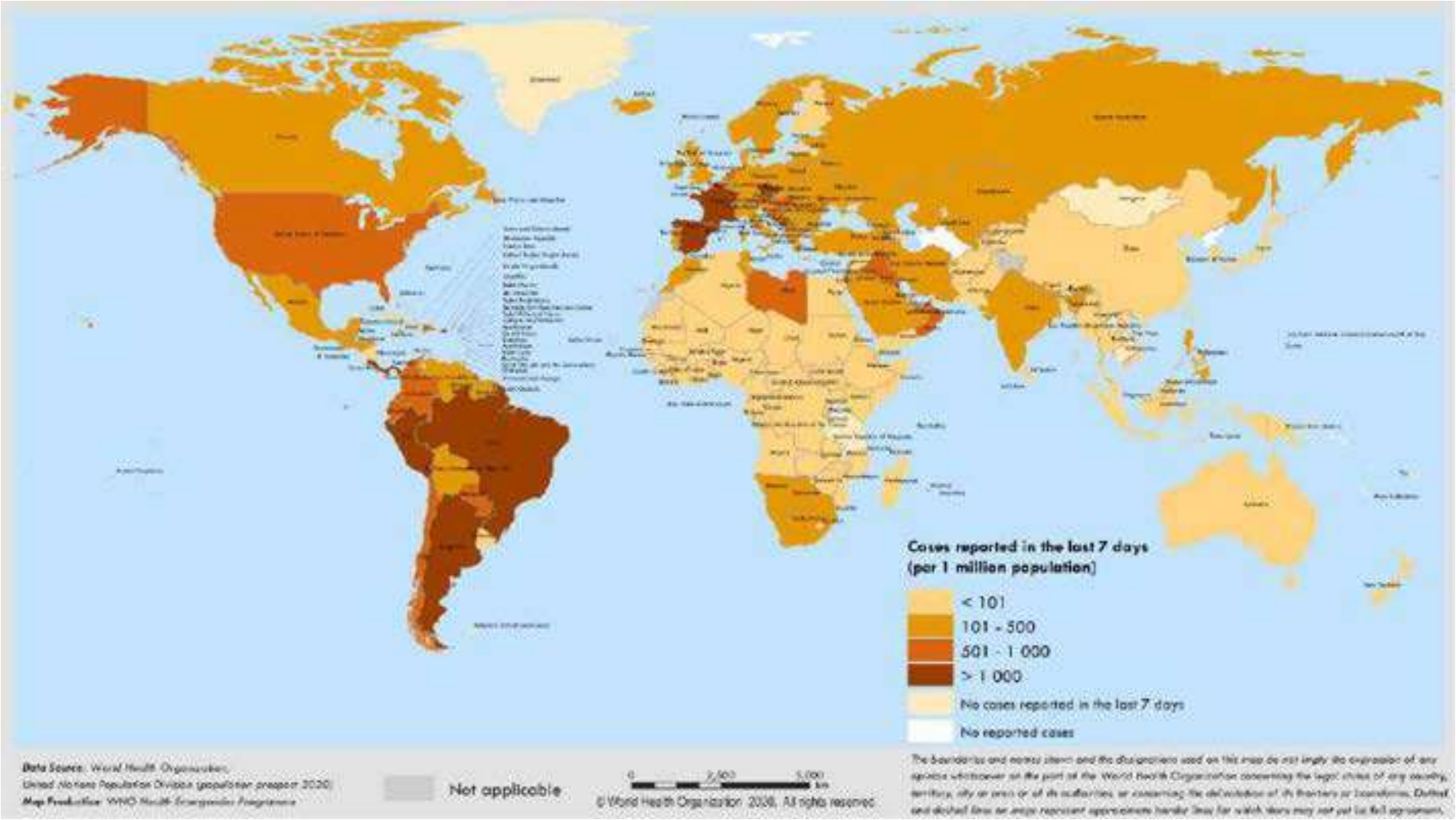
Additional region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western-Pacific Region.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 20 September 2020**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days*	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days*	Cumulative deaths (%)
Americas	767 410 (38%)	10%	15 466 584 (50%)	19 132 (52%)	-22%	527 837 (55%)
South-East Asia	696 400 (35%)	1%	6 073 462 (20%)	9 309 (25%)	4%	101 700 (11%)
Europe	360 601 (18%)	11%	5 195 853 (17%)	4 072 (11%)	27%	229 802 (24%)
Eastern Mediterranean	114 057 (6%)	8%	2 215 733 (7%)	2 629 (7%)	14%	57 641 (6%)
Western Pacific	31 353 (2%)	4%	577 905 (2%)	781 (2%)	15%	12 667 (1%)
Africa	29 076 (1%)	-12%	1 145 397 (4%)	841 (2%)	-16%	24 757 (3%)
† Other	-	-	741 (<1%)	-	-	13 (<1%)
Global	**1 998 897 (100%)**	**6%**	**30 675 675 (100%)**	**36 764 (100%)**	**-10%**	**954 417 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number, global totals may not equal 100%.*
***See data, table and figure notes*

Figure 2. COVID-19 cases per million population reported in the last seven days by countries, territories and areas, 14 through 20 September 2020**



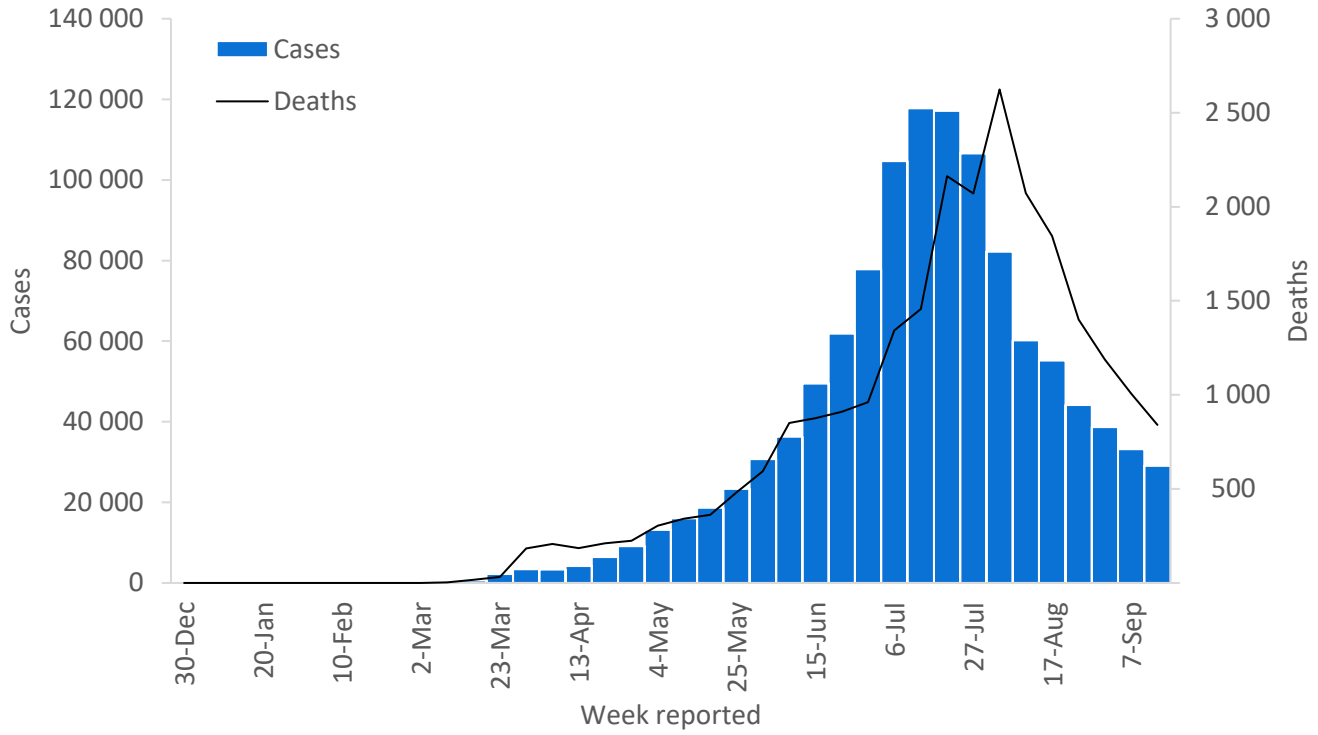
**See *data, table and figure notes*.

Situation by WHO Region

African Region

For the last six weeks, the African Region has continued to report a decrease in both COVID-19 cases and deaths. During the past week, 33 of the 49 affected countries reported either a decrease in deaths or no deaths. The region has reported almost 25 000 cumulative deaths to date, of which South Africa accounts for 15 900 (64%). South Africa continues to report the highest number of new cases and new deaths, followed by Ethiopia, Algeria and Mozambique.
Notably, 35 of 49 affected countries/territories/areas in the Region continue to report ongoing community transmission.

Figure 3: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, as of 20 September 2020**



**See *data, table and figure notes*

Region of the Americas

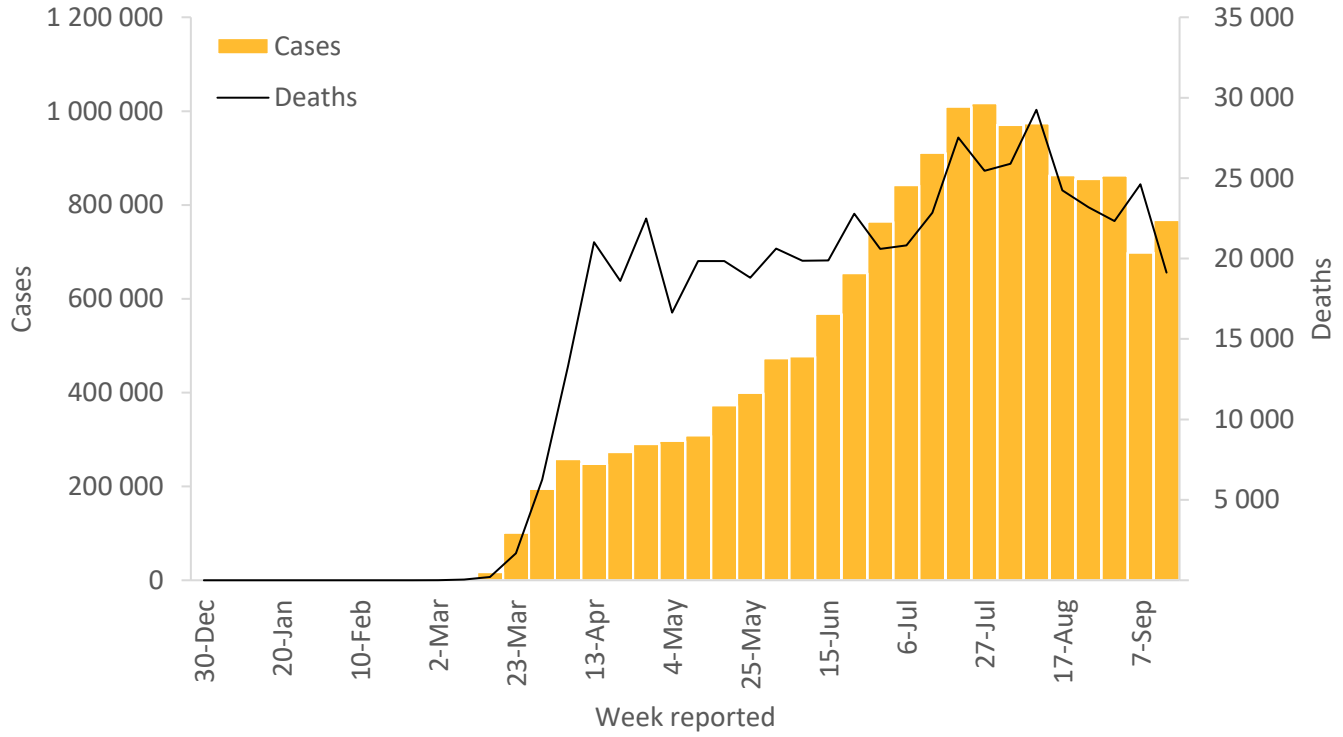
The Region of the Americas remains the most affected WHO Region, accounting for 50% of all reported cases and 55% of deaths. Even though the Region has reported an increase of 10% in the number of new cases in the past week, it also accounts for the largest decrease in deaths compared to the previous seven days (-22%) (Figure 4). Thirty-two out of the 48 affected countries and territories in the Region report community transmission, while only eight report sporadic transmission.

The countries reporting the highest numbers of new cases in the past week include the United States of America, Brazil, Argentina and Colombia. The number of daily cases reported in Ecuador has remained relatively high, with an average of more than 500 cases reported daily in September.

The marked decrease in the number of deaths in the Region has been driven mainly by a decrease in Colombia, Mexico, Ecuador and Bolivia in the past seven days, while the United States of America and Brazil continue to report the highest number of deaths, each reporting over 5000 new deaths in the past week.

While Argentina was one of the countries in the Americas with the lowest incidence of cases and deaths during the first few months of the pandemic, over the last few months the weekly incidence of cases has been rising rapidly, and test positivity rates have exceeded 40% in recent weeks.

Figure 4: Number of COVID-19 cases and deaths reported weekly by the WHO Region of the Americas, as of 20 September 2020**

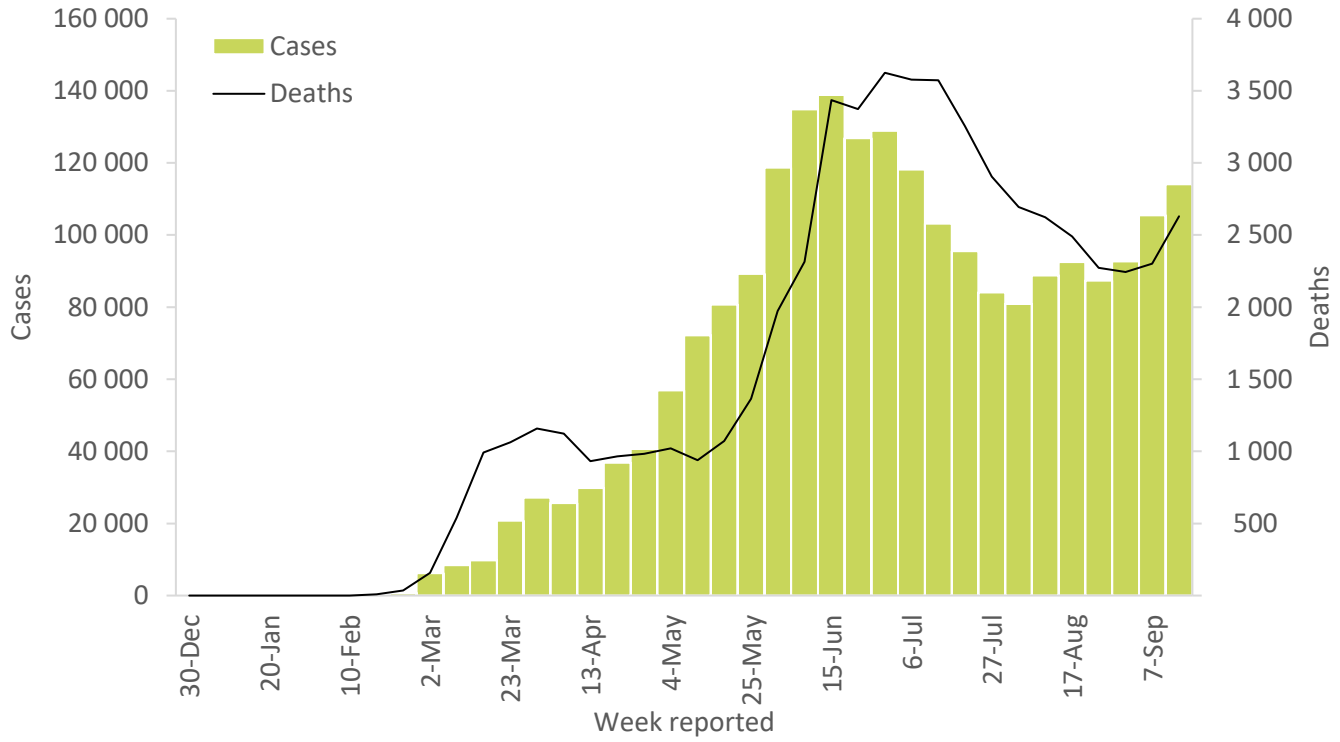


**See *data, table and figure notes*

Eastern Mediterranean Region

The number of cases and deaths reported in the Eastern Mediterranean Region have consistently increased over the last three weeks (Figure 5), and have increased by 8% and 14% respectively in the last seven days. The highest numbers of new cases were reported by Iraq, Iran and Morocco. Jordan, Oman and Tunisia reported the greatest relative increase in cases compared to the previous week. While Iran reported the highest number of new deaths, Tunisia and Afghanistan reported the greatest increase in deaths compared to the previous week.

Figure 5: Number of COVID-19 cases and deaths reported weekly by the WHO Eastern Mediterranean Region, as of 20 September 2020**



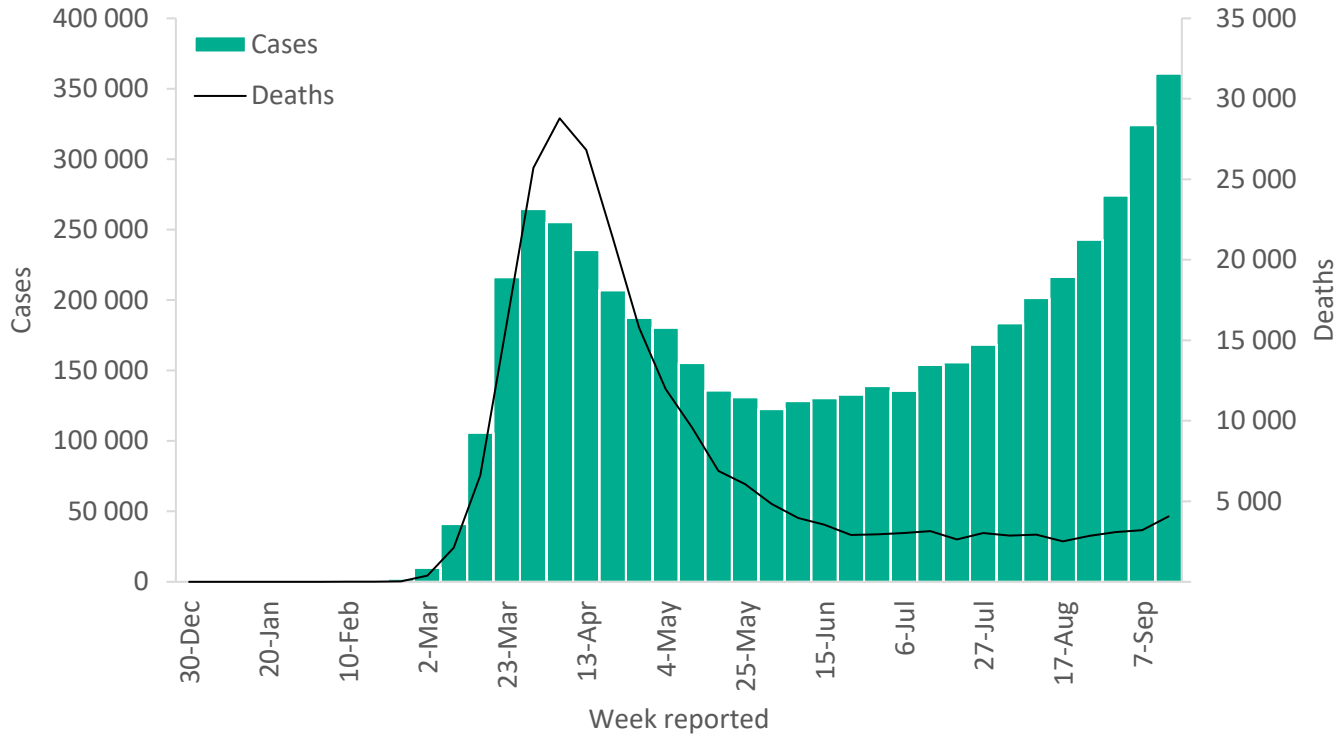
**See *data, table and figure notes*

European Region

The number of cases and deaths reported in the European Region increased by 11% and 27% respectively in the past seven days (Figure 6), with France, the Russian Federation, Spain and the United Kingdom reporting the highest numbers of new cases in the past week. Iceland and Cyprus have reported the greatest percentage increase in new cases in the past week.

The Region has been experiencing a slight increase in the number of reported deaths over the past four weeks, reaching over 4000 new deaths in the past seven days. Hungary and Denmark reported the highest relative increase in deaths in the past week, while the United Kingdom continues to report the highest number of cumulative deaths, with almost 42 000.

Figure 6: Number of COVID-19 cases and deaths reported weekly by the WHO European Region, as of 20 September 2020**



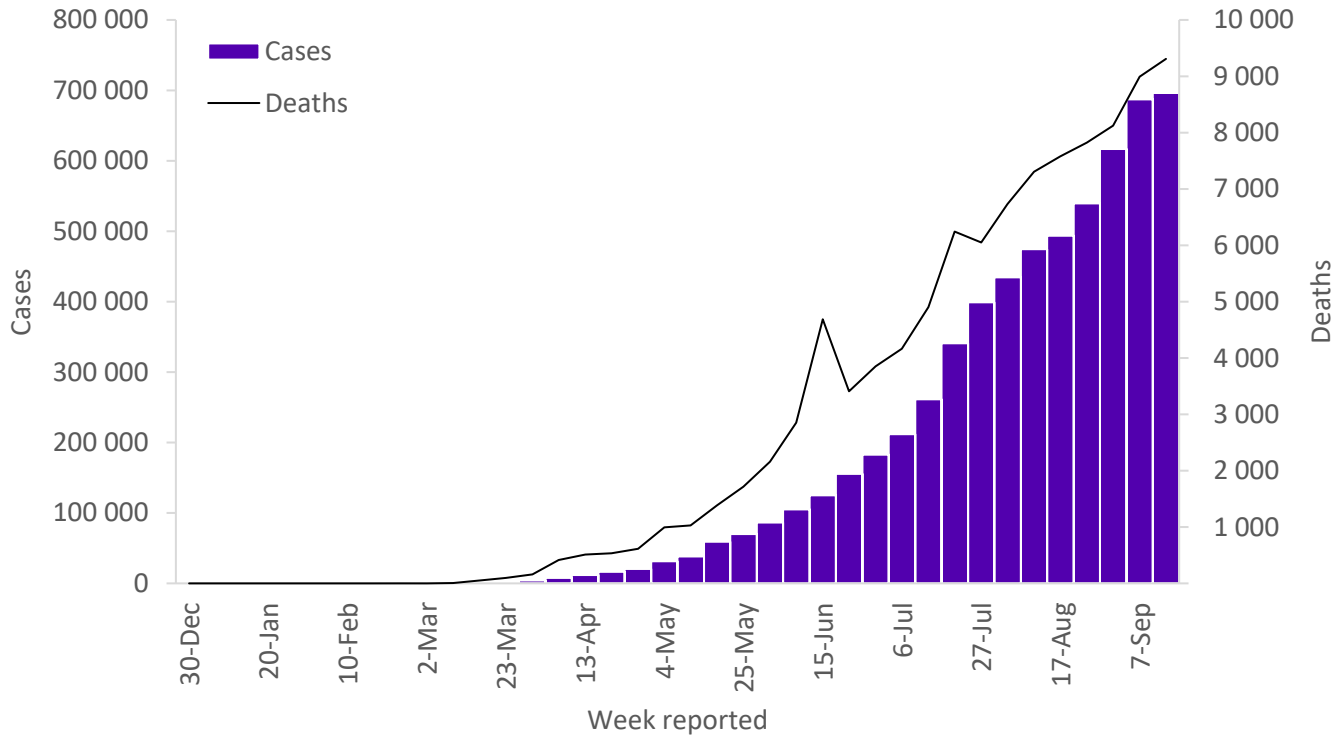
**See *data, table and figure notes*

South-East Asia Region

The South-East Asia Region is the second most affected Region and currently accounts for 35% and 25% of cases and deaths, respectively, newly reported globally in the past seven days. Although the number of cases and deaths has been increasing steadily since March, the increases have slowed, with increases in new cases and deaths of only 1% and 4% respectively in the past week. The countries reporting the highest number of new cases continue to be India, Indonesia and Bangladesh, while Myanmar and Nepal showed the highest increase in new cases in the past seven days.

The countries reporting the highest number of new deaths per million population include India and Maldives, with 6 and 4 deaths per million population respectively, while Myanmar continues to show the highest increase in deaths in the past week.

Figure 7: Number of COVID-19 cases and deaths reported weekly by the WHO South-East Asia Region, as of 20 September 2020**

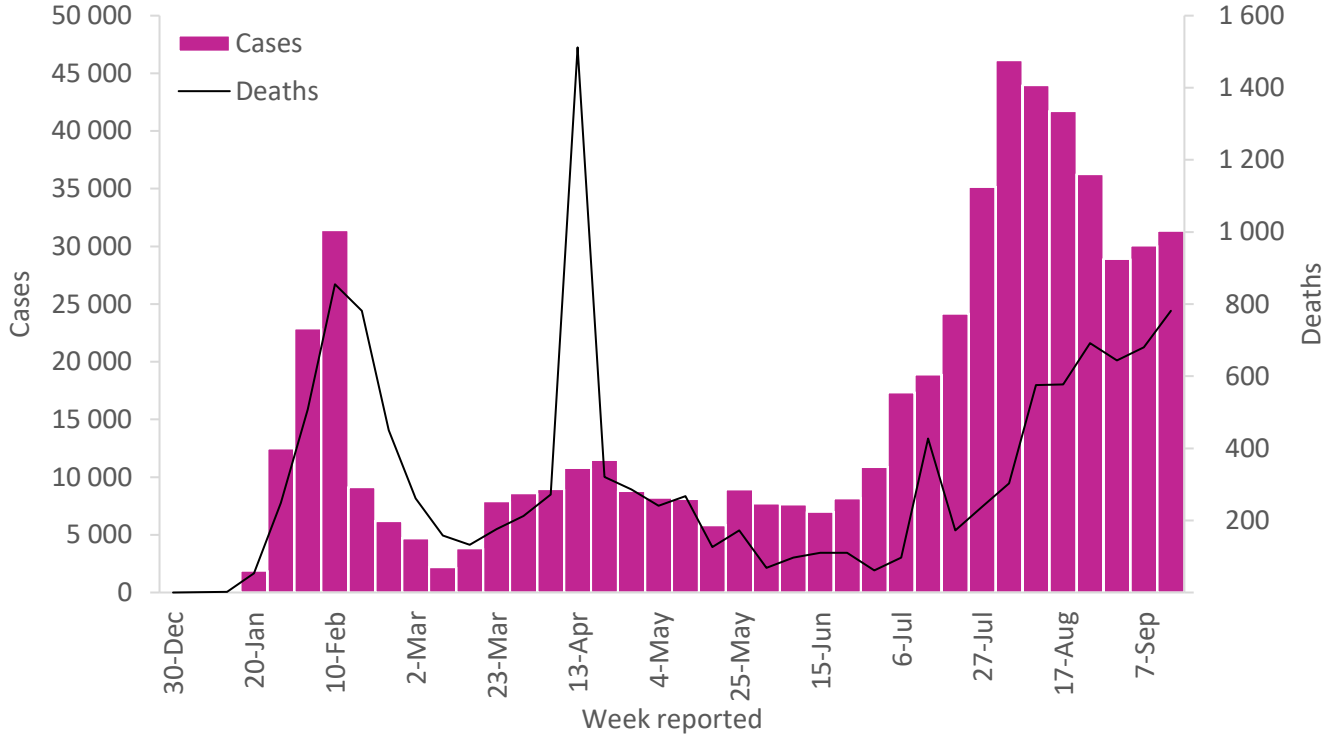


**See *data, table and figure notes*

Western Pacific Region

Overall, the Western Pacific Region continues to show the lowest cumulative cases, accounting for less than 2% of global cases and less than 1.5% of all deaths. The Philippines and Japan accounted for the greatest number of new cases and new deaths in the Region. Relative increases in the number of deaths were reported in Malaysia, New Zealand and Papua New Guinea.

Figure 8: Number of COVID-19 cases and deaths reported weekly by the WHO Western Pacific Region, data as of 20 September 2020**



**See *data, table and figure notes*

Key weekly updates

- As the world comes together at an unprecedented mostly virtual 75th UN General Assembly from 15-31 September, WHO has three messages to share:

  1. **Equitable access to COVID-19 tools.** WHO calls on world leaders to support the Access to COVID-19 Tools (ACT)-Accelerator, a unique international collaboration to fast-track the development, production and equitable access to COVID-19 tests, treatments, and vaccines globally, while strengthening health systems.

  2. **Maintain the momentum towards achieving the Sustainable Development Goals.** The pandemic risks unravelling decades of gains made in health and development. According to a recent WHO survey, 90% of countries are experiencing disruptions to essential health services.

  3. **We must prepare for the next pandemic together, now.** A year ago the independent Global Preparedness Monitoring Board warned of the threat of a pandemic, calling for global leaders to take urgent, united action to prepare. Last week, the Board issued its 2020 report, 'A World in Disorder', which outlined five urgent actions to be taken: responsible leadership; engaged citizenship; strong and agile systems for health security; sustained investment; and robust global governance of preparedness.

- WHO Director-General Dr Tedros, in his regular media briefing on Friday, highlighted that this is a critical moment for countries. As cases and deaths have started to spike again, he called upon leaders to put targeted measures in place which can help suppress the spread of the virus and ensure that health systems and workers are protected. Individuals must also practise physical distancing, clean their hands frequently, wear a mask as advised, cough and sneeze safely away from others, avoid crowds, and keep windows and doors open when they can't meet friends and family outside.

- WHO has published new guidance on school-related public health measures that examines considerations for school operations, and the measures needed to minimize the risk to students and staff of COVID-19.

- On 17 September, we celebrated World Patient Safety Day to raise global awareness of the importance of health worker safety and its interlinkages with patient safety. The COVID-19 pandemic has exerted unprecedented pressure on health systems worldwide. Health systems can only function with health workers, and a knowledgeable, skilled and motivated health workforce is critical for the provision of safe care to patients.

- WHO has released a slide set on 'What we know about the long-term effects of COVID-19'. Typically people recover from COVID-19 after two to six weeks; however, for some people, including young adults and persons with no underlying medical conditions who were not hospitalized, symptoms may linger or recur for weeks or months following initial recovery. Some patients develop medical complications that may have lasting health effects. Much is still unknown, and more time and research are needed to understand the long-term effects of COVID-19.

Table 2. Number of COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, as of 20 September 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Africa	**29076**	**1145397**	**173**	**841**	**24757**	**4**	
South Africa	11 442	659 656	11 122	513	15 940	269	Community transmission
Ethiopia	4 243	68 131	593	93	1 089	9	Community transmission
Algeria	1 616	49 623	1 132	60	1 665	38	Community transmission
Mozambique	1 497	6 537	209	6	41	1	Community transmission
Uganda	1 314	6 017	132	11	63	1	Clusters of cases
Nigeria	968	57 145	277	17	1 095	5	Community transmission
Kenya	866	36 829	685	27	646	12	Community transmission
Namibia	688	10 292	4 051	13	111	44	Community transmission
Angola	566	3 901	119	15	147	4	Clusters of cases
Zambia	558	14 024	763	17	329	18	Community transmission
Senegal	495	14 688	877	9	302	18	Community transmission
Cabo Verde	475	5 186	9 328	6	50	90	Clusters of cases
Ghana	443	45 877	1 476	11	297	10	Community transmission
Botswana	315	2 567	1 092	3	13	6	Clusters of cases
Burkina Faso	298	1 797	86	0	56	3	Community transmission
Madagascar	283	16 020	579	9	219	8	Community transmission
Guinea	266	10 286	783	0	63	5	Community transmission
Cameroon	264	20 431	770	1	416	16	Community transmission
Côte d'Ivoire	213	19 200	728	0	120	5	Community transmission
Eswatini	195	5 245	4 521	6	104	90	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Zimbabwe	164	7 672	516	1	225	15	Community transmission
Lesotho	145	1 390	649	0	33	15	Clusters of cases
Gambia	128	3 504	1 450	6	108	45	Community transmission
Rwanda	106	4 671	361	3	25	2	Clusters of cases
Democratic Republic of The Congo	103	10 487	117	6	268	3	Community transmission
Mauritania	91	7 365	1 584	0	161	35	Community transmission
Mali	90	3 006	148	0	128	6	Community transmission
Togo	85	1 640	198	4	41	5	Community transmission
Chad	66	1 149	70	1	81	5	Community transmission
South Sudan	64	2 642	236	0	49	4	Community transmission
Sierra Leone	63	2 159	271	0	72	9	Community transmission
Gabon	53	8 696	3 907	0	53	24	Community transmission
Congo	52	4 986	904	1	89	16	Community transmission
Malawi	49	5 718	299	2	179	9	Community transmission
Central African Republic	44	4 793	992	0	62	13	Community transmission
Benin	38	2 280	188	0	40	3	Community transmission
Guinea-Bissau	28	2 303	1 170	0	39	20	Community transmission
Liberia	24	1 335	264	0	82	16	Community transmission
Comoros	14	470	540	0	7	8	Community transmission
Equatorial Guinea	6	5 002	3 565	0	83	59	Community transmission
Mauritius	6	367	289	0	10	8	Sporadic cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Niger	4	1 182	49	0	69	3	Clusters of cases
Seychelles	4	139	1 413	0	0	<1	Sporadic cases
Eritrea	3	364	103	0	0	<1	Sporadic cases
Sao Tome and Principe	2	908	4 143	0	15	68	Clusters of cases
Burundi	1	473	40	0	1	<1	Clusters of cases
United Republic of Tanzania	0	509	9	0	21	<1	Community transmission
Territories[ii]							
Réunion	471	3 194	3 567	0	10	11	Clusters of cases
Mayotte	167	3 541	12 979	0	40	147	Clusters of cases
Americas	**767410**	**15466584**	**2295**	**19132**	**527837**	**78**	
United States of America	275 171	6 662 003	20 127	5 633	197 442	596	Community transmission
Brazil	213 019	4 495 183	21 148	5 397	135 793	639	Community transmission
Argentina	77 953	613 658	13 578	1 499	12 705	281	Community transmission
Colombia	48 383	750 471	14 749	1 332	23 850	469	Community transmission
Peru	39 742	756 412	22 941	813	31 283	949	Community transmission
Mexico	30 655	688 954	5 344	2 620	72 803	565	Community transmission
Chile	12 008	444 674	23 262	359	12 254	641	Community transmission
Ecuador	10 888	125 620	7 120	253	11 089	629	Community transmission
Costa Rica	8 405	62 374	12 244	103	686	135	Community transmission
Venezuela (Bolivarian Republic of)	6 511	65 174	2 292	62	530	19	Community transmission
Canada	6 285	141 911	3 760	42	9 205	244	Community transmission
Paraguay	5 615	32 127	4 504	115	611	86	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Dominican Republic	5 468	107 700	9 928	103	2 044	188	Community transmission
Bolivia (Plurinational State of)	4 879	130 051	11 141	300	7 550	647	Community transmission
Honduras	4 562	70 611	7 129	88	2 146	217	Community transmission
Panama	4 549	104 879	24 307	89	2 229	517	Community transmission
Guatemala	3 494	85 152	4 753	156	3 105	173	Community transmission
Jamaica	1 247	4 758	1 607	20	60	20	Community transmission
Trinidad and Tobago	847	3 739	2 672	10	60	43	Community transmission
El Salvador	577	27 428	4 229	26	808	125	Community transmission
Cuba	402	5 055	446	5	113	10	Clusters of cases
Guyana	339	2 102	2 672	10	62	79	Clusters of cases
Bahamas	303	3 177	8 079	2	69	175	Clusters of cases
Suriname	162	4 691	7 996	3	96	164	Community transmission
Belize	155	1 590	3 999	1	20	50	Community transmission
Haiti	143	8 600	754	5	221	19	Community transmission
Uruguay	117	1 890	544	1	46	13	Clusters of cases
Nicaragua	102	3 979	601	3	147	22	Community transmission
Barbados	5	185	644	0	7	24	Clusters of cases
Antigua and Barbuda	0	95	970	0	3	31	Sporadic cases
Dominica	0	24	333	0	0	<1	Clusters of cases
Grenada	0	24	213	0	0	<1	No cases
Saint Kitts and Nevis	0	17	320	0	0	<1	No cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Saint Lucia	0	27	147	0	0	<1	Sporadic cases
Saint Vincent and the Grenadines	0	64	577	0	0	<1	Sporadic cases
Territories[ii]							
Puerto Rico	3 901	40 993	14 329	70	605	211	Community transmission
Aruba	563	3 382	31 677	7	23	215	Community transmission
Guadeloupe	346	3 426	8 562	2	26	65	Community transmission
Martinique	183	1 122	2 990	0	18	48	Community transmission
French Guiana	171	9 692	32 449	2	65	218	Community transmission
Curaçao	75	210	1 280	0	1	6	Community transmission
Saint Martin	74	330	8 536	0	6	155	Community transmission
Sint Maarten	35	565	13 176	0	19	443	Community transmission
United States Virgin Islands	31	1 242	11 894	0	19	182	Community transmission
Turks and Caicos Islands	26	667	17 227	0	5	129	Clusters of cases
Bonaire, Sint Eustatius and Saba	11	36	1 373	1	1	38	Sporadic cases
British Virgin Islands	5	71	2 348	0	1	33	Clusters of cases
Saint Barthélemy	2	23	2 327	0	0	<1	Sporadic cases
Bermuda	1	178	2 858	0	9	145	Sporadic cases
Anguilla	0	3	200	0	0	<1	No cases
Cayman Islands	0	208	3 165	0	1	15	Sporadic cases
Falkland Islands (Malvinas)	0	13	3 732	0	0	<1	No cases
Montserrat	0	13	2 601	0	1	200	No cases
Saint Pierre and Miquelon	0	11	1 898	0	0	<1	Sporadic cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Eastern Mediterranean	**114057**	**2215733**	**315**	**2629**	**57641**	**8**	
Iraq	28 819	315 597	7 846	550	8 491	211	Community transmission
Iran (Islamic Republic of)	19 103	419 043	4 989	1 089	24 118	287	Community transmission
Morocco	15 381	99 816	2 704	242	1 795	49	Clusters of cases
United Arab Emirates	5 393	84 242	8 518	5	404	41	Community transmission
Bahrain	4 913	64 499	37 905	10	221	130	Clusters of cases
Libya	4 886	27 234	3 963	72	426	62	Community transmission
Kuwait	4 838	99 049	23 193	23	581	136	Community transmission
Lebanon	4 628	28 297	4 146	47	286	42	Community transmission
Saudi Arabia	4 221	329 271	9 458	218	4 458	128	Sporadic cases
Pakistan	4 190	305 671	1 384	37	6 416	29	Clusters of cases
Oman	3 416	91 753	17 967	56	818	160	Community transmission
Tunisia	3 101	9 736	824	48	155	13	Clusters of cases
Qatar	1 623	123 146	42 743	4	209	73	Community transmission
Jordan	1 478	4 540	445	8	30	3	Community transmission
Egypt	1 044	101 900	996	123	5 750	56	Clusters of cases
Afghanistan	403	39 044	1 003	21	1 441	37	Clusters of cases
Syrian Arab Republic	259	3 765	215	18	170	10	Community transmission
Sudan	65	13 535	309	2	836	19	Community transmission
Somalia	25	3 401	214	0	98	6	Sporadic cases
Yemen	17	2 030	68	3	586	20	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Djibouti	7	5 401	5 467	0	61	62	Sporadic cases
Territories[ii]							
Occupied Palestinian territory	6 247	44 763	8 775	53	291	57	Community transmission
Europe	**360601**	**5195853**	**760**	**4072**	**229802**	**34**	
France	66 869	420 855	6 448	360	31 109	477	Community transmission
Spain	50 696	640 040	13 689	596	30 495	652	Clusters of cases
Russian Federation	40 588	1 103 399	7 561	840	19 418	133	Clusters of cases
United Kingdom	25 184	390 362	5 750	136	41 759	615	Community transmission
Israel	23 346	176 452	20 386	65	1 176	136	Community transmission
Ukraine	21 343	175 678	4 017	379	3 557	81	Community transmission
Czechia	12 905	48 306	4 511	46	499	47	Clusters of cases
Germany	11 987	271 415	3 239	37	9 386	112	Clusters of cases
Turkey	11 713	301 348	3 573	446	7 445	88	Community transmission
Netherlands	10 904	91 841	5 360	22	6 266	366	Community transmission
Italy	10 272	296 569	4 905	89	35 692	590	Clusters of cases
Romania	9 164	111 550	5 799	275	4 402	229	Community transmission
Hungary	6 165	17 990	1 862	50	683	71	Community transmission
Belgium	5 764	100 654	8 685	17	9 944	858	Community transmission
Austria	4 997	37 948	4 213	11	765	85	Community transmission
Portugal	4 715	68 025	6 671	39	1 899	186	Clusters of cases
Poland	4 680	78 330	2 070	100	2 282	60	Community transmission
Uzbekistan	4 193	51 235	1 531	41	429	13	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Republic of Moldova	3 622	46 336	11 486	83	1 201	298	Community transmission
Denmark	2 631	21 847	3 772	6	635	110	Community transmission
Switzerland	2 576	49 171	5 681	22	1 764	204	Community transmission
Kazakhstan	1 964	138 348	7 368	51	1 999	106	Clusters of cases
Greece	1 942	14 978	1 437	29	331	32	Clusters of cases
Ireland	1 808	32 538	6 590	9	1 792	363	Community transmission
Bosnia and Herzegovina	1 758	24 892	7 587	63	746	227	Community transmission
Armenia	1 569	47 431	16 006	14	930	314	Community transmission
Belarus	1 486	75 461	7 986	32	776	82	Community transmission
Montenegro	1 408	8 114	12 919	16	134	213	Clusters of cases
Croatia	1 357	14 725	3 587	26	244	59	Community transmission
Georgia	1 275	3 502	878	0	19	5	Community transmission
Sweden	1 177	88 237	8 737	1	5 865	581	Community transmission
Slovakia	1 093	6 546	1 199	1	39	7	Clusters of cases
Albania	1 041	12 226	4 248	28	358	124	Clusters of cases
Bulgaria	928	18 819	2 708	38	755	109	Clusters of cases
Azerbaijan	870	39 042	3 851	15	574	57	Clusters of cases
North Macedonia	863	16 557	7 947	43	689	331	Clusters of cases
Norway	779	12 645	2 332	2	267	49	Clusters of cases
Slovenia	706	4 309	2 073	2	133	64	Clusters of cases
Luxembourg	559	7 718	12 330	0	124	198	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Serbia	540	32 840	4 716	9	740	106	Community transmission
Kyrgyzstan	535	45 416	6 961	0	1 063	163	Clusters of cases
Finland	410	8 922	1 610	2	339	61	Community transmission
Lithuania	368	3 664	1 346	1	87	32	Community transmission
Malta	359	2 634	5 965	2	17	39	Clusters of cases
Tajikistan	289	9 303	975	1	73	8	Pending
Andorra	220	1 564	20 242	0	53	686	Community transmission
Estonia	220	2 875	2 167	0	64	48	Clusters of cases
Iceland	145	2 307	6 761	0	10	29	Community transmission
Cyprus	57	1 580	1 309	1	22	18	Clusters of cases
Latvia	51	1 515	803	1	36	19	Clusters of cases
Monaco	18	192	4 892	0	1	25	Sporadic cases
Liechtenstein	3	112	2 937	0	1	26	Sporadic cases
San Marino	1	742	21 863	0	42	1 238	Community transmission
Holy See	0	12	14 833	0	0	<1	Sporadic cases
Territories[ii]							
Kosovo[1]	436	14 959	8 041	25	604	325	Community transmission
Gibraltar	23	346	10 270	0	0	<1	Clusters of cases
Faroe Islands	13	431	8 820	0	0	<1	Sporadic cases
Jersey	13	393	3 612	0	32	294	Community transmission
Isle of Man	2	339	3 987	0	24	282	No cases
Guernsey	1	254	4 019	0	13	206	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Greenland	0	14	247	0	0	<1	No cases
South-East Asia	**696400**	**6073462**	**1053**	**9309**	**101700**	**18**	
India	646 263	5 400 619	3 913	8 166	86 752	63	Clusters of cases
Indonesia	25 941	240 687	880	798	9 448	35	Community transmission
Bangladesh	11 328	347 372	2 109	211	4 913	30	Community transmission
Nepal	9 677	62 797	2 155	65	401	14	Clusters of cases
Myanmar	2 467	5 263	97	65	81	1	Clusters of cases
Maldives	597	9 649	17 851	2	33	61	Clusters of cases
Sri Lanka	79	3 283	153	1	13	1	Clusters of cases
Thailand	33	3 506	50	1	59	1	Clusters of cases
Bhutan	15	259	336	0	0	<1	Sporadic cases
Timor-Leste	0	27	20	0	0	<1	Sporadic cases
Western Pacific	**31353**	**577905**	**100**	**781**	**12667**	**2**	
Philippines	25 597	283 460	2 587	638	4 930	45	Community transmission
Japan	3 439	78 657	622	61	1 500	12	Clusters of cases
Republic of Korea	799	22 975	448	25	383	7	Clusters of cases
Malaysia	299	10 167	314	2	130	4	Clusters of cases
Australia	278	26 885	1 054	41	844	33	Clusters of cases
Singapore	201	57 558	9 838	0	27	5	Clusters of cases
China	174	90 840	62	3	4 744	3	Clusters of cases
New Zealand	18	1 464	304	1	25	5	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Papua New Guinea	8	516	58	1	6	1	Community transmission
Viet Nam	8	1 068	11	0	35	<1	Clusters of cases
Brunei Darussalam	0	145	331	0	3	7	No cases
Cambodia	0	275	16	0	0	<1	Sporadic cases
Fiji	0	32	36	0	2	2	Sporadic cases
Lao People's Democratic Republic	0	23	3	0	0	<1	Sporadic cases
Mongolia	0	311	95	0	0	<1	Sporadic cases
Territories[ii]							
French Polynesia	298	1 318	4 692	0	2	7	Sporadic cases
Guam	226	2 117	12 543	9	34	201	Clusters of cases
Northern Mariana Islands (Commonwealth of the)	8	68	1 181	0	2	35	Pending
New Caledonia	0	26	91	0	0	<1	Sporadic cases
Subtotal for all regions	**1 998 897**	**30 674 934**	**3 953**	**36 764**	**954 404**	**123**	
Other[†]	0	741	-	0	13	-	Not applicable
Grand total	**1 998 897**	**30 675 675**	**-**	**36 764**	**954 417**	**-**	

**See *data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases; efforts are underway to identify these for notation in the data table. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines

on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas; classification is based on the highest category reported within a country/territory/area. Categories:

- No cases: with no confirmed cases;
- Sporadic cases: with one or more cases, imported or locally detected;
- Clusters of cases: experiencing cases, clustered in time, geographic location and/or by common exposures;
- Community transmission: experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel laboratory surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area;
- Pending: transmission classification has not been reported to WHO.

[ii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

[†] Other: includes cases reported from international conveyances.

Country, territory, or area-specific notes, updates and errata

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

World Health Organization

Coronavirus disease (COVID-19)

Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 10 am CEST 13 September 2020

For the latest data and information on COVID-19, please see:

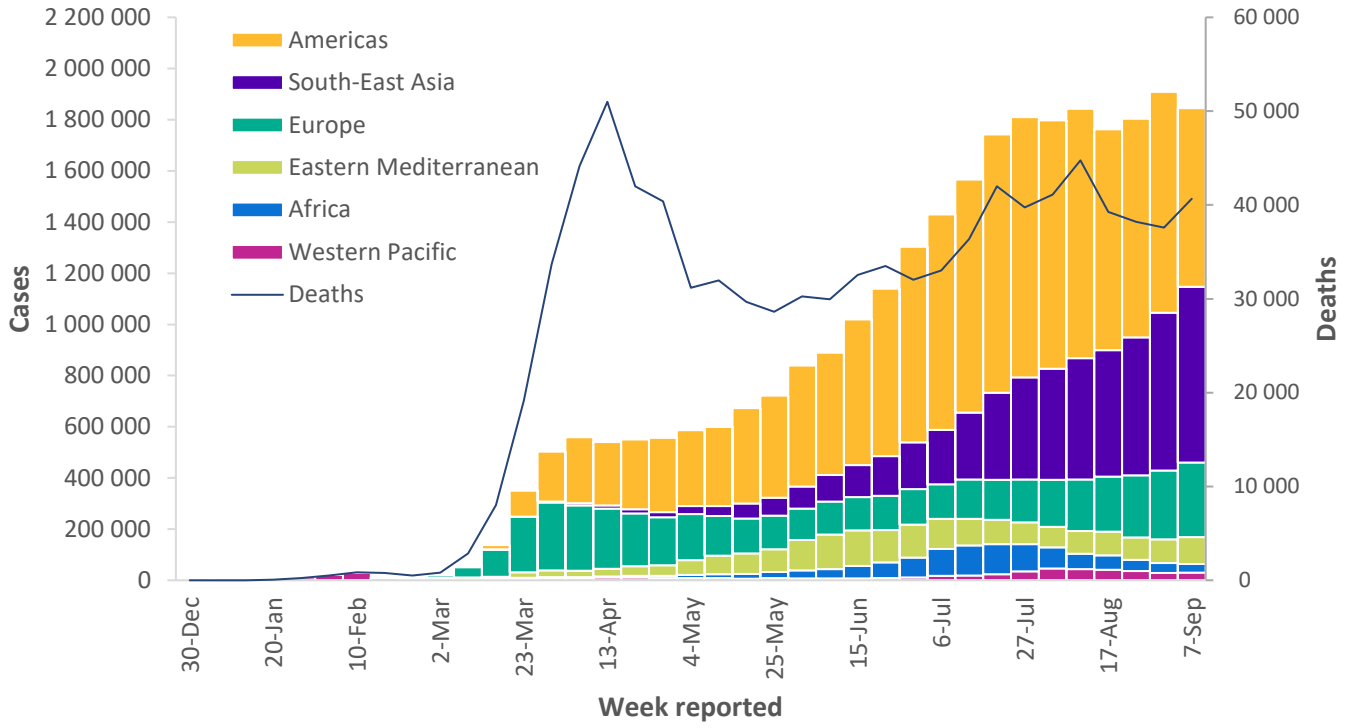
- WHO COVID-19 Dashboard
- Rolling updates on COVID-19
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

In the week from 7 through 13 September, there were over 1.8 million new cases of COVID-19, comparable to the previous seven days (Table 1); while deaths increased slightly as compared to the previous week, with over 40 600 deaths reported.

The Region of the Americas has consistently registered the greatest number of reported cases for many weeks. It continues to account for nearly half of the global total of cases even as cases have declined in the reporting week. The African Region also showed a decline in reported cases this week and was the only region to report a decline in deaths.

Figure 1: Number of COVID-19 cases reported weekly by WHO Region, and global deaths, 30 December 2019 through 13 September 2020**



**See *data table and figure notes*.

The European region reported the third-highest number of new cases, amounting to 16% of the global total, and is the region with the second-highest cumulative number of cases per million population (5 172 cases per million population).

In recent weeks schools have been re-opening in a number of countries throughout the six WHO regions. WHO has published both a Question and Answer and guidance on considerations for school-related public health measures in the context of COVID-19.

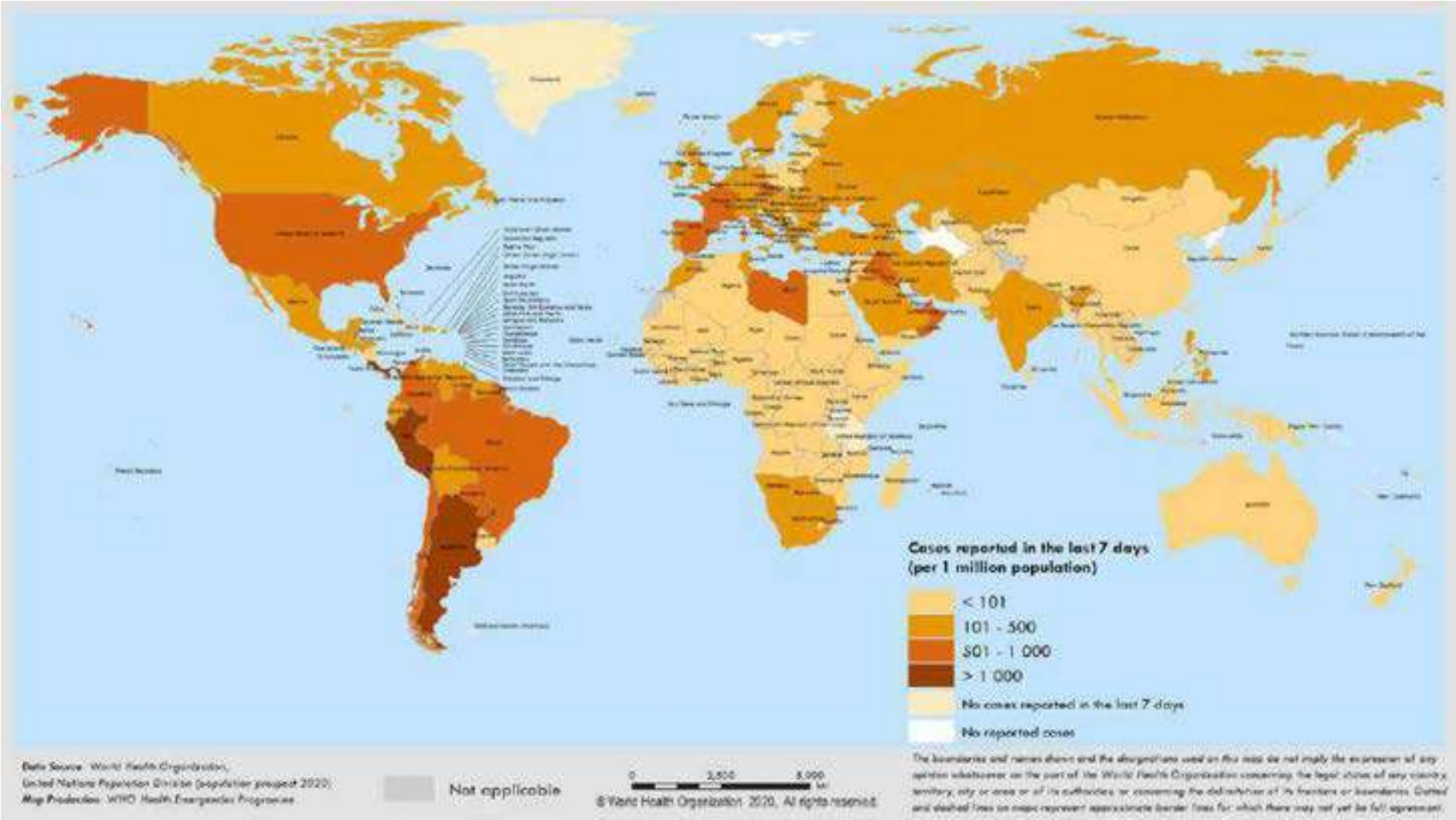
Additional region-specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, and Western-Pacific Region.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 13 September 2020**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days*	Cumulative deaths (%)
Americas	697 780 (38%)	-19%	14 699 174 (51%)	24 626 (61%)	10%	508 705 (55%)
South-East Asia	687 119 (37%)	11%	5 377 062 (19%)	8 991 (22%)	11%	92 391 (10%)
Europe	291 387 (16%)	8%	4 796 426 (17%)	3 050 (8%)	<1%	225 494 (25%)
Eastern Mediterranean	105 430 (6%)	14%	2 101 676 (7%)	2 302 (6%)	3%	55 012 (6%)
Africa	33 169 (2%)	-14%	1 116 321 (4%)	1 007 (2%)	-15%	23 916 (3%)
Western Pacific	30 074 (2%)	4%	546 552 (2%)	680 (2%)	6%	11 886 (1%)
† Other	-	-	741 (<1%)	-	-	13 (<1%)
Global	**1 844 959 (100%)**	**-3%**	**28 637 952 (100%)**	**40 656 (100%)**	**8%**	**917 417 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. Regional percentages rounded to the nearest whole number so global totals may not equal 100%.*
***See data, table and figure notes*

Figure 2. COVID-19 cases per million population reported in the last seven days by countries, territories and areas, 7 through 13 September 2020**



**See *data, table and figure notes*.

Situation by WHO Region

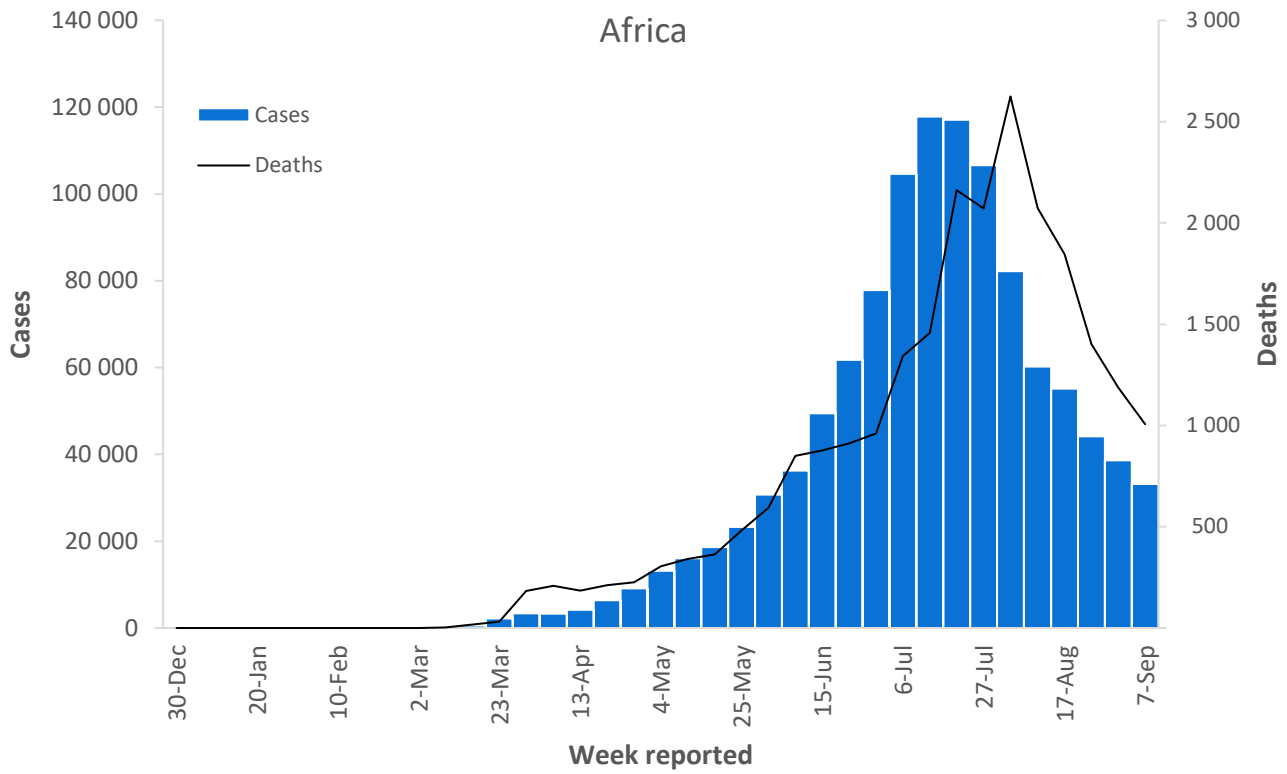
African Region

The African Region has witnessed declining trends in the number of new cases reported (a 14% decrease in cases and a 15% decrease in deaths in the past seven days), with 26 of the 47 affected countries reporting decreases in the past week. While this is encouraging, vigilance is still essential as many factors may be influencing these trends such as testing capacity and strategy, along with delays in reporting in some areas.

While South Africa continues to account for the greatest number of cumulative reported cases in the region (Table 2), disease incidence by 1 million population is highest in Mayotte (12 367 per million). Cumulative deaths per million population remains the highest in South Africa (260 per million population).

Elsewhere in the region, WHO has donated life-saving equipment and medical supplies and helped established a new WHO-supported COVID-19 testing molecular laboratory in Makeni City, northern Sierra Leone, to facilitate scaling up of testing capacity for the disease in the country. Sierra Leone has continued to report COVID-19 cases throughout the pandemic amidst other ongoing communicable diseases outbreaks. Sierre Leone reported 53 cases and 1 death this week, resulting in a cumulative total of 263 cases per million population and 9 deaths per million population.

Figure 3: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, as of 13 September 2020**



**See *data, table and figure notes*

Region of the Americas

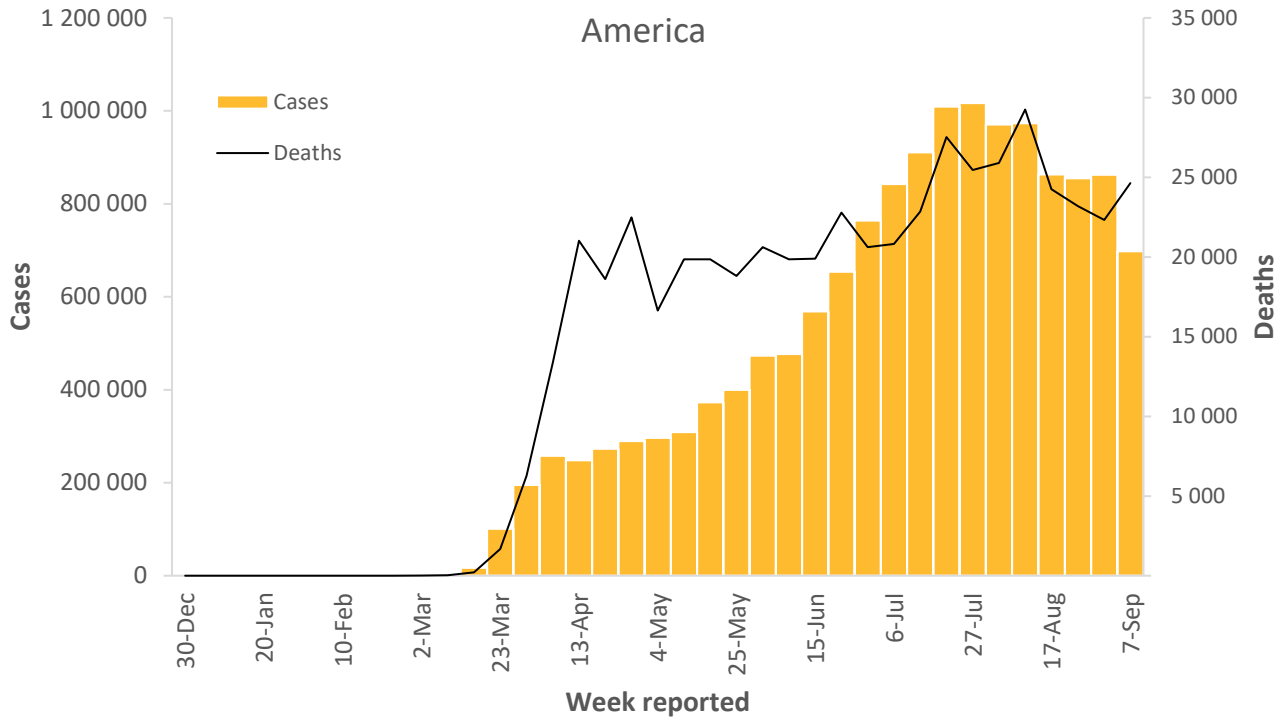
As cases in the Region of the Americas continues to rise and social dynamics change, the WHO Regional Office has compiled infographics covering a range of issues related to COVID-19, including tips on how to stay safe and healthy during the pandemic for different ages, risk groups and settings.

While the numbers are relatively low (Table 2) as compared to other countries in the region, Guadeloupe has reported its highest number of cases this week, rising from 428 new cases in the previous weekly update to 1717 new cases this week, and the transmission pattern has now moved from clusters of cases to community transmission. Cumulative cases and deaths have increased relative to the territory's population, over 100% in cases (3 406 to 7 698 per million population) and a 20% increase in cumulative deaths (50 to 60 per million population) in the past seven days.

In the past week, Curaçao has shown the highest weekly increase in the number of cases since the start of the outbreak in the country, a 250% increase in weekly new cases reported which translates to a 73% increase in cumulative cases from 475 to 823 per million population.

While cases reported this week in Costa Rica are in line with the average for the country in the past few weeks, the number of deaths reported has increased by 84% and a 24% in the incidence of deaths relative to the country's population (92 to 114 per million population) in the past week.

Figure 4: Number of COVID-19 cases and deaths reported weekly by the WHO Region of the Americas, as of 13 September 2020**



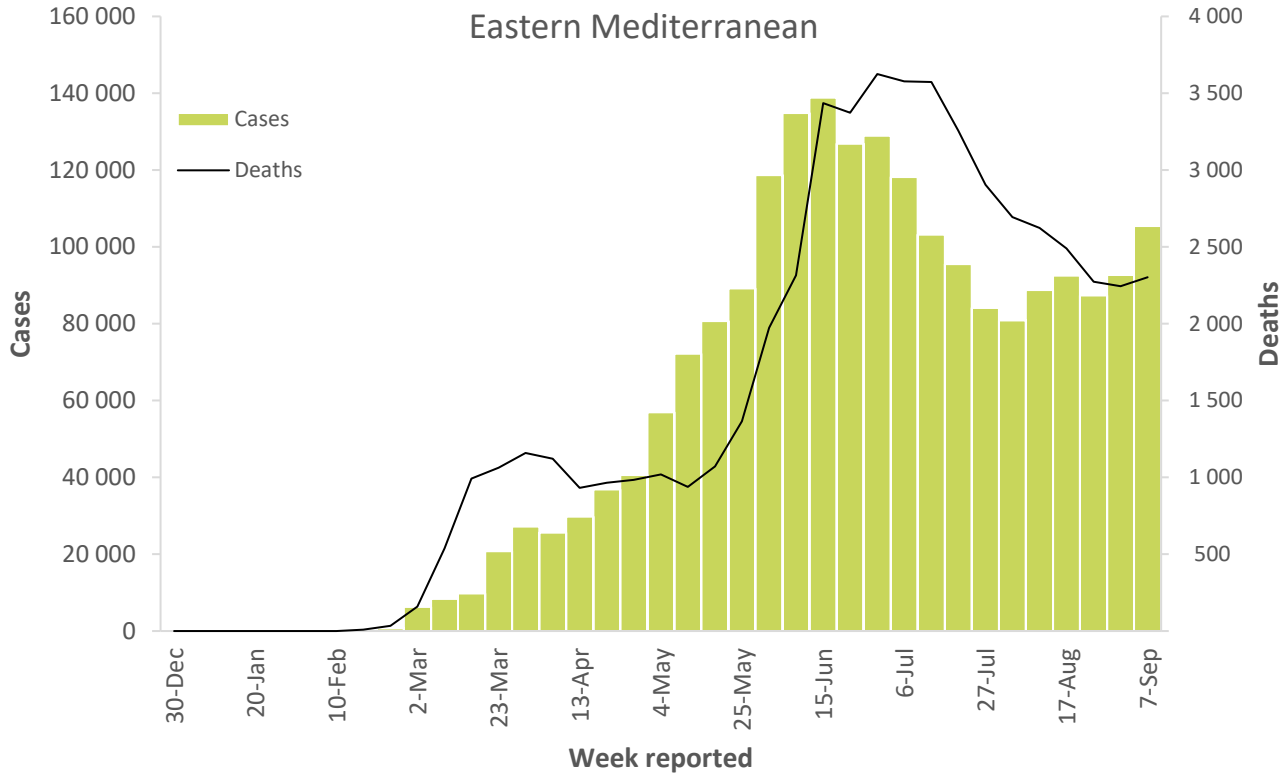
**See *data, table and figure notes*

Eastern Mediterranean Region

Cases in the Region continue to rise, an increase of 14% in the past seven days, and currently account for 6% of global cases. Seasonal religious and cultural mass gatherings, wedding celebrations and other social events have contributed to the upsurge of cases in different countries in the region. Upticks of cases reported in Tunisia and Jordan have been linked to ceremonies and celebrations.

Cases in Morocco have reached a peak at approximately 2 000 per day, an increase of 41% in weekly new cases, resulting in 2 288 cases per million population. The majority of new cases (42%) are being reported in the Casablanca-Settat region, where public health and safety measures are being scaled up in response. In Jordan, the number of weekly new cases has increased by 54%, increasing the cumulative cases per million population from 231 to 300. Deaths have remained stable at 2 per million population. Additionally, the first two cases of COVID-19 were confirmed in a refugee camp hosting Syrian refugees. In Libya, the number of new confirmed cases of COVID-19 has more than doubled over the past two weeks; both the cumulative cases and deaths per million population in Libya has increased by 30% in the past seven days. Given the acute shortages of tests and laboratory capacity, the real number of cases is likely to be much higher. WHO is supporting the efforts of Libyan authorities to increase the number of COVID-19 tests and trace all contacts.

Figure 5: Number of COVID-19 cases and deaths reported weekly by the WHO Eastern Mediterranean Region, as of 13 September 2020**

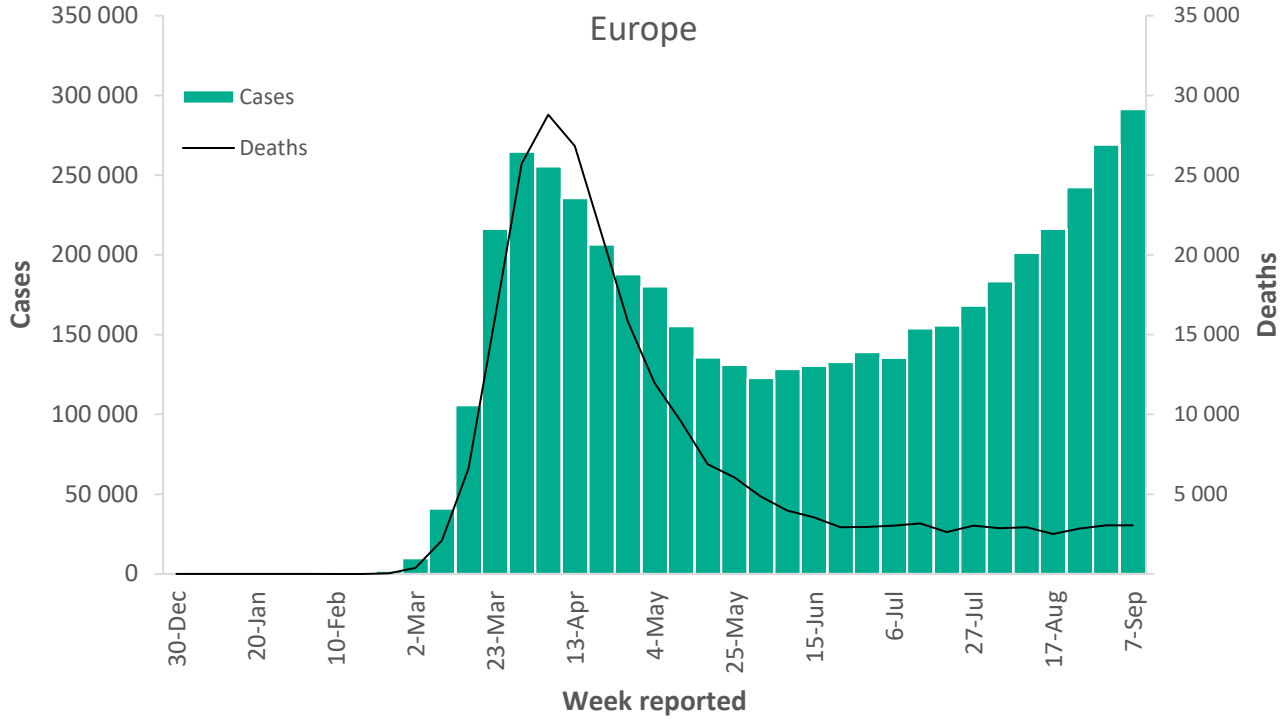


**See *data, table and figure notes*

European Region

The European Region accounts for 16% of global COVID-19 cases and 25% of the deaths. While France reported the highest number of new cases in the past seven days, the top three countries in the region reporting the highest cumulative cases per million population are San Marino (21 834 cases per million population), Andorra (17 395 per million population) and Israel (16 430 per million population). The countries reporting the highest cumulative number of deaths relative to their population are San Marino (1 238 per million population), Belgium (856 per million population) and Andorra (686 per million population).

Figure 6: Number of COVID-19 cases and deaths reported weekly by the WHO European Region, as of 13 September 2020**



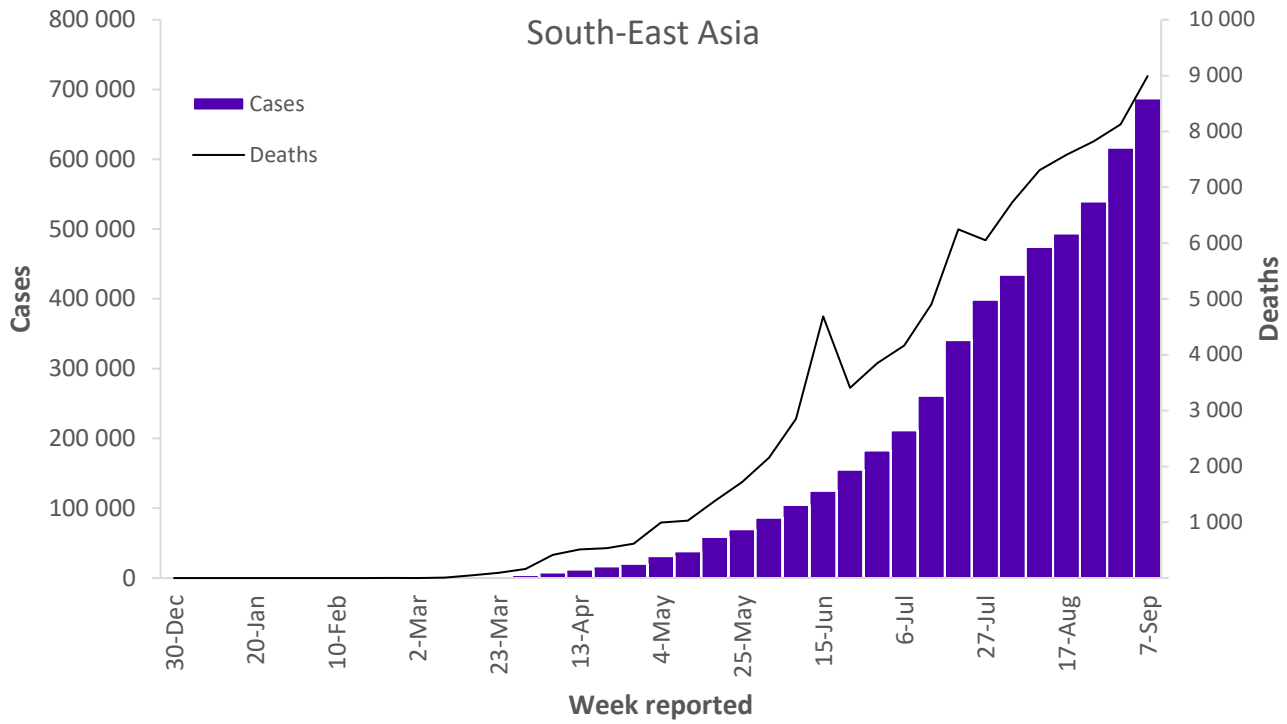
**See *data, table and figure notes*

South-East Asia Region

In the South-East Asia Region, India, Indonesia and Bangladesh continue to report the highest number of cases, although the Maldives accounts for the highest number of cumulative cases relative to its population (16 746 per million population). The region recorded 22% of all new deaths in the last seven days but retains low overall cumulative deaths relative to the region's population (46 per million population)

Myanmar is continuing to show increasing case numbers, with a greater than 250% increase in weekly new cases, resulting in more than a doubling of cumulative incidence from 24 to 51 per million population. Deaths remain low, with an incidence of <1 per million population. An influx of local travelers from Rakhine State to Yangon Region occurring since the end of August has contributed to increasing trends; as incidence rises, there are concerns of spread of cases from Myanmar across its border with Thailand, where cases have remained low (50 per million population) since peaks in early April.

Figure 7: Number of COVID-19 cases and deaths reported weekly by the WHO South-East Asia Region, as of 13 September 2020**

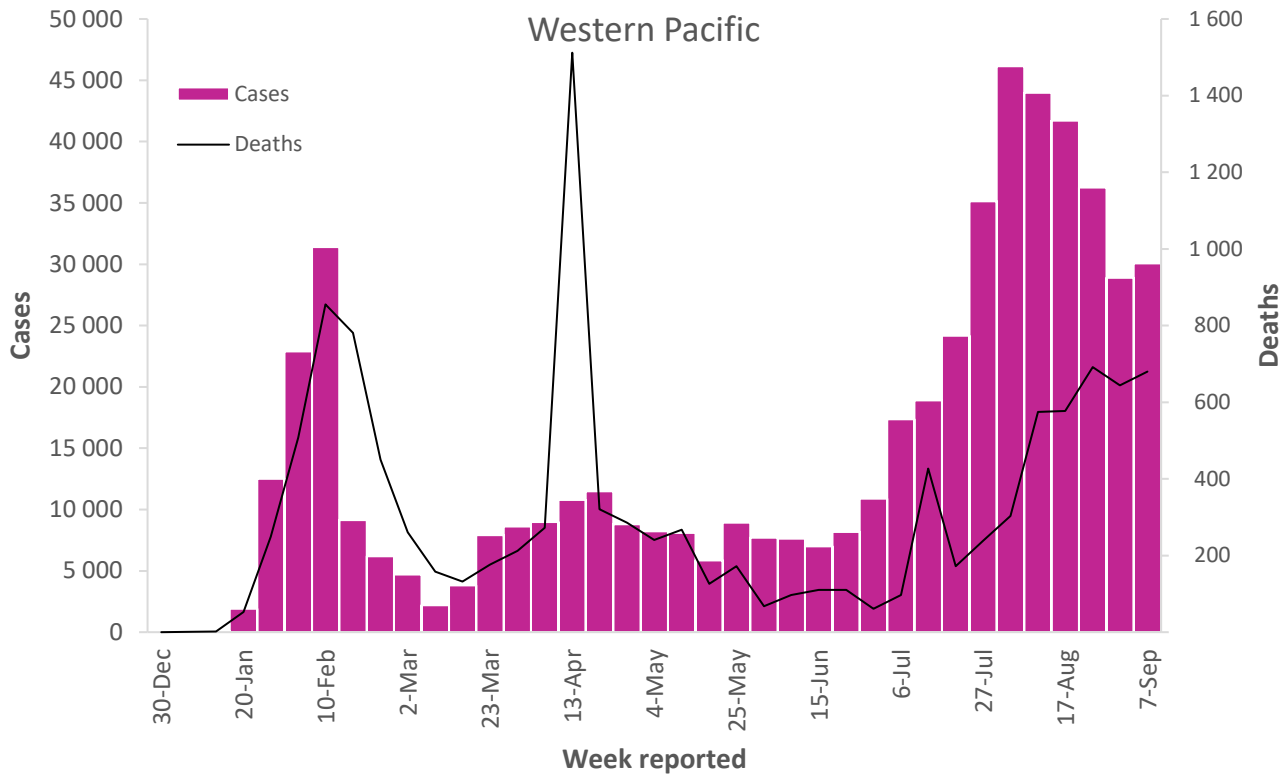


**See *data, table and figure notes*

Western Pacific Region

Overall, the Western Pacific Region has the lowest cumulative cases (278) and deaths (6) per million population. The Philippines, Japan and the Republic of Korea have the greatest number of new cases in the region; however, Singapore holds the largest number of cumulative cases per million population at 9 804. Malaysia showed an increase in weekly new cases of nearly 650%, averaging about 68 cases per day. Prior to this, Malaysia had been reporting fewer than 20 cases per day since the end of July. In the last seven days the cumulative cases per million population rose by 5% to 305 cases per million population).

Figure 8: Number of COVID-19 cases and deaths reported weekly by the WHO Western Pacific Region, data as of 13 September 2020**



**See *data, table and figure notes*

Key weekly updates

- The first meeting of the International Health Regulations (IHR 2005) Review Committee on the functioning of the IHR during the COVID-19 pandemic was held this week. WHO Director-General Dr Tedros stated that the committee would review the functioning of the IHR during the COVID-19 response, including IHR provisions related to, but not limited to, the following six areas:
    - The convening of the Emergency Committee and its working modalities, and in particular, the binary mechanism for declaring a Public Health Emergency of International Concern;
    - The international coordination and collaboration for response, including the role and functioning of national IHR focal points;
    - Outbreak alert, verification and risk assessment, information sharing and communication;
    - Additional health measures in relation to international travel;
    - Implementation and reporting of IHR core capacities, including the possibility of establishing peer review processes for capacity assessments;
    - Examining progress made on the implementation of recommendations from previous IHR review committees.
- As public health and safety measures begin to reduce COVID-19 cases to manageable levels in some countries, the epidemiological practice of contact tracing must go into full force.This becomes complicated and time-consuming very quickly, especially in the context of COVID-19, as the virus can be transmitted between people without even causing symptoms. While conventional contact tracing methods will always remain relevant, digital tools present an opportunity to optimize traditional approaches. WHO is pursuing multiple avenues at once: behind the scenes bringing together private sector, innovators and governments to scale up technology and digital inclusion; and on the ground, for example in humanitarian settings.
- In his second regular media briefing of last week, WHO Director-General Dr Tedros highlighted that COVID-19 is like no other disease in history, in that it has seen such rapid development in research. In April, together with the European Commission and severalother partners, WHO launched the Access to COVID-19 Tools (ACT) Accelerator, to catalyze the development of and equitable access to vaccines, diagnostics and therapeutics. WHO co-hosted the first ACT Accelerator Facilitation Council meeting last week. The Council reiterated that there is a need for a significant increase in funding in order for the ACT Accelerator to be able to deliver on its goals.
- The ability to confirm COVID-19 disease relies on the accurate detection of the SARS-CoV-2 virus. WHO has published interim guidance for countries who are considering the integration of rapid immunoassays into COVID-19 outbreak management programs and has also revised guidance on diagnostic testing for SARS-CoV-2 which provides more background information on clinical diagnostic algorithms and new findings from the literature and best practices.
- Surveys by UNICEF and WHO reveal that the COVID-19 pandemic has resulted in major disruptions to health services, which threaten to undo decades of hard-won progress, particularly in the number of global deaths in children under five years old, which was at its lowest point on record in 2019.

Table 2. Number of COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, as of 13 September 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per million population	Transmission classification
Africa	**33 169**	**1 116 321**	**168**	**1 007**	**23 916**	**4**	
South Africa	11 330	648 214	10 929	648	15 427	260	Community transmission
Ethiopia	6 422	63 888	556	99	996	9	Community transmission
Algeria	1 936	48 007	1 095	56	1 605	37	Community transmission
Nigeria	1 272	56 177	273	24	1 078	5	Community transmission
Uganda	1 164	4 703	103	13	52	1	Clusters of cases
Namibia	1 090	9 604	3 780	11	98	39	Community transmission
Kenya	943	35 963	669	25	619	12	Community transmission
Zambia	757	13 466	732	20	312	17	Community transmission
Côte D'Ivoire	718	18 987	720	1	120	5	Community transmission
Mozambique	699	5 040	161	9	35	1	Community transmission
Zimbabwe	671	7 508	505	18	224	15	Community transmission
Ghana	657	45 434	1 462	3	286	9	Community transmission
Cameroon	563	20 167	760	0	415	16	Community transmission
Madagascar	468	15 737	568	11	210	8	Community transmission
Cabo Verde	436	4 711	8 473	2	44	79	Clusters of cases
Angola	400	3 335	101	15	132	4	Clusters of cases
Senegal	312	14 193	848	4	293	17	Community transmission
Congo	306	4 934	894	6	88	16	Community transmission
Guinea	298	10 020	763	2	63	5	Community transmission
Gambia	256	3 376	1 397	3	102	42	Community transmission

Botswana	250	2 252	958	2	10	4	Clusters of cases
Democratic Republic of The Congo	236	10 384	116	3	262	3	Community transmission
Eswatini	231	5 050	4 353	4	98	84	Community transmission
Rwanda	216	4 565	352	4	22	2	Clusters of cases
Mauritania	140	7 274	1 564	1	161	35	Community transmission
Togo	112	1 555	188	6	37	4	Community transmission
Lesotho	97	1 245	581	2	33	15	Clusters of cases
Burkina Faso	91	1 499	72	1	56	3	Community transmission
Mali	83	2 916	144	2	128	6	Community transmission
Malawi	58	5 669	296	2	177	9	Community transmission
Sierra Leone	53	2 096	263	1	72	9	Community transmission
Chad	49	1 083	66	3	80	5	Community transmission
Gabon	42	8 643	3 883	0	53	24	Community transmission
South Sudan	34	2 578	230	1	49	4	Community transmission
Eritrea	31	361	102	0	0	<1	Sporadic cases
Guinea-Bissau	30	2 275	1 156	1	39	20	Community transmission
Benin	29	2 242	185	0	40	3	Community transmission
Equatorial Guinea	24	4 996	3 561	0	83	59	Community transmission
Central African Republic	20	4 749	983	0	62	13	Community transmission
Burundi	10	472	40	0	1	<1	Clusters of cases
Comoros	8	456	524	0	7	8	Community transmission
Sao Tome and Principe	8	906	4 134	0	15	68	Clusters of cases
Liberia	5	1 311	259	0	82	16	Community transmission

Mauritius	5	361	284	0	10	8	Sporadic cases
Niger	1	1 178	49	0	69	3	Clusters of cases
Seychelles	0	135	1 373	0	0	<1	Sporadic cases
United Republic of Tanzania	0	509	9	0	21	<1	Community transmission
Territories[ii]							
Réunion	608	2 723	3 041	4	10	11	Clusters of cases
Mayotte	0	3 374	12 367	0	40	147	Clusters of cases
Americas	**697 780**	**14 699 174**	**2 182**	**24 626**	**508 705**	**75**	
United States of America	242 694	6 386 832	19 295	5 146	191 809	579	Community transmission
Brazil	189 332	4 282 164	20 146	4 875	130 396	613	Community transmission
Argentina	73 823	535 705	11 853	1 521	11 206	248	Community transmission
Colombia	52 026	702 088	13 798	1 630	22 518	443	Community transmission
Peru	39 822	716 670	21 736	916	30 470	924	Community transmission
Mexico	35 209	658 299	5 106	3 332	70 183	544	Community transmission
Chile	12 232	432 666	22 633	344	11 895	622	Community transmission
Costa Rica	8 289	53 969	10 594	114	583	114	Community transmission
Venezuela (Bolivarian Republic of)	7 690	58 663	2 063	56	468	16	Community transmission
Paraguay	5 858	26 512	3 717	98	496	70	Community transmission
Bolivia (Plurinational State of)	5 592	125 172	10 723	1 907	7 250	621	Community transmission
Panama	4 734	100 330	23 253	77	2 140	496	Community transmission
Canada	4 502	135 626	3 593	22	9 163	243	Community transmission
Guatemala	4 177	81 658	4 558	104	2 949	165	Community transmission
Dominican Republic	3 456	102 232	9 424	101	1 941	179	Community transmission
Honduras	2 251	66 049	6 669	74	2 058	208	Community transmission
Trinidad and Tobago	750	2 892	2 066	18	50	36	Community transmission

El Salvador	645	26 851	4 140	30	782	121	Community transmission
Jamaica	547	3 511	1 186	10	40	14	Community transmission
Bahamas	398	2 874	7 308	12	67	170	Clusters of cases
Cuba	355	4 653	411	8	108	10	Clusters of cases
Guyana	347	1 763	2 241	8	52	66	Clusters of cases
Belize	283	1 435	3 609	4	19	48	Community transmission
Suriname	277	4 529	7 720	18	93	159	Community transmission
Haiti	131	8 457	742	4	216	19	Community transmission
Uruguay	120	1 773	510	0	45	13	Clusters of cases
Nicaragua	104	3 877	585	3	144	22	Community transmission
Saint Vincent and the Grenadines	3	64	577	0	0	<1	Sporadic cases
Barbados	2	180	626	0	7	24	Clusters of cases
Dominica	2	24	333	0	0	<1	Clusters of cases
Saint Lucia	1	27	147	0	0	<1	Sporadic cases
Antigua and Barbuda	0	95	970	0	3	31	Clusters of cases
Grenada	0	24	213	0	0	<1	No cases
Saint Kitts and Nevis	0	17	320	0	0	<1	No cases
Ecuador	- 3 313	114 732	6 503	4 112	10 836	614	Community transmission
Territories[ii]							
Puerto Rico	2 600	37 092	12 965	71	535	187	Community transmission
Guadeloupe	1 717	3 080	7 698	4	24	60	Community transmission
Aruba	527	2 819	26 404	3	16	150	Community transmission
French Guiana	199	9 521	31 877	1	63	211	Community transmission

Martinique	181	939	2 502	0	18	48	Community transmission
Curaçao	57	135	823	0	1	6	Community transmission
Turks and Caicos Islands	50	641	16 556	0	5	129	Clusters of cases
United States Virgin Islands	44	1 211	11 597	3	19	182	Community transmission
Sint Maarten	26	530	12 359	0	19	443	Community transmission
Saint Martin	17	256	6 622	0	6	155	Community transmission
Bonaire, Sint Eustatius and Saba	7	25	953	0	0	<1	Sporadic cases
Saint Pierre and Miquelon	5	11	1 898	0	0	<1	Sporadic cases
British Virgin Islands	3	66	2 183	0	1	33	Clusters of cases
Cayman Islands	3	208	3 165	0	1	15	Sporadic cases
Saint Barthélemy	3	21	2 124	0	0	<1	Sporadic cases
Bermuda	2	177	2 842	0	9	145	Sporadic cases
Anguilla	0	3	200	0	0	<1	No cases
Falkland Islands (Malvinas)	0	13	3 732	0	0	<1	No cases
Montserrat	0	13	2 601	0	1	200	No cases
Eastern Mediterranean	**105 430**	**2 101 676**	**299**	**2302**	**55 012**	**8**	
Iraq	30 059	286 778	7 130	519	7 941	197	Community transmission
Iran (Islamic Republic of)	15 274	399 940	4 762	875	23 029	274	Community transmission
Morocco	14 275	84 435	2 288	224	1 553	42	Clusters of cases
United Arab Emirates	5 378	78 849	7 972	11	399	40	Community transmission
Libya	5 254	22 348	3 252	82	354	52	Community transmission
Kuwait	5 248	94 211	22 061	18	558	131	Community transmission
Saudi Arabia	5 118	325 050	9 337	191	4 240	122	Clusters of cases
Bahrain	4 815	59 586	35 018	15	211	124	Clusters of cases
Lebanon	3 658	23 669	3 468	52	239	35	Community transmission

Pakistan	2 972	301 481	1 365	37	6 379	29	Clusters of cases
Oman	1 957	88 337	17 299	57	762	149	Community transmission
Tunisia	1 859	6 635	561	14	107	9	Clusters of cases
Qatar	1 659	121 523	42 180	3	205	71	Community transmission
Egypt	1 144	100 856	986	116	5 627	55	Clusters of cases
Jordan	709	3 062	300	6	22	2	Clusters of cases
Syrian Arab Republic	402	3 506	200	22	152	9	Community transmission
Afghanistan	243	38 641	993	8	1 420	36	Clusters of cases
Sudan	63	13 470	307	2	834	19	Community transmission
Somalia	44	3 376	212	0	98	6	Sporadic cases
Yemen	26	2 013	67	10	583	20	Community transmission
Djibouti	7	5 394	5 460	1	61	62	Sporadic cases
Territories[ii]							
Occupied Palestinian territory	5 266	38 516	7 550	39	238	47	Clusters of cases
Europe	**291 387**	**4 796 426**	**702**	**3 050**	**225 494**	**33**	
France	53 471	353 986	5 423	203	30 749	471	Community transmission
Spain	45 475	566 326	12 113	220	29 747	636	Clusters of cases
Russian Federation	37 306	1 062 811	7 283	758	18 578	127	Clusters of cases
The United Kingdom	21 010	365 178	5 379	74	41 623	613	Community transmission
Ukraine	18 441	154 335	3 529	332	3 178	73	Community transmission
Turkey	11 407	289 635	3 434	379	6 999	83	Community transmission
Israel	10 878	142 213	16 430	46	1 068	123	Community transmission
Italy	9 959	286 297	4 735	69	35 603	589	Clusters of cases

Germany	9 443	259 428	3 096	24	9 349	112	Clusters of cases
Romania	8 522	102 386	5 322	277	4 127	215	Community transmission
Czechia	7 649	35 401	3 306	22	453	42	Clusters of cases
Netherlands	7 147	80 937	4 724	12	6 244	364	Community transmission
Hungary	3 933	11 825	1 224	9	633	66	Community transmission
Austria	3 895	32 951	3 659	19	754	84	Community transmission
Uzbekistan	3 566	47 042	1 406	45	388	12	Clusters of cases
Portugal	3 367	63 310	6 209	22	1 860	182	Clusters of cases
Poland	3 263	73 650	1 946	69	2 182	58	Community transmission
Republic of Moldova	3 241	42 714	10 589	55	1 118	277	Community transmission
Switzerland	2 746	46 595	5 384	11	1 742	201	Community transmission
Belgium	2 584	91 443	7 890	13	9 919	856	Community transmission
Kazakhstan	2 460	136 384	7 263	70	1 948	104	Clusters of cases
Denmark	1 669	19 216	3 318	2	629	109	Community transmission
Greece	1 650	13 036	1 251	22	302	29	Clusters of cases
Croatia	1 629	13 368	3 256	21	218	53	Community transmission
Sweden	1 520	86 505	8 565	11	5 846	579	Community transmission
Belarus	1 312	73 975	7 829	39	744	79	Community transmission
Ireland	1 196	30 730	6 223	6	1 783	361	Clusters of cases
Montenegro	1 101	6 706	10 677	10	118	188	Clusters of cases
Albania	1 083	11 185	3 887	18	330	115	Clusters of cases
Armenia	1 079	45 862	15 477	19	916	309	Community transmission
Azerbaijan	980	38 172	3 765	14	559	55	Clusters of cases
Bulgaria	937	17 891	2 575	52	717	103	Clusters of cases
Slovakia	927	5 453	999	1	38	7	Clusters of cases

Bosnia and Herzegovina	820	22 254	6 783	24	668	204	Community transmission
Norway	746	11 866	2 189	1	265	49	Clusters of cases
North Macedonia	696	15 694	7 533	32	646	310	Clusters of cases
Georgia	577	2 227	558	0	19	5	Community transmission
Kyrgyzstan	478	44 881	6 879	2	1 063	163	Clusters of cases
Slovenia	472	3 603	1 733	1	131	63	Clusters of cases
Serbia	451	32 300	4 638	8	731	105	Community transmission
Luxembourg	305	7 159	11 437	0	124	198	Community transmission
Finland	287	8 512	1 536	2	337	61	Community transmission
Tajikistan	257	9 014	945	2	72	8	Pending
Lithuania	256	3 296	1 211	0	86	32	Community transmission
Malta	232	2 247	5 089	1	15	34	Sporadic cases
Estonia	165	2 655	2 001	0	64	48	Clusters of cases
Andorra	129	1 344	17 395	0	53	686	Community transmission
Latvia	39	1 464	776	0	35	19	Clusters of cases
Iceland	26	2 162	6 336	0	10	29	Community transmission
Monaco	22	169	4 306	0	1	25	Sporadic cases
Cyprus	16	1 523	1 261	0	21	17	Clusters of cases
San Marino	6	741	21 834	0	42	1 238	Community transmission
Liechtenstein	1	109	2 858	0	1	26	Sporadic cases
Holy See	0	12	14 833	0	0	<1	Sporadic cases
Territories[ii]							
Kosovo[1]	539	14 523	7 806	33	579	311	Community transmission

Gibraltar	18	323	9 587	0	0	<1	Clusters of cases
Faroe Islands	5	418	8 554	0	0	<1	Sporadic cases
Guernsey	1	253	4 003	0	13	206	Community transmission
Isle of Man	1	337	3 963	0	24	282	No cases
Greenland	0	14	247	0	0	<1	No cases
Jersey	- 4	380	3 493	0	32	294	Community transmission
South-East Asia	**687 119**	**5 377 062**	**933**	**8 991**	**92 391**	**16**	
India	640 545	4 754 356	3 445	7 960	78 586	57	Clusters of cases
Indonesia	24 081	214 746	785	710	8 650	32	Community transmission
Bangladesh	12 479	336 044	2 040	255	4 702	29	Community transmission
Nepal	7 843	53 120	1 823	56	336	12	Clusters of cases
Myanmar	1 477	2 796	51	8	16	<1	Clusters of cases
Maldives	566	9 052	16 746	2	31	57	Clusters of cases
Sri Lanka	83	3 204	150	0	12	1	Clusters of cases
Thailand	29	3 473	50	0	58	1	Clusters of cases
Bhutan	16	244	316	0	0	<1	Sporadic cases
Timor-Leste	0	27	20	0	0	<1	Sporadic cases
Western Pacific	**30 074**	**546 552**	**94**	**680**	**11 886**	**2**	
Philippines	23 293	257 863	2 353	502	4 292	39	Community transmission
Japan	3 799	75 218	595	82	1 439	11	Clusters of cases
Republic of Korea	999	22 176	433	24	358	7	Clusters of cases
Malaysia	477	9 868	305	0	128	4	Clusters of cases
Australia	400	26 607	1 043	55	803	31	Clusters of cases
Singapore	375	57 357	9 804	0	27	5	Clusters of cases
China	149	90 666	62	6	4 741	3	Clusters of cases

New Zealand	25	1 446	300	0	24	5	Clusters of cases
Papua New Guinea	20	508	57	0	5	1	Community transmission
Viet Nam	11	1 060	11	0	35	<1	Clusters of cases
Cambodia	1	275	16	0	0	<1	Sporadic cases
Fiji	1	32	36	0	2	2	Sporadic cases
Lao People'S Democratic Republic	1	23	3	0	0	<1	Sporadic cases
Mongolia	1	311	95	0	0	<1	Sporadic cases
Brunei Darussalam	0	145	331	0	3	7	Sporadic cases
Territories[ii]							
French Polynesia	300	1 020	3 631	2	2	7	Sporadic cases
Guam	220	1 891	11 204	9	25	148	Clusters of cases
Northern Mariana Islands (Commonwealth of The)	2	60	1 042	0	2	35	Pending
New Caledonia	0	26	91	0	0	<1	Sporadic cases
Subtotal for all regions	**1 844 959**	**28 637 211**	**3 690**	**40 656**	**917 404**	**118**	
Other[†]	0	741		0	13		
Grand total	**1 844 959**	**28 637 952**	**3 690**	**40 656**	**917 417**	**118**	

**See *data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion critiera, testing strategies, reporting practice, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/ areas report combined probable and laboratory-confirmed cases; efforts are underway to identify these for notation in the data table. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas; classification is based on the highest category reported within a country/territory/area. Categories:

- No cases: with no confirmed cases;
- Sporadic cases: with one or more cases, imported or locally detected;
- Clusters of cases: experiencing cases, clustered in time, geographic location and/or by common exposures;
- Community transmission: experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel laboratory surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area;
- Pending: transmission classification has not been reported to WHO.

[ii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

[†] Other: includes cases reported from international conveyances.

Country, territory, or area-specific notes, updates and errata

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

World Health Organization

Coronavirus disease (COVID-19)

Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 10 am CEST 6 September 2020

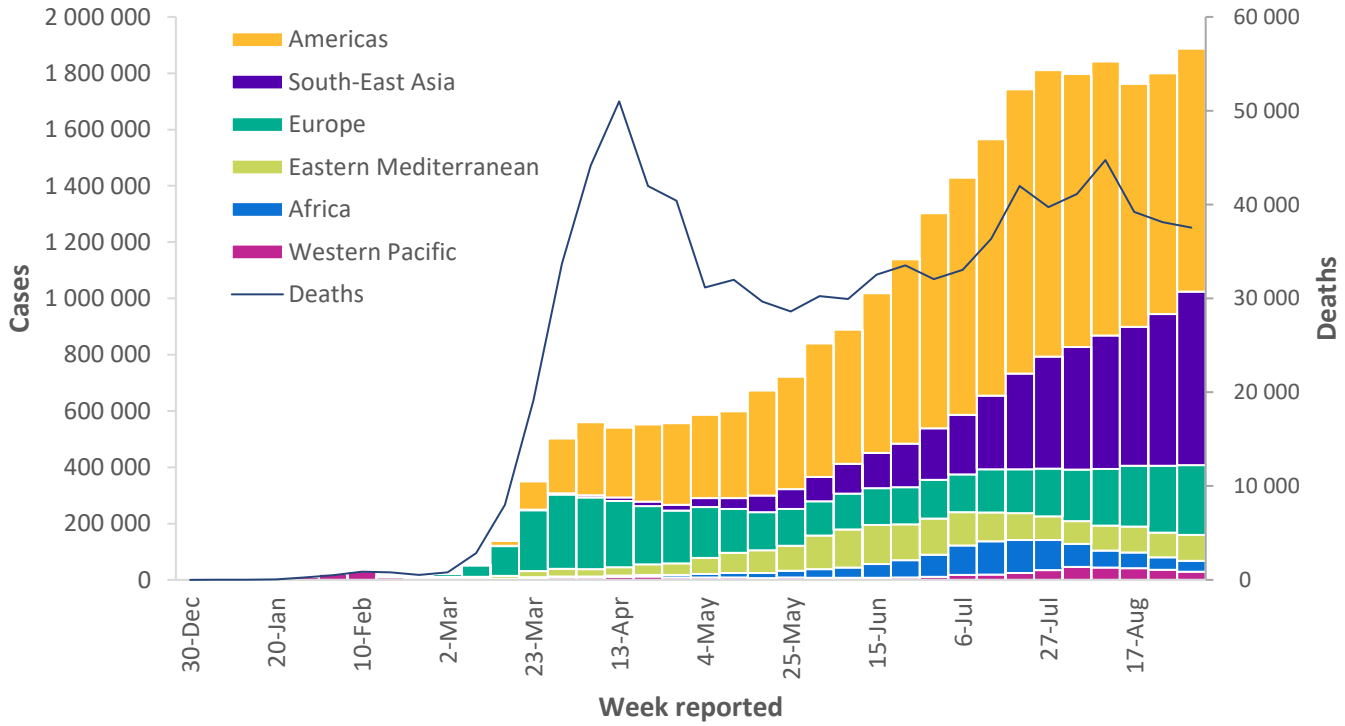
For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- Rolling updates on COVID-19
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

Cumulatively, nearly 27 million COVID-19 cases and 900 000 deaths have been reported to WHO to date. Over 1.8 million new cases and 37 000 new deaths were reported for the week ending 6 September, a 5% increase in the number of cases and a 2% decrease in the number of deaths compared to the previous week (24 to 30 August) (Figure 1).

Figure 1: Number of COVID-19 cases reported weekly by WHO region, and total deaths, 30 December to 6 September 2020**



**See *data table and figure notes*.

The WHO South-East Asia Region continued to show the highest increase in new COVID-19 cases in the past week, compared to the previous week, with over 600 000 new cases reported. A weekly increase in the number of new reported cases was seen in the European and Eastern Mediterranean Regions, while the African and Western Pacific Regions declined in both cases and deaths compared with last week. The Region of the Americas has seen a 1% increase in reported cases, but a 4% decrease in deaths, and continues to carry the highest burden of the disease globally, accounting for nearly half of all new cases reported in the past seven days.

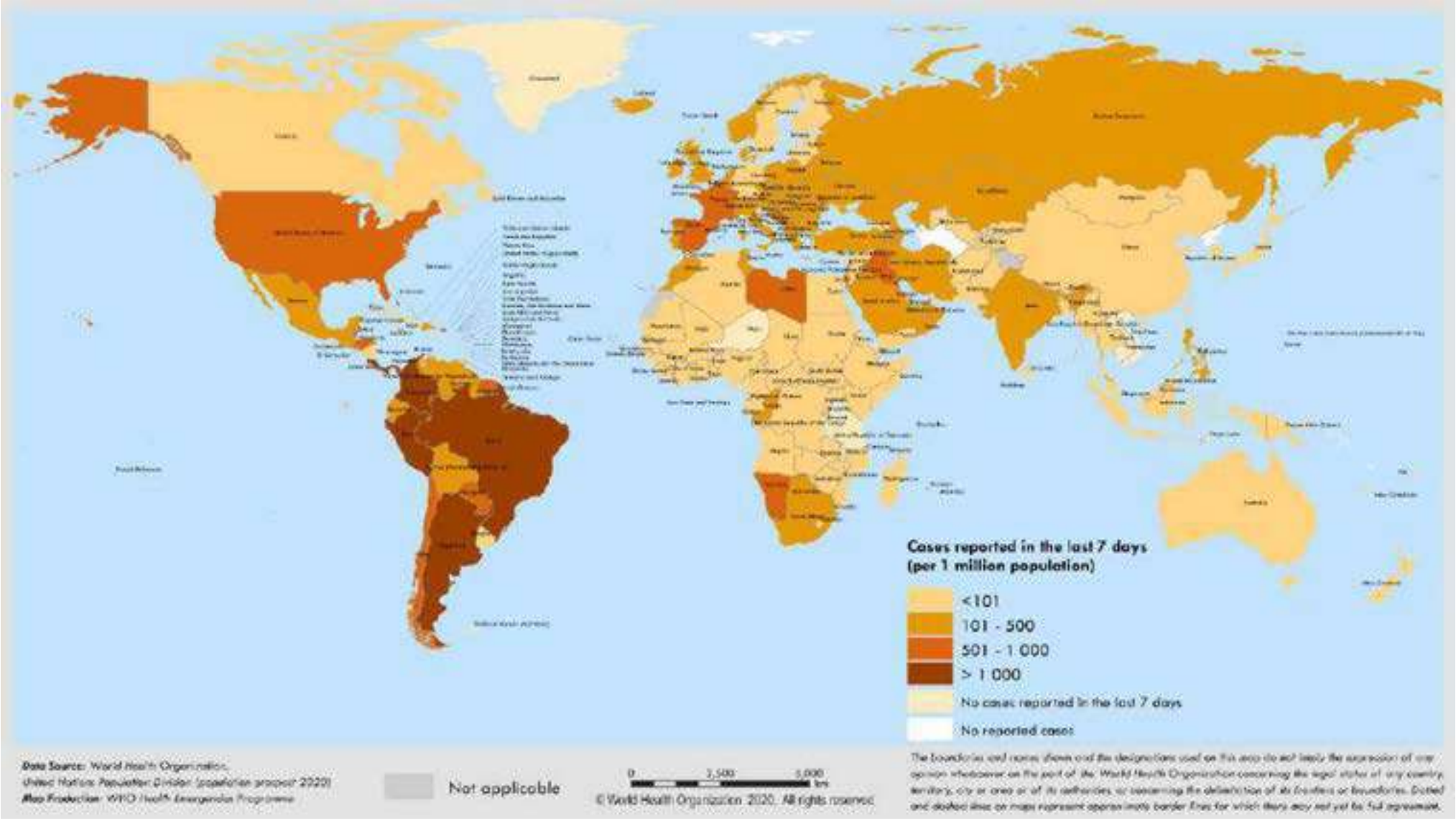
Region specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, Western-Pacific Region.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, data as of 6 September 2020**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days*	Cumulative deaths (%)
Americas	862 478 (46%)	1%	14 001 390 (52%)	22 325 (59%)	-4%	484 079 (55%)
South-East Asia	616 795 (33%)	14%	4 689 943 (18%)	8 124 (22%)	4%	83 400 (10%)
Europe	247 125 (13%)	4%	4 475 267 (17%)	3 015 (8%)	9%	222 279 (25%)
Eastern Mediterranean	92 699 (5%)	6%	1 996 246 (8%)	2 244 (6%)	-1%	52 710 (6%)
Africa	38 639 (2%)	-12%	1 083 152 (4%)	1 207 (3%)	-14%	22 929 (3%)
Western Pacific	28 907 (2%)	-20%	516 478 (2%)	644 (2%)	-7%	11 206 (1%)
† Other	-	-	741 (<1%)	-	-	13 (<1%)
Global	**1 886 643 (100%)**	**5%**	**26 763 217 (100%)**	**37 559 (100%)**	**-2%**	**876 616 (100%)**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior.*
***See data, table and figure notes*

Figure 2. COVID-19 cases per 1 million population reported in the last seven days by countries,territories and areas, 31 August to 6 September 2020**



**See *data, table and figure notes*.

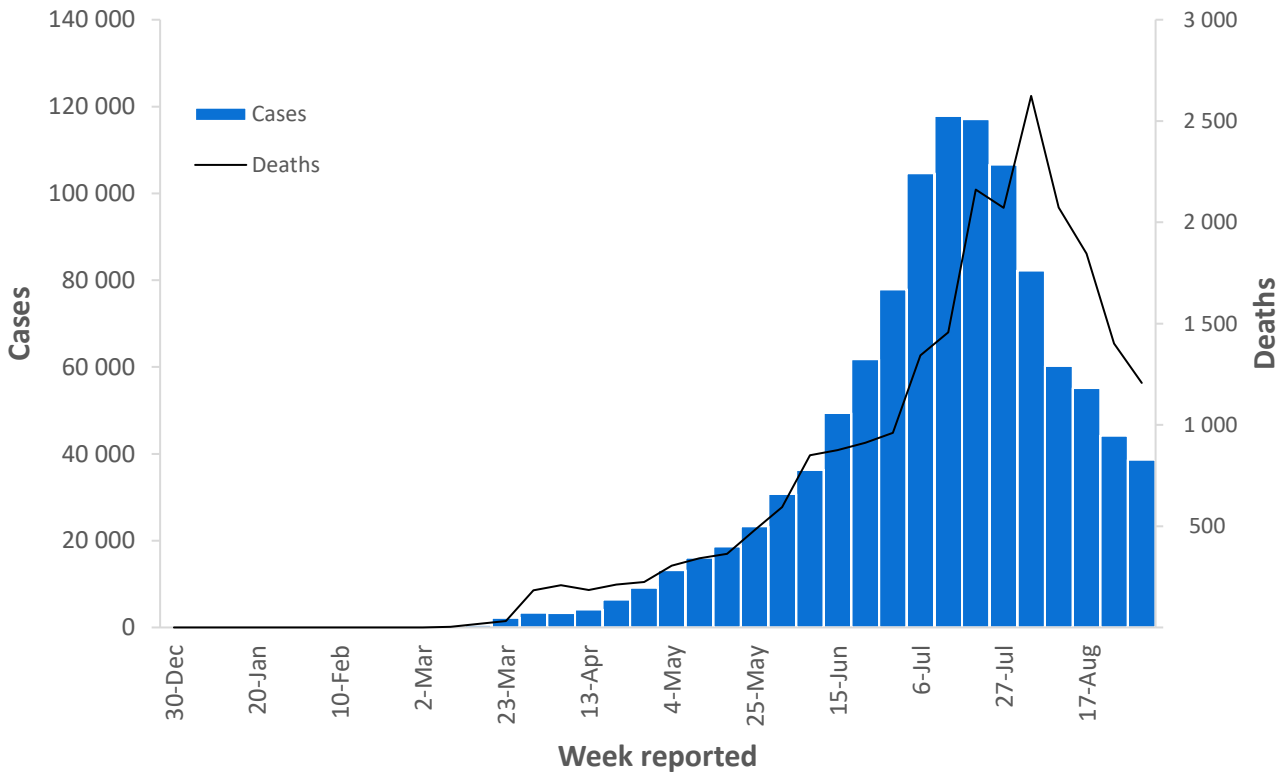
Situation by WHO Region

African Region

While cases in South Africa have declined this week, the country continues to report the highest number of cases in the region, accounting for 37% of all new cases. Other countries reporting a high number of cases include Ethiopia, Algeria, Namibia and Kenya.

While cases in Nigeria have declined by 35% this week, compared to the previous week, the number of reported deaths increased by 200%.

Figure 3: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, data as of 6 September 2020**



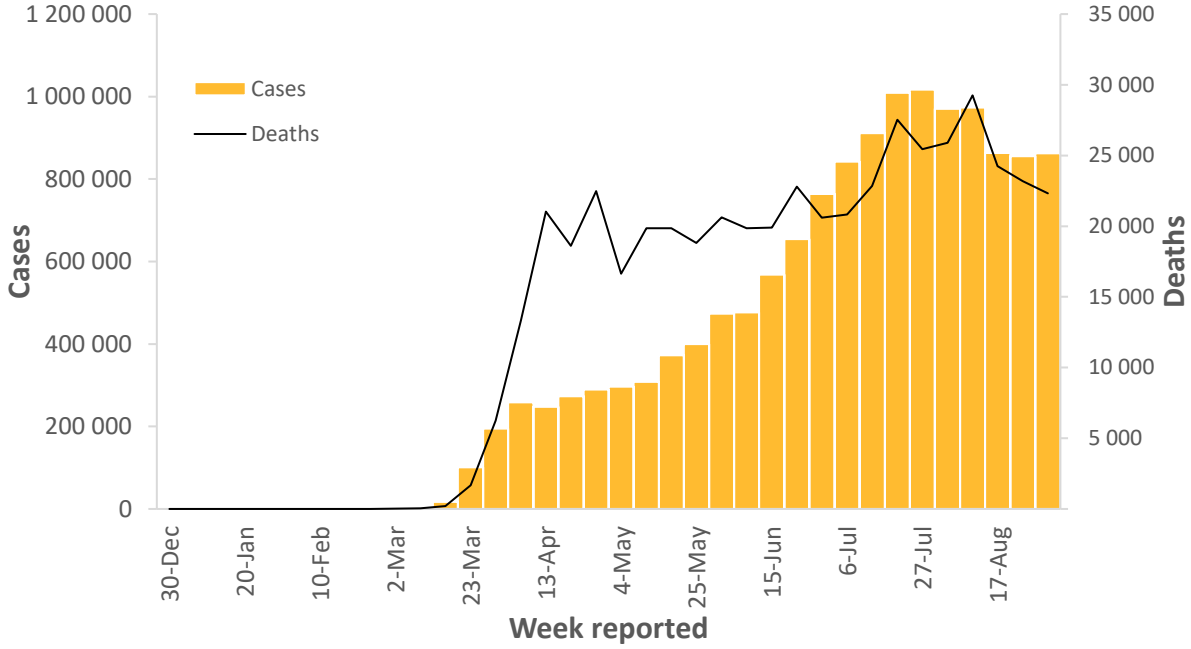
**See *data, table and figure notes*

Region of the Americas

The United States of America and Brazil account for nearly three quarters of all COVID-19 cases in the Americas. Argentina, Colombia, and Peru account for the next largest proportion in new cases in the region.

In the Bahamas, , public health and social measures have been extended from mid-August as the island continues to experience an increase in cases (18%) and deaths (15%).

Figure 4: Number of COVID-19 cases and deaths reported weekly by Region of the Americas, data as of 6 September 2020**



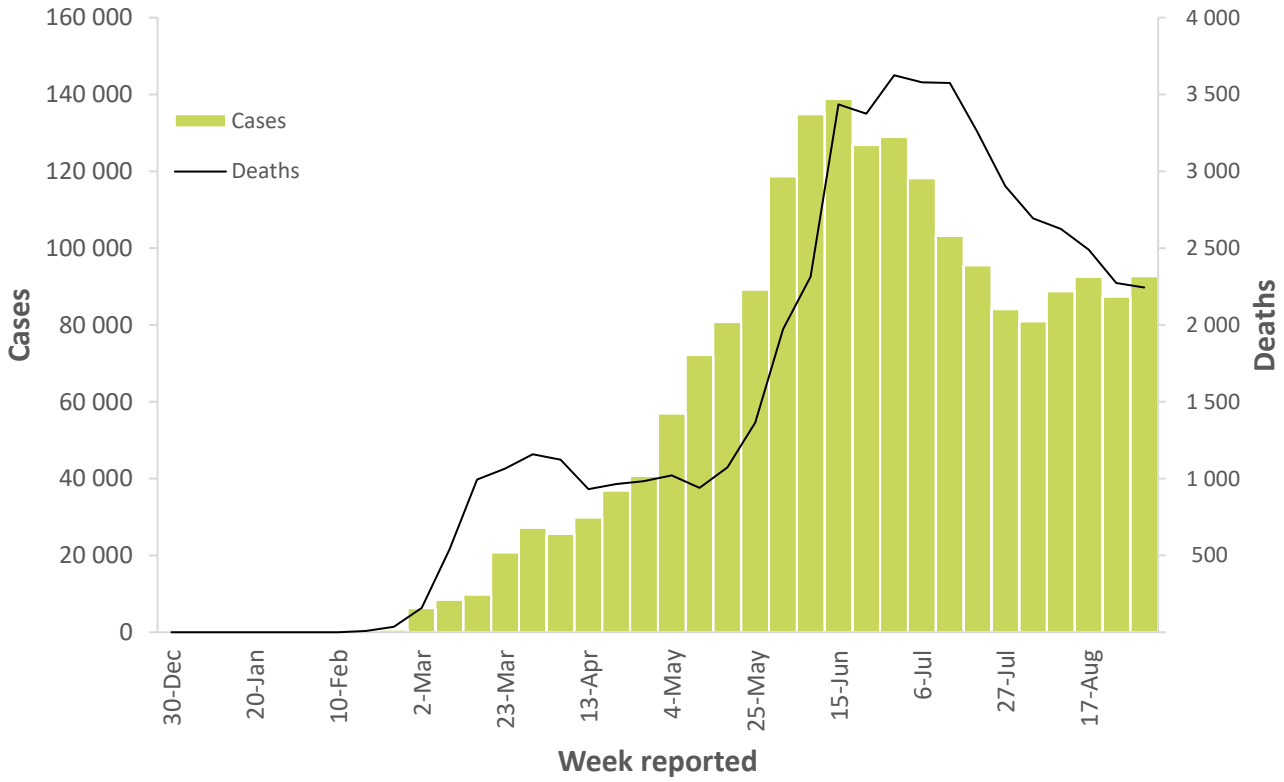
**See *data, table and figure notes*

Eastern Mediterranean Region

The highest numbers of new cases in the region have been seen in Iraq, Iran, Morocco, Saudi Arabia and Kuwait, and Iraq continues to report the highest number of new COVID-19 cases.

In Afghanistan, cases have increased by 77% this week compared to last week, although new deaths are down by 33% as compared to last week. In Bahrain, cases have increased by nearly 44% in the past seven days as have cases in Tunisia where trends show an increase in cases since the country reopened its borders at the end of June.

Figure 5: Number of COVID-19 cases and deaths reported weekly by Eastern Mediterranean Region, data as of 6 September 2020**



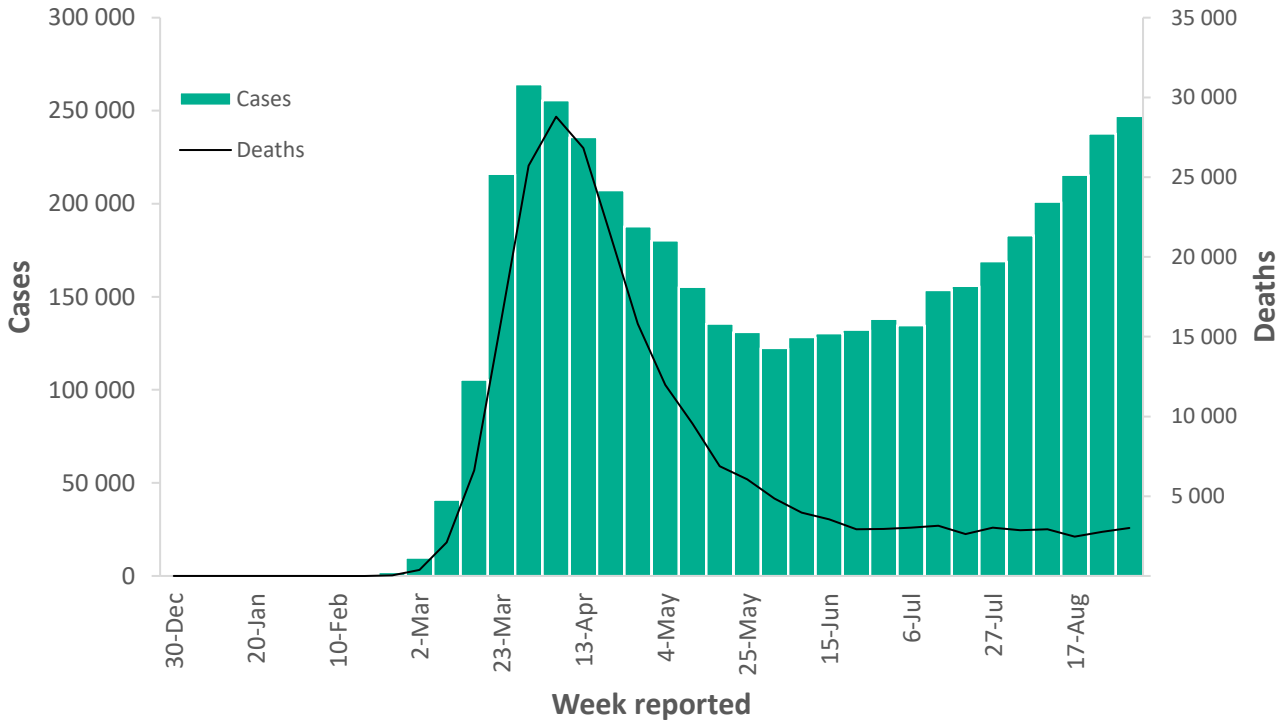
**See *data, table and figure notes*

European Region

In the European Region, France reported the highest number of new cases in the past seven days with nearly 44 000 cases followed closely by Spain at just over 40 000. Russia and Ukraine also continue to report a high number of cases. In Ukraine, cases are continuing to rise, with a 19% increase in the past seven days. The government has extended the public health and social measures until the end of October.

While cases in Italy have continued to show an increase, this week's 9% increase was substantially lower than last week's nearly 85% increase.

Figure 6: Number of COVID-19 cases and deaths reported weekly by European Region, data as of 6 September 2020**

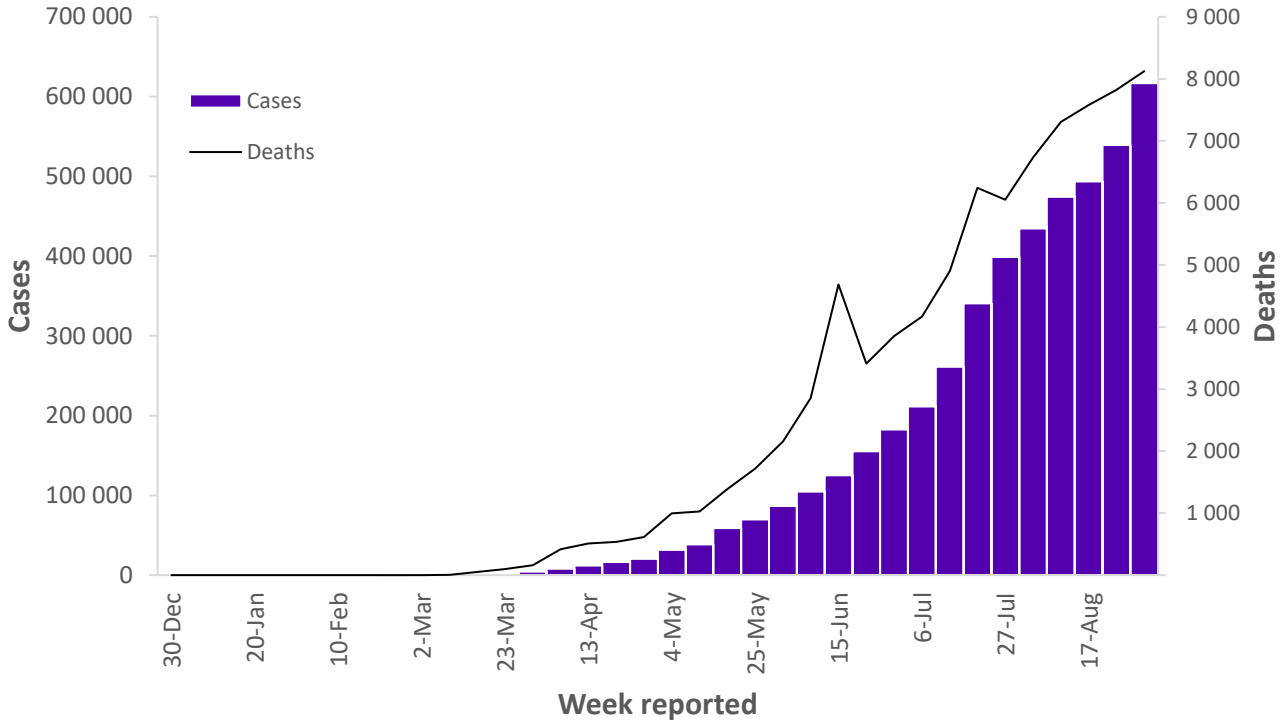


**See *data, table and figure notes*

South-East Asia Region

India continues to report a very high number of new cases, reaching nearly 600 000 new cases in the past seven days, with an average of approximately 81 582 cases per day, the highest numbers of daily new cases in the past week. In Myanmar, cases have shown a marked increase of nearly 87% in the past seven days.

Figure 7: Number of COVID-19 cases and deaths reported weekly by South-East Asia Region, data as of 6 September 2020**

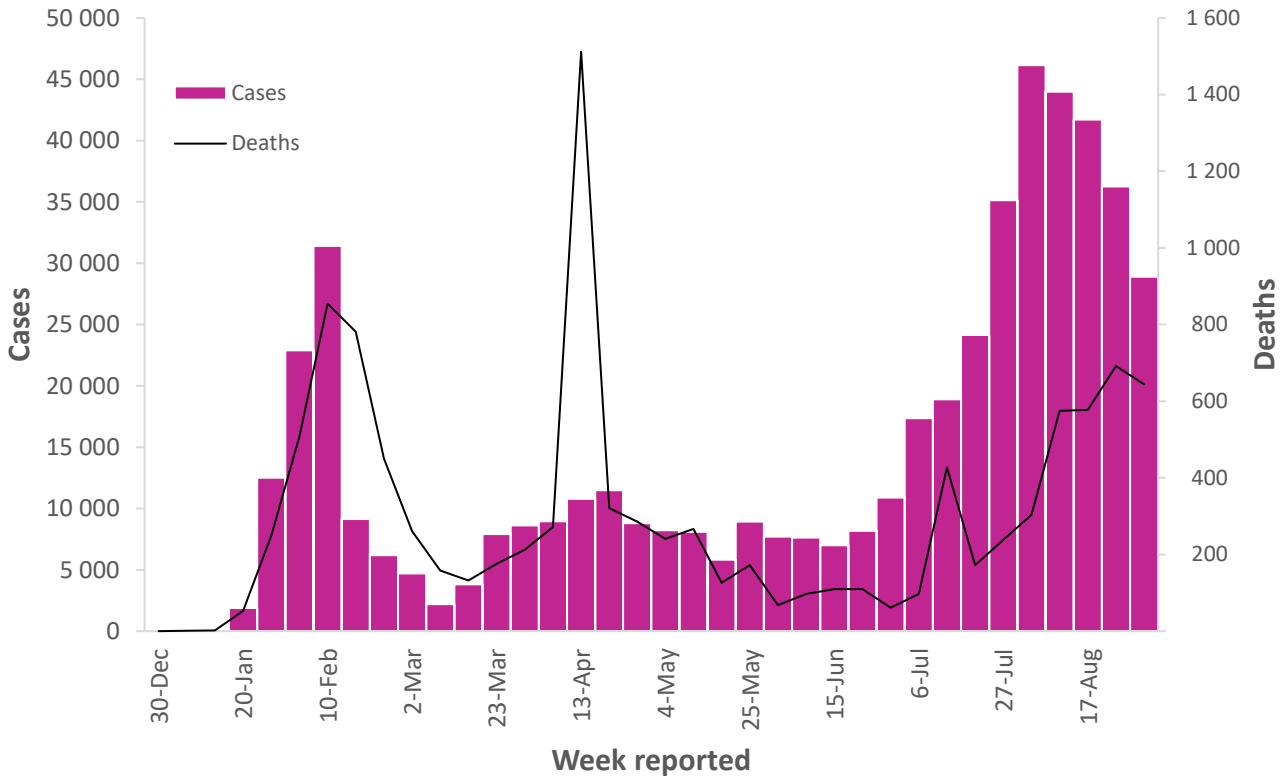


**See *data, table and figure notes*

Western Pacific Region

The three countries reporting the highest number of new cases in the Western Pacific Region are the Philippines, Japan and Republic of Korea. However, the Philippines have seen a decrease in new cases in the past week compared to the previous week. French Polynesia has seen an increase of just over 29% in cases in the past seven days; while stricter containment rules were imposed last month, both the government and the French High Commission ruled out more stringent public health and social measures, with schools set to reopen on 7 September.

Figure 8: Number of COVID-19 cases and deaths reported weekly by Western Pacific Region, data as of 6 September 2020**



**See *data, table and figure notes*

Key weekly updates

- WHO Director-General Dr Tedros, in his regular media briefing on Friday, spelled out four essential things that all countries, communities and individuals must focus on to rein in COVID-19:
    - Prevent amplifying events. COVID-19 spreads very efficiently among clusters of people;
    - Reduce deaths by protecting vulnerable groups, including older people, those with underlying conditions and essential workers;
    - Empower people: individuals must play their part by taking the measures we know work to protect themselves and others – stay at least one metre away from others, clean hands regularly, practise respiratory etiquette, and wear a mask as recommended; and
    - Governments must take tailored actions to find, isolate, test and care for cases, and trace and quarantine contacts.
- WHO has published guidance on the use of corticosteroids in the treatment of patients with COVID-19. Based on current evidence, two recommendations are made: a strong recommendation for systemic corticosteroid therapy for 7 to 10 days in patients with severe and critical COVID-19, and a conditional recommendation not to use corticosteroid therapy in patients with nonsevere COVID-19.
- WHO has also published guidance for individuals who tend to the bodies of persons who have died of suspected or confirmed COVID-19. The document updates guidance issued on 24 March with the following new or modified content: clarification of body bag requirements; clarification of personal protective equipment (PPE) requirements during autopsies; updated ventilation requirements during autopsy.
- At the first meeting of the Technical Advisory Group on Behavioural Insights and Sciences for Health, Dr Tedros said "The COVID-19 pandemic has taught the world that public health agencies and experts need a better understanding of how people and societies behave and make decisions in relation to their health". The group brings together some 21 advisors representing a variety of countries and expertise in related disciplines.
- Many parents, educators and children themselves have concerns and anxieties about going to school during these times. WHO/Europe and the Ministry of Health, Italy, have released a joint statement on schooling during the COVID-19 pandemic, discussing some of the measures that can be considered for risk reduction in school settings. These include: protective measures, such as masks, hand hygiene, and social distancing; specific policies for at-risk children; and online learning.
- While the race to find safe and effective COVID-19 vaccines continues, African countries are signing up to a ground-breaking initiative, which aims to secure at least 220 million doses of vaccine for the continent, once licensed and approved. All 54 countries on the continent have expressed interest in COVAX, a global initiative which is co-led by the Coalition for Epidemic Preparedness Innovations (CEPI), Gavi, the Vaccine Alliance (Gavi) and the World Health Organization (WHO). The European Commission has joined the COVAX Facility, and Dr Tedros thanked the Commission for its contribution of 400 million euros.
- WHO has launched an appeal for at least US$76 million to support Lebanon in the wake of the blasts four weeks ago, which left more than 6,500 people injured, 300,000 people homeless, and severely damaged critical health infrastructure and medical supplies. Any individual or organization can contribute through the WHO Foundation.

Table 2. Number of COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, African Region, data as of 6 September 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Africa	**38639**	**1083152**	**163**	**1207**	**22929**	**3**	
South Africa	14 333	636 884	10 738	798	14 779	249	Community transmission
Ethiopia	7 812	57 466	500	127	897	8	Community transmission
Algeria	2 289	46 071	1 051	58	1 549	35	Community transmission
Namibia	1 398	8 514	3 351	18	87	34	Community transmission
Kenya	1 226	35 020	651	22	594	11	Community transmission
Nigeria	1 178	54 905	266	43	1 054	5	Community transmission
Ghana	828	44 777	1 441	13	283	9	Community transmission
Zambia	807	12 709	691	8	292	16	Community transmission
Uganda	783	3 539	77	11	39	1	Clusters of cases
Congo	649	4 628	839	24	102	18	Community transmission
Mozambique	581	4 341	139	4	26	1	Community transmission
Rwanda	506	4 349	336	2	18	1	Clusters of cases
Cabo Verde	497	4 275	7 689	3	42	76	Clusters of cases
Madagascar	478	15 269	551	9	199	7	Community transmission
Guinea	471	9 722	740	2	61	5	Community transmission
Cameroon	462	19 604	738	4	415	16	Community transmission
Zimbabwe	431	6 837	460	10	206	14	Community transmission
Senegal	425	13 881	829	7	289	17	Community transmission
Angola	384	2 935	89	10	117	4	Clusters of cases

Côte D'Ivoire	376	18 269	693	4	119	5	Community transmission
Botswana	369	2 002	851	2	8	3	Clusters of cases
Gambia	323	3 120	1 291	3	99	41	Community transmission
Eswatini	309	4 819	4 154	3	94	81	Community transmission
Democratic Republic of The Congo	155	10 148	113	4	259	3	Community transmission
Mauritania	122	7 134	1 534	2	160	34	Community transmission
Gabon	96	8 601	3 864	0	53	24	Community transmission
Guinea-Bissau	96	2 245	1 141	5	38	19	Community transmission
Malawi	83	5 611	293	1	175	9	Community transmission
Lesotho	82	1 148	536	0	31	14	Clusters of cases
Mali	76	2 833	140	0	126	6	Community transmission
Benin	68	2 213	183	0	40	3	Community transmission
Togo	53	1 443	174	4	31	4	Community transmission
Burkina Faso	51	1 408	67	0	55	3	Community transmission
Equatorial Guinea	31	4 972	3 544	0	83	59	Community transmission
Central African Republic	29	4 729	979	1	62	13	Community transmission
Chad	26	1 034	63	0	77	5	Community transmission
South Sudan	25	2 544	227	1	48	4	Community transmission
Comoros	25	448	515	0	7	8	Community transmission
Sierra Leone	24	2 043	256	1	71	9	Community transmission
Burundi	17	462	39	0	1	<1	Clusters of cases
Eritrea	12	330	93	0	0	<1	Sporadic cases
Mauritius	10	356	280	0	10	8	Sporadic cases

Seychelles	4	135	1 373	0	0	<1	Sporadic cases
Liberia	3	1 306	258	0	82	16	Community transmission
Sao Tome and Principe	3	898	4 097	0	15	68	Clusters of cases
Niger	2	1 177	49	0	69	3	Clusters of cases
United Republic of Tanzania	0	509	9	0	21	<1	Community transmission
Territories[ii]							
Réunion	558	2 115	2 362	3	6	7	Clusters of cases
Mayotte	73	3 374	12 367	0	40	147	Clusters of cases
Americas	**862478**	**14001390**	**2078**	**22325**	**484079**	**72**	
United States of America	288 617	6 144 138	18 562	5 974	186 663	564	Community transmission
Brazil	288 029	4 092 832	19 255	6 017	125 521	591	Community transmission
Argentina	69 873	461 882	10 220	1 380	9 685	214	Community transmission
Colombia	59 542	650 062	12 776	2 121	20 888	411	Community transmission
Peru	46 887	676 848	20 528	1 083	29 554	896	Community transmission
Mexico	37 352	623 090	4 833	3 705	66 851	518	Community transmission
Chile	12 425	420 434	21 994	370	11 551	604	Community transmission
Costa Rica	7 195	45 680	8 967	62	469	92	Community transmission
Venezuela (Bolivarian Republic of)	7 094	50 973	1 793	54	412	14	Community transmission
Bolivia (Plurinational State of)	5 171	119 580	10 244	497	5 343	458	Community transmission
Ecuador	5 139	118 045	6 691	187	6 724	381	Community transmission
Dominican Republic	5 050	98 776	9 106	167	1 840	170	Community transmission
Honduras	4 988	63 798	6 441	157	1 984	200	Community transmission
Panama	4 972	95 596	22 156	97	2 063	478	Community transmission
Paraguay	4 780	20 654	2 896	118	398	56	Community transmission
Guatemala	3 802	77 481	4 325	117	2 845	159	Community transmission

Canada	3 766	131 124	3 474	33	9 141	242	Community transmission
Jamaica	953	2 964	1 001	11	30	10	Clusters of cases
El Salvador	669	26 206	4 040	44	752	116	Community transmission
Trinidad and Tobago	565	2 142	1 531	13	32	23	Community transmission
Bahamas	419	2 476	6 296	15	55	140	Clusters of cases
Suriname	404	4 252	7 248	9	75	128	Community transmission
Cuba	373	4 298	379	6	100	9	Clusters of cases
Belize	282	1 152	2 897	3	15	38	Community transmission
Guyana	236	1 416	1 800	9	44	56	Clusters of cases
Haiti	152	8 326	730	11	212	19	Community transmission
Nicaragua	114	3 773	570	4	141	21	Community transmission
Uruguay	97	1 653	476	2	45	13	Clusters of cases
Barbados	12	178	619	0	7	24	Clusters of cases
Dominica	2	22	306	0	0	<1	Clusters of cases
Saint Vincent and the Grenadines	1	61	550	0	0	<1	Sporadic cases
Antigua and Barbuda	1	95	970	0	3	31	Clusters of cases
Grenada	0	24	213	0	0	<1	Clusters of cases
Saint Kitts and Nevis	0	17	320	0	0	<1	No cases
Saint Lucia	0	26	142	0	0	<1	Sporadic cases
Territories[ii]							
Puerto Rico	1 942	34 492	12 057	36	464	162	Community transmission
Aruba	444	2 292	21 468	5	13	122	Community transmission
Guadeloupe	428	1 363	3 406	5	20	50	Clusters of cases

French Guiana	246	9 322	31 210	4	62	208	Community transmission
Martinique	158	754	2 009	2	18	48	Clusters of cases
Turks and Caicos Islands	101	591	15 264	2	5	129	Clusters of cases
Sint Maarten	60	504	11 753	2	19	443	Community transmission
United States Virgin Islands	49	1 167	11 175	2	16	153	Community transmission
British Virgin Islands	28	63	2 084	0	1	33	Clusters of cases
Saint Martin	26	239	6 182	1	6	155	Sporadic cases
Curaçao	23	78	475	0	1	6	Clusters of cases
Bermuda	7	175	2 810	0	9	145	Sporadic cases
Bonaire, Sint Eustatius and Saba	3	18	686	0	0	<1	Sporadic cases
Saint Pierre and Miquelon	1	6	1 035	0	0	<1	Sporadic cases
Saint Barthélemy	0	18	1 821	0	0	<1	Sporadic cases
Anguilla	0	3	200	0	0	<1	No cases
Cayman Islands	0	205	3 119	0	1	15	Sporadic cases
Falkland Islands (Malvinas)	0	13	3 732	0	0	<1	No cases
Montserrat	0	13	2 601	0	1	200	No cases
Eastern Mediterranean	**92699**	**1996246**	**284**	**2244**	**52710**	**7**	
Iraq	29 273	256 719	6 382	531	7 422	185	Community transmission
Iran (Islamic Republic of)	12 850	384 666	4 580	795	22 154	264	Community transmission
Morocco	10 104	70 160	1 901	251	1 329	36	Clusters of cases
Saudi Arabia	6 021	319 932	9 190	209	4 049	116	Clusters of cases
Kuwait	4 739	88 963	20 832	12	540	126	Clusters of cases
United Arab Emirates	4 143	73 471	7 429	9	388	39	Community transmission
Libya	4 136	17 094	2 488	41	272	40	Community transmission
Lebanon	3 736	20 011	2 932	32	187	27	Community transmission

Bahrain	3 380	54 771	32 188	7	196	115	Clusters of cases
Pakistan	2 873	298 509	1 351	54	6 342	29	Clusters of cases
Qatar	1 457	119 864	41 604	6	202	70	Community transmission
Oman	1 375	86 380	16 915	55	705	138	Community transmission
Egypt	1 215	99 712	974	135	5 511	54	Clusters of cases
Tunisia	1 204	4 776	404	18	93	8	Clusters of cases
Syrian Arab Republic	476	3 104	177	24	130	7	Community transmission
Jordan	460	2 353	231	1	16	2	Clusters of cases
Afghanistan	255	38 398	986	10	1 412	36	Clusters of cases
Sudan	218	13 407	306	9	832	19	Community transmission
Yemen	37	1 987	67	9	573	19	Community transmission
Somalia	22	3 332	210	1	98	6	Sporadic cases
Djibouti	2	5 387	5 452	0	60	61	Sporadic cases
Territories[ii]							
Occupied Palestinian territory	4 723	33 250	6 518	35	199	39	Community transmission
Europe	**247125**	**4475267**	**655**	**3015**	**222279**	**33**	
France	43 686	300 515	4 604	81	30 546	468	Community transmission
Spain	40 087	498 989	10 672	322	29 418	629	Clusters of cases
Russian Federation	35 179	1 025 505	7 027	727	17 820	122	Clusters of cases
Ukraine	16 820	135 894	3 107	319	2 846	65	Community transmission
Israel	12 390	125 084	14 451	63	988	114	Community transmission
The United Kingdom	11 412	344 168	5 070	51	41 549	612	Community transmission
Turkey	11 164	278 228	3 299	336	6 620	78	Community transmission

Italy	9 485	276 338	4 570	61	35 534	588	Clusters of cases
Germany	8 214	249 985	2 984	30	9 325	111	Clusters of cases
Romania	8 031	93 864	4 879	311	3 850	200	Community transmission
Netherlands	4 227	73 790	4 306	17	6 232	364	Community transmission
Poland	4 148	70 387	1 860	81	2 113	56	Community transmission
Czechia	3 658	27 752	2 591	10	431	40	Clusters of cases
Kazakhstan	3 251	133 924	7 132	97	1 878	100	Clusters of cases
Republic of Moldova	3 069	39 473	9 785	73	1 063	264	Community transmission
Portugal	2 495	59 943	5 879	20	1 838	180	Clusters of cases
Belgium	2 468	87 731	7 570	15	9 905	855	Community transmission
Switzerland	2 234	43 849	5 067	7	1 731	200	Community transmission
Hungary	2 223	7 892	817	10	624	65	Community transmission
Uzbekistan	2 173	43 476	1 299	32	343	10	Clusters of cases
Austria	2 119	29 056	3 226	2	735	82	Community transmission
Croatia	1 878	11 739	2 859	14	197	48	Community transmission
Bosnia and Herzegovina	1 652	21 198	6 461	44	632	193	Community transmission
Greece	1 409	11 386	1 092	20	280	27	Clusters of cases
Belarus	1 140	72 663	7 690	34	705	75	Community transmission
Armenia	1 033	44 783	15 113	20	897	303	Community transmission
Azerbaijan	1 018	37 192	3 668	16	545	54	Clusters of cases
Denmark	847	17 547	3 029	3	627	108	Community transmission
Albania	823	10 102	3 510	37	312	108	Clusters of cases
Ireland	814	29 534	5 981	0	1 777	360	Clusters of cases
Sweden	802	84 985	8 415	5	5 835	578	Community transmission
Bulgaria	790	16 954	2 440	60	665	96	Clusters of cases

Montenegro	741	5 518	8 786	11	107	170	Clusters of cases
Slovakia	684	4 526	829	4	37	7	Clusters of cases
Kyrgyzstan	583	44 403	6 806	2	1 061	163	Clusters of cases
Norway	577	11 120	2 051	0	264	49	Clusters of cases
Serbia	567	31 849	4 574	13	723	104	Community transmission
North Macedonia	469	14 762	7 086	10	606	291	Clusters of cases
Slovenia	297	3 131	1 506	2	130	63	Clusters of cases
Luxembourg	274	6 854	10 949	0	124	198	Community transmission
Tajikistan	241	8 757	918	2	70	7	Pending
Georgia	210	1 679	421	0	19	5	Community transmission
Lithuania	201	3 040	1 117	0	86	32	Community transmission
Finland	176	8 225	1 484	0	335	60	Community transmission
Malta	167	2 014	4 561	4	14	32	Sporadic cases
Estonia	128	2 491	1 878	0	64	48	Clusters of cases
Andorra	91	1 215	15 725	0	53	686	Community transmission
Latvia	50	1 425	755	1	35	19	Clusters of cases
Iceland	36	2 136	6 259	0	10	29	Community transmission
Cyprus	24	1 507	1 248	0	21	17	Clusters of cases
Monaco	13	147	3 746	0	1	25	Sporadic cases
San Marino	2	735	21 657	0	42	1 238	Community transmission
Liechtenstein	1	108	2 832	0	1	26	Sporadic cases
Holy See	0	12	14 833	0	0	<1	Sporadic cases
Territories[ii]							

Kosovo[1]	812	13 984	7 517	48	546	293	Community transmission
Gibraltar	31	305	9 053	0	0	<1	Clusters of cases
Jersey	9	383	3 520	0	32	294	Community transmission
Faroe Islands	2	413	8 452	0	0	<1	Sporadic cases
Greenland	0	14	247	0	0	<1	No cases
Guernsey	0	252	3 988	0	13	206	Community transmission
Isle of Man	0	336	3 951	0	24	282	No cases
South-East Asia	**616795**	**4689943**	**813**	**8124**	**83400**	**14**	
India	571 078	4 113 811	2 981	7 128	70 626	51	Clusters of cases
Indonesia	21 470	190 665	697	679	7 940	29	Community transmission
Bangladesh	14 640	323 565	1 965	241	4 447	27	Community transmission
Nepal	7 937	45 277	1 554	73	280	10	Clusters of cases
Maldives	908	8 486	15 699	1	29	54	Clusters of cases
Myanmar	570	1 319	24	2	8	<1	Clusters of cases
Sri Lanka	126	3 121	146	0	12	1	Clusters of cases
Bhutan	33	228	295	0	0	<1	Sporadic cases
Thailand	33	3 444	49	0	58	1	Clusters of cases
Timor-Leste	0	27	20	0	0	<1	Sporadic cases
Western Pacific	**28907**	**516478**	**89**	**644**	**11206**	**2**	
Philippines	21 439	234 570	2 141	371	3 790	35	Community transmission
Japan	4 155	71 419	565	93	1 357	11	Clusters of cases
Republic of Korea	1 478	21 177	413	11	334	7	Clusters of cases
Australia	660	26 207	1 028	148	748	29	Clusters of cases
Singapore	265	56 982	9 740	0	27	5	Clusters of cases
China	166	90 517	62	7	4 735	3	Clusters of cases

Malaysia	74	9 391	290	3	128	4	Clusters of cases
New Zealand	43	1 421	295	2	24	5	Clusters of cases
Papua New Guinea	29	488	55	0	5	1	Community transmission
Viet Nam	9	1 049	11	3	35	<1	Clusters of cases
Mongolia	9	310	95	0	0	<1	Sporadic cases
Fiji	3	31	35	0	2	2	Sporadic cases
Brunei Darussalam	1	145	331	0	3	7	Sporadic cases
Cambodia	1	274	16	0	0	<1	Sporadic cases
Lao People'S Democratic Republic	0	22	3	0	0	<1	Sporadic cases
Territories[ii]							
Guam	332	1 671	9 901	6	16	95	Clusters of cases
French Polynesia	238	720	2 563	0	0	<1	Sporadic cases
New Caledonia	3	26	91	0	0	<1	Sporadic cases
Northern Mariana Islands (Commonwealth of The)	2	58	1 008	0	2	35	Pending
Subtotal for all regions	**1 886 643**	**26 762 476**		**37 559**	**876 603**		
Other[†]	0	741		0	13	-	Not applicable
Grand total	**1 886 643**	**26 763 217**		**37 559**	**876 616**		

**See *data, table and figure notes*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operations Updates
- WHO COVID-19 Case definition
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region
- Research and Development
- Online courses on COVID-19 and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented is based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion critiera, testing strategies, reporting practice, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/ areas report combined probable and laboratory-confirmed cases; efforts are underway to identify these for notation in the data table. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas; classification is based on the highest category reported within a country/territory/area. Categories:

- No cases: with no confirmed cases;
- Sporadic cases: with one or more cases, imported or locally detected;
- Clusters of cases: experiencing cases, clustered in time, geographic location and/or by common exposures;
- Community transmission: experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel laboratory surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area;
- Pending: transmission classification has not been reported to WHO.

[ii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

[†] Other: includes cases reported from international conveyances.

Country, territory, or area-specific notes, updates and errata

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

World Health Organization

Coronavirus disease (COVID-19)

Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 10 am CEST 30 August 2020

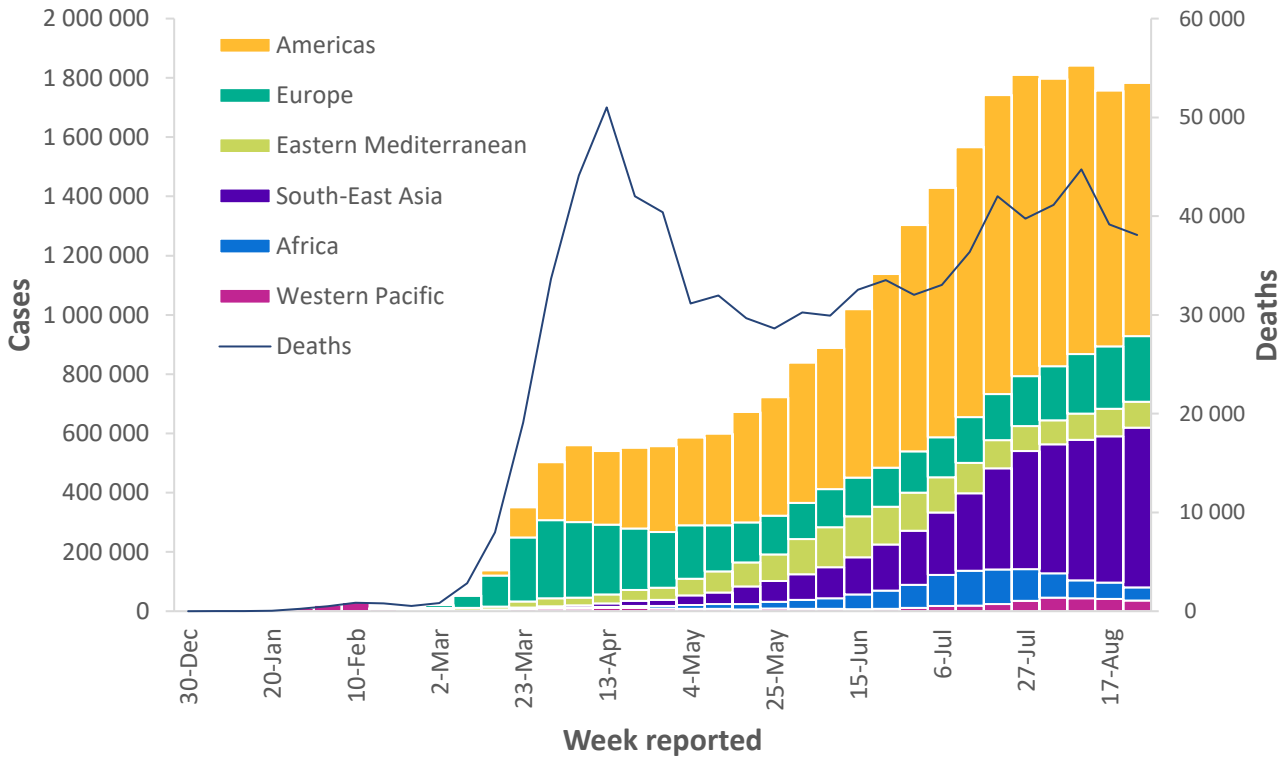
For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- Rolling updates on COVID-19
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

Over 1.8 million new COVID-19 cases and 38 000 new deaths were reported to WHO in the week ending 30 August, a 1% increase in the number of cases and 3% decrease in the number of deaths compared to the previous week (17 to 23 August) (Figure 1). A cumulative total of nearly 25 million cases and 800 000 deaths have been reported since the start of the outbreak.

Figure 1: Number of COVID-19 cases and deaths reported weekly by WHO region, 30 December to 30 August 2020**



**See *data table and figure notes*.

Overall, the Region of the Americas continues to carry the highest burden of COVID-19 globally, accounting for nearly half of all new cases reported in the past seven days, although within the region there have been slight decreases in new cases and deaths in the past week. The WHO South East Asia Region showed the highest rise in new cases in the past week, with over 500,000 new cases reported. In the European Region, new cases and new deaths have continued to increase over the past seven days compared to the previous week. Along with the Region of the Americas, the percentage change in new cases in Africa, the Eastern Mediterranean, and Western Pacific Regions have all declined compared with last week.

Region specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, Western-Pacific Region.

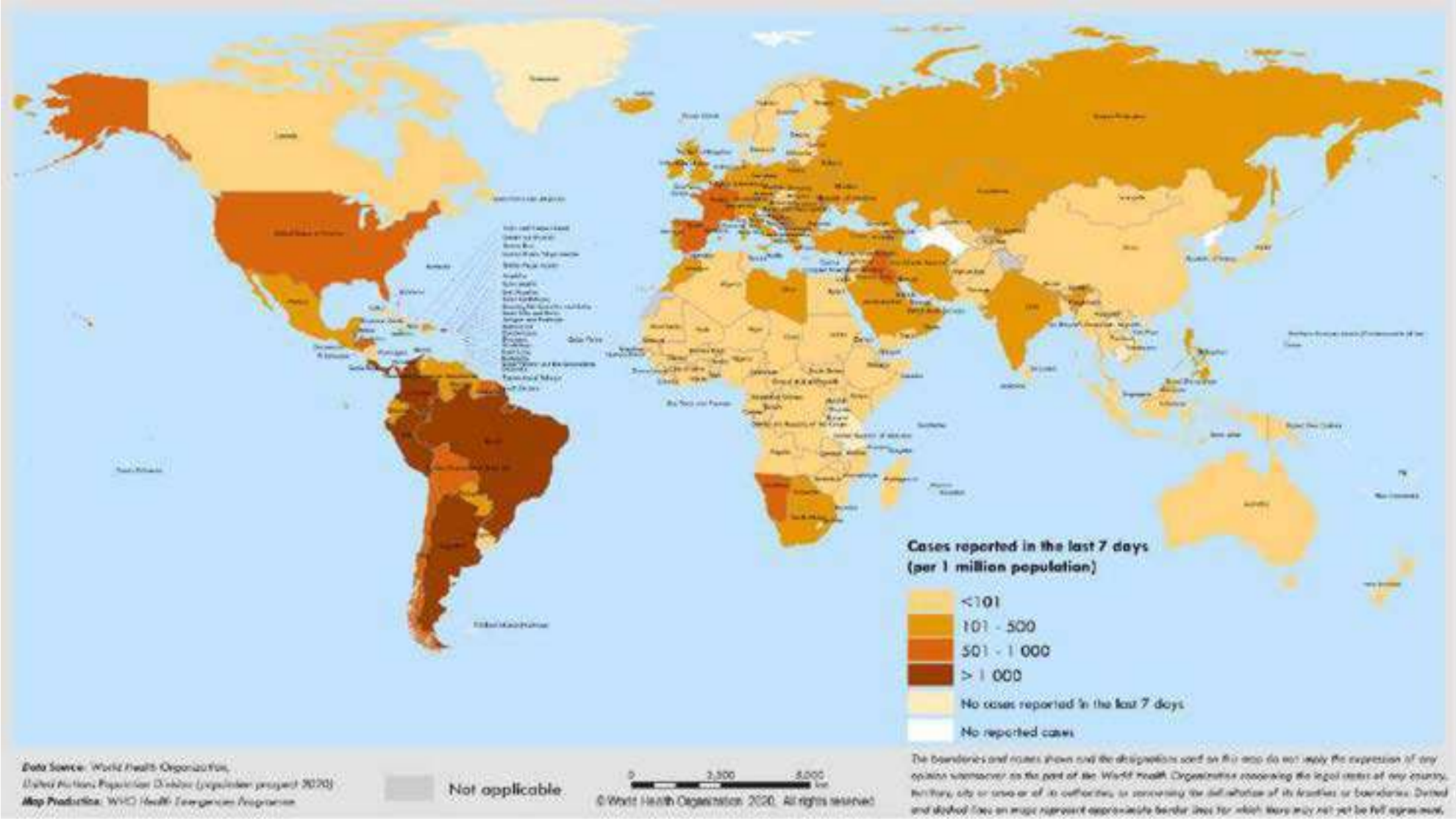
Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, data as of 30 August 2020**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days*	Cumulative deaths (%)
Americas	854 959 (48%)	-1%	13 138 912 (53%)	23 178 (61%)	-4%	461 754 (55%)
South-East Asia	539 341 (30%)	9%	4 073 148 (16%)	7 821 (21%)	3%	75 276 (9%)
Europe	220 777 (12%)	5%	4 205 708 (17%)	2 723 (7%)	12%	219 131 (26%)
Africa	44 134 (2%)	-20%	1 044 513 (4%)	1 401 (4%)	-24%	21 722 (3%)
Eastern Mediterranean	87 340 (5%)	-6%	1 903 547 (8%)	2 273 (6%)	-9%	50 466 (6%)
Western Pacific	36 260 (2%)	-13%	487 571 (2%)	692 (2%)	20%	10 562 (1%)
† Other	-	-	741 (0%)	-	-	13 (0%)
Global	**1 782 811 (100%)**	**1%**	**24 854 140 (100%)**	**38 088 (100%)**	**-3%**	**838 924 (100%)**

Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior.

***See data, table and figure notes*

Figure 2. COVID-19 cases per 1 million population reported in the last seven days by countries,territories and areas, 24 August to 30 August 2020**



**See *data, table and figure notes*.

Situation by WHO Region

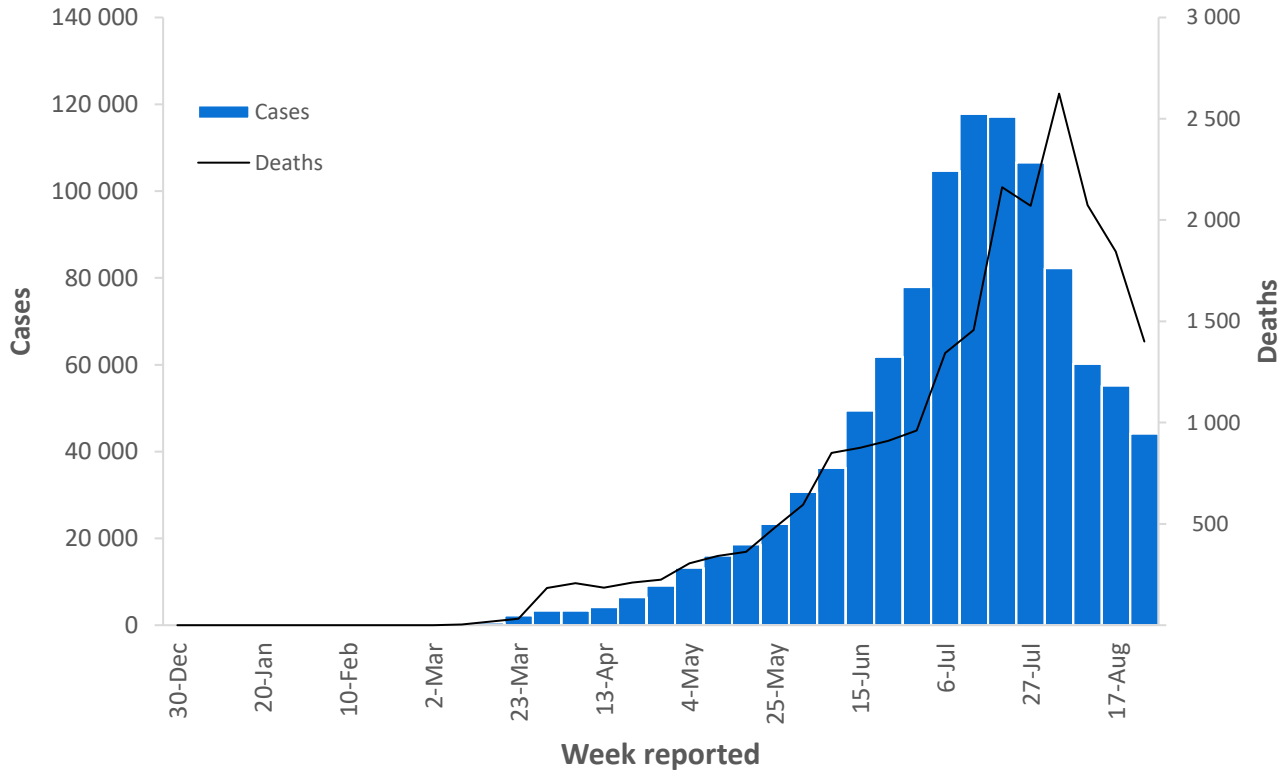
African Region

Several countries in the Region that were previous COVID-19 hotspots have recorded a reduction in case incidence including Ghana, Kenya, Gabon and Madagascar. While the observed declining trends are encouraging, the figures should be interpreted cautiously as they may be affected by many factors, including the current testing capacity and strategy, and delays in reporting.

Cases in Ethiopia have continued to rise, reaching new highs this week (10 621 cases) with Addis Ababa remaining the worst affected region. In response, the Ethiopian government, with support from WHO, have launched the COVID-19 Enhanced Community Based Activities and Testing Campaign (ComBAT). ComBAT aims to reach out to over 60 million individuals in a variety of settings, conduct 200 000 tests and treat 10 000 cases.

At 622 551 cases, South Africa has the fifth highest number of COVID-19 infections globally and the highest number in Africa. However, there has been a marked decline in new cases since they peaked on 25 July at 13 944 cases, and the downward trend has continued this week with new cases falling by 34% (Figure 3). As a result, the government has eased public health and social measures while reminding the public to remain vigilant.

Figure 3: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, data as of 30 August 2020**



**See *data, table and figure notes*

Region of the Americas

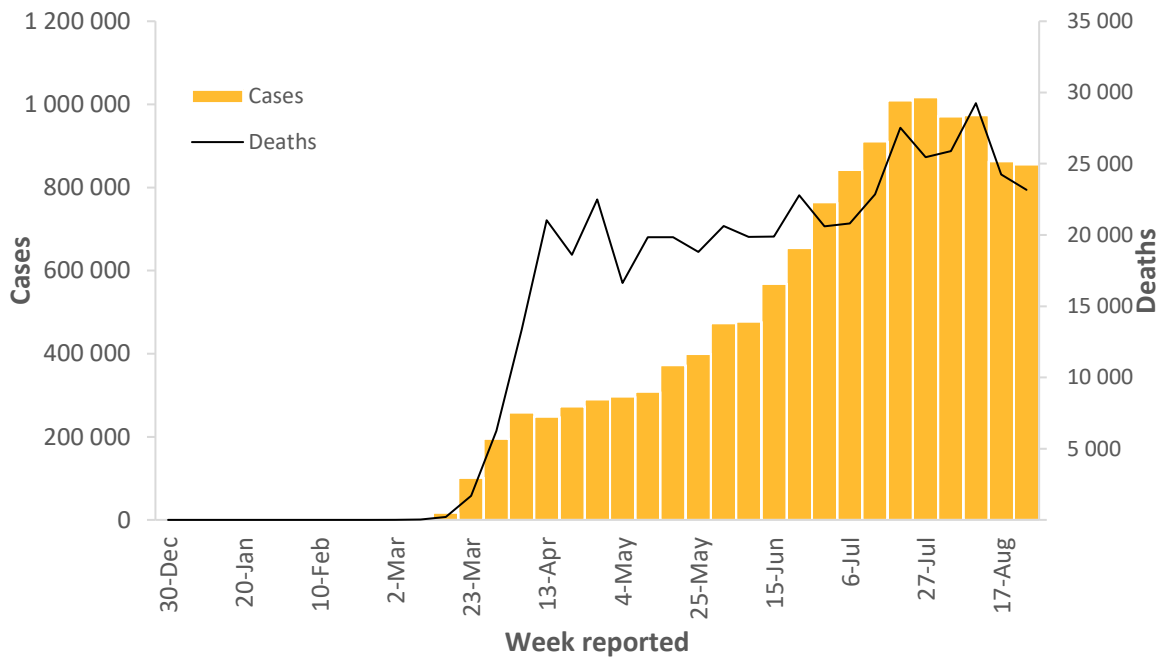
The Americas account for approximately 13% of the world's population, but over 50% of officially reported global cases and deaths. Currently, while the biggest drivers of the case counts in the region have observed a moderate decline or stabalisation of case incidence (Figure 4), increasing trends are now being seen in other parts of the region including Peru, Mexico, Colombia, and Argentina. Social gatherings could also have contributed to the increase in cases in the region. WHO recommends avoiding the 'three c's'-crowded places, close contact settings, and confined and enclosed settings. More advice from WHO on how to protect yourself and others from the spread COVID-19 can be found here.

The United States of America has the highest number of cases in the world – over 5.8 million cases, a quarter of the global total. However, the country has witnessed a decline in new cases from previous peaks in July of over 70 000 cases per day to an average of 41 000 new cases per day this past week. As school and university campuses have reopened, there have been news reports of students testing positive. WHO has published guidance for school-related public health measures in the context of COVID-19.

Although cases in Colombia have declined in the past week, they have been gradually increasing since June and continued caution is required. After five months of implementing public health and social measures, Colombia will begin easing the measures beginning 1 September.

Argentina has reported new peaks in the number of cases cases reported weekly and an upward trajectory in cases and deaths since June. Cases in Mexico declined by 6% in the past week and have declined gradually across the month of August. Mexico is implementing remote teaching and education for children to reduce transmission.

Figure 4: Number of COVID-19 cases and deaths reported weekly by Region of the Americas, data as of 30 August 2020**



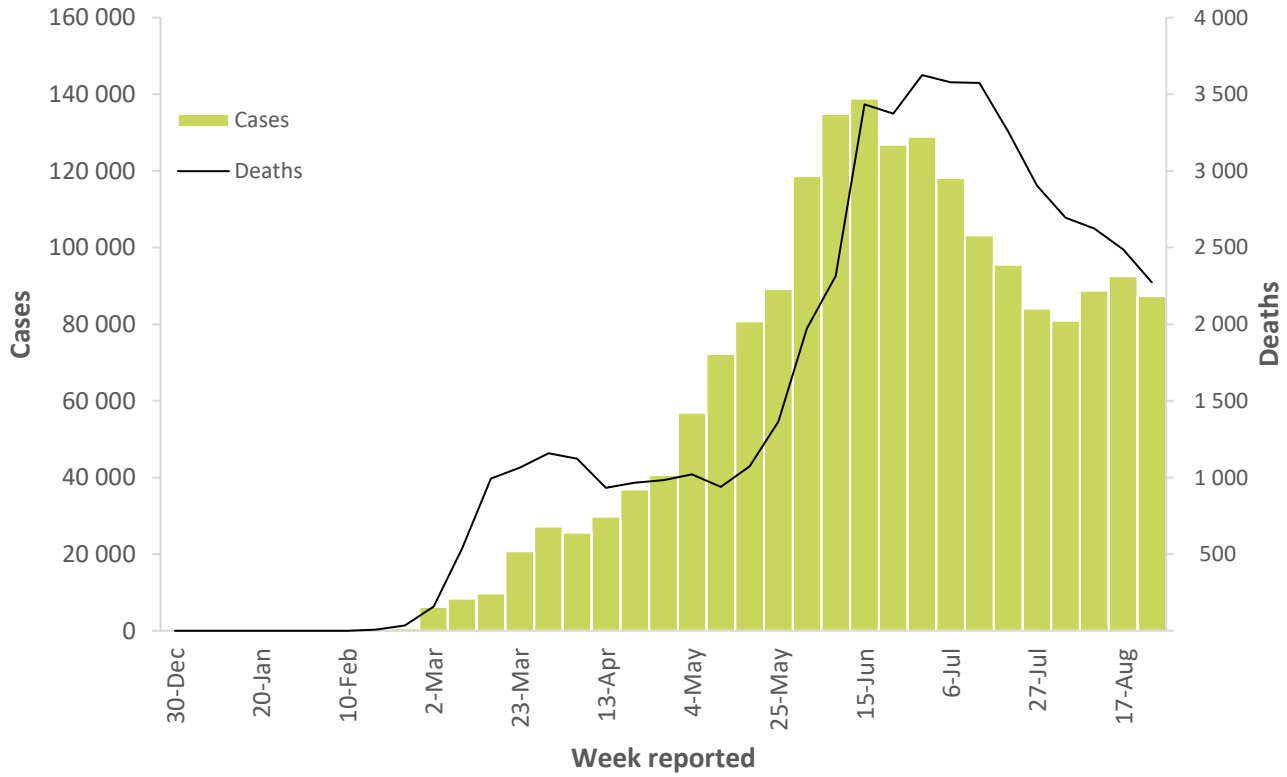
**See *data, table and figure notes*

Eastern Mediterranean Region

The Eastern Mediterranean Region has observed a fluctuating incidence of new cases in recent weeks (Figure 5). The highest number of new cases have been seen in Iraq, Iran, Morocco, Saudi Arabia, and Kuwait. WHO, in partnership with the Iraqi Ministry of Health and its implementing partners, has concluded another round of a COVID-19 awareness-raising campaign that intensified community outreach efforts to educate people on measures to limit transmission of COVID-19. The campaign reached more than 5 million people in four densely populated and heavily affected areas in Basra, Wasit, Thi Qar and Missan. Campaign teams are moving to the Kurdistan region and will be targeting 9 heavily populated, high-risk areas in Sulaymaniyah province. Over the past week WHO has also delivered 6 ambulances to the Ministry of Health of the Kurdistan region and 22 tonnes of COVID-19 equipment.

In Pakistan, cases have fallen from over 5 000 per day in mid-June to 2 871 cases in the past week. As the public health and social measures are lifted, the public is encouraged to take precautions to ensure a resurgence does not occur particularly as they celebrate the first 10 days of the month of Muharram, which started on 21 August.

Figure 5: Number of COVID-19 cases and deaths reported weekly by Eastern Mediterranean Region, data as of 30 August 2020**



**See *data, table and figure notes*

European Region

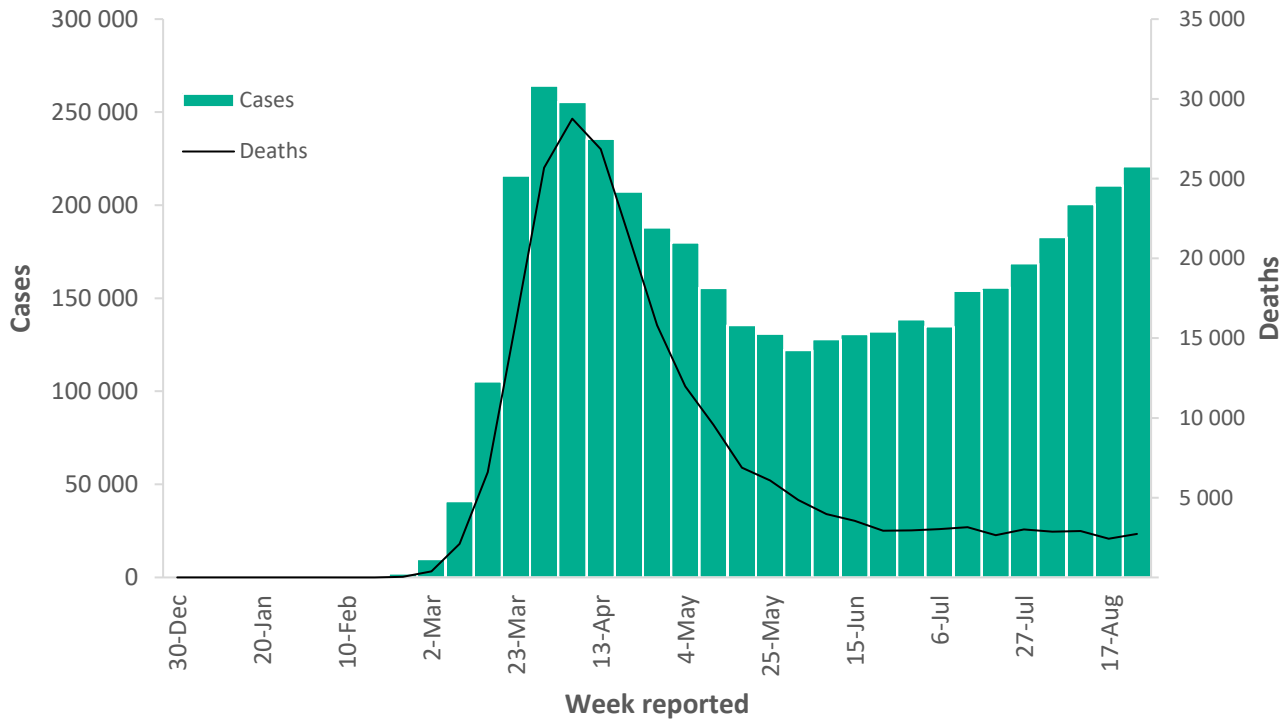
Gradual increases continue to be observed in the European Region (Figure 6), with Spain, Russia, France, and Ukraine reporting the highest number of new cases this week. Spain has seen a resurgence since mid-July and cases are now reaching the peaks previously seen in March and April. July and August is the holiday season in Spain, and social interactions have likely contributed to the increased number of reported cases. Spain has deployed the military to support contact tracing activities.

France has also seen a growing number of cases since the end of July with cases rising from around 500 cases per day to approximately 4 773 cases per day over the past week.

Cases in Italy have shown a marked increase in the past seven days, up by 85% overall compared to last week.

In the European Region many of those of who died of COVID-19 have been elderly people (as of this week 88% of all deaths were in persons aged 65 years and over). WHO has published comprehensive guidance on preventing and managing COVID-19 across long-term care services.

Figure 6: Number of COVID-19 cases and deaths reported weekly by European Region, data as of 30 August 2020**



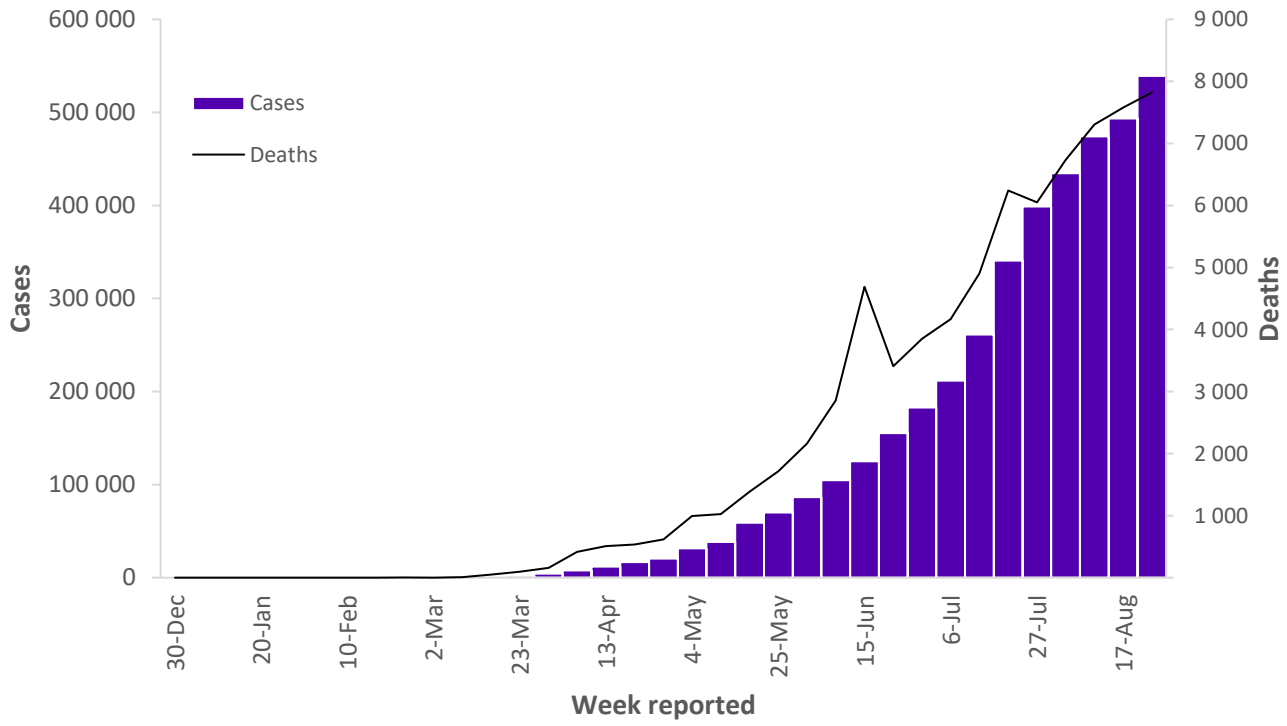
**See *data, table and figure notes*

South-East Asia Region

South-East Asia has reported the largest week-on-week increase (Figure 7), largely due to increased case detections in India. India has reported nearly 500 000 new cases in the past seven days, a 9% increase compared to the previous seven days and the highest numbers of new cases globally. While these trends are concerning, the increase in cases should be seen against a substansive rise in testing in recent weeks.

In Indonesia, cases have been gradually increasing while there are also concerns about transmission among family members of school children as 40% of people aged 60 years and older in Indonesia live in three-generation households, meaning that they live with their children and grandchildren. WHO has published interim guidance on considerations for school-related public health measures in the context of COVID-19 and a joint document with UNICEF and IFRC on key messages and actions for COVID-19 prevention and control in schools. WHO has also convened a technical advisory group on schools.

Figure 7: Number of COVID-19 cases and deaths reported weekly by South-East Asia Region, data as of 30 August 2020**

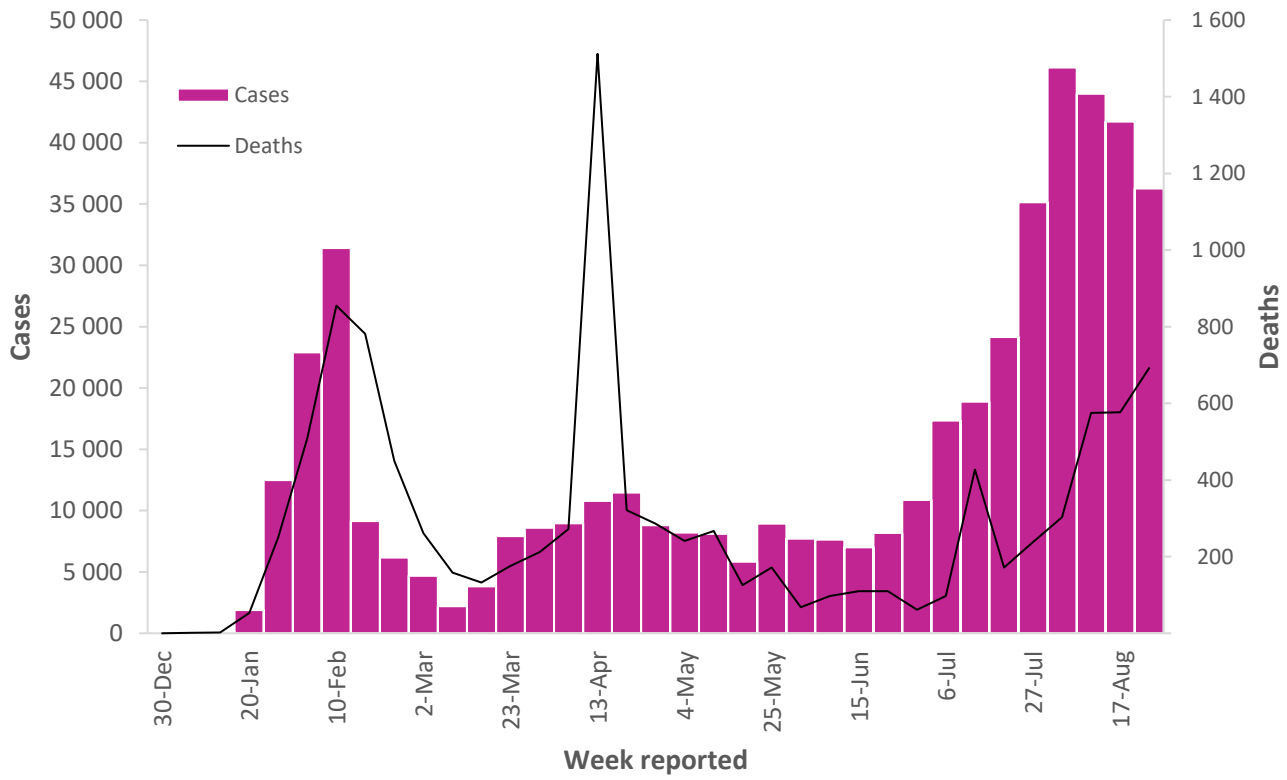


**See *data, table and figure notes*

Western Pacific Region

The Philippines and Japan are reporting the highest number of new cases in the region this week although cases in Japan have been decreasing since the end of June with a 22% decrease in overall cases reported this week compared to last week. In the Philippines, a large percentage of cases have been reported from the National Capital Region.

Figure 8: Number of COVID-19 cases and deaths reported weekly by Western Pacific Region, data as of 30 August 2020**



**See *data, table and figure notes*

Table 2. Number of COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, African Region, data as of 30 August 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Africa	**44 134**	**1 044 513**	**157**	**1 401**	**21 722**	**3**	
South Africa	15 506	622 551	10 497	994	13 981	236	Community transmission
Ethiopia	10 621	49 654	432	108	770	7	Community transmission
Algeria	2 714	43 782	998	67	1 491	34	Community transmission
Nigeria	1 822	53 727	261	14	1 011	5	Community transmission
Kenya	1 676	33 794	628	30	572	11	Community transmission
Namibia	1 578	7 116	2 801	23	69	27	Community transmission
Zambia	1 275	11 902	647	7	284	15	Community transmission
Rwanda	954	3 843	297	5	16	1	Clusters of cases
Ghana	624	43 949	1 414	9	270	9	Community transmission
Senegal	606	13 456	804	16	282	17	Community transmission
Uganda	590	2 756	60	8	28	1	Clusters of cases
Côte D'Ivoire	519	17 893	678	2	115	4	Community transmission
Madagascar	514	14 791	534	12	190	7	Community transmission
Zimbabwe	513	6 406	431	43	196	13	Community transmission
Mozambique	456	3 760	120	2	22	1	Community transmission
Angola	417	2 551	78	13	107	3	Clusters of cases
Cameroon	380	19 142	721	3	411	15	Community transmission

Gambia	360	2 797	1 157	12	96	40	Community transmission
Botswana	325	1 633	694	3	6	3	Clusters of cases
Cabo Verde	323	3 778	6 795	2	39	70	Clusters of cases
Eswatini	321	4 510	3 887	8	91	78	Community transmission
Guinea	284	9 251	704	6	59	4	Community transmission
Democratic Republic of The Congo	183	9 993	112	4	255	3	Community transmission
Togo	178	1 390	168	0	27	3	Community transmission
Malawi	146	5 528	289	6	174	9	Community transmission
Congo	129	3 979	721	1	78	14	Community transmission
Mauritania	118	7 012	1 508	0	158	34	Community transmission
Gabon	117	8 505	3 821	0	53	24	Community transmission
Burkina Faso	60	1 357	65	0	55	3	Community transmission
Mali	58	2 757	136	1	126	6	Community transmission
Lesotho	51	1 066	498	1	31	14	Clusters of cases
Sierra Leone	39	2 019	253	1	70	9	Community transmission
Benin	30	2 145	177	1	40	3	Community transmission
Chad	26	1 008	61	1	77	5	Community transmission
Central African Republic	21	4 700	973	0	61	13	Community transmission
South Sudan	20	2 519	225	0	47	4	Community transmission
Liberia	18	1 303	258	0	82	16	Community transmission
Burundi	15	445	37	0	1	<1	Clusters of cases
Equatorial Guinea	15	4 941	3 522	0	83	59	Community transmission
Eritrea	12	318	90	0	0	<1	Sporadic cases
Comoros	6	423	486	0	7	8	Community transmission

Seychelles	4	131	1 332	0	0	<1	Sporadic cases
Niger	3	1 175	49	0	69	3	Clusters of cases
Sao Tome and Principe	3	895	4 084	0	15	68	Clusters of cases
Guinea-Bissau	0	2 149	1 092	0	33	17	Community transmission
Mauritius	0	346	272	0	10	8	Sporadic cases
United Republic of Tanzania	0	509	9	0	21	<1	Community transmission
Territories[ii]							
Réunion	440	1 557	1 739	- 3	3	3	Clusters of cases
Mayotte	64	3 301	12 100	1	40	147	Clusters of cases
Americas	**854 959**	**13 138 912**	**1 950**	**23 178**	**461 754**	**69**	
United States of America	288 304	5 855 521	17 690	6 443	180 689	546	Community transmission
Brazil	272 473	3 804 803	17 900	6 146	119 504	562	Community transmission
Colombia	68 382	590 520	11 605	2 199	18 767	369	Community transmission
Argentina	62 966	392 009	8 674	1 510	8 305	184	Community transmission
Peru	53 894	629 961	19 106	1 226	28 471	863	Community transmission
Mexico	36 004	585 738	4 543	3 536	63 146	490	Community transmission
Chile	12 301	408 009	21 344	389	11 181	585	Community transmission
Bolivia (Plurinational State of)	6 974	114 409	9 801	480	4 846	415	Community transmission
Costa Rica	6 351	38 485	7 555	67	407	80	Community transmission
Panama	6 232	90 624	21 003	107	1 966	456	Community transmission
Guatemala	5 823	73 679	4 113	148	2 728	152	Community transmission
Ecuador	5 817	112 906	6 399	260	6 537	371	Community transmission

Venezuela (Bolivarian Republic of)	5 691	43 879	1 543	41	358	13	Community transmission
Honduras	5 429	58 810	5 938	195	1 827	184	Community transmission
Paraguay	3 338	15 874	2 226	98	280	39	Community transmission
Dominican Republic	3 165	93 726	8 640	119	1 673	154	Community transmission
Canada	2 986	127 358	3 374	44	9 108	241	Community transmission
El Salvador	1 117	25 537	3 937	54	708	109	Community transmission
Trinidad and Tobago	678	1 577	1 127	6	19	14	Community transmission
Jamaica	665	2 011	679	3	19	6	Clusters of cases
Suriname	388	3 848	6 559	10	66	113	Community transmission
Bahamas	354	2 057	5 231	13	40	102	Clusters of cases
Cuba	308	3 925	347	5	94	8	Clusters of cases
Guyana	299	1 180	1 500	5	35	44	Clusters of cases
Belize	222	870	2 188	7	12	30	Community transmission
Haiti	124	8 174	717	5	201	18	Community transmission
Nicaragua	119	3 659	552	4	137	21	Community transmission
Uruguay	40	1 556	448	1	43	12	Clusters of cases
Barbados	9	166	578	0	7	24	Clusters of cases
Saint Vincent and the Grenadines	2	60	541	0	0	<1	Sporadic cases
Dominica	1	20	278	0	0	<1	Clusters of cases
Antigua and Barbuda	0	94	960	0	3	31	Clusters of cases
Grenada	0	24	213	0	0	<1	Clusters of cases
Saint Kitts and Nevis	0	17	320	0	0	<1	No cases
Saint Lucia	0	26	142	0	0	<1	Sporadic cases
Territories[ii]							

Puerto Rico	2 973	32 550	11 378	47	428	150	Community transmission
Aruba	461	1 848	17 309	2	8	75	Community transmission
French Guiana	279	9 076	30 387	3	58	194	Community transmission
United States Virgin Islands	186	1 118	10 706	4	14	134	Community transmission
Guadeloupe	164	935	2 337	0	15	37	Clusters of cases
Turks and Caicos Islands	143	490	12 656	1	3	77	Clusters of cases
Martinique	132	596	1 588	0	16	43	Clusters of cases
Sint Maarten	91	444	10 354	0	17	396	Community transmission
Saint Martin	37	213	5 510	0	5	129	Sporadic cases
Curaçao	18	55	335	0	1	6	Sporadic cases
British Virgin Islands	14	35	1 158	0	1	33	Sporadic cases
Bonaire, Sint Eustatius and Saba	2	15	572	0	0	<1	Sporadic cases
Saint Barthélemy	2	18	1 821	0	0	<1	Sporadic cases
Bermuda	1	168	2 698	0	9	145	Sporadic cases
Anguilla	0	3	200	0	0	<1	No cases
Cayman Islands	0	205	3 119	0	1	15	Sporadic cases
Falkland Islands (Malvinas)	0	13	3 732	0	0	<1	No cases
Montserrat	0	13	2 601	0	1	200	No cases
Saint Pierre and Miquelon	0	5	863	0	0	<1	Sporadic cases
Eastern Mediterranean	**87 340**	**1 903 547**	**271**	**2 273**	**50 466**	**7**	
Iraq	26 396	227 446	5 655	538	6 891	171	Community transmission
Iran (Islamic Republic of)	15 024	371 816	4 427	857	21 359	254	Community transmission
Morocco	9 244	60 056	1 627	220	1 078	29	Clusters of cases

Saudi Arabia	7 541	313 911	9 017	221	3 840	110	Clusters of cases
Kuwait	4 267	84 224	19 722	15	528	124	Clusters of cases
Lebanon	4 084	16 275	2 384	34	155	23	Community transmission
Pakistan	2 871	295 636	1 338	53	6 288	28	Clusters of cases
United Arab Emirates	2 711	69 328	7 010	7	379	38	Community transmission
Libya	2 521	12 958	1 886	43	231	34	Clusters of cases
Bahrain	2 353	51 391	30 202	6	189	111	Clusters of cases
Qatar	1 642	118 407	41 099	3	196	68	Community transmission
Egypt	1 260	98 497	963	133	5 376	53	Clusters of cases
Oman	1 236	85 005	16 646	41	650	127	Community transmission
Tunisia	834	3 572	302	7	75	6	Clusters of cases
Sudan	507	13 189	301	8	823	19	Community transmission
Syrian Arab Republic	485	2 628	150	21	106	6	Community transmission
Jordan	317	1 893	186	4	15	1	Clusters of cases
Afghanistan	144	38 143	980	15	1 402	36	Clusters of cases
Somalia	41	3 310	208	4	97	6	Sporadic cases
Yemen	39	1 950	65	17	564	19	Community transmission
Djibouti	3	5 385	5 450	0	60	61	Sporadic cases
Territories[ii]							
Occupied Palestinian territory	3 820	28 527	5 592	26	164	32	Clusters of cases
Europe	**220 777**	**4 205 708**	**615**	**2 723**	**219 131**	**32**	**0**
Spain	37 308	439 286	9 396	132	29 011	620	Clusters of cases
Russian Federation	33 577	990 326	6 786	710	17 093	117	Clusters of cases
France	33 410	256 829	3 935	89	30 465	467	Community transmission
Ukraine	14 116	119 074	2 723	256	2 527	58	Community transmission

Israel	11 036	110 863	12 808	87	885	102	Community transmission
Turkey	10 032	267 064	3 167	182	6 284	75	Community transmission
Germany	8 907	241 771	2 886	26	9 295	111	Clusters of cases
Italy	8 717	266 853	4 414	43	35 473	587	Clusters of cases
Romania	8 289	85 833	4 462	306	3 539	184	Community transmission
The United Kingdom	8 151	332 756	4 902	75	41 498	611	Community transmission
Poland	5 058	66 239	1 750	81	2 032	54	Community transmission
Netherlands	3 529	69 563	4 060	24	6 215	363	Community transmission
Kazakhstan	3 470	130 673	6 959	148	1 781	95	Clusters of cases
Republic of Moldova	3 332	36 404	9 024	55	990	245	Community transmission
Uzbekistan	2 605	41 303	1 234	42	311	9	Clusters of cases
Belgium	2 329	84 505	7 291	25	9 891	853	Community transmission
Czechia	2 304	24 094	2 250	10	421	39	Clusters of cases
Switzerland	2 089	41 615	4 808	5	1 724	199	Community transmission
Portugal	1 996	57 448	5 634	24	1 818	178	Clusters of cases
Croatia	1 961	9 861	2 402	13	183	45	Community transmission
Austria	1 838	26 937	2 991	1	733	81	Community transmission
Bosnia and Herzegovina	1 834	19 546	5 958	62	588	179	Community transmission
Greece	1 596	9 977	957	20	260	25	Clusters of cases
Belarus	1 238	71 523	7 569	34	671	71	Community transmission
Azerbaijan	1 069	36 174	3 568	14	529	52	Clusters of cases
Bulgaria	1 033	16 164	2 326	66	605	87	Clusters of cases
Albania	1 004	9 279	3 224	30	275	96	Clusters of cases

North Macedonia	985	14 293	6 860	39	596	286	Clusters of cases
Armenia	958	43 750	14 764	25	877	296	Community transmission
Sweden	857	83 958	8 313	2	5 821	576	Community transmission
Ireland	812	28 720	5 816	0	1 777	360	Clusters of cases
Kyrgyzstan	797	43 820	6 717	3	1 059	162	Clusters of cases
Serbia	734	31 282	4 492	15	710	102	Community transmission
Denmark	573	16 700	2 883	3	624	108	Community transmission
Hungary	536	5 669	587	3	614	64	Community transmission
Slovakia	526	3 842	704	0	33	6	Clusters of cases
Montenegro	421	4 777	7 606	12	96	153	Clusters of cases
Norway	346	10 543	1 945	0	264	49	Clusters of cases
Malta	270	1 847	4 183	0	10	23	Sporadic cases
Lithuania	245	2 839	1 043	2	86	32	Community transmission
Tajikistan	239	8 516	893	2	68	7	Pending
Slovenia	217	2 834	1 363	1	128	62	Clusters of cases
Finland	178	8 049	1 453	1	335	60	Community transmission
Estonia	98	2 363	1 781	1	64	48	Clusters of cases
Andorra	77	1 124	14 547	0	53	686	Community transmission
Cyprus	66	1 483	1 228	0	21	17	Clusters of cases
Georgia	58	1 469	368	2	19	5	Community transmission
Iceland	42	2 100	6 154	0	10	29	Community transmission
Latvia	42	1 375	729	1	34	18	Clusters of cases
Monaco	22	130	3 313	0	1	25	Sporadic cases
San Marino	7	733	21 598	0	42	1 238	Community transmission
Liechtenstein	6	107	2 806	0	1	26	Sporadic cases

Holy See	0	12	14 833	0	0	<1	Sporadic cases
Luxembourg	- 1 124	6 580	10 512	0	124	198	Community transmission
Territories[ii]							
Kosovo[1]	878	13 172	7 080	51	498	268	Community transmission
Gibraltar	45	274	8 133	0	0	<1	Clusters of cases
Faroe Islands	27	411	8 411	0	0	<1	Sporadic cases
Jersey	11	374	3 438	0	32	294	Community transmission
Greenland	0	14	247	0	0	<1	No cases
Guernsey	0	252	3 988	0	13	206	Community transmission
Isle of Man	0	336	3 951	0	24	282	No cases
South-East Asia	**539 341**	**4 073 148**	**707**	**7 821**	**75 276**	**13**	**0**
India	497 793	3 542 733	2 567	6 792	63 498	46	Clusters of cases
Indonesia	17 697	169 195	619	667	7 261	27	Community transmission
Bangladesh	16 300	308 925	1 876	299	4 206	26	Community transmission
Nepal	6 223	37 340	1 282	61	207	7	Clusters of cases
Maldives	918	7 578	14 019	2	28	52	Clusters of cases
Myanmar	305	749	14	0	6	<1	Clusters of cases
Sri Lanka	48	2 995	140	0	12	1	Clusters of cases
Bhutan	40	195	253	0	0	<1	Sporadic cases
Thailand	16	3 411	49	0	58	1	Clusters of cases
Timor-Leste	1	27	20	0	0	<1	No cases
Western Pacific	**36 260**	**487 571**	**84**	**692**	**10 562**	**2**	**0**
Philippines	25 882	213 131	1 945	453	3 419	31	Community transmission

Japan	5 517	67 264	532	88	1 264	10	Clusters of cases
Republic of Korea	2 300	19 699	384	14	323	6	Clusters of cases
Australia	945	25 547	1 002	115	600	24	Clusters of cases
Singapore	451	56 717	9 695	0	27	5	Clusters of cases
China	210	90 351	61	11	4 728	3	Clusters of cases
Papua New Guinea	98	459	51	1	5	1	Community transmission
Malaysia	60	9 317	288	0	125	4	Clusters of cases
New Zealand	54	1 378	286	0	22	5	Clusters of cases
Viet Nam	26	1 040	11	6	32	<1	Clusters of cases
Mongolia	3	301	92	0	0	<1	Sporadic cases
Brunei Darussalam	1	144	329	0	3	7	Sporadic cases
Cambodia	0	273	16	0	0	<1	Sporadic cases
Fiji	0	28	31	1	2	2	Sporadic cases
Lao People'S Democratic Republic	0	22	3	0	0	<1	Sporadic cases
Territories[ii]							
Guam	527	1 339	7 934	3	10	59	Clusters of cases
French Polynesia	184	482	1 716	0	0	<1	Sporadic cases
Northern Mariana Islands (Commonwealth of The)	2	56	973	0	2	35	Pending
New Caledonia	0	23	81	0	0	<1	Sporadic cases
Subtotal for all regions	**1 782 811**	**24 853 399**	**-**	**38 088**	**838 911**	**-**	
† Other	0	741	-	0	13	-	Not applicable
Grand total	**1 782 811**	**24 854 140**	**-**	**38 088**	**838 924**	**-**	

**See *data, table and figure notes*

Key weekly updates

- WHO has issued updated interim guidance on hotels and other accommodation facilities to help the sector protect the safety of staff and clients. See also the Q&A's on Staying at hotels and accommodation establishments and COVID-19 and Working in hotels and COVID-19.

- WHO has also released guidance for shipowners, seafarers, unions and associations and associated authorities for promoting public health measures on cargo ships and fishing vessels. This complements guidance for employers to make sure they implement containment measures at workplaces and the related Q&A.

- Speaking at his regular media briefing on 27 August, WHO Director-General Dr Tedros highlighted the momentous achievement of eradicating wild poliovirus in Africa and sleeping sickness in Togo. Dr Tedros went on to say that "globally, we need the same spirit of solidarity and partnership that are helping to end polio and sleeping sickness to end the COVID-19 pandemic."

- The results of a WHO survey conducted to assess the impact of the COVID-19 pandemic on up to 25 essential health services in countries show disruptions of essential health services in nearly all countries, and more so in lower-income than higher-income countries. The great majority of service disruptions were partial, which was defined as a change of 5–50% in service provision or use.

- WHO has published an overview of the structure, methodology, and assumptions used by the COVID-19 Essential Supplies Forecasting Tool (ESFT). The ESFT is designed to help governments, partners, and other stakeholders to estimate potential requirements for essential supplies to respond to the current pandemic of COVID-19. See also the ESFT Frequently Asked Questions.

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operations Updates
- WHO COVID-19 Case definition
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Updates from WHO regions
  - African Region
  - Eastern Mediterranean Region
  - European Region
  - Region of the Americas
  - South-East Asia Region
  - Western Pacific Region
- Research and Development
- Online courses on COVID-19 and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented is based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion critiera, testing strategies, reporting practice, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/ areas report combined probable and laboratory-confirmed cases; efforts are underway to identify these for notation in the data table. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas; classification is based on the highest category reported within a country/territory/area. Categories:

- No cases: with no confirmed cases;
- Sporadic cases: with one or more cases, imported or locally detected;
- Clusters of cases: experiencing cases, clustered in time, geographic location and/or by common exposures;
- Community transmission: experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel laboratory surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area;
- Pending: transmission classification has not been reported to WHO.

[ii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

[†] Other: includes cases reported from international conveyances.

Country, territory, or area-specific notes, updates and errata

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

World Health Organization

Coronavirus disease (COVID-19)

Weekly Epidemiological Update

Data as received by WHO from national authorities, as of 10am CEST 23 August 2020

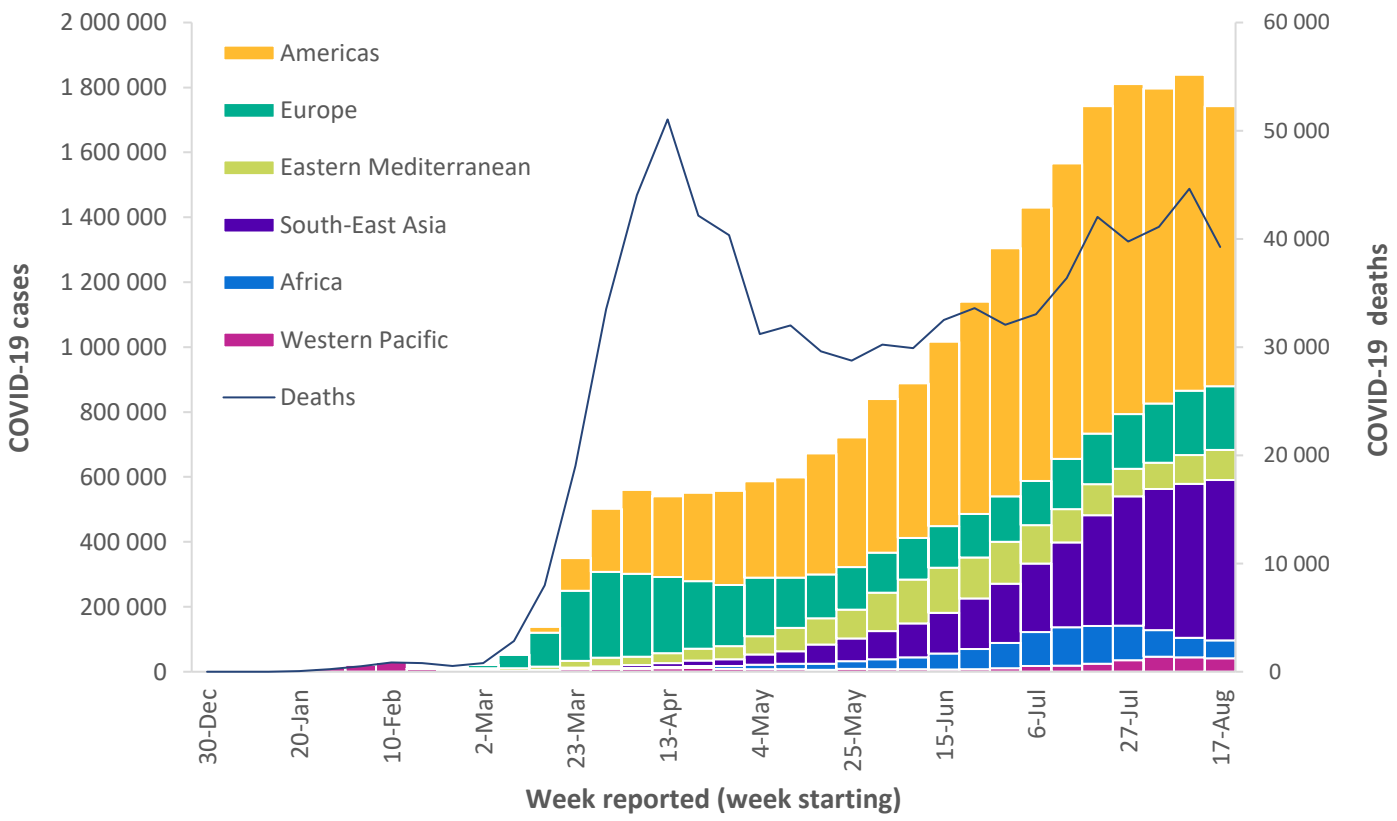
For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- Rolling updates on COVID-19
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

Over 1.7 million new COVID-19 cases and 39 000 new deaths were reported to WHO for the week ending 23 August, a 5% decrease in the number of cases and 12% decrease in the number of deaths compared to the previous week (10 to 16 August) (Figure 1). A cumulative total of over 23 million cases and 800 000 deaths have been reported so far.

Figure 1: Number of COVID-19 cases and deaths reported weekly by WHO region, 30 December to 23 August 2020**



**See *data table and figure notes*.

With the exception of the South-East Asia and Eastern Mediterranean regions, a decrease in the weekly case incidence was reported across WHO regions in the last seven days (Table 1, Figure 2). Although the WHO Region of the Americas remains the most affected, accounting for 50% of newly reported cases and 62% of deaths, the region had the largest decrease compared to the previous week. The South-East Asia Region, which is the second most active region, continues to report an increase accounting for 28% and 19% of newly reported cases and deaths respectively. In the European Region, the number of cases reported has consistently increased over the last three weeks, however, a slight decrease (1%) was reported in the most recent week, and the number of deaths have continued to decrease across the region. In the Eastern Mediterrenean Region, the number of reported cases increased by 4% compared to the previous week, however, the number of reported deaths have consistently decreased over the last six weeks. Likewise, the African and Western Pacific regions reported overall decreases in case activity over the past week.

Region specific information can be found below: African Region, Region of the Americas, Eastern Mediterranean Region, European Region, South-East Asia Region, Western-Pacific Region.

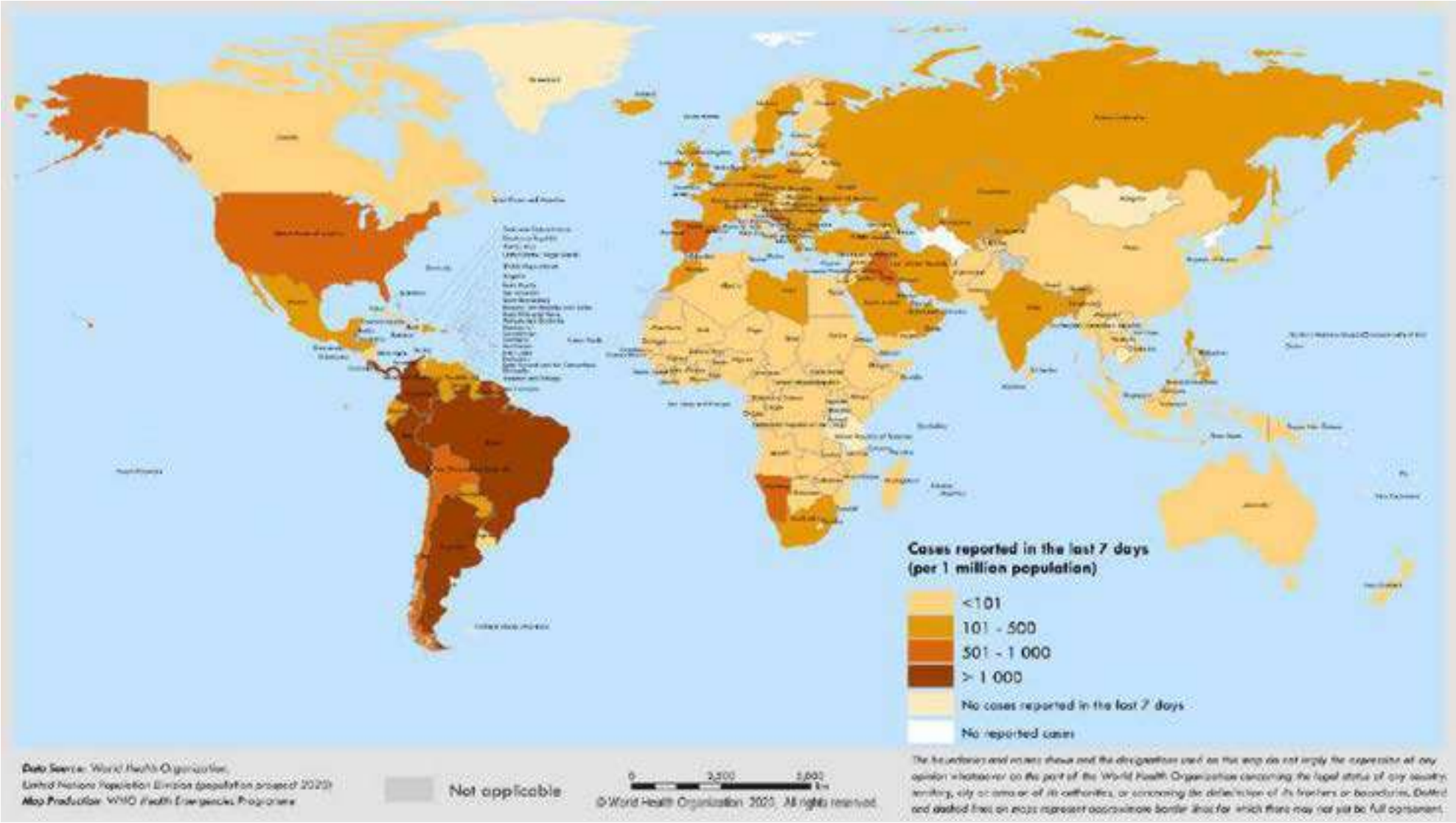
Table 1. Number of COVID-19 confirmed cases and deaths reported in the last seven days, by WHO Region, data as of 23 August 2020[**]

WHO Region	New cases in last seven days (%)	Percentage change in new cases in last 7 days	Cumulative cases (%)	Cumulative cases per 1 million population	New deaths in last seven days (%)	Percentage change in new deaths in last seven days*	Cumulative deaths (%)	Cumulative deaths per 1 million population
Americas	863 093 (50%)	-11%	12 283 953 (53%)	1 823	24 250 (62%)	-17%	438 576 (55%)	65
South-East Asia	493 639 (28%)	4%	3 533 807 (15%)	613	7 580 (19%)	4%	67 455 (8%)	12
Europe	195 999 (11%)	-1%	3 970 890 (17%)	581	2 499 (6%)	-12%	216 478 (27%)	32
Eastern Mediterranean	92 534 (5%)	4%	1 816 207 (8%)	258	2 489 (6%)	-5%	48 193 (6%)	7
Africa	55 165 (3%)	-8%	1 000 379 (4%)	151	1 845 (5%)	-11%	20 321 (3%)	3
Western Pacific	41 722 (2%)	-5%	451 311 (2%)	78	577 (1%)	<1%	9 870 (1%)	2
[†] Other	0	0	741	-	-	-	13	-
Global	**1 742 152 (100%)**	**-5%**	**23 057 288 (100%)**	**2 971**	**39 240 (100%)**	**-12%**	**800 906 (100%)**	**103**

[*]Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. All percentages rounded to the nearest integer.

[**]See data, table and figure notes

Figure 2. COVID-19 cases per 1 million population reported in the last seven days by countries,territories and areas, 17 August to 23 August 2020**



**See *data, table and figure notes*. .

Situation by WHO Region

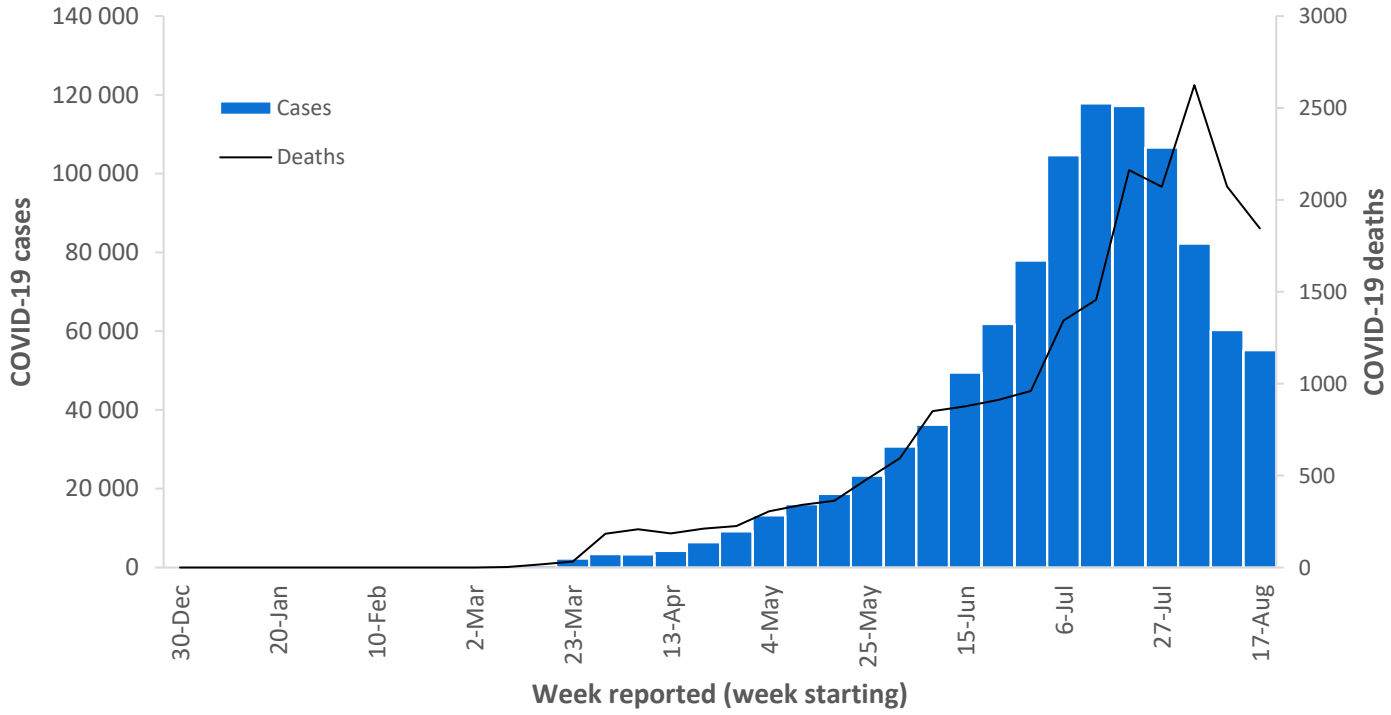
African Region

The number of cases and deaths reported in the African Region decreased by 8% and 11% respectively in the past seven days, primarily due to a decrease in cases reported in Algeria, Ghana, Kenya, Senegal and South Africa (Figure 3, Table 2).

Despite the overall decrease in the number of cases across the region, Uganda reported an increase of over 300%. Here, intensive community transmission has been reported in capital Kampala, particularly the divisions of Makindye, Nakawa and Kawempe.

Ethiopia has continued to report an increase in cases and deaths; and similarly, Namibia and Nigeria reported a 55% and 19% increase in the number of cases respectively. After 22 days of no cases, Mauritius reported two new cases in returnees who were repatriated from a neighbouring country.

Figure 3: Number of COVID-19 cases and deaths reported weekly by African Region, data as of 23 August 2020**



**See *data, table and figure notes*

Table 2. Number of COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, African Region, data as of 23 August 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Algeria	2 935	41 068	937	64	1 424	32	Community transmission
Angola	255	2 134	65	8	94	3	Clusters of cases
Benin	52	2 115	174	0	39	3	Community transmission
Botswana	94	1 308	556	0	3	1	Clusters of cases
Burkina Faso	57	1 297	62	1	55	3	Community transmission
Burundi	17	430	36	0	1	<1	Clusters of cases
Cabo Verde	292	3 455	6 214	3	37	67	Clusters of cases
Cameroon	293	18 762	707	7	408	15	Community transmission
Central African Republic	27	4 679	969	0	61	13	Community transmission
Chad	30	982	60	0	76	5	Community transmission
Comoros	12	417	480	0	7	8	Community transmission
Congo	19	3 850	698	1	77	14	Community transmission
Côte D'Ivoire	381	17 374	659	5	113	4	Community transmission
Democratic Republic of The Congo	173	9 810	110	12	251	3	Community transmission
Equatorial Guinea	105	4 926	3 511	0	83	59	Community transmission
Eritrea	21	306	86	0	0	<1	Sporadic cases
Eswatini	444	4 189	3 611	14	83	72	Community transmission
Ethiopia	10 139	39 033	340	153	662	6	Community transmission
Gabon	163	8 388	3 769	2	53	24	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Gambia	748	2 437	1 008	30	84	35	Community transmission
Ghana	1 115	43 325	1 394	30	261	8	Community transmission
Guinea	624	8 967	683	3	53	4	Community transmission
Guinea-Bissau	32	2 149	1 092	0	33	17	Community transmission
Kenya	2 269	32 118	597	70	542	10	Community transmission
Lesotho	112	1 015	474	5	30	14	Clusters of cases
Liberia	28	1 285	254	0	82	16	Community transmission
Madagascar	553	14 277	516	12	178	6	Community transmission
Malawi	356	5 382	281	11	168	9	Community transmission
Mali	85	2 699	133	0	125	6	Community transmission
Mauritania	201	6 894	1 483	1	158	34	Community transmission
Mauritius	0	346	272	0	10	8	Sporadic cases
Mozambique	513	3 304	106	1	20	1	Community transmission
Namibia	1 631	5 538	2 180	11	46	18	Community transmission
Niger	7	1 172	48	0	69	3	Clusters of cases
Nigeria	3 135	51 905	252	23	997	5	Community transmission
Rwanda	537	2 889	223	3	11	1	Clusters of cases
Sao Tome and Principe	7	892	4 070	0	15	68	Clusters of cases
Senegal	818	12 850	767	15	266	16	Community transmission
Seychelles	0	127	1 291	0	0	<1	Sporadic cases
Sierra Leone	26	1 980	248	0	69	9	Community transmission
South Africa	23 392	607 045	10 235	1 310	12 987	219	Community transmission
South Sudan	10	2 499	223	0	47	4	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Togo	120	1 212	146	1	27	3	Community transmission
Uganda	732	2 166	47	8	20	<1	Clusters of cases
United Republic of Tanzania	0	509	9	0	21	<1	Community transmission
Zambia	1 441	10 627	578	17	277	15	Community transmission
Zimbabwe	717	5 893	396	23	153	10	Community transmission
Territories[ii]							
Mayotte	118	3 237	11 865	0	39	143	Clusters of cases
Réunion	329	1 117	1 248	1	6	7	Clusters of cases
Total	**55 165**	**1 000 379**	**151**	**1 845**	**20 321**	**3**	

**See *data, table and figure notes*

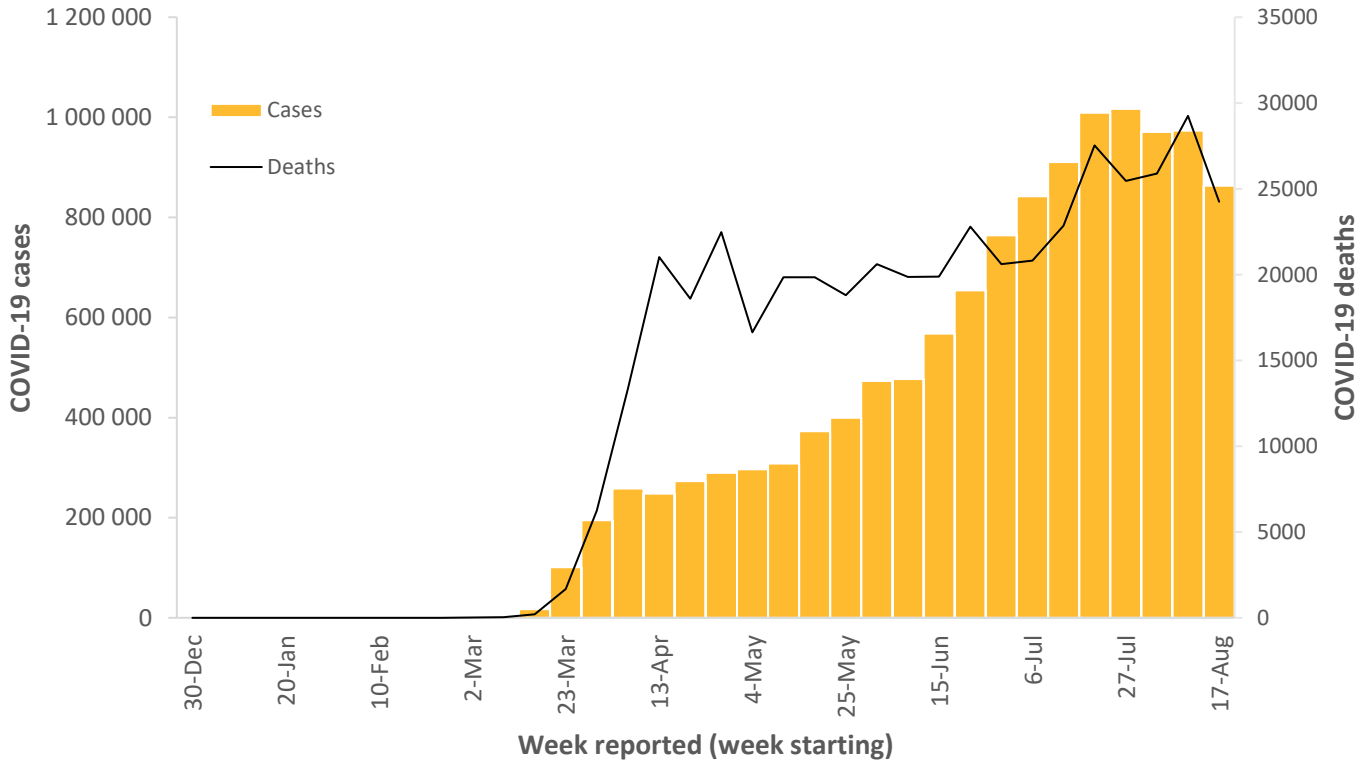
Region of the Americas

The number of new cases and deaths decreased by 11% and 17% respectively compared to the previous week – primarily driven by reduced transmission rates reported fromBrazil, Dominican Republic,Panama and the United States of America (Figure 4, Table 3).

Several countries and territories in the Carribean islands have, however, reported a large increase in cases and deaths in the last seven days including Bahamas, Guadeloupe, Guyana, Jamaica and Trinidad and Tobago. The increase in cases observed in the Carribean islands may in part be due to an increase in tourism.

The number of deaths reported in Peru decreased by 73% compared to the previous week, however, the incidence death rate in the last seven days (42 deaths per 1 million population) and the cumulative death rate in the country (826 deaths per 1 million population) remains the highest in the region.

Figure 4: Number of COVID-19 cases and deaths reported weekly by Region of the Americas, data as of 23 August 2020**



**See *data, table and figure notes*

Table 3. Number of COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, Region of the Americas, data as of 23 August 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Antigua and Barbuda	1	94	960	0	3	31	Clusters of cases
Argentina	46 606	329 043	7 280	1 230	6 795	150	Community transmission
Bahamas	584	1 703	4 331	10	27	69	Clusters of cases
Barbados	9	157	546	0	7	24	Clusters of cases
Belize	260	648	1 630	2	5	13	Clusters of cases
Bolivia (Plurinational State of)	9 485	107 435	9 204	427	4 366	374	Community transmission
Brazil	256 810	3 532 330	16 618	6 835	113 358	533	Community transmission
Canada	2 720	124 372	3 295	44	9 064	240	Community transmission
Chile	11 806	395 708	20 700	397	10 792	565	Community transmission
Colombia	77 027	522 138	10 262	2 076	16 568	326	Community transmission
Costa Rica	5 203	32 134	6 308	59	340	67	Community transmission
Cuba	325	3 617	319	1	89	8	Clusters of cases
Dominica	1	19	264	0	0	<1	Clusters of cases
Dominican Republic	5 016	90 561	8 348	116	1 554	143	Community transmission
Ecuador	6 401	107 089	6 070	212	6 277	356	Community transmission
El Salvador	1 801	24 420	3 765	51	654	101	Community transmission
Grenada	0	24	213	0	0	<1	Clusters of cases
Guatemala	5 543	67 856	3 788	225	2 580	144	Community transmission
Guyana	232	881	1 120	8	30	38	Clusters of cases
Haiti	219	8 050	706	0	196	17	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Honduras	3 914	53 381	5 390	84	1 632	165	Community transmission
Jamaica	264	1 346	455	2	16	5	Clusters of cases
Mexico	38 365	549 734	4 264	3 702	59 610	462	Community transmission
Nicaragua	127	3 540	534	5	133	20	Community transmission
Panama	4 990	84 392	19 559	125	1 859	431	Community transmission
Paraguay	3 514	12 536	1 758	74	182	26	Community transmission
Peru	59 771	576 067	17 471	1 389	27 245	826	Community transmission
Saint Kitts and Nevis	0	17	320	0	0	<1	No cases
Saint Lucia	1	26	142	0	0	<1	Sporadic cases
Saint Vincent and the Grenadines	1	58	523	0	0	<1	Sporadic cases
Suriname	622	3 460	5 898	15	56	95	Community transmission
Trinidad and Tobago	425	899	642	3	13	9	Community transmission
United States of America	308 652	5 567 217	16 819	7 045	174 246	526	Community transmission
Uruguay	95	1 516	436	4	42	12	Clusters of cases
Venezuela (Bolivarian Republic of)	6 807	38 188	1 343	51	317	11	Community transmission
Territories[ii]							
Anguilla	0	3	200	0	0	<1	No cases
Aruba	493	1 387	12 991	2	6	56	Community transmission
Bermuda	8	167	2 682	0	9	145	Sporadic cases
Bonaire, Sint Eustatius and Saba	0	13	496	0	0	<1	Sporadic cases
British Virgin Islands	12	21	695	0	1	33	Sporadic cases
Cayman Islands	2	205	3 119	0	1	15	No cases
Curaçao	5	37	225	0	1	6	Sporadic cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Falkland Islands (Malvinas)	0	13	3 732	0	0	<1	No cases
French Guiana	209	8 797	29 453	2	55	184	Community transmission
Guadeloupe	325	771	1 927	1	15	37	Clusters of cases
Martinique	128	464	1 236	0	16	43	Clusters of cases
Montserrat	0	13	2 601	0	1	200	No cases
Puerto Rico	3 882	29 577	10 339	52	381	133	Community transmission
Saint Barthélemy	3	16	1 619	0	0	<1	Sporadic cases
Saint Martin	67	176	4 553	0	5	129	Sporadic cases
Saint Pierre and Miquelon	1	5	863	0	0	<1	Sporadic cases
Sint Maarten	90	353	8 232	0	17	396	Community transmission
Turks and Caicos Islands	73	347	8 962	0	2	52	Clusters of cases
United States Virgin Islands	198	932	8 925	1	10	96	Community transmission
Total	**863 093**	**12 283 953**	**1 823**	**24 250**	**438 576**	**65**	

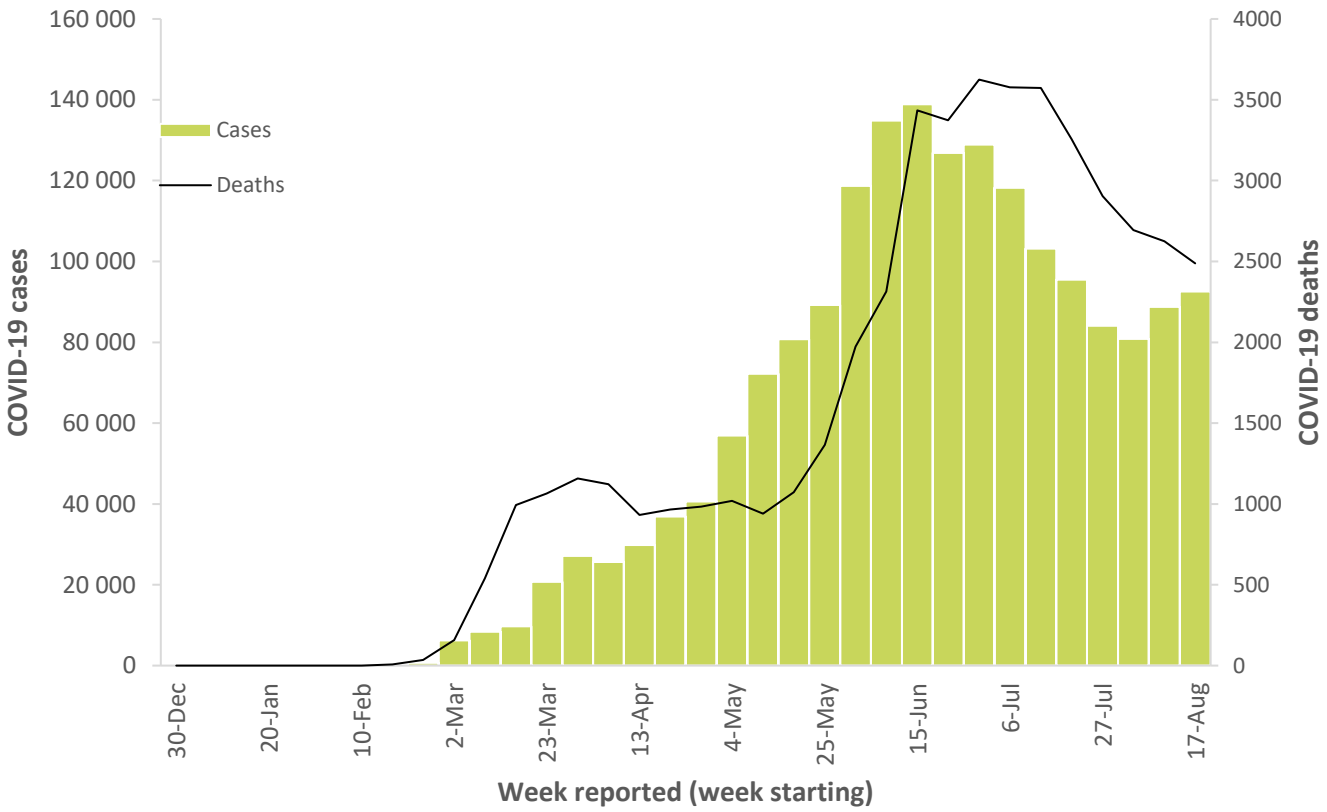
**See *data, table and figure notes*

Eastern Mediterranean Region

The number of cases reported in the Eastern Mediterranean Region increased by 4% in the last seven days, however, the number of deaths decreased by 5% and has consistently decreased over the last six weeks (Figure 5). Jordan, Lebanon and Tunisia reported the highest increase in cases compared to the previous week (Table 4).

Following the explosion in Beirut, Lebanon on 4 August , health care capacity in the area has diminished while COVID-19 cases countinue to rise. As a result of the increase in cases, the Ministry of Public Health has established testing sites for residents and volunteers in the areas most affected by the blast. In addition, several health facilities are being restored and health supplies, including personal protective equipments, have been received.

Figure 5: Number of COVID-19 cases and deaths reported weekly by Eastern Mediterranean Region, data as of 23 August 2020**



***See data, table and figure notes*

Table 4. Number of COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, Eastern Mediterranean Region, data as of 23 August 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Afghanistan	403	37 999	976	12	1 387	36	Clusters of cases
Bahrain	2 608	49 038	28 819	13	183	108	Clusters of cases
Djibouti	15	5 382	5 447	1	60	61	Clusters of cases
Egypt	901	97 237	950	102	5 243	51	Clusters of cases
Iran (Islamic Republic of)	15 722	356 792	4 248	1 010	20 502	244	Community transmission
Iraq	28 467	201 050	4 998	568	6 353	158	Community transmission
Jordan	237	1 576	154	0	11	1	Clusters of cases
Kuwait	4 260	79 957	18 723	15	513	120	Clusters of cases
Lebanon	3 749	12 191	1 786	24	121	18	Community transmission
Libya	3 110	10 437	1 519	49	188	27	Clusters of cases
Morocco	9 795	50 812	1 377	226	858	23	Clusters of cases
Oman	845	83 769	16 404	47	609	119	Community transmission
Pakistan	4 048	292 765	1 325	67	6 235	28	Clusters of cases
Qatar	1 956	116 765	40 529	1	193	67	Community transmission
Saudi Arabia	9 055	306 370	8 800	250	3 619	104	Clusters of cases
Somalia	13	3 269	206	0	93	6	Sporadic cases
Sudan	368	12 682	289	17	815	19	Community transmission
Syrian Arab Republic	550	2 143	122	25	85	5	Community transmission
Tunisia	715	2 738	232	14	68	6	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
United Arab Emirates	2 515	66 617	6 736	11	372	38	Community transmission
Yemen	49	1 911	64	18	547	18	Community transmission
Territories[ii]							
occupied Palestinian territory	3 153	24 707	4 843	19	138	27	Clusters of cases
Total	**92 534**	**1 816 207**	**258**	**2 489**	**48 193**	**7**	

**See *data, table and figure notes*

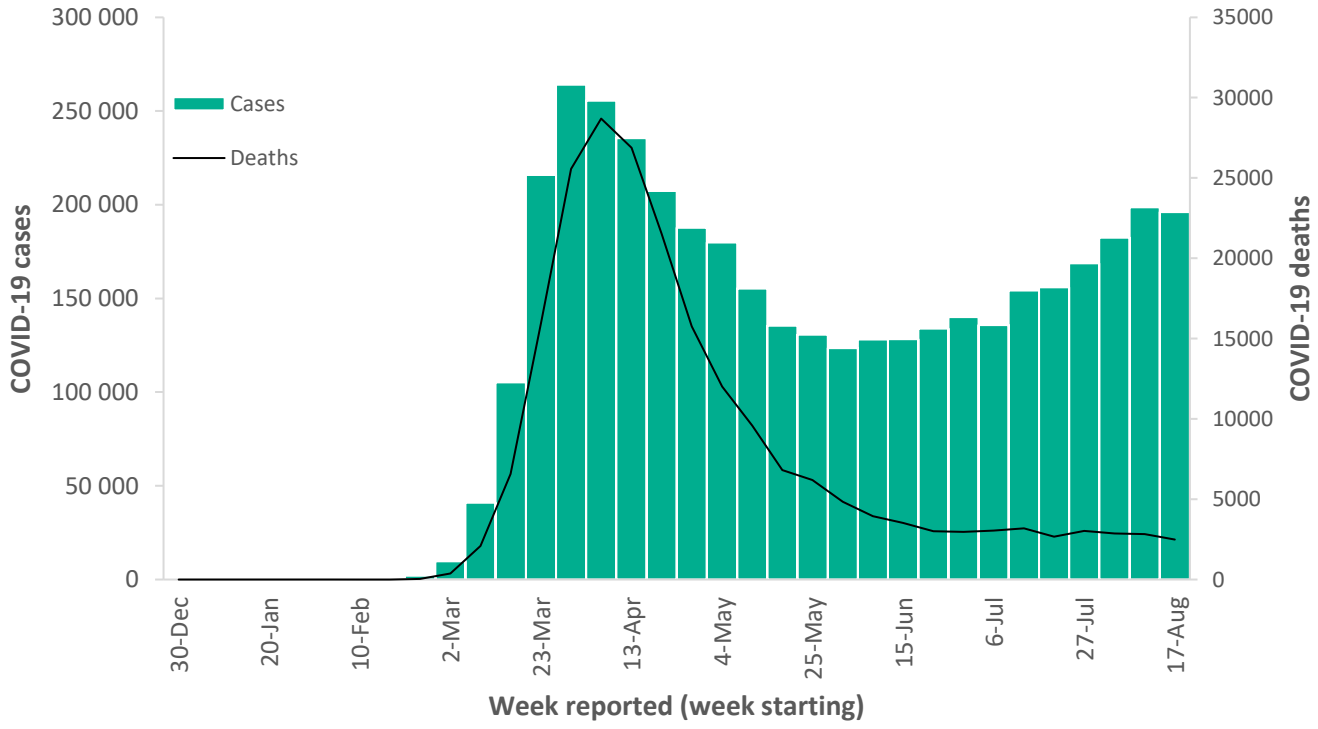
European Region

Following a steady increase in the number of cases reported in the European Region over the last few weeks, the number of cases decreased slightly by 1% in the last seven days . The number of deaths reported in the last seven days decreased by 12%, continuing the downward trend (Figure 6). Not all countries are reporting a decline: Spain reported a 200% increase in the number of deaths in the last week compared to the previous week.

As countries across the region continue to report a resurgence in cases, several countries reported record high numbers in the last seven days including Croatia, , Czechia, Poland, Republic of Moldova and Ukraine (Table 5).

In response to the increase in cases across the region, many countries have recently re-introduced public health and social measures including travel restrictions.

Figure 6: Number of COVID-19 cases and deaths reported weekly by European Region, data as of 23 August 2020**



***See data, table and figure notes*

Table 5. Number of COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, European Region, data as of 23 August 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Albania	1 015	8 275	2 875	20	245	85	Clusters of cases
Andorra	50	1 047	13 551	0	53	686	Community transmission
Armenia	1 129	42 792	14 441	34	852	288	Community transmission
Austria	1 888	25 099	2 787	4	732	81	Community transmission
Azerbaijan	998	35 105	3 462	9	515	51	Clusters of cases
Belarus	861	70 285	7 438	30	637	67	Community transmission
Belgium	2 696	81 374	7 021	41	9 988	862	Community transmission
Bosnia and Herzegovina	1 910	17 712	5 399	60	526	160	Community transmission
Bulgaria	798	15 131	2 178	44	539	78	Clusters of cases
Croatia	1 480	7 900	1 924	5	170	41	Clusters of cases
Cyprus	85	1 417	1 174	1	21	17	Clusters of cases
Czechia	1 899	21 790	2 035	16	411	38	Clusters of cases
Denmark	644	16 127	2 784	0	621	107	Community transmission
Estonia	81	2 265	1 707	0	63	47	Clusters of cases
Finland	151	7 871	1 421	1	334	60	Community transmission
France	21 301	223 419	3 423	99	30 376	465	Clusters of cases
Georgia	75	1 411	354	0	17	4	Clusters of cases
Germany	8 631	232 864	2 779	38	9 269	111	Clusters of cases
Greece	1 523	8 381	804	14	240	23	Clusters of cases
Holy See	0	12	14 833	0	0	<1	Sporadic cases
Hungary	256	5 133	531	4	611	63	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Iceland	59	2 058	6 031	0	10	29	Community transmission
Ireland	717	27 908	5 652	3	1 777	360	Clusters of cases
Israel	8 290	99 827	11 533	71	798	92	Community transmission
Italy	4 698	258 136	4 269	38	35 430	586	Clusters of cases
Kazakhstan	5 564	127 203	6 775	0	1 633	87	Clusters of cases
Kyrgyzstan	1 167	43 023	6 594	6	1 056	162	Clusters of cases
Latvia	18	1 333	707	1	33	17	Clusters of cases
Liechtenstein	8	101	2 648	0	1	26	Sporadic cases
Lithuania	208	2 594	953	3	84	31	Community transmission
Luxembourg	265	7 704	12 307	1	124	198	Community transmission
Malta	231	1 577	3 572	1	10	23	Sporadic cases
Monaco	7	108	2 752	0	1	25	Sporadic cases
Montenegro	302	4 315	6 870	9	84	134	Clusters of cases
Netherlands	3 597	66 034	3 854	31	6 191	361	Community transmission
North Macedonia	762	13 308	6 388	22	557	267	Clusters of cases
Norway	347	10 197	1 881	3	264	49	Clusters of cases
Poland	5 091	61 181	1 617	82	1 951	52	Community transmission
Portugal	1 230	55 211	5 415	17	1 792	176	Clusters of cases
Republic of Moldova	3 167	33 072	8 198	40	935	232	Community transmission
Romania	8 170	77 544	4 031	279	3 233	168	Community transmission
Russian Federation	33 896	956 749	6 556	698	16 383	112	Clusters of cases
San Marino	7	726	21 392	0	42	1 238	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Serbia	1 077	30 548	4 387	25	695	100	Community transmission
Slovakia	461	3 316	607	2	33	6	Clusters of cases
Slovenia	216	2 617	1 259	3	127	61	Clusters of cases
Spain	30 718	386 054	8 257	191	28 838	617	Clusters of cases
Sweden	1 774	86 068	8 522	27	5 810	575	Community transmission
Switzerland	1 695	39 526	4 567	5	1 719	199	Community transmission
Tajikistan	248	8 277	868	2	66	7	Pending
The United Kingdom	7 161	324 605	4 782	62	41 423	610	Community transmission
Turkey	8 915	257 032	3 048	147	6 102	72	Community transmission
Ukraine	13 602	104 958	2 400	201	2 271	52	Community transmission
Uzbekistan	3 754	38 698	1 156	41	269	8	Clusters of cases
Territories[ii]							
Faroe Islands	14	384	7 858	0	0	<1	Sporadic cases
Gibraltar	23	229	6 797	0	0	<1	Clusters of cases
Greenland	0	14	247	0	0	<1	No cases
Guernsey	0	252	3 988	0	13	206	Community transmission
Isle of Man	0	336	3 951	0	24	282	No cases
Jersey	7	363	3 336	1	32	294	Community transmission
Kosovo[1]	1 062	12 294	6 608	67	447	240	Community transmission
Total	**195 999**	**3 970 890**	**581**	**2 499**	**216 478**	**32**	

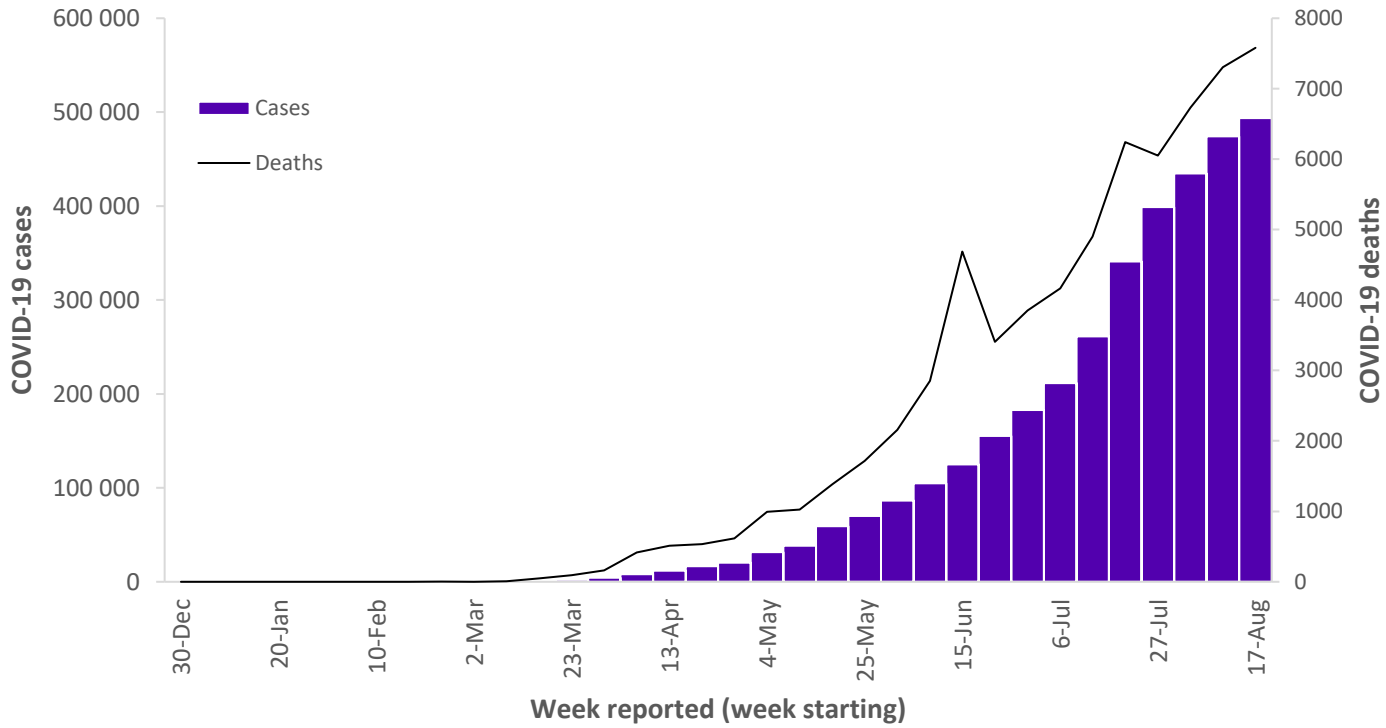
**See *data, table and figure notes*

South-East Asia Region

South-East Asia is the second most affected region and currently accounts for 28% and 19% of newly reported cases and deaths respectively, globally in the past seven days. The region has seen a steady increase in reported cases and deaths, with a 4% increase in the past seven days (Figure 7). India continues to report the majority of cases, and has reported a cumulative total of over three million cases, which accounts for 86% of all regional confirmed cases (Table 6).

The number of cases and deaths in Nepal has rapidly increased in the last seven days with a 49% and 52% increase respectively compared to the previous weeks. In addition, the testing capacity in Nepal has significantly increased resulting in a 38% increase in the testing rate.

Figure 7: Number of COVID-19 cases and deaths reported weekly by South-East Asia Region, data as of 23 August 2020**



**See *data, table and figure notes*

Table 6. Number of COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, South-East Asia Region, data as of 23 August 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Bangladesh	18 100	292 625	1 777	282	3 907	24	Community transmission
Bhutan	22	155	201	0	0	<1	Sporadic cases
India	455 258	3 044 940	2 206	6 726	56 706	41	Clusters of cases
Indonesia	14 030	151 498	554	523	6 594	24	Community transmission
Maldives	981	6 660	12 321	4	26	48	Clusters of cases
Myanmar	70	444	8	0	6	<1	Sporadic cases
Nepal	5 098	31 117	1 068	44	146	5	Clusters of cases
Sri Lanka	61	2 947	138	1	12	1	Clusters of cases
Thailand	18	3 395	49	0	58	1	Clusters of cases
Timor-Leste	1	26	20	0	0	<1	No cases
Total	**493 639**	**3 533 807**	**613**	**7 580**	**67 455**	**12**	

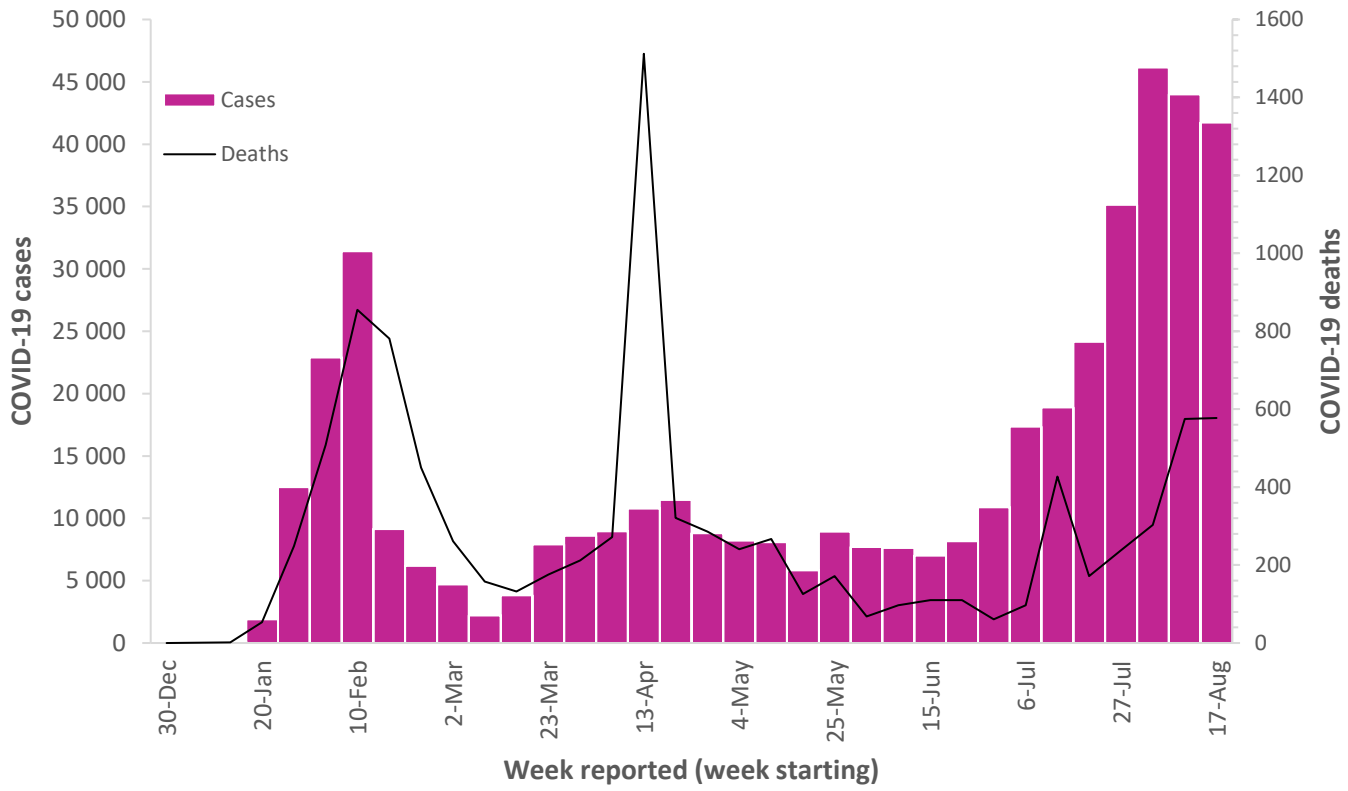
**See *data, table and figure notes*

Western Pacific Region

The number of cases reported in the Western Pacific Region decreased by 5% following a decrease in the number of new cases reported by Australia, China, Japan, Singapore and Viet Nam (Figure 8, Table 7). The Republic of Korea reported a 180% increase in cases, mainly due to an increase in cases associated with religious gatherings.

Due to the increase in cases reported in the region, some Pacific Island countries are tightening border measures. There is also an increase in active testing and case finding systems across the region, which are facilitating the detection and control of clusters.

Figure 8: Number of COVID-19 cases and deaths reported weekly by Western Pacific Region, data as of 23 August 2020**



**See *data, table and figure notes*

Table 7. Number of COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, Western Pacific Region, data as of 23 August 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Australia	1 567	24 602	965	106	485	19	Clusters of cases
Brunei Darussalam	1	143	327	0	3	7	No cases
Cambodia	0	273	16	0	0	<1	Sporadic cases
China	380	90 141	61	7	4 717	3	Clusters of cases
Fiji	0	28	31	0	1	1	Sporadic cases
Japan	7 033	61 747	488	88	1 176	9	Clusters of cases
Lao People'S Democratic Republic	0	22	3	0	0	<1	Sporadic cases
Malaysia	82	9 257	286	0	125	4	Clusters of cases
Mongolia	0	298	91	0	0	<1	Sporadic cases
New Zealand	53	1 324	275	0	22	5	Clusters of cases
Papua New Guinea	86	361	40	1	4	<1	Community transmission
Philippines	29 331	187 249	1 709	366	2 966	27	Community transmission
Republic of Korea	2 081	17 399	339	4	309	6	Clusters of cases
Singapore	605	56 266	9 618	0	27	5	Clusters of cases
Viet Nam	63	1 014	10	3	26	<1	Clusters of cases
Territories[ii]							
French Polynesia	132	298	1 061	0	0	<1	Sporadic cases
Guam	304	812	4 811	2	7	41	Clusters of cases
New Caledonia	0	23	81	0	0	<1	Sporadic cases
Northern Mariana Islands (Commonwealth of The)	4	54	938	0	2	35	Pending
Total	**41 722**	**451 311**	**78**	**577**	**9 870**	**2**	

**See *data, table and figure notes*

Key weekly updates

- During the 20 August Member State Briefing, WHO Director-General Dr Tedros highlighted that "the fastest way to end the pandemic and reopen economies is to start by protecting the highest risk populations everywhere, rather than the entire populations of just some countries." He encouraged all countries to join the COVAX Global Vaccines Facility, part of the ACT Accelerator – a critical mechanism for joint procurement and pooling risk across multiple vaccines. Nine vaccine candidates in the COVAX portfolio are currently going through Phase II or Phase III clinical trials. WHO is proposing to allocate vaccines in two phases. Speaking on 24 August, Dr Tedros further explained that "the Facility is the critical mechanism for joint procurement and pooling risk across multiple vaccines so that whatever vaccine is proven to be safe and effective – all countries within the Facility will be able to access them. Most importantly, it is the mechanism to enable a globally coordinated rollout. This is in the interests of all countries, even those that have invested with individual manufacturers independently." WHO issued terms of agreement for all countries to confirm how they prefer to join the mechanism, with a deadline of 31 August.

- WHO has published updated guidance on quarantine measures for individuals who are identified as contacts of a case of COVID-19. This includes information on the implementation of quarantine, as well as on ventilation and on the care of children in quarantine.

- WHO has published new guidance on the use of masks for children which serves as an annex to previously published guidance on use of masks in the context of COVID-19. The Q&A on children and the use of masks has recently been updated that provides answers to questions the public may have.

- Speaking at a press conference held jointly with UNICEF, Dr Matshidiso Moeti, WHO Regional Director for Africa said "Schools have paved the way to success for many Africans. They also provide a safe haven for many children in challenging circumstances to develop and thrive. We must not be blind-sided by our efforts to contain COVID-19 and end up with a lost generation. Just as countries are opening businesses safely, we can reopen schools. This decision must be guided by a thorough risk analysis to ensure the safety of children, teachers and parents and with key measures like physical distancing put in place." In a WHO survey of 39 countries in sub-Saharan Africa, only six schools were found to be fully open. The impact of extended disruption to education as a result of school closure is significant, and inlcudes poor nutrition, stress, increased exposure to violence and exploitation, childhood pregnancies, and diminished educational progress. WHO and UNICEF have urged governments in Africa to promote the safe reopening of schools while taking measures to limit the spread of the virus.

- Globally, risks of COVID-19 resurgence remain in all countries that have managed to suppress transmission. Dr Hans Henri P. Kluge, WHO Regional Director for Europe, highlighted this during a statement to the press, indicating that as summer turns to autumn in the northern hemisphere, we must make sure that we adopt the right public health measures to enable the safe return to school, manage the approaching influenza season, sustain our economies, and address the increased health risks to older people at this time of year.

- The COVID-19 pandemic has negatively affected mental health and raised concerns of an increase in domestic violence in the Region of the Americas. WHO Regional-Director Carissa F. Etienne has counseled that countries in the Americas should expand and invest in mental health services. WHO has produced several publications on mental health and COVID-19, including advice for the public, a children's book, and other guidance.

- Recent studies that show an increased risk among pregnant women of presenting with severe forms of COVID-19. In light of this, the WHO Regional Office for the Americas is encouraging countries to step up efforts to ensure access to prenatal care services for pregnant women.

- WHO and the Jack Ma Foundation have donated COVID-19 essential medical supplies to 20 Caribbean countries. The supplies, which landed in Barbados, will be delivered through a new integrated regional logistics hub, supported by a donation by the Government of Canada.

- The COVID-19 pandemic has affected older people disproportionately, especially those living in long-term care facilities. Some countries indicate that more than 40% of COVID-19 related deaths have been linked to long-term care facilities. The WHO Regional Office for the Western Pacific has produced a communication toolkit for long-term care facilities to support Infection Prevention and Control. This compliments a WHO policy brief released last month on preventing and managing COVID-19 across long-term care services.

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operations Updates
- Updates from WHO regional offices
  - WHO AFRO
  - WHO PAHO
  - WHO EMRO
  - WHO SEARO
  - WHO EURO
  - WHO WPRO
- Research and Development
- Online courses on COVID-19 and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented is based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion critiera, testing strategies, reporting practice, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/ areas report combined probable and laboratory-confirmed cases; efforts are underway to identify these for notation in the data table. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas; classification is based on the highest category reported within a country/territory/area. Categories:

- No cases: with no confirmed cases;
- Sporadic cases: with one or more cases, imported or locally detected;
- Clusters of cases: experiencing cases, clustered in time, geographic location and/or by common exposures;
- Community transmission: experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel laboratory surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area;
- Pending: transmission classification has not been reported to WHO.

[ii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

[†] Other: includes cases reported from international conveyances.

Country, territory, or area-specific notes, updates and errata

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

- Erratum,Global Epidemiological Situation: The percentage change in the new cases and deaths in the last seven days have been corrected to align with the numbers provided in Table 1.
- Erratum, Situation by WHO Region,Eastern Mediterranean Region: The percentage change in the new cases reported last seven days have been corrected.The change aligns with numbers provided in Table 1.
- Erratum, Situation by WHO Region,South-East Asia Region: The percentage for new deaths reported in last seven days has been corrected. The change aligns with numbers provided in Table 1.

World Health Organization

Coronavirus disease (COVID-19)

Weekly Epidemiological Update 1

Data as received by WHO from national authorities, as of 10am CEST 16 August 2020

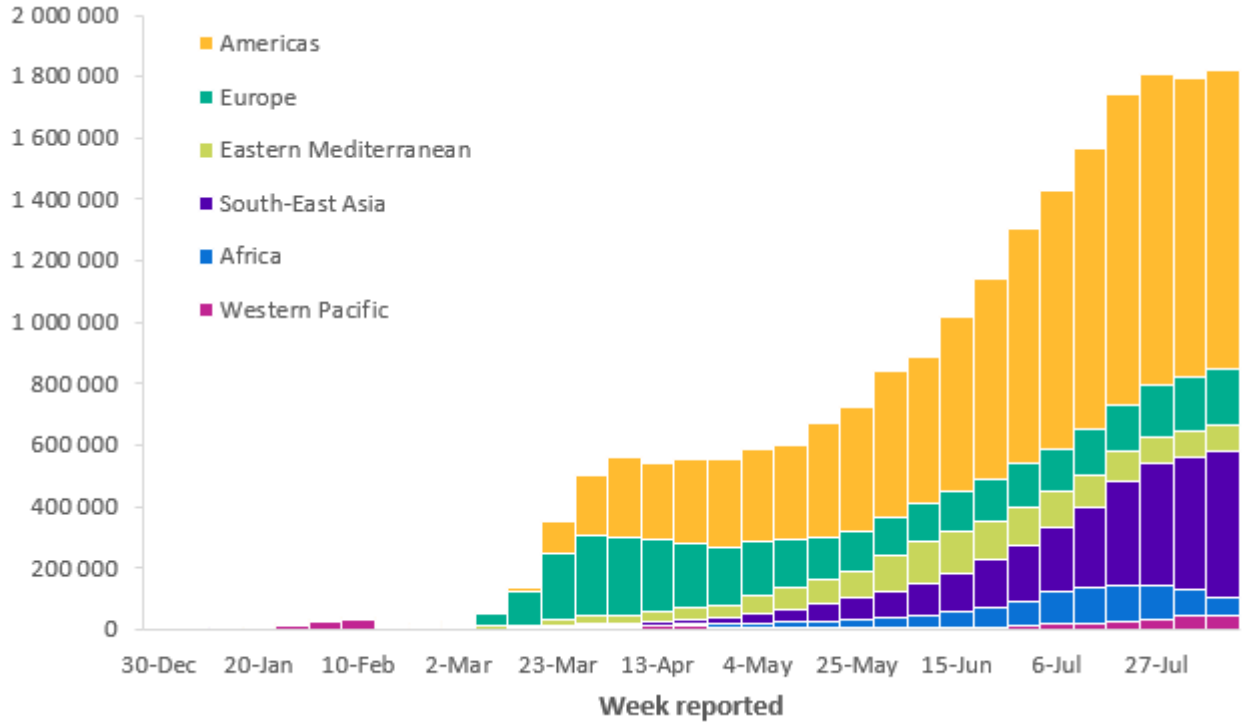
For the latest data and information on COVID-19, please see:

- WHO COVID-19 Dashboard
- Rolling updates on COVID-19
- WHO COVID-19 Weekly Operational Update

Global epidemiological situation

For the week ending 16 August, over 1.8 million new COVID-19 cases and 39 000 new deaths were reported to WHO.This brings the cumulative total to 21.2 million confirmed COVID-19 cases including 761 000 deaths (Figure 1). In the past seven days, the number of reported daily cases rapidly increased with an average of 260 000 cases and 5 500 deaths.

Figure 1: Number of COVID-19 cases reported weekly by WHO region, 30 December to 16 August 2020**



***See data table and figure notes.*

The WHO Region of the Americas remains the most affected region in the past seven days, accounting for 53% of all newly confirmed cases and 75% of reported deaths. The South-East Asia Region continues to report an increase in cases and is currently the second most affected region. While the number of

cases decreased in the Eastern Mediterranean Region from the end of June through to 10 August, a 10% increase was reported in the number of cases reported in last seven days. The number of reported deaths, however, have continued to decrease across the region. The Western Pacific Region reported a large increase in the number of deaths compared to the previous seven days, although, this accounted for just 1% of the new deaths reported globally. The African Region reported a decrease in the number of cases and deaths over the past seven days (Table 1, Figure 2).

Due to the resurgence of cases in many countries, stay at home measures and travel restrictions are being re-implemented as part of efforts to limit the transmission of the virus.

Situation by WHO Region

Region of the Americas

In the WHO Region of the Americas, the number of cases reported last week remained stable compared to the previous week, with a less than 1% increase in the number of newly confirmed cases. However, during the same period, the number of deaths increased by 13%. The United States of America reported 360 000 new cases, a 4% decrease from the previous week. This decrease may in part be attributable to an underreporting of cases in California due to technology issues with the electronic laboratory reporting system which reports into the state's disease registry system.

The number of deaths reported in Peru increased by 220% in the past seven days to a total of 25 800 and a cumulative death rate of 784 deaths per 1 million population, which is currently the highest in the region.

Reports of COVID-19 cases among indigenous people are increasing across the region, with a reported mortality rate higher in this group compared to non-indigenous peoples.

South-East Asia Region

South-East Asia is the second most affected region and currently accounts for a respective 26% and 19% of newly reported cases and deaths globally in the past seven days. The region has seen a steady increase in reported cases and deaths, with a 9% increase in the past 7 days, compared to the previous week. India continues to report the majority of cases, accounting for 85% of all confirmed cases in the region as of 16 August and 92% of cases in the past seven days. The Maldives has recorded the highest incidence rate globally as cases continue to increase in the country.

European Region

The number of cases reported in the European Region has gradually increased in recent weeks, however, there was no substantial change in the number of cases reported this week compared to the previous week. Nevertheless, a number of countries in the region are showing a resurgence in cases including France, Germany, Netherlands, Spain and the United Kingdom. Several COVID-19 clusters, which have

contributed to the resurgence of cases, have been reported in meat processing and packaging facilities in a number of countries including Belgium, Denmark and Germany. A total of 2 480 deaths were reported across the region in the past seven days, which is a 21% decrease from the previous week. However, following a retrospective review process in the United Kingdom, over 5 000 deaths were deducted from the country's total COVID-19 deaths, resulting in a decrease of 2 728 deaths in the European region.

African Region

The African Region reported the largest decrease in the number of newly reported cases (27%) and deaths (21%) in the past seven days, primarily due to a decrease in cases reported in South Africa, Kenya, Algeria, Nigeria and Ghana.
Conversely, Ethiopia reported a 56% and 12% increase in the number of cases and deaths respectively, with more than half of the cases reported in Addis Ababa. Due to the increase in cases, a month-long testing and prevention campaign will be implemented with a plan to carry out 400 000 tests.

There are increasing reports of healthcare worker infections across the region, resulting in an overburdened health care system in several countries including Gambia, Kenya, Nigeria and Zimbabwe.

Eastern Mediterranean Region

Following five weeks of decline in the number of cases reported in the Eastern Mediterranean Region, a total of 88 700 new cases were reported in the last seven days, a 10% increase in the number of newly reported cases compared to the previous week. While countries in the Gulf state are reporting a decline in incidence, Iraq, Morocco, occupied Palestinian territory, Lebanon and Libya are reporting an increase in cases. The number of cases and deaths reported in Pakistan in the past seven days decreased by 20% and 24% respectively from the previous week, resulting in the lifting of lockdown restrictions across the country.

Western Pacific Region

The number of cases reported in the Western Pacific Region decreased by 5% as the number of new cases reported in Japan, Australia, Singapore and Viet Nam decreased in the past seven days. However, the number of deaths reported increased by 90% mainly due to increases reported in the Philippines, Japan, Viet Nam, China and Australia. The Republic of Korea continues to report cases associated with religious clusters and reported an increase of 210% in the number of cases compared to last week. On August 11, New Zealand reported a new locally acquired case, after recording 102 days with no community transmission. A total of 52 new cases have been reported in the past seven days resulting in a temporary lockdown of the northern part of the country. New Zealand is the third country in the region to report a resurgence in cases after a period of little or no known community transmission. Other countries include Australia and Viet Nam.

Key weekly updates

- "There are two essential elements to addressing the pandemic effectively: leaders must step up to take action and citizens need to embrace new measures…My message is crystal clear: suppress, suppress, suppress the virus."

  WHO Director-General Dr Tedros, at his regular media briefing on Monday, 10 August

- The Access to COVID-19 Tools (ACT) Accelerator, is a global collaboration to accelerate the development, production, and equitable access to COVID-19 tests, treatments, and vaccines. Nine vaccine candidates are currently in the portfolio of the vaccines pillar (called COVAX) and going through phase two or phase three trials. This portfolio, already the broadest in the world, is constantly expanding. The ACT-Accelerator is the only up-and-running global initiative that brings together all the global research and development, manufacturing, regulatory, purchasing and procurement needed for all the tools required to end the pandemic.

- Access to basic handwashing facilities is a key condition for schools to be able to operate safely in the midst of the COVID-19 pandemic. Yet the latest data from the WHO/UNICEF Joint Monitoring Programme (JMP) found that 43% of schools worldwide lacked access to basic handwashing with soap and water in 2019. UNICEF and partners have published a Framework for Reopening schools and guidance on hand hygiene, which compliments Key Messages and Actions for COVID-19 Prevention and Control in Schools and Considerations for school-related public health measures in the context of COVID-19.

- WHO has published updated guidance on home care for patients with suspected or confirmed COVID-19 and the management of their contacts. The document provides guidance on the issues to be considered when deciding whether or not to provide care for COVID-19 patients at home and offers advice for health workers and caregivers providing that care.

- WHO has published the Emergency Global Supply Chain System (COVID-19) catalogue, which lists all medical devices, including personal protective equipment, medical equipment, medical consumables, single use devices, laboratory and test-related devices that may be requested through the COVID-19 Supply Portal.

Table 1. Number of COVID-19 confirmed cases and deaths reported in the last seven days, by WHO Region, data as of 16 August 2020**

WHO Region	New cases in last seven days (%)	Percentage change in new cases in last 7 days*	Cumulative cases (%)	New deaths in last seven days (%)	Percentage change in new deaths in last seven days*	Cumulative deaths (%)
Americas	973 599 (53%)	<1%	11 420 860 (54%)	29 250 (75%)	13%	414 326 (54%)
South-East Asia	474 368 (26%)	9%	3 040 168 (14%)	7 306 (19%)	9%	59 875 (8%)
Europe	180 196 (10%)	<1%	3 754 649 (18%)	- 2 728 (-7%)	-187%	214 092 (28%)
Africa	60 175 (3%)	-27%	945 165 (4%)	2 073 (5%)	-21%	18 476 (2%)
Eastern Mediterranean	88 733 (5%)	10%	1 723 673 (8%)	2 624 (7%)	-3%	45 704 (6%)
Western Pacific	43 984 (2%)	-5%	409 589 (2%)	575 (1%)	90%	9 293 (1%)
Global	**1 821 055**	**1%**	**21 294 845**	**39 100**	**-6%**	**761 779**

**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior. All percentages rounded to the nearest integer.*

***See data, table and figure notes.*

Table 2. Number of COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, data as of 16 August 2020**

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Americas							
United States of America	360 607	5 258 565	15 887	7 271	167 201	505	Community transmission
Brazil	313 078	3 275 520	15 410	6 951	106 523	501	Community transmission
Colombia	77 915	445 111	8 748	2 242	14 492	285	Community transmission
Peru	52 421	516 296	15 659	5 207	25 856	784	Community transmission
Argentina	46 760	282 437	6 249	1 115	5 565	123	Community transmission
Mexico	41 962	511 369	3 966	4 597	55 908	434	Community transmission
Chile	12 879	383 902	20 083	384	10 395	544	Community transmission
Bolivia (Plurinational State of)	10 059	97 950	8 391	415	3 939	337	Community transmission
Venezuela (Bolivarian Republic of)	7 215	31 381	1 104	58	266	9	Community transmission
Ecuador	7 116	100 688	5 707	149	6 065	344	Community transmission
Panama	6 842	79 402	18 402	143	1 734	402	Community transmission
Dominican Republic	6 767	85 545	7 886	149	1 438	133	Community transmission
Guatemala	6 124	62 313	3 478	158	2 355	131	Community transmission
Costa Rica	4 850	26 931	5 287	63	281	55	Community transmission
Honduras	2 832	49 467	4 994	83	1 548	156	Community transmission
Canada	2 667	121 652	3 223	50	9 020	239	Community transmission
El Salvador	2 641	22 619	3 487	67	603	93	Community transmission
Paraguay	2 514	9 022	1 265	39	108	15	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Suriname	635	2 838	4 838	12	41	70	Community transmission
Cuba	404	3 292	291	0	88	8	Clusters of cases
Bahamas	289	1 119	2 846	3	17	43	Clusters of cases
Trinidad and Tobago	249	474	339	2	10	7	Clusters of cases
Belize	242	388	976	1	3	8	Clusters of cases
Haiti	232	7 831	687	19	196	17	Community transmission
Nicaragua	147	3 413	515	5	128	19	Community transmission
Guyana	111	649	825	0	22	28	Clusters of cases
Uruguay	96	1 421	409	1	38	11	Clusters of cases
Jamaica	95	1 082	365	2	14	5	Clusters of cases
Barbados	10	148	515	0	7	24	Clusters of cases
Antigua and Barbuda	1	93	950	0	3	31	Clusters of cases
Saint Vincent and the Grenadines	1	57	514	0	0	<1	Sporadic cases
Dominica	0	18	250	0	0	<1	Clusters of cases
Grenada	0	24	213	0	0	<1	Clusters of cases
Saint Kitts and Nevis	0	17	320	0	0	<1	No cases
Saint Lucia	0	25	136	0	0	<1	Sporadic cases
Territories[ii]							
Puerto Rico	4 271	25 695	8 982	55	329	115	Community transmission
Aruba	631	894	8 373	1	4	37	Community transmission
French Guiana	321	8 588	28 753	5	53	177	Community transmission
United States Virgin Islands	206	734	7 029	0	9	86	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Guadeloupe	156	446	1 115	0	14	35	Clusters of cases
Turks and Caicos Islands	104	274	7 077	0	2	52	Clusters of cases
Sint Maarten	87	263	6 133	1	17	396	Community transmission
Saint Martin	56	109	2 820	2	5	129	Sporadic cases
Saint Barthélemy	4	13	1 315	0	0	<1	Sporadic cases
Bermuda	1	159	2 553	0	9	145	Sporadic cases
Curaçao	1	32	195	0	1	6	Sporadic cases
Anguilla	0	3	200	0	0	<1	No cases
Bonaire, Sint Eustatius and Saba	0	13	496	0	0	<1	Sporadic cases
British Virgin Islands	0	9	298	0	1	33	Sporadic cases
Cayman Islands	0	203	3 089	0	1	15	No cases
Falkland Islands (Malvinas)	0	13	3 732	0	0	<1	No cases
Martinique	0	336	895	0	16	43	Clusters of cases
Montserrat	0	13	2 601	0	1	200	No cases
Saint Pierre and Miquelon	0	4	690	0	0	<1	Sporadic cases
South-East Asia							
India	436 672	2 589 682	1 877	6 601	49 980	36	Clusters of cases
Bangladesh	19 412	274 525	1 667	260	3 625	22	Community transmission
Indonesia	13 965	137 468	503	413	6 071	22	Community transmission
Nepal	3 427	26 019	893	29	102	4	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Maldives	781	5 679	10 506	3	22	41	Clusters of cases
Sri Lanka	45	2 886	135	0	11	1	Clusters of cases
Thailand	26	3 377	48	0	58	1	Clusters of cases
Bhutan	25	133	172	0	0	<1	Sporadic cases
Myanmar	15	374	7	0	6	<1	Sporadic cases
Timor-Leste	0	25	19	0	0	<1	No cases
Europe							
Russian Federation	35 317	922 853	6 324	754	15 685	107	Clusters of cases
Spain	22 952	342 813	7 332	53	28 617	612	Clusters of cases
France	16 765	202 118	3 096	76	30 277	464	Clusters of cases
Ukraine	10 407	91 356	2 089	173	2 070	47	Community transmission
Romania	8 751	69 374	3 606	295	2 954	154	Community transmission
Turkey	8 495	248 117	2 942	126	5 955	71	Community transmission
Germany	7 562	223 453	2 667	35	9 231	110	Clusters of cases
Kazakhstan	7 059	119 781	6 379	0	1 433	76	Clusters of cases
Israel	6 835	88 488	10 223	54	640	74	Community transmission
The United Kingdom	6 604	316 371	4 660	- 5 208	41 358	609	Community transmission
Poland	4 923	56 090	1 482	69	1 869	49	Community transmission
Uzbekistan	4 747	34 944	1 044	38	228	7	Clusters of cases
Netherlands	4 450	62 437	3 644	12	6 160	360	Community transmission
Italy	3 335	253 438	4 192	189	35 392	585	Clusters of cases
Belgium	2 914	77 776	6 711	59	9 935	857	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Republic of Moldova	2 462	29 905	7 413	54	895	222	Community transmission
Sweden	1 971	84 294	8 347	20	5 783	573	Community transmission
Kyrgyzstan	1 937	41 856	6 416	27	1 495	229	Clusters of cases
Bosnia and Herzegovina	1 713	15 802	4 816	70	466	142	Community transmission
Czechia	1 656	19 891	1 857	6	395	37	Clusters of cases
Serbia	1 608	29 471	3 340	38	670	76	Community transmission
Switzerland	1 469	37 831	4 371	3	1 714	198	Community transmission
Portugal	1 444	53 981	5 294	25	1 775	174	Clusters of cases
Greece	1 437	6 858	658	15	226	22	Clusters of cases
Austria	1 276	23 211	2 577	7	728	81	Community transmission
Armenia	1 253	41 663	14 060	27	818	276	Community transmission
Denmark	1 041	15 483	2 673	4	621	107	Community transmission
Bulgaria	990	14 333	2 063	50	495	71	Clusters of cases
Albania	985	7 260	2 523	32	225	78	Clusters of cases
Croatia	877	6 420	1 564	8	165	40	Clusters of cases
North Macedonia	775	12 546	6 022	12	535	257	Clusters of cases
Belarus	686	69 424	7 347	22	607	64	Community transmission
Azerbaijan	626	34 107	3 364	18	506	50	Clusters of cases
Ireland	547	27 191	5 507	2	1 774	359	Clusters of cases
Norway	382	9 850	1 817	5	261	48	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Montenegro	349	4 013	6 389	8	75	119	Clusters of cases
Luxembourg	326	7 439	11 884	4	123	196	Community transmission
Malta	313	1 247	2 824	0	9	20	Sporadic cases
Slovakia	289	2 855	523	0	31	6	Clusters of cases
Tajikistan	284	8 029	842	2	64	7	Pending
Hungary	224	4 877	505	5	607	63	Community transmission
Lithuania	155	2 386	876	0	81	30	Community transmission
Slovenia	154	2 401	1 155	4	124	60	Clusters of cases
Finland	152	7 720	1 393	2	333	60	Clusters of cases
Georgia	111	1 336	335	0	17	4	Clusters of cases
Cyprus	99	1 332	1 103	1	20	17	Clusters of cases
Iceland	44	1 999	5 858	0	10	29	Community transmission
Andorra	41	997	12 904	1	53	686	Community transmission
Estonia	37	2 184	1 646	0	63	47	Clusters of cases
Latvia	27	1 315	697	0	32	17	Clusters of cases
Monaco	15	143	3 644	0	1	25	Sporadic cases
Liechtenstein	4	93	2 439	0	1	26	Sporadic cases
San Marino	2	719	21 186	0	42	1 238	Community transmission
Holy See	0	12	14 833	0	0	<1	Sporadic cases
Territories[ii]							
Kosovo[1]	1 216	11 232	6 037	75	380	204	Community transmission
Faroe Islands	79	370	7 572	0	0	<1	Sporadic cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Gibraltar	13	206	6 114	0	0	<1	Clusters of cases
Jersey	11	356	3 272	0	31	285	Community transmission
Isle of Man	0	336	3 951	0	24	282	No cases
Guernsey	0	252	3 988	0	13	206	Community transmission
Greenland	0	14	247	0	0	<1	No cases
Africa							
South Africa	30 465	583 653	9 841	1 467	11 677	197	Community transmission
Ethiopia	6 641	28 894	251	119	509	4	Community transmission
Kenya	4 012	29 849	555	54	472	9	Community transmission
Algeria	3 440	38 133	870	67	1 360	31	Community transmission
Nigeria	2 630	48 770	237	32	974	5	Community transmission
Ghana	1 677	42 210	1 358	25	231	7	Community transmission
Zambia	1 283	9 186	500	57	260	14	Community transmission
Namibia	1 055	3 907	1 538	19	35	14	Clusters of cases
Senegal	1 029	12 032	719	22	251	15	Community transmission
Madagascar	802	13 724	496	25	166	6	Community transmission
Eswatini	617	3 745	3 228	13	69	59	Community transmission
Zimbabwe	601	5 176	348	28	130	9	Clusters of cases
Gambia	599	1 689	699	35	54	22	Sporadic cases
Mozambique	550	2 791	89	3	19	1	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Guinea	468	8 343	635	0	50	4	Community transmission
Cameroon	427	18 469	696	6	401	15	Community transmission
Botswana	410	1 214	516	1	3	1	Clusters of cases
Malawi	402	5 026	263	14	157	8	Community transmission
Côte D'Ivoire	373	16 993	644	4	108	4	Community transmission
Cabo Verde	328	3 163	5 689	2	34	61	Clusters of cases
Angola	307	1 879	57	16	86	3	Clusters of cases
Gabon	302	8 225	3 695	0	51	23	Community transmission
Rwanda	218	2 352	182	2	8	1	Clusters of cases
Democratic Republic of The Congo	202	9 637	108	21	239	3	Community transmission
Mauritania	195	6 693	1 439	0	157	34	Community transmission
Congo	167	3 831	694	18	76	14	Community transmission
Lesotho	161	903	422	2	25	12	Clusters of cases
Benin	127	2 063	170	1	39	3	Community transmission
Uganda	116	1 385	30	6	12	<1	Clusters of cases
Togo	80	1 092	132	4	26	3	Community transmission
Burkina Faso	65	1 240	59	0	54	3	Community transmission
Guinea-Bissau	65	2 117	1 076	4	33	17	Community transmission
Sierra Leone	59	1 954	245	1	69	9	Community transmission
Mali	49	2 614	129	0	125	6	Community transmission
Liberia	23	1 257	249	3	82	16	Community transmission
South Sudan	19	2 489	222	0	47	4	Community transmission

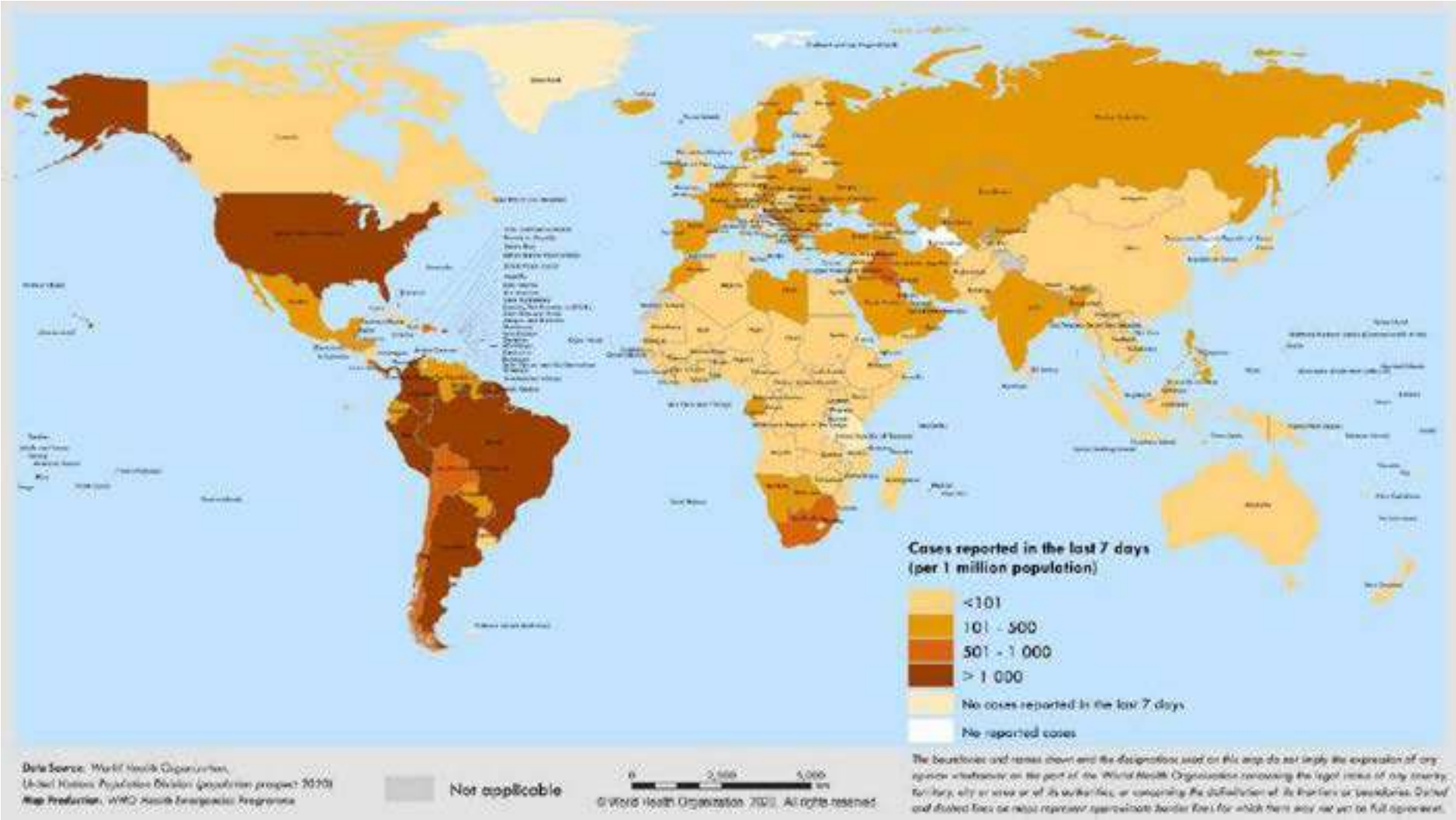
Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Central African Republic	11	4 652	963	2	61	13	Community transmission
Chad	10	952	58	0	76	5	Community transmission
Burundi	8	413	35	0	1	<1	Clusters of cases
Niger	8	1 165	48	0	69	3	Community transmission
Sao Tome and Principe	7	885	4 038	0	15	68	Clusters of cases
Comoros	6	405	466	0	7	8	Community transmission
Mauritius	2	346	272	0	10	8	Sporadic cases
Seychelles	1	127	1 291	0	0	<1	Sporadic cases
Equatorial Guinea	0	4 821	3 436	0	83	59	Community transmission
Eritrea	0	285	80	0	0	<1	Sporadic cases
United Republic of Tanzania	0	509	9	0	21	<1	Community transmission
Territories[ii]							
Réunion	107	788	880	0	5	6	Clusters of cases
Mayotte	51	3 119	11 433	0	39	143	Clusters of cases
Eastern Mediterranean							
Iraq	25 194	172 583	4 291	475	5 785	144	Community transmission
Iran (Islamic Republic of)	16 378	341 070	4 061	1 228	19 492	232	Community transmission
Saudi Arabia	10 053	297 315	8 540	239	3 369	97	Clusters of cases
Morocco	9 010	41 017	1 111	152	632	17	Clusters of cases
Pakistan	4 614	288 717	1 307	94	6 168	28	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Kuwait	4 498	75 697	17 725	24	498	117	Clusters of cases
Bahrain	2 801	46 430	27 286	8	170	100	Clusters of cases
Libya	2 249	7 327	1 066	31	139	20	Clusters of cases
Lebanon	2 219	8 442	1 237	23	97	14	Community transmission
Qatar	2 159	114 809	39 850	10	192	67	Community transmission
United Arab Emirates	1 802	64 102	6 481	5	361	37	Community transmission
Oman	1 567	82 924	16 239	53	562	110	Community transmission
Egypt	1 022	96 336	941	149	5 141	50	Clusters of cases
Afghanistan	542	37 596	966	63	1 375	35	Clusters of cases
Syrian Arab Republic	468	1 593	91	10	60	3	Community transmission
Sudan	420	12 314	281	25	798	18	Community transmission
Tunisia	345	2 023	171	3	54	5	Sporadic cases
Jordan	93	1 339	131	0	11	1	Clusters of cases
Yemen	61	1 862	62	16	529	18	Community transmission
Djibouti	29	5 367	5 432	0	59	60	Clusters of cases
Somalia	29	3 256	205	0	93	6	Sporadic cases
Territories[ii]							
occupied Palestinian territory	3 180	21 554	4 225	16	119	23	Clusters of cases
Western Pacific							
Philippines	31 033	157 918	1 441	391	2 600	24	Community transmission
Japan	7 931	54 714	433	48	1 088	9	Clusters of cases
Australia	2 337	23 035	903	101	379	15	Clusters of cases

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 1 million population	New deaths in last 7 days	Cumulative deaths:	Cumulative deaths per 1 million population	Transmission classification
Singapore	732	55 661	9 514	0	27	5	Clusters of cases
Republic of Korea	720	15 318	299	0	305	6	Clusters of cases
China	612	89 761	61	22	4 710	3	Clusters of cases
Viet Nam	139	951	10	13	23	<1	Clusters of cases
Malaysia	105	9 175	283	0	125	4	Clusters of cases
Papua New Guinea	87	275	31	0	3	<1	Community transmission
New Zealand	52	1 271	264	0	22	5	Clusters of cases
Cambodia	25	273	16	0	0	<1	Sporadic cases
Mongolia	5	298	91	0	0	<1	Sporadic cases
Lao People's Democratic Republic	2	22	3	0	0	<1	Sporadic cases
Fiji	1	28	31	0	1	1	Sporadic cases
Brunei Darussalam	0	142	325	0	3	7	Sporadic cases
Territories[ii]							
Guam	104	508	3 010	0	5	30	Clusters of cases
French Polynesia	97	166	591	0	0	<1	Sporadic cases
Northern Mariana Islands (Commonwealth of The)	2	50	869	0	2	35	Pending
New Caledonia	0	23	81	0	0	<1	Sporadic cases
Subtotal for all regions	**1 821 055**	**21 294 104**	**2743**	**39 100**	**761 766**	**98**	
Other[†]	0	741	-	0	13	-	Not applicable
Grand total	**1 821 055**	**21 294 845**	**2743**	**39 100**	**761 779**	**98**	

**See *data, table and figure notes*.

Figure 2. COVID-19 cases per 1 million population reported in the last seven days by countries,territories and areas, 10 August to 16 August 2020**



**See data, table and figure notes.*

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operations Updates
- Updates from WHO regional offices
  - WHO AFRO
  - WHO PAHO
  - WHO EMRO
  - WHO SEARO
  - WHO EURO
  - WHO WPRO
- Research and Development
- Online courses on COVID-19 and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Data, table and figure notes

Data presented is based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO surveillance definitions and guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion critiera, testing strategies, reporting practice, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/ areas report combined probable and laboratory-confirmed cases; efforts are underway to identify these for notation in the data table. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas; classification is based on the highest category reported within a country/territory/area. Categories:

- No cases: with no confirmed cases;
- Sporadic cases: with one or more cases, imported or locally detected;
- Clusters of cases: experiencing cases, clustered in time, geographic location and/or by common exposures;
- Community transmission: experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel laboratory surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area;
- Pending: transmission classification has not been reported to WHO.

[ii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

[†] Other: includes cases reported from international conveyances.

Country, territory, or area-specific notes, updates and errata

Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. See the log of major changes and errata for details. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.