COVID-19 Weekly Epidemiological Update

Edition 145 published 1 June 2023

In this edition:

Global overview

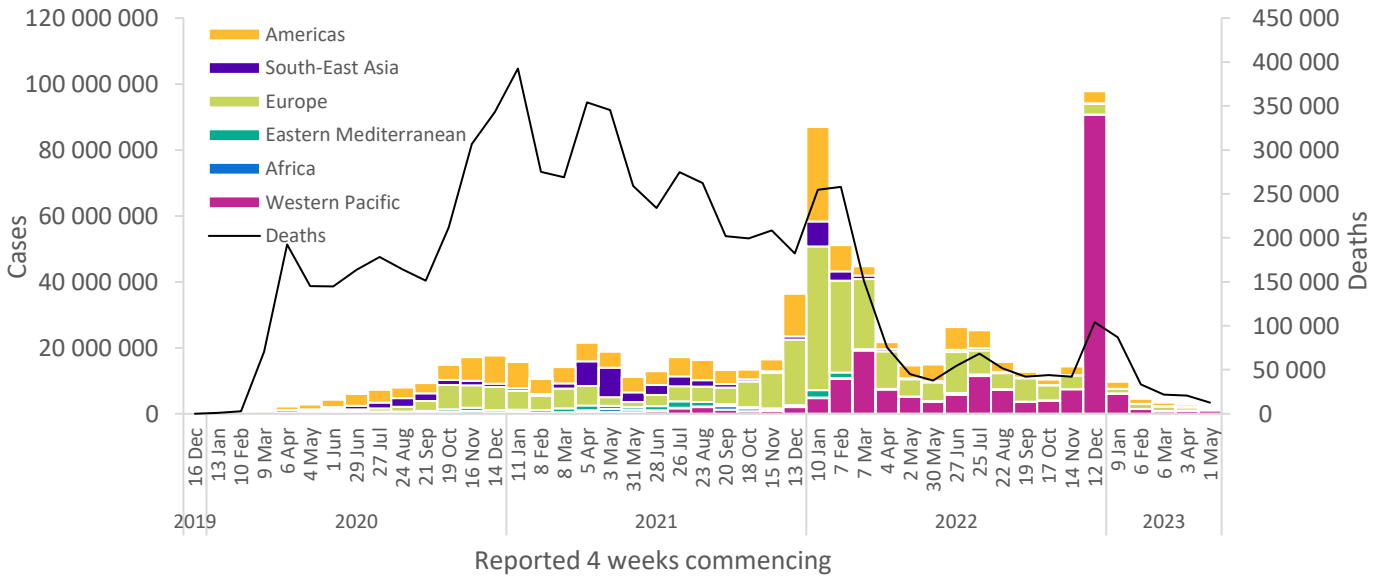
Data as of 28 May 2023

Globally, nearly 2 million new cases and over 12 000 deaths were reported in the last 28 days (1 to 28 May 2023), a decrease of 30% and 39%, respectively, compared to the previous 28 days (3 to 30 April 2023) (Figure 1, Table 1). During this 28-day reporting period, 150 of 243 (62%) countries and territories reported at least one case. The situation is mixed at the regional level, with increases in reported cases seen in the Western Pacific Region and the African Region, and decreases in deaths in all six WHO regions. As of 28 May 2023, over 767 million confirmed cases and over 6.9 million deaths have been reported globally.

Reported COVID-19 cases are underestimates of infection rates, largely due to the reductions in testing globally, and potential delays in reporting. Data presented in this report are therefore incomplete and should be interpreted in light of changes in testing and surveillance. Additionally, data from previous weeks are continuously being updated to incorporate retrospective changes in reported COVID-19 cases and deaths made by countries.

We present changes in epidemiological trends using a 28-day interval. Disaggregated data are still accessible on the WHO COVID-19 dashboard, where the full dataset is available for download.

Figure 1. COVID-19 cases reported by WHO Region, and global deaths by 28-day intervals, as of 28 May 2023**



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

At the regional level, the number of newly reported 28-day cases decreased across four of the six WHO regions: the South-East Asia Region (-66%), the Eastern Mediterranean Region (-52%), the European Region (-48%), and the Region of the Americas (-44%); while case numbers increased or remained stable in two WHO regions, the Western Pacific Region (+10%) and the African Region (+3%). The number of newly reported 28-day deaths decreased or remained stable across six regions: the Eastern Mediterranean Region (-74%), the European Region (-50%), the Region of the Americas (-33%), the Western Pacific Region (-15%), the African Region (-11%), and the South-East Asia Region (-4%).

At the country level, the highest numbers of new 28-day cases were reported from the Republic of Korea (476 087 new cases; +44%), the United States of America (170 425 new cases; -57%), Australia (138 721 new cases; +22%), Brazil (129 610 new cases; -32%), and France (106 803 new cases; -46%). The highest numbers of new 28-day deaths were reported from the United States of America (3089 new deaths; -41%), Brazil (1170 new deaths; -7%), France (685 new deaths; -22%), the Russian Federation (614 new deaths; -38%), and Italy (606 new deaths; -4%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 28 May 2023**

WHO Region	New cases in last 28 days (%)	Change in new cases in last 28 days *	Cumulative cases (%)	New deaths in last 28 days (%)	Change in new deaths in last 28 days *	Cumulative deaths (%)
Western Pacific	1 002 686 (50%)	10%	**203 860 910 (27%)**	1 329 (11%)	-15%	**412 249 (6%)**
Europe	476 449 (24%)	-48%	**276 462 853 (36%)**	4 571 (36%)	-50%	**2 238 758 (32%)**
Americas	393 469 (20%)	-44%	**192 946 838 (25%)**	5 513 (44%)	-33%	**2 954 589 (43%)**
South-East Asia	88 019 (4%)	-66%	**61 161 195 (8%)**	915 (7%)	-4%	**805 971 (12%)**
Eastern Mediterranean	21 823 (1%)	-52%	**23 377 260 (3%)**	221 (2%)	-74%	**351 258 (5%)**
Africa	7 101 (<1%)	3%	**9 532 755 (1%)**	17 (<1%)	-11%	**175 369 (3%)**
Global	**1 989 547 (100%)**	**-30%**	**767 342 575 (100%)**	**12 566 (100%)**	**-39%**	**6 938 207 (100%)**

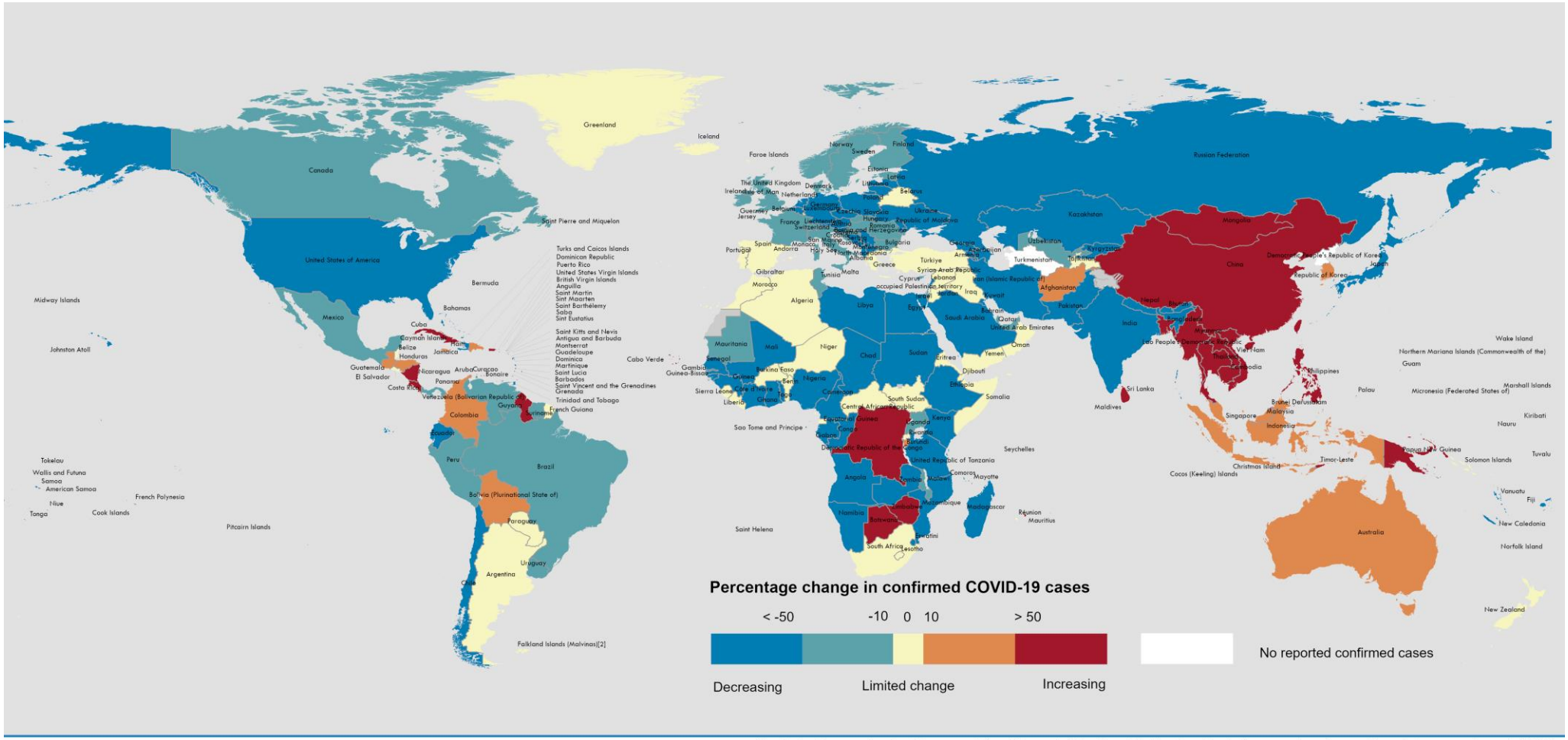
**Percent change in the number of newly confirmed cases/deaths in the past 28 days, compared to 28 days prior. Data from previous weeks are updated continuously with adjustments received from countries.*

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

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

- WHO COVID-19 Dashboard
- WHO Monthly Operational Update and past editions of the Weekly Epidemiological Update on COVID-19
- WHO COVID-19 detailed surveillance data dashboard
- WHO COVID-19 policy briefs

Figure 2. Percentage change in confirmed COVID-19 cases over the last 28 days relative to the previous 28 days, as of 28 May 2023**



***Data Source**: World Health Organization*
***Map Production**: WHO Health Emergencies Programme*

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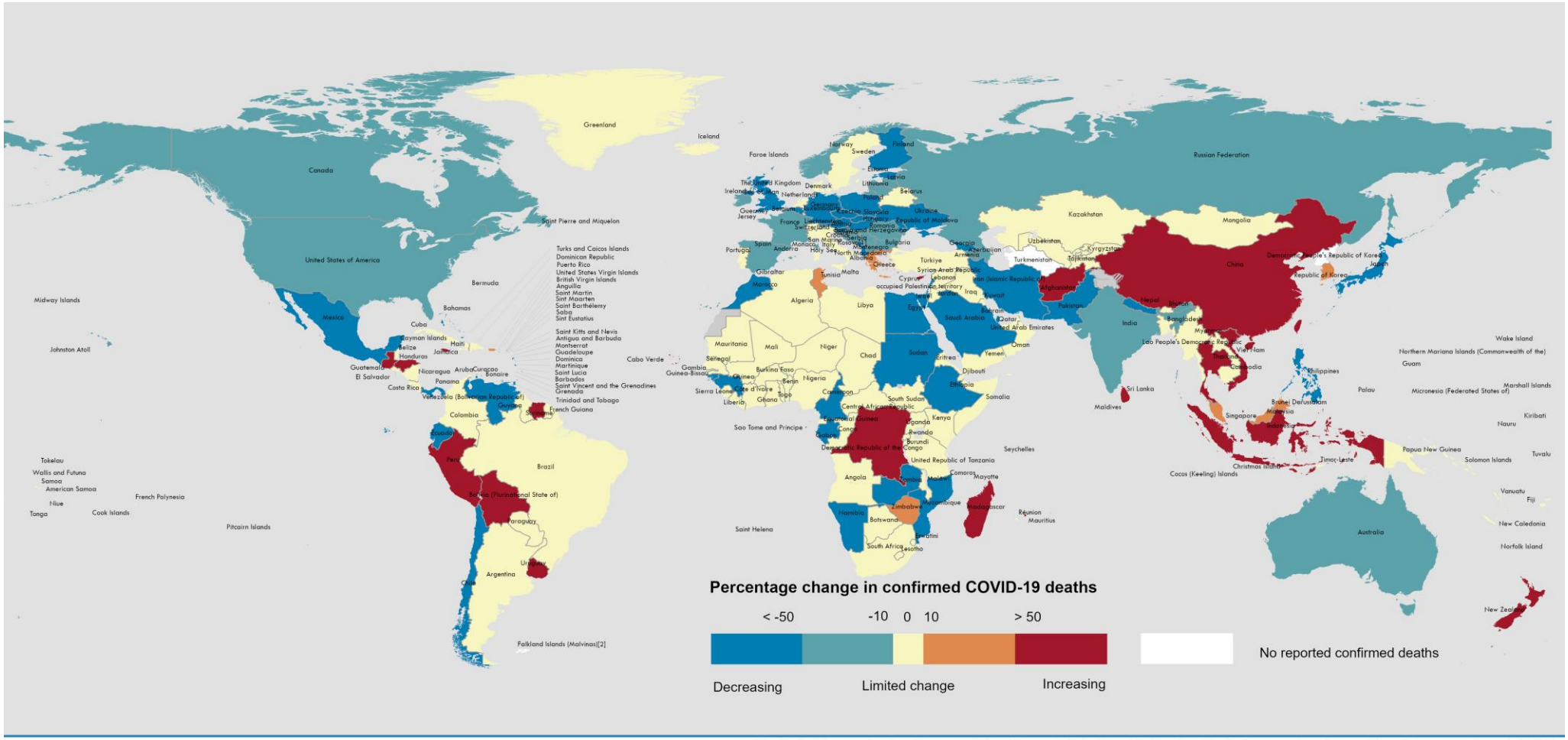
**See *Annex 1: Data, table, and figure notes*

Figure 3. Percentage change in confirmed COVID-19 deaths over the last 28 days relative to the previous 28 days, as of 28 May 2023**



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

Hospitalizations and ICU admissions

At the global level, during the past 28 days (24 April to 21 May 2023), a total of 94 096 new hospitalizations and 2723 new intensive care unit (ICU) admissions were reported (Figure 4). This represents a 27% and 13% decrease in hospitalizations and ICU admissions, respectively, compared to the previous 28 days (27 March to 23 April 2023). The presented hospitalization data are preliminary and might change as new data become available. Furthermore, hospitalization data are subject to reporting delays. These data also likely include both hospitalizations with incidental cases of SARS-CoV-2 infection and those due to COVID-19 disease.

Globally, during the past 28 days, 37 (16%) countries reported data to WHO on new hospitalizations at least once (Figure 5). The European Region had the highest proportion of countries reporting data on new hospitalizations (19 countries; 31%), followed by the South-East Asia Region (two countries; 18%), the Eastern Mediterranean Region (three countries; 14%), the African Region (six countries; 12%), the Western Pacific Region (three countries; 9%), and the Region of the Americas (four countries; 7%). The proportion of countries that consistently[i] reported new weekly hospitalizations for the period was 11% (25 countries).

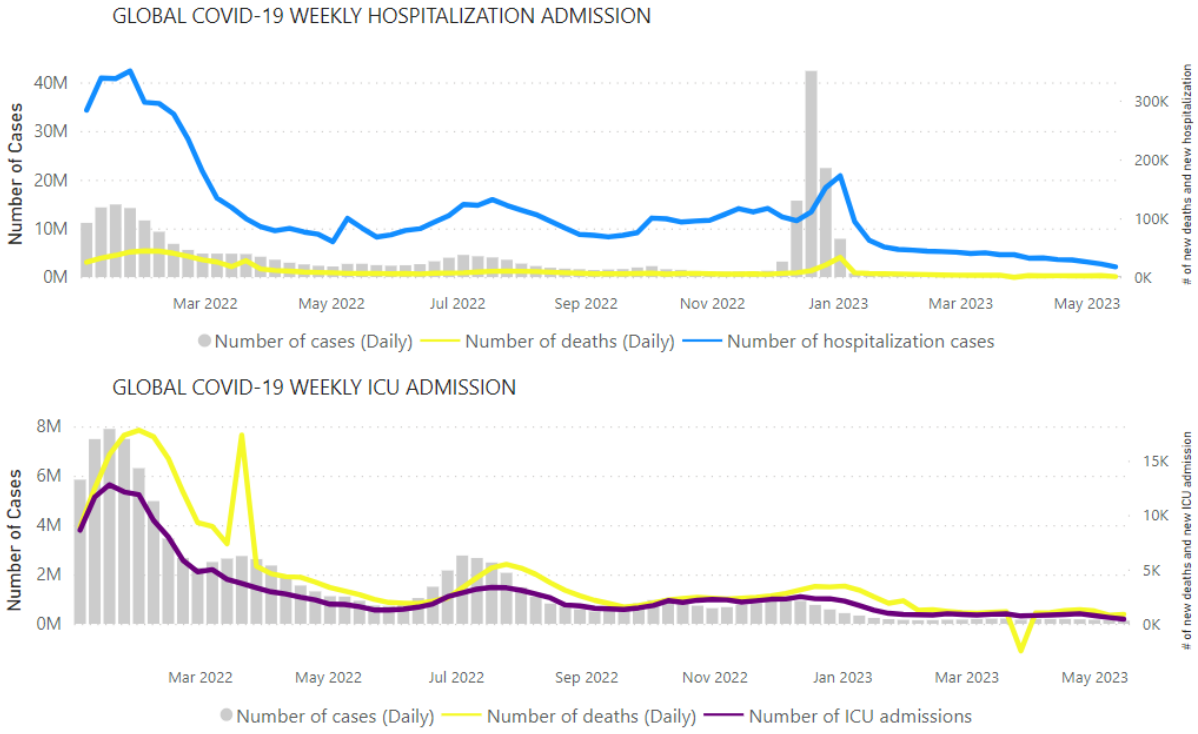
Among the 25 countries consistently reporting new hospitalizations, six (24%) countries registered an increase of 20% or greater in hospitalizations during the past 28 days compared to the previous 28-day period: Mongolia (1299 vs 84; +1446%), Indonesia (9623 vs 3556; +171%), Zimbabwe (40 vs 27; +48%), Malaysia (8354 vs 5867; +42%), Bangladesh (104 vs 78; +33%), and Argentina (206 vs 163; +26%). The highest number of new hospitalizations was reported from the United States of America (37 426 vs 54 985; -32%), Indonesia (9623 vs 3556; +171%), and Ukraine (8853 vs 14 925; -41%).

Across the six WHO regions, in the past 28 days, a total of 34 (14%) countries reported data to WHO on new ICU admissions at least once (Figure 5). The European Region had the highest proportion of countries reporting data on new ICU admissions (18 countries; 30%), followed by the Eastern Mediterranean Region (five countries; 23%), the Western Pacific Region (five countries; 14%), the South-East Asia Region (one country; 9%), the Region of the Americas (three countries; 5%), and the African Region (two countries; 4%). The proportion of countries that consistently[i] reported new weekly ICU admissions for the period was 9% (20 countries).

Among the 20 countries consistently reporting new ICU admissions, two (10%) countries showed an increase of 20% or greater during the past 28 days compared to the previous 28-day period: Malaysia (150 vs 49; +206%) and Indonesia (406 vs 164; +148%). The highest numbers of new ICU admissions were reported from France (869 vs 1018; -15%), Indonesia (406 vs 164; +148%), and Australia (283 vs 279; +1%).

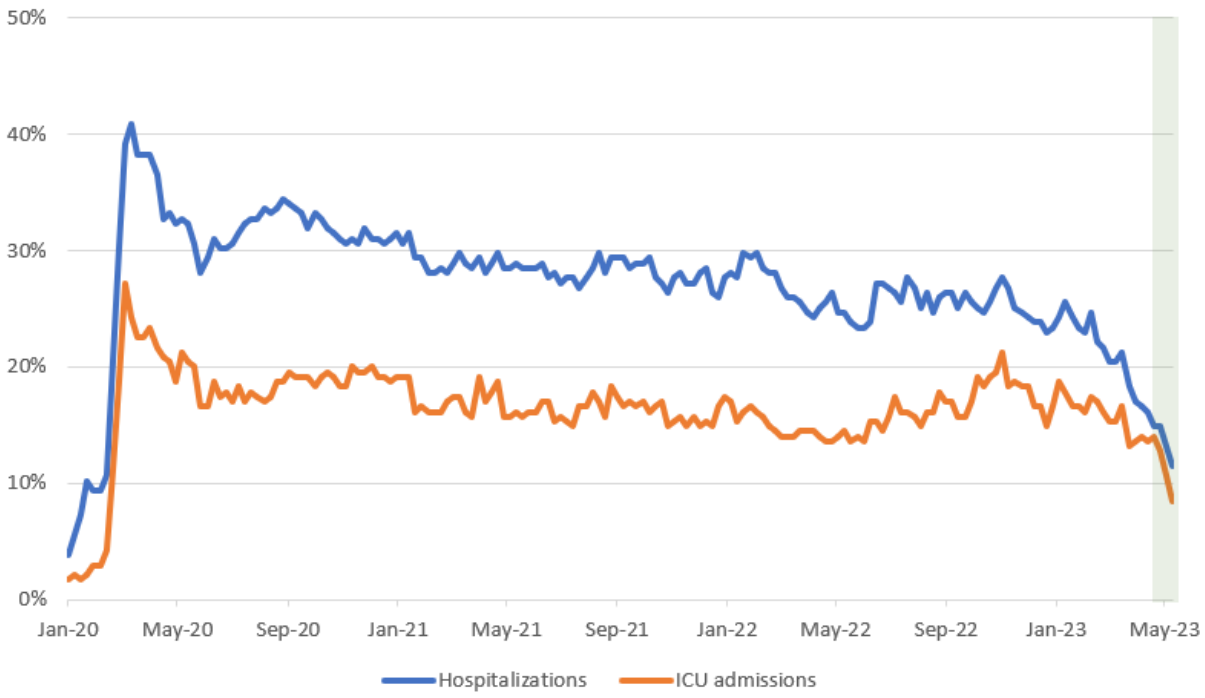
[i] "Consistently" as used here refers to countries that submitted data for new hospitalizations and intensive care unit admissions for the four consecutive weeks that make up the 28-day period.

Figure 4. COVID-19 cases, deaths, hospitalizations, and ICU admissions reported weekly to WHO, as of 21 May 2023



Note: Recent weeks are subject to reporting delays and should not be interpreted as a declining trend. Cases included in grey bars in the graph are only from countries reporting hospitalizations or ICU admissions, respectively.
Source: WHO Detailed Surveillance Dashboard

Figure 5. Weekly proportion of countries reporting new hospitalizations and ICU admissions: epidemiological week 1, 2020 to week 20, 2023



Note: Recent weeks are subject to reporting delays and should not be interpreted as a declining trend.

SARS-CoV-2 variants of interest and variants under monitoring

Geographic spread and prevalence

Globally, from 1 to 28 May 2023 (28 days), 20 796 SARS-CoV-2 sequences were shared through GISAID. WHO is currently monitoring two variants of interest (VOIs), XBB.1.5 and XBB.1.16, along with seven variants under monitoring (VUMs) and their descendent lineages: BA.2.75, CH.1.1, BQ.1, XBB, XBB.1.9.1, XBB.1.9.2, and XBB.2.3.

Globally, XBB.1.5 has been reported from 115 countries since the variant emerged. In epidemiological week 19 (8 to 14 May 2023), XBB.1.5 accounted for 34% of sequences, a decrease from 49% in epidemiological week 15 (10 to 16 April 2023). XBB.1.16 has been reported from 61 countries. In week 19, XBB.1.16 accounted for 16.3% of sequences, an increase from 8.8% in week 15.

Table 2 shows the number of countries reporting the VOIs and VUMs and their prevalence from week 15 to week 19. Among the VUMs, XBB, XBB.1.9.1, XBB.1.9.2, and XBB.2.3 have shown increasing trends in recent weeks. Overall, other VUMs show declining trends during the same reporting period. VOI and VUMs that have shown increasing trends are highlighted in orange, and those with decreasing trends are highlighted in green.

Table 2. Weekly prevalence of SARS-CoV-2 VOIs and VUMs, week 15 to week 19 of 2023

Lineage	Countries[§]	Sequences[§]	2023-15	2023-16	2023-17	2023-18	2023-19
XBB.1.5* (VOI)	115	234 239	49.07	46.45	44.42	42.29	34.04
XBB.1.16* (VOI)	61	13 848	8.78	9.84	10.25	12.86	16.32
BA.2.75*	123	111 654	2.75	2.37	1.82	1.49	1.15
CH.1.1*	92	46 462	3.67	3.05	2.97	2.60	2.79
BQ.1*	150	411 011	2.78	2.03	1.40	0.96	0.69
XBB*	127	63 294	4.10	4.00	4.64	4.78	5.46
XBB.1.9.1*	90	28 900	11.93	13.37	15.52	16.44	16.94
XBB.1.9.2*	60	7 573	3.32	4.08	4.71	4.60	5.26
XBB.2.3*	52	5 498	2.99	3.30	3.84	4.18	6.34
Unassigned	103	149 179	1.23	0.90	0.08	0.03	0.02
Other[+]	208	6 722 190	6.71	7.65	8.51	8.49	10.11

* Includes descendant lineages, except those individually specified elsewhere in the table. For example, XBB* does not include XBB.1.5, XBB.1.9.1, XBB.1.9.2, XBB.1.16, and XBB.2.3.

[+] "Other" represents other circulating lineages excluding the VOI, VUMs, BA.1*, BA.2*, BA.3*, BA.4*, BA.5*.

[§] Numbers of countries and sequences are since the emergence of the variants

Additional resources

- Tracking SARS-CoV-2 Variants
- WHO statement on updated tracking system on SARS-CoV-2 variants of concern and variants of interest
- WHO XBB.1.16 Initial Risk Assessment, 17 April 2023
- WHO XBB.1.5 rapid risk assessment, 24 February 2023

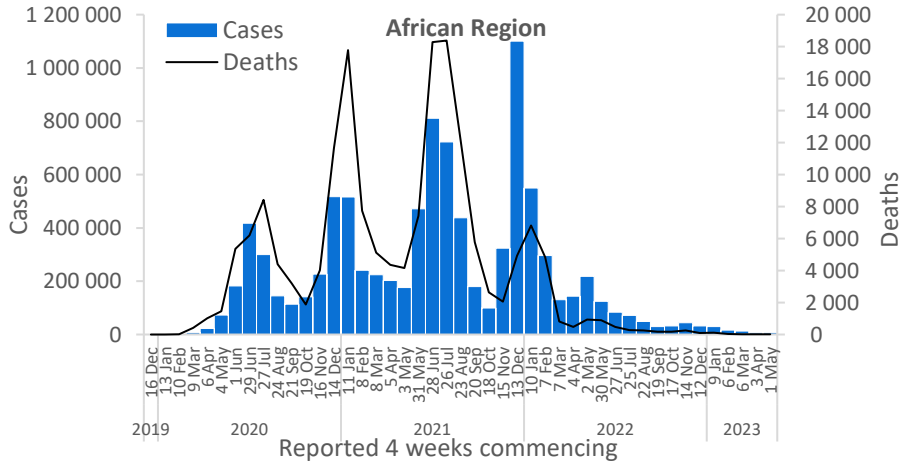
WHO regional overviews

Data for 1 to 28 May 2023

African Region

The African Region reported over 7000 new cases, a slight increase of 3% as compared to the previous 28-day period. Six (12%) of the 50 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Botswana (49 vs 19 new cases; +158%), Zimbabwe (340 vs 134 new cases; +154%), and Cabo Verde (444 vs 207 new cases; +114%). The highest numbers of new cases were reported from Mauritius (5227 new cases; 411.0 new cases per 100 000; +57%), Cabo Verde (444 new cases; 79.9 new cases per 100 000; +114%), and the Democratic Republic of the Congo (440 new cases; <1 new case per 100 000; +64%).

The number of new 28-day deaths in the Region decreased by 11% as compared to the previous 28-day period, with 17 new deaths reported. The highest numbers of new deaths were reported from Zimbabwe (seven new deaths; <1 new death per 100 000; +40%), Mauritius (four new deaths; <1 new death per 100 000; +100%), and the Democratic Republic of the Congo (three new deaths; <1 new death per 100 000; no deaths reported the previous 28-day period).

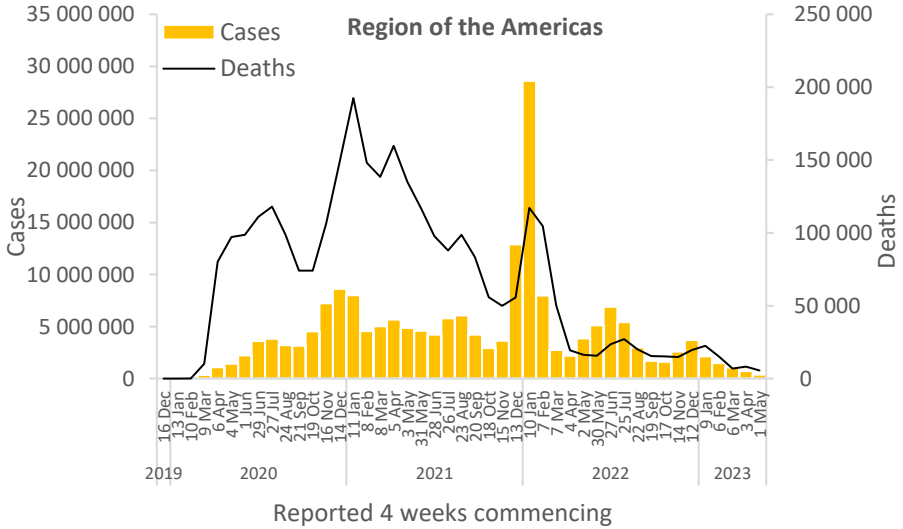


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 393 000 new cases, a 44% decrease as compared to the previous 28-day period. Eleven (20%) of the 56 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Cuba (975 vs 263 new cases; +271%), the United States Virgin Islands (167 vs 56 new cases; +198%), and Barbados (328 vs 134 new cases; +145%). The highest numbers of new cases were reported from the United States of America (170 425 new cases; 51.5 new cases per 100 000; -57%), Brazil (129 610 new cases; 61.0 new cases per 100 000; -32%), and Puerto Rico (25 103 new cases; 877.5 new cases per 100 000; +99%).

The number of new 28-day deaths in the Region decreased by 33% as compared to the previous 28-day period, with 5513 new deaths reported. The highest numbers of new deaths were reported from the United States of America (3089 new deaths; <1 new death per 100 000; -41%), Brazil (1170 new deaths; <1 new death per 100 000; -7%), and Peru (551 new deaths; 1.7 new deaths per 100 000; +63%).

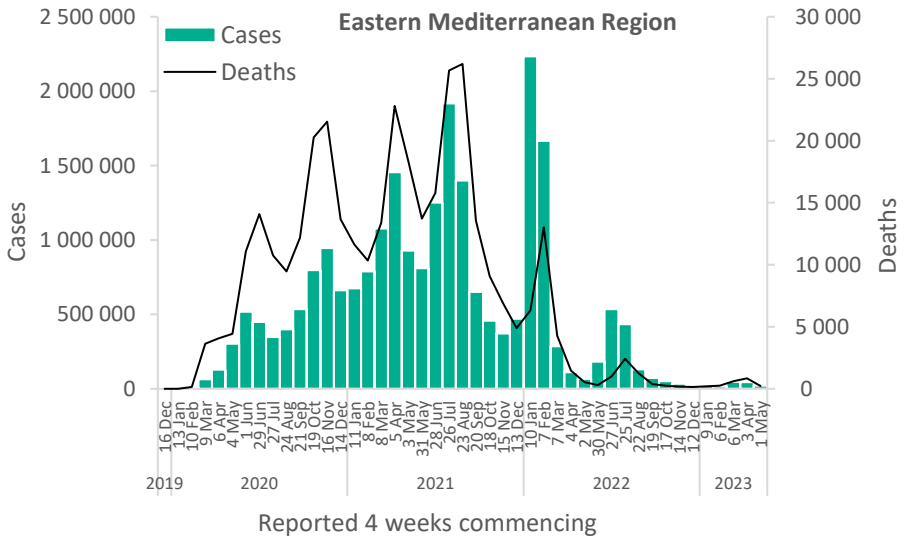


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 21 000 new cases, a 52% decrease as compared to the previous 28-day period. One (5%) of the 22 countries for which data are available reported increases in new cases of 20% or greater: Afghanistan (6300 vs 4252 new cases; +48%). The highest numbers of new cases were reported from Afghanistan (6300 new cases; 16.2 new cases per 100 000; +48%), Qatar (4929 new cases; 171.1 new cases per 100 000; -40%), and the United Arab Emirates (4230 new cases; 42.8 new cases per 100 000; -12%).

The number of new 28-day deaths in the Region decreased by 74% as compared to the previous 28-day period, with 221 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (156 new deaths; <1 new death per 100 000; -79%), Tunisia (28 new deaths; <1 new death per 100 000; +12%), and Afghanistan (22 new deaths; <1 new death per 100 000; +144%).

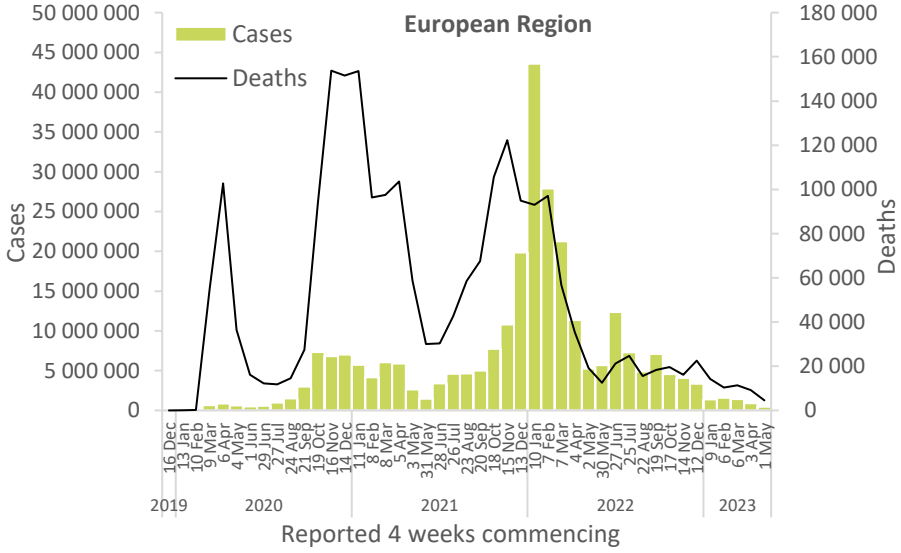


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 476 000 new cases, a 48% decrease as compared to the previous 28-day period. No country has reported increases in new cases of 20% or greater compared to the previous 28-day period. The highest numbers of new cases were reported from France (106 803 new cases; 164.2 new cases per 100 000; -46%), the Russian Federation (66 664 new cases; 45.7 new cases per 100 000; -66%), and Italy (62 063 new cases; 104.1 new cases per 100 000; -34%).

The number of new 28-day deaths in the Region decreased by 50% as compared to the previous 28-day period, with 4571 new deaths reported. The highest numbers of new deaths were reported from France (685 new deaths; 1.1 new deaths per 100 000; -22%), the Russian Federation (614 new deaths; <1 new death per 100 000; -38%), and Italy (606 new deaths; 1.0 new deaths per 100 000; -4%).

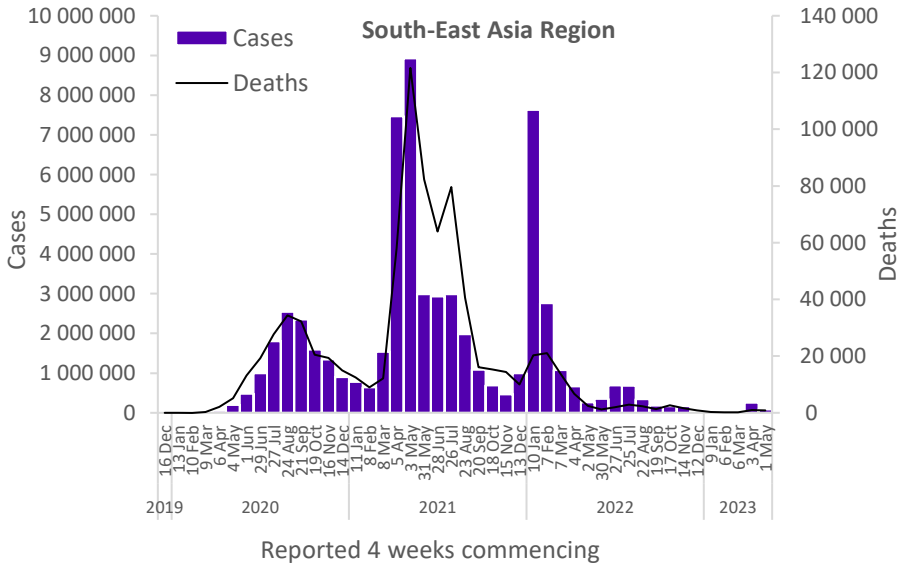


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 88 000 new cases, a 66% decrease as compared to the previous 28-day period. Five (45%) of the 10 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Myanmar (3791 vs 792 new cases; +379%), Timor-Leste (20 vs five new cases; +300%), and Bangladesh (739 vs 194 new cases; +281%). The highest numbers of new cases were reported from India (44 355 new cases; 3.2 new cases per 100 000; -80%), Indonesia (31 567 new cases; 11.5 new cases per 100 000; +15%), and Thailand (6687 new cases; 9.6 new cases per 100 000; +91%).

The number of new 28-day deaths in the Region decreased by 4% as compared to the previous 28-day period, with 915 new deaths reported. The highest numbers of new deaths were reported from Indonesia (455 new deaths; <1 new death per 100 000; +77%), India (331 new deaths; <1 new death per 100 000; -49%), and Thailand (96 new deaths; <1 new death per 100 000; +405%).

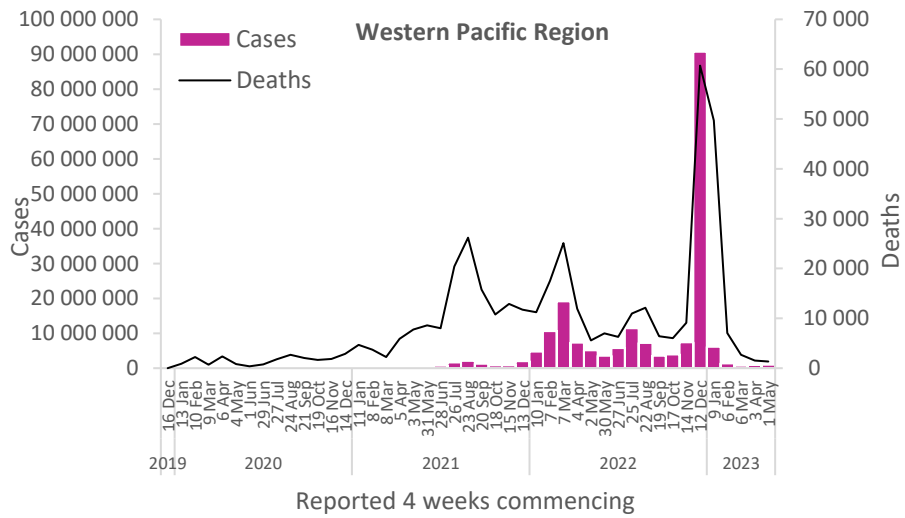


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported over one million new cases, a 10% increase as compared to the previous 28-day period. Fourteen (40%) of the 35 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Mongolia (656 vs 79 new cases; +730%), Palau (10 vs two new cases; +400%), and the Philippines (45 586 vs 10 341 new cases; +341%). The highest numbers of new cases were reported from the Republic of Korea (476 087 new cases; 928.6 new cases per 100 000; +44%), Australia (138 721 new cases; 544.0 new cases per 100 000; +22%), and Singapore (91 104 new cases; 1557.2 new cases per 100 000; -7%).

The number of new 28-day deaths in the Region decreased by 15% as compared to the previous 28-day period, with 1329 new deaths reported. The highest numbers of new deaths were reported from Australia (379 new deaths; 1.5 new deaths per 100 000; -25%), the Republic of Korea (272 new deaths; <1 new death per 100 000; +37%), and China (260 new deaths; <1 new death per 100 000; +319%).



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 excepted, the names of proprietary products are distinguished by initial capital letters.

Updates on the COVID-19 outbreak in the Democratic People's Republic of Korea are 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.

WHO continues to monitor all SARS-CoV-2 variants and to track changes in prevalence and viral characteristics. The current trends describing the circulation of variants 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, and delays in uploading sequence data to GISAID.[1]

References

1. Chen Z, Azman AS, Chen X, et al. Global landscape of SARS-CoV-2 genomic surveillance and data sharing. *Nature genetics*. 2022;54(4). doi:10.1038/s41588-022-01033-y

COVID-19 Weekly Epidemiological Update

Edition 146 published 8 June 2023

In this edition:

Global overview

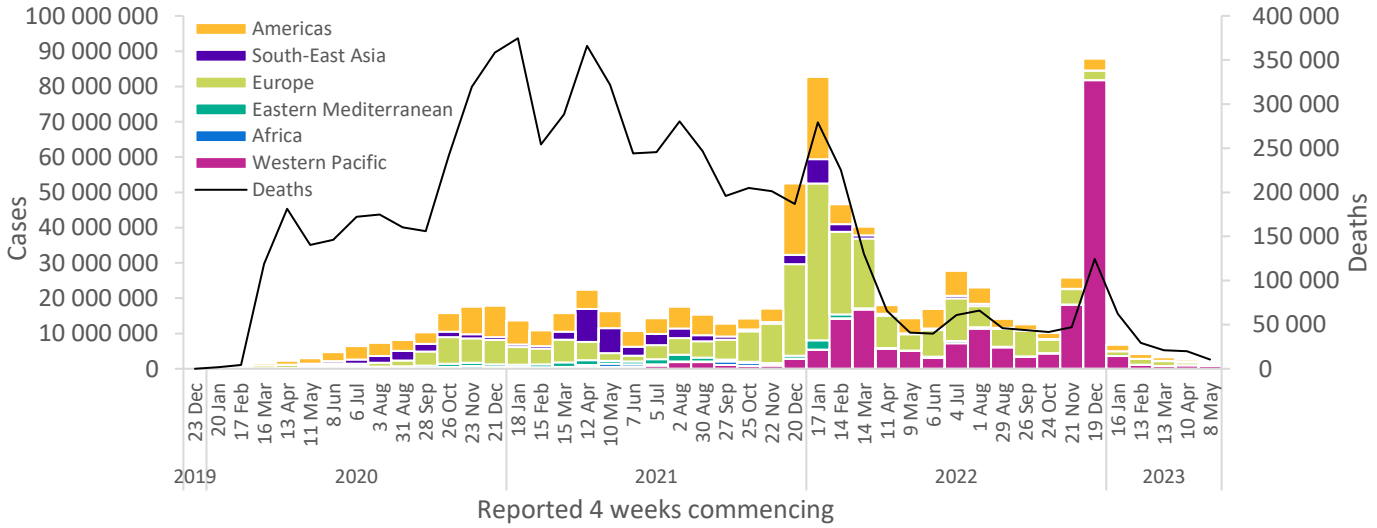
Data as of 4 June 2023

Globally, over 1.7 million new cases and over 10 000 deaths were reported in the last 28 days (8 May to 4 June 2023), a decrease of 38% and 47%, respectively, compared to the previous 28 days (10 April to 7 May 2023) (Figure 1, Table 1). During this 28-day reporting period, 144 of 243 (59%) countries and territories reported at least one case. The situation at the regional level shows decreases in cases and deaths in all six WHO regions. As of 4 June 2023, over 767 million confirmed cases and over 6.9 million deaths have been reported globally.

Reported COVID-19 cases are underestimates of infection rates, largely due to the reductions in testing globally, and potential delays in reporting. Additionally, data from previous weeks are continuously being updated to incorporate retrospective changes in reported COVID-19 cases and deaths made by countries. Data presented in this report are therefore incomplete and should be interpreted in light of these limitations.

We present changes in epidemiological trends using a 28-day interval. Disaggregated data are still accessible on the WHO COVID-19 dashboard, where the full dataset is available for download.

Figure 1. COVID-19 cases reported by WHO Region, and global deaths by 28-day intervals, as of 4 June 2023**



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

At the regional level, the number of newly reported 28-day cases decreased across all WHO regions: the South-East Asia Region (-77%), the Eastern Mediterranean Region (-60%), the Region of the Americas (-55%), the European Region (-49%), the African Region (-22%), and the Western Pacific Region (-5%). The number of newly reported 28-day deaths also decreased across all six WHO regions: the Eastern Mediterranean Region (-78%), the European Region (-54%), the Region of the Americas (-44%), the South-East Asia Region (-35%), the Western Pacific Region (-19%), and the African Region (-17%).

At the country level, the highest numbers of new 28-day cases were reported from the Republic of Korea (470 093 new cases; +29%), Australia (147 684 new cases; +27%), Brazil (113 286 new cases; -33%), France (93 850 new cases; -46%), and the United States of America (93 260 new cases; -75%). The highest numbers of new 28-day deaths were reported from the United States of America (1943 new deaths; -58%), Brazil (1074 new deaths; -16%), France (555 new deaths; -41%), Italy (549 new deaths; -17%), and the Russian Federation (532 new deaths; -44%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 4 June 2023**

WHO Region	New cases in last 28 days (%)	Change in new cases in last 28 days *	Cumulative cases (%)	New deaths in last 28 days (%)	Change in new deaths in last 28 days *	Cumulative deaths (%)
Western Pacific	924 460 (54%)	-5%	**204 049 665 (27%)**	1 305 (12%)	-19%	**412 605 (6%)**
Europe	420 961 (24%)	-49%	**276 567 903 (36%)**	4 008 (38%)	-54%	**2 240 284 (32%)**
Americas	293 984 (17%)	-55%	**192 989 462 (25%)**	4 222 (40%)	-44%	**2 955 160 (43%)**
South-East Asia	59 315 (3%)	-77%	**61 172 598 (8%)**	760 (7%)	-35%	**806 155 (12%)**
Eastern Mediterranean	15 503 (1%)	-60%	**23 379 138 (3%)**	153 (1%)	-78%	**351 281 (5%)**
Africa	6 133 (<1%)	-22%	**9 534 108 (1%)**	15 (<1%)	-17%	**175 373 (3%)**
Global	**1 720 356 (100%)**	**-38%**	**767 693 638 (100%)**	**10 463 (100%)**	**-47%**	**6 940 871 (100%)**

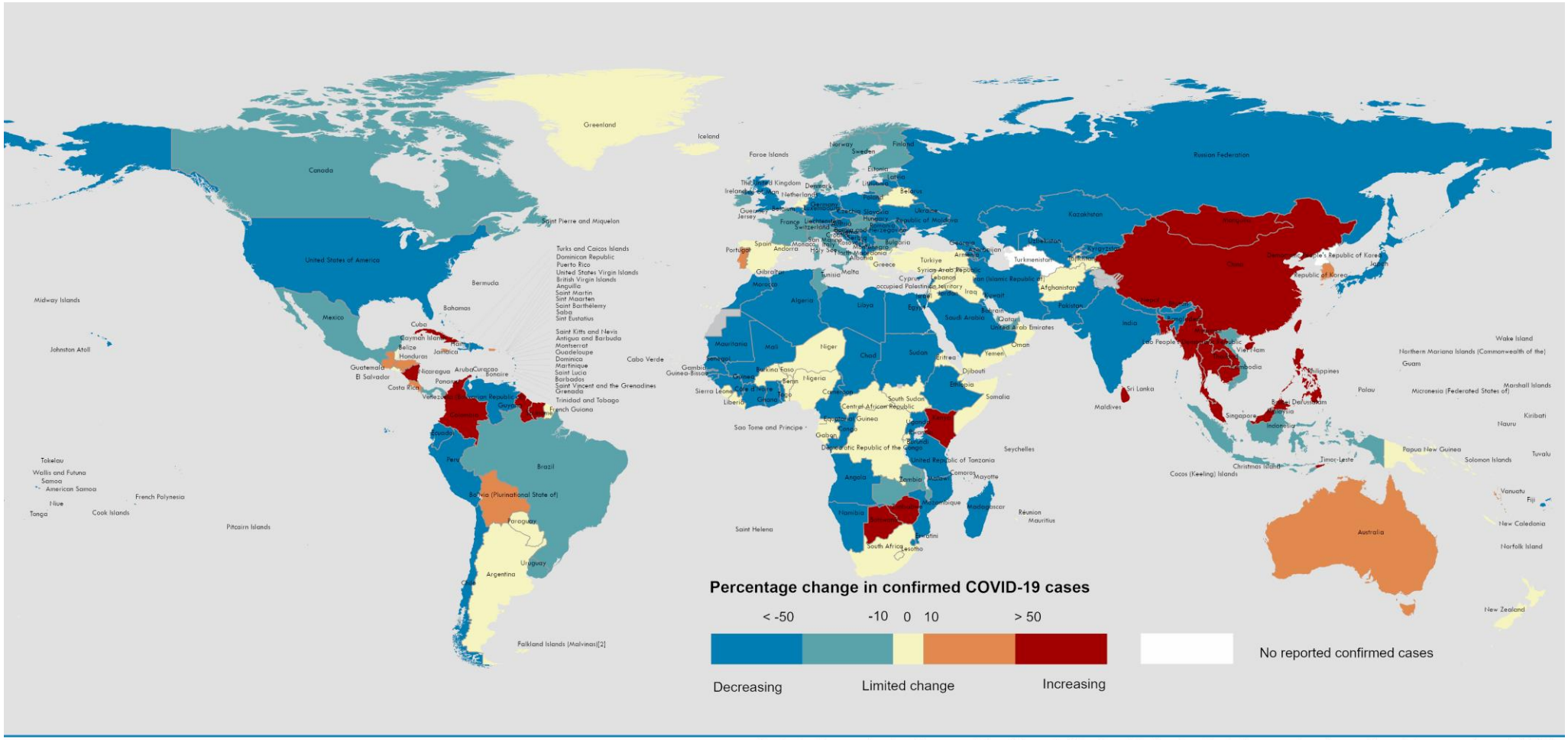
**Percent change in the number of newly confirmed cases/deaths in the past 28 days, compared to 28 days prior. Data from previous weeks are updated continuously with adjustments received from countries.*

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

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

- WHO COVID-19 Dashboard
- WHO Monthly Operational Update and past editions of the Weekly Epidemiological Update on COVID-19
- WHO COVID-19 detailed surveillance data dashboard
- WHO COVID-19 policy briefs

Figure 2. Percentage change in confirmed COVID-19 cases over the last 28 days relative to the previous 28 days, as of 4 June 2023**

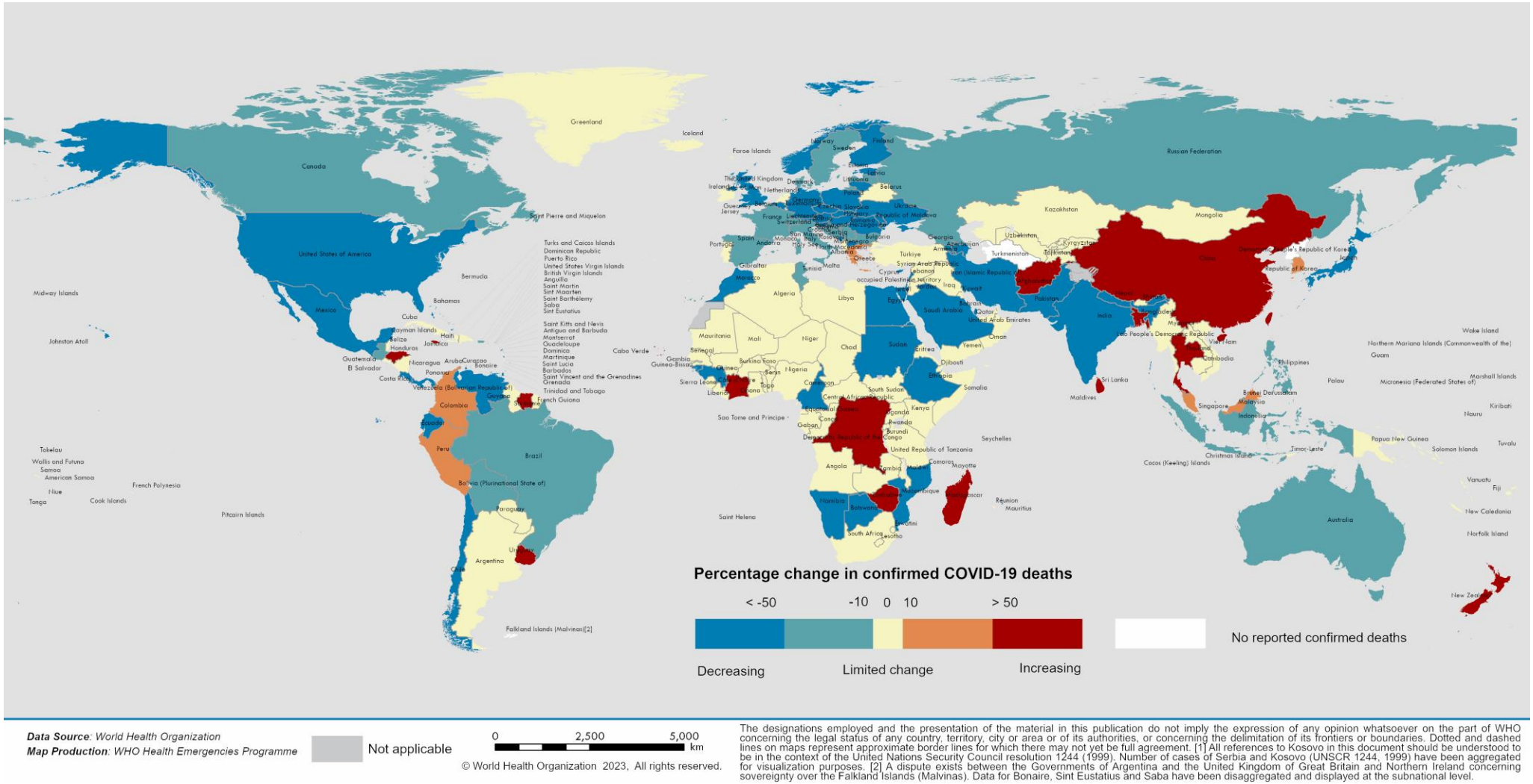


***Data Source**: World Health Organization*
***Map Production**: WHO Health Emergencies Programme*

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. Percentage change in confirmed COVID-19 deaths over the last 28 days relative to the previous 28 days, as of 4 June 2023**



***Data Source**: World Health Organization*
***Map Production**: WHO Health Emergencies Programme*

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

Hospitalizations and ICU admissions

At the global level, during the past 28 days (1 May 2023 to 28 May 2023), a total of 79 266 new hospitalizations and 1937 new intensive care unit (ICU) admissions were reported (Figure 4). This represents a 35% and 42% decrease in hospitalizations and ICU admissions, respectively, compared to the previous 28 days (3 April 2023 to 30 April 2023). The presented hospitalization data are preliminary and might change as new data become available. Furthermore, hospitalization data are subject to reporting delays. These data also likely include both hospitalizations with incidental cases of SARS-CoV-2 infection and those due to COVID-19 disease.

Globally, during the past 28 days, 36 (15%) countries reported data to WHO on new hospitalizations at least once (Figure 5). The European Region had the highest proportion of countries reporting data on new hospitalizations (19 countries; 31%), followed by the South-East Asia Region (two countries; 18%), the Eastern Mediterranean Region (three countries; 14%), the African Region (five countries; 10%), the Western Pacific Region (three countries; 9%), and the Region of the Americas (four countries; 7%). The proportion of countries that consistently[i] reported new hospitalizations for the period was 7% (17 countries).

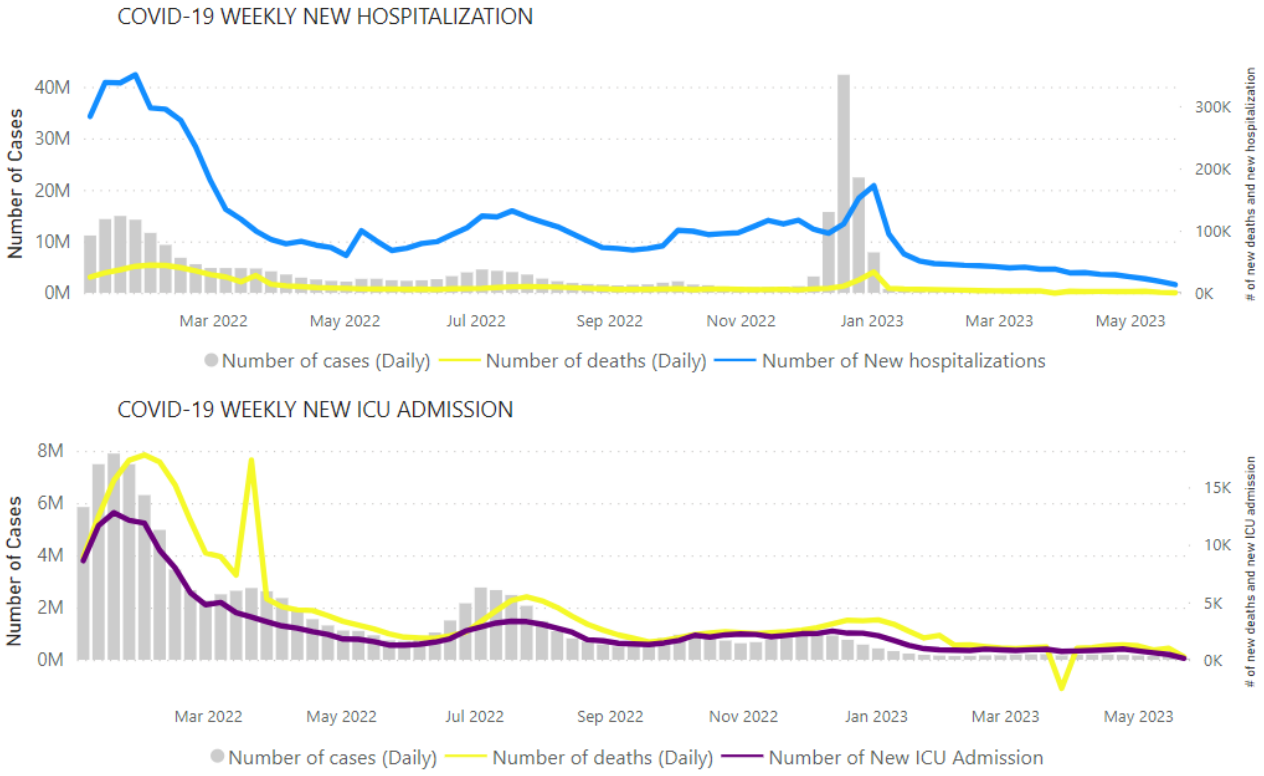
Among the 17 countries consistently reporting new hospitalizations, five (29%) countries registered an increase of 20% or greater in hospitalizations during the past 28 days compared to the previous 28-day period: Mongolia (1968 vs 117; +1582%), Zimbabwe (42 vs 18; +133%), Afghanistan (133 vs 67; +99%), Bangladesh (138 vs 82; +68%), and Indonesia (7556 vs 6091; +24%). The highest number of new hospitalizations was reported from the United States of America (35 037 vs 49 454; -29%), Ukraine (7829 vs 13 380; -41%), and Indonesia (7556 vs 6091; +24%).

Across the six WHO regions, in the past 28 days, 31 (13%) countries reported data to WHO on new ICU admissions at least once (Figure 5). The European Region had the highest proportion of countries reporting data on new ICU admissions (18 countries; 30%), followed by the Eastern Mediterranean Region (three countries; 14%), the Western Pacific Region (five countries; 14%), the South-East Asia Region (one country; 9%), the African Region (two countries; 4%), and the Region of the Americas (two countries; 4%). The proportion of countries that consistently reported new ICU admissions for the period was 4% (9 countries).

Among the nine countries consistently reporting new ICU admissions, only one (11%) country showed an increase of 20% or greater in new ICU admissions during the past 28 days compared to the previous 28-day period: Indonesia (329 vs 262; +26%). The highest numbers of new ICU admissions were reported from Indonesia (329 vs 262; +26%), Ukraine (245 vs 391; -37%), and Italy (156 vs 425; -63%).

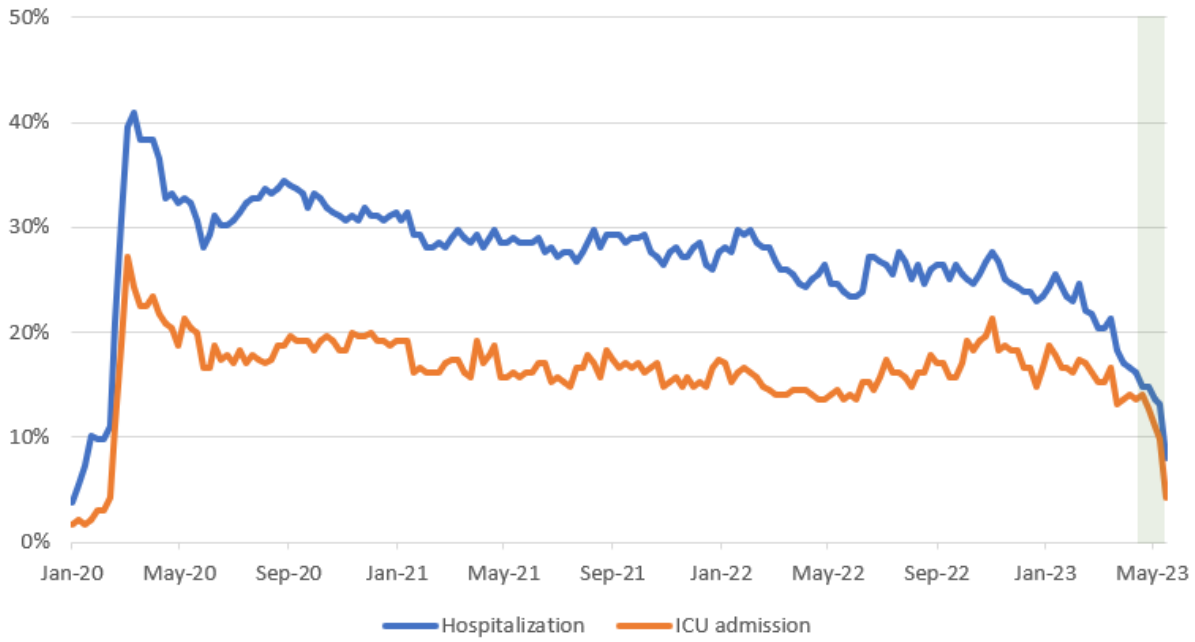
[i] "Consistently" as used here refers to countries that submitted data for new hospitalizations and intensive care unit admissions for the four consecutive weeks that make up the 28-day period.

Figure 4. COVID-19 cases, deaths, hospitalizations, and ICU admissions reported weekly to WHO, as of 28 May 2023



Note: Recent weeks are subject to reporting delays and should not be interpreted as a declining trend. Cases included in grey bars in the graph are only from countries reporting hospitalizations or ICU admissions, respectively.
Source: WHO Detailed Surveillance Dashboard

Figure 5. Weekly proportion of countries reporting new hospitalizations and ICU admissions: epidemiological week 1, 2020 to week 21, 2023



Note: Recent weeks are subject to reporting delays and should not be interpreted as a declining trend.

SARS-CoV-2 variants of interest and variants under monitoring

Geographic spread and prevalence

Globally, from 8 May to 4 June 2023 (28 days), 17 523 SARS-CoV-2 sequences were shared through GISAID. WHO is currently tracking two variants of interest (VOIs), XBB.1.5 and XBB.1.16, along with seven variants under monitoring (VUMs) and their descendent lineages. The VUMs are BA.2.75, CH.1.1, BQ.1, XBB, XBB.1.9.1, XBB.1.9.2 and XBB.2.3.

There has been an increase in the number of countries reporting the two VOIs. Between 10 April and 7 May 2023 (28 days), 61 countries reported XBB.1.5 sequences, a cumulative total of 116 countries as of 21 May 2023 (Figure 6A, Table 2). During the same 28-day period, 51 countries reported XBB.1.16 sequences, bringing the cumulative total to 65 countries (Figure 6B, Table 2). While XBB.1.5 remains dominant globally, its prevalence has been declining steadily. In epidemiological week 20 (15 to 21 May 2023), XBB.1.5 accounted for 30.3% of sequences, a decline from 46.2% in week 16 (17 to 23 April 2023). Globally, XBB.1.16 continues to rise in prevalence, accounting for 16.8% of sequences in week 20 compared to 10.2% in week 16.

Table 2 shows the number of countries reporting VOIs and VUMs since their emergence, and their prevalence from week 16 to week 20. Among the VUMs, XBB, XBB.1.9.1, XBB.1.9.2, and XBB.2.3 have shown increasing trends. Conversely, other VUMs show declining trends during the same reporting period. The VOI and VUMs exhibiting increasing trends are highlighted in orange, while those with decreasing trends are highlighted in green.

Current SARS-CoV-2 variant trends continue to differ across and within WHO regions and countries. Several countries are seeing a rise in cases, driven by the VOIs and some VUMs. The rise in cases may be accompanied by a rise in hospitalizations and deaths, although these are lower compared to previous SARS-CoV-2 waves. Population immunity from vaccination and previous SARS-CoV-2 infection are among the factors contributing to the observed heterogeneity in the variant circulation dynamics, and decreased hospitalizations and deaths. During weeks 16 to 20, the VOIs XBB.1.5 and XBB.1.16 were dominant in three regions and one region, respectively: XBB.1.5 was dominant in the African Region, the Region of the Americas and the European Region (44.0%, 57.2% and 43.2% respectively); XBB.1.16 was dominant in the South-East Asia Region (37.4%). The VUM XBB.1.9.1 was dominant in the Eastern Mediterranean Region, while there is a dominance of XBB.1.9.1 (22.7%) followed by XBB.1.5 (16.2%) in the Western Pacific Region (Figure 7).

The global trends in the number and percentage of SARS-CoV-2 sequences are shown in Figure 8. With the declining trends of testing and sequencing globally, low and unrepresentative levels of SARS-CoV-2 genomic surveillance continue to pose challenges in adequately assessing the SARS-CoV-2 variant landscape. The updated risk assessment for XBB.1.16 highlights additional laboratory and epidemiological evidence. Available reports from two countries indicate no increase in disease severity associated with XBB.1.16 compared to other co-circulating SARS-CoV-2 variants.

Table 2. Weekly prevalence of SARS-CoV-2 VOIs and VUMs, epidemiological week 16 to week 20 of 2023

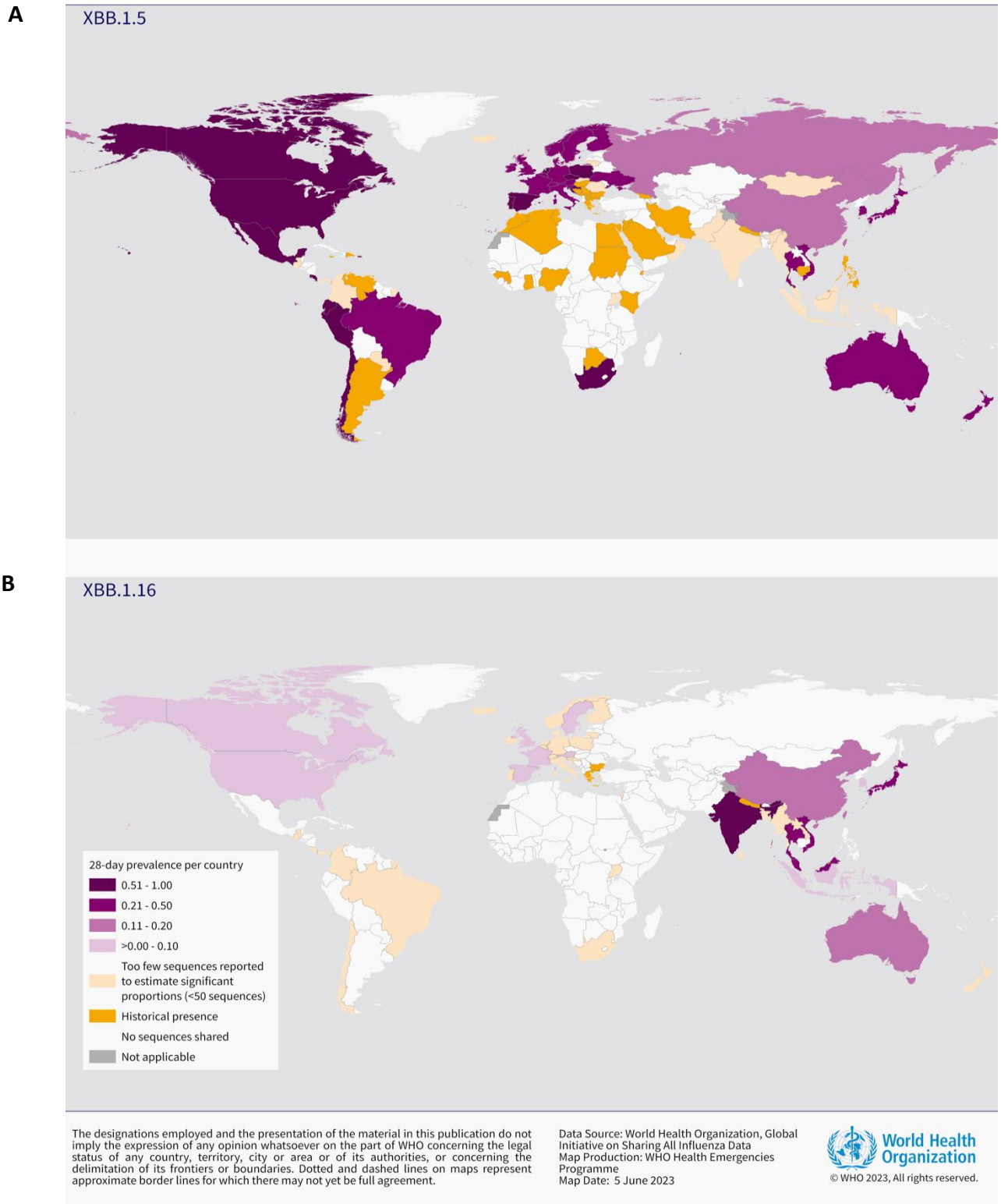
Lineage	Countries[§]	Sequences[§]	2023-16	2023-17	2023-18	2023-19	2023-20
XBB.1.5* (VOI)	116	240 457	46.19	43.72	40.19	33.06	30.28
XBB.1.16* (VOI)	65	16 368	10.15	10.75	12.81	15.56	16.81
BA.2.75*	123	111 956	2.29	1.70	1.97	1.48	1.19
CH.1.1*	92	46 871	3.03	2.93	2.68	2.76	1.96
BQ.1*	150	411 412	1.97	1.35	0.88	0.55	0.34
XBB*	127	64 360	4.30	4.76	4.78	5.20	5.27
XBB.1.9.1*	90	31 583	13.31	15.48	16.96	17.70	18.19
XBB.1.9.2*	64	8 426	4.12	4.66	4.78	5.58	6.63
XBB.2.3	55	6 359	3.29	3.72	4.27	5.33	7.09
Unassigned	103	149 639	0.93	0.92	0.66	1.74	1.45
Other[+]	208	6 724 206	7.54	8.15	8.43	9.62	10.42

* Includes descendant lineages, except those individually specified elsewhere in the table. For example, XBB* does not include XBB.1.5, XBB.1.9.1, XBB.1.9.2, XBB.1.16, and XBB.2.3.

[+] Others are other circulating lineages excluding the VOI, VUMs, BA.1*, BA.2*, BA.3*, BA.4*, BA.5*.

[§] Countries and sequences are since the emergence of the variants.

Figure 6. Global 28-day prevalence of variants of interest XBB.1.5 (A) and XBB.1.16 (B), between 10 April to 7 May 2023*+



*Reporting period to account for delay in sequence submission to GISAID.

+Historical presence indicates countries previously reporting XBB.1.5 sequences but that have not reported them within the period from 10 April to 7 May 2023.

Figure 7. Top three SARS-CoV-2 variants (including non-VOIs/VUMs) by WHO region, epidemiological week 16 to week 20 of 2023

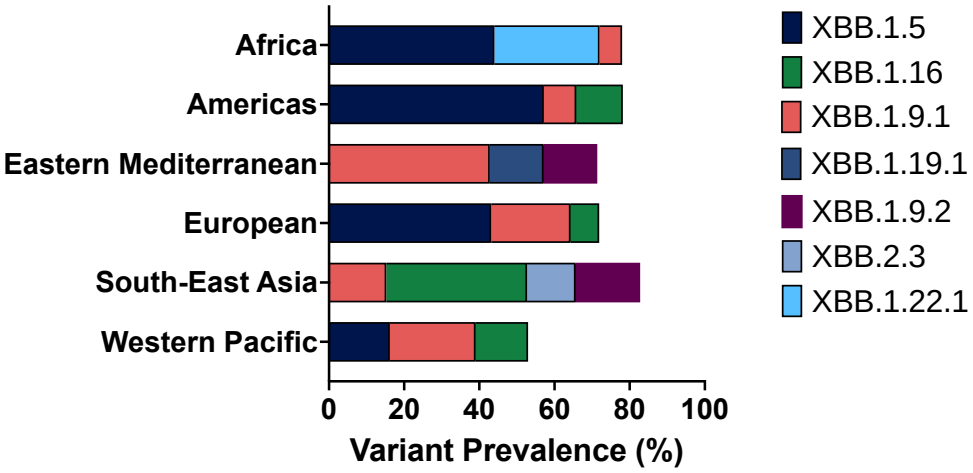


Figure 8. The number and percentage of SARS-CoV-2 sequences, from 1 January to 21 May 2023

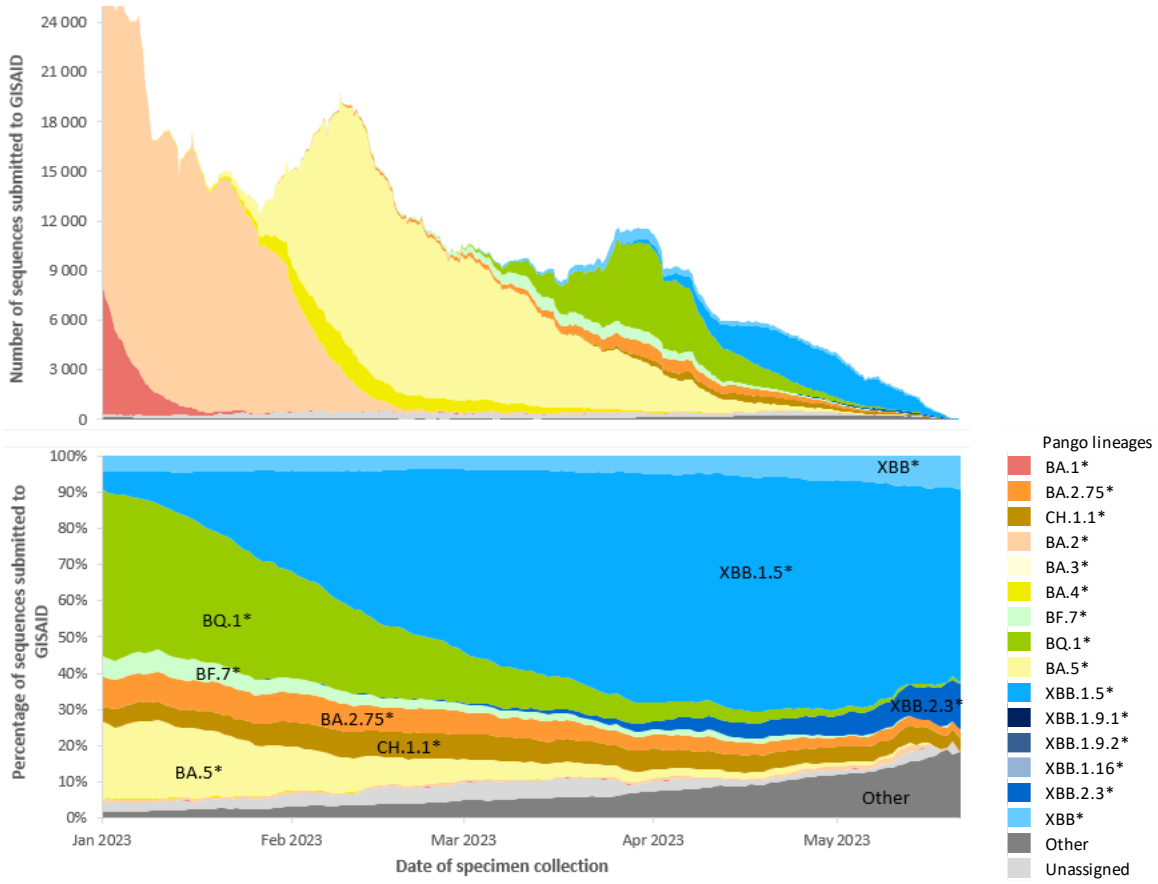


Figure 8. Panel A shows the number, and **Panel B** the percentage, of all circulating variants since January 2023. Omicron sister-lineages and additional Omicron VOC descendent lineages under further monitoring are shown. *BA.1*, BA.2*, BA.3*, BA.4* and BA.5** (* indicates inclusion of descendent lineages) include all BA.1, BA.2, BA.3, BA.4 and BA.5 pooled descendent lineages, except currently circulating variants shown individually. The *Unassigned* category includes lineages pending for a PANGO lineage name, whereas the *Other* category includes lineages that are assigned but not listed in the legend. Source: SARS- CoV-2 sequence data and metadata from GISAID, from 1 January 2023 to 21 May 2023.

Additional resources

- Tracking SARS-CoV-2 Variants
- WHO statement on updated tracking system on SARS-CoV-2 variants of concern and variants of interest
- WHO XBB.1.16 Updated Risk Assessment, 5 June 2023
- WHO XBB.1.5 rapid risk assessment, 24 February 2023

Vaccine effectiveness of primary series and booster vaccination against the Omicron variant of concern

Vaccine Effectiveness

The Forest plots displaying the effectiveness of COVID-19 vaccines against the Omicron variants are available on View-hub.org and updated regularly (last updated 5 June 2023). All data are collected as part of an ongoing systematic review of COVID-19 vaccine effectiveness (VE) studies (methods described here). COVID-19 VE results are summarized in the following plots, where data are available:

- VE of primary series and first booster dose by vaccine for all vaccines
- VE for various sub-populations of interest
- Absolute and relative VE of a second booster dose (for more information on interpreting relative VE, see the special focus on relative vaccine effectiveness from the 29 June 2022 Weekly Epidemiological Update)
- Duration of VE over time for vaccines
- Absolute VE of bivalent vaccines given as a first, second, or third booster dose

A recent report suggests that VE against Omicron descendant lineage BA.4/BA.5 is likely lower than against BA.1, although the reasons for this finding might be both due to the lower vaccine efficacy against BA.4/BA.5 as well as methodological factors in how the VE studies were done. Two studies (including one randomized controlled trial conducting an exploratory analysis) evaluating protection of bivalent and monovalent boosters during the same time period showed marginal (approximately 10%) higher VE for bivalent vaccines against Omicron symptomatic infection. No studies have evaluated VE against severe disease for monovalent and bivalent vaccines during the same time period.

Neutralization

Neutralizing antibody studies can provide early insights into vaccine performance against new and emerging VOCs and their subvariants. For more information about the capacity of COVID-19 vaccines to neutralize various Omicron sub-variants, please see a systematic review of post-monovalent vaccination neutralization responses to Omicron BA.1, BA.2, BA.3, and BA.4/BA.5. In addition, neutralization plots displaying the results of a living systematic review of neutralization studies are updated regularly on VIEW-hub.org (last updated 5 June 2023) and contain information on more recent Omicron descendant lineages, such as BQ.1 and XBB.

Finally, a summary of neutralization responses comparing monovalent to bivalent mRNA vaccines is also available on VIEW-hub.org, providing preliminary evidence of improved performance of bivalent vaccines against more recent Omicron descendant lineages.

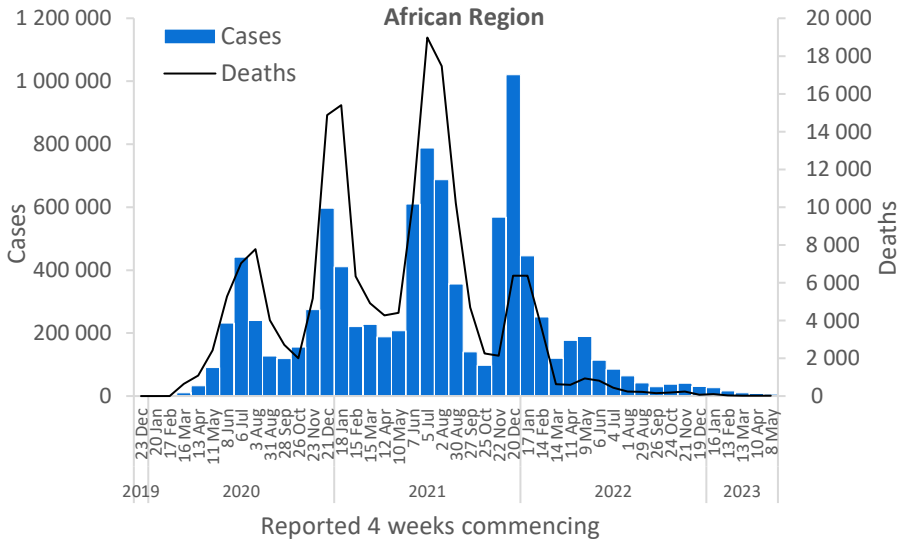
WHO regional overviews

Data for 8 May to 4 June 2023

African Region

The African Region reported over 6000 new cases, a 22% decrease as compared to the previous 28-day period. Three (6%) of the 50 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Botswana (76 vs 21 new cases; +262%), Kenya (238 vs 82 new cases; +190%), and Zimbabwe (373 vs 184 new cases; +103%). The highest numbers of new cases were reported from Mauritius (4274 new cases; 336.1 new cases per 100 000; -7%), the Democratic Republic of the Congo (487 new cases; <1 new case per 100 000; +6%), and Zimbabwe (373 new cases; 2.5 new cases per 100 000; +103%).

The number of new 28-day deaths in the Region decreased by 17% as compared to the previous 28-day period, with 15 new deaths reported. The highest numbers of new deaths were reported from Zimbabwe (seven new deaths; <1 new death per 100 000; +75%), Mauritius (three new deaths; <1 new death per 100 000; -25%), and the Democratic Republic of the Congo (two new deaths; <1 new death per 100 000; +100%).

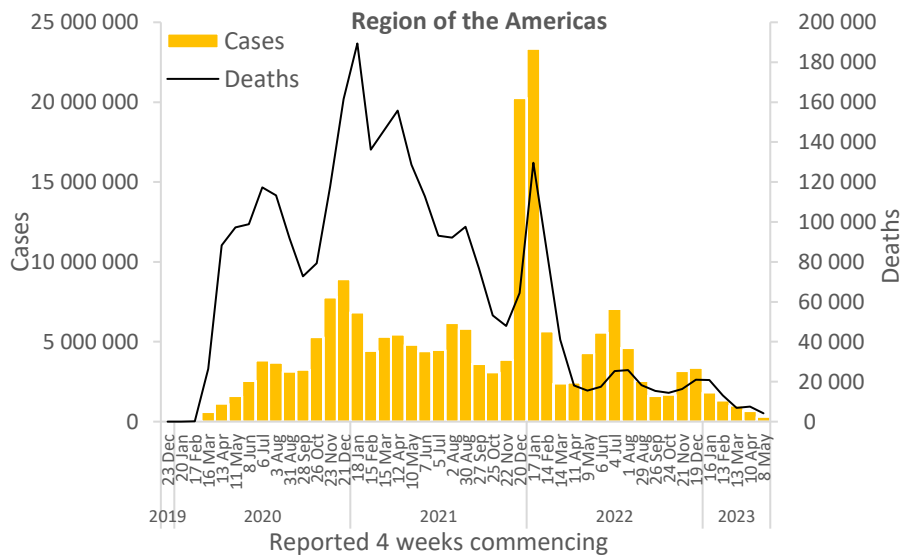


Updates from the African Region

Region of the Americas

The Region of the Americas reported nearly 294 000 new cases, a 55% decrease as compared to the previous 28-day period. Nine (16%) of the 56 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in the United States Virgin Islands (186 vs 50 new cases; +272%), Saint Kitts and Nevis (three vs one new cases; +200%), and Guyana (89 vs 49 new cases; +82%). The highest numbers of new cases were reported from Brazil (113 286 new cases; 53.3 new cases per 100 000; -33%), the United States of America (93 260 new cases; 28.2 new cases per 100 000; -75%), and Puerto Rico (23 303 new cases; 814.5 new cases per 100 000; +48%).

The number of new 28-day deaths in the Region decreased by 44% as compared to the previous 28-day period, with 4222 new deaths reported. The highest numbers of new deaths were reported from the United States of America (1943 new deaths; <1 new death per 100 000; -58%), Brazil (1074 new deaths; <1 new death per 100 000; -16%), and Peru (477 new deaths; 1.4 new deaths per 100 000; +45%).

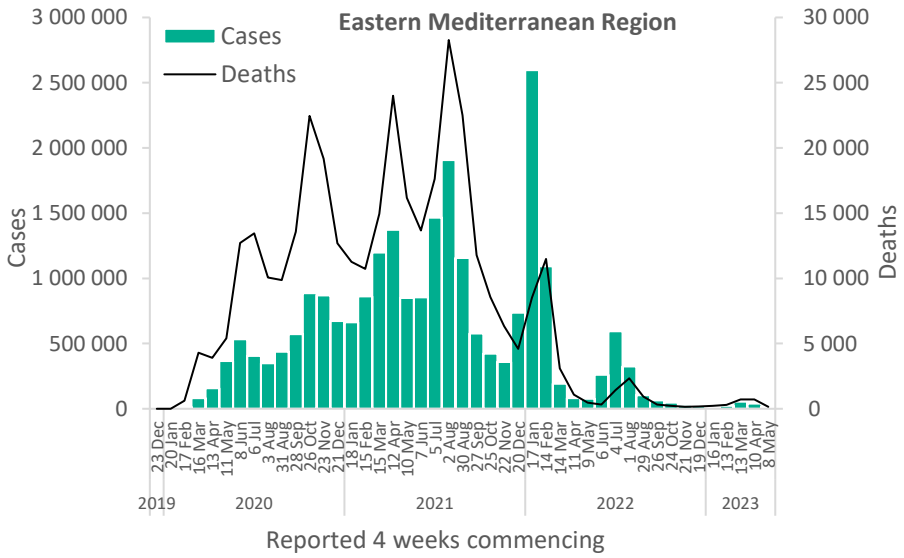


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 15 000 new cases, a 60% decrease as compared to the previous 28-day period. No country has reported increases in new cases of 20% or greater compared to the previous 28-day period. The highest numbers of new cases were reported from Afghanistan (5236 new cases; 13.5 new cases per 100 000; similar to the previous 28-day period), Qatar (4140 new cases; 143.7 new cases per 100 000; -44%), and the United Arab Emirates (2793 new cases; 28.2 new cases per 100 000; -41%).

The number of new 28-day deaths in the Region decreased by 78% as compared to the previous 28-day period, with 153 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (102 new deaths; <1 new death per 100 000; -83%), Tunisia (22 new deaths; <1 new death per 100 000; -37%), and Afghanistan (21 new deaths; <1 new death per 100 000; +62%).

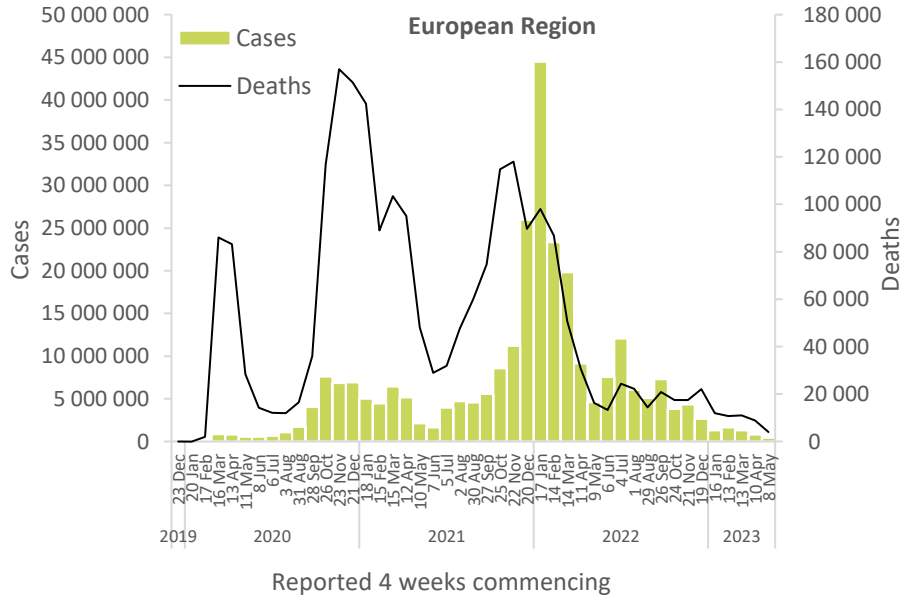


Updates from the Eastern Mediterranean Region

European Region

The European Region reported nearly 421 000 new cases, a 49% decrease as compared to the previous 28-day period. No country has reported increases in new cases of 20% or greater compared to the previous 28-day period. The highest numbers of new cases were reported from France (93 850 new cases; 144.3 new cases per 100 000; -46%), Italy (55 430 new cases; 92.9 new cases per 100 000; -41%), and Greece (54 712 new cases; 510.4 new cases per 100 000; +4%).

The number of new 28-day deaths in the Region decreased by 54% as compared to the previous 28-day period, with 4008 new deaths reported. The highest numbers of new deaths were reported from France (555 new deaths; <1 new death per 100 000; -41%), Italy (549 new deaths; <1 new death per 100 000; -17%), and the Russian Federation (532 new deaths; <1 new death per 100 000; -44%).

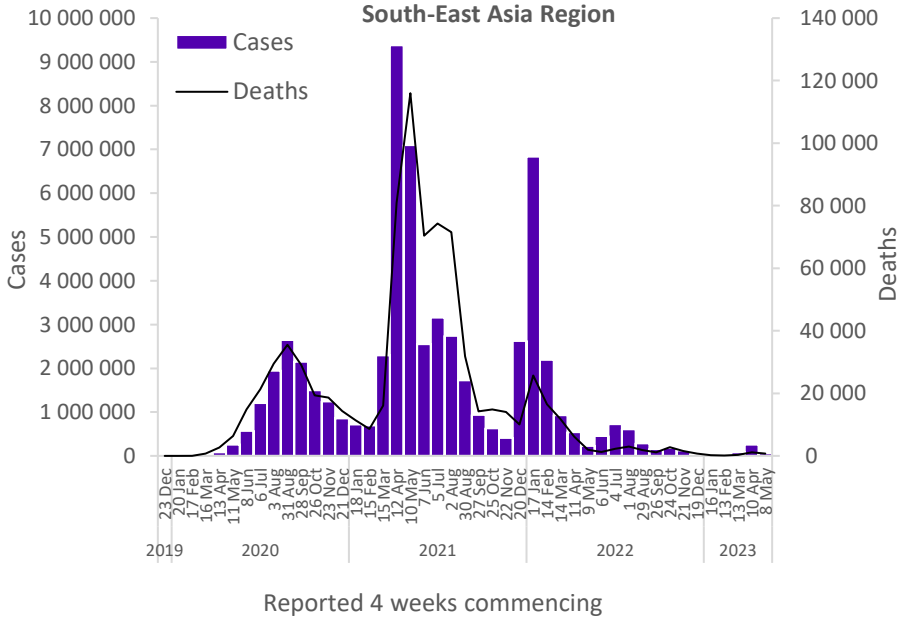


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 59 000 new cases, a 77% decrease as compared to the previous 28-day period. Five (45%) of the 10 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Bangladesh (1301 vs 260 new cases; +400%), Timor-Leste (19 vs eight new cases; +138%), and Thailand (11 043 vs 5033 new cases; +119%). The highest numbers of new cases were reported from India (21 952 new cases; 1.6 new cases per 100 000; -90%), Indonesia (21 183 new cases; 7.7 new cases per 100 000; -41%), and Thailand (11 043 new cases; 15.8 new cases per 100 000; +119%).

The number of new 28-day deaths in the Region decreased by 35% as compared to the previous 28-day period, with 760 new deaths reported. The highest numbers of new deaths were reported from Indonesia (330 new deaths; <1 new death per 100 000; -19%), India (200 new deaths; <1 new death per 100 000; -72%), and Thailand (196 new deaths; <1 new death per 100 000; +626%).

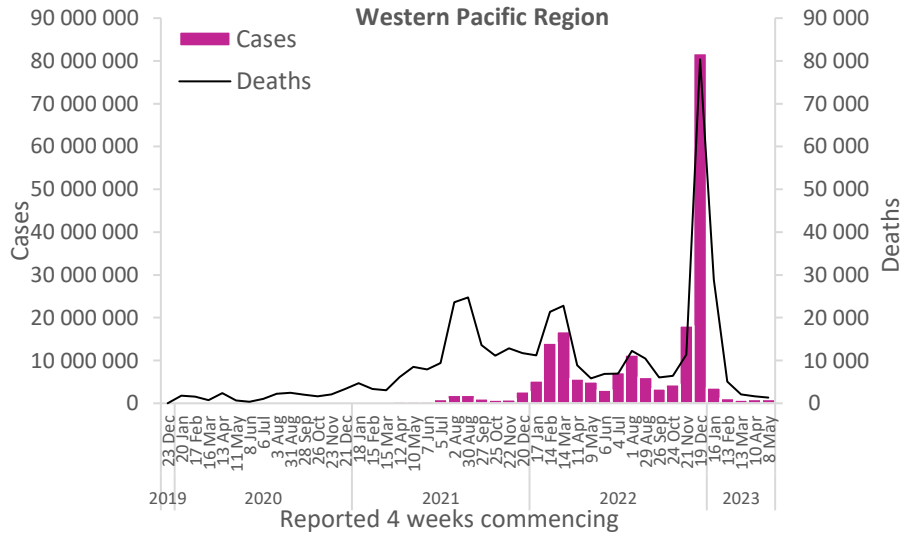


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported over 924 000 new cases, a 5% decrease as compared to the previous 28-day period. Thirteen (37%) of the 35 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Mongolia (1996 vs 118 new cases; +1592%), Cambodia (67 vs nine new cases; +644%), and the Lao People's Democratic Republic (177 vs 48 new cases; +269%). The highest numbers of new cases were reported from the Republic of Korea (470 093 new cases; 916.9 new cases per 100 000; +29%), Australia (147 684 new cases; 579.2 new cases per 100 000; +27%), and Singapore (82 538 new cases; 1410.8 new cases per 100 000; -12%).

The number of new 28-day deaths in the Region decreased by 19% as compared to the previous 28-day period, with 1305 new deaths reported. The highest numbers of new deaths were reported from Australia (450 new deaths; 1.8 new deaths per 100 000; -15%), the Republic of Korea (288 new deaths; <1 new death per 100 000; +37%), and China (232 new deaths; <1 new death per 100 000; +130%).



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 excepted, the names of proprietary products are distinguished by initial capital letters.

Updates on the COVID-19 outbreak in the Democratic People's Republic of Korea are 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.

WHO continues to monitor all SARS-CoV-2 variants and to track changes in prevalence and viral characteristics. The current trends describing the circulation of variants 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, and delays in uploading sequence data to GISAID.[1]

References

1. Chen Z, Azman AS, Chen X, et al. Global landscape of SARS-CoV-2 genomic surveillance and data sharing. *Nature genetics*. 2022;54(4). doi:10.1038/s41588-022-01033-y

COVID-19 Weekly Epidemiological Update

Edition 147 published 15 June 2023

In this edition:

Global overview

Data as of 11 June 2023

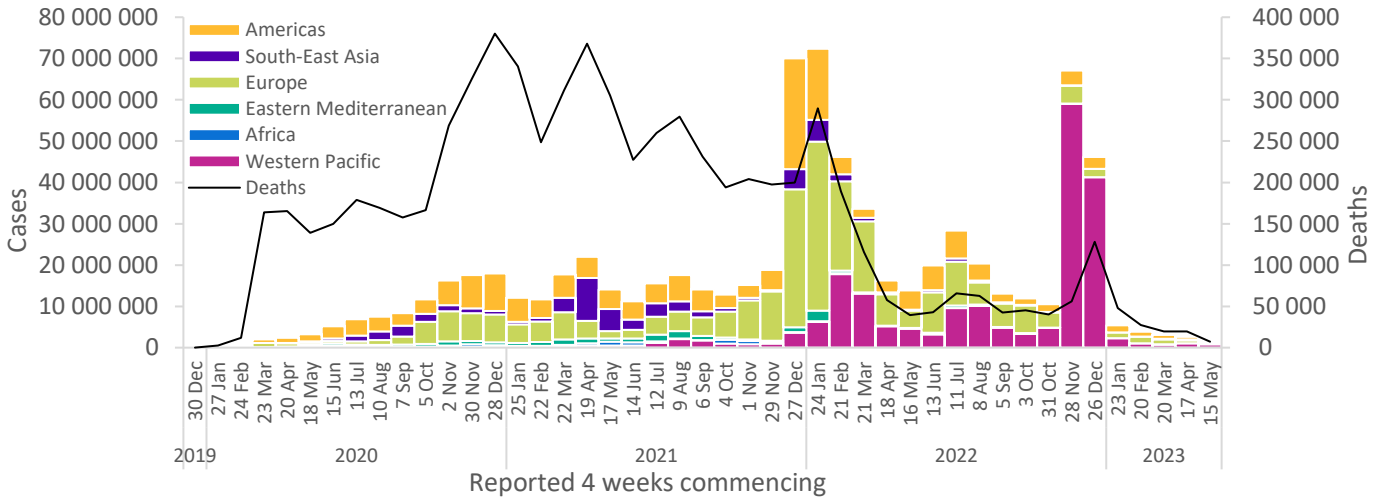
Globally, nearly 1.5 million new cases and 7300 deaths were reported in the last 28 days (15 May to 11 June 2023) (Figure 1, Table 1). At the regional level, all six WHO regions reported decreases in cases and deaths. As of 11 June 2023, over 767 million confirmed cases and over 6.9 million deaths have been reported globally.

Reported cases are not an accurate representation of infection rates due to the reductions in testing and due to continued reductions in reporting globally. During this 28-day period, only 59% (139 of 234) of countries and territories reported cases – a proportion that has been consistently declining since mid-2022. Additionally, data from previous weeks are continuously being updated to incorporate retrospective changes in reported COVID-19 cases and deaths made by countries. Data presented in this report are therefore incomplete and should be interpreted in light of these limitations.

Some countries continue to report high burdens of COVID-19, including increases in newly reported cases and, more importantly, increases in hospitalizations and deaths – the latter of which are considered more reliable indicators given the reductions in testing.

We present changes in epidemiological trends using a 28-day interval. Disaggregated data are still accessible on the WHO COVID-19 dashboard, where the full dataset is available for download.

Figure 1. COVID-19 cases reported by WHO Region, and global deaths by 28-day intervals, as of 11 June 2023**



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

At the regional level, the number of newly reported 28-day cases decreased across all WHO regions: the South-East Asia Region (-81%), the Region of the Americas (-69%), the Eastern Mediterranean Region (-67%), the European Region (-47%), the African Region (-30%), and the Western Pacific Region (-19%). The number of newly reported 28-day deaths decreased across all six regions: the Eastern Mediterranean Region (-77%), the Region of the Americas (-76%), the European Region (-56%), the African Region (-55%), the South-East Asia Region (-51%), and the Western Pacific Region (-41%).

At the country level, the highest numbers of new 28-day cases were reported from the Republic of Korea (475 577 new cases; +14%), Australia (150 877 new cases; +25%), Brazil (113 995 new cases; -26%), France (80 644 new cases; -46%), and Singapore (59 914 new cases; -40%). The highest numbers of new 28-day deaths were reported from Brazil (1175 new deaths; -10%), the Russian Federation (516 new deaths; -41%), Italy (503 new deaths; -26%), Spain (499 new deaths; -21%), and France (497 new deaths; -47%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 11 June 2023**

WHO Region	New cases in last 28 days (%)	Change in new cases in last 28 days *	Cumulative cases (%)	New deaths in last 28 days (%)	Change in new deaths in last 28 days *	Cumulative deaths (%)
Western Pacific	850 611 (58%)	-19%	**204 243 050 (27%)**	960 (13%)	-41%	**412 702 (6%)**
Europe	367 118 (25%)	-47%	**276 479 832 (36%)**	3 582 (49%)	-56%	**2 241 463 (32%)**
Americas	190 138 (13%)	-69%	**193 030 045 (25%)**	2 032 (28%)	-76%	**2 955 770 (43%)**
South-East Asia	41 172 (3%)	-81%	**61 179 469 (8%)**	604 (8%)	-51%	**806 271 (12%)**
Eastern Mediterranean	10 786 (1%)	-67%	**23 381 065 (3%)**	113 (2%)	-77%	**351 308 (5%)**
Africa	5 884 (<1%)	-30%	**9 536 044 (1%)**	9 (<1%)	-55%	**175 374 (3%)**
Global	**1 465 709 (100%)**	**-44%**	**767 850 269 (100%)**	**7 300 (100%)**	**-63%**	**6 942 901 (100%)**

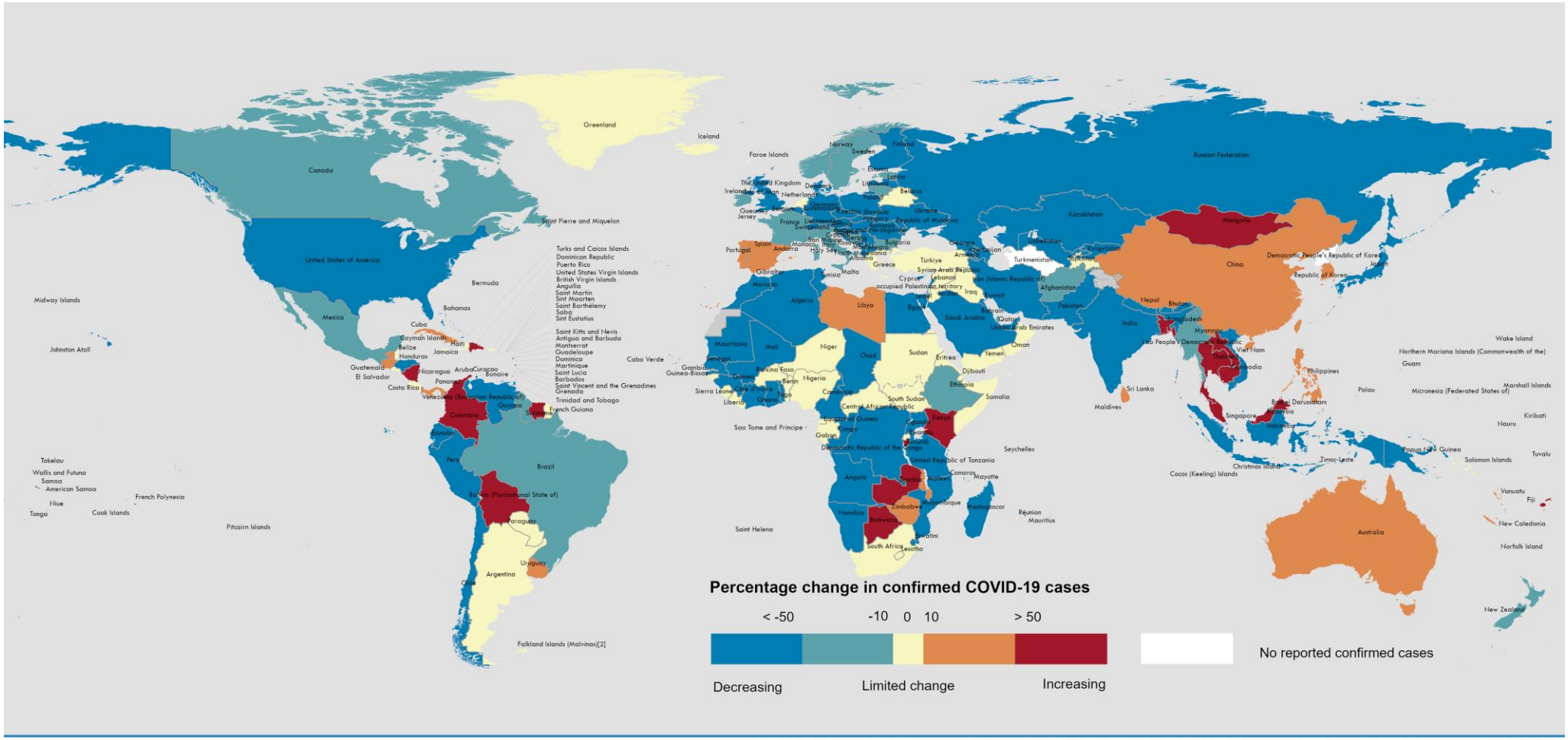
**Percent change in the number of newly confirmed cases/deaths in the past 28 days, compared to 28 days prior. Data from previous weeks are updated continuously with adjustments received from countries.*

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

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

- WHO COVID-19 Dashboard
- WHO Monthly Operational Update and past editions of the Weekly Epidemiological Update on COVID-19
- WHO COVID-19 detailed surveillance data dashboard
- WHO COVID-19 policy briefs

Figure 2. Percentage change in confirmed COVID-19 cases over the last 28 days relative to the previous 28 days, as of 11 June 2023**

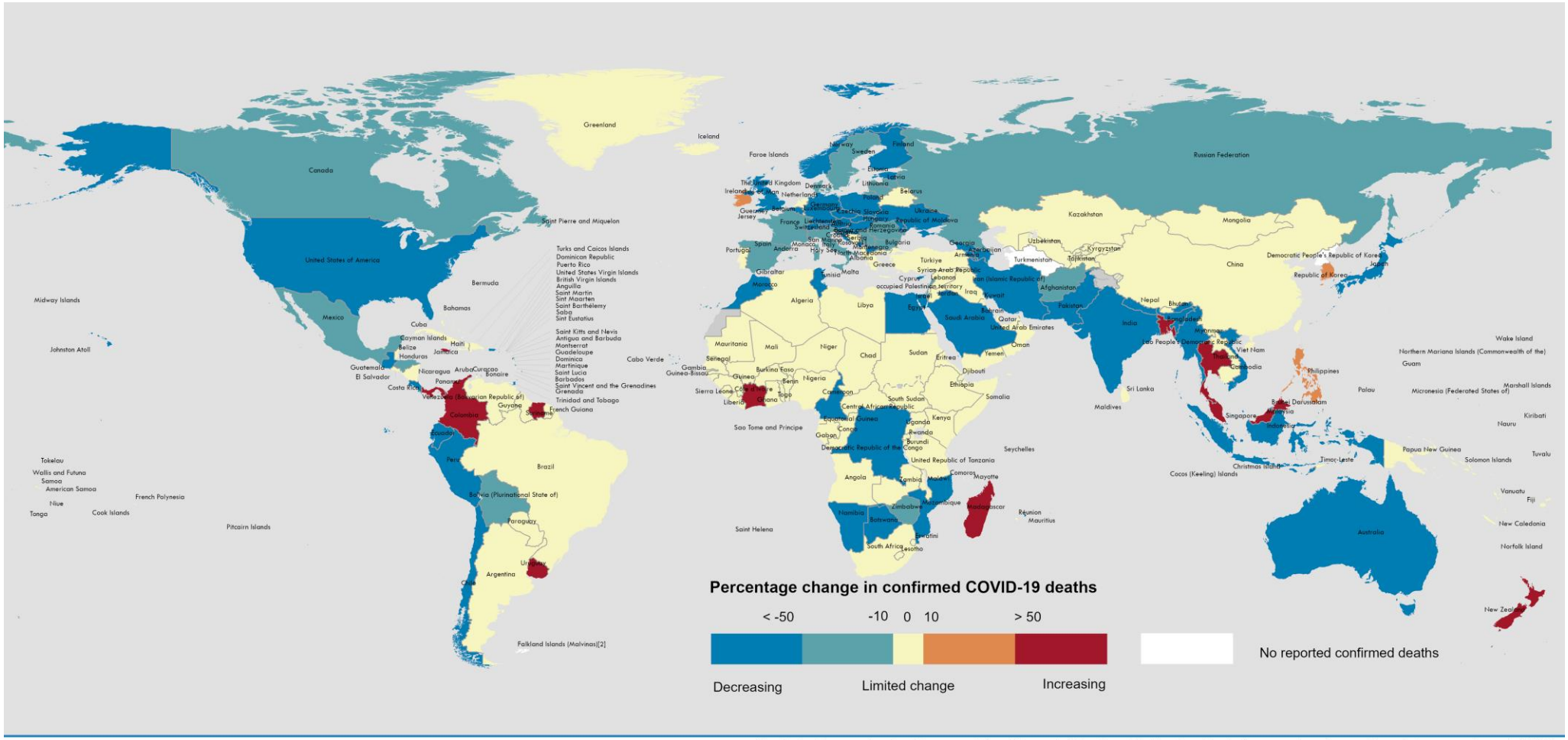


***Data Source**: World Health Organization*
***Map Production**: WHO Health Emergencies Programme*

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. Percentage change in confirmed COVID-19 deaths over the last 28 days relative to the previous 28 days, as of 11 June 2023**



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Hospitalizations and ICU admissions

At the global level, during the past 28 days (8 May 2023 to 4 June 2023), a total of 75 189 new hospitalizations and 2015 new intensive care unit (ICU) admissions were reported (Figure 4). This represents a 36% and 41% decrease in both hospitalizations and ICU admissions, respectively, compared to the previous 28 days (10 April 2023 to 7 May 2023). The presented hospitalization data are preliminary and might change as new data become available. Furthermore, hospitalization data are subject to reporting delays. These data also likely include both hospitalizations with incidental cases of SARS-CoV-2 infection and those due to COVID-19 disease.

Globally, during the past 28 days, 36 (15%) countries reported data to WHO on new hospitalizations at least once (Figure 5). The European Region had the highest proportion of countries reporting data on new hospitalizations (20 countries; 33%), followed by the South-East Asia Region (three countries; 27%), the Eastern Mediterranean Region (three countries; 14%), the Western Pacific Region (three countries; 9%), the African Region (four countries; 8%), and the Region of the Americas (three countries; 5%). The proportion of countries that consistently[i] reported new hospitalizations for the period was 9% (22 countries).

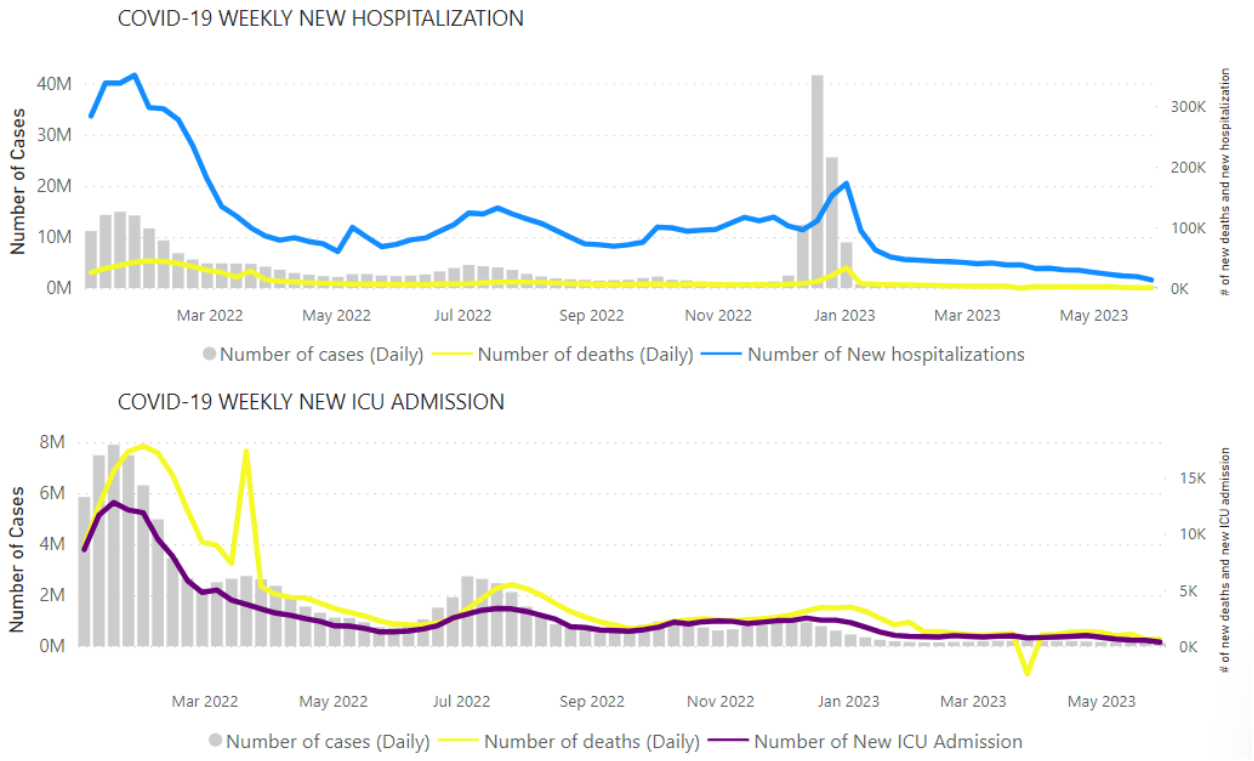
Among the 22 countries consistently reporting new hospitalizations, four (18%) countries registered an increase of 20% or greater in hospitalizations during the past 28 days compared to the previous 28-day period: Bangladesh (194 vs 83; +134%), Afghanistan (169 vs 81; +109%), Zimbabwe (38 vs 19; +100%), and Malta (69 vs 42; +64%). The highest number of new hospitalizations was reported from the United States of America (32 651 vs 44 879; -27%), Ukraine (7115 vs 11 473; -38%), and Indonesia (5436 vs 8125; -33%).

Across the six WHO regions, in the past 28 days, a total of 29 (12%) countries reported data to WHO on new ICU admissions at least once (Figure 5). The European Region had the highest proportion of countries reporting data on new ICU admissions (18 countries; 30%), followed by the South-East Asia Region (two countries; 18%), the Western Pacific Region (five countries; 14%), the Eastern Mediterranean Region (one country; 5%), the Region of the Americas (two countries; 4%), and the African Region (one country; 2%). The proportion of countries that consistently reported new ICU admissions for the period was 7% (16 countries).

Among the 16 countries consistently reporting new ICU admissions, only one (6%) country showed an increase of 20% or greater in new ICU admissions during the past 28 days compared to the previous 28-day period: Brunei (12 vs 10; +20%). The highest numbers of new ICU admissions were reported from France (578 vs 1107; -48%), Australia (329 vs 292; 13%), and Indonesia (248 vs 346; -28%).

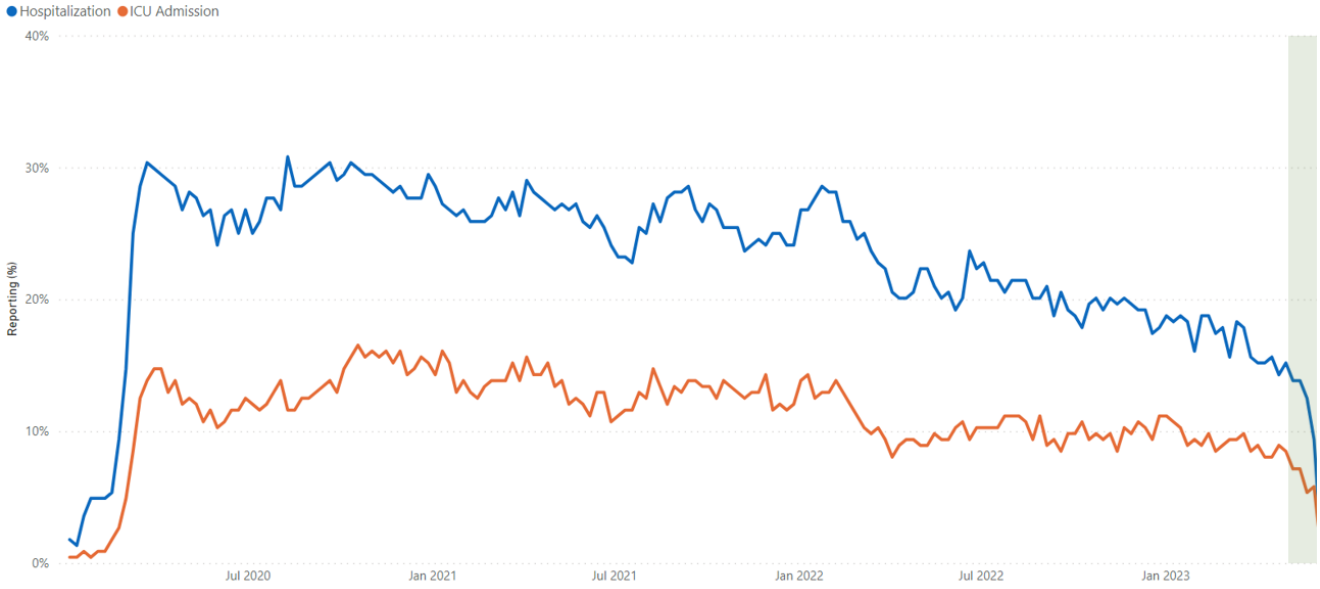
[i] "Consistently" as used here refers to countries that submitted data for new hospitalizations and intensive care unit admissions for the four consecutive weeks that make up the 28-day period.

Figure 4. COVID-19 cases, deaths, hospitalizations, and ICU admissions reported weekly to WHO, as of 4 June 2023



Note: Recent weeks are subject to reporting delays and should not be interpreted as a declining trend. Cases included in grey bars in the graph are only from countries reporting hospitalizations or ICU admissions, respectively.
Source: WHO Detailed Surveillance Dashboard

Figure 5. Weekly proportion of countries reporting new hospitalizations and ICU admissions: epidemiological week 1, 2020 to week 22, 2023



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SARS-CoV-2 variants of interest and variants under monitoring

Geographic spread and prevalence

Globally, from 15 May to 11 June 2023 (28 days), 15 789 SARS-CoV-2 sequences were shared through GISAID. WHO is currently tracking two variants of interest (VOIs), XBB.1.5 and XBB.1.16, along with seven variants under monitoring (VUMs) and their descendent lineages. The VUMs are BA.2.75, CH.1.1, BQ.1, XBB, XBB.1.9.1, XBB.1.9.2, and XBB.2.3.

Globally, XBB.1.5 has been reported from 116 countries since its emergence. While XBB.1.5 remains dominant globally, its prevalence has been declining steadily. In epidemiological week 21 (22 to 28 May 2023), XBB.1.5 accounted for 30% of sequences, a decrease from 43.5% in week 17 (24 to 30 April 2023). XBB.1.16 has been reported from 69 countries. In week 21, XBB.1.16 accounted for 18% of sequences, an increase from 10.9% in week 17.

Table 2 shows the number of countries reporting the VOIs and VUMs and their prevalence from week 17 to week 21. VOI and VUMs that have shown increasing trends are highlighted in orange, while those with decreasing trends are highlighted in green. Among the VUMs, XBB, XBB.1.9.1, XBB.1.9.2, and XBB.2.3 have shown increasing trends in recent weeks, with XBB.1.9.1 accounting for almost half of the reported VUM sequences. Overall, other VUMs show declining or stable trends during the same reporting period.

Table 2. Weekly prevalence of SARS-CoV-2 VOIs and VUMs, week 17 to week 21 of 2023

Lineage	Countries[§]	Sequences[§]	2023-17	2023-18	2023-19	2023-20	2023-21
XBB.1.5* (VOI)	116	246 663	43.46	39.30	33.27	32.22	30.01
XBB.1.16* (VOI)	69	18 898	10.91	13.60	15.18	17.52	17.95
BA.2.75*	124	112 254	1.77	2.00	1.77	0.93	0.86
CH.1.1*	92	47 698	3.46	3.33	3.36	2.84	2.07
BQ.1*	150	411 988	1.36	0.90	0.68	0.40	0.40
XBB*	128	65 296	4.78	5.00	5.07	5.05	5.12
XBB.1.9.1*	93	34 308	15.30	16.75	18.40	18.79	19.22
XBB.1.9.2*	68	9 141	4.55	4.60	5.28	5.68	6.91
XBB.2.3*	61	7 010	3.65	4.14	5.09	5.57	7.46
Unassigned	103	149 689	0.88	0.59	1.15	0.78	-
Other[+]	208	6 727 113	8.10	8.53	9.91	9.67	9.22

* Includes descendant lineages, except those individually specified elsewhere in the table. For example, XBB* does not include XBB.1.5, XBB.1.9.1, XBB.1.9.2, XBB.1.16, and XBB.2.3.

[+] Others are other circulating lineages excluding the VOI, VUMs, BA.1*, BA.2*, BA.3*, BA.4*, BA.5*.

[§] Number of countries and sequences are since the emergence of the variants.

Additional resources

- Tracking SARS-CoV-2 Variants
- WHO statement on updated tracking system on SARS-CoV-2 variants of concern and variants of interest
- WHO XBB.1.16 Updated Risk Assessment, 5 June 2023
- WHO XBB.1.5 rapid risk assessment, 24 February 2023

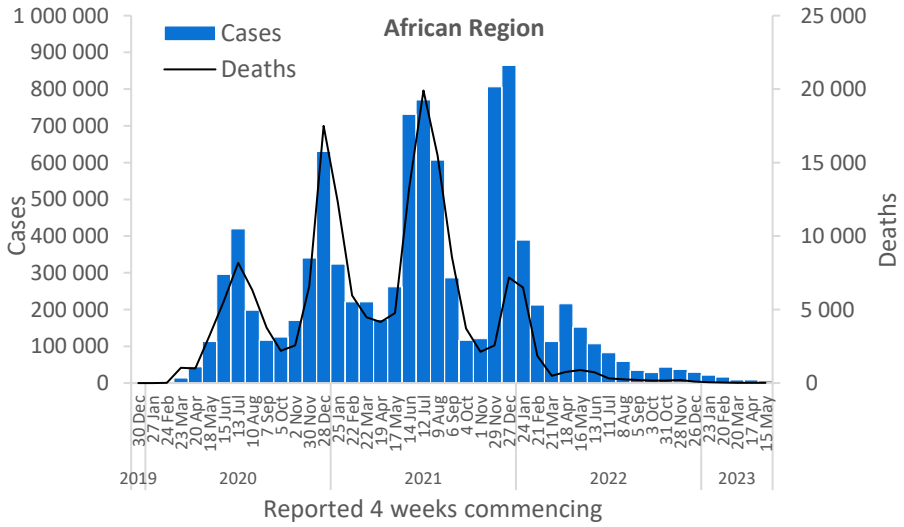
WHO regional overviews

Data for 15 May to 11 June 2023

African Region

The African Region reported over 5800 new cases, a 30% decrease as compared to the previous 28-day period. Six (12%) of the 50 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Burundi (205 vs 23 new cases; +791%), Botswana (91 vs 15 new cases; +507%), and Zambia (1063 vs 192 new cases; +454%). The highest numbers of new cases were reported from Mauritius (3252 new cases; 255.7 new cases per 100 000; -40%), Zambia (1063 new cases; 5.8 new cases per 100 000; +454%), and Zimbabwe (320 new cases; 2.2 new cases per 100 000; +39%).

The number of new 28-day deaths in the Region decreased by 55% as compared to the previous 28-day period, with nine new deaths reported. The highest numbers of new deaths were reported from Zimbabwe (five new deaths; <1 new death per 100 000; -17%), Mauritius (two new deaths; <1 new death per 100 000; -67%), and Côte d'Ivoire (one new death; <1 new death per 100 000; no deaths reported the previous 28-day period).

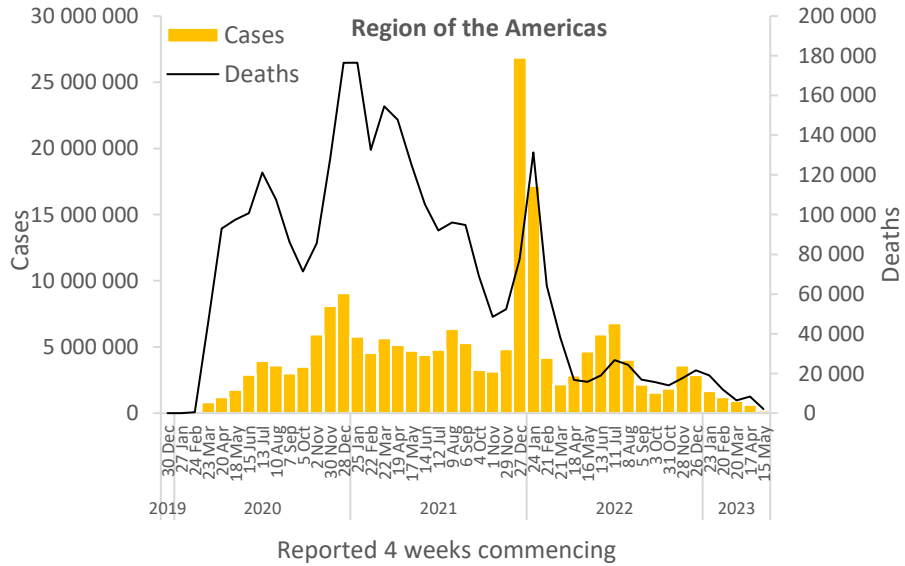


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 190 000 new cases, a 69% decrease as compared to the previous 28-day period. Nine (16%) of the 56 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Saint Barthélemy (eight vs two new cases; +300%), the Dominican Republic (493 vs 142 new cases; +247%), and the United States Virgin Islands (188 vs 96 new cases; +96%). The highest numbers of new cases were reported from Brazil (113 995 new cases; 53.6 new cases per 100 000; -26%), Mexico (19 573 new cases; 15.2 new cases per 100 000; -42%), and Puerto Rico (17 063 new cases; 596.4 new cases per 100 000; -9%).

The number of new 28-day deaths in the Region decreased by 76% as compared to the previous 28-day period, with 2032 new deaths reported. The highest numbers of new deaths were reported from Brazil (1175 new deaths; <1 new death per 100 000; -10%), Canada (347 new deaths; <1 new death per 100 000; -34%), and Peru (157 new deaths; <1 new death per 100 000; -70%).

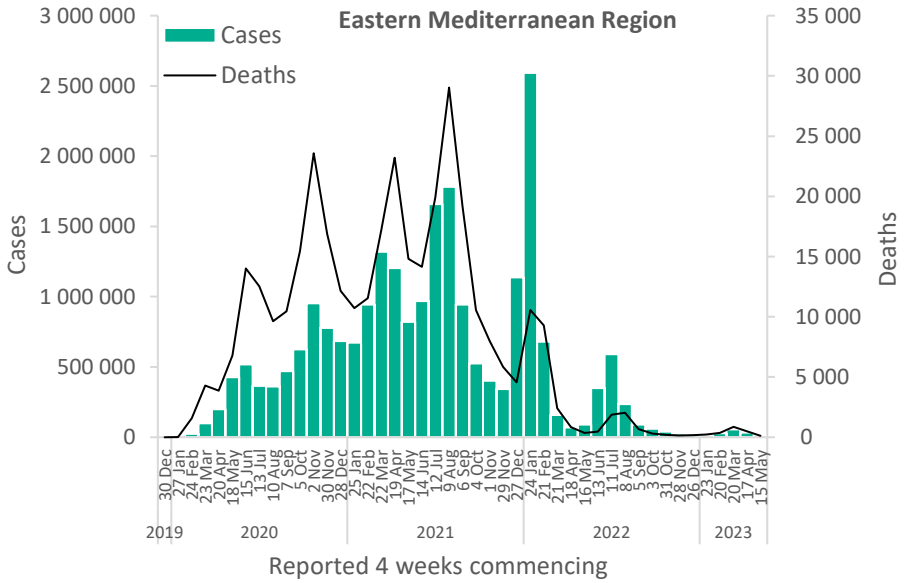


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 10 000 new cases, a 67% decrease as compared to the previous 28-day period. One (5%) of the 22 countries for which data are available reported increases in new cases of 20% or greater: Libya (11 vs nine new cases; +22%). The highest numbers of new cases were reported from Afghanistan (3785 new cases; 9.7 new cases per 100 000; -38%), Qatar (3066 new cases; 106.4 new cases per 100 000; -50%), and the United Arab Emirates (1423 new cases; 14.4 new cases per 100 000; -71%).

The number of new 28-day deaths in the Region decreased by 77% as compared to the previous 28-day period, with 113 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (69 new deaths; <1 new death per 100 000; -83%), Lebanon (16 new deaths; <1 new death per 100 000; -45%), and Tunisia (16 new deaths; <1 new death per 100 000; -60%).

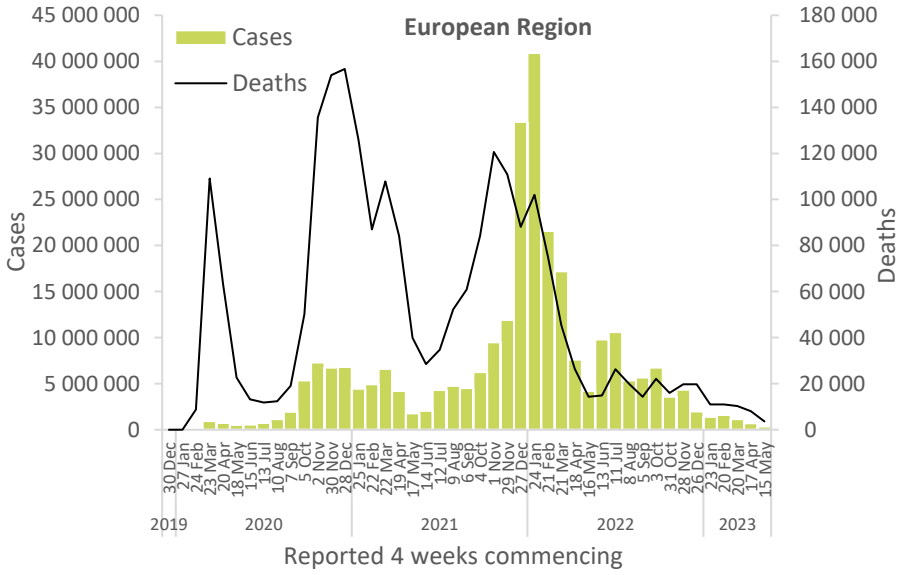


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 367 000 new cases, a 47% decrease as compared to the previous 28-day period. One (2%) of the 61 countries for which data are available reported increases in new cases of 20% or greater: Spain (44 752 vs 31 995 new cases; +40%). The highest numbers of new cases were reported from France (80 644 new cases; 124 new cases per 100 000; -46%), Greece (50 833 new cases; 474.3 new cases per 100 000; similar with the previous 28-day period), and Italy (47 471 new cases; 79.6 new cases per 100 000; -45%).

The number of new 28-day deaths in the Region decreased by 56% as compared to the previous 28-day period, with 3582 new deaths reported. The highest numbers of new deaths were reported from the Russian Federation (516 new deaths; <1 new death per 100 000; -41%), Italy (503 new deaths; <1 new death per 100 000; -26%), and Spain (499 new deaths; 1.1 new deaths per 100 000; -21%).

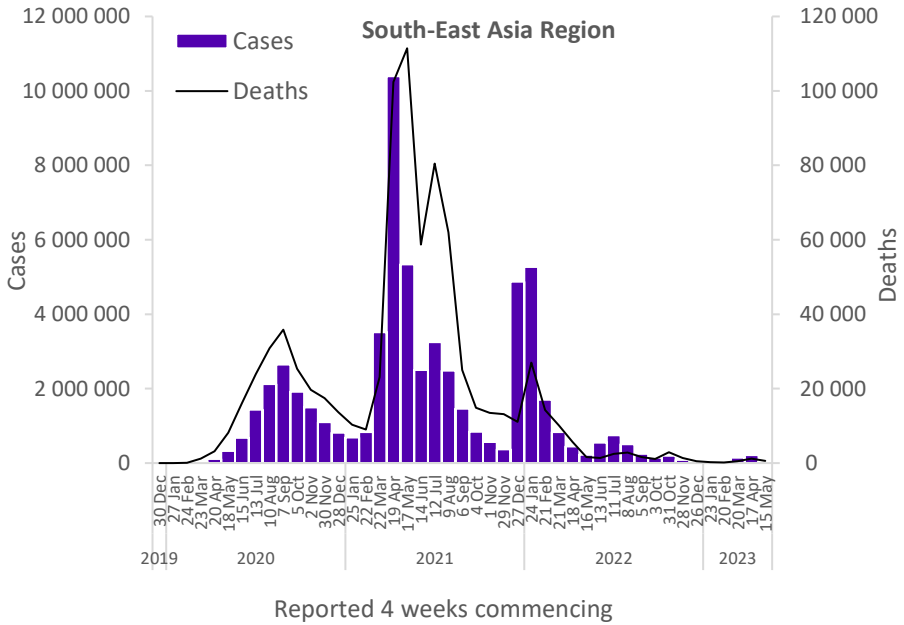


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 41 000 new cases, an 81% decrease as compared to the previous 28-day period. Three (30%) of the 10 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Bangladesh (1992 vs 362 new cases; +450%), Thailand (11 396 vs 6954 new cases; +64%), and Sri Lanka (231 vs 179 new cases; +29%). The highest numbers of new cases were reported from Indonesia (12 783 new cases; 4.7 new cases per 100 000; -68%), India (12 114 new cases; <1 new case per 100 000; -93%), and Thailand (11 396 new cases; 16.3 new cases per 100 000; +64%).

The number of new 28-day deaths in the Region decreased by 51% as compared to the previous 28-day period, with 604 new deaths reported. The highest numbers of new deaths were reported from Thailand (243 new deaths; <1 new death per 100 000; +417%), Indonesia (212 new deaths; <1 new death per 100 000; -56%), and India (121 new deaths; <1 new death per 100 000; -82%).

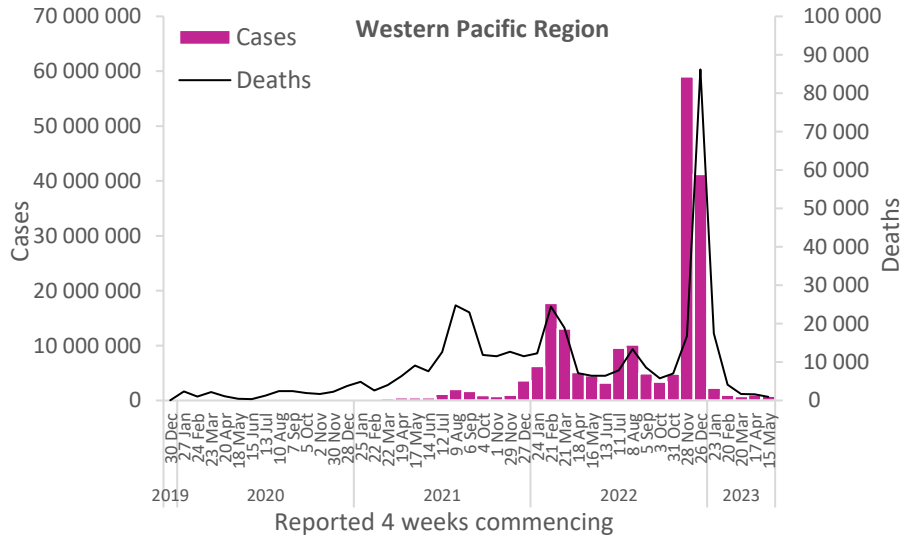


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported over 850 000 new cases, a 19% decrease as compared to the previous 28-day period. Twelve (34%) of the 35 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Fiji (108 vs three new cases; +3500%), Palau (11 vs one new cases; +1000%), and Cambodia (103 vs 10 new cases; +930%). The highest numbers of new cases were reported from the Republic of Korea (475 577 new cases; 927.6 new cases per 100 000; +14%), Australia (150 877 new cases; 591.7 new cases per 100 000; +25%), and Singapore (59 914 new cases; 1024.1 new cases per 100 000; -40%).

The number of new 28-day deaths in the Region decreased by 41% as compared to the previous 28-day period, with 960 new deaths reported. The highest numbers of new deaths were reported from the Republic of Korea (286 new deaths; <1 new death per 100 000; +24%), Australia (243 new deaths; 1.0 new death per 100 000; -59%), and China (168 new deaths; <1 new death per 100 000; +6%).



Updates from the Western Pacific Region

Summary of the 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 for COVID-19 and other respiratory diseases include:

- A common approach across two regions: delivering respiratory pathogen simulation exercises in Costa Rica and Lebanon
- WHO delivers essential equipment and training to support whole genome sequencing in East Malaysia
- Training on genetic characterization of influenza and SARS-CoV-2 to enhance GISRS respiratory disease surveillance in the Americas
- A global analysis of COVID-19 intra-action reviews: reflecting on, adjusting and improving emergency preparedness and response during a pandemic, examples from the African 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 excepted, the names of proprietary products are distinguished by initial capital letters.

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References

1. Chen Z, Azman AS, Chen X, et al. Global landscape of SARS-CoV-2 genomic surveillance and data sharing. *Nature genetics*. 2022;54(4). doi:10.1038/s41588-022-01033-y

COVID-19 Weekly Epidemiological Update

Edition 148 published 22 June 2023

In this edition:

Global overview

Data as of 18 June 2023

Globally, over 1.2 million new cases and over 7100 deaths were reported in the last 28 days (22 May to 18 June 2023) (Figure 1, Table 1). The African region has reported a slight increase in deaths but a decease in cases, while the other five WHO regions have reported decreases in both cases and deaths. As of 18 June 2023, over 768 million confirmed cases and over 6.9 million deaths have been reported globally.

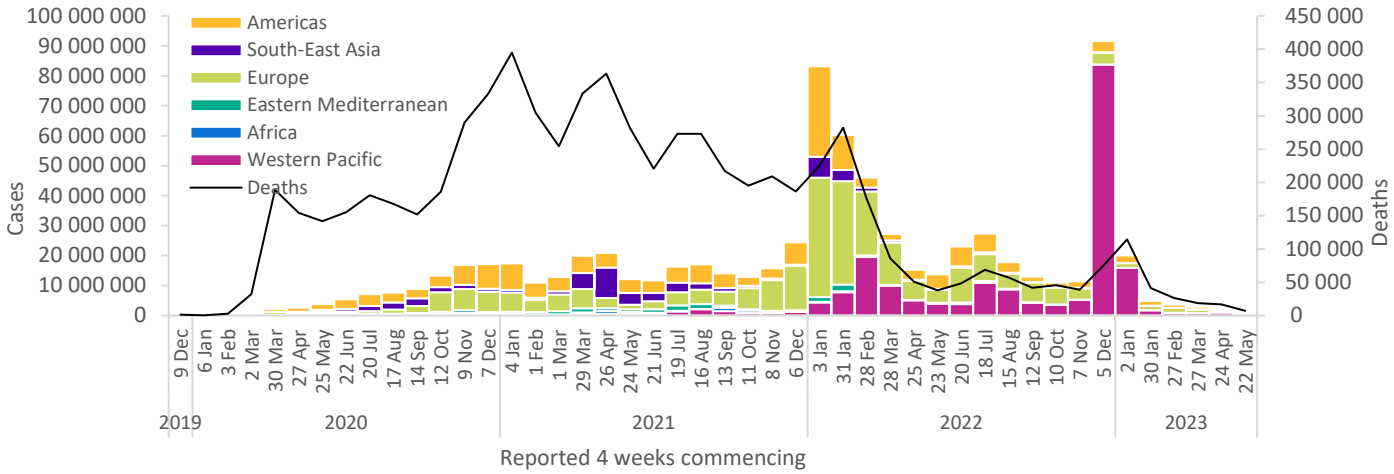
Reported cases are not an accurate representation of infection rates due to the reductions in testing and reporting globally. During this 28-day period, only 56% (133 of 234)[i] of countries and territories reported at least one case – a proportion that has been consistently declining since mid-2022. Additionally, data from previous weeks are continuously being updated to incorporate retrospective changes in reported COVID-19 cases and deaths made by countries. Data presented in this report are therefore incomplete and should be interpreted in light of these limitations.

Some countries continue to report high burdens of COVID-19, including increases in newly reported cases and, more importantly, increases in hospitalizations and deaths – the latter of which are considered more reliable indicators given the reductions in testing.

We present changes in epidemiological trends using a 28-day interval. Disaggregated data are still accessible on the WHO COVID-19 dashboard, where the full dataset is available for download. Global and national data on SARS-CoV-2 PCR percent positivity is available on WHO's integrated dashboard provided by the Global Influenza Programme.

[i] The denominator of 234 includes all countries and territories that have reported at least one case of COVID-19 since the beginning of the pandemic. In contrast, the denominator of 243, which was used in previous editions of the COVID-19 Weekly Epidemiological Update, encompassed not only countries and territories but also conveyances.

Figure 1. COVID-19 cases reported by WHO Region, and global deaths by 28-day intervals, as of 18 June 2023**



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

At the regional level, the number of newly reported 28-day cases decreased across all WHO regions: the South-East Asia Region (-78%), the Eastern Mediterranean Region (-71%), the Region of the Americas (-70%), the European Region (-46%), the Western Pacific Region (-33%), and the African Region (-26%). The number of newly reported 28-day deaths decreased across five regions: the Region of the Americas (-73%), the Eastern Mediterranean Region (-70%), the South-East Asia Region (-57%), the European Region (-49%), the Western Pacific Region (-28%); while the number of deaths increased slightly in one WHO Region, the African Region (+5%).

At the country level, the highest numbers of new 28-day cases were reported from the Republic of Korea (363 382 new cases; -21%), Australia (135 144 new cases; +4%), Brazil (85 987 new cases; -41%), France (71 197 new cases; -42%), and Singapore (54 581 new cases; -44%). The highest numbers of new 28-day deaths were reported from Brazil (978 new deaths; -19%), Spain (729 new deaths; +70%), the Russian Federation (577 new deaths; -13%), Australia (496 new deaths; -6%), and Italy (420 new deaths; -36%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 18 June 2023**

WHO Region	New cases in last 28 days (%)	Change in new cases in last 28 days *	Cumulative cases (%)	New deaths in last 28 days (%)	Change in new deaths in last 28 days *	Cumulative deaths (%)
Western Pacific	698 322 (58%)	-33%	**204 340 687 (27%)**	1 154 (16%)	-28%	**413 410 (6%)**
Europe	315 151 (26%)	-46%	**276 536 948 (36%)**	3 523 (49%)	-49%	**2 242 740 (32%)**
Americas	150 857 (12%)	-70%	**193 056 651 (25%)**	1 875 (26%)	-73%	**2 956 210 (43%)**
South-East Asia	32 139 (3%)	-78%	**61 184 736 (8%)**	496 (7%)	-57%	**806 365 (12%)**
Eastern Mediterranean	7 821 (1%)	-71%	**23 382 101 (3%)**	98 (1%)	-70%	**351 329 (5%)**
Africa	6 397 (1%)	-26%	**9 538 444 (1%)**	22 (<1%)	5%	**175 389 (3%)**
Global	**1 210 687 (100%)**	**-48%**	**768 040 331 (100%)**	**7 168 (100%)**	**-58%**	**6 945 456 (100%)**

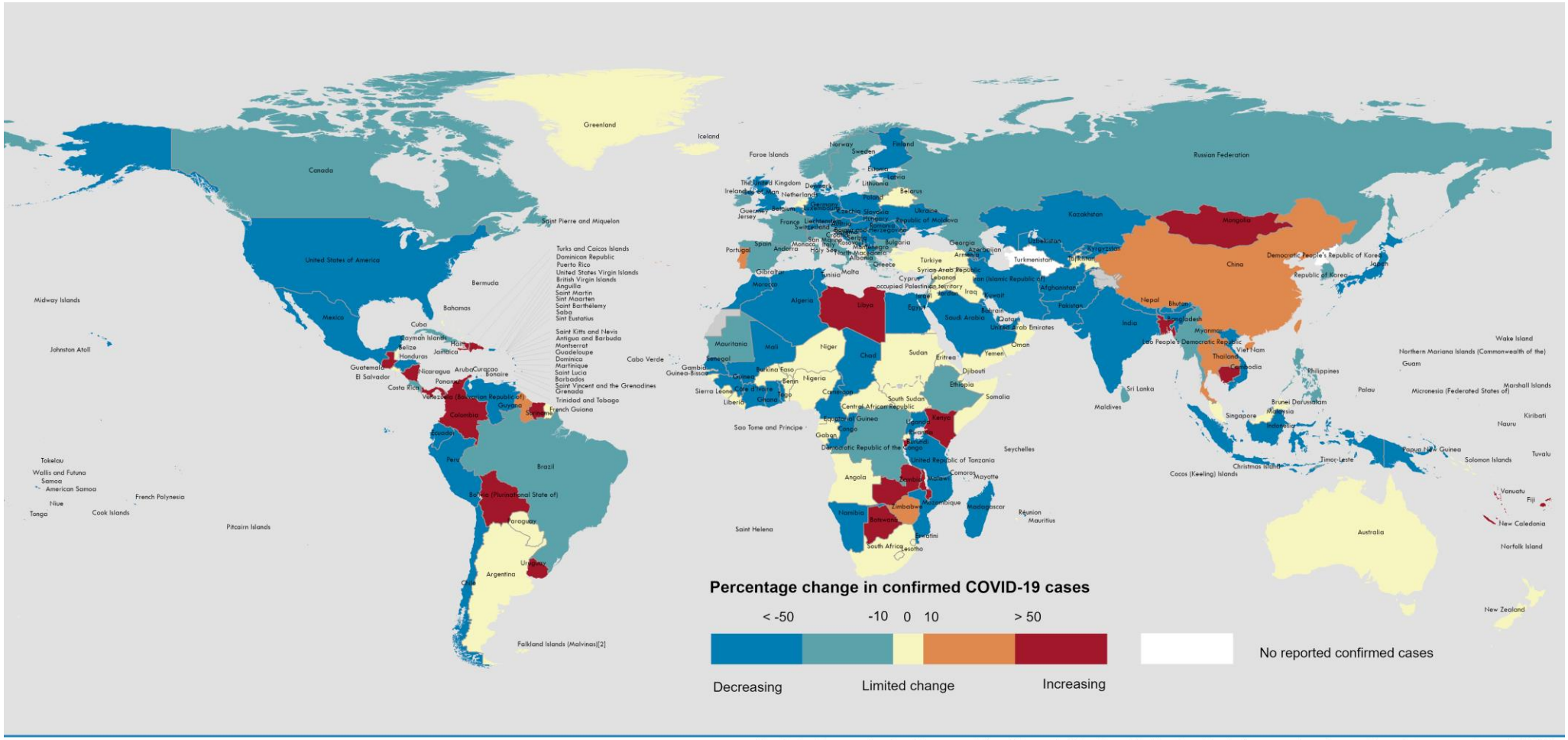
**Percent change in the number of newly confirmed cases/deaths in the past 28 days, compared to 28 days prior. Data from previous weeks are updated continuously with adjustments received from countries.*

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

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

- WHO COVID-19 Dashboard
- WHO Monthly Operational Update and past editions of the Weekly Epidemiological Update on COVID-19
- WHO COVID-19 detailed surveillance data dashboard
- WHO COVID-19 policy briefs

Figure 2. Percentage change in confirmed COVID-19 cases over the last 28 days relative to the previous 28 days, as of 18 June 2023**

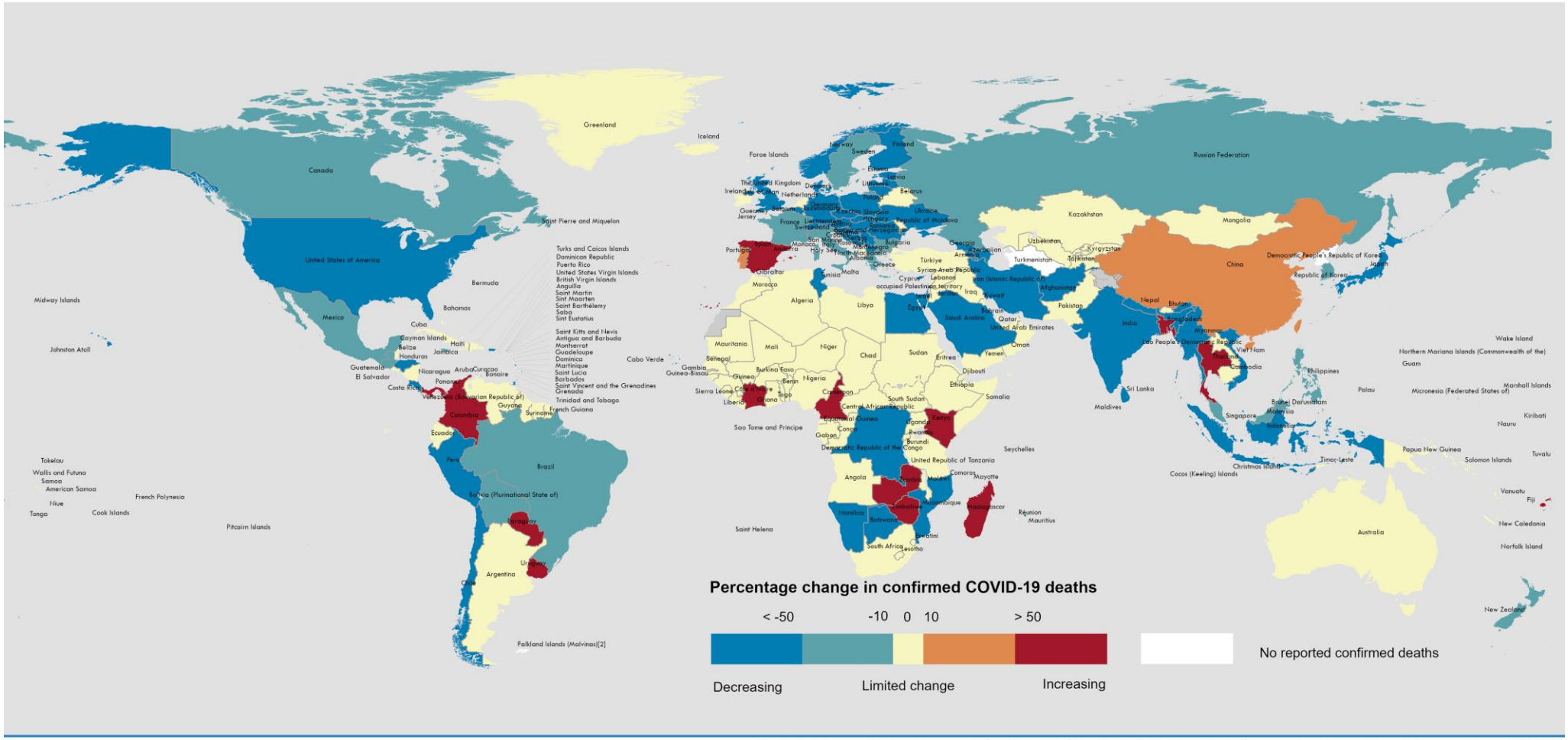


***Data Source**: World Health Organization*
***Map Production**: WHO Health Emergencies Programme*

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. Percentage change in confirmed COVID-19 deaths over the last 28 days relative to the previous 28 days, as of 18 June 2023**



***Data Source**: World Health Organization*
***Map Production**: WHO Health Emergencies Programme*

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

Hospitalizations and ICU admissions

At the global level, during the past 28 days (15 May 2023 to 11 June 2023), a total of 67 774 new hospitalizations and 2585 new intensive care unit (ICU) admissions were reported (Figure 4). This represents a 39% and 40% decrease in both hospitalizations and ICU admissions, respectively, compared to the previous 28 days (17 April 2023 to 14 May 2023). The presented hospitalization data are preliminary and might change as new data become available. Furthermore, hospitalization data are subject to reporting delays. These data also likely include both hospitalizations with incidental cases of SARS-CoV-2 infection and those due to COVID-19 disease.

Globally, during the past 28 days, 41 (18%) countries reported data to WHO on new hospitalizations at least once (Figure 5). The European Region had the highest proportion of countries reporting data on new hospitalizations (21 countries; 34%), followed by the South-East Asia Region (two countries; 20%), the Region of the Americas (eight countries; 14%), the Eastern Mediterranean Region (three countries; 14%), the Western Pacific Region (three countries; 9%), and the African Region (four countries; 8%). The proportion of countries that consistently[ii] reported new hospitalizations for the period was 12% (27 countries) (Table 2).

Among the 27 countries consistently reporting new hospitalizations, four (15%) countries registered an increase of 20% or greater in hospitalizations during the past 28 days compared to the previous 28-day period: Bangladesh (233 vs 87; +168%), Zimbabwe (54 vs 23; +135%), Malta (72 vs 42; +71%) and Cuba (436 vs 281; +55%). The highest number of new hospitalizations was reported from the United States of America (27 738 vs 39 050; -29%), Malaysia (6330 vs 8024; -21%), and Ukraine (6316 vs 10 041; -37%).

Across all the six WHO regions, in the past 28 days, a total of 31 (13%) countries reported data to WHO on new ICU admissions at least once (Figure 5). The European Region had the highest proportion of countries reporting data on new ICU admissions (19; 31%), followed by the Western Pacific Region (five countries; 14%), the South-East Asia Region (one country; 10%), the Region of the Americas (four countries; 7%), the Eastern Mediterranean Region (one country; 5%), and the African Region (one country; 2%). The proportion of countries that consistently reported new ICU admissions for the period was 9% (21 countries) (Table 2).

Among the 21 countries consistently reporting new ICU admissions, two (10%) country showed an increase of 20% or greater in new ICU admissions during the past 28 days compared to the previous 28-day period: Slovakia (two vs one; +100%) and Mexico (20 vs 14; +43%). The highest numbers of new ICU admissions were reported from Brazil (730 vs 1068; -32%), France (507 vs 1022; -50%) and Australia (342 vs 293; +17%).

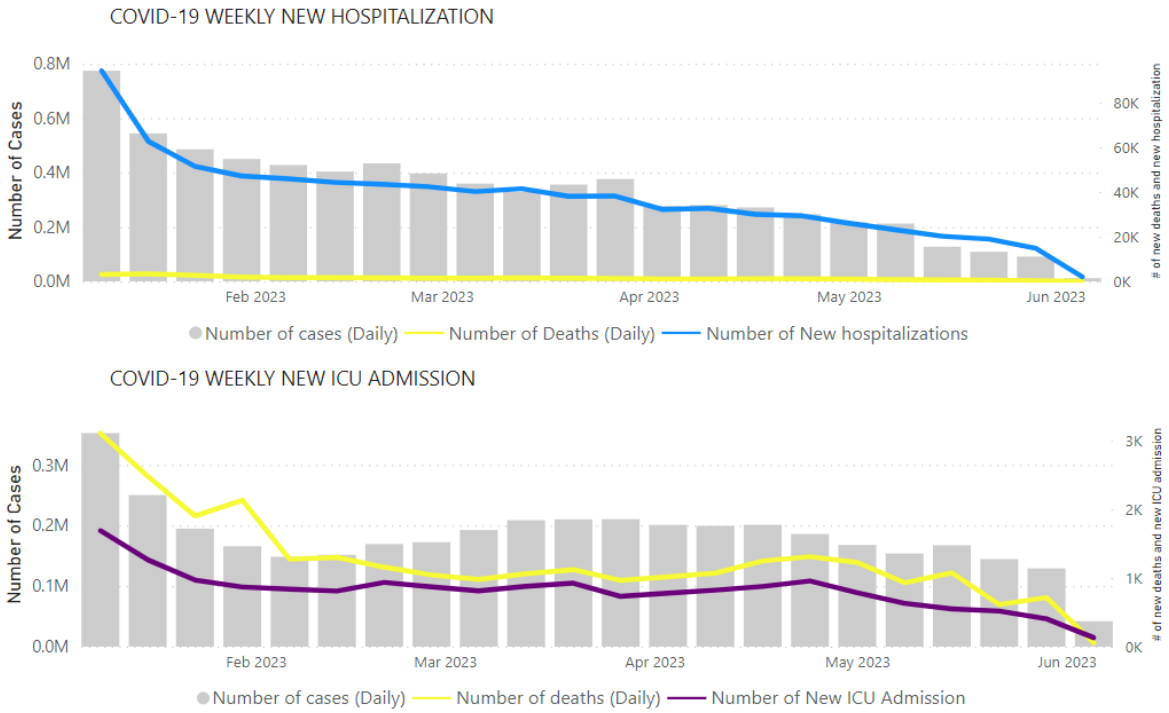
[ii] "Consistently" as used here refers to countries that submitted data for new hospitalizations and intensive care unit admissions for the four consecutive weeks that make up the 28-day period.

Table 2. New Hospitalization and ICU Admissions by WHO Region with 28-day change: 15 May 2023 to 11 June 2023 compared to 17 April 2023 to 14 May 2023

Region	New hospitalizations from countries that reported consistently in the last and previous 28 days			New ICU admissions from countries that reported consistently in the last and previous 28 days		
	Number of countries* (percentage)	Number of new hospitalizations	Percent change	Number of countries* (percentage)	Number of new ICU admissions	Percent change
Africa	1/50 (2%)	54	**+135%**	0/50 (<1%)	N/A	**N/A**
Americas	5/56 (9%)	30 847	**-30%**	2/56 (4%)	750	**-31%**
Eastern Mediterranean	1/22 (5%)	19	**-82%**	1/22 (5%)	<1	**-100%**
European	16/61 (26%)	20 659	**-48%**	13/61 (21%)	1018	**-50%**
South-East Asia	2/10 (20%)	3 701	**-61%**	1/10 (10%)	184	**-53%**
Western Pacific	2/35 (6%)	7 499	**-27%**	4/35 (11%)	496	**1%**
Global	**27/234 (12%)**	**62 779**	**-39%**	**21/234 (9%)**	2448	**-39%**

** To be able to compare two periods only the countries reported consistently in both (the last and previous 28 days) periods are included in the table*

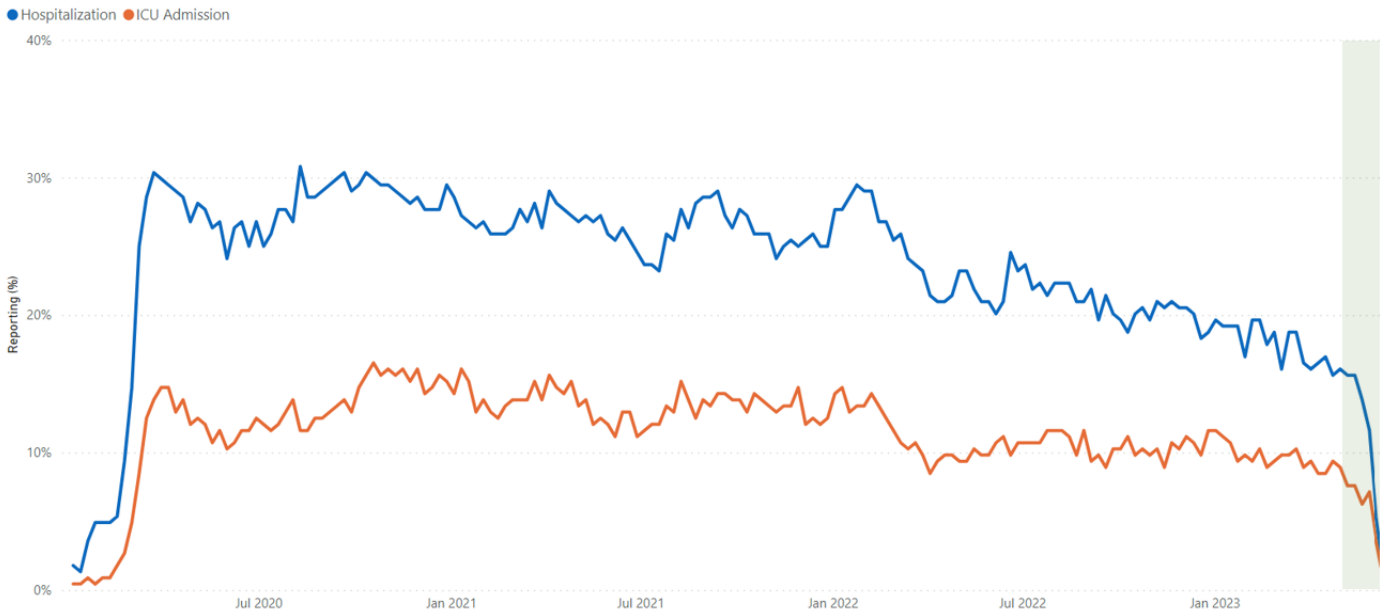
Figure 4. COVID-19 cases, deaths, hospitalizations, and ICU admissions reported weekly to WHO, as of 11 June 2023



Note: Recent weeks are subject to reporting delays and should not be interpreted as a declining trend. Cases included in grey bars in the graph are only from countries reporting hospitalizations or ICU admissions, respectively. Additionally due to a technical issue, data from the European region is not reflected in the figures for the last week.

Source: WHO Detailed Surveillance Dashboard

Figure 5. Weekly proportion of countries reporting new hospitalizations and ICU admissions: epidemiological week 1, 2020 to week 23, 2023



Note: Recent weeks are subject to reporting delays and should not be interpreted as a declining trend. Additionally, due to a technical issue, data from the European region is not reflected in the figure for the last week.

SARS-CoV-2 variants of interest and variants under monitoring

Geographic spread and prevalence

Globally, from 22 May to 18 June 2023 (28 days), 17 303 SARS-CoV-2 sequences were shared through GISAID. WHO is currently tracking two variants of interest (VOIs), XBB.1.5 and XBB.1.16, along with six variants under monitoring (VUMs) and their descendent lineages. The VUMs are BA.2.75, CH.1.1, XBB, XBB.1.9.1, XBB.1.9.2, and XBB.2.3. The variant BQ.1 has been removed from the VUM list due to its low global prevalence (below 1% over the past month).

Globally, 112 countries have reported detection of XBB.1.5 since its emergence. While XBB.1.5 continues to be the most reported lineage worldwide, its prevalence has been declining steadily. In epidemiological week 22 (29 May to 4 June 2023), XBB.1.5 accounted for 23.3% of sequences, as compared to 36.7% in week 18 (1 to 7 May 2023). XBB.1.16 has been reported from 85 countries. In week 22, XBB.1.16 accounted for 21.9% of sequences, an increase from 14.1% in week 18. An analysis of available data indicates that countries with a low prior prevalence of XBB.1.5 have experienced a significant increase in the prevalence of XBB.1.16, while countries that had a high prevalence of XBB.1.5 have reported low circulation of XBB.1.16.

Table 3 shows the number of countries reporting the VOIs and VUMs and their prevalence from week 18 to week 22. VOI and VUMs that have shown increasing trends are highlighted in orange, while those with decreasing trends are highlighted in green. Among the VUMs, XBB, XBB.1.9.2, and XBB.2.3 have shown increasing trends in recent weeks. Overall, other VUMs show declining or stable trends during the same reporting period.

Table 3. Weekly prevalence of SARS-CoV-2 VOIs and VUMs, week 18 to week 22 of 2023

Lineage	Countries[§]	Sequences[§]	2023-18	2023-19	2023-20	2023-21	2023-22
XBB.1.5* (VOI)	112	238 633	36.65	32.06	29.80	25.63	23.31
XBB.1.16* (VOI)	85	24 983	14.11	15.68	18.22	19.17	21.92
BA.2.75*	124	118 911	3.85	3.53	2.85	2.37	2.34
CH.1.1*	93	41 751	1.30	1.39	1.21	1.07	1.03
XBB*	127	61 183	5.01	4.67	4.87	5.78	5.89
XBB.1.9.1*	95	37 464	17.13	18.17	18.64	18.80	17.81
XBB.1.9.2*	77	19 049	8.20	10.39	10.80	11.74	12.05
XBB.2.3*	56	5 276	2.37	2.70	3.34	4.66	5.02
Unassigned	91	146 368	0.56	1.04	0.53	-	0.03
Other[+]	209	6 744 051	8.86	9.01	8.82	9.47	9.44

* Includes descendant lineages, except those individually specified elsewhere in the table. For example, XBB* does not include XBB.1.5, XBB.1.9.1, XBB.1.9.2, XBB.1.16, and XBB.2.3.

[+] Others are other circulating lineages excluding the VOI, VUMs, BA.1*, BA.2*, BA.3*, BA.4*, BA.5*.

[§] Number of countries and sequences are since the emergence of the variants

Additional resources

- Tracking SARS-CoV-2 Variants
- WHO statement on updated tracking system on SARS-CoV-2 variants of concern and variants of interest
- WHO XBB.1.16 Updated Risk Assessment, 5 June 2023
- WHO XBB.1.5 rapid risk assessment, 24 February 2023

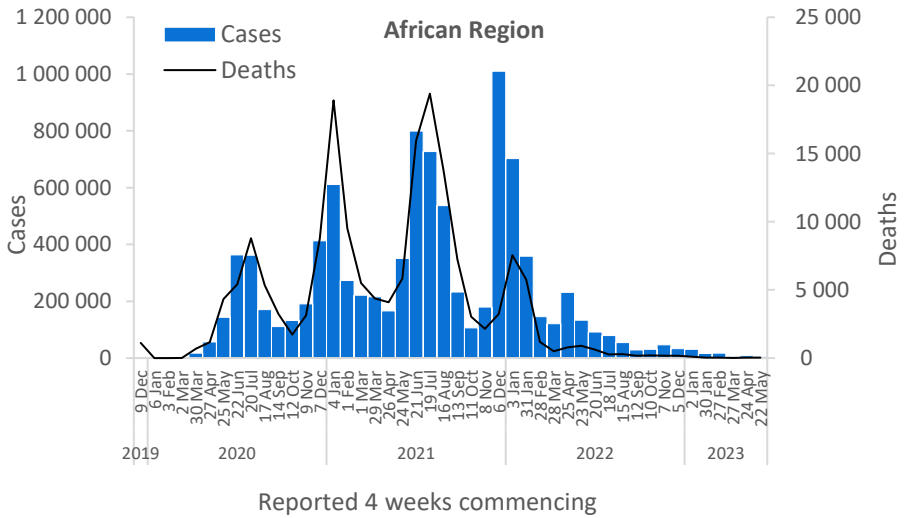
WHO regional overviews

Data for 22 May to 18 June 2023

African Region

The African Region reported over 6300 new cases, a 26% decrease as compared to the previous 28-day period. Five (10%) of the 50 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Zambia (1966 vs 192 new cases; +924%), Kenya (392 vs 42 new cases; +833%) and Burundi (274 vs 36 new cases; +661%). The highest numbers of new cases were reported from Mauritius (2355 new cases; 185.2 new cases per 100 000; -59%), Zambia (1966 new cases; 10.7 new cases per 100 000; +924%), and the Democratic Republic of the Congo (519 new cases; <1 new case per 100 000; -37%).

The number of new 28-day deaths in the Region increased by 5% as compared to the previous 28-day period, with 22 new deaths reported. The highest numbers of new deaths were reported from Zimbabwe (11 new deaths; <1 new death per 100 000; +83%), Cameroon (two new deaths; <1 new death per 100 000; +100%), and Mauritius (two new deaths; <1 new death per 100 000; -67%).

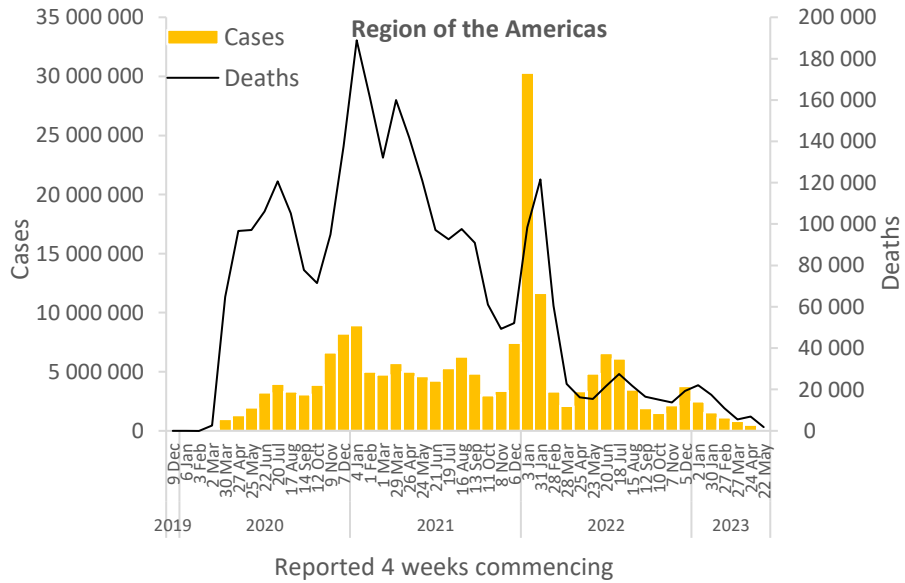


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 150 000 new cases, a 70% decrease as compared to the previous 28-day period. Ten (18%) of the 56 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Haiti (64 vs 11 new cases; +482%), Saint Kitts and Nevis (six vs two new cases; +200%), and Suriname (50 vs 18 new cases; +178%). The highest numbers of new cases were reported from Brazil (85 987 new cases; 40.5 new cases per 100 000; -41%), Mexico (15 301 new cases; 11.9 new cases per 100 000; -52%), and Canada (12 193 new cases; 32.3 new cases per 100 000; -38%).

The number of new 28-day deaths in the Region decreased by 73% as compared to the previous 28-day period, with 1875 new deaths reported. The highest numbers of new deaths were reported from Brazil (978 new deaths; <1 new death per 100 000; -19%), Canada (283 new deaths; <1 new death per 100 000; -46%), and Peru (232 new deaths; <1 new death per 100 000; -52%).

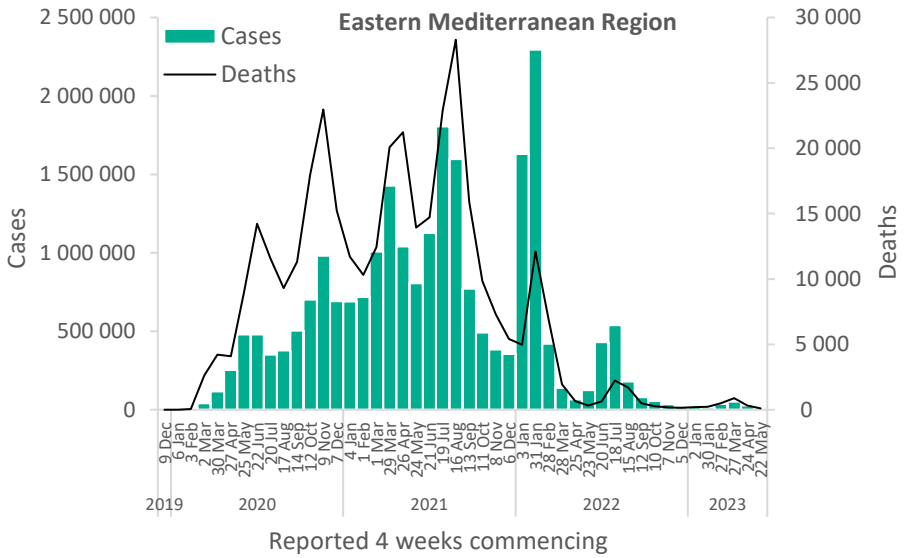


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 7800 new cases, a 71% decrease as compared to the previous 28-day period. One (5%) of the 22 countries for which data are available reported increases in new cases of 20% or greater: Libya (nine vs five new cases; +80%). The highest numbers of new cases were reported from Afghanistan (2764 new cases; 7.1 new cases per 100 000; -55%), Qatar (2404 new cases; 83.4 new cases per 100 000; -57%), and the Islamic Republic of Iran (1142 new cases; 1.4 new cases per 100 000; -77%).

The number of new 28-day deaths in the Region decreased by 70% as compared to the previous 28-day period, with 98 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (60 new deaths; <1 new death per 100 000; -75%), Lebanon (18 new deaths; <1 new death per 100 000; -5%), and Tunisia (11 new deaths; <1 new death per 100 000; -68%).

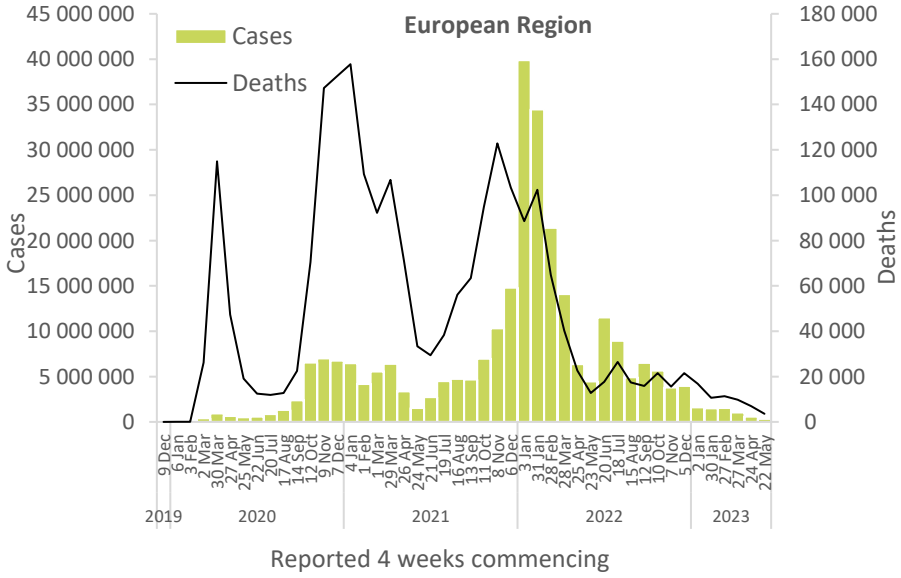


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 315 000 new cases, a 46% decrease as compared to the previous 28-day period. No country has reported increases in new cases of 20% or greater compared to the previous 28-day period. The highest numbers of new cases were reported from France (71 197 new cases; 109.5 new cases per 100 000; -42%), the Russian Federation (46 109 new cases; 31.6 new cases per 100 000; -49%), and Greece (41 730 new cases; 389.3 new cases per 100 000; -25%).

The number of new 28-day deaths in the Region decreased by 49% as compared to the previous 28-day period, with 3523 new deaths reported. The highest numbers of new deaths were reported from Spain (729 new deaths; 1.5 new deaths per 100 000; +70%), the Russian Federation (577 new deaths; <1 new death per 100 000; -13%), and Italy (420 new deaths; <1 new death per 100 000; -36%).

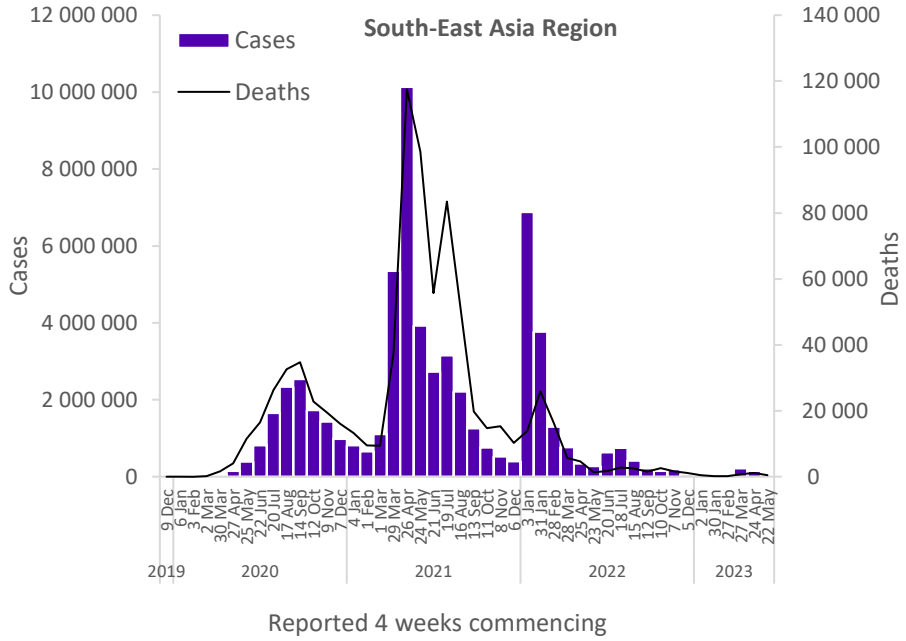


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 32 000 new cases, a 78% decrease as compared to the previous 28-day period. Two (20%) of the 10 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Bangladesh (2 844 vs 472 new cases; +503%) and Thailand (10 922 vs 8 498 new cases; +29%). The highest numbers of new cases were reported from Thailand (10 922 new cases; 15.6 new cases per 100 000; +29%), Indonesia (9038 new cases; 3.3 new cases per 100 000; -76%), and India (7019 new cases; <1 new case per 100 000; -93%).

The number of new 28-day deaths in the Region decreased by 57% as compared to the previous 28-day period, with 496 new deaths reported. The highest numbers of new deaths were reported from Thailand (239 new deaths; <1 new death per 100 000; +125%), Indonesia (170 new deaths; <1 new death per 100 000; -66%), and India (63 new deaths; <1 new death per 100 000; -87%).

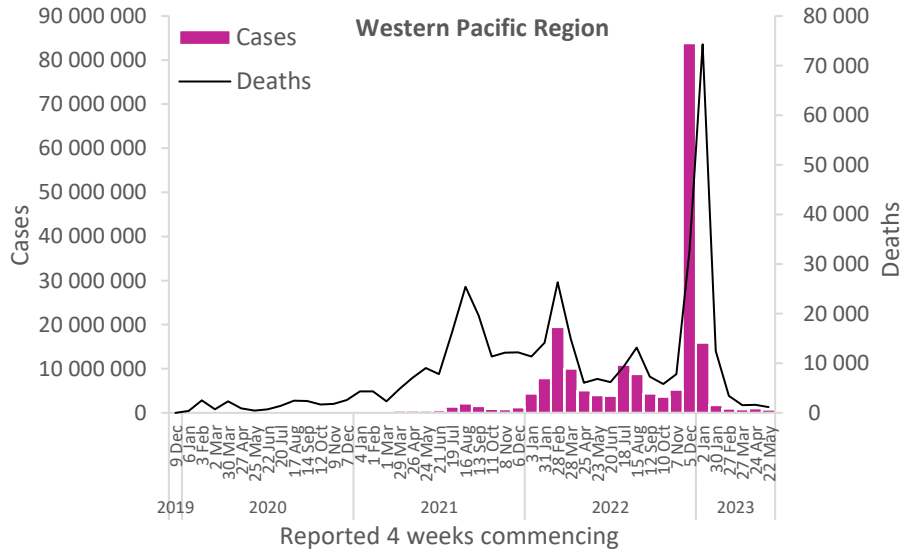


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported over 698 000 new cases, a 33% decrease as compared to the previous 28-day period. Seven (20%) of the 35 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Fiji (151 vs three new cases; +4933%), Cambodia (143 vs eight new cases; +1688%), and New Caledonia (six vs one new cases; +500%). The highest numbers of new cases were reported from the Republic of Korea (363 382 new cases; 708.8 new cases per 100 000; -21%), Australia (135 144 new cases; 530.0 new cases per 100 000; +4%), and Singapore (54 581 new cases; 933.0 new cases per 100 000; -44%).

The number of new 28-day deaths in the Region decreased by 28% as compared to the previous 28-day period, with 1154 new deaths reported. The highest numbers of new deaths were reported from Australia (496 new deaths; 1.9 new deaths per 100 000; -6%), China (246 new deaths; <1 new death per 100 000; +11%), and the Republic of Korea (206 new deaths; <1 new death per 100 000; -21%).



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 excepted, the names of proprietary products are distinguished by initial capital letters.

Updates on the COVID-19 outbreak in the Democratic People's Republic of Korea are 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.

WHO continues to monitor all SARS-CoV-2 variants and to track changes in prevalence and viral characteristics. The current trends describing the circulation of variants 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, and delays in uploading sequence data to GISAID.[1]

References

1. Chen Z, Azman AS, Chen X, et al. Global landscape of SARS-CoV-2 genomic surveillance and data sharing. *Nature genetics*. 2022;54(4). doi:10.1038/s41588-022-01033-y

COVID-19 Weekly Epidemiological Update

Edition 149 published 29 June 2023

In this edition:

Global overview

Data as of 25 June 2023

Globally, over one million new cases and over 5700 deaths were reported in the last 28 days (29 May to 25 June 2023) (Figure 1, Table 1). While five WHO regions have reported decreases in both cases and deaths, the African Region has reported a decrease in cases but an increase in deaths. As of 25 June 2023, over 767 million[i] confirmed cases and over 6.9 million deaths have been reported globally.

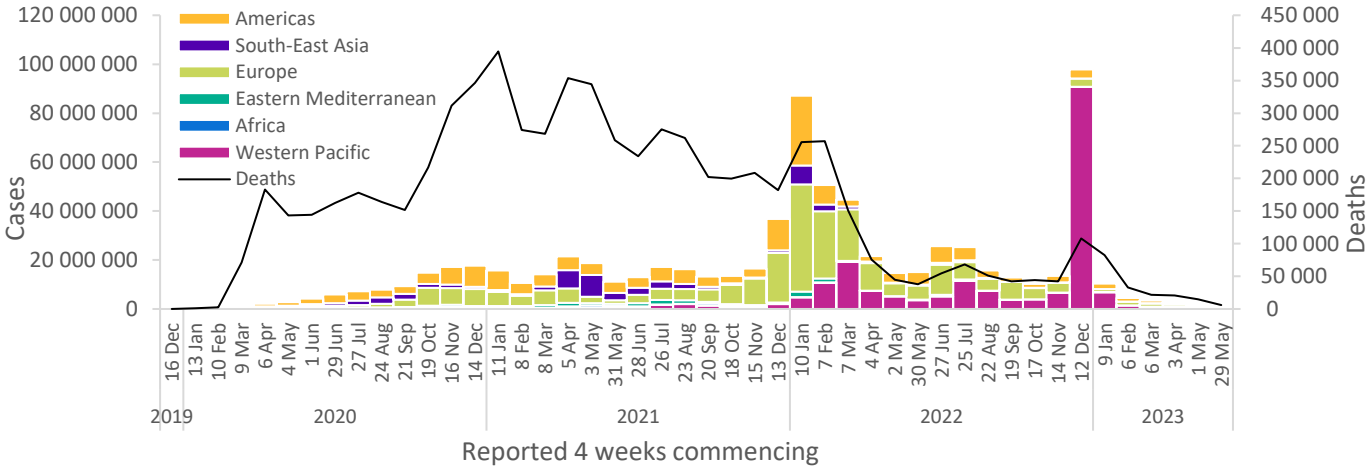
Reported cases are not an accurate representation of infection rates due to the reductions in testing and reporting globally. During this 28-day period, only 62% (146 of 234) of countries and territories reported at least one case – a proportion that has been declining since mid-2022. Additionally, data from previous weeks are continuously being updated to incorporate retrospective changes in reported COVID-19 cases and deaths made by countries. Data presented in this report are therefore incomplete and should be interpreted in light of these limitations.

Some countries continue to report high burdens of COVID-19, including increases in newly reported cases and, more importantly, increases in hospitalizations and deaths – the latter of which are considered more reliable indicators given the reductions in testing.

We present changes in epidemiological trends using a 28-day interval. Disaggregated data are still accessible on the WHO COVID-19 dashboard, where the full dataset is available for download. Global and national data on SARS-CoV-2 PCR percent positivity are available on WHO's integrated dashboard provided by the Global Influenza Programme

[i] Several countries are now being updated using data from the European Surveillance System (TESSy). As a result, for some of these countries, the numbers have been revised retrospectively, leading to reduced figures in certain instances. Consequently, the cumulative totals are now lower compared to the figures reported in the COVID-19 Weekly Epidemiological Update published on 22 June 2023.

Figure 1. COVID-19 cases reported by WHO Region, and global deaths by 28-day intervals, as of 25 June 2023**



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

At the regional level, the number of newly reported 28-day cases decreased across all six WHO regions: the Eastern Mediterranean Region (-75%), the South-East Asia Region (-73%), the Region of the Americas (-66%), the European Region (-57%), the Western Pacific Region (-35%), and the African Region (-12%). The number of newly reported 28-day deaths decreased across five regions: the Region of the Americas (-68%), the Eastern Mediterranean Region (-63%), the European Region (-62%), the South-East Asia Region (-56%), and the Western Pacific Region (-43%); while newly reported deaths increased in the African Region (+20%).

At the country level, the highest numbers of new 28-day cases were reported from the Republic of Korea (371 513 new cases; -22%), Australia (111 543 new cases; -21%), Brazil (77 022 new cases; -41%), France (45 306 new cases; -55%), and Singapore (40 531 new cases; -56%). The highest numbers of new 28-day deaths were reported from Brazil (1055 new deaths; -10%), the Russian Federation (517 new deaths; -16%), Australia (343 new deaths; -53%), Italy (342 new deaths; -48%), and France (285 new deaths; -58%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 25 June 2023**

WHO Region	New cases in last 28 days (%)	Change in new cases in last 28 days *	Cumulative cases (%)	New deaths in last 28 days (%)	Change in new deaths in last 28 days *	Cumulative deaths (%)
Western Pacific	650 024 (63%)	-35%	**204 508 315 (27%)**	1 018 (18%)	-43%	**413 895 (6%)**
Europe	199 624 (19%)	-57%	**275 679 854 (36%)**	2 310 (40%)	-62%	**2 242 952 (32%)**
Americas	137 590 (13%)	-66%	**193 094 953 (25%)**	1 896 (33%)	-68%	**2 956 943 (43%)**
South-East Asia	24 400 (2%)	-73%	**61 188 565 (8%)**	421 (7%)	-56%	**806 434 (12%)**
Africa	6 773 (1%)	-12%	**9 540 096 (1%)**	24 (<1%)	20%	**175 396 (3%)**
Eastern Mediterranean	5 725 (1%)	-75%	**23 383 754 (3%)**	82 (1%)	-63%	**351 341 (5%)**
Global	**1 024 136 (100%)**	**-49%**	**767 396 301 (100%)**	**5 751 (100%)**	**-61%**	**6 946 974 (100%)**

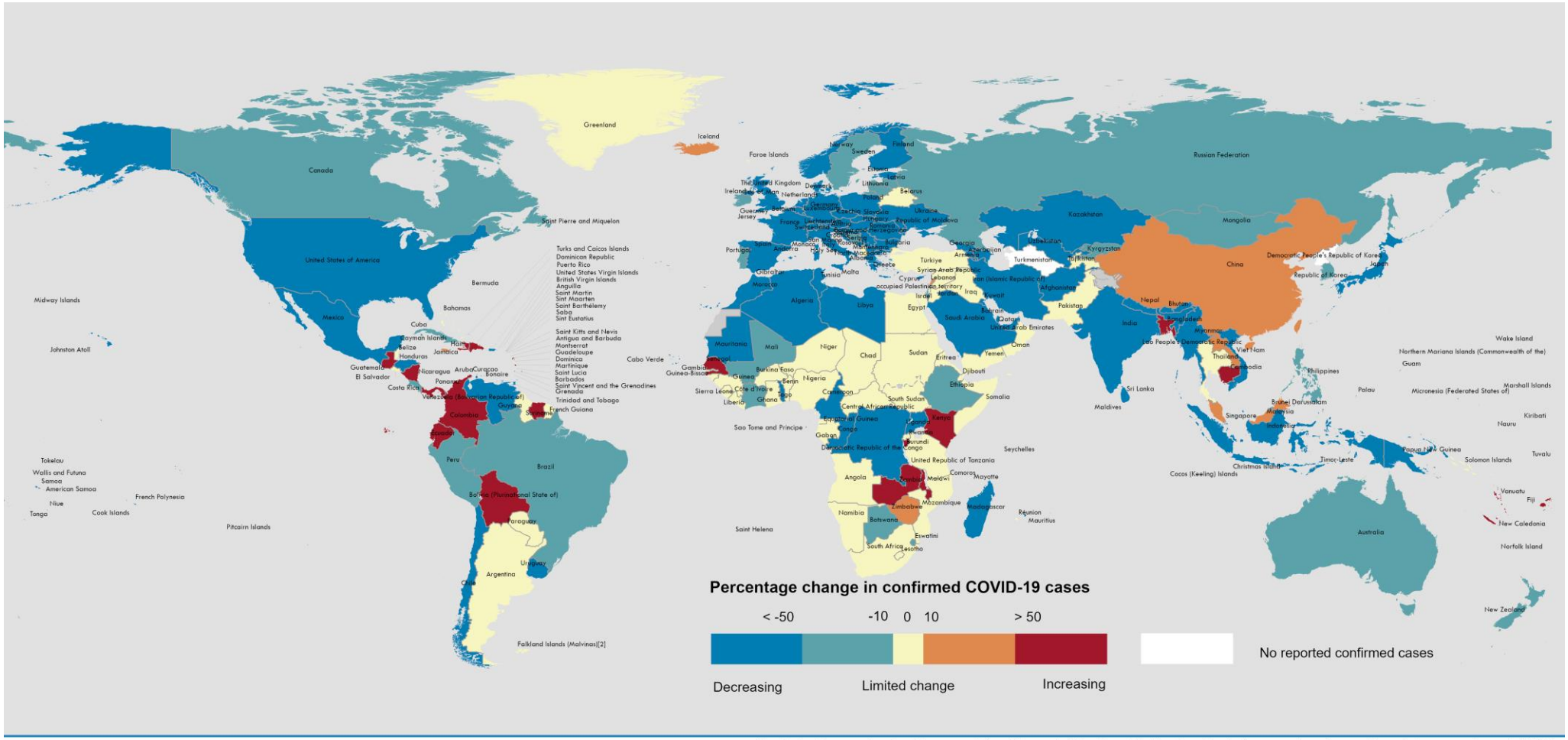
**Percent change in the number of newly confirmed cases/deaths in the past 28 days, compared to 28 days prior. Data from previous weeks are updated continuously with adjustments received from countries.*

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

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

- WHO COVID-19 Dashboard
- WHO Monthly Operational Update and past editions of the Weekly Epidemiological Update on COVID-19
- WHO COVID-19 detailed surveillance data dashboard
- WHO COVID-19 policy briefs

Figure 2. Percentage change in confirmed COVID-19 cases over the last 28 days relative to the previous 28 days, as of 25 June 2023**

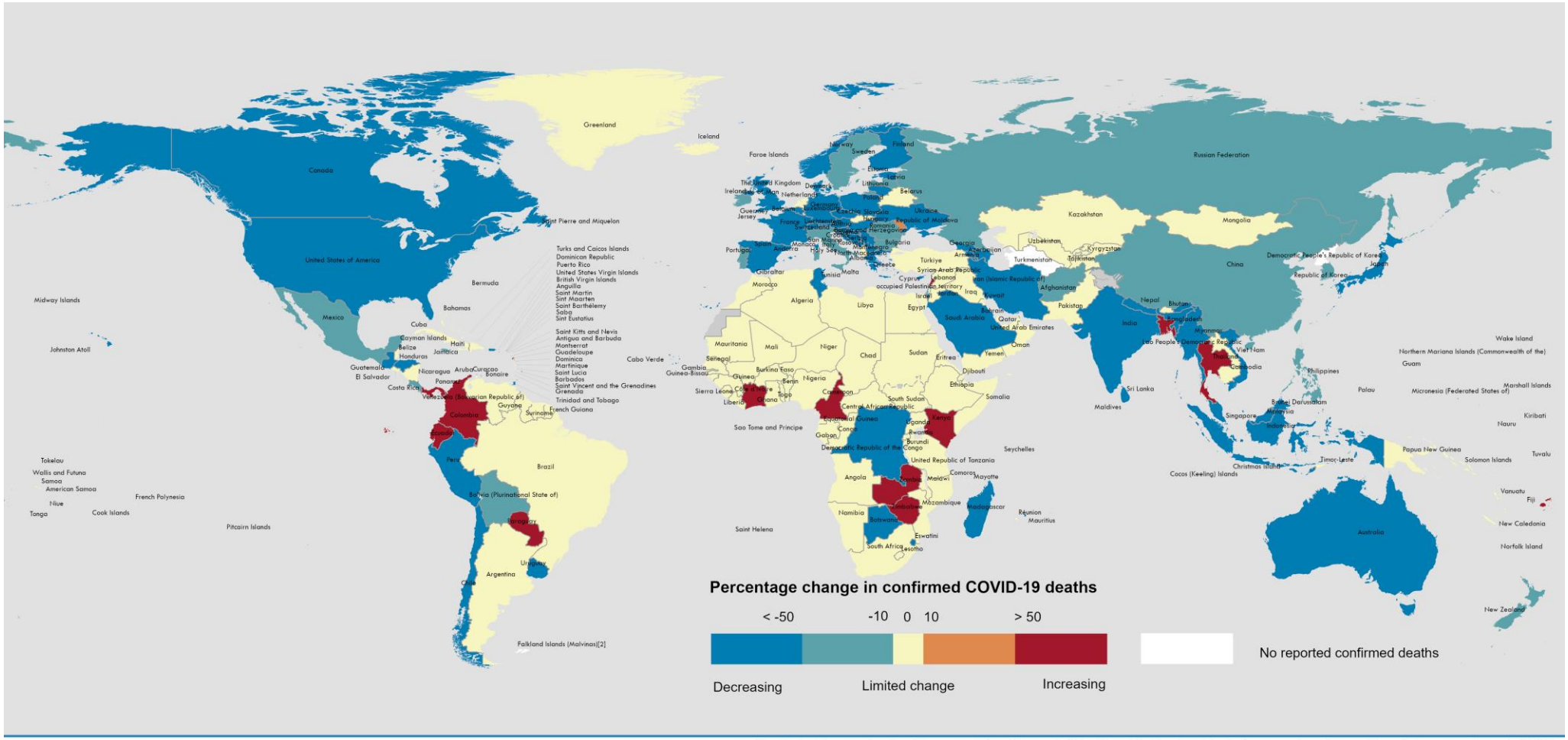


***Data Source**: World Health Organization*
***Map Production**: WHO Health Emergencies Programme*

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. Percentage change in confirmed COVID-19 deaths over the last 28 days relative to the previous 28 days, as of 25 June 2023**



***Data Source**: World Health Organization*
***Map Production**: WHO Health Emergencies Programme*

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*

Hospitalizations and ICU admissions

At the global level, during the past 28 days (22 May 2023 to 18 June 2023), a total of 62 128 new hospitalizations and 2080 new intensive care unit (ICU) admissions were reported (Figure 4). This represents a 40% and 48% decrease in both hospitalizations and ICU admissions, respectively, compared to the previous 28 days (24 April 2023 to 21 May 2023). The presented hospitalization data are preliminary and might change as new data become available. Furthermore, hospitalization data are subject to reporting delays. These data also likely include both hospitalizations with incidental cases of SARS-CoV-2 infection and those due to COVID-19 disease.

Globally, during the past 28 days, 40 (17%) countries reported data to WHO on new hospitalizations at least once (Figure 5). The European Region had the highest proportion of countries reporting data on new hospitalizations (20 countries; 33%), followed by the Region of the Americas (eight countries; 14%), the African Region (four countries; 8%), the Eastern Mediterranean Region (three countries; 14%), the Western Pacific Region (three countries; 9%), and the South-East Asia Region (two countries; 20%). The proportion of countries that consistently[ii] reported new hospitalizations for the period was 10% (24 countries) (Table 2).

Among the 24 countries consistently reporting new hospitalizations, three (13%) countries registered an increase of 20% or greater in hospitalizations during the past 28 days compared to the previous 28-day period: Afghanistan (178 vs 33; +439%), Bangladesh (269 vs 104; +159%), and Malta (86 vs 35; +146%). The highest number of new hospitalizations was reported from the United States of America (27 065 vs 37 232; -27%), Ukraine (5744 vs 8853; -35%), and France (3634 vs 7642; -52%).

Across all six WHO regions, in the past 28 days, a total of 30 (13%) countries reported data to WHO on new ICU admissions at least once (Figure 5). The European Region had the highest proportion of countries reporting data on new ICU admissions (17 countries; 28%), followed by the Western Pacific Region (five countries; 14%), the Region of the Americas (four countries; 7%), the Eastern Mediterranean Region (two countries; 9%), the African Region (one country; 2%), and the South-East Asia Region (one country; 10%) The proportion of countries that consistently reported new ICU admissions for the period was 8% (18 countries) (Table 2).

Among the 18 countries consistently reporting new ICU admissions, two (11%) countries showed an increase of 20% or greater in new ICU admissions during the past 28 days compared to the previous 28-day period: Lithuania (19 vs 11; 73%) and Mexico (19 vs 14; +36%). The highest numbers of new ICU admissions were reported from France (438 vs 866; -49%), Australia (304 vs 325; -6%), and Ukraine (164 vs 280; -41%).

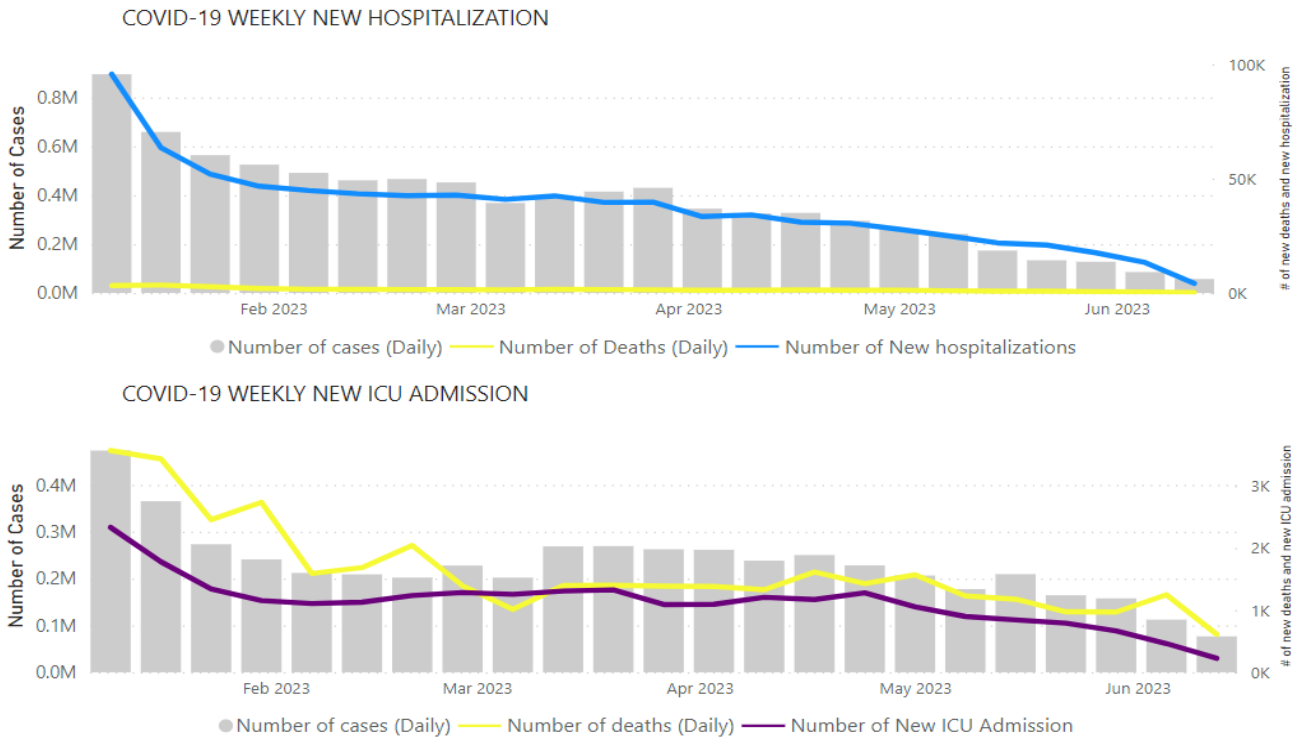
[ii] "Consistently" as used here refers to countries that submitted data for new hospitalizations and intensive care unit admissions for the four consecutive weeks that make up the 28-day period.

Table 2. New Hospitalization and ICU Admissions by WHO Region with 28-day change: 22 May to 18 June 2023 compared to 24 April to 21 May 2023

Region	New hospitalizations from countries that reported consistently in the last and previous 28 days			New ICU admissions from countries that reported consistently in the last and previous 28 days		
	Number of countries* (percentage)	Number of new hospitalizations	Percent change	Number of countries* (percentage)	Number of new ICU admissions	Percent change
Africa	1/50 (2%)	33	**-18%**	0/50 (0%)	N/A	**N/A****
Americas	4/56 (7%)	28 213	**-28%**	1/56 (2%)	19	**+36%**
Eastern Mediterranean	2/22 (9%)	214	**+189%**	1/22 (5%)	3	**N/D****
European	13/61 (21%)	20 423	**-46%**	11/61 (18%)	996	**-49%**
South-East Asia	2/10 (20%)	2 579	**-73%**	1/10 (10%)	145	**-64%**
Western Pacific	2/35 (6%)	2 499	**-27%**	4/35 (11%)	335	**-16%**
Global	**24/234 (10%)**	**53 911**	**-40%**	**18/234 (8%)**	**1 498**	**-46%**

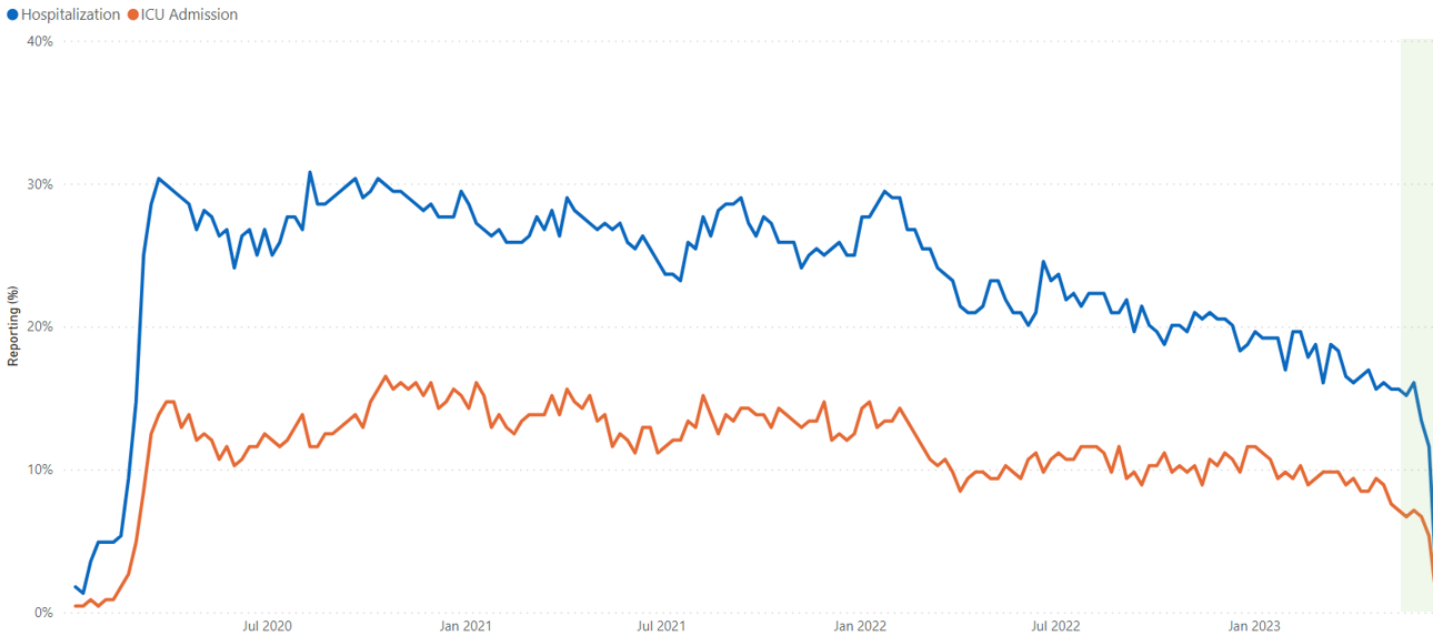
** To be able to compare two periods only the countries reported consistently in both (the last and previous 28 days) periods are included in the table*
*** N/A and N/D represents not available and not definable respectively*

Figure 4. COVID-19 cases, deaths, hospitalizations, and ICU admissions reported weekly to WHO, as of 18 June 2023



Note: Recent weeks are subject to reporting delays and data might not be complete, please interpret with caution. Cases included in grey bars in the graph are only from countries reporting hospitalizations or ICU admissions, respectively.
Source: WHO Detailed Surveillance Dashboard

Figure 5. Weekly proportion of countries reporting new hospitalizations and ICU admissions: epidemiological week 1, 2020 to week 24, 2023



Note: Recent weeks are subject to reporting delays and should not be interpreted as a declining trend.

SARS-CoV-2 variants of interest and variants under monitoring

Geographic spread and prevalence

Globally, from 29 May to 25 June 2023 (28 days), 13 152 SARS-CoV-2 sequences were shared through GISAID. WHO is currently tracking two variants of interest (VOIs), XBB.1.5 and XBB.1.16, along with six variants under monitoring (VUMs) and their descendent lineages. The VUMs are BA.2.75, CH.1.1, XBB, XBB.1.9.1, XBB.1.9.2, and XBB.2.3.

Globally, 114 countries have reported the detection of XBB.1.5 since its emergence. Its prevalence has been declining steadily. In epidemiological week 23 (5 to 11 June 2023), XBB.1.5 accounted for 19.8% of sequences, as compared to 32.1% in week 19 (8 to 14 May 2023). The updated risk assessment for XBB.1.5 presents supplementary laboratory and epidemiological evidence, which suggests that XBB.1.5 does not pose additional public health risks compared to other circulating variants.

XBB.1.16 has been reported from 89 countries. In week 23, XBB.1.16 accounted for 20.5% of sequences, an increase from 15.7% in week 19. Its prevalence has surpassed that of XBB.1.5 in week 23. An analysis of available data indicates that countries with a low prior prevalence of XBB.1.5 have experienced a significant increase in the prevalence of XBB.1.16, while countries that had a high prevalence of XBB.1.5 have reported low circulation of XBB.1.16.

Table 3 shows the number of countries reporting the VOIs and VUMs and their prevalence from week 19 to week 23. The VOI and the VUMs that have shown increasing trends during the last five weeks period are highlighted in orange, those that have remained stable are highlighted in blue, while those with decreasing trends are highlighted in green. Among the VUMs, XBB, XBB.1.9.2, and XBB.2.3 have shown increasing trends in recent weeks. Overall, other VUMs show declining or stable trends during the same reporting period.

Table 3. Weekly prevalence of SARS-CoV-2 VOIs and VUMs, week 19 to week 23 of 2023

Lineage	Countries[§]	Sequences[§]	2023-19	2023-20	2023-21	2023-22	2023-23
XBB.1.5* (VOI)	114	242 397	32.16	29.66	24.81	22.26	19.79
XBB.1.16* (VOI)	89	27 413	15.66	18.06	18.67	21.31	20.53
BA.2.75*	124	119 879	3.45	2.91	2.66	2.46	1.64
CH.1.1*	95	41 989	1.36	1.23	0.95	0.92	1.11
XBB*	130	62 221	4.75	5.01	5.61	5.82	6.37
XBB.1.9.1*	98	40 414	18.29	18.56	19.02	18.82	19.52
XBB.1.9.2*	79	20 604	10.32	10.52	12.03	12.15	12.18
XBB.2.3*	60	5 769	2.79	3.38	4.23	4.31	4.06
Unassigned	91	146 918	0.99	1.09	1.46	2.52	4.70
Other[+]	209	6 746 112	8.89	8.72	9.43	8.40	9.09

* Includes descendant lineages, except those individually specified elsewhere in the table. For example, XBB* does not include XBB.1.5, XBB.1.9.1, XBB.1.9.2, XBB.1.16, and XBB.2.3.

[+] Others are other circulating lineages excluding the VOI, VUMs, BA.1*, BA.2*, BA.3*, BA.4*, BA.5*.

[§] Number of countries and sequences are since the emergence of the variants

Additional resources

- Tracking SARS-CoV-2 Variants
- WHO statement on updated tracking system on SARS-CoV-2 variants of concern and variants of interest
- WHO XBB.1.5 Updated Risk Assessment, 20 June 2023
- WHO XBB.1.16 Updated Risk Assessment, 5 June 2023

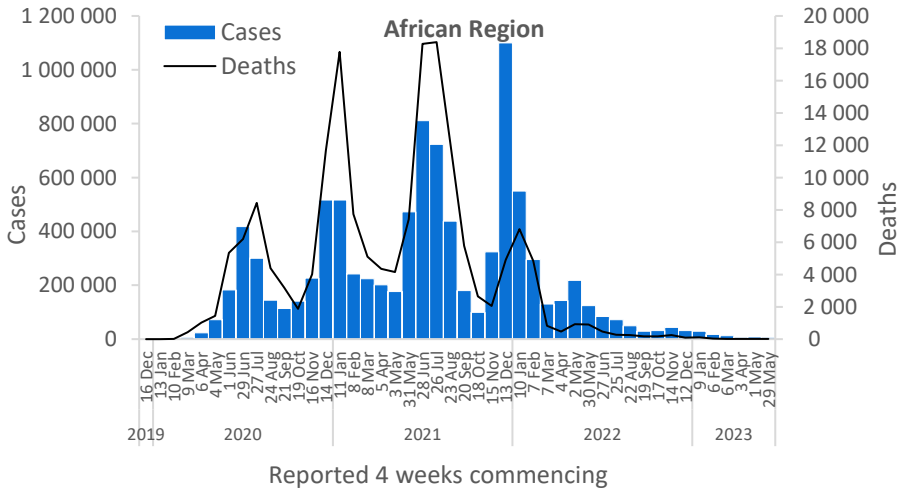
WHO regional overviews

Data for 29 May to 25 June 2023

African Region

The African Region reported over 6700 new cases, a 12% decrease as compared to the previous 28-day period. Five (10%) of the 50 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Zambia (3027 vs 85 new cases; +3461%), Kenya (463 vs 14 new cases; +3207%), and Burundi (380 vs 31 new cases; +1126%). The highest numbers of new cases were reported from Zambia (3027 new cases; 16.5 new cases per 100 000; +3461%), Mauritius (1721 new cases; 135.3 new cases per 100 000; -67%), and Kenya (463 new cases; <1 new case per 100 000; +3207%).

The number of new 28-day deaths in the Region increased by 20% as compared to the previous 28-day period, with 24 new deaths reported. The highest numbers of new deaths were reported from Zimbabwe (14 new deaths; <1 new death per 100 000; +100%), Zambia (four new deaths; <1 new death per 100 000; no deaths reported the previous 28-day period), and Cameroon (two new deaths; <1 new death per 100 000; no deaths reported the previous 28-day period).

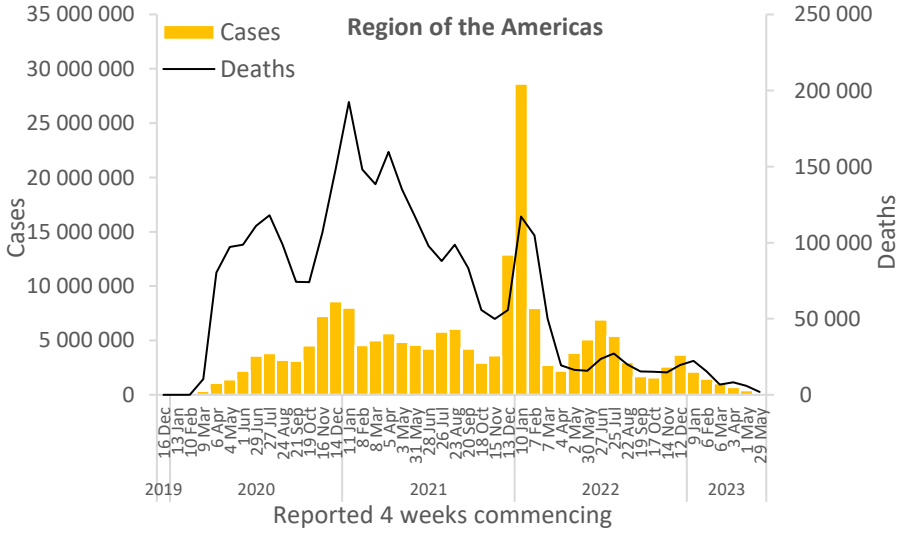


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 137 000 new cases, a 66% decrease as compared to the previous 28-day period. Thirteen (23%) of the 56 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in the Dominican Republic (1242 vs 131 new cases; +848%), Saint Martin (21 vs three new cases; +600%), and Martinique (379 vs 75 new cases; +405%). The highest numbers of new cases were reported from Brazil (77 022 new cases; 36.2 new cases per 100 000; -41%), Mexico (11 923 new cases; 9.2 new cases per 100 000; -58%), and Canada (10 480 new cases; 27.8 new cases per 100 000; -41%).

The number of new 28-day deaths in the Region decreased by 68% as compared to the previous 28-day period, with 1896 new deaths reported. The highest numbers of new deaths were reported from Brazil (1055 new deaths; <1 new death per 100 000; -10%), Peru (250 new deaths; <1 new death per 100 000; -63%), and Canada (212 new deaths; <1 new death per 100 000; -57%).

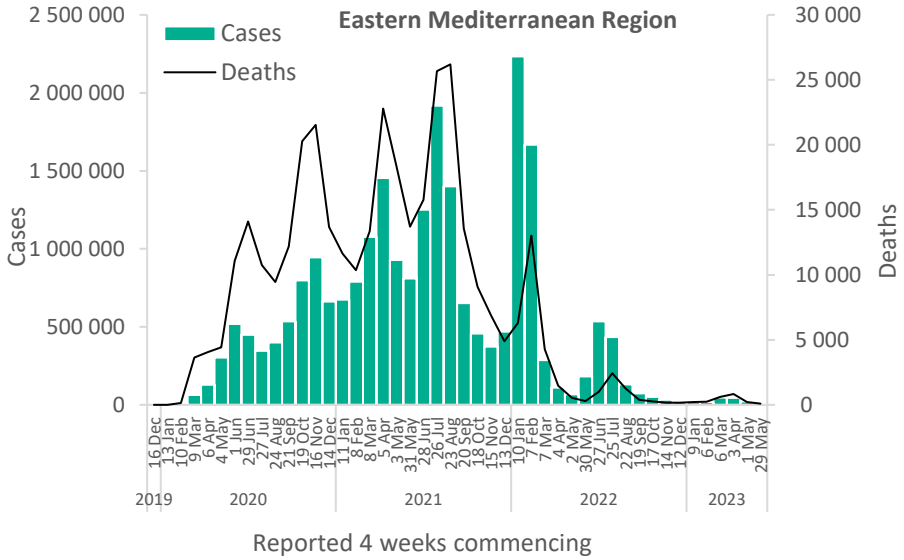


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 5700 new cases, a 75% decrease as compared to the previous 28-day period. One (5%) of the 22 countries for which data are available reported increases in new cases of 20% or greater: Lebanon (996 vs 800 new cases; +25%). The highest numbers of new cases were reported from Afghanistan (1939 new cases; 5.0 new cases per 100 000; -69%), Qatar (1409 new cases; 48.9 new cases per 100 000; -72%), and Lebanon (996 new cases; 14.6 new cases per 100 000; +25%).

The number of new 28-day deaths in the Region decreased by 63% as compared to the previous 28-day period, with 82 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (39 new deaths; <1 new death per 100 000; -75%), Lebanon (22 new deaths; <1 new death per 100 000; +69%), and Afghanistan (13 new deaths; <1 new death per 100 000; -43%).

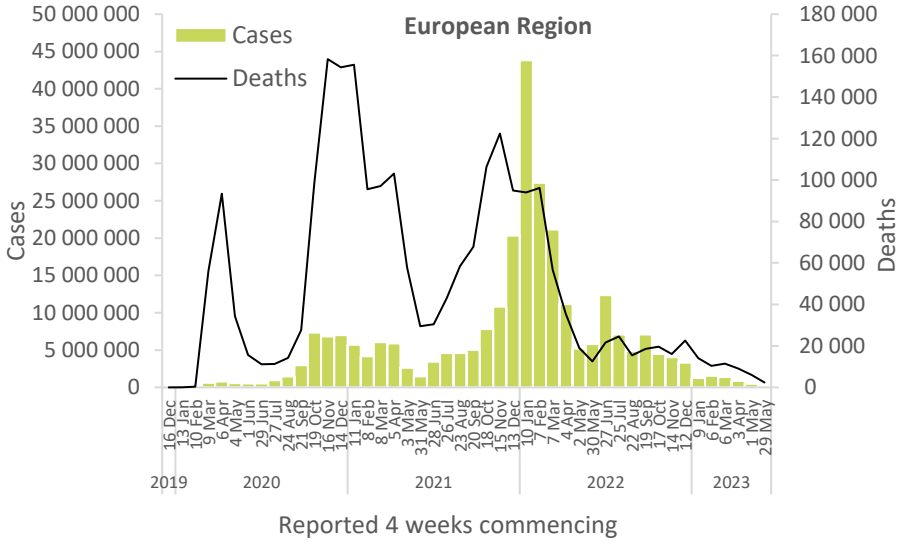


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 199 000 new cases, a 57% decrease as compared to the previous 28-day period. No country has reported increases in new cases of 20% or greater compared to the previous 28-day period. The highest numbers of new cases were reported from France (45 306 new cases; 69.7 new cases per 100 000; -55%), the Russian Federation (35 536 new cases; 24.4 new cases per 100 000; -47%), and Italy (31 289 new cases; 52.5 new cases per 100 000; -53%).

The number of new 28-day deaths in the Region decreased by 62% as compared to the previous 28-day period, with 2310 new deaths reported. The highest numbers of new deaths were reported from the Russian Federation (517 new deaths; <1 new death per 100 000; -16%), Italy (342 new deaths; <1 new death per 100 000; -48%), and France (285 new deaths; <1 new death per 100 000; -58%).

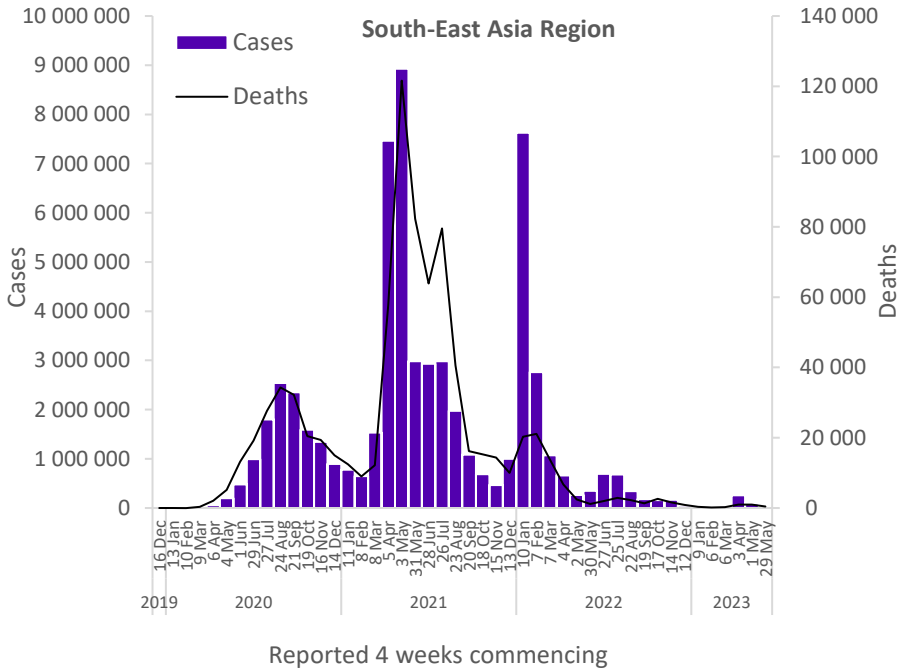


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 24 000 new cases, a 73% decrease as compared to the previous 28-day period. One (10%) of the 10 countries for which data are available reported increases in new cases of 20% or greater: Bangladesh (3281 vs 739 new cases; +344%). The highest numbers of new cases were reported from Thailand (9605 new cases; 13.8 new cases per 100 000; -1%), Indonesia (5492 new cases; 2.0 new cases per 100 000; -83%), and India (4208 new cases; <1 new case per 100 000; -91%).

The number of new 28-day deaths in the Region decreased by 56% as compared to the previous 28-day period, with 421 new deaths reported. The highest numbers of new deaths were reported from Thailand (233 new deaths; <1 new death per 100 000; +69%), Indonesia (126 new deaths; <1 new death per 100 000; -72%), and India (39 new deaths; <1 new death per 100 000; -88%).

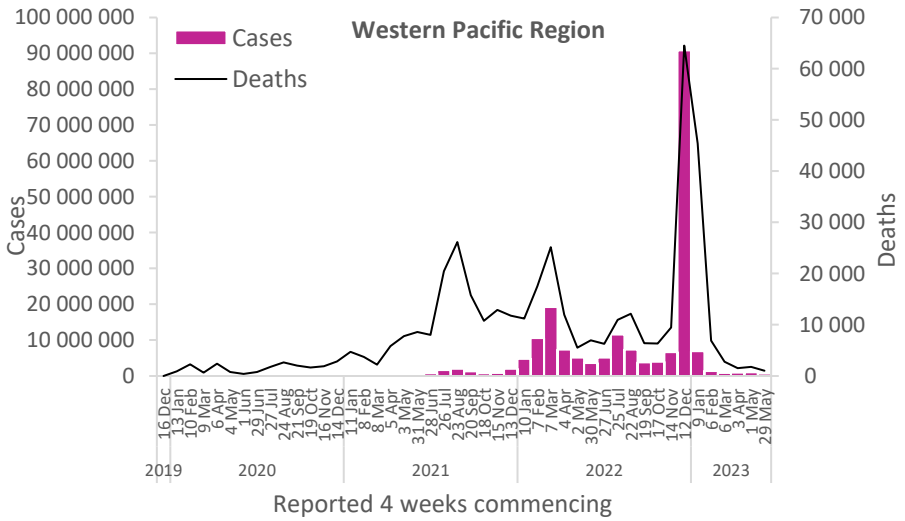


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported over 650 000 new cases, a 35% decrease as compared to the previous 28-day period. Four (11%) of the 35 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Cambodia (128 vs 34 new cases; +276%), Kiribati (eight vs four new cases; +100%), and the Lao People's Democratic Republic (194 vs 148 new cases; +31%). The highest numbers of new cases were reported from the Republic of Korea (371 513 new cases; 724.6 new cases per 100 000; -22%), Australia (111 543 new cases; 437.4 new cases per 100 000; -21%), and Singapore (40 531 new cases; 692.8 new cases per 100 000; -56%).

The number of new 28-day deaths in the Region decreased by 43% as compared to the previous 28-day period, with 1018 new deaths reported. The highest numbers of new deaths were reported from Australia (343 new deaths; 1.3 new deaths per 100 000; -53%), China (230 new deaths; <1 new death per 100 000; -16%), and the Republic of Korea (206 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.

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 excepted, the names of proprietary products are distinguished by initial capital letters.

Updates on the COVID-19 outbreak in the Democratic People's Republic of Korea are 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.

WHO continues to monitor all SARS-CoV-2 variants and to track changes in prevalence and viral characteristics. The current trends describing the circulation of variants 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, and delays in uploading sequence data to GISAID.[1]

References

1. Chen Z, Azman AS, Chen X, et al. Global landscape of SARS-CoV-2 genomic surveillance and data sharing. *Nature genetics*. 2022;54(4). doi:10.1038/s41588-022-01033-y