

## **COVID-19 Weekly Epidemiological Update**

#### Edition 42, published 1 June 2021

#### In this edition:

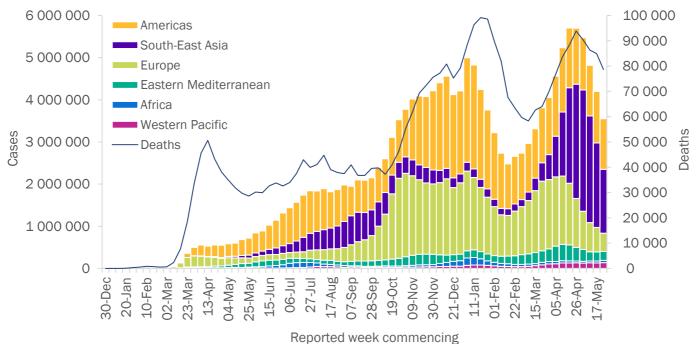
- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest (VOIs) and Variants of Concern (VOCs)
- Special focus: Early lessons from country implementation of COVID-19 vaccination
- WHO regional overviews
- Key weekly updates

## **Global overview**

## Data as of 30 May 2021

The number of new COVID-19 cases and deaths continues to decrease, with over 3.5 million new cases and 78 000 new deaths reported globally in the past week; a 15% and 7% decrease respectively, compared to the previous week (Figure 1). The European and South-East Asia Regions reported the largest decline in new cases and deaths in the past week, while case incidence increased in the African and Western Pacific regions (Table 1). The numbers of cases reported by the Americas and Eastern Mediterranean Regions were similar to those reported in the previous week. An increase in death incidence was reported in the African Region, whereas the Europe and the Eastern Mediterranean Regions reported decreases, and the reported death incidence in the Western Pacific and the Americas Regions was similar to the death incidence in the previous week. Although the number of global cases and deaths continued to decrease for a fifth and fourth consecutive week respectively, case and death incidences remain at high levels and significant increases have been reported in many countries in all regions.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 30 May 2021\*\*



\*\*See Annex 3: Data, table and figure notes

The highest numbers of new cases were reported from India (1 364 668 new cases; 26% decrease), Brazil (420 981 new cases; 7% decrease), Argentina (219 910 new cases; 3% increase), the United States of America (153 587 new cases; 18% decrease), and Colombia (150 517 new cases; 40% increase).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 30 May 2021\*\*

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 198 427 (34%)	-2%	67 178 933 (40%)	31 286 (40%)	-1%	1 646 407 (47%)
Europe	430 945 (12%)	-26%	54 244 552 (32%)	11 113 (14%)	-17%	1 148 766 (33%)
South-East Asia	1 516 572 (43%)	-24%	31 605 221 (19%)	29 477 (37%)	-8%	401 754 (11%)
Eastern Mediterranean	212 568 (6%)	-1%	10 076 696 (6%)	3 556 (5%)	-18%	201 642 (6%)
Africa	52 710 (1%)	22%	3 497 924 (2%)	1 143 (1%)	11%	87 107 (2%)
Western Pacific	139 234 (4%)	6%	3 000 768 (2%)	2 090 (3%)	-2%	45 148 (1%)
Global	3 550 456 (100%)	-15%	169 604 858 (100%)	78 665 (100%)	-7%	3 530 837 (100%)

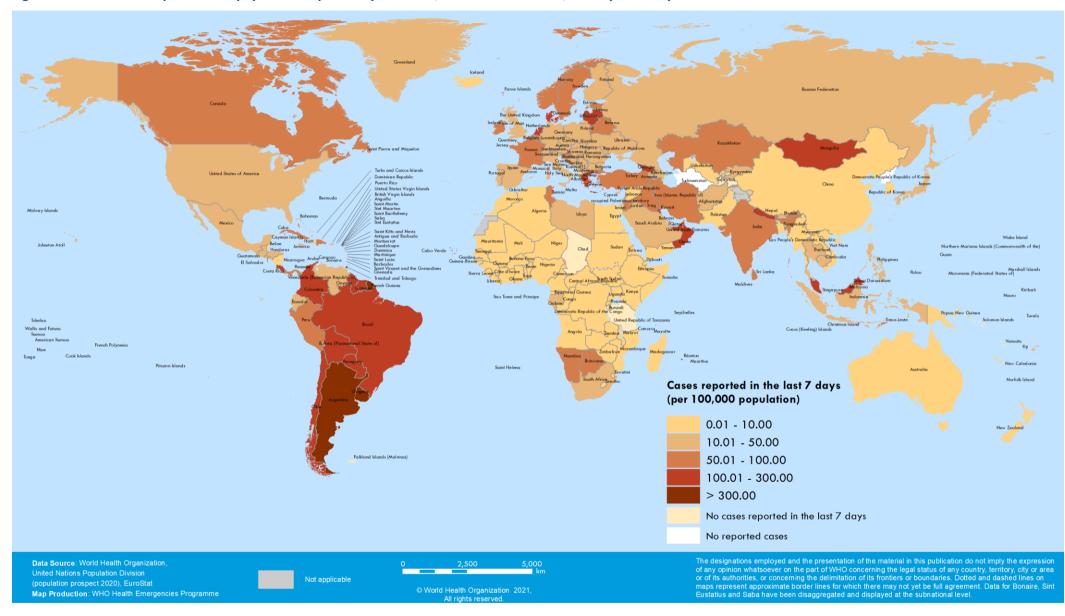
<sup>\*</sup>Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior

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

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

<sup>\*\*</sup>See Annex 3: Data, table and figure notes

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 24 May – 30 May 2021\*\*



<sup>\*\*</sup>See Annex 3: Data, table and figure notes

# Special Focus: Update on SARS-CoV-2 Variants of Interest (VOIs) and Variants of Concern (VOCs)

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter clinical presentation and severity, or if they show increases in transmissibility that require national health authorities to implement strengthened public health and social measures (PHSM) to control disease spread. Systems have been established in WHO to detect "signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) and assess these based on the risk posed to global public health. Here we provide updates on new WHO labels and classifications of VOCs and VOIs, as well as the updated geographical distribution of VOCs. National authorities may choose to designate other variants of local interest/concern.

#### New easy-to-say VOI and VOCs labels for public communication

On 31 May 2021, WHO announced new easy-to-say/easy-to-remember VOI and VOC labels to facilitate public communication about SARS-CoV-2 variants. The need for easy-to-say labels of SARS-CoV-2 VOI and VOC arose for several reasons, including:

- the existence of different genomic nomenclature systems, which serve important scientific purposes but complicate public communication around variants due to the complexities of the labels assigned (e.g., B.1.617.2, 21A/S:478K),
- the common but potentially stigmatizing use of the name of the country or area of first detection of a variant as an easily recognizable label.

WHO has now assigned labels based upon the Greek alphabet to globally classified VOCs and VOIs (Table 2), and will sequentially assign new labels for newly-designated global VOCs and VOIs in the future. If all 24 letters become assigned, other lists of labels will be announced by WHO. As VOIs and VOCs are reclassified based on the evolving situation, it is expected that these will retain their label, and labels of formed VOIs/VOCs will not be reused for labeling new emerging variants.

We recommend Member States, health authorities, media and others communicating on SARS-CoV-2 variants to adopt the WHO labels in public communication as soon as practical. Importantly, these labels do not replace the three current nomenclature systems for tracking and scientific reporting of SARS-CoV-2 genetic evolution: <u>GISAID</u>, <u>Nextstrain</u>, and <u>Pango</u> – these systems remain critical and will continue to be used in scientific communications.

#### Recent changes to the VOIs and VOCs classifications

As the global public health risks posed by specific SARS-CoV-2 variants becomes better understood and evolves, WHO will continue to update the list of global VOIs and VOCs. This is necessary to adjust to the emergence of new variants, their changing epidemiology (e.g., the incidence of some variants is rapidly declining), and our understanding of their phenotypic impacts as new evidence becomes available and is shared.

First, available information allows for the delineation of VOC B.1.617. B.1.617 viruses are divided in three lineages: B.1.617.1, B.1.617.2 and B.1.617.3. Available findings for lineages B.1.617.1 and B.1.617.2 were initially used to designate B.1.617 a global VOC on 11 May 2021. Since then, it has become evident that greater public health risks are currently associated with B.1.617.2, while lower rates of transmission of other lineages have been observed. To reflect this updated information, B.1.617 has been delineated as follows:

- B.1.617.2 remains a VOC and labelled variant Delta we continue to observe significantly increased transmissibility and a growing number of countries reporting outbreaks associated with this variant.
   Further studies into the impact of this variant remain a high priority for WHO.
- B.1.617.1 has been reclassified to a VOI and labelled variant Kappa while also demonstrating increased transmissibility (in specified locations), global prevalence appears to be declining. This variant will continue to be monitored and reassessed regularly.
- B.1.617.3 is no longer classified as either a VOI or VOC relatively few reports of this variant have been submitted to date.

Second, variant B.1.616, which was first detected in France following investigations into an unusual cluster of cases in a hospital, is no longer classified as a VOI. Local authorities have reported that the outbreak has been controlled, and no further detections within or outside of France have been reported since late-April 2021. Further local and regional monitoring remains prudent, given B.1.616 was associated with potential increased disease severity and reduced detections via nasopharyngeal samples. <sup>2</sup>

Variants no longer classified as VOCs or VOIs will continue to be monitored as part of the overall evolution of SARS-CoV-2, and may be reassessed pending new evidence indicating an increased public health risk.

Table 2: SARS-CoV-2 Variants of Concern (VOCs) and Variants of Interest (VOIs), as of 31 May 2021

WHO label	Pango lineage	GISAID clade	Nextstrain clade	Earliest documented samples	Date of designation
Variants of	Concern (VO	Cs)			
Alpha	B.1.1.7	GRY (formerly GR/501Y.V1)	20I/501Y.V1	United Kingdom, Sep-2020	18-Dec-2020
Beta	B.1.351	GH/501Y.V2	20H/501Y.V2	South Africa, May-2020	18-Dec-2020
Gamma	P.1	GR/501Y.V3	20J/501Y.V3	Brazil, Nov-2020	11-Jan-2021
Delta	B.1.617.2	G/452R.V3	21A/S:478K	India, Oct-2020	VOI: 4-Apr-2021 VOC: 11-May-2021
Variants of	Interest (VO	ls)			
Epsilon	B.1.427/ B.1.429	GH/452R.V1	20C/S.452R	United States of America, Mar-2020	5-Mar-2021
Zeta	P.2	GR	20B/S.484K	Brazil, Apr-2020	17-Mar-2021
Eta	B.1.525	G/484K.V3	20A/S484K	Multiple countries, Dec-2020	17-Mar-2021
Theta	P.3	GR	20B/S:265C	Philippines, Jan-2021	24-Mar-2021
lota	B.1.526	GH	20C/S:484K	United States of America, Nov-2020	24-Mar-2021
Карра	B.1.617.1	G/452R.V3	21A/S:154K	India, Oct-2020	4-Apr-2021

<sup>&</sup>lt;sup>1</sup> Santé publique France, COVID-19 : point épidémiologique du 27 mai 2021. https://www.santepubliquefrance.fr/maladies-et-traumatismes/maladies-et-infections-respiratoires/infection-a-coronavirus/documents/bulletin-national/covid-19-point-epidemiologique-du-27-mai-2021

<sup>&</sup>lt;sup>2</sup> Fillatre et al. A new SARS-CoV-2 variant poorly detected by RT-PCR on nasopharyngeal samples, with high lethality (preprint). https://www.medrxiv.org/content/10.1101/2021.05.05.21256690v1

## **Geographic distribution**

As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing, the number of countries/areas/territories (hereafter countries) reporting VOCs has continued to increase (Figures 3, Annex 2). This distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

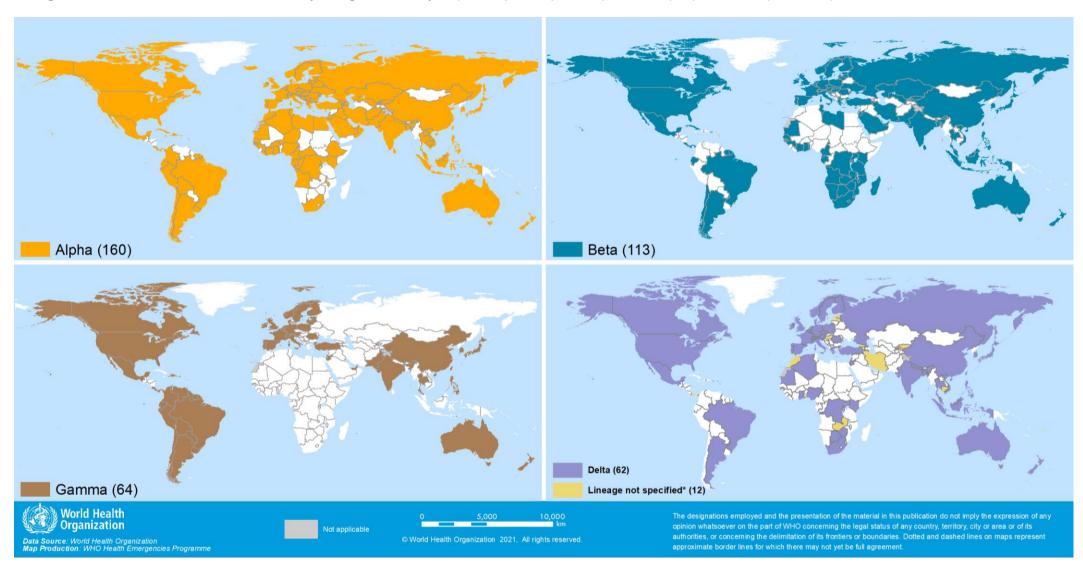
#### WHO recommendations

Virus evolution is expected, and the more SARS-CoV-2 circulates, the more opportunities it has to evolve. Reducing transmission through established and proven disease control methods such as those outlined in the COVID-19 Strategic Preparedness and Response Plan, as well as avoiding introductions into animal populations are crucial aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critical to curb the spread of SARS-CoV-2 and its variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the PHSM, including infection prevention and control (IPC) measures in health facilities has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities. Authorities are also encouraged to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and to detect unusual events.

#### **Additional resources**

- Tracking SARS-CoV-2 variants
- Working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19
- COVID-19 Situation Reports from WHO Regional Offices and partners: <u>AFRO</u>, <u>AMRO/PAHO</u>, <u>EMRO</u>, <u>EURO/ECDC</u>, <u>SEARO</u>, <u>WPRO</u>
- ACT accelerator diagnostic pillar, FIND test directory

Figure 3. Countries, territories and areas reporting variants Alpha (B.1.1.7), Beta (B.1.351), Gamma (P.1) and Delta (B.1.617.2), as of 1 June 2021\*\*



<sup>\*</sup>Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

<sup>\*\*</sup>Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details.

## Special focus: Early lessons from country implementation of COVID-19 vaccination

Safe and effective vaccines, together with non-pharmaceutical interventions are a game-changing tool in the response to the COVID-19 pandemic. As of 26 May 2021, over 1.5 billion vaccine doses have been administered globally, and over 736 million individuals have received at least one dose (see the WHO COVID-19 Dashboard for the latest figures). However, vaccination rates are not uniform across countries. The lowest-income countries had access to vaccines later than higher-income countries, and have vaccinated a substantially lower proportion of their target populations. We briefly summarize early lessons learned by thematic areas and share qualitative insights gained during the early phases of rolling out COVID-19 vaccines, based on anecdotal reports from regional early learning webinars and discussions with countries, particularly in low-and-middle-income countries (LMICs).

## Planning and coordination

Most LMICs prepared National Deployment and Vaccination Plans in anticipation of vaccine supply becoming available. They also established governance structures and coordination processes for planning and overseeing deployment of vaccination activities as part of national response plans. In several countries, engaging with the offices of heads of state facilitated collaboration across health programmes and sectors, which enabled coordinated vaccination.

Identifying and prioritizing groups at the highest risk of exposure or severe outcomes facilitated operational planning. While many countries were able to roughly estimate the size of their priority target groups, information on who they are and where they resided was often unknown. Several countries established digital platforms and used community mobilizers to identify and pre-register priority target groups to facilitate vaccine delivery.

The findings from <u>scenario-based simulation exercises</u> or drills helped identify unanticipated operational bottlenecks, and were used to update operational plans. At the subnational level, micro plans facilitated vaccine roll-out and session planning, through estimation of the target population size at each administrative level, requisite resources including vaccine doses, supplies and human resources. When such micro plans did not exist or were inadequately prepared at the district and lower administrative levels, it contributed to delayed or slower vaccine roll-out.

#### **Costing and financing**

While costing tools were developed to assist countries in estimating vaccine and operational costs, these tools were complex, and many countries lacked the capacity to use them to develop timely and robust cost estimates. Some LMICs were quickly able to mobilize domestic resources to support vaccine rollout, whereas other LMIC governments did not allocate adequate domestic resources. In the past, vaccination for epidemics was accompanied by external support to partially cover operational costs. This was not the case with the COVID-19 vaccine roll-out. The dependency on donors and failure to secure funds in time led to delays in conducting health worker training, compromise on the quality of these trainings, or lowered motivation among health workers due to delayed payment of salaries. In addition, disbursement and distribution of funds to the lowest administrative levels was not streamlined in some countries, leading to a lack of funds, even though funds were available at the national level.

<sup>&</sup>lt;sup>3</sup> pandem-ic. 2021. Vaccination by income. Available from: https://pandem-ic.com/vaccination-trackers/

#### Supply chain and logistics

Most LMICs utilized findings from national Effective Vaccine Management (EVM) assessments and benefited from support by Gavi, the Vaccine Alliance, to optimize their cold chain equipment. Therefore, most had sufficient cold chain capacity to handle the initial shipment of vaccines. Several countries also successfully managed vaccines requiring ultra-cold chain storage and transport; some of them using equipment procured for Ebola vaccines.

Several countries had multiple vaccine products through donations, the COVAX facility, and direct procurement from manufacturers. Managing multiple vaccines with different cold chain requirements without vaccine vial monitors led to logistical challenges. A few of these products had not received WHO Emergency Use Listing and countries did not have the requisite information on product characteristics to enable logistical planning. The initial doses of vaccines that countries received had a relatively short shelf-life of six months at the time of release, often with a shorter shelf-life at the time of delivery to countries. Where there was slow roll-out of vaccines, it was challenging to use them in a timely manner. On occasion, vaccines were re-distributed to other countries to avoid wastage.

## Vaccine delivery

While most LMICs had experience with conducting mass vaccination campaigns, Infection Prevention and Control (IPC) at vaccination sites added some challenges to maintain a smooth workflow. Countries provided safe spaces for observation of vaccinees for severe allergic reactions following vaccination, and trained personnel and provided supplies to manage such reactions. Several countries reported lower than expected turn-out at sessions due to vaccine hesitancy, resulting in a high volume of open vials to be wasted.

## **Demand creation and hesitancy**

Early communication to create awareness and prepare communities for the vaccine roll-out, as well as public vaccination of the political and religious leaders improved vaccine uptake. Several countries also successfully utilized social media to heighten public awareness. However, not all countries had the capacity to cope with the magnitude of misinformation or disinformation being disseminated on media platforms and to mount a timely and comprehensive response.

Hesitancy, especially among health and care workers, driven by fear of adverse effects of specific products reported in the media, further fuelled by suspension of some vaccines in high-income countries contributed to low vaccine uptake. Hesitancy among health and care workers was reported to have a ripple effect in other priority groups.

#### **Digital monitoring**

Digital registration and data monitoring systems played a key role in monitoring vaccination, generating digital vaccination certificates in several countries, and sending reminders for follow-up vaccination. Digital pre-registration systems, where established, also improved operational flow and enabled the achievement of vaccination targets for each session. However, the lack of digital tools for data entry at the service delivery points impeded data collection in a few countries. In at least one country where hybrid paper-based and digital platforms were used, the lack of proper planning led to inadequate numbers of data entry clerks and delayed data entry and transmission. Several countries reported delayed and incomplete reporting from the lower administrative levels and the limited granular and timely data may have prohibited operational decisions.

#### Safety monitoring

Most countries leveraged the existing safety surveillance system for immunization to establish reporting of adverse events following vaccination and regularly reported data to WHO and global pharmacovigilance

databases. A few countries lacked the capacity to investigate and conduct causality assessments of serious adverse events and in some, key information was not collected to enable adequate investigation. In other instances, decisions to halt vaccination following a reported death contributed to misperceptions about the safety of the vaccine.

#### **Lessons learned**

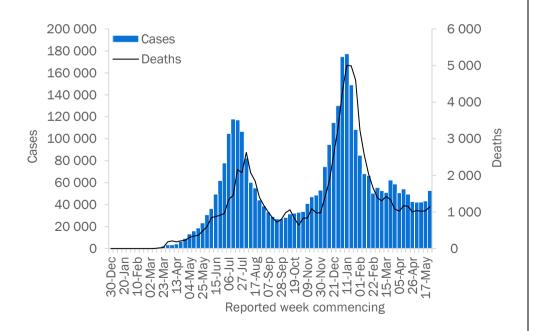
Lessons learned from the early phases of vaccine introduction will inform ongoing vaccination activities. Sharing early lessons through periodic webinars and peer-to-peer exchanges allowed countries to adopt best practices or successfully implement solutions to operational challenges. Additionally, WHO and partner agencies have used these insights to develop or update guidance and information notes to support countries. In the area of costing and financing, the <a href="COVID-19 Vaccine Introduction and deployment Tool">COVID</a> was updated and a mechanism to provide direct technical support to countries was established to help improve operational cost estimates. New sources of funding are being developed to support LMICs with filling budgetary gaps to meet immediate operational needs and longer-term financing. Insights from the early introduction of COVID-19 vaccination can further be leveraged to create more resilient immunization systems, foster greater integration in primary health care delivery, and accelerate the implementation of the life-course approach to deliver a package of primary health care interventions.

## **WHO** regional overviews

## **African Region**

The African Region reported over 52 000 new cases and over 1100 new deaths, a 22% and an 11% increase respectively compared to the previous week. Case incidence increased after four consecutive weeks of a plateau in new weekly cases. The highest numbers of new cases were reported from South Africa (26 498 new cases; 44.7 new cases per 100 000 population; a 24% increase), Uganda (2424 new cases; 5.3 new cases per 100 000; a 191% increase), and Kenya (2377 new cases; 4.4 new cases per 100 000; a 13% decrease).

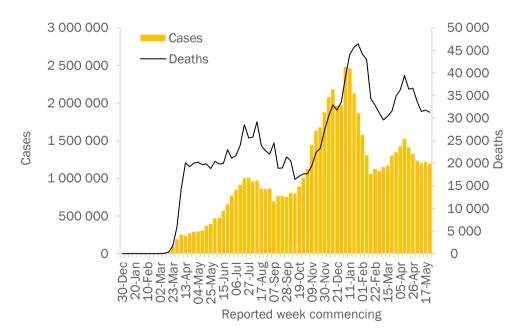
The highest numbers of new deaths were reported from South Africa (591 new deaths; 1.0 new deaths per 100 000 population; similar to the number reported in the previous week), Kenya (92 new deaths; 0.2 new deaths per 100 000; a 92% increase), and Ethiopia (75 new deaths; 0.1 new deaths per 100 000; an 18% decrease).



## **Region of the Americas**

The Region of the Americas reported just under 1.2 million new cases and over 31 000 new deaths, figures similar to those of the previous week. The number of new cases has remained relatively stable for a fourth consecutive week, while the number of deaths has remained stable for a third consecutive week. The highest numbers of new cases were reported from Brazil (420 981 new cases; 198.1 new cases per 100 000; a 7% decrease), Argentina (219 910 new cases; 486.6 new cases per 100 000; a 3% increase), and the United States of America (153 587 new cases; 46.4 new cases per 100 000; an 18% decrease).

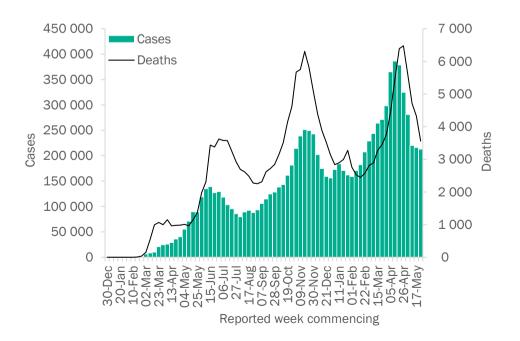
The highest numbers of new deaths were reported from Brazil (12 736 new deaths; 6.0 new deaths per 100 000; a 7% decrease), the United States of America (4596 new deaths; 1.4 new deaths per 100 000; a 14% increase), and Colombia (3488 new deaths; 6.9 new deaths per 100 000; similar to the number reported in the previous week).



## **Eastern Mediterranean Region**

The Eastern Mediterranean Region reported over 212 000 new cases, similar to the number reported in the previous week, and over 3500 new deaths, an 18% decrease compared to the previous week. While small decreases have been seen in case incidence for the past three weeks, death incidence continued a steep decline for a fifth consecutive week. The highest numbers of new cases were reported from the Islamic Republic of Iran (69 331 new cases; 82.5 new cases per 100 000; a 17% decrease), Iraq (29 459 new cases; 73.2 new cases per 100 000; an 8% increase), and Bahrain (20 829 new cases; 1224.1 new cases per 100 000; a 32% increase).

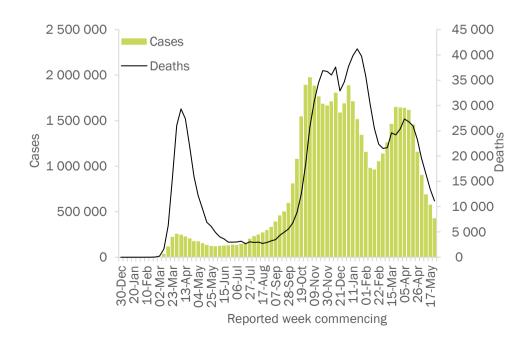
The highest numbers of new deaths were reported from the Islamic Republic of Iran (1360 new deaths; 1.6 new deaths per 100 000; a 22% decrease), Pakistan (503 new deaths; 0.2 new deaths per 100 000; a 29% decrease), and Tunisia (392 new deaths; 3.3 new deaths per 100 000; a 3% decrease).



## **European Region**

The European Region reported just under 431 000 new cases and over 11 000 new deaths, a 26% and a 17% decrease respectively compared to the previous week. The number of cases and deaths have steeply decreased for the past six and seven weeks respectively. The highest numbers of new cases were reported from the Russian Federation (61 937 new cases; 42.4 new cases per 100 000; similar to the number reported in the previous week), France (60 600 new cases; 93.2 new cases per 100 000; a 26% decrease), and Turkey (57 330 new cases; 68.0 new cases per 100 000; a 20% decrease).

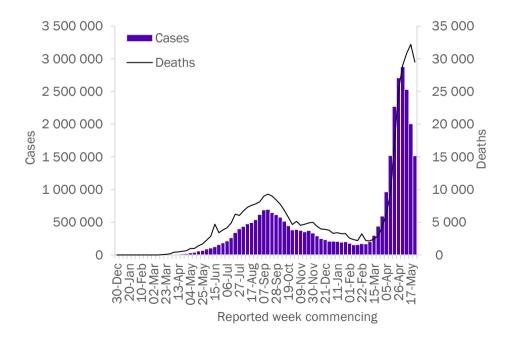
The highest numbers of new deaths were reported from the Russian Federation (2680 new deaths; 1.8 new deaths per 100 000; a 3% increase), Turkey (1200 new deaths; 1.4 new deaths per 100 000; a 22% decrease), and Ukraine (1104 new deaths; 2.5 new deaths per 100 000; a 15% decrease).



## **South-East Asia Region**

The South-East Asia Region reported over 1.5 million new cases and over 29 000 new deaths, a 24% and an 8% decrease respectively compared to the previous week. Case incidence continued to follow a sharp decline for a third consecutive week, and death incidence decreased for the first time since early March 2021, primarily driven by trends reported in India. The highest numbers of new cases were reported from India (1 364 668 new cases; 98.9 new cases per 100 000; a 26% decrease), Nepal (47 779 new cases; 164.0 new cases per 100 000; a 18% decrease), and Indonesia (39 986 new cases; 14.6 new cases per 100 000; a 20% increase).

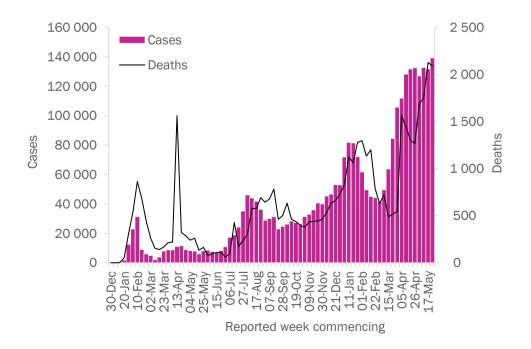
The highest numbers of new deaths were reported from India (26 706 new deaths; 1.9 new deaths per 100 000; an 8% decrease), Indonesia (1057 new deaths; 0.4 new deaths per 100 000; a 15% decrease), and Nepal (1010 new deaths; 3.5 new deaths per 100 000; a 22% decrease).



## **Western Pacific Region**

The Western Pacific Region reported over 139 000 new cases, a 6% increase compared to the previous week and just under 2100 new deaths, a similar number to the previous week. The numbers of both cases and deaths remain at the highest levels since the beginning of the pandemic. The highest numbers of new cases were reported from Malaysia (53 419 new cases; 165.0 new cases per 100 000; a 38% increase), the Philippines (38 362 new cases; 35.0 new cases per 100 000; a 4% decrease), and Japan (27 400 new cases; 21.7 new cases per 100 000; a 24% decrease).

The highest numbers of new deaths were reported from the Philippines (776 new deaths; 0.7 new deaths per 100 000; a 13% decrease), Japan (684 new deaths; 0.5 new deaths per 100 000; a 12% decrease), and Malaysia (451 new deaths; 1.4 new deaths per 100 000; a 35% increase).



## Key weekly updates

## WHO Director-General's key messages

- In his <u>opening remarks at the media briefing on COVID-19 28 May 2021</u>, the Director-General called on world leaders to support a massive push to vaccinate at least 10% of the population of every country by September, and 30% by the end of the year. If countries immediately share doses with COVAX, and if manufacturers prioritize COVAX, this target can be reached and lives saved.
- Ultimately, the fastest way to bring this pandemic to an end is to dramatically increase global manufacturing of vaccines, tests, treatments and other medical supplies, and ensure equitable access. A year ago, more than 40 Heads of State joined WHO to form C-TAP, the COVID-19 Technology Access Pool.
- In his <u>closing remarks at the 74<sup>th</sup> World Health Assembly</u>, the Director-General reminded that the theme of this Assembly was "Ending this pandemic, preventing the next: building together a healthier, safer and fairer world" while stressing that we still have a lot of work to do to end this pandemic. The tailored and consistent use of public health measures, in combination with equitable vaccination, remains the way out.

## **Updates and publications**

- COVAX Joint Statement: Call to action to equip COVAX to deliver 2 billion doses in 2021
- <u>Technical note on delayed shipments for theChAdOx1-S [recombinant] vaccines: what are the implications for the administration of second doses?</u>
- Critical preparedness, readiness and response actions for COVID-19
- Operational guide for engaging communities in contact tracing
- World Health Assembly recommends reinforcement of measures to protect mental health during public health emergencies
- Improving family medicine in China and battling COVID-19 with smart systems
- A New Commitment for Vaccine Equity and Defeating the Pandemic

## **Technical guidance and other resources**

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- <u>The Strategic Preparedness and Response Plan (SPRP)</u> outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - o African Region
  - o Region of the Americas
  - o <u>Eastern Mediterranean Region</u>
  - o South-East Asia Region
  - o European Region
  - o Western Pacific Region
- Recommendations and advice for the public:
  - o **Protect yourself**
  - o Questions and answers
  - o <u>Travel advice</u>
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 30 May 2021\*\*

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Africa	52 710	3 497 924	311.8	1 143	87 107	7.8	
South Africa	26 498	1 659 070	2 797.3	591	56 363	95.0	Community transmission
Uganda	2 424	45 931	100.4	12	362	0.8	Community transmission
Kenya	2 377	170 485	317.1	92	3 141	5.8	Community transmission
Ethiopia	2 299	271 200	235.9	75	4 143	3.6	Community transmission
Botswana	2 162	56 313	2 394.6	47	831	35.3	Community transmission
Angola	2 031	34 180	104.0	42	757	2.3	Community transmission
Namibia	1 947	54 659	2 151.2	55	818	32.2	Community transmission
Algeria	1 805	128 456	292.9	49	3 460	7.9	Community transmission
Zambia	1 645	94 751	515.4	9	1 276	6.9	Community transmission
Cameroon	1 226	77 982	293.8	40	1 270	4.8	Community transmission
Cabo Verde	1 075	30 273	5 444.9	7	263	47.3	Community transmission
Seychelles	982	11 415	11 606.9	2	40	40.7	Community transmission
Democratic Republic of the Congo	553	31 416	35.1	3	782	0.9	Community transmission
Madagascar	454	41 234	148.9	36	829	3.0	Community transmission
Rwanda	356	26 780	206.8	1	349	2.7	Community transmission
Mauritania	349	19 463	418.6	5	463	10.0	Community transmission
Senegal	308	41 331	246.8	9	1 138	6.8	Community transmission
Nigeria	306	166 285	80.7	4	2 071	1.0	Community transmission
Burundi	260	4 754	40.0	0	6	0.1	Community transmission
Gabon	258	24 365	1 094.7	3	150	6.7	Community transmission
Zimbabwe	254	38 933	261.9	8	1 594	10.7	Community transmission
Côte d'Ivoire	253	47 195	178.9	3	301	1.1	Community transmission
Ghana	192	93 775	301.8	1	784	2.5	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Guinea	184	23 172	176.4	3	161	1.2	Community transmission
Congo	182	11 658	211.3	3	153	2.8	Community transmission
Mozambique	156	70 724	226.3	5	836	2.7	Community transmission
Eritrea	129	4 061	114.5	0	14	0.4	Community transmission
Equatorial Guinea	93	8 529	607.9	5	118	8.4	Community transmission
Togo	80	13 432	162.2	0	125	1.5	Community transmission
Central African Republic	75	7 085	146.7	2	98	2.0	Community transmission
Mauritius	71	1 393	109.5	0	17	1.3	Clusters of cases
Malawi	55	34 329	179.5	1	1 154	6.0	Community transmission
Niger	46	5 410	22.3	0	192	0.8	Community transmission
Eswatini	39	18 589	1 602.3	0	672	57.9	Community transmission
Liberia	37	2 179	43.1	1	86	1.7	Community transmission
Benin	33	8 058	66.5	0	101	0.8	Community transmission
Mali	29	14 265	70.4	5	517	2.6	Community transmission
Sierra Leone	23	4 140	51.9	0	79	1.0	Community transmission
Lesotho	19	10 825	505.3	6	326	15.2	Community transmission
South Sudan	18	10 688	95.5	0	115	1.0	Community transmission
Burkina Faso	16	13 430	64.2	1	166	0.8	Community transmission
Gambia	15	5 993	248.0	1	179	7.4	Community transmission
Guinea-Bissau	12	3 761	191.1	0	68	3.5	Community transmission
Sao Tome and Principe	11	2 345	1 070.0	1	37	16.9	Community transmission
Comoros	9	3 949	454.1	0	146	16.8	Community transmission
Chad	5	4 928	30.0	0	173	1.1	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories <sup>iii</sup>							
Réunion	1 335	24 901	2 781.3	13	189	21.1	Community transmission
Mayotte	24	19 325	7 083.6	2	173	63.4	Community transmission

Reporting Country/Territory/Areai	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Americas	1 198 427	67 178 933	6 568.3	31 286	1 646 407	161.0	
Brazil	420 981	16 391 930	7 711.7	12 736	459 045	216.0	Community transmission
Argentina	219 910	3 702 422	8 192.0	3 302	76 693	169.7	Community transmission
United States of America	153 587	32 916 501	9 944.5	4 596	588 292	177.7	Community transmission
Colombia	150 517	3 342 567	6 569.1	3 488	87 207	171.4	Community transmission
Chile	46 343	1 369 756	7 165.4	661	29 047	151.9	Community transmission
Peru	31 989	1 947 555	5 906.7	1 409	68 978	209.2	Community transmission
Uruguay	23 658	282 198	8 123.8	358	4 118	118.5	Community transmission
Canada	22 154	1 374 275	3 641.2	278	25 440	67.4	Community transmission
Paraguay	20 955	348 184	4 881.6	777	8 892	124.7	Community transmission
Bolivia (Plurinational State of)	18 500	364 570	3 123.2	520	14 377	123.2	Community transmission
Mexico	16 034	2 408 778	1 868.2	1 816	223 072	173.0	Community transmission
Costa Rica	14 883	314 102	6 166.0	197	3 962	77.8	Community transmission
Venezuela (Bolivarian Republic of)	9 105	230 147	809.4	112	2 595	9.1	Community transmission
Cuba	8 255	140 087	1 236.8	80	943	8.3	Community transmission
Dominican Republic	7 841	290 526	2 678.2	22	3 628	33.4	Community transmission
Ecuador	6 901	424 741	2 407.4	305	20 485	116.1	Community transmission
Guatemala	6 731	253 837	1 416.9	125	8 121	45.3	Community transmission
Honduras	4 891	236 451	2 387.3	151	6 284	63.4	Community transmission
Trinidad and Tobago	3 685	22 620	1 616.3	110	458	32.7	Community transmission
Panama	3 546	376 854	8 734.1	44	6 365	147.5	Community transmission
Suriname	1 563	14 305	2 438.5	39	282	48.1	Community transmission
El Salvador	1 026	73 246	1 129.3	30	2 241	34.6	Community transmission
Guyana	981	16 724	2 126.2	31	380	48.3	Community transmission
Haiti	523	14 258	125.0	27	307	2.7	Community transmission
Jamaica	475	48 374	1 633.6	30	942	31.8	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Bahamas	246	11 745	2 986.7	4	229	58.2	Clusters of cases
Nicaragua	102	5 833	88.1	1	186	2.8	Community transmission
Saint Lucia	100	5 035	2 742.0	0	77	41.9	Community transmission
Saint Vincent and the Grenadines	54	2 027	1 827.1	0	12	10.8	Community transmission
Belize	27	12 791	3 216.8	1	324	81.5	Community transmission
Barbados	24	4 009	1 395.0	0	47	16.4	Community transmission
Saint Kitts and Nevis	22	68	127.8	0	0	0.0	Clusters of cases
Antigua and Barbuda	4	1 259	1 285.6	0	42	42.9	Clusters of cases
Dominica	4	188	261.1	0	0	0.0	Clusters of cases
Grenada	0	161	143.1	0	1	0.9	Sporadic cases
Territories <sup>iii</sup>							
French Guiana	983	23 763	7 956.0	4	116	38.8	Community transmission
Puerto Rico	875	138 485	4 840.7	28	2 499	87.4	Community transmission
Guadeloupe	357	16 874	4 217.2	0	255	63.7	Community transmission
Martinique	190	11 979	3 192.1	2	95	25.3	Community transmission
Saint Martin	114	2 009	5 196.7	0	15	38.8	Community transmission
United States Virgin Islands	96	3 442	3 296.1	0	27	25.9	Community transmission
Aruba	65	10 957	10 262.6	1	107	100.2	Community transmission
Sint Maarten	58	2 404	5 606.1	1	28	65.3	Community transmission
British Virgin Islands	41	289	955.8	0	1	3.3	Clusters of cases
Cayman Islands	7	581	884.1	0	2	3.0	Sporadic cases
Saint Barthélemy	7	1 023	10 349.0	0	1	10.1	Clusters of cases
Bonaire	5	1 585	7 578.3	0	17	81.3	Community transmission
Curaçao	5	12 271	7 478.1	0	122	74.3	Community transmission
Turks and Caicos Islands	4	2 412	6 229.7	0	17	43.9	Clusters of cases
Bermuda	3	2 491	4 000.1	0	32	51.4	Community transmission
Anguilla	0	109	726.6	0	0	0.0	Clusters of cases

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Falkland Islands (Malvinas)	0	63	1 808.8	0	0	0.0	Sporadic cases
Montserrat	0	20	400.1	0	1	20.0	No cases
Saba	0	7	362.1	0	0	0.0	Sporadic cases
Saint Pierre and Miquelon	0	25	431.4	0	0	0.0	No cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	212 568	10 076 696	1 378.8	3 556	201 642	27.6	
Iran (Islamic Republic of)	69 331	2 893 218	3 444.6	1 360	79 741	94.9	Community transmission
Iraq	29 459	1 193 608	2 967.5	176	16 334	40.6	Community transmission
Bahrain	20 829	235 699	13 851.8	130	939	55.2	Community transmission
Pakistan	18 771	916 239	414.8	503	20 680	9.4	Community transmission
United Arab Emirates	12 747	567 263	5 735.5	25	1 673	16.9	Community transmission
Tunisia	9 275	343 374	2 905.4	392	12 574	106.4	Community transmission
Kuwait	8 494	306 717	7 182.1	40	1 764	41.3	Community transmission
Saudi Arabia	8 437	448 284	1 287.7	97	7 334	21.1	Community transmission
Egypt	7 969	260 659	254.7	331	15 001	14.7	Clusters of cases
Oman	5 442	215 366	4 217.4	65	2 321	45.5	Community transmission
Jordan	5 433	735 139	7 205.0	86	9 443	92.5	Community transmission
Afghanistan	5 033	70 761	181.8	117	2 919	7.5	Community transmission
Morocco	2 056	518 868	1 405.7	19	9 138	24.8	Community transmission
Libya	1 916	184 815	2 689.7	11	3 116	45.3	Community transmission
Lebanon	1 914	540 132	7 913.5	48	7 718	113.1	Community transmission
Qatar	1 881	217 041	7 533.4	11	554	19.2	Community transmission
Sudan	408	35 479	80.9	60	2 628	6.0	Clusters of cases
Syrian Arab Republic	388	24 440	139.7	34	1 763	10.1	Community transmission
Yemen	82	6 735	22.6	15	1 320	4.4	Community transmission
Djibouti	36	11 527	1 166.7	2	154	15.6	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Somalia	30	14 653	92.2	1	768	4.8	Community transmission
Territories <sup>iii</sup>							
occupied Palestinian territory	2 637	336 679	6 599.7	33	3 760	73.7	Community transmission
Europe	430 945	54 244 552	5 813.6	11 113	1 148 766	123.1	
Kosovo [1]	169	107 339		4	2 233		Community transmission
Russian Federation	61 937	5 063 442	3 469.7	2 680	121 162	83.0	Clusters of cases
France	60 600	5 557 673	8 545.1	811	108 543	166.9	Community transmission
Turkey	57 330	5 235 978	6 208.2	1 200	47 271	56.0	Community transmission
Germany	30 190	3 679 148	4 423.8	1 026	88 406	106.3	Community transmission
Italy	24 865	4 213 055	7 064.0	849	126 002	211.3	Clusters of cases
Netherlands	22 068	1 644 633	9 447.8	81	17 615	101.2	Community transmission
The United Kingdom	20 499	4 480 949	6 600.7	59	127 775	188.2	Community transmission
Ukraine	18 951	2 201 472	5 033.8	1 104	50 472	115.4	Community transmission
Spain	16 066	3 663 176	7 739.2	78	79 888	168.8	Community transmission
Kazakhstan	12 081	441 801	2 352.9	172	7 321	39.0	Clusters of cases
Belgium	11 493	1 061 196	9 209.8	91	24 935	216.4	Community transmission
Greece	11 466	400 395	3 735.5	290	12 024	112.2	Community transmission
Sweden	7 831	1 068 473	10 345.8	5	14 451	139.9	Community transmission
Belarus	6 864	391 637	4 144.6	60	2 821	29.9	Community transmission
Denmark	6 775	279 434	4 799.0	9	2 516	43.2	Community transmission
Poland	6 328	2 871 950	7 566.1	810	73 738	194.3	Community transmission
Georgia	6 030	343 603	8 613.4	135	4 757	119.2	Community transmission
Switzerland	3 670	689 924	7 971.7	12	10 196	117.8	Community transmission
Portugal	3 402	848 213	8 238.3	6	17 023	165.3	Clusters of cases
Lithuania	3 350	274 199	9 813.5	72	4 257	152.4	Community transmission
Austria	3 301	640 162	7 192.0	54	10 334	116.1	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Norway	3 275	124 029	2 310.7	2	783	14.6	Clusters of cases
Czechia	3 266	1 661 159	15 533.6	84	30 104	281.5	Community transmission
Ireland	2 899	261 157	5 260.6	0	4 941	99.5	Community transmission
Serbia	2 373	712 046	10 279.7	78	6 844	98.8	Community transmission
Hungary	2 360	804 032	8 230.0	149	29 624	303.2	Community transmission
Latvia	2 206	132 918	6 967.5	47	2 370	124.2	Community transmission
Romania	2 190	1 077 426	5 574.2	362	30 247	156.5	Community transmission
Croatia	2 155	356 141	8 775.9	111	8 014	197.5	Community transmission
Kyrgyzstan	2 044	104 555	1 602.6	52	1 803	27.6	Clusters of cases
Slovenia	1 967	253 496	12 095.1	8	4 692	223.9	Clusters of cases
Uzbekistan	1 673	100 124	299.2	10	690	2.1	Clusters of cases
Bulgaria	1 656	418 221	6 016.3	170	17 657	254.0	Clusters of cases
Azerbaijan	1 488	333 723	3 291.4	52	4 903	48.4	Clusters of cases
Estonia	894	129 486	9 743.3	11	1 251	94.1	Clusters of cases
Slovakia	855	389 690	7 140.0	47	12 339	226.1	Clusters of cases
Finland	839	92 244	1 669.5	16	948	17.2	Community transmission
Armenia	688	222 636	7 513.3	40	4 432	149.6	Community transmission
Bosnia and Herzegovina	685	203 938	6 216.1	105	9 222	281.1	Community transmission
Republic of Moldova	504	255 105	6 323.9	28	6 100	151.2	Community transmission
Luxembourg	344	69 889	11 162.5	4	814	130.0	Community transmission
Cyprus	323	72 159	8 126.0	4	357	40.2	Clusters of cases
Montenegro	314	99 597	15 857.8	9	1 583	252.0	Clusters of cases
North Macedonia	218	155 246	7 451.6	102	5 398	259.1	Clusters of cases
Israel	141	839 454	9 698.5	4	6 408	74.0	Community transmission
Albania	121	132 297	4 597.2	7	2 449	85.1	Clusters of cases
Andorra	84	13 693	17 722.1	0	127	164.4	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Malta	30	30 529	5 933.0	2	419	81.4	Clusters of cases
Iceland	20	6 576	1 805.9	1	30	8.2	Community transmission
Liechtenstein	9	3 099	7 998.0	0	57	147.1	Sporadic cases
Monaco	2	2 503	6 378.0	0	32	81.5	Sporadic cases
San Marino	1	5 090	14 997.9	0	90	265.2	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories <sup>iii</sup>							
Faroe Islands	36	712	1 457.1	0	1	2.0	Sporadic cases
Gibraltar	7	4 293	12 742.3	0	94	279.0	Clusters of cases
Greenland	6	40	70.5	0	0	0.0	No cases
Jersey	5	3 243	3 008.5	0	69	64.0	Community transmission
Isle of Man	1	1 592	1 872.2	0	29	34.1	No cases
Guernsey	0	822	1 275.1	0	14	21.7	Community transmission
South-East Asia	1 516 572	31 605 221	1 563.5	29 477	401 754	19.9	
India	1 364 668	27 894 800	2 021.4	26 706	325 972	23.6	Clusters of cases
Nepal	47 779	553 422	1 899.4	1 010	7 163	24.6	Community transmission
Indonesia	39 986	1 809 926	661.7	1 057	50 262	18.4	Community transmission
Thailand	24 807	154 307	221.1	236	1 012	1.4	Clusters of cases
Sri Lanka	19 351	180 593	843.4	227	1 405	6.6	Clusters of cases
Bangladesh	9 660	797 386	484.2	201	12 549	7.6	Community transmission
Maldives	8 541	62 906	11 637.5	35	158	29.2	Clusters of cases
Timor-Leste	1 271	6 752	512.1	5	16	1.2	Community transmission
Myanmar	298	143 526	263.8	0	3 216	5.9	Clusters of cases
Bhutan	211	1 603	207.7	0	1	0.1	Clusters of cases
Western Pacific	139 234	3 000 768	152.7	2 090	45 148	2.3	
Malaysia	53 419	558 534	1 725.7	451	2 650	8.2	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Philippines	38 362	1 216 569	1 110.2	776	20 722	18.9	Community transmission
Japan	27 400	741 674	586.4	684	12 920	10.2	Clusters of cases
Mongolia	4 690	56 621	1 727.2	24	268	8.2	Clusters of cases
Cambodia	4 199	29 404	175.9	33	209	1.3	Sporadic cases
China	4 052	110 765	7.5	82	4 945	0.3	Clusters of cases
Republic of Korea	3 989	139 910	272.9	26	1 957	3.8	Clusters of cases
Viet Nam	1 789	6 908	7.1	6	47	0.0	Clusters of cases
Papua New Guinea	714	15 901	177.7	6	162	1.8	Community transmission
Singapore	204	62 003	1 059.8	0	32	0.5	Sporadic cases
Fiji	154	360	40.2	0	4	0.4	Sporadic cases
Lao People's Democratic Republic	126	1 908	26.2	1	3	0.0	Sporadic cases
Australia	79	30 083	118.0	0	910	3.6	Clusters of cases
New Zealand	9	2 316	48.0	0	26	0.5	Sporadic cases
Brunei Darussalam	5	241	55.1	0	3	0.7	Sporadic cases
Solomon Islands	0	20	2.9	0	0	0.0	No cases
Territories <sup>iii</sup>							
Guam	22	7 918	4 691.5	0	139	82.4	Clusters of cases
French Polynesia	16	18 860	6 713.9	1	142	50.6	Sporadic cases
New Caledonia	3	128	44.8	0	0	0.0	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	2	183	317.9	0	2	3.5	Pending
Marshall Islands	0	4	6.8	0	0	0.0	No cases
Samoa	0	1	0.5	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Wallis and Futuna	0	454	4 037.0	0	7	62.2	Sporadic cases
Global	3 550 456	169 604 858		78 665	3 530 837		

<sup>\*</sup>See Annex 3: Data, table and figure notes

Annex 2. List of countries/territories/areas reporting Variants of Concern as of 1 June 2021\*\*

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Afghanistan	•	-	-	-	-
Albania	•	-	-	-	-
Algeria	•	-	-	•	-
Angola	•	•	-	-	-
Argentina	•	•	•	•	-
Armenia	0	-	-	-	-
Aruba	•	•	•	•	-
Australia	•	•	•	0	-
Austria	•	•	•	•	-
Azerbaijan	•	-	-	-	-
Bahrain	•	•	-	•	-
Bangladesh	•	•	-	•	-
Barbados	•	-	-	-	-
Belarus	•	-	-	-	-
Belgium	•	•	•	•	-
Belize	•	-	-	-	-
Bolivia (Plurinational State of)	•	-	•*	-	-
Bonaire	•	-	-	-	-
Bosnia and Herzegovina	0	-	-	-	-
Botswana	-	•	-	•	-
Brazil	•	•	•	•	-
Brunei Darussalam	•	•	-	-	-
Bulgaria	•	-	-	-	-
Burkina Faso	•*	-	-	-	-
Cabo Verde	•	-	-	-	-
Cambodia	•	-	-	-	•*

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Cameroon	•	•	-	-	-
Canada	•	•	•	•	-
Cayman Islands	•	-	-	-	-
Central African Republic	•	-	-	-	-
Chile	•	•	•	-	-
China	•	•	•	0	-
Colombia	•	-	•	-	-
Comoros	•*	•	-	-	-
Congo	•	-	-	-	-
Costa Rica	•	•	•	-	-
Croatia	•	•	-	-	-
Cuba	•	•	-	-	-
Curaçao	•	-	•	-	-
Cyprus	•	•	-	-	•
Czechia	•	•	-	•*	-
Côte d'Ivoire	•	•	-	-	-
Democratic Republic of the Congo	•	•	-	•	-
Denmark	•	•	•	•	-
Dominica	•	-	-	-	-
Dominican Republic	•	-	•*	-	-
Ecuador	•	•	•	-	-
Egypt	•	_	_	-	-
Equatorial Guinea	•	•	-	_	-
Estonia	•	•	0*	-	0*
Eswatini	-	•	-	-	-
Ethiopia	0	-	-	-	-

			<u>a</u>		
Country/Territory/Area	Alpha	Beta	Gamma	Delta	elta+
	⋖	<u> </u>	U		٥
Faroe Islands	•*	-	•	-	-
Fiji	-	-	-	-	•
Finland	•	•	•	•	-
France	•	•	•	•	-
French Guiana	•	•	•	-	-
French Polynesia	•	-	•	-	-
Gabon	•	0	-	-	-
Gambia	•	-	-	•*	-
Georgia	•	-	-	-	0*
Germany	•	•	•	•	-
Ghana	•	•	-	•	-
Gibraltar	•	-	-	-	-
Greece	•	•	-	•	-
Grenada	•	-	-	-	-
Guadeloupe	•	•	-	-	-
Guam	•	-	-	-	-
Guinea	•	•	-	-	-
Guinea-Bissau	•	•	-	-	-
Guyana	-	-	•	-	-
Haiti	•	-	•	-	-
Hungary	•	0	-	-	0*
Iceland	•	-	-	-	-
India	•	•	•	•	-
Indonesia	•	•	-	•	-
Iran (Islamic Republic of)	•	•	-	-	•
Iraq	•	-	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Ireland	•	•	•	•	-
Israel	•	•	•	•	-
Italy	•	•	•	•	-
Jamaica	•	-	-	-	-
Japan	•	•	•	•	-
Jordan	•	•	•	•	-
Kazakhstan	0	0	-	-	-
Kenya	•	•	-	•	-
Kosovo <sup>[1]</sup>	•	-	-	-	-
Kuwait	•	-	-	-	-
Kyrgyzstan	•	•	-	-	•
Lao People's Democratic Republic	•	-	-	-	-
Latvia	•	•	•	-	0*
Lebanon	•	-	-	-	-
Lesotho	-	•	-	-	-
Liberia	•	-	-	-	-
Libya	•	•	-	-	-
Liechtenstein	•	-	-	-	-
Lithuania	•	•	•	-	-
Luxembourg	•	•	•	•	-
Madagascar	-	•	-	-	-
Malawi	•	•	-	-	-
Malaysia	•	•	-	0	-
Malta	•	0	•	-	-
Martinique	•	•	-	-	-
Mauritania	•*	•*	-	•*	-
Mauritius	0	•	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Mayotte	•	•	-	-	-
Mexico	•	•	•	•	-
Monaco	•	0	-	-	-
Montenegro	•	-	-	-	-
Morocco	•	-	-	-	•
Mozambique	-	•	-	-	-
Namibia	-	•	-	-	-
Nepal	•	-	-	•*	-
Netherlands	•	•	•	•	-
New Caledonia	•	-	-	-	-
New Zealand	•	•	0	0	-
Niger	•	-	-	-	-
Nigeria	•	-	-	•*	-
North Macedonia	•	•	-	-	-
Norway	•	•	•	•	-
Occupied Palestinian Territory	•	•	-	-	-
Oman	•	-	-	-	-
Pakistan	•	•	•	-	-
Panama	•	•	•	-	•*
Paraguay	-	-	•	-	-
Peru	•	-	•	-	-
Philippines	•	•	•	0	-
Poland	•	0	•	•	-
Portugal	•	•	•	0	-
Puerto Rico	•	•	•	•*	-
Qatar	•	•	-	•*	-
Republic of Korea	•	•	•	0	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Republic of Moldova	0	-	-	-	-
Romania	•	•	•	•	-
Russian Federation	•	•	-	•	-
Rwanda	•	0	-	-	-
Réunion	•	•	•	0	-
Saint Barthélemy	•	-	-	-	-
Saint Lucia	•	-	-	-	-
Saint Martin	•	•	-	-	-
Sao Tome and Principe	•*	-	-	-	-
Saudi Arabia	•	•	-	-	-
Senegal	•	•*	-	-	-
Serbia	•	-	-	-	-
Seychelles	-	•	-	-	-
Singapore	•	•	•	•	-
Sint Maarten	•	•	-	-	-
Slovakia	•	•	-	-	-
Slovenia	•	•	•	•	-
South Africa	•	•	-	•	-
Spain	•	•	•	•	-
Sri Lanka	•	•	-	0	-
Suriname	•	•	•	-	-
Sweden	•	•	•	•	-
Switzerland	•	•	0	•	-
Thailand	•	•	•	•	-
Togo	•	•	-	-	-
Trinidad and Tobago	•	-	•	-	-
Tunisia	•	•	-	-	-
Turkey	•	•	•	•*	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Turks and Caicos Islands	•	-	-	-	-
Uganda	•	•	-	•	-
Ukraine	•	0	-	-	-
United Arab Emirates	•	•	•	-	-
United Kingdom	•	•	•	•	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
United Republic of Tanzania	-	•	-	-	-
United States of America	•	•	•	•	-
Uruguay	•	-	•	-	-
Uzbekistan	•	•	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Delta+
Venezuela (Bolivarian Republic of)	-	-	•	-	-
Viet Nam	•	•	-	•	-
Wallis and Futuna	•	-	-	-	-
Zambia	-	•	-	•*	0
Zimbabwe	-	0	-	•	-

<sup>\*</sup>Newly reported in this update. Columns for B.1.617.1 (Kappa) and B.1.617.3 were removed this week according to changes in VOC designation.

<sup>&</sup>quot;Delta+" reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

<sup>&</sup>quot;●" indicates that information for this variant was received by WHO from official sources.

<sup>&</sup>quot;o" indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available. Variants Gamma for Bangladesh and Delta for Panama were excluded this week based on further information received.

<sup>\*\*</sup>Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Efforts are ongoing to differentiate these in future reports. See also Annex 3: Data, table and figure notes.

#### Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO <u>case definitions</u> and <u>surveillance guidance</u>. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly.

A record of historic data adjustment made is available upon request by emailing <a href="mailto:epi-data-support@who.int">epi-data-support@who.int</a>. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see <a href="mailto:covid19.who.int">covid19.who.int</a> for the most up-to-date data.

Global totals include 758 cases and 13 deaths reported from international conveyances.

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

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

<sup>&</sup>lt;sup>i</sup> Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

<sup>&</sup>lt;sup>ii</sup> Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see:

Considerations for implementing and adjusting public health and social measures in the context of COVID-19.

<sup>&</sup>quot;Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.



## **COVID-19 Weekly Epidemiological Update**

Data as received by WHO from national authorities, as of 2 May 2021, 10 am CET

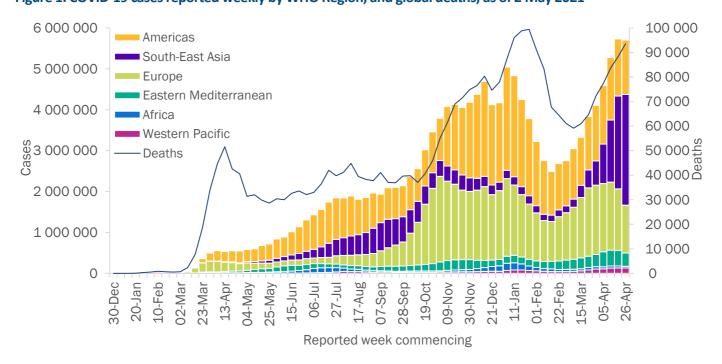
#### In this edition:

- Global overview
- Special focus: World Hand Hygiene Day, 5 May 2021
- Special focus: WHO partnership with SeroTracker synthesizing "real-time" seroprevalence data to support global pandemic response
- Special focus: SARS-CoV-2 variants
- WHO regional overviews
- Key weekly updates

## **Global overview**

For the second successive week, the number of COVID-19 cases globally remains at the highest levels since the beginning of the pandemic with over 5.7 million new weekly cases, following nine consecutive weeks of increases (Figure 1). New deaths continue to increase for the seventh consecutive week, with over 93 000 deaths. The South-East Asia Region continues to report marked increases in both case and death incidences (Table 1). India accounts for over 90% of both cases and deaths in the region, as well as 46% of global cases and 25% of global deaths reported in the past week. Case incidence in the regions of Europe, Eastern Mediterranean, Africa and the Americas decreased, while rates in the Western Pacific Region were comparable to the previous week. The number of deaths decreased in Europe, Africa and the Western Pacific region, while slight increases were reported in the Americas and Eastern Mediterranean regions.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 2 May 2021\*\*



<sup>\*\*</sup>See Annex: Data, table and figure notes

The highest numbers of new cases were reported from India (2 597 285 new cases; 20% increase), Brazil (421 933 new cases; 4% increase), the United States of America (345 692 new cases; 15% decrease), Turkey (257 992 new cases; 32% decrease), and France (163 666 new cases; 23% decrease).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 2 May 2021\*\*

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 330 513 (23%)	-5%	62 281 517 (41%)	36 715 (39%)	1%	1 517 981 (48%)
Europe	1 166 859 (20%)	-22%	51 920 795 (34%)	22 819 (24%)	-12%	1 084 814 (34%)
South-East Asia	2 709 582 (47%)	19%	22 675 230 (15%)	25 262 (27%)	48%	280 220 (9%)
Eastern Mediterranean	324 394 (6%)	-14%	9 147 412 (6%)	6 461 (7%)	1%	183 431 (6%)
Africa	42 090 (1%)	-15%	3 316 851 (2%)	1 000 (1%)	-13%	82 870 (3%)
Western Pacific	132 543 (2%)	1%	2 470 005 (2%)	1 266 (1%)	-3%	37 488 (1%)
Global	5 705 981 (100%)	0%	151 812 556 (100%)	93 523 (100%)	6%	3 186 817 (100%)

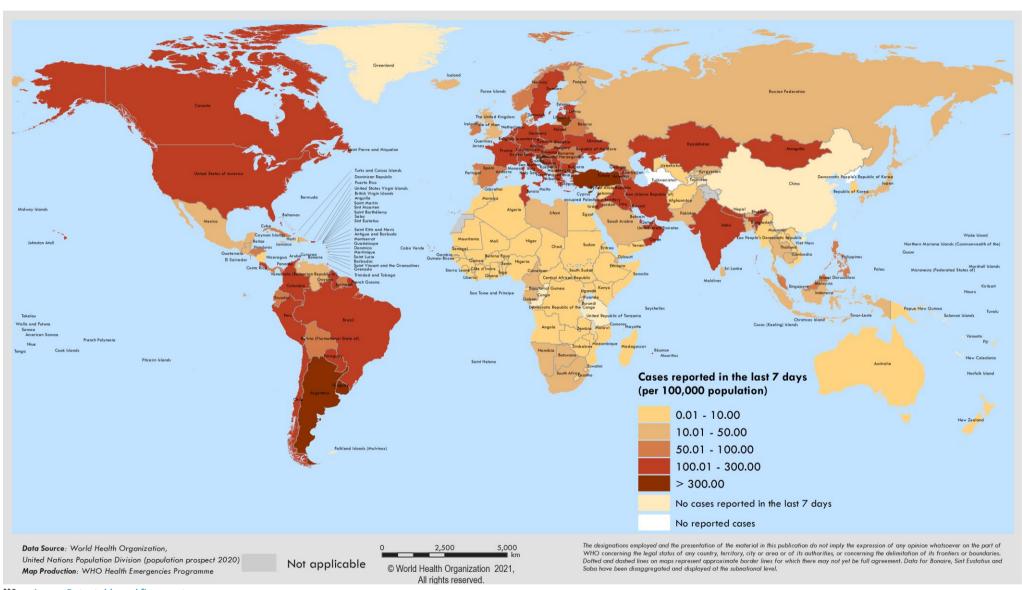
 $<sup>^*</sup>$ Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior

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

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

<sup>\*\*</sup>See Annex: Data, table and figure notes

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 26 April – 2 May 2021\*\*



<sup>\*\*</sup>See Annex: Data, table and figure notes

## Special Focus: World Hand Hygiene Day, 5 May 2021



For many infectious pathogens, including SARS-CoV-2, good hand hygiene practices are tremendously important for reducing the risk of transmission, as part of a wider package of public health and infection prevention and control (IPC) measures. Launched in 2009 and celebrated annually on 5 May, World Hand Hygiene Day (WHHD) aims to promote visibility and sustainability of hand hygiene in healthcare, and to bring people together in support of hand hygiene improvement around the world. This year, in the Year of Health and Care Workers, WHHD 2021 focuses on achieving effective hand hygiene action at the point of care and redouble our efforts to ensure that hand hygiene is a priority for action.

Health workers, patients and families, infection prevention and control practitioners, health facility managers, policy-makers, vaccinators and the general public all have an important role to play and are <u>encouraged to practice good hand hygiene</u>, because:

- Appropriate hand hygiene reduces the risk of infection from many pathogens, including SARS-CoV-2, both in the general population<sup>1</sup> and among health workers.<sup>2</sup>
- Appropriate hand hygiene prevents up to 50% of avoidable infections acquired during health care delivery.<sup>3</sup>
- Investing in hand hygiene yields huge returns hand hygiene policies can generate economic savings averaging 16 times the cost of their implementation. 4
- Effective hand hygiene reduces mortality and disabilities due to health care-associated infections.<sup>4</sup>

Effective hand hygiene can be achieved by using the <u>WHO hand hygiene multimodal improvement strategy</u>, which has proved to be highly impactful, leading to a significant improvement in key hand hygiene indicators, a reduction in health care-associated infections and antimicrobial resistance, and substantially helping to stop outbreaks.<sup>5</sup>

Despite overwhelming evidence showing the impact of good hand hygiene practices, many gaps still exist that show inadequate infrastructure and supplies leading to gaps in hand washing behaviour, in particular in health care. For example:

- Globally, 1 in 4 health care facilities do not have access to basic water services.
- 1 in 3 facilities lack hand hygiene resources at the point of care,<sup>6</sup> and in low-income countries only 17% of facilities have continuous availability of alcohol-based hand rub supplies, compared to 75% in high-income countries.<sup>7</sup>
- Compliance with hand hygiene best practices is only around 9% during care of critically ill patients in lowincome countries, while levels of hand hygiene compliance for high-income countries rarely exceed 70%.<sup>8,9</sup>

Through the global <u>Hand Hygiene for All initiative</u>, WHO and UNICEF call upon policy and decision makers to invest in hand hygiene improvement as a whole-of-society effort, and show tangible action to strengthen the enabling environment and ensure vital hand hygiene products and WASH services are readily accessible, across the health system, and for everyone in their community.

WHO provides guidance on the <u>resources considerations</u> needed for making such an investment across the health system and WHHD 2021 represents a critical time for everyone to show commitment to hand hygiene improvement.

For more information, see WHHD key facts and figures, and how to get involved in the campaign.

Seconds save lives – Clean your hands!

#### References

- 1. Jefferson T et al. Physical interventions to interrupt or reduce the spread of respiratory viruses. Cochrane Database Syst Rev. 2020 Nov 20;11:CD006207. doi: 10.1002/14651858.CD006207.pub5
- 2. Chou R et al. Epidemiology of and Risk Factors for Coronavirus Infection in Health Care Workers: A Living Rapid Review. Ann Intern Med. 5 May 2020. doi: 10.7326/M20-1632
- 3. Luangasanatip N et al., Comparative efficacy of interventions to promote hand hygiene in hospital: systematic review and network meta-analysis. BMJ 2015; 28;351:h3728. doi: 10.1136/bmj.h3728
- 4. OECD (2018), Stemming the Superbug Tide: Just A Few Dollars More, OECD Publishing, Paris. https://doi.org/10.1787/9789264307599-en
- 5. Allegranzi B et al. Global implementation of WHO's multimodal strategy for improvement of hand hygiene: a quasi-experimental study. Lancet Infect Dis. 2013; 13:843–51. doi: 10.1016/S1473-3099(13)70163-4
- Global progress report on WASH in health care facilities: Fundamentals first https://www.who.int/publications/i/item/9789240017542
- 7. WHO unpublished data. Global survey on hand hygiene in health care facilities, 2019.
- 8. Erasmus V et al. Systematic review of studies on compliance with hand hygiene guidelines in hospital care. Infect Control Hosp Epidemiol 2010; 31:283-294. doi: 10.1086/650451
- 9. Lambe KA et al. Hand Hygiene Compliance in the ICU: A Systematic Review. Crit Care Med, 2019; 47:1251-1257. doi: 10.1097/CCM.000000000003868

# Special Focus: WHO partnership with SeroTracker — synthesizing "real-time" seroprevalence data to support global pandemic response

As of 2 May 2021, there have been over 151 million confirmed COVID-19 cases reported to WHO worldwide; however, this does not fully represent the true extent of infection with the SARS-COV-2 virus. This is because current surveillance strategies and testing capacities often do not typically include infected individuals who were asymptomatic, often miss mildly symptomatic cases, those who do not have access to testing. Studies measuring seroprevalence are crucial tools for pandemic surveillance and to provide data to inform public health interventions. These studies are designed to measure antibodies against SARS-CoV-2 in a population at a point in time. They provide a more robust estimate of the true extent of the pandemic, population susceptibility to infection (antibody-mediated immunity), and provide data to estimate other critical parameters (e.g. infection fatality ratios) – all of which are key metrics that inform public health decision-making at local, national and international levels.

To date, more than 950 serosurveys have reported results either through pre-prints or peer-reviewed publications. Most available studies have been conducted in high-income countries and many have not used standardized methods, including the use of standardized protocols or used well-performing antibody tests, making it challenging to compare findings between countries, regions and over time. The WHO is supporting countries through the Unity Studies initiative, which provides technical, operational and financial support for countries around the world, particularly low- and middle-income countries (LMICs), to build research capacity and conduct serosurveys following a standardized protocols and well-performing, easy to use antibody tests protocols, including a population-based, age-stratified seroepidemiological investigation protocol and studies of health care workers.

To support the reporting of available seroprevalence studies, WHO has partnered with SeroTracker – a knowledge hub that tracks, displays, maps and synthesizes SARS-CoV-2 seroprevalence and serosurveillance efforts worldwide. Through its partnership with SeroTracker, WHO aims to create the world's largest repository of seroprevalence data, including results from countries performing one or more of the Unity Studies with other SARS-CoV-2 serosurveys. These efforts will help to map COVID-19 infections globally.

Data and information from available SARS-COV-2 seroprevalence studies will be visualized on the <u>SeroTracker digital dashboard and data platform</u>, which will include a webpage dedicated to display research aligned with WHO Unity Studies. The platform will allow users to filter results based on study date, WHO Region, participant demographics; visualize results through maps and graphics; and access study publications.

The WHO-SeroTracker database will additionally be used to regularly synthesize SARS-CoV-2 serosurvey findings to inform public health strategies. Synthesizing findings, through comprehensive meta-analyses across countries and regions, is crucial to understand the global extent of SARS-CoV-2 infection, to better inform decision making, and to identify gaps in knowledge.

#### References

- Arora RK, et al. 2020. SeroTracker: a global SARS-CoV-2 seroprevalence dashboard. Lancet Infectious Diseases. Available from: https://doi.org/10.1016/S1473-3099(20)30631-9
- 2. Bobrovitz N, et al. 2020. Lessons from a rapid systematic review of early SARS-CoV-2 serosurveys. medRxiv (preprint). https://www.medrxiv.org/content/10.1101/2020.05.10.20097451v1
- 3. Bobrovitz N, et al. 2020. Global seroprevalence of SARS-CoV-2 antibodies: a systematic review and meta-analysis. medRxiv (preprint). https://www.medrxiv.org/content/10.1101/2020.11.17.20233460v2

## **Special Focus: Update on SARS-CoV-2 variants**

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 result in changes in transmissibility, clinical presentation and severity, or if they result in changes in public health and social measures (PHSM) implementation by national health authorities. Systems have been established to detect "signals" of potential variants of concern (VOCs) or variants of interest (VOIs) and assess these based on the risk posed to global public health (see also working definitions). National authorities may choose to designate other variants of local interest/concern. Detailed information on currently circulating VOCs and VOIs is available in previously published editions of the Weekly Epidemiological Update. Here we provide a brief update on the geographical distribution of the three VOCs as of 4 May 2021, as well as an update on detected VOIs (Table 2).

As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing, the number of countries/areas/territories (hereafter countries) reporting VOCs and VOIs has continued to increase. Since our last update on 27 April, VOC 202012/01 has been detected in three additional countries, variant 501Y.V2 in ten additional countries, and variant P.1 has been reported in three additional countries. As of 4 May, a total 142 countries have reported VOC 202012/01 (Figure 3), 97 countries variant 501Y.V2 (Figure 4), and 56 countries variant P.1 (Figure 5) – see also Annex 2. The information presented here should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and prioritization of samples for sequencing between countries.

Table 2: SARS-CoV-2 variants of concern (VOC) and variants of interest (VOI), as of 4 May 2021\*

	Nextstrain	Pango	GISAID	Alternate	First	Earliest	Characteristic spike mutations
	clade	lineage	clade	name	detected in	samples	Characteristic spike mutations
	20I/501Y.V1	B.1.1.7	GR/501Y.V1	VOC 202012/01 <sup>†</sup>	United	Sep 2020	69/70del, 144del, N501Y,
					Kingdom		A570D, D614G, P681H, T716I,
							S982A, D1118H
	20H/ <b>501Y.V2</b> <sup>†</sup>	B.1.351	GH/501Y.V2 <sup>†</sup>	VOC 202012/02	South Africa	Aug 2020	D80A, D215G, 241/243del,
VOC							K417N, E484K, N501Y, D614G,
							A701V
	20J/501Y.V3	B.1.1.28.1,	GR/501Y.V3	VOC 202101/02	Brazil and	Dec 2020	L18F, T20N, P26S, D138Y,
		alias P.1 <sup>†</sup>			Japan		R190S, K417T, E484K, N501Y,
							D614G H655Y, T1027I, V1176F
	20A/S.484K	B.1.525	G/484K.V3	-	United	Dec 2020	Q52R, A67V,
					Kingdom and		69/70del, 144del, E484K,
					Nigeria		D614G, Q677H, F888L
	20C/S.452R	B.1.427/	GH/452R.V1	CAL.20C/L452R	United	Jun 2020	S13I, W152C, L452R, D614G
		B.1.429			States of		
					America		
	20B/S.484K	B.1.1.28.2,	GR	-	Brazil	Apr 2020	E484K, D614G, V1176F
		alias P.2					
	-	B.1.1.28.3,	-	PHL-B.1.1.28	Philippines	Feb 2021	141/143del, E484K, N501Y,
		alias P.3			and Japan		D614G P681H, E1092K, H1101Y,
VOI							V1176F
	20C	B.1.526 with	GH	-	United	Nov 2020	L5F, T95I, D253G, D614G,
		E484K or			States of		A701V, E484K or S477N
		S477N			America		
	20C	B.1.616	GH	-	France	Jan 2021	H66D, G142V, 144del, D215G,
							V483A, D614G, H655Y, G669S,
							Q949R, N1187D
	-	B.1.617	G/452R.V3	-	India	Oct 2020	L452R, D614G, P681R, ±E484Q

<sup>&</sup>lt;sup>†</sup>While work is ongoing to establish standardized nomenclature for key variants, these are the names by which WHO will refer to them in this publication.

Figure 3. Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01, as of 4 May 2021

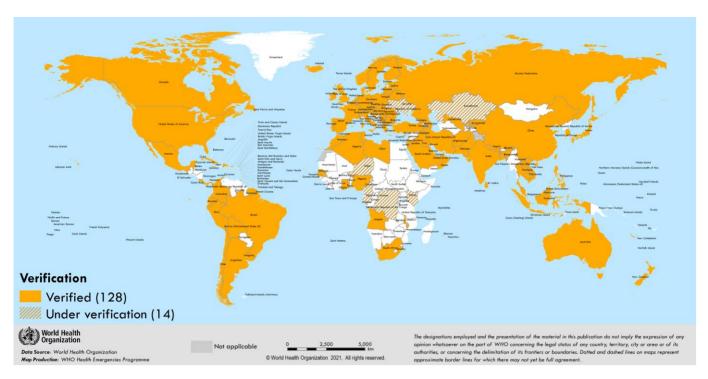
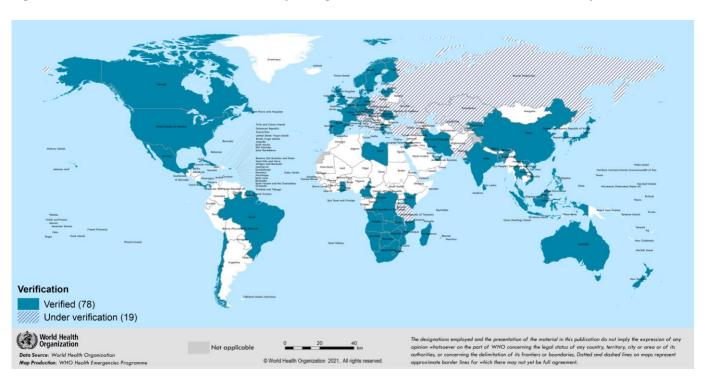


Figure 4. Countries, territories and areas reporting SARS-CoV-2 variant 501Y.V2, as of 4 May 2021



Verification

Verification

Verification

Verification

Verification

Verification

Not opplicable

Not opplic

Figure 5. Countries, territories and areas reporting SARS-CoV-2 variant P.1, as of 4 May 2021

#### **WHO** recommendations

Virus evolution is expected and the more SARS-CoV-2 circulates, the more opportunities it has to mutate. Reducing transmission through established and proven disease control methods such as those outlined in the COVID-19 Strategic Preparedness and Response Plan, as well as avoiding introductions into animal populations are crucial aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critical to curb the spread of SARS-CoV-2 and its variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the implementation of PHSM and infection prevention and control (IPC) measures in health facilities has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities. Authorities are also encouraged to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and to detect unusual events.

## **Additional resources**

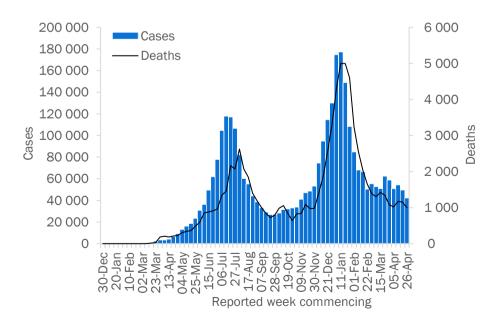
- Working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern
- COVID-19 new variants: Knowledge gaps and research
- COVID-19 Situation Reports from WHO Regional Offices and partners: <u>AFRO</u>, <u>AMRO/PAHO</u>, <u>EMRO</u>, <u>EURO/ECDC</u>, <u>SEARO</u>, <u>WPRO</u>
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19

# **WHO** regional overviews

# **African Region**

The African Region reported over 42 000 new cases and 1000 new deaths, a 15% and a 13% decrease respectively compared to the previous week. Overall, cases and deaths trended downward since peaking in mid-January 2021; however, countries throughout the Region continue to report sustained transmission and increases in some areas. The highest numbers of new cases were reported from South Africa (8472 new cases; 14.3 new cases per 100 000 population; a 3% decrease), Ethiopia (7107 new cases; 6.2 new cases per 100 000; a 34% decrease), and Cameroon (4609 new cases; 17.4 new cases per 100 000; an 8% increase).

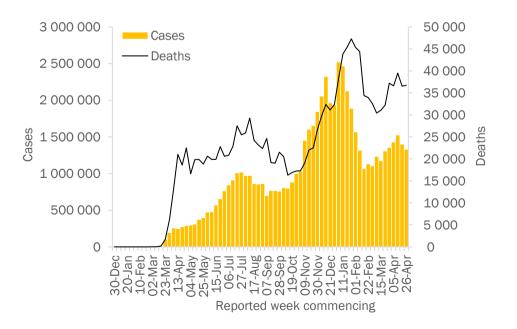
The highest numbers of new deaths were reported from South Africa (281 new deaths; 0.5 new deaths per 100 000 population; a 32% decrease), Ethiopia (178 new deaths; 0.2 new deaths per 100 000; a 12% decrease), and Kenya (141 new deaths; 0.3 new deaths per 100 000; a 1% increase).



# **Region of the Americas**

The Region of the Americas reported over 1.3 million new cases and over 36 000 new deaths, a 5% decrease and a 1% increase respectively compared to the previous week. Case incidence has decreased for a second consecutive week. The highest numbers of new cases were reported from Brazil (421 933 new cases; 198.5 new cases per 100 000; a 4% increase), the United States of America (345 692 new cases; 104.4 new cases per 100 000; a 15% decrease), and Argentina (152 711 new cases; 337.9 new cases per 100 000; an 8% decrease). These three countries account for 69% of cases reported in the region this week.

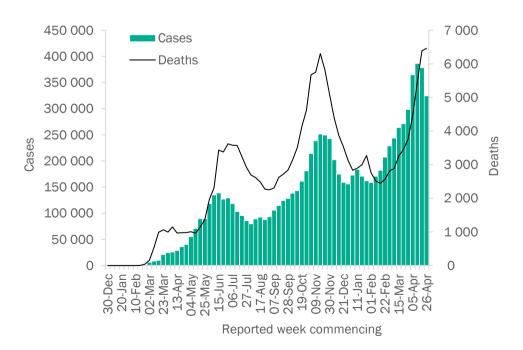
The highest numbers of new deaths were reported from Brazil (17 365 new deaths; 8.2 new deaths per 100 000; a 2% decrease), the United States of America (4728 new deaths; 1.4 new deaths per 100 000; a 5% decrease), and Colombia (3274 new deaths; 6.4 new deaths per 100 000; a 14% increase).



## **Eastern Mediterranean Region**

The Eastern Mediterranean Region reported over 324 000 new cases and over 6400 new deaths, a 14% decrease and a 1% increase respectively compared to the previous week. The number of cases has decreased for a second consecutive week, while deaths continue to increase for a tenth consecutive week. The highest numbers of new cases were reported from the Islamic Republic of Iran (139 118 new cases; 165.6 new cases per 100 000; a 14% decrease), Iraq (45 078 new cases; 112.1 new cases per 100 000; a 17% decrease), and Pakistan (35 503 new cases; 16.1 new cases per 100 000; an 11% decrease).

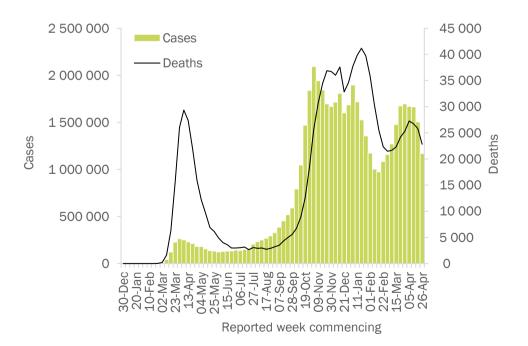
The highest numbers of new deaths were reported from the Islamic Republic of Iran (2970 new deaths; 3.5 new deaths per 100 000; a 6% increase), Pakistan (958 new deaths; 0.4 new deaths per 100 000; a 6% increase), and Tunisia (577 new deaths; 4.9 new deaths per 100 000; a 12% increase).



# **European Region**

The European Region reported over 1.1 million new cases and over 22 000 new deaths, a marked 22% and a 12% decrease respectively compared to the previous week. Cases have decreased for a fourth consecutive week, and deaths have also decreased for a third consecutive week. The highest numbers of new cases were reported from Turkey (257 992 new cases; 305.9 new cases per 100 000; a 32% decrease), France (163 666 new cases; 251.6 new cases per 100 000; a 23% decrease), and Germany (129 404 new cases; 155.6 new cases per 100 000; an 11% decrease).

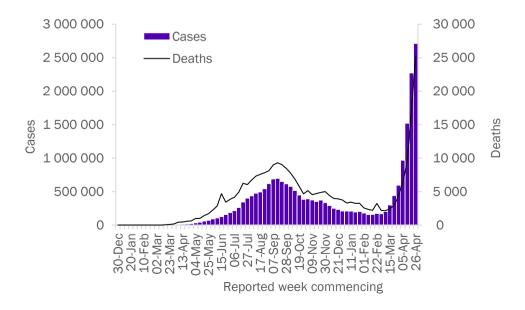
The highest numbers of new deaths were reported from Poland (2653 new deaths; 7.0 new deaths per 100 000; a 22% decrease), the Russian Federation (2630 new deaths; 1.8 new deaths per 100 000; a 1% decrease), and Turkey (2493 new deaths; 3.0 new deaths per 100 000; a 4% increase).



## **South-East Asia Region**

The South-East Asia Region reported over 2.7 million new cases and over 25 000 new deaths, a 19% and a 48% increase respectively compared to the previous week. India is currently driving the vast majority of this upward trend; however, notable increases have also been observed elsewhere in the region, for example in Nepal and Sri Lanka. Among ten countries which have reported cases in this region, eight countries reported an increase in case incidence this week. The highest numbers of new cases were reported from India (2 597 285 new cases; 188.2 new cases per 100 000; a 20% increase), Indonesia (36 088 new cases; 13.2 new cases per 100 000; a 3% decrease), and Nepal (31 806 new cases; 109.2 new cases per 100 000; a 137% increase).

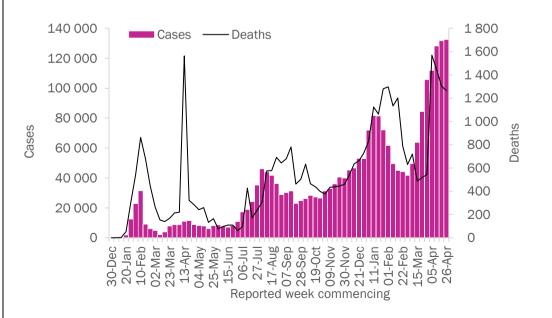
The highest numbers of new deaths were reported from India (23 231 new deaths; 1.7 new deaths per 100 000; a 53% increase), Indonesia (1152 new deaths; 0.4 new deaths per 100 000; a 2% decrease), and Bangladesh (558 new deaths; 0.3 new deaths per 100 000; a 17% decrease).



# **Western Pacific Region**

The Western Pacific Region reported over 132 000 new cases and over 1200 new deaths, a 1% increase and a 3% decrease respectively compared to the previous week. Case incidence continued an upward trend which has been reported for the past eight weeks, while deaths decreased for a third consecutive week. The highest numbers of new cases were reported from the Philippines (57 238 new cases; 52.2 new cases per 100 000; a 10% decrease), Japan (35 084 new cases; 27.7 new cases per 100 000; a 9% increase), and Malaysia (21 342 new cases; 65.9 new cases per 100 000; a 23% increase).

The highest numbers of new deaths were reported from the Philippines (680 new deaths; 0.6 new deaths per 100 000; a 21% decrease), Japan (383 new deaths; 0.3 new deaths per 100 000; a 32% increase), and Malaysia (95 new deaths; 0.3 new deaths per 100 000; a 70% increase).



# Key weekly updates

#### WHO Director-General's key message

## Opening remarks at the media briefing on COVID-19 – 3 May 2021:

- More cases of COVID-19 have been reported globally in the past two weeks than during the first six months of the pandemic.
- Sweden will donate 1 million doses of AstraZeneca Vaxzevria vaccines to COVAX, which follows similar donations by France, New Zealand and Norway, with positive signs from some other countries.
- The Access to COVID-19 Tools Accelerator currently faces a funding gap of 19 billion US dollars, and we
  estimate that we will need a further 35 to 45 billion dollars next year to vaccinate most adults around the
  world. The G7 countries could mobilize a substantial portion of these funds themselves and lead a global
  effort to accelerate vaccination around the world.

#### **COVID-19 Infodemic**

- WHO and UN Global Pulse are building a social listening radio tool to aid the COVID-19 infodemic response
- Fighting misinformation in the time of COVID-19, one click at a time

## **COVID-19 Solidarity Response Fund**

- Partner highlights: Young refugees in South Sudan raise awareness of COVID-19 through song
- Partner highlights: Saving lives—helping refugees access health care in Uganda during the COVID-19 lockdown

#### **COVID-19 Vaccines**

- COVID-19 Vaccination Financing and Budgeting Q&A
- WHO lists Moderna mRNA 1273 vaccine for emergency use
- WHO welcomes Sweden's announcement to share COVID-19 vaccine doses with COVAX
- Disability considerations for COVID-19 vaccination: WHO and UNICEF policy brief, 19 April 2021
- COVID-19 Exercise Programme Drills for Vaccine Deployment

#### **Intra-action Reviews**

- Conducting safe onsite COVID-19 intra-action reviews during the pandemic
- Conducting effective online COVID-19 intra-action reviews during the pandemic

# **Technical guidance and other resources**

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- <u>The Strategic Preparedness and Response Plan (SPRP)</u> outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - o African Region
  - o Region of the Americas
  - o Eastern Mediterranean Region
  - o South-East Asia Region
  - o European Region
  - o Western Pacific Region
- Recommendations and advice for the public:
  - o Protect yourself
  - o Questions and answers
  - o Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 2 May 2021\*\*

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Africa	42 090	3 316 851	295.6	1 000	82 870	7.4	
South Africa	8 472	1 582 842	2 668.8	281	54 406	91.7	Community transmission
Ethiopia	7 107	258 062	224.5	178	3 709	3.2	Community transmission
Cameroon	4 609	70 607	266.0	73	1 064	4.0	Community transmission
Kenya	3 735	160 053	297.7	141	2 744	5.1	Community transmission
Cabo Verde	2 343	24 127	4 339.5	19	220	39.6	Community transmission
Madagascar	2 034	37 296	134.7	61	654	2.4	Community transmission
Algeria	1 575	122 311	278.9	63	3 261	7.4	Community transmission
Angola	1 323	26 815	81.6	23	600	1.8	Community transmission
Botswana	1 079	46 934	1 995.8	21	712	30.3	Community transmission
Namibia	983	48 654	1 914.8	19	643	25.3	Community transmission
Rwanda	690	25 225	194.8	7	335	2.6	Community transmission
Ghana	673	92 601	298.0	2	779	2.5	Community transmission
Gabon	642	23 075	1 036.7	1	139	6.2	Community transmission
Nigeria	469	165 153	80.1	2	2 063	1.0	Community transmission
Guinea	444	22 247	169.4	5	144	1.1	Community transmission
Seychelles	432	5 602	5 696.2	1	27	27.5	Community transmission
Democratic Republic of the Congo	406	29 904	33.4	12	768	0.9	Community transmission
Zambia	353	91 670	498.6	6	1 251	6.8	Community transmission
Mali	336	13 896	68.6	23	485	2.4	Community transmission
Uganda	332	41 907	91.6	2	343	0.7	Community transmission
Mozambique	322	69 965	223.8	7	814	2.6	Community transmission
Senegal	306	40 388	241.2	10	1 109	6.6	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Côte d'Ivoire	294	46 114	174.8	5	286	1.1	Community transmission
Mauritania	210	18 402	395.8	1	455	9.8	Community transmission
Togo	205	12 992	156.9	2	123	1.5	Community transmission
Zimbabwe	196	38 260	257.4	12	1 568	10.5	Community transmission
Central African Republic	187	6 411	132.7	3	88	1.8	Community transmission
Burundi	185	4 038	34.0	0	6	0.1	Community transmission
Equatorial Guinea	135	7 694	548.4	5	112	8.0	Community transmission
Benin	101	7 821	64.5	2	99	0.8	Community transmission
Burkina Faso	88	13 319	63.7	1	157	0.8	Community transmission
Malawi	84	34 095	178.2	1	1 148	6.0	Community transmission
Comoros	79	3 908	449.4	0	146	16.8	Community transmission
Gambia	78	5 898	244.1	1	174	7.2	Community transmission
Chad	72	4 824	29.4	1	170	1.0	Community transmission
Niger	70	5 228	21.6	0	191	0.8	Community transmission
South Sudan	68	10 583	94.5	1	115	1.0	Community transmission
Eritrea	66	3 671	103.5	0	10	0.3	Community transmission
Eswatini	18	18 458	1 591.0	0	671	57.8	Community transmission
Liberia	13	2 099	41.5	0	85	1.7	Community transmission
Sierra Leone	13	4 057	50.9	0	79	1.0	Community transmission
Guinea-Bissau	12	3 736	189.8	0	67	3.4	Community transmission
Sao Tome and Principe	12	2 310	1 054.0	0	35	16.0	Community transmission
Lesotho	3	10 731	500.9	0	316	14.8	Community transmission
Congo	0	10 678	193.5	0	144	2.6	Community transmission
Mauritius	0	1 206	94.8	0	16	1.3	Clusters of cases
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories <sup>iii</sup>							

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Réunion	1 038	20 381	2 276.4	7	148	16.5	Community transmission
Mayotte	198	20 094	7 365.4	1	170	62.3	Community transmission
Americas	1 330 513	62 281 517	6 089.5	36 715	1 517 981	148.4	
Brazil	421 933	14 659 011	6 896.4	17 365	403 781	190.0	Community transmission
United States of America	345 692	32 002 328	9 668.3	4 728	570 537	172.4	Community transmission
Argentina	152 711	2 977 363	6 587.7	2 689	63 865	141.3	Community transmission
Colombia	119 180	2 859 724	5 620.2	3 274	73 720	144.9	Community transmission
Canada	54 844	1 219 425	3 230.9	336	24 219	64.2	Community transmission
Peru	53 790	1 799 445	5 457.5	2 465	61 477	186.5	Community transmission
Chile	41 944	1 204 755	6 302.3	715	26 457	138.4	Community transmission
Mexico	21 325	2 344 755	1 818.6	2 403	216 907	168.2	Community transmission
Uruguay	18 891	198 428	5 712.2	389	2 616	75.3	Community transmission
Paraguay	15 943	279 077	3 912.7	670	6 385	89.5	Community transmission
Costa Rica	14 061	250 991	4 927.1	95	3 231	63.4	Community transmission
Ecuador	11 835	384 589	2 179.8	566	18 724	106.1	Community transmission
Bolivia (Plurinational State of)	9 702	305 594	2 618.0	192	12 975	111.2	Community transmission
Venezuela (Bolivarian Republic of)	8 302	197 683	695.2	127	2 136	7.5	Community transmission
Cuba	7 304	107 622	950.2	73	654	5.8	Community transmission
Guatemala	7 170	228 477	1 275.3	148	7 543	42.1	Community transmission
Honduras	6 637	212 333	2 143.8	186	5 281	53.3	Community transmission
Dominican Republic	2 917	266 861	2 460.0	36	3 487	32.1	Community transmission
Panama	2 218	364 576	8 449.5	32	6 232	144.4	Community transmission
Trinidad and Tobago	1 337	10 824	773.4	12	169	12.1	Community transmission
Jamaica	910	45 777	1 545.9	23	779	26.3	Community transmission
El Salvador	880	69 198	1 066.8	30	2 128	32.8	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Guyana	835	13 283	1 688.8	19	296	37.6	Community transmission
Suriname	431	10 363	1 766.5	11	204	34.8	Clusters of cases
Bahamas	403	10 453	2 658.1	3	199	50.6	Clusters of cases
Haiti	136	13 094	114.8	3	254	2.2	Community transmission
Saint Lucia	89	4 552	2 478.9	4	74	40.3	Community transmission
Belize	69	12 668	3 185.9	2	323	81.2	Community transmission
Nicaragua	48	5 498	83.0	1	182	2.7	Community transmission
Barbados	43	3 863	1 344.2	0	44	15.3	Community transmission
Saint Vincent and the Grenadines	34	1 864	1 680.2	1	11	9.9	Community transmission
Antigua and Barbuda	10	1 232	1 258.1	1	32	32.7	Clusters of cases
Grenada	2	161	143.1	0	1	0.9	Sporadic cases
Dominica	1	174	241.7	0	0	0.0	Clusters of cases
Saint Kitts and Nevis	1	45	84.6	0	0	0.0	No cases
Territories <sup>iii</sup>							
Puerto Rico	4 506	131 956	4 612.5	47	2 310	80.7	Community transmission
Guadeloupe	1 707	14 634	3 657.4	34	228	57.0	Community transmission
Martinique	1 381	11 139	2 968.3	13	79	21.1	Community transmission
French Guiana	717	19 543	6 543.1	3	101	33.8	Community transmission
Curaçao	159	12 181	7 423.2	9	108	65.8	Community transmission
Aruba	139	10 608	9 935.7	3	98	91.8	Community transmission
Bermuda	78	2 393	3 842.8	5	28	45.0	Community transmission
United States Virgin Islands	45	3 125	2 992.6	0	27	25.9	Community transmission
Saint Martin	39	1 749	4 524.2	1	14	36.2	Community transmission
Anguilla	35	93	619.9	0	0	0.0	Clusters of cases
Saint Barthélemy	34	988	9 994.9	0	1	10.1	Clusters of cases
Sint Maarten	18	2 230	5 200.3	0	27	63.0	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Turks and Caicos Islands	14	2 390	6 172.8	0	17	43.9	Clusters of cases
Cayman Islands	9	543	826.2	0	2	3.0	Sporadic cases
Bonaire	4	1 531	7 320.1	1	16	76.5	Community transmission
British Virgin Islands	0	194	641.6	0	1	3.3	Clusters of cases
Falkland Islands (Malvinas)	0	63	1 808.8	0	0	0.0	Sporadic cases
Montserrat	0	20	400.1	0	1	20.0	No cases
Saba	0	6	310.4	0	0	0.0	No cases
Saint Pierre and Miquelon	0	25	431.4	0	0	0.0	Sporadic cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	324 394	9 147 412	1 251.7	6 461	183 431	25.1	
Iran (Islamic Republic of)	139 118	2 516 157	2 995.7	2 970	72 090	85.8	Community transmission
Iraq	45 078	1 070 366	2 661.1	281	15 498	38.5	Community transmission
Pakistan	35 503	825 519	373.7	958	17 957	8.1	Community transmission
United Arab Emirates	13 023	521 948	5 277.3	22	1 591	16.1	Clusters of cases
Tunisia	12 162	310 734	2 629.2	577	10 808	91.4	Community transmission
Jordan	11 654	712 077	6 979.0	308	8 871	86.9	Community transmission
Kuwait	9 866	275 270	6 445.7	58	1 569	36.7	Community transmission
Oman	7 975	193 253	3 784.4	68	2 010	39.4	Community transmission
Lebanon	7 893	527 508	7 728.6	186	7 302	107.0	Community transmission
Bahrain	7 662	177 997	10 460.7	28	648	38.1	Community transmission
Saudi Arabia	7 148	418 411	1 201.9	81	6 968	20.0	Community transmission
Egypt	7 014	228 584	223.4	404	13 402	13.1	Clusters of cases
Qatar	4 806	206 302	7 160.6	47	465	16.1	Community transmission
Libya	2 756	177 508	2 583.3	82	3 029	44.1	Community transmission
Morocco	2 525	511 562	1 386.0	38	9 026	24.5	Community transmission
Afghanistan	1 279	60 122	154.4	55	2 637	6.8	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Syrian Arab Republic	819	22 818	130.4	72	1 598	9.1	Community transmission
Somalia	456	13 915	87.6	24	713	4.5	Community transmission
Djibouti	375	11 121	1 125.6	13	145	14.7	Community transmission
Yemen	220	6 329	21.2	54	1 230	4.1	Community transmission
Sudan	195	33 944	77.4	29	2 349	5.4	Clusters of cases
Territories <sup>iii</sup>							
occupied Palestinian territory	6 867	325 967	6 389.7	106	3 525	69.1	Community transmission
Europe	1 166 859	51 920 795	5 564.5	22 819	1 084 814	116.3	
Kosovo <sup>[1]</sup>	1 560	105 332		60	2 168		Community transmission
Turkey	257 992	4 849 408	5 749.9	2 493	40 504	48.0	Community transmission
France	163 666	5 553 806	8 539.1	1 963	103 994	159.9	Community transmission
Germany	129 404	3 416 822	4 108.4	1 628	83 192	100.0	Community transmission
Italy	86 100	4 035 617	6 766.5	2 012	121 033	202.9	Clusters of cases
Russian Federation	60 686	4 823 255	3 305.1	2 630	110 862	76.0	Clusters of cases
Ukraine	57 909	2 083 180	4 763.3	2 273	44 596	102.0	Community transmission
Netherlands	49 169	1 502 081	8 628.9	131	17 169	98.6	Community transmission
Poland	44 377	2 803 233	7 385.1	2 653	68 068	179.3	Community transmission
Spain	30 950	3 514 942	7 426.0	169	78 080	165.0	Community transmission
Sweden	29 792	973 604	9 427.2	19	14 048	136.0	Community transmission
Belgium	19 669	995 559	8 640.2	260	24 284	210.8	Community transmission
Kazakhstan	19 503	381 078	2 029.5	197	4 542	24.2	Clusters of cases
Czechia	16 038	1 634 114	15 280.7	397	29 343	274.4	Community transmission
The United Kingdom	15 360	4 418 534	6 508.8	107	127 524	187.9	Community transmission
Greece	14 692	346 422	3 232.0	503	10 453	97.5	Community transmission
Hungary	13 374	782 892	8 013.6	1 177	27 802	284.6	Community transmission
Austria	13 195	616 614	6 927.4	157	9 978	112.1	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Serbia	12 959	690 931	9 974.9	190	6 386	92.2	Community transmission
Croatia	12 547	335 173	8 259.2	328	7 182	177.0	Community transmission
Romania	11 850	1 056 572	5 466.3	927	28 194	145.9	Community transmission
Azerbaijan	8 857	320 322	3 159.3	196	4 538	44.8	Clusters of cases
Switzerland	8 763	656 952	7 590.8	36	9 971	115.2	Community transmission
Georgia	8 694	312 445	7 832.3	126	4 151	104.1	Community transmission
Lithuania	8 383	249 680	8 936.0	102	3 950	141.4	Community transmission
Belarus	8 308	359 982	3 809.6	69	2 552	27.0	Community transmission
Bulgaria	7 746	404 846	5 823.9	585	16 444	236.6	Clusters of cases
Denmark	5 035	252 045	4 328.6	15	2 489	42.7	Community transmission
Cyprus	4 796	66 372	7 474.3	15	313	35.2	Clusters of cases
Slovenia	4 696	241 311	11 513.7	33	4 567	217.9	Clusters of cases
Latvia	4 415	119 370	6 257.4	38	2 139	112.1	Community transmission
Armenia	3 575	216 863	7 318.5	121	4 139	139.7	Community transmission
Bosnia and Herzegovina	3 361	198 832	6 060.4	337	8 579	261.5	Community transmission
Ireland	3 233	249 437	5 024.5	34	4 906	98.8	Community transmission
Slovakia	3 187	383 098	7 019.2	271	11 766	215.6	Clusters of cases
Portugal	2 983	836 947	8 128.9	17	16 976	164.9	Clusters of cases
Norway	2 959	112 540	2 096.7	20	756	14.1	Clusters of cases
Uzbekistan	2 616	91 643	273.8	9	652	1.9	Clusters of cases
Estonia	2 470	122 685	9 231.5	25	1 168	87.9	Clusters of cases
North Macedonia	2 307	152 581	7 323.7	241	4 891	234.8	Community transmission
Republic of Moldova	2 262	251 160	6 226.1	117	5 826	144.4	Community transmission
Kyrgyzstan	2 229	96 060	1 472.4	37	1 619	24.8	Clusters of cases
Finland	1 271	86 808	1 571.1	11	914	16.5	Community transmission
Luxembourg	1 195	67 397	10 764.4	7	797	127.3	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Montenegro	839	97 613	15 541.9	38	1 503	239.3	Clusters of cases
Albania	776	131 185	4 558.5	24	2 396	83.3	Clusters of cases
Israel	561	838 535	9 687.8	15	6 365	73.5	Community transmission
Andorra	208	13 232	17 125.5	1	125	161.8	Community transmission
Malta	158	30 307	5 889.8	3	415	80.7	Clusters of cases
Iceland	82	6 472	1 777.4	0	29	8.0	Community transmission
Liechtenstein	51	3 022	7 799.3	0	56	144.5	Sporadic cases
Monaco	28	2 457	6 260.8	1	32	81.5	Sporadic cases
San Marino	19	5 066	14 927.2	1	90	265.2	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories <sup>iii</sup>							
Isle of Man	2	1 587	1 866.4	0	29	34.1	No cases
Faroe Islands	1	664	1 358.8	0	1	2.0	Sporadic cases
Jersey	1	3 234	3 000.1	0	69	64.0	Community transmission
Gibraltar	0	4 283	12 712.6	0	94	279.0	Clusters of cases
Greenland	0	31	54.6	0	0	0.0	No cases
Guernsey	0	822	1 275.1	0	14	21.7	Community transmission
South-East Asia	2 709 582	22 675 230	1 121.8	25 262	280 220	13.9	
India	2 597 285	19 557 457	1 417.2	23 231	215 542	15.6	Clusters of cases
Indonesia	36 088	1 672 880	611.6	1 152	45 652	16.7	Community transmission
Nepal	31 806	328 893	1 128.8	162	3 298	11.3	Clusters of cases
Bangladesh	18 184	760 584	461.8	558	11 510	7.0	Community transmission
Thailand	13 524	68 984	98.8	105	245	0.4	Clusters of cases
Sri Lanka	9 276	109 862	513.1	49	687	3.2	Clusters of cases
Maldives	2 616	30 237	5 593.8	2	73	13.5	Clusters of cases

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Timor-Leste	588	2 396	181.7	0	3	0.2	Clusters of cases
Myanmar	127	142 831	262.5	3	3 209	5.9	Clusters of cases
Bhutan	88	1 106	143.3	0	1	0.1	Sporadic cases
Western Pacific	132 543	2 470 005	125.7	1 266	37 488	1.9	
Philippines	57 238	1 046 637	955.1	680	17 354	15.8	Community transmission
Japan	35 084	597 225	472.2	383	10 296	8.1	Clusters of cases
Malaysia	21 342	411 594	1 271.7	95	1 521	4.7	Community transmission
Mongolia	8 066	37 285	1 137.3	41	115	3.5	Clusters of cases
Cambodia	4 545	14 520	86.8	29	103	0.6	Sporadic cases
Republic of Korea	4 353	123 240	240.4	20	1 833	3.6	Clusters of cases
Lao People's Democratic Republic	574	821	11.3	0	0	0.0	Sporadic cases
Papua New Guinea	536	11 206	125.2	13	115	1.3	Community transmission
Singapore	213	61 179	1 045.7	1	31	0.5	Sporadic cases
China	185	103 649	7.0	2	4 858	0.3	Clusters of cases
Australia	154	29 812	116.9	0	910	3.6	Clusters of cases
Viet Nam	109	2 942	3.0	0	35	0.0	Clusters of cases
Fiji	32	119	13.3	0	2	0.2	Sporadic cases
New Zealand	16	2 261	46.9	0	26	0.5	Clusters of cases
Brunei Darussalam	4	227	51.9	0	3	0.7	Sporadic cases
Solomon Islands	0	20	2.9	0	0	0.0	No cases
Territories <sup>iii</sup>							
Guam	60	7 757	4 596.1	0	136	80.6	Clusters of cases
French Polynesia	24	18 758	6 677.6	0	141	50.2	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	4	168	291.9	0	2	3.5	Pending
Wallis and Futuna	4	453	4 028.1	2	7	62.2	Sporadic cases

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Marshall Islands	0	4	6.8	0	0	0.0	No cases
New Caledonia	0	124	43.4	0	0	0.0	Sporadic cases
Samoa	0	1	0.5	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Global	5 705 981	151 812 556		93 523	3 186 817		

<sup>\*</sup>See Annex: Data, table and figure notes

Annex 2. List of countries/territories/areas reporting variants of concern as of 4 May 2021\*\*

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Afghanistan	Verified	-	
Albania	Under verification	-	-
Algeria	Verified	-	-
Angola	Verified	Verified	-
Argentina	Verified	-	Verified
Armenia	Under verification	-	-
Aruba	Verified	Verified	Verified
Australia	Verified	Verified	Verified
Austria	Verified	Verified	Verified
Azerbaijan	Verified	-	-
Bahrain	Verified	Verified*	-
Bangladesh	Verified	Verified	-
Barbados	Verified	-	-
Belarus	Verified	-	-
Belgium	Verified	Verified	Verified
Belize	Verified	-	-
Bolivia (Plurinational State			
of)	Verified	-	
Bonaire	Verified	-	
Bosnia and Herzegovina	Under verification	-	-
Botswana	-	Verified	
Brazil	Verified	Verified	Verified
Brunei Darussalam	Verified	Verified	-
Bulgaria	Verified	-	-
Cabo Verde	Verified	-	-
Cambodia	Verified	-	_

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
	Under		
Cameroon	verification*	Verified	-
Canada	Verified	Verified	Verified
Cayman Islands	Verified	-	-
Chile	Verified	Verified	Verified
China	Verified	Verified	Verified
Colombia	Verified	-	Verified
Comoros	-	Verified	-
Costa Rica	Verified	Verified	Verified
		Under	
Croatia	Verified	verification	-
Cuba	Verified	Verified	-
Curaçao	Verified	-	-
Cyprus	Verified	-	-
		Under	
Czechia	Verified	verification	-
Democratic Republic of			
the Congo	Under verification	Verified	-
Denmark	Verified	Verified	Verified
Dominican Republic	Verified	-	-
Ecuador	Verified	-	Verified
		Under	
Estonia	Verified	verification	-
Eswatini	-	Verified	-
Faroe Islands	-	-	Verified
Finland	Verified	Verified	Verified
France	Verified	Verified	Verified
French Guiana	Verified	Verified	Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
French Polynesia	Verified	-	Verified
	Under		
Gabon	verification*	-	-
Gambia	Verified	-	-
Georgia	Verified	-	-
Germany	Verified	Verified	Verified
Ghana	Verified	Verified	-
Gibraltar	Under verification	-	-
Greece	Verified	Verified	-
Grenada	Verified	-	-
Guadeloupe	Verified	Verified*	-
Guyana	-	-	Verified
		Under	
Hungary	Verified	verification	-
Iceland	Verified	-	
India	Verified	Verified	Verified
Indonesia	Verified	Verified*	-
Iran (Islamic Republic of)	Verified	Verified*	-
Iraq	Verified	-	-
Ireland	Verified	Verified	Under verification
			Under
Israel	Verified	Verified	verification*
n - l	M - 20 - 4	Under	Market and
	Verified	verification	Verified
Jamaica .	Verified	-	-
Japan	Verified	Verified	Verified
Jordan	Verified Verified		Verified
Kazakhstan	Under verification	Under verification	-

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Kenya	Under verification	Verified	-
Kosovo <sup>[1]</sup>	Verified	-	-
Kuwait	Verified	-	-
Kyrgyzstan	Verified	Verified	-
Lao People's Democratic			
Republic	Verified	-	-
			Under
Latvia	Verified	Verified	verification*
Lebanon	Verified	-	-
Lesotho	-	Verified	-
Libya	Verified	Verified	-
Liechtenstein	Verified	-	-
Lithuania	Verified	/erified Verified	
			Under
Luxembourg	Verified	Verified	verification
Madagascar	-	Verified*	-
Malawi	Verified	Verified	-
Malaysia	Verified	Verified	-
		Under	
Malta	Verified	verification	Verified
Martinique	Verified	Verified*	-
		Under	
Mauritius	Under verification	verification*	-
Mayotte	Verified	Verified	-
Mexico	Verified	Verified*	Verified
	.,	Under	
Monaco	Verified	verification	-
Montenegro	Verified	-	-
Morocco	Verified	-	-
Mozambique	-	Verified	-

Country/Territory/Area	VOC 202012/01 501Y.v2 (B.1.1.7) (B.1.351)		P.1 (B.1.1.28)
Namibia	-	Verified	-
Nepal	Verified	-	-
Netherlands	Verified	Verified	Verified
New Caledonia	Verified	-	-
New Zealand	Verified Under	Verified	Under verification
Niger	verification*	_	_
Nigeria	Verified	_	
North Macedonia	Verified	Verified	
Norway	Verified	Verified	Verified
occupied Palestinian	vermed	Vermeu	Vermeu
territory	Verified	Verified	-
Oman	Verified	-	-
		Under	Under
Pakistan	Verified	verification*	verification*
Panama	Verified	Verified	Verified
Paraguay	-	-	Verified
Peru	Verified	-	Verified
Philippines	Verified	Verified	Verified
Poland	Verified	Under verification	Under verification
Portugal	Verified	Verified	Under verification
Puerto Rico	Verified	Verified Verified	
Qatar	Verified	Verified	-
Republic of Korea	Verified	Verified	Verified
Republic of Moldova	Under verification	-	-
Réunion	Verified	Verified	Verified
Romania	Verified	Verified	Verified

Country/Territory/Area	VOC 202012/01 501Y.v2 (B.1.1.7) (B.1.351)		P.1 (B.1.1.28)
		Under	
Russian Federation	Verified verification		-
		Under	
Rwanda	Under verification	verification	-
Saint Barthélemy	Verified	_	-
Saint Lucia	Verified	-	-
Saint Martin	Verified	Verified	-
Saudi Arabia	Verified	-	-
Senegal	Verified	-	-
Serbia	Verified	-	-
		Under	
Seychelles	-	verification*	-
Singapore	Verified	Verified	-
Sint Maarten	Verified	-	-
		Under	
Slovakia	Verified	verification	-
		_	Under
Slovenia	Verified	Verified	verification
South Africa	Verified	Verified	-
Spain	Verified	Verified	Verified
Sri Lanka	Verified	Verified	-
Suriname	Verified	Verified	Verified
			Under
Sweden	Verified	Verified	verification
			Under
Switzerland	Verified	Verified	verification
Thailand	Verified	Verified	-
The United Kingdom	Verified	Verified	Verified
Togo	Verified	-	-
Trinidad and Tobago	Verified	_	Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Tunisia	Verified	-	-
		Under	Under
Turkey	Verified	verification	verification
Turks and Caicos Islands	Verified	-	-
		Under	
Ukraine	Under verification	verification	-
United Arab Emirates	Verified	Verified	Verified
United Republic of		Under	
Tanzania	-	verification	-
United States of America	Verified	Verified	Verified
Uruguay	Verified	-	Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
		Under	
Uzbekistan	Verified	verification	-
Venezuela (Bolivarian			
Republic of)	-	-	Verified
Viet Nam	Verified	Verified	-
Wallis and Futuna	Verified	-	-
Zambia	-	Verified	-
Zimbabwe	-	Verified	-

<sup>\*</sup>Newly reported in this update.

<sup>&</sup>quot;Verified" indicates that information for this variant was received by WHO from official sources.

<sup>&</sup>quot;Under verification" indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available. Variant P.1 for Saint Martin was excluded this week based on further information received.

<sup>\*\*</sup>See Annex: Data, table and figure notes

#### Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 746 cases and 13 deaths reported from international conveyances.

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

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

<sup>1</sup> Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

<sup>ii</sup> Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see:

Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.

- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that
  are not directly linked to imported cases, but which are all linked by time, geographic location and common
  exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of
  infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorizations are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
  - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups.
     Low risk of infection for the general population.
  - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days;
     transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
  - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission
     widespread and not focused in population sub-groups. High risk of infection for the general population.
  - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

<sup>&</sup>quot;Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.



# **COVID-19 Weekly Epidemiological Update**

Data as received by WHO from national authorities, as of 9 May 2021, 10 am CET

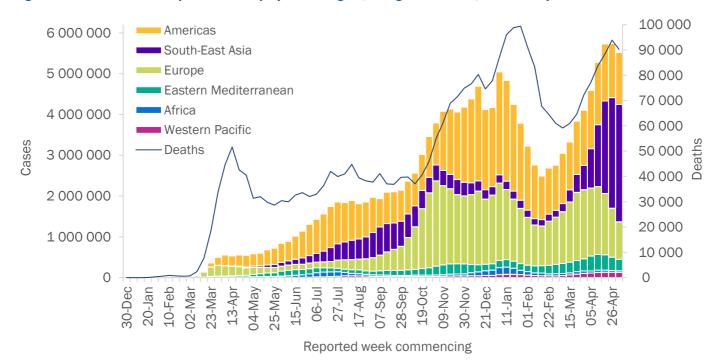
#### In this edition:

- Global overview
- Special focus: SARS-CoV-2 variants
- WHO regional overviews
- Key weekly updates

## Global overview

The number of new COVID-19 cases and deaths globally decreased slightly this week, with over 5.5 million cases and over 90 000 deaths (Figure 1). Case and death incidence, however, remains at the highest level since the beginning of the pandemic. New weekly cases decreased in the regions of Europe and Eastern Mediterranean, while the South-East Asia Region continued an upward trajectory for 9 weeks and reported a further 6% increase last week (Table 1). Death incidence increased in the South-East Asia and Western Pacific regions. While India continues to account for 95% of cases and 93% of deaths in the South-East Asia Region, as well as 50% of global cases and 30% of global deaths, worrying trends have been observed in neighbouring countries. In all WHO Regions there are countries which have been showing a sustained upward trend in cases and deaths over several weeks.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 9 May 2021\*\*



<sup>\*\*</sup>See Annex: Data, table and figure notes

The highest numbers of new cases were reported from India (2 738 957 new cases; 5% increase), Brazil (423 438 new cases; similar to previous week), the United States of America (334 784 new cases; 3% decrease), Turkey (166 733 new cases; 35% decrease), and Argentina (140 771 new cases; 8% decrease).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 9 May 2021\*\*

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 272 491 (23%)	-4%	63 554 005 (40%)	33 879 (38%)	-8%	1 551 860 (47%)
Europe	919 119 (17%)	-23%	52 871 662 (34%)	19 056 (21%)	-18%	1 104 629 (34%)
South-East Asia	2 877 410 (52%)	6%	25 552 640 (16%)	28 977 (32%)	15%	309 197 (9%)
Eastern Mediterranean	280 853 (5%)	-13%	9 428 375 (6%)	5 605 (6%)	-13%	189 052 (6%)
Africa	40 656 (1%)	-5%	3 357 846 (2%)	1 034 (1%)	3%	83 904 (3%)
Western Pacific	127 073 (2%)	-4%	2 597 134 (2%)	1 691 (2%)	34%	39 179 (1%)
Global	5 517 602 (100%)	-4%	157 362 408 (100%)	90 242 (100%)	-4%	3 277 834 (100%)

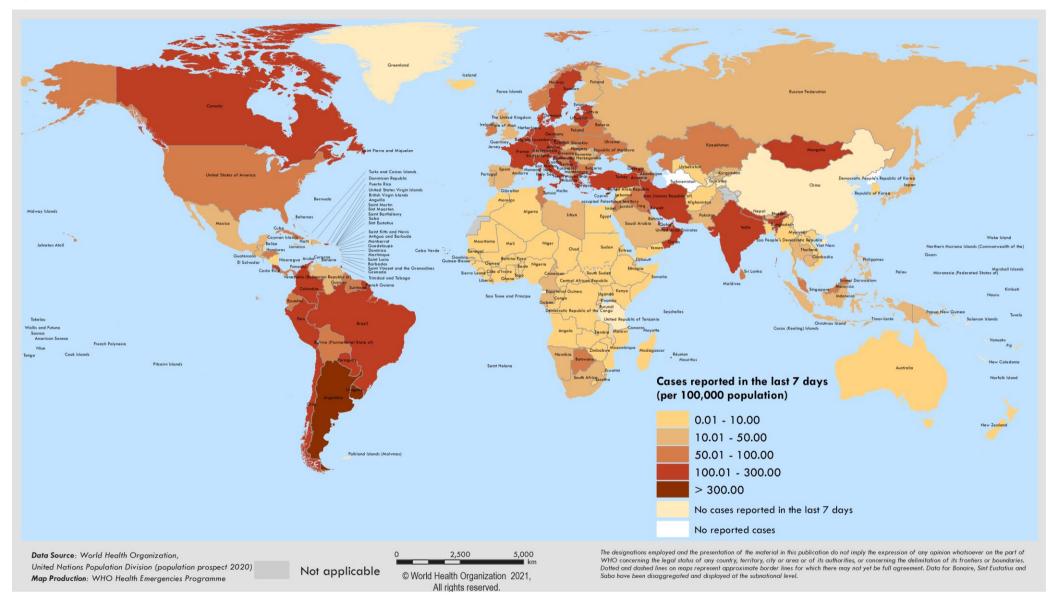
<sup>\*</sup>Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior

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

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

<sup>\*\*</sup>See Annex: Data, table and figure notes

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 27 April – 9 May 2021\*\*



<sup>\*\*</sup>See Annex: Data, table and figure notes

## **Special Focus: Update on SARS-CoV-2 variants**

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 result in changes in transmissibility, clinical presentation and severity, or if they result in changes in public health and social measures (PHSM) implementation by national health authorities. Systems have been established to detect "signals" of potential variants of concern (VOCs) or variants of interest (VOIs) and assess these based on the risk posed to global public health (see also working definitions). National authorities may choose to designate other variants of local interest/concern. Detailed information on currently circulating VOCs and VOIs is available in previously published editions of the Weekly Epidemiological Update. Here we provide information on a newly designated VOC within lineage B.1.617, and provide an update on the geographical distribution, and emerging evidence surrounding phenotypic characteristics of all designated VOIs and VOCs.

#### Newly designated VOC within lineage B.1.617

In consultation with the WHO SARS-CoV-2 Virus Evolution Working Group, WHO has determined that viruses within the lineage B.1.617 have been characterized as a VOC. B.1.617 contains three sub-lineages (Table 2), which differ by few but potentially relevant mutations in the spike protein as well as prevalence of detection globally. As of 11 May, over 4500 sequences have been uploaded to GISAID and assigned to B.1.617 from 44 countries in all six WHO regions, and WHO has received reports of detections from five additional countries (Figure 3). Though there may be important differences among the three sublineages, currently available evidence is too limited for VOI/VOC characterization by sublineage. Future delineation of sublineages as VOIs/VOCs may be possible as our understanding by sublineage and relative importance of their epidemiology increases. At the present time, WHO has designated B.1.617 as a VOC based on early evidence of phenotypic impacts compared to other circulating virus variants, namely:

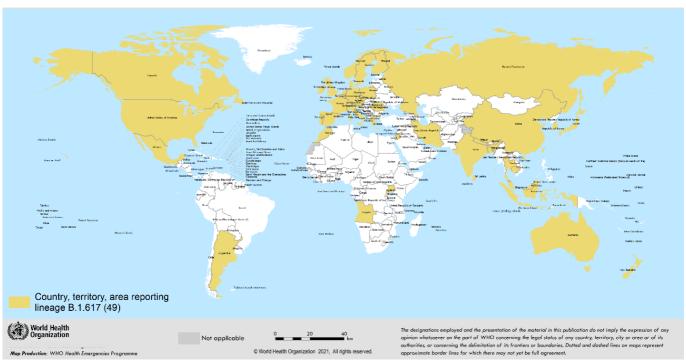
- B.1.617 sublineages appear to have higher rates of transmission, including observed rapid increases in prevalence in multiple countries (moderate evidence available for B.1.617.1 and B.1.617.2), and
- Preliminary evidence suggests potential reduced effectiveness of Bamlanivimab, a monoclonal antibody used for COVID-19 treatment, and potentially slightly reduced susceptibility to neutralisation antibodies (limited evidence available for B.1.617.1).

Table 2: Overview of B.1.617 sublineages, as of 11 May 2021

Sublineage	B.1.617.1	B.1.617.2	B.1.617.3
Sequences in GISAID	2001	2507	67
Number of countries	34 (in 6 WHO regions)	31 (in 5 WHO regions)	4 (in 3 WHO regions)
reporting detections			
Number of lineage-	7	8	6
defining spike mutations*			
Characteristic spike	G142D, E154K, L452R,	T19R, G142D, del157/158, L452R,	T19R, L452R, E484Q,
mutations*	E484Q, D614G, P681R,	T478K, D614G, P681R, D950N	D614G, P681R, D950N
	Q1071H		

<sup>\*</sup>Mutations found in >60% of sequences

Figure 3. Countries, territories and areas with B.1.617.1, B.1.617.2 or B.1.617.3 sequences uploaded to GISAID and/or reported to WHO as of 11 May 2021\*



<sup>\*</sup> Unverified detections based primarily on GISAID, subject to change as WHO validates detection with Member States.

Viruses in the B.1.617 lineage were first reported in India in October 2020. The resurgence in COVID-19 cases and deaths in India has raised questions on the potential role of B.1.617 and other variants (e.g., B.1.1.7) in circulation. A recent risk assessment of the situation in India conducted by WHO found that resurgence and acceleration of COVID-19 transmission in India had several potential contributing factors, including increase in the proportion of cases of SARS-CoV-2 variants with potentially increased transmissibility; several religious and political mass gathering events which increased social mixing; and, under use of and reduced adherence to public health and social measures (PHSM). The exact contributions of these each of these factors on increased transmission in India are not well understood.

Approximately 0.1% of positive samples in India have been sequenced and uploaded to GISAID to identify SARS-CoV-2 variants. The prevalence of several VOCs including B.1.1.7 and B.1.612 sublineages increased concurrent to the surge in COVID-19 cases reported in India. While B.1.1.7 and B.1.612.1 variants have begun to wane in recent weeks, a marked increase in the proportion of viruses sequenced as B.1.612.2 has been observed over the same period. Since the identification of these variants through late April 2021, B.1.617.1 and B.1.617.2 accounted for 21% and 7% of sequenced samples from India, respectively.<sup>a</sup>

Preliminary analyses conducted by WHO using sequences submitted to GISAID suggests that B.1.617.1 and B.1.617.2 have a substantially higher growth rate than other circulating variants in India, suggesting potential increased transmissibility compared. Too few sequences of B.1.617.3 have been detected to date to assess its relative transmissibility.

Other studies suggest that the case numbers increased more rapidly during the most recent surge when variants B.1.1.7 and B.1.617 were circulating, compared to the first surge (June to October 2020).<sup>b</sup> A structural analysis of B.1.617 receptor binding domain (RBD) mutations (L452R and E484Q, along with P681R in the furin cleavage site) suggest that mutations in these variants may result in increased ACE2 binding and rate of S1-S2 cleavage resulting in better transmissibility, and possibly capacity to escape binding and neutralization by some monoclonal antibodies.<sup>c</sup> In a preliminary study on hamsters, infection with B.1.617.1 resulted in increased body weight loss, higher viral load in lungs and pronounced lung lesions as compared to B.1 variants (D614G).<sup>d</sup>

Potential impacts of B.1.617 lineage on effectiveness of vaccines or therapeutics, or reinfection risks, remain uncertain. Preliminary laboratory studies awaiting peer review suggest a limited reduction in neutralisation by antibodies; however, real-world impacts may be limited. One study found a seven-fold reduction in neutralization effectiveness against B.1.617.1 of antibodies generated by vaccination with Moderna - mRNA-1273 and Pfizer BioNTech-Comirnaty vaccines. A second study also found a reduction in neutralization against virus carrying the E484Q mutation (contained in B.1.617.1 and B.1.617.3) for Pfizer BioNTech - Comirnaty vaccine, similar to that found with the E484K mutation. A third study reviewing a limited sample of convalescent sera of COVID-19 cases (n=17) and sera from recipients of the Bharat - Covaxin vaccine (n=23) concluded that most neutralizing activity against B.1.617 was retained. A fourth study reported an approximately three-fold decrease in neutralization activity by plasma from recipients of Pfizer BioNTech - Comirnaty vaccine (n=15) against B.1.617, and a limited two-fold decrease by convalescent sera from cases with severe COVID-19 (n=15). The same study showed that B.1.617.1 (with additional spike mutations R21T, and Q218H) mediates increased entry into certain human and intestinal cell lines, and was resistant to the monoclonal antibody Bamlanivimab; however, it was efficiently inhibited by Imdevimab and by a cocktail of Casirivimab and Imdevimab.

Outside of India, the United Kingdom has reported the largest number of cases sequenced as B.1.617 sublineages, and recently designated B.1.617.2 as a national variant of concern. This follows a recent steep increase in the number of cases sequenced as B.1.617 sublineages, and a national assessment that characterized B.1.617.2 as at least equivalent in terms of transmissibility as VOC B.1.1.7; however, they noted insufficient data to assess the potential for immune escape. As of 5 May, the United Kingdom has reported 520 genomically confirmed B.1.617.2 cases (of which approximately two-thirds were domestically acquired), 261 confirmed B.1.617 cases (without further delineation), and nine confirmed B.1.617.3 cases.

Further robust studies into the phenotypic impacts of these variants, including impacts on epidemiological characteristics (transmissibility, severity, re-infection risk, etc.) and impact on countermeasures, are urgently needed.

#### References

- <sup>a</sup> Outbreak.info. SARS-CoV-2 Mutation Reports: Lineage Mutation Tracker. https://outbreak.info/situation-reports
- <sup>b</sup> Ranjan, R., Sharma, A., Verma, M.K., 2021. Characterization of the Second Wave of COVID-19 in India. medRxiv 2021.04.17.21255665. https://doi.org/10.1101/2021.04.17.21255665
- <sup>c</sup> Cherian, S., Potdar, V., Jadhav, S., et al 2021. Convergent evolution of SARS-CoV-2 spike mutations, L452R, E484Q and P681R, in the second wave of COVID-19 in Maharashtra, India. bioRxiv 2021.04.22.440932. https://doi.org/10.1101/2021.04.22.440932
- <sup>d</sup> Yadav, P.D., Mohandas, S., Shete, A.M., et al 2021. SARS CoV-2 variant B.1.617.1 is highly pathogenic in hamsters than B.1 variant. bioRxiv 2021.05.05.442760. https://doi.org/10.1101/2021.05.05.442760
- <sup>e</sup> Yadav, P.D., Sapkal, G.N., Abraham, P., et al 2021. Neutralization of variant under investigation B.1.617 with sera of BBV152 vaccinees. bioRxiv 2021.04.23.441101. https://doi.org/10.1101/2021.04.23.441101
- <sup>f</sup> Edara, V.-V., Lai, L., Sahoo, M., et al 2021. Infection and vaccine-induced neutralizing antibody responses to the SARS-CoV-2 B.1.617.1 variant. bioRxiv 2021.05.09.443299. https://doi.org/10.1101/2021.05.09.443299
- <sup>g</sup> Ferreira, I., Datir, R., Papa, G., et al 2021. SARS-CoV-2 B.1.617 emergence and sensitivity to vaccine-elicited antibodies. bioRxiv 2021.05.08.443253. https://doi.org/10.1101/2021.05.08.443253
- h Public Health England, 2021. SARS-CoV-2 variants of concern and variants under investigation in England. (Technical Briefing No. 10). https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/984274/Variants\_of\_Concern\_VOC\_T echnical\_Briefing\_10\_England.pdf
- <sup>i</sup> Public Health England, 2021. Variants: distribution of cases data https://www.gov.uk/government/publications/covid-19-variants-genomically-confirmed-case-numbers/variants-distribution-of-cases-data#Variant12

#### **Other VOCs**

As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing, the number of countries/areas/territories (hereafter countries) reporting VOCs and VOIs has continued to increase. Since our last update on 4 May, VOC 202012/01 has been detected in seven additional countries, variant 501Y.V2 in five additional countries, and variant P.1 in four additional countries. As of 11 May, a total 149 countries have reported VOC 202012/01 (Figure 4), 102 countries variant 501Y.V2 (Figure 5), and 60 countries variant P.1 (Figure 6) – see also Annex 2. The information presented here should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and prioritization of samples for sequencing between countries.

Table 3: SARS-CoV-2 Variants of Concern and Variants of Interest, as of 11 May 2021

PANGO lineage Nextstrain clade GISAID clade	Alternate name	First detected in	Earliest samples	Characteristic spike mutations
Variants of Concern (VOCs)				
B.1.1.7 20I/501Y.V1	VOC 202012/01 <sup>†</sup>	United Kingdom	Sep 2020	69/70del, 144del, N501Y, A570D, D614G, P681H, T716I,
GR/501Y.V1				S982A, D1118H
B.1.351	VOC 202012/02	South Africa	May 2020	D80A, D215G, 241/243del,
20H/ <b>501Y.V2</b> <sup>†</sup>				K417N, E484K, N501Y, D614G,
GH/501Y.V2				A701V
B.1.1.28.1, alias <b>P.1</b> <sup>†</sup>	VOC 202101/02	Brazil	Nov 2020	L18F, T20N, P26S, D138Y,
20J/501Y.V3				R190S, K417T, E484K, N501Y,
GR/501Y.V3				D614G H655Y, T1027I, V1176F
B.1.617* <sup>†</sup>	-	India	Oct 2020	L452R, D614G, P681R, ±
-				(E484Q, Q107H, T19R,
G/452R.V3				del157/158, T478K, D950N)
Variants of Interest (VOIs)				
B.1.525	-	Multiple	Dec 2020	Q52R, A67V, 69/70del, 144del,
20A/S.484K		countries		E484K, D614G, Q677H, F888L
G/484K.V3				
B.1.427/B.1.429	CAL.20C/L452R	United States of	Mar 2020	S13I, W152C, L452R, D614G
20C/S.452R		America		
GH/452R.V1				
B.1.1.28.2, alias P.2 20B/S.484K	-	Brazil	Apr 2020	E484K, D614G, V1176F
GR				
B.1.1.28.3, alias P.3	PHL-B.1.1.28	Philippines	Jan 2021	141/143del, E484K, N501Y,
-				D614G, P681H, E1092K,
				H1101Y, V1176F
B.1.526 (+E484K/S477N)	-	United States of	Nov 2020	L5F, T95I, D253G, D614G,
20C		America		A701V, + (E484K or S477N)
GH				
B.1.616	-	France	Feb 2021	H66D, G142V, 144del, D215G,
-				V483A, D614G, H655Y, G669S,
GH	h atau da salisa du a a a a a a	latura familiari		Q949R, N1187D

<sup>†</sup>While work is ongoing to establish standardized nomenclature for key variants, these are the names we will use in this publication.

\* B.1.617 is divided in three sublineages (B.1.617.1, B.1.617.2 and B.1.617.3), which differ in mutations and phenotypic characteristics.

Current available data is too limited to make clear distinctions between sublineage at this time.

Figure 4. Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01, as of 11 May 2021

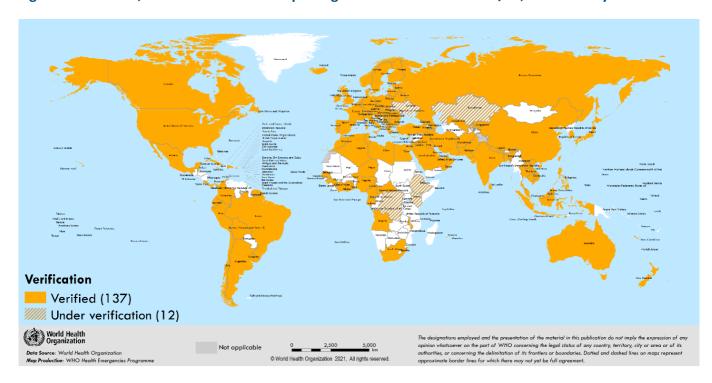
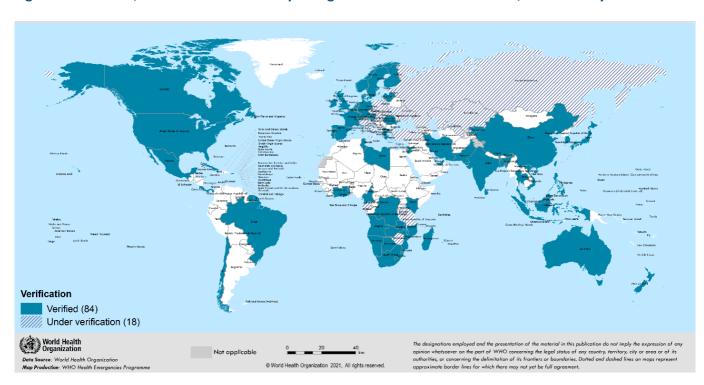


Figure 5. Countries, territories and areas reporting SARS-CoV-2 variant 501Y.V2, as of 11 May 2021



Verification

Verification

Verification

Vorification

Vo

Figure 6. Countries, territories and areas reporting SARS-CoV-2 variant P.1, as of 11 May 2021

## **Vaccine performance against VOCs**

Available evidence on vaccine performance against VOCs has been highlighted in previous editions of the Weekly Epidemiological Update, most recently <u>27 April</u>, and is summarised in Table 4.

Table 4. Summary of vaccine performance against variants of concern (VOC) relative to ancestral stains

VOC 202012/01 (B.1.1.7)	VOC 202012/01 (B.1.1.7) 501Y.V2 (B.1.351)	
Efficacy/effectiveness against disease or	infection	
Protection retained against disease  Severe disease: No/minimal loss: Pfizer BioNTech-Comirnaty¹-³  Infection & symptomatic disease: No/minimal loss: AstraZeneca- Vaxzevria, Novavax-Covavax, Pfizer BioNTech-Comirnaty²-¹³  Asymptomatic infection: No/minimal loss: Pfizer BioNTech- Comirnaty²-¹⁴ Inconclusive/moderate/substantial loss, limited sample size: AstraZeneca-Vaxzevria⁵	Reduced protection against disease, limited evidence  Severe disease: No/minimal loss: Janssen Ad26.COV 2.5, PfizerBioNTech-Comirnaty <sup>3,35</sup> Mild-moderate disease: Moderate loss: Janssen-Ad26.COV 2.5, Novavax-Covavax <sup>35,36</sup> Inconclusive/substantial loss, limited sample size: AstraZeneca-Vaxzevria <sup>37</sup> Infection: Moderate loss: Pfizer BioNTech-Comirnaty <sup>3</sup> Asymptomatic infection: No evidence	Limited evidence  • No/minimal loss: Sinovac- CoronaVac 44
Neutralization		
<ul> <li>No/minimal loss: Bharat-Covaxin, Gamaleya-Sputnik V, Moderna- mRNA-1273, Novavax-Covavax, Pfizer BioNTech-Comirnaty, Beijing CNBG-BBIBP-CorV, Sinovac- CoronaVac<sup>16-35</sup></li> <li>Minimal/moderate loss: AstraZeneca-Vaxzevria<sup>5,31</sup></li> </ul>	<ul> <li>Minimal/modest loss: Beijing CNBG-BBIBP-CorV, Sinovac-CoronaVac<sup>39,40</sup></li> <li>Minimal to large loss: Moderna-mRNA-1273, Pfizer BioNTech-Comirnaty<sup>15,16,20-22,24-27,29-32,38,40-43</sup></li> <li>Moderate to substantial loss: AstraZeneca-Vaxzevria, Gamaleya-Sputnik V, Novavax-Covavax<sup>22,30,33,42</sup></li> </ul>	<ul> <li>No/Minimal reduction:         AstraZeneca-Vaxzevria,         Sinovac-CoronaVac<sup>30,45</sup></li> <li>Minimal/moderate         reduction: Moderna-         mRNA-1273, Pfizer         BioNTech-Comirnaty         16,17,24,27,29,30,41,43,45,46</li> </ul>

Since the update on 27 April, two studies from Israel and another from Qatar offer further evidence that Pfizer BioNTech-Comirnaty vaccine provides similar protection against B.1.1.7 disease as that reported in clinical trials.<sup>47</sup> Both studies from Israel (one published and one preprint) used national surveillance data and found high vaccine effectiveness after the second dose. The published study estimated a vaccine effectiveness of 98.1% (95% CI: 97.6-98.5), 98.0% (97.7-98.3), 97.7% (97.5-97.9), 96.5% (96.3-96.8), and 93.8% (93.3-94.2) against death, hospitalization, symptomatic disease, infection, and asymptomatic infection ≥ 14 days post second dose, respectively, in a setting where B.1.1.7 accounted for 95% of documented SARS-CoV-2 cases.<sup>2</sup> The preprint from Israel reported similar findings.<sup>1</sup>

In addition, the study from Qatar reports effectiveness of the vaccine to be 89.5% (95% CI: 85.9-92.3) against documented B.1.1.7 infection and 100% (95% CI: 81.7-100.0) against documented B.1.1.7 severe disease  $\geq$  14 days post second dose.<sup>3</sup> The study also evaluated effectiveness of the Pfizer BioNTech-Comirnaty vaccine against B.1351-specific disease, finding somewhat reduced effectiveness of 75.0% (70.5-78.9%) against B.1.351 infection  $\geq$  14 days post second dose. However, effectiveness against B.1.351 severe disease  $\geq$  14 days post second dose was retained: 100% (73.7-100.0).<sup>3</sup>

A study from the United States of America conducted during a period when B.1.1.7 was circulating found that the Janssen - Ad26.COV 2.5 vaccine was 76.7% (95%CI: 30.3-95.3) effective against SARS-CoV-2 infection, similar to clinical trial efficacy findings conducted in a non-B.1.1.7 setting.<sup>47</sup> While this estimate is an average estimate across all circulating viruses during the study, B.1.1.7 was the most predominant variant in the region represented by the vast majority of participants (B.1.1.7 ranged from ~25-70% of sequenced viruses reported by the US Centers for Disease Control and Prevention during the study period in this region).<sup>48</sup>

#### **WHO** recommendations

Virus evolution is an expected phenomenon, and the more SARS-CoV-2 circulates, the more opportunities it has to evolve. Reducing transmission through established and proven disease control methods such as those outlined in the COVID-19 Strategic Preparedness and Response Plan, as well as avoiding introductions into animal populations are crucial aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critical to curb the spread of SARS-CoV-2 and its variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the PHSM, including infection prevention and control (IPC) measures in health facilities has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities. Authorities are also encouraged to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and to detect unusual events.

#### **Additional resources**

- Working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern
- COVID-19 new variants: Knowledge gaps and research
- COVID-19 Situation Reports from WHO Regional Offices and partners: <u>AFRO</u>, <u>AMRO/PAHO</u>, <u>EMRO</u>, <u>EURO/ECDC</u>, <u>SEARO</u>, <u>WPRO</u>
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19

#### References

- 1. Goldberg, Y. et al. Protection of previous SARS-CoV-2 infection is similar to that of BNT162b2 vaccine protection: A three-month nationwide experience from Israel. medRxiv 2021.04.20.21255670 (2021) doi: 10.1101/2021.04.20.21255670.
- 2. Haas, E.J. et al. Impact and effectiveness of mRNA BNT162b2 vaccine against SARS-CoV-2 infections and COVID-19 cases, hospitalisations, and deaths following a nationwide vaccination campaign in Israel: an observational study using national surveillance data. Lancet 0, 947-948 (2021).
- 3. Abu-Raddad L.J. et al. Chemaitelly H, Butt AA, National Study Group for COVID-19 Vaccination. Effectiveness of the BNT162b2 Covid-19 Vaccine against the B.1.1.7 and B.1.351 Variants. N. Engl. J. Med. NEJMc2104974 (2021) doi:10.1056/NEJMc2104974.
- 4. Mahase, E. Covid-19: What new variants are emerging and how are they being investigated? BMJ 372, n158 (2021).

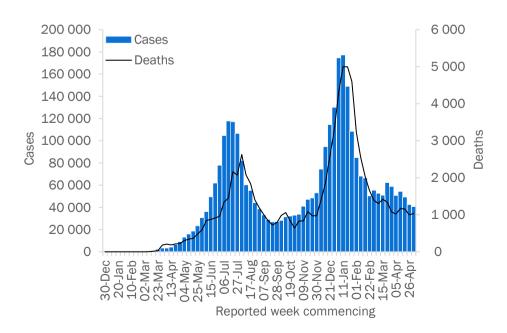
- 5. Emary, K. R. W. et al. Efficacy of ChAdOx1 nCoV-19 (AZD1222) vaccine against SARS-CoV-2 variant of concern 202012/01 (B.1.1.7): an exploratory analysis of a randomised controlled trial. Lancet 397, 1351–1362 (2021).
- 6. Bernal, J. L. et al. Early effectiveness of COVID-19 vaccination with BNT162b2 mRNA vaccine and ChAdOx1 adenovirus vector vaccine on symptomatic disease, hospitalisations and mortality in older adults in England. medRxiv 2021.03.01.21252652 (2021) doi:10.1101/2021.03.01.21252652.
- 7. Hall, V. J. et al. Effectiveness of BNT162b2 mRNA Vaccine Against Infection and COVID-19 Vaccine Coverage in Healthcare Workers in England, Multicentre Prospective Cohort Study (the SIREN Study). SSRN Electron. J. (2021) doi:10.2139/ssrn.3790399.
- 8. Yelin, I. et al. Associations of the BNT162b2 COVID-19 vaccine effectiveness with patient age and comorbidities. medRxiv 2021.03.16.21253686 (2021) doi:10.1101/2021.03.16.21253686.
- 9. Hyams, C. et al. Assessing the Effectiveness of BNT162b2 and ChAdOx1nCoV-19 COVID-19 Vaccination in Prevention of Hospitalisations in Elderly and Frail Adults: A Single Centre Test Negative Case-Control Study. SSRN Electron. J. (2021) doi:10.2139/ssrn.3796835.
- 10. Shrotri, M. et al. Vaccine effectiveness of the first dose of ChAdOx1 nCoV-19 and BNT162b2 against SARS-CoV-2 infection in residents of Long-Term Care Facilities (VIVALDI study). medRxiv 2021.03.26.21254391 (2021) doi:10.1101/2021.03.26.21254391.
- 11. Glampson, B. et al. North West London Covid-19 Vaccination Programme: Real-world evidence for Vaccine uptake and effectiveness. medRxiv 2021.04.08.21254580 (2021) doi:10.1101/2021.04.08.21254580.
- 12. Pritchard, E. et al. Impact of vaccination on SARS-CoV-2 cases in the community: a population-based study using the UK's COVID-19 Infection Survey. medRxiv 2021.04.22.21255913 (2021) doi:10.1101/2021.04.22.21255913.
- 13. Mason, T. et al. Effects of BNT162b2 mRNA vaccine on Covid-19 infection and hospitalisation among older people: matched case control study for England. medRxiv (2021).
- 14. Jones, N. K. et al. Single-dose BNT162b2 vaccine protects against asymptomatic SARS-CoV-2 infection. Elife 10, (2021).
- 15. Edara, V. V. et al. Infection and mRNA-1273 vaccine antibodies neutralize SARS-CoV-2 UK variant. medRxiv Prepr. Serv. Heal. Sci. 2021.02.02.21250799 (2021) doi:10.1101/2021.02.02.21250799.
- 16. Garcia-Beltran, W. F. et al. Multiple SARS-CoV-2 variants escape neutralization by vaccine-induced humoral immunity. Cell 0, (2021).
- 17. Liu, Y. et al. Neutralizing Activity of BNT162b2-Elicited Serum. N. Engl. J. Med. 384, 1466–1468 (2021).
- 18. Muik, A. et al. Neutralization of SARS-CoV-2 lineage B.1.1.7 pseudovirus by BNT162b2 vaccine-elicited human sera. bioRxiv 2021.01.18.426984 (2021) doi:10.1101/2021.01.18.426984.
- 19. Trinité, B. et al. Previous SARS-CoV-2 infection increases B.1.1.7 cross-neutralization by vaccinated individuals. Equal contribution. bioRxiv 2021.03.05.433800 (2021) doi:10.1101/2021.03.05.433800.
- 20. Wang, Z. et al. mRNA vaccine-elicited antibodies to SARS-CoV-2 and circulating variants. Nature 592, 616 (2021).
- 21. Wang, P. et al. Antibody Resistance of SARS-CoV-2 Variants B.1.351 and B.1.1.7. Nature 1–6 (2021) doi:10.1038/s41586-021-03398-2.
- 22. Shen, X. et al. Neutralization of SARS-CoV-2 Variants B.1.429 and B.1.351. N. Engl. J. Med. NEJMc2103740 (2021) doi:10.1056/nejmc2103740.
- 23. Tada, T. et al. Neutralization of viruses with European, South African, and United States SARS-CoV-2 variant spike proteins by convalescent sera and BNT162b2 mRNA vaccine-elicited antibodies. bioRxiv Prepr. Serv. Biol. 2021.02.05.430003 (2021) doi:10.1101/2021.02.05.430003.
- 24. Wu, K. et al. mRNA-1273 vaccine induces neutralizing antibodies against spike mutants from global SARS-CoV-2 variants. bioRxiv Prepr. Serv. Biol. 2021.01.25.427948 (2021) doi:10.1101/2021.01.25.427948.
- 25. Planas, D. et al. Sensitivity of infectious SARS-CoV-2 B.1.1.7 and B.1.351 variants to neutralizing antibodies. Nat. Med. 1–8 (2021) doi:10.1038/s41591-021-01318-5.
- 26. Becker, M. et al. Immune response to SARS-CoV-2 variants of concern in vaccinated individuals. medRxiv 2021.03.08.21252958 (2021) doi:10.1101/2021.03.08.21252958.
- 27. McCallum, M. et al. SARS-CoV-2 immune evasion by variant B.1.427/B.1.429. bioRxiv 2021.03.31.437925 (2021) doi:10.1101/2021.03.31.437925.
- 28. Skelly, D. T. et al. Vaccine-induced immunity provides more robust heterotypic immunity than natural infection to emerging SARS-CoV-2 variants of concern. (2021) doi:10.21203/rs.3.rs-226857/v1.
- 29. Hoffmann, M. et al. SARS-CoV-2 variants B.1.351 and B.1.1.248: Escape from therapeutic 1 antibodies and antibodies induced by infection and vaccination 2 3. bioRxiv 2021.02.11.430787 (2021) doi:10.1101/2021.02.11.430787.
- 30. Dejnirattisai, W. et al. Antibody evasion by the P.1 strain of SARS-CoV-2. Cell 0, (2021).
- 31. Bates, T. A. et al. Neutralization of SARS-CoV-2 variants by convalescent and vaccinated serum. medRxiv 2021.04.04.21254881 (2021) doi:10.1101/2021.04.04.21254881.
- 32. Kuzmina, A. et al. SARS-CoV-2 spike variants exhibit differential infectivity and neutralization resistance to convalescent or post-vaccination sera. Cell Host Microbe 29, 522-528.e2 (2021).
- 33. Ikegame, S. et al. Qualitatively distinct modes of Sputnik V vaccine-neutralization escape by SARS-CoV-2 Spike variants. medRxiv 2021.03.31.21254660 (2021) doi:10.1101/2021.03.31.21254660.
- 34. Yadav, P. et al. Neutralization of variant under investigation B.1.617 with sera of BBV152 vaccinees. bioRxiv 2021.04.23.441101 (2021) doi:10.1101/2021.04.23.441101.
- 35. Sadoff, J. et al. Safety and Efficacy of Single-Dose Ad26.COV2.S Vaccine against Covid-19. N. Engl. J. Med. NEJMoa2101544 (2021)
- 36. Shinde, V. et al. Efficacy of NVX-CoV2373 Covid-19 Vaccine against the B.1.351 Variant. N. Engl. J. Med. NEJMoa2103055 (2021) doi:10.1056/NEJMoa2103055.
- 37. Madhi, S. A. et al. Efficacy of the ChAdOx1 nCoV-19 Covid-19 Vaccine against the B.1.351 Variant. N. Engl. J. Med. NEJMoa2102214 (2021) doi:10.1056/NEJMoa2102214.
- 38. Huang, B. et al. Neutralization of SARS-CoV-2 VOC 501Y.V2 by human antisera elicited by both 1 inactivated BBIBP-CorV and recombinant dimeric RBD ZF2001 vaccines 2 3 Authors. bioRxiv 2021.02.01.429069 (2021) doi:10.1101/2021.02.01.429069.
- 39. Wang, G.-L. et al. Susceptibility of Circulating SARS-CoV-2 Variants to Neutralization. N. Engl. J. Med. NEJMc2103022 (2021) doi:10.1056/nejmc2103022.
- 40. Stamatatos, L. et al. mRNA vaccination boosts cross-variant neutralizing antibodies elicited by SARS-CoV-2 infection. Science (80-.). eabg9175 (2021) doi:10.1126/science.abg9175.
- 41. Wang, P. et al. Antibody Resistance of SARS-CoV-2 Variants B.1.351 and B.1.1.7. bioRxiv (2021).
- 42. Zhou, D. et al. Evidence of escape of SARS-CoV-2 variant B.1.351 from natural and vaccine-induced sera. Cell 189, 1–14 (2021).
- 43. Chang, X. et al. BNT162b2 mRNA COVID-19 vaccine induces antibodies of broader cross-reactivity than natural infection but recognition of mutant viruses is up to 10-fold reduced. bioRxiv 2021.03.13.435222 (2021) doi:10.1101/2021.03.13.435222.
- 44. Hitchings, M. D. et al. Effectiveness of CoronaVac in the setting of high SARS-CoV-2 P.1 variant transmission in Brazil: A test-negative case-control study. medRxiv 2021.04.07.21255081 (2021) doi:10.1101/2021.04.07.21255081.
- 45. Palacios, R. et al. Efficacy and Safety of a COVID-19 Inactivated Vaccine in Healthcare Professionals in Brazil: The PROFISCOV Study. SSRN Electron. J. (2021) doi:10.2139/ssrn.3822780.
- 46. Wang, P. et al. Increased Resistance of SARS-CoV-2 Variant P.1 to Antibody Neutralization. bioRxiv Prepr. Serv. Biol. 2021.03.01.433466 (2021) doi:10.1101/2021.03.01.433466.
- 47. Polack, F.P. et al. Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine. N. Engl. J. Med. NEJMoa2034577 (2020)
- 48. Corchado-Garcia J. et al. Real-world effectiveness of Ad26.COV2.S adenoviral vector vaccine for COVID-19. medRxiv 2021.04.27.21256193 (2021) doi:10.1101/2021.04.27.21256193.
- 49. USCDC Data Tracker. https://covid.cdc.gov/covid-data-tracker/#variant-proportions

# **WHO** regional overviews

# **African Region**

The African Region reported over 40 000 new cases and over 1000 new deaths, a 5% decrease and 3% increase respectively compared to the previous week. This follows a long-term downward trend in case and death incidence; however, this trend may soon reverse with cases and deaths beginning to climb again in some countries. The highest numbers of new cases were reported from South Africa (11 975 new cases; 20.2 new cases per 100 000 population; a 41% increase), Ethiopia (4155 new cases; 3.6 new cases per 100 000; a 42% decrease), and Cameroon (4126 new cases; 15.5 new cases per 100 000; a 10% decrease).

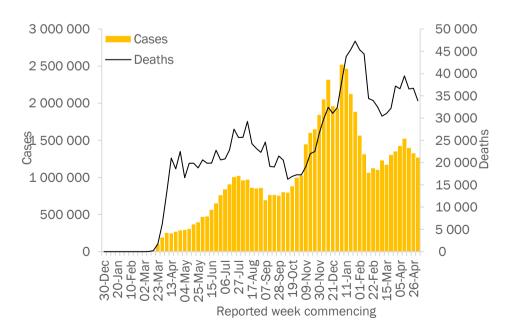
The highest numbers of new deaths were reported from South Africa (318 new deaths; 0.5 new deaths per 100 000 population; a 13% increase), Ethiopia (162 new deaths; 0.1 new deaths per 100 000; a 9% decrease), and Kenya (139 new deaths; 0.3 new deaths per 100 000; a 1% decrease).



# **Region of the Americas**

The Americas reported over 1.2 million new cases and 33 000 new deaths, decreasing by 4% and 8% respectively compared to the previous week. This is the third consecutive week of decreasing case incidence across the region; however, cases and deaths continue to climb in some countries. The highest numbers of new cases were reported from Brazil (423 438 new cases; 199.2 new cases per 100 000; similar to previous week), the United States of America (334 784 new cases; 101.1 new cases per 100 000; a 3% decrease), and Argentina (140 771 new cases; 311.5 new cases per 100 000; an 8% decrease).

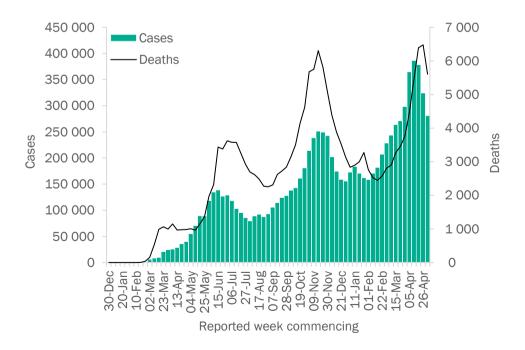
The highest numbers of new deaths were reported from Brazil (15 333 new deaths; 7.2 new deaths per 100 000; a 12% decrease), the United States of America (4940 new deaths; 1.5 new deaths per 100 000; a 4% increase), and Colombia (3147 new deaths; 6.2 new deaths per 100 000; a 4% decrease).



## **Eastern Mediterranean Region**

The Eastern Mediterranean Region reported over 280 000 new cases and over 5600 new deaths, both rates decreasing by 13% compared to the previous week. This is the first week a marked decrease in reported deaths has been reported following 11 weeks of rising numbers. The highest numbers of new cases were reported from the Islamic Republic of Iran (124 513 new cases; 148.2 new cases per 100 000; a 10% decrease), Iraq (38 192 new cases; 95.0 new cases per 100 000; a 15% decrease), and Pakistan (28 721 new cases; 13.0 new cases per 100 000; a 19% decrease).

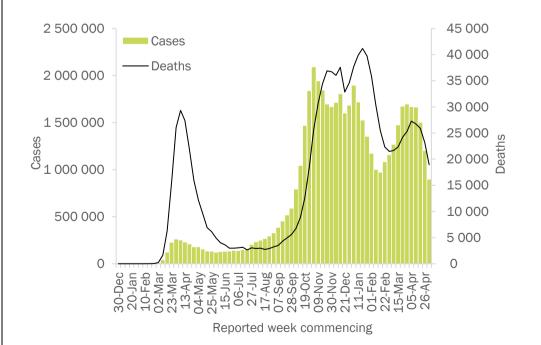
The highest numbers of new deaths were reported from the Islamic Republic of Iran (2434 new deaths; 2.9 new deaths per 100 000; an 18% decrease), Pakistan (840 new deaths; 0.4 new deaths per 100 000; a 12% decrease), and Tunisia (542 new deaths; 4.6 new deaths per 100 000; a 6% decrease).



## **European Region**

The European Region reported over 897 000 new cases and just under 19 000 new deaths, a 25% and an 18% decrease respectively compared to the previous week. Cases and deaths in the region have been decreasing for the past month. The highest numbers of new cases were reported from Turkey (166 733 new cases; 197.7 new cases per 100 000; a 35% decrease), France (122 487 new cases; 188.3 new cases per 100 000; a 26% decrease), and Germany (103 507 new cases; 124.5 new cases per 100 000; a 20% decrease).

The highest numbers of new deaths were reported from Russian Federation (2464 new deaths; 1.7 new deaths per 100 000; a 6% decrease), Turkey (2242 new deaths; 2.7 new deaths per 100 000; a 10% decrease), and Poland (1944 new deaths; 5.1 new deaths per 100 000; a 27% decrease).

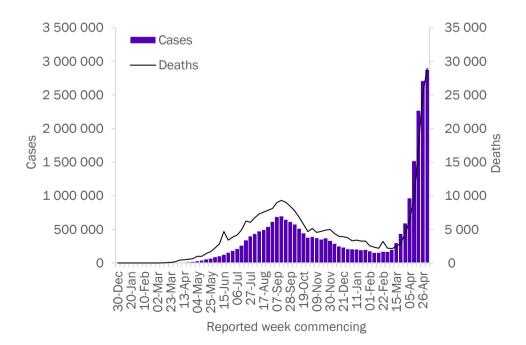


1h

# **South-East Asia Region**

The South-East Asia Region reported over 2.8 million new cases and just under 29 000 new deaths, a 6% and a 15% increase respectively compared to the previous week. This marks the ninth consecutive week the incidences of cases and deaths have been increasing in the region. The highest numbers of new cases were reported from India (2 738 957 new cases; 198.5 new cases per 100 000; a 5% increase), Nepal (56 997 new cases; 195.6 new cases per 100 000; a 79% increase), and Indonesia (36 882 new cases; 13.5 new cases per 100 000; a 2% increase).

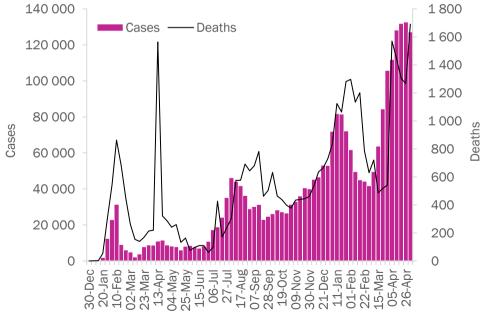
The highest numbers of new deaths were reported from India (26 820 new deaths; 1.9 new deaths per 100 000; a 15% increase), Indonesia (1190 new deaths; 0.4 new deaths per 100 000; a 3% increase), and Bangladesh (368 new deaths; 0.2 new deaths per 100 000; a 34% decrease).



# **Western Pacific Region**

The Western Pacific Region reported over 127 000 new cases and just under 1700 new deaths, a 4% decrease and a 34% increase respectively compared to the previous week. The highest numbers of new cases were reported from the Philippines (48 197 new cases; 44.0 new cases per 100 000; a 16% decrease), Japan (35 802 new cases; 28.3 new cases per 100 000; a 2% increase), and Malaysia (25 350 new cases; 78.3 new cases per 100 000; a 19% increase).

The highest numbers of new deaths were reported from the Philippines (915 new deaths; 0.8 new deaths per 100 000; a 35% increase), Japan (527 new deaths; 0.4 new deaths per 100 000; a 38% increase), and Malaysia (136 new deaths; 0.4 new deaths per 100 000; a 43% increase).



Reported week commencing

## Key weekly updates

#### WHO Director-General's key messages

Opening remarks at the media briefing on COVID-19 - 7 May 2021:

- The announcement on 5 May by the United States of America that it will <u>support a temporary waiver</u> of intellectual property protections for <u>COVID-19 vaccines</u> is a significant statement of solidarity and support for vaccine equity.
- On 7 May, <u>WHO listed Beijing CNBG (Sinopharm) BBIBP-CorV COVID-19 vaccine for emergency use</u>, making it the sixth vaccine to receive WHO validation for safety, efficacy and quality. The Strategic Advisory Group of Experts on Immunization (SAGE) has also reviewed the available data, and recommends the vaccine for adults 18 years and older, with a two-dose schedule.
- The WHO Director-General announced the establishment of the WHO Council on the Economics of
   <u>Health for All</u> to identify new ways to shape the global economy, and to build societies that are
   healthy, inclusive, equitable and sustainable.

#### **Updates and publications**

- WHO, Germany launch new global hub for pandemic and epidemic intelligence
- Scientific Brief on COVID-19 natural immunity
- WHO's work in health emergencies Strengthening preparedness for health emergencies: implementation of the International Health Regulations (2005)
- Estimating COVID-19 vaccine effectiveness against severe acute respiratory infections (SARI) hospitalizations associated with laboratory-confirmed SARS-CoV-2: an evaluation using the test-negative design
- The Partnership for Healthy Cities supports COVID-19 Vaccine Outreach in 18 Cities
- <u>Joint Statement on transparency and data integrity International Coalition of Medicines Regulatory</u>
  Authorities (ICMRA) and WHO
- WHO calls for better hand hygiene and other infection control practices
- COVID-19 home care bundle for health care workers
- COVID-19 considerations for tuberculosis (TB) care

## **Technical guidance and other resources**

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- <u>The Strategic Preparedness and Response Plan (SPRP)</u> outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - o African Region
  - o Region of the Americas
  - o <u>Eastern Mediterranean Region</u>
  - o South-East Asia Region
  - o European Region
  - o Western Pacific Region
- Recommendations and advice for the public:
  - o Protect yourself
  - o Questions and answers
  - o Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 9 May 2021\*\*

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Africa	40 656	3 357 846	299.3	1 034	83 904	7.5	
South Africa	11 975	1 594 817	2 689.0	318	54 724	92.3	Community transmission
Ethiopia	4 155	262 217	228.1	162	3 871	3.4	Community transmission
Cameroon	4 126	74 733	281.5	80	1 144	4.3	Community transmission
Kenya	3 185	163 238	303.6	139	2 883	5.4	Community transmission
Cabo Verde	1 984	26 111	4 696.3	12	232	41.7	Community transmission
Angola	1 662	28 477	86.6	30	630	1.9	Community transmission
Algeria	1 589	123 900	282.5	60	3 321	7.6	Community transmission
Madagascar	1 578	38 874	140.4	62	716	2.6	Community transmission
Botswana	1 483	48 417	2 058.9	22	734	31.2	Community transmission
Namibia	1 239	49 893	1 963.6	40	683	26.9	Community transmission
Seychelles	870	6 811	6 925.5	1	28	28.5	Community transmission
Congo	469	11 147	202.0	4	148	2.7	Community transmission
Uganda	401	42 308	92.5	3	346	0.8	Community transmission
Zambia	387	92 057	500.7	6	1 257	6.8	Community transmission
Guinea	386	22 633	172.3	6	150	1.1	Community transmission
Democratic Republic of the Congo	381	30 285	33.8	4	772	0.9	Community transmission
Rwanda	361	25 586	197.5	3	338	2.6	Community transmission
Gabon	357	23 432	1 052.8	4	143	6.4	Community transmission
Senegal	277	40 665	242.9	8	1 117	6.7	Community transmission
Central African Republic	263	6 674	138.2	5	93	1.9	Community transmission
Ghana	255	92 856	298.8	4	783	2.5	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Mauritania	234	18 636	400.8	1	456	9.8	Community transmission
Côte d'Ivoire	230	46 344	175.7	5	291	1.1	Community transmission
Nigeria	229	165 382	80.2	2	2 065	1.0	Community transmission
Mozambique	201	70 166	224.5	7	821	2.6	Community transmission
Mali	186	14 082	69.5	14	499	2.5	Community transmission
Zimbabwe	154	38 414	258.5	8	1 576	10.6	Community transmission
Togo	149	13 141	158.7	1	124	1.5	Community transmission
Burundi	139	4 177	35.1	0	6	0.1	Community transmission
Niger	91	5 319	22.0	1	192	0.8	Community transmission
Eritrea	71	3 742	105.5	2	12	0.3	Community transmission
Malawi	71	34 166	178.6	5	1 153	6.0	Community transmission
Benin	63	7 884	65.0	1	100	0.8	Community transmission
Burkina Faso	58	13 377	64.0	5	162	0.8	Community transmission
South Sudan	54	10 637	95.0	1	116	1.0	Community transmission
Chad	50	4 874	29.7	1	171	1.0	Community transmission
Lesotho	42	10 773	502.9	3	319	14.9	Community transmission
Mauritius	40	1 246	98.0	1	17	1.3	Clusters of cases
Gambia	31	5 929	245.3	1	175	7.2	Community transmission
Eswatini	19	18 477	1 592.6	0	671	57.8	Community transmission
Liberia	15	2 114	41.8	0	85	1.7	Community transmission
Comoros	14	3 922	451.0	0	146	16.8	Community transmission
Sierra Leone	11	4 068	51.0	0	79	1.0	Community transmission
Sao Tome and Principe	8	2 318	1 057.7	0	35	16.0	Community transmission
Guinea-Bissau	3	3 739	190.0	0	67	3.4	Community transmission
Equatorial Guinea	0	7 694	548.4	0	112	8.0	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Territories <sup>iii</sup>							
Réunion	1 070	21 451	2 395.9	2	150	16.8	Community transmission
Mayotte	40	20 134	7 380.1	0	170	62.3	Community transmission
Americas	1 272 491	63 554 005	6 213.9	33 879	1 551 860	151.7	
Brazil	423 438	15 082 449	7 095.6	15 333	419 114	197.2	Community transmission
United States of America	334 784	32 337 112	9 769.4	4 940	575 477	173.9	Community transmission
Argentina	140 771	3 118 134	6 899.2	3 007	66 872	148.0	Community transmission
Colombia	108 902	2 968 626	5 834.2	3 147	76 867	151.1	Community transmission
Canada	53 744	1 273 169	3 373.3	310	24 529	65.0	Community transmission
Peru	40 020	1 839 465	5 578.9	2 042	63 519	192.6	Community transmission
Chile	37 221	1 241 976	6 497.0	644	27 101	141.8	Community transmission
Uruguay	17 718	216 146	6 222.3	416	3 032	87.3	Community transmission
Mexico	17 119	2 361 874	1 831.9	1 750	218 657	169.6	Community transmission
Paraguay	15 156	294 233	4 125.2	589	6 974	97.8	Community transmission
Costa Rica	14 495	265 486	5 211.6	134	3 365	66.1	Community transmission
Ecuador	14 332	398 921	2 261.1	413	19 137	108.5	Community transmission
Bolivia (Plurinational State of)	10 559	316 153	2 708.4	207	13 182	112.9	Community transmission
Venezuela (Bolivarian Republic of)	7 498	205 181	721.6	127	2 263	8.0	Community transmission
Cuba	7 290	114 912	1 014.5	68	722	6.4	Community transmission
Guatemala	6 406	234 883	1 311.1	174	7 717	43.1	Community transmission
Honduras	5 997	218 330	2 204.3	304	5 585	56.4	Community transmission
Dominican Republic	3 739	270 600	2 494.5	36	3 523	32.5	Community transmission
Panama	2 186	366 762	8 500.2	26	6 258	145.0	Community transmission
Trinidad and Tobago	1 896	12 720	908.9	27	196	14.0	Community transmission
El Salvador	1 057	70 255	1 083.1	22	2 150	33.1	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Jamaica	811	46 588	1 573.3	24	803	27.1	Community transmission
Guyana	754	14 037	1 784.6	18	314	39.9	Community transmission
Suriname	570	10 933	1 863.7	10	214	36.5	Clusters of cases
Bahamas	320	10 773	2 739.5	13	212	53.9	Clusters of cases
Saint Lucia	102	4 654	2 534.5	1	75	40.8	Community transmission
Nicaragua	77	5 575	84.2	1	183	2.8	Community transmission
Haiti	70	13 164	115.4	9	263	2.3	Community transmission
Barbados	68	3 931	1 367.9	1	45	15.7	Community transmission
Saint Vincent and the Grenadines	48	1 912	1 723.5	1	12	10.8	Community transmission
Belize	18	12 686	3 190.4	0	323	81.2	Community transmission
Antigua and Barbuda	8	1 237	1 263.2	0	32	32.7	Clusters of cases
Dominica	1	175	243.1	0	0	0.0	Clusters of cases
Grenada	0	161	143.1	0	1	0.9	Sporadic cases
Saint Kitts and Nevis	0	45	84.6	0	0	0.0	Sporadic cases
Territories <sup>iii</sup>							
Puerto Rico	2 932	134 888	4 715.0	57	2 367	82.7	Community transmission
French Guiana	823	20 366	6 818.6	3	104	34.8	Community transmission
Guadeloupe	795	15 429	3 856.1	8	236	59.0	Community transmission
Martinique	351	11 490	3 061.8	8	87	23.2	Community transmission
Aruba	129	10 737	10 056.6	2	100	93.7	Community transmission
United States Virgin Islands	85	3 210	3 074.0	0	27	25.9	Community transmission
Bermuda	41	2 434	3 908.6	2	30	48.2	Community transmission
Curaçao	41	12 222	7 448.2	5	113	68.9	Community transmission
Saint Martin	28	1 777	4 596.6	0	14	36.2	Community transmission
British Virgin Islands	25	219	724.3	0	1	3.3	Clusters of cases
Sint Maarten	20	2 250	5 247.0	0	27	63.0	Community transmission

Reporting Country/Territory/Area	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Bonaire	16	1 547	7 396.6	0	16	76.5	Community transmission
Turks and Caicos Islands	12	2 402	6 203.8	0	17	43.9	Clusters of cases
Anguilla	6	99	659.9	0	0	0.0	Clusters of cases
Saint Barthélemy	6	994	10 055.6	0	1	10.1	Clusters of cases
Cayman Islands	5	548	833.8	0	2	3.0	Sporadic cases
Saba	1	7	362.1	0	0	0.0	Sporadic cases
Falkland Islands (Malvinas)	0	63	1 808.8	0	0	0.0	Sporadic cases
Montserrat	0	20	400.1	0	1	20.0	No cases
Saint Pierre and Miquelon	0	25	431.4	0	0	0.0	Sporadic cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	280 853	9 428 375	1 290.1	5 605	189 052	25.9	
Iran (Islamic Republic of)	124 513	2 640 670	3 143.9	2 434	74 524	88.7	Community transmission
_ Iraq	38 192	1 108 558	2 756.1	243	15 741	39.1	Community transmission
Pakistan	28 721	854 240	386.7	840	18 797	8.5	Community transmission
United Arab Emirates	12 497	534 445	5 403.7	19	1 610	16.3	Clusters of cases
Bahrain	9 908	187 905	11 043.0	30	678	39.8	Community transmission
Kuwait	8 806	284 076	6 651.9	66	1 635	38.3	Community transmission
Tunisia	8 778	319 512	2 703.5	542	11 350	96.0	Community transmission
Egypt	7 688	236 272	230.9	443	13 845	13.5	Clusters of cases
Jordan	7 156	719 233	7 049.1	205	9 076	89.0	Community transmission
Saudi Arabia	7 031	425 442	1 222.0	91	7 059	20.3	Community transmission
Oman	6 091	199 344	3 903.6	73	2 083	40.8	Community transmission
Lebanon	4 761	532 269	7 798.3	158	7 460	109.3	Community transmission
Qatar	4 301	210 603	7 309.9	37	502	17.4	Community transmission
Libya	2 189	179 697	2 615.2	34	3 063	44.6	Community transmission
Morocco	2 066	513 628	1 391.5	38	9 064	24.6	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Afghanistan	1 720	61 842	158.9	49	2 686	6.9	Community transmission
Sudan	772	34 826	79.4	80	2 445	5.6	Clusters of cases
Syrian Arab Republic	501	23 319	133.2	50	1 648	9.4	Community transmission
Somalia	500	14 415	90.7	34	747	4.7	Community transmission
Djibouti	214	11 335	1 147.3	4	149	15.1	Community transmission
Yemen	137	6 466	21.7	41	1 271	4.3	Community transmission
Territories <sup>iii</sup>							
occupied Palestinian territory	4 311	330 278	6 474.2	94	3 619	70.9	Community transmission
Europe	919 119	52 871 662	5 666.4	19 056	1 104 629	118.4	
Kosovo [1]	970	106 302		25	2 193		Community transmission
Turkey	166 733	5 016 141	5 947.6	2 242	42 746	50.7	Community transmission
France	122 487	5 676 293	8 727.5	1 550	105 544	162.3	Community transmission
Germany	103 507	3 520 329	4 232.9	1 583	84 775	101.9	Community transmission
Italy	67 304	4 102 921	6 879.3	1 661	122 694	205.7	Clusters of cases
Russian Federation	57 007	4 880 262	3 344.1	2 464	113 326	77.7	Clusters of cases
Netherlands	51 444	1 553 292	8 923.1	151	17 319	99.5	Community transmission
Spain	41 011	3 577 486	7 558.2	252	78 879	166.6	Community transmission
Ukraine	36 330	2 119 510	4 846.4	1 797	46 393	106.1	Community transmission
Poland	29 819	2 833 052	7 463.6	1 944	70 012	184.4	Community transmission
Sweden	28 799	1 007 792	9 758.3	15	14 173	137.2	Community transmission
Belgium	20 793	1 017 482	8 830.4	260	24 554	213.1	Community transmission
Kazakhstan	15 052	396 130	2 109.7	0	4 542	24.2	Clusters of cases
The United Kingdom	14 560	4 433 094	6 530.2	79	127 603	188.0	Community transmission
Greece	14 155	360 577	3 364.0	525	10 978	102.4	Community transmission
Czechia	10 947	1 645 061	15 383.1	324	29 667	277.4	Community transmission
Switzerland	10 276	670 704	7 749.7	36	10 069	116.3	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Georgia	9 474	321 919	8 069.8	130	4 281	107.3	Community transmission
Austria	9 453	626 067	7 033.6	132	10 110	113.6	Community transmission
Croatia	9 321	344 494	8 488.9	287	7 469	184.0	Community transmission
Hungary	8 817	791 709	8 103.9	800	28 602	292.8	Community transmission
Romania	8 682	1 065 254	5 511.2	709	28 903	149.5	Community transmission
Serbia	8 643	699 574	10 099.7	153	6 539	94.4	Community transmission
Lithuania	8 147	257 827	9 227.6	84	4 034	144.4	Community transmission
Belarus	7 692	367 674	3 891.0	70	2 622	27.7	Community transmission
Denmark	6 137	258 182	4 434.0	8	2 497	42.9	Community transmission
Azerbaijan	5 734	326 056	3 215.8	128	4 666	46.0	Clusters of cases
Bulgaria	5 115	409 961	5 897.5	458	16 902	243.1	Clusters of cases
Slovenia	4 414	245 795	11 727.6	15	4 610	220.0	Clusters of cases
Latvia	3 961	123 331	6 465.0	69	2 208	115.7	Community transmission
Norway	2 870	115 410	2 150.1	11	767	14.3	Clusters of cases
Ireland	2 866	252 303	5 082.2	15	4 921	99.1	Community transmission
Cyprus	2 791	69 163	7 788.6	21	334	37.6	Clusters of cases
Uzbekistan	2 754	94 397	282.0	10	662	2.0	Clusters of cases
Estonia	2 441	125 126	9 415.2	33	1 201	90.4	Clusters of cases
Armenia	2 407	219 270	7 399.7	95	4 234	142.9	Community transmission
Slovakia	2 377	385 475	7 062.7	253	12 019	220.2	Clusters of cases
Kyrgyzstan	2 340	98 400	1 508.2	36	1 655	25.4	Clusters of cases
Portugal	2 311	839 258	8 151.4	15	16 991	165.0	Clusters of cases
Bosnia and Herzegovina	2 157	200 989	6 126.2	232	8 811	268.6	Community transmission
Finland	1 465	88 561	1 602.8	8	922	16.7	Community transmission
Republic of Moldova	1 444	252 604	6 261.9	117	5 943	147.3	Community transmission
North Macedonia	1 310	153 891	7 386.6	188	5 079	243.8	Clusters of cases

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Luxembourg	894	68 291	10 907.2	5	802	128.1	Community transmission
Montenegro	647	98 359	15 660.7	35	1 541	245.4	Clusters of cases
Albania	481	131 666	4 575.2	15	2 411	83.8	Clusters of cases
Israel	369	838 887	9 691.9	11	6 376	73.7	Community transmission
Andorra	174	13 406	17 350.7	2	127	164.4	Community transmission
Malta	131	30 438	5 915.3	2	417	81.0	Clusters of cases
Iceland	34	6 506	1 786.7	0	29	8.0	Community transmission
Liechtenstein	27	3 062	7 902.5	1	57	147.1	Sporadic cases
Monaco	22	2 479	6 316.9	0	32	81.5	Sporadic cases
San Marino	13	5 079	14 965.5	0	90	265.2	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories <sup>iii</sup>							
Faroe Islands	4	668	1 367.0	0	1	2.0	Sporadic cases
Gibraltar	3	4 286	12 721.5	0	94	279.0	Clusters of cases
Isle of Man	3	1 590	1 869.9	0	29	34.1	No cases
Greenland	0	31	54.6	0	0	0.0	No cases
Guernsey	0	822	1 275.1	0	14	21.7	Community transmission
Jersey	0	3 234	3 000.1	0	69	64.0	Community transmission
South-East Asia	2 877 410	25 552 640	1 264.1	28 977	309 197	15.3	
India	2 738 957	22 296 414	1 615.7	26 820	242 362	17.6	Clusters of cases
Nepal	56 997	385 890	1 324.4	334	3 632	12.5	Community transmission
Indonesia	36 882	1 709 762	625.1	1 190	46 842	17.1	Community transmission
Thailand	14 391	83 375	119.4	154	399	0.6	Clusters of cases
Sri Lanka	13 372	123 234	575.5	99	786	3.7	Clusters of cases
Bangladesh	11 543	772 127	468.8	368	11 878	7.2	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Maldives	4 487	34 724	6 423.9	10	83	15.4	Clusters of cases
Timor-Leste	569	2 965	224.9	1	4	0.3	Clusters of cases
Myanmar	116	142 947	262.7	1	3 210	5.9	Clusters of cases
Bhutan	96	1 202	155.8	0	1	0.1	Clusters of cases
Western Pacific	127 073	2 597 134	132.2	1 691	39 179	2.0	
Philippines	48 197	1 094 834	999.1	915	18 269	16.7	Community transmission
Japan	35 802	633 027	500.5	527	10 823	8.6	Clusters of cases
Malaysia	25 350	436 944	1 350.0	136	1 657	5.1	Community transmission
Mongolia	6 731	44 016	1 342.7	45	160	4.9	Clusters of cases
Cambodia	4 717	19 237	115.1	17	120	0.7	Sporadic cases
Republic of Korea	4 069	127 309	248.3	41	1 874	3.7	Clusters of cases
Papua New Guinea	964	12 226	136.6	6	121	1.4	Community transmission
Lao People's Democratic Republic	412	1 233	16.9	0	0	0.0	Sporadic cases
Viet Nam	303	3 245	3.3	0	35	0.0	Clusters of cases
Singapore	152	61 331	1 048.3	0	31	0.5	Sporadic cases
China	147	103 796	7.1	0	4 858	0.3	Clusters of cases
Australia	94	29 906	117.3	0	910	3.6	Clusters of cases
New Zealand	25	2 286	47.4	0	26	0.5	Sporadic cases
Fiji	17	136	15.2	1	3	0.3	Sporadic cases
Brunei Darussalam	3	230	52.6	0	3	0.7	Clusters of cases
Solomon Islands	0	20	2.9	0	0	0.0	No cases
Territories <sup>iii</sup>							
Guam	56	7 813	4 629.2	3	139	82.4	Clusters of cases
French Polynesia	32	18 790	6 689.0	0	141	50.2	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	1	169	293.6	0	2	3.5	Pending

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Wallis and Futuna	1	454	4 037.0	0	7	62.2	Sporadic cases
Marshall Islands	0	4	6.8	0	0	0.0	No cases
New Caledonia	0	124	43.4	0	0	0.0	Sporadic cases
Samoa	0	1	0.5	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Global	5 517 602	157 362 408		90 242	3 277 834		

<sup>\*</sup>See Annex: Data, table and figure notes

Annex 2. List of countries/territories/areas reporting variants of concern as of 11 May 2021\*\*

Afghanistan Verified Albania Under verified Angola Argentina Verified Verified Armenia Under verified Verified Armenia Under verified Verified Armenia Under verified Armenia Under verified	Country/Territory/Area	VOC 202012/01	501Y.v2	P.1
Albania Under verification	Country/ Territory/ Area	(B.1.1.7)	(B.1.351)	(B.1.1.28)
Algeria Verified Angola Verified Verified	Afghanistan	Verified	-	-
Angola Verified Verified - Argentina Verified - Armenia Under verification - Aruba Verified Verified Verified Australia Verified Verified Verified Austria Verified Verified Verified Azerbaijan Verified - Bahrain Verified Verified Verified - Bangladesh Verified Verified verification* Barbados Verified - Belarus Verified - Belgium Verified Verified Verified Verified Belize Verified - Bolivia (Plurinational State of) Verified - Bosnia and Herzegovina Under verification - Botswana - Brazil Verified Verified - Bulgaria Verified - Cabo Verde Verified -	Albania	Under verification	-	-
Argentina Verified - Verified Armenia Under verification Aruba Verified Verified Verified Australia Verified Verified Verified Austria Verified Verified Verified Azerbaijan Verified Bahrain Verified Verified - Under Bangladesh Verified Verified verified verification*  Barbados Verified Belgium Verified Verified Verified Belize Verified Bolivia (Plurinational State of) Verified Bosnia and Herzegovina Under verification Botswana - Verified Verified Verified Purpose Agrantation Botswana - Verified Verified Purpose Agrantation Botswana - Verified Verified Purpose Agrantation Botswana - Verified Purpose Agrantation Botswana - Verified Verified Purpose Agrantation	Algeria	Verified	-	
Armenia Under verification Aruba Verified Verified Verified Australia Verified Verified Verified Austria Verified Verified Verified Austria Verified Verified Verified Azerbaijan Verified	Angola	Verified	Verified	-
Aruba Verified Verified Verified Australia Verified Verified Verified Austria Verified Verified Verified Azerbaijan Verified Bahrain Verified Verified - Under Bangladesh Verified Verified verification*  Barbados Verified Belarus Verified Belgium Verified Verified Verified Belize Verified Bolivia (Plurinational State of) Verified Bosnia and Herzegovina Under verification Botswana - Verified Verified Verified  Brunei Darussalam Verified Verified Verified  Bulgaria Verified	Argentina	Verified	-	Verified
AustraliaVerifiedVerifiedVerifiedAustriaVerifiedVerifiedVerifiedAzerbaijanVerifiedBahrainVerifiedVerified-BangladeshVerifiedVerifiedverification*BarbadosVerifiedBelarusVerifiedBelgiumVerifiedVerifiedVerifiedBelizeVerifiedBolivia (Plurinational State of)VerifiedBonaireVerifiedBosnia and HerzegovinaUnder verificationBotswana-VerifiedVerifiedBrazilVerifiedVerifiedVerifiedBrunei DarussalamVerifiedVerified-BulgariaVerifiedCabo VerdeVerified	Armenia	Under verification	-	-
AustriaVerifiedVerifiedVerifiedAzerbaijanVerifiedBahrainVerifiedVerified-BangladeshVerifiedVerifiedverification*BarbadosVerifiedBelarusVerifiedBelgiumVerifiedVerifiedVerifiedBelizeVerifiedBolivia (Plurinational State of)VerifiedOf)VerifiedBonaireVerifiedBosnia and HerzegovinaUnder verificationBotswana-VerifiedVerifiedBrunei DarussalamVerifiedVerifiedVerifiedBulgariaVerifiedCabo VerdeVerified	Aruba	Verified	Verified	Verified
Azerbaijan Verified	Australia	Verified	Verified	Verified
Bahrain Verified Verified -  Bangladesh Verified Verified verification*  Barbados Verified -  Belarus Verified -  Belgium Verified Verified Verified  Belize Verified -  Bolivia (Plurinational State of) Verified -  Bonaire Verified -  Bosnia and Herzegovina Under verification -  Botswana - Verified -  Brazil Verified Verified -  Brazil Verified Verified -  Bulgaria Verified -  Cabo Verde Verified -	Austria	Verified	Verified	Verified
Bangladesh Verified Verified verification*  Barbados Verified  Belarus Verified Verified Verified  Belgium Verified Verified Verified  Belize Verified  Bolivia (Plurinational State of) Verified  Bonaire Verified  Bosnia and Herzegovina Under verification  Botswana - Verified  Brazil Verified Verified Verified Verified  Brunei Darussalam Verified Verified  Bulgaria Verified  Cabo Verde Verified	Azerbaijan	Verified	-	-
BangladeshVerifiedVerifiedverification*BarbadosVerifiedBelarusVerifiedBelgiumVerifiedVerifiedVerifiedBelizeVerifiedBolivia (Plurinational State of)VerifiedBonaireVerifiedBosnia and HerzegovinaUnder verificationBotswana-Verified-BrazilVerifiedVerifiedVerifiedBrunei DarussalamVerifiedVerified-BulgariaVerifiedCabo VerdeVerified	Bahrain	Verified	Verified	-
BelarusVerifiedBelgiumVerifiedVerifiedVerifiedBelizeVerifiedBolivia (Plurinational State of)VerifiedBonaireVerifiedBosnia and HerzegovinaUnder verificationBotswana-Verified-BrazilVerifiedVerifiedVerifiedBrunei DarussalamVerifiedVerified-BulgariaVerifiedCabo VerdeVerified	Bangladesh	Verified	Verified	
BelgiumVerifiedVerifiedVerifiedBelizeVerifiedBolivia (Plurinational State of)VerifiedBonaireVerifiedBosnia and HerzegovinaUnder verificationBotswana-Verified-BrazilVerifiedVerifiedVerifiedBrunei DarussalamVerifiedVerified-BulgariaVerifiedCabo VerdeVerified	Barbados	Verified	-	-
Belize Verified	Belarus	Verified	-	-
Bolivia (Plurinational State of) Verified	Belgium	Verified	Verified	Verified
of) Verified	Belize	Verified	-	-
Bonaire Verified	Bolivia (Plurinational State			
Bosnia and Herzegovina Under verification	of)	Verified	-	-
Botswana - Verified - Brazil Verified Verified Verified  Brunei Darussalam Verified Verified - Bulgaria Verified Cabo Verde Verified	Bonaire	Verified	-	-
Brazil Verified Verified Verified  Brunei Darussalam Verified Verified -  Bulgaria Verified -  Cabo Verde Verified -	Bosnia and Herzegovina	Under verification	-	-
Brunei Darussalam Verified - Bulgaria Verified - Cabo Verde Verified -	Botswana	-	Verified	-
Bulgaria Verified Cabo Verde Verified	Brazil	Verified	Verified	Verified
Cabo Verde Verified	Brunei Darussalam	Verified	Verified	
	Bulgaria	Verified	-	-
Cambodia Verified	Cabo Verde	Verified	-	-
	Cambodia	Verified	-	_

VOC 202012/01	F01V2	P.1
		(B.1.1.28)
		(D.1.1.20)
		Verified
verified	verified	vermed
Verified	-	-
Verified*	-	-
Verified	Verified	Verified
Verified	Verified	Verified
Verified	-	Verified
-	Verified	-
Verified	Verified	Verified
Verified*	Verified*	-
	Under	
Verified	verification	-
Verified	Verified	-
Verified	-	-
Verified	-	-
	Under	
Verified	verification	-
Under verification	Verified	-
Verified	Verified	Verified
Verified	-	-
Verified	-	Verified
Verified*	-	-
Verified*	Verified*	-
	Under	
Verified	verification	<u>-</u>
-	Verified	-
	Verified* Verified Verified - Verified - Verified*  Verified	(B.1.1.7)(B.1.351)VerifiedVerifiedVerifiedVerifiedVerified*-VerifiedVerifiedVerifiedVerifiedVerifiedVerifiedVerifiedVerifiedVerified*Verified*VerifiedVerified*VerifiedVerifiedVerified-Verified-VerifiedVerifiedVerifiedVerifiedVerifiedVerifiedVerified-Verified-Verified*-Verified*VerificationVerified-Verified-Verified*UnderVerifiedVerification

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
	Under		
Ethiopia	verification*	-	-
Faroe Islands	-	-	Verified
Finland	Verified	Verified	Verified
France	Verified	Verified	Verified
French Guiana	Verified	Verified	Verified
French Polynesia	Verified	-	Verified
Gabon	Verified	Under verification*	-
Gambia	Verified	-	-
Georgia	Verified	-	-
Germany	Verified	Verified	Verified
Ghana	Verified	Verified	-
Gibraltar	Under verification	-	-
Greece	Verified	Verified	-
Grenada	Verified		-
Guadeloupe	Verified	Verified	-
Guam	Verified*	-	-
Guinea	Verified*	-	-
Guyana	-	-	Verified
		Under	
Hungary	Verified	verification	-
Iceland	Verified	-	-
India	Verified	Verified	Verified
Indonesia	Verified	Verified	_
Iran (Islamic Republic of)	Verified	Verified	-
Iraq	Verified		
Ireland	Verified	Verified	Under verification

Country/Torritory/Aroa	VOC 202012/01	501Y.v2	P.1
Country/Territory/Area	(B.1.1.7)	(B.1.351)	(B.1.1.28)
			Under
Israel	Verified	Verified	verification
		Under	
<u>Italy</u>	Verified	verification	Verified
Jamaica	Verified	-	-
Japan	Verified	Verified	Verified
Jordan	Verified	Verified	Verified
		Under	
Kazakhstan	Under verification	verification	-
Kenya	Under verification	Verified	-
Kosovo <sup>[1]</sup>	Verified	-	-
Kuwait	Verified	-	-
Kyrgyzstan	Verified	Verified	-
Lao People's Democratic			
Republic	Verified	-	-
			Under
Latvia	Verified	Verified	verification
Lebanon	Verified	-	-
Lesotho	-	Verified	-
Libya	Verified	Verified	-
Liechtenstein	Verified	-	-
			Under
Lithuania	Verified	Verified	verification*
			Under
Luxembourg	Verified	Verified	verification
Madagascar	-	Verified	-
Malawi	Verified	Verified	-
Malaysia	Verified	Verified	-
		Under	
Malta	Verified	verification	Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Martinique	Verified	Verified	-
Mauritius	Under verification	Verified	-
Mayotte	Verified	Verified	-
Mexico	Verified	Verified	Verified
		Under	
Monaco	Verified	verification	-
Montenegro	Verified	-	
Morocco	Verified	-	-
Mozambique	-	Verified	-
Namibia	-	Verified	-
Nepal	Verified	-	-
Netherlands	Verified	Verified	Verified
New Caledonia	Verified	-	-
			Under
New Zealand	Verified	Verified	verification
Niger	Verified	-	-
Nigeria	Verified	-	-
North Macedonia	Verified	Verified	-
Norway	Verified	Verified	Verified
occupied Palestinian			
territory	Verified	Verified	-
Oman	Verified	-	-
Pakistan	Verified	Verified	Verified
Panama	Verified	Verified	Verified
Paraguay	-	_	Verified
Peru	Verified	-	Verified
Philippines	Verified	Verified	Verified
Poland	Verified	Under verification	Under verification

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
			Under
Portugal	Verified	Verified	verification
Puerto Rico	Verified	Verified	Verified
Qatar	Verified	Verified	-
Republic of Korea	Verified	Verified	Verified
Republic of Moldova	Under verification	-	-
Réunion	Verified	Verified	Verified
Romania	Verified	Verified	Verified
Russian Federation	Verified	Under verification	-
Rwanda	Under verification	Under verification	-
Saint Barthélemy	Verified	-	-
Saint Lucia	Verified	-	-
Saint Martin	Verified	Verified	-
Saudi Arabia	Verified	-	-
Senegal	Verified	-	-
Serbia	Verified	-	-
Seychelles	-	Verified	-
Singapore	Verified	Verified	Verified*
Sint Maarten	Verified	-	-
Slovakia	Verified	Under verification	-
			Under
Slovenia	Verified	Verified	verification
South Africa	Verified	Verified	-
Spain	Verified	Verified	Verified
Sri Lanka	Verified	Verified	-
Suriname	Verified	Verified	Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Sweden	Verified	Verified	Under verification
Switzerland	Verified	Verified	Under verification
Thailand	Verified	Verified	Verified*
Togo	Verified	Verified*	-
Trinidad and Tobago	Verified	-	Verified
Tunisia	Verified	Verified*	-
Turkey	Verified	Under verification	Under verification
Turks and Caicos Islands	Verified	-	-
Ukraine	Under verification	Under verification	-
United Arab Emirates	Verified	Verified	Verified
United Kingdom	Verified	Verified	Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
United Republic of		Under	
Tanzania	-	verification	-
United States of America	Verified	Verified	Verified
Uruguay	Verified	-	Verified
		Under	
Uzbekistan	Verified	verification	-
Venezuela (Bolivarian			
Republic of)	-	-	Verified
Viet Nam	Verified	Verified	-
Wallis and Futuna	Verified	-	-
Zambia	-	Verified	-
		Under	
Zimbabwe	-	verification	-

<sup>\*</sup>Newly reported in this update.

<sup>&</sup>quot;Verified" indicates that information for this variant was received by WHO from official sources.

<sup>&</sup>quot;Under verification" indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available.

<sup>\*\*</sup>See Annex: Data, table and figure notes

#### Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 746 cases and 13 deaths reported from international conveyances.

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

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

<sup>1</sup> Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

<sup>ii</sup> Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see:

Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.

- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that
  are not directly linked to imported cases, but which are all linked by time, geographic location and common
  exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of
  infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorizations are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
  - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups.
     Low risk of infection for the general population.
  - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days;
     transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
  - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission
     widespread and not focused in population sub-groups. High risk of infection for the general population.
  - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

"" "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.

32



## **COVID-19 Weekly Epidemiological Update**

Data as received by WHO from national authorities, as of 16 May 2021, 10 am CET

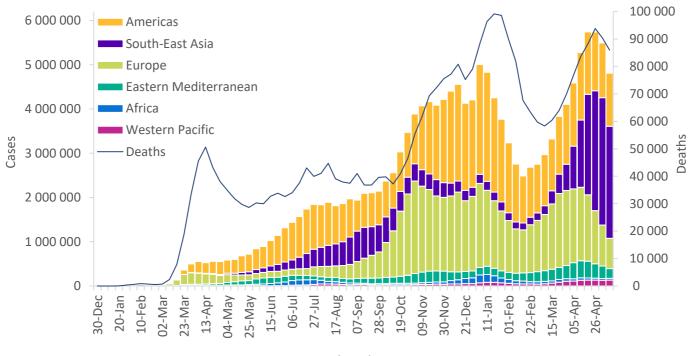
#### In this edition:

- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest (VOIs) and Variants of Concern (VOCs)
- WHO regional overviews
- Key weekly updates

#### Global overview

Globally, in the past week, the number of new cases and deaths continued to decrease with just over 4.8 million new cases and just under 86 000 new deaths reported; a 12% and 5% decrease respectively compared to the previous week (Figure 1). Despite a declining trend over the past three weeks, the incidence of cases remains at some of the highest levels since the start of the pandemic. All regions reported a decline in new cases this week apart from the Western Pacific Region, where the incidence of new cases was similar to the previous week (Table 1). The European Region reported the largest decline in new cases this week, followed by the Eastern Mediterranean. These regions also reported the largest decline in new deaths over the past week. South-East Asia and Western Pacific regions reported a similar number of new deaths as the previous week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 16 May 2021\*\*



Reported week commencing

<sup>\*\*</sup>See Annex 3: Data, table and figure notes

The highest numbers of new cases were reported from India (2 387 663 new cases; 13% decrease), Brazil (437 076 new cases; 3% increase), the United States of America (235 638 new cases; 21% decrease), Argentina (151 332 new cases; 8% increase), and Colombia (115 834 new cases; 6% increase).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 16 May 2021\*\*

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 201 726 (25%)	-3%	64 757 485 (40%)	31 439 (37%)	-7%	1 583 343 (47%)
Europe	684 903 (14%)	-26%	53 565 774 (33%)	16 255 (19%)	-16%	1 121 477 (33%)
South-East Asia	2 529 924 (53%)	-12%	28 082 564 (17%)	30 881 (36%)	7%	340 078 (10%)
Eastern Mediterranean	220 035 (5%)	-22%	9 648 410 (6%)	4 709 (5%)	-16%	193 761 (6%)
Africa	40 175 (1%)	-4%	3 399 382 (2%)	940 (1%)	-9%	84 844 (3%)
Western Pacific	132 757 (3%)	4%	2 729 890 (2%)	1 751 (2%)	4%	40 930 (1%)
Global	4 809 520 (100%)	-12%	162 184 263 (100%)	85 975 (100%)	-5%	3 364 446 (100%)

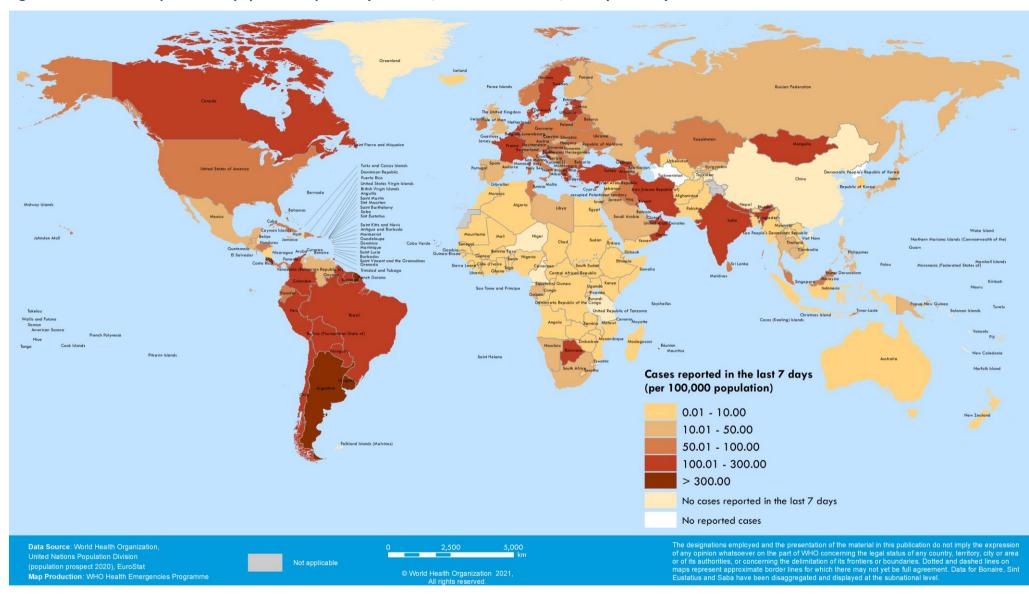
<sup>\*</sup>Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior

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

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

<sup>\*\*</sup>See Annex 3: Data, table and figure notes

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 10 May – 16 May 2021\*\*



<sup>\*\*</sup>See Annex 3: Data, table and figure notes

# Special Focus: Update on SARS-CoV-2 Variants of Interest (VOIs) and Variants of Concern (VOCs)

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 result in changes in transmissibility, clinical presentation and severity, or if they result in changes in public health and social measures (PHSM) implementation by national health authorities. Systems have been established to detect "signals" of potential variants of concern (VOCs) or variants of interest (VOIs) and assess these based on the risk posed to global public health (see also working definitions). National authorities may choose to designate other variants of local interest/concern. Detailed information on currently circulating VOCs and VOIs is available in previously published editions of the Weekly Epidemiological Update. Here we provide a brief update on the geographical distribution of the four VOCs as of 18 May 2021, as well as an update on detected VOIs (Table 2).

Table 2: SARS-CoV-2 Variants of Concern and Variants of Interest, as of 18 May 2021

PANGO lineage Nextstrain clade GISAID clade	Alternate name	First detected in	Earliest samples	Characteristic spike mutations
Variants of Concern (VOCs)				
B.1.1.7 20I/501Y.V1 GR/501Y.V1	VOC 202012/01	United Kingdom	Sep 2020	69/70del, 144del, N501Y, A570D, D614G, P681H, T716I, S982A, D1118H
B.1.351 20H/501Y.V2 <sup>†</sup> GH/501Y.V2	VOC 202012/02	South Africa	May 2020	D80A, D215G, 241/243del, K417N, E484K, N501Y, D614G, A701V
B.1.1.28.1, alias P.1 20J/501Y.V3 GR/501Y.V3	VOC 202101/02	Brazil	Nov 2020	L18F, T20N, P26S, D138Y, R190S, K417T, E484K, N501Y, D614G H655Y, T1027I, V1176F
B.1.617* - G/452R.V3	-	India	Oct 2020	L452R, D614G, P681R, ± (E484Q, Q107H, T19R, del157/158, T478K, D950N)
Variants of Interest (VOIs)				
B.1.525 20A/S.484K G/484K.V3	-	Multiple countries	Dec 2020	Q52R, A67V, 69/70del, 144del, E484K, D614G, Q677H, F888L
B.1.427/B.1.429 20C/S.452R GH/452R.V1	CAL.20C/L452R	United States of America	Mar 2020	S13I, W152C, L452R, D614G
B.1.1.28.2, alias P.2 20B/S.484K GR	-	Brazil	Apr 2020	E484K, D614G, V1176F
B.1.1.28.3, alias P.3 -	PHL-B.1.1.28	Philippines	Jan 2021	141/143del, E484K, N501Y, D614G, P681H, E1092K, H1101Y, V1176F
B.1.526 (+E484K/S477N) 20C GH	-	United States of America	Nov 2020	L5F, T95I, D253G, D614G, A701V, + (E484K or S477N)
B.1.616 - GH	-	France	Feb 2021	H66D, G142V, 144del, D215G, V483A, D614G, H655Y, G669S, Q949R, N1187D

<sup>\*</sup> B.1.617 lineage is divided in three sublineages (B.1.617.1, B.1.617.2 and B.1.617.3). Findings for sublineages B.1.617.1 and B.1.617.2 were mainly used to declare B.1.617 a global VOC. Once more information becomes available, specific sublineages may be declared as a global VOI/VOC.

As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing, the number of countries/areas/territories (hereafter countries) reporting VOCs and VOIs has continued to increase (Figures 3 - 6, Annex 2). This distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.



Figure 3. Countries, territories and areas reporting B.1.1.7 lineage, as of 18 May 2021

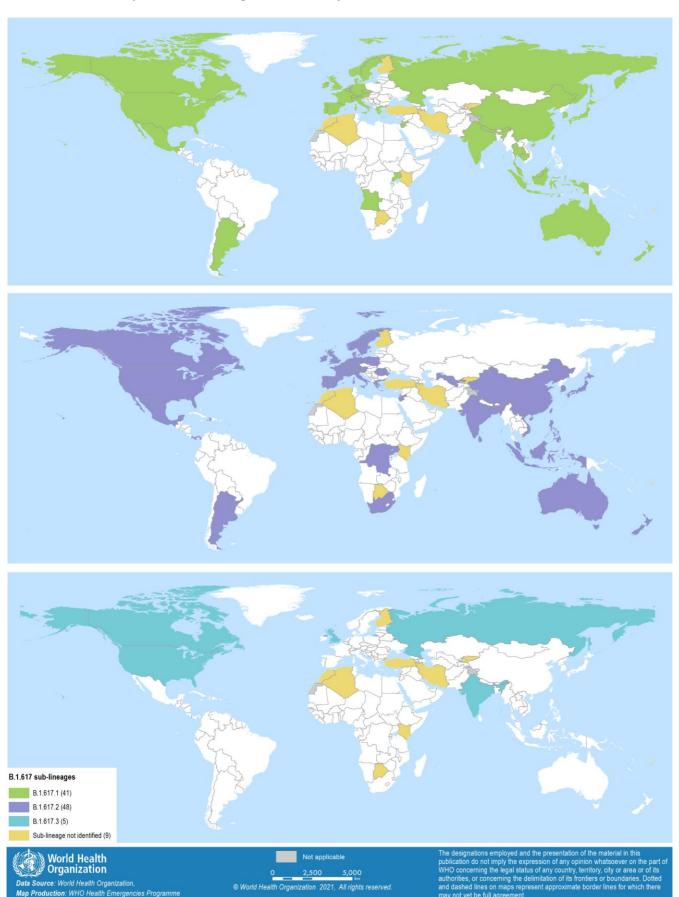




Figure 5. Countries, territories and areas reporting P.1 lineage, as of 18 May 2021



Figure 6. Countries, territories and areas reporting B.1.617.1, B.1.617.2 and B.1.617.3 sublineages, or B.1.617 with an unspecified sublineage, as of 18 May 2021\*



<sup>\*</sup>Countries/territories/areas listed in this figure include both official and unofficial reports of B.1.617 detection pending verification. Please see Annex 2 for details.

#### WHO recommendations

Virus evolution is expected, and the more SARS-CoV-2 circulates, the more opportunities it has to evolve. Reducing transmission through established and proven disease control methods such as those outlined in the COVID-19 Strategic Preparedness and Response Plan, as well as avoiding introductions into animal populations are crucial aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critical to curb the spread of SARS-CoV-2 and its variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the PHSM, including infection prevention and control (IPC) measures in health facilities has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities. Authorities are also encouraged to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and to detect unusual events.

#### **Additional resources**

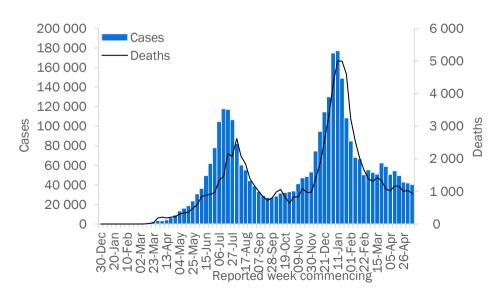
- Working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19
- COVID-19 Situation Reports from WHO Regional Offices and partners: <u>AFRO</u>, <u>AMRO/PAHO</u>, <u>EMRO</u>, <u>EURO/ECDC</u>, <u>SEARO</u>, <u>WPRO</u>

## **WHO** regional overviews

## **African Region**

The African Region reported over 40 000 new cases and over 900 new deaths, a 4% and a 9% decrease respectively compared to the previous week. Case incidence continued to decrease for a fourth consecutive week while the number of deaths has reflected similar trends during this period. The highest numbers of new cases were reported from South Africa (16 326 new cases; 27.5 new cases per 100 000 population; a 36% increase), Botswana (3745 new cases; 159.3 new cases per 100 000; a 153% increase), and Ethiopia (3615 new cases; 3.1 new cases per 100 000; a 13% decrease). Cases in South Africa comprised 41% of cases reported in the Region.

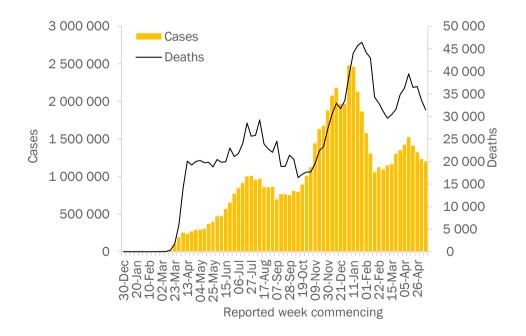
The highest numbers of new deaths were reported from South Africa (459 new deaths; 0.8 new deaths per 100 000 population; a 44% increase), Kenya (118 new deaths; 0.2 new deaths per 100 000; a 15% decrease), and Ethiopia (105 new deaths; 0.1 new deaths per 100 000; a 35% decrease).



### **Region of the Americas**

The Region of the Americas reported over 1.2 million new cases and over 31 000 new deaths, a 3% and a 7% decrease respectively compared to the previous week. The number of cases decreased for a fourth consecutive week, and the number of deaths decreased for a second consecutive week. The highest numbers of new cases were reported from Brazil (437 076 new cases; 205.6 new cases per 100 000; a 3% increase), the United States of America (235 638 new cases; 71.2 new cases per 100 000; a 21% decrease), and Argentina (151 332 new cases; 334.8 new cases per 100 000; an 8% increase).

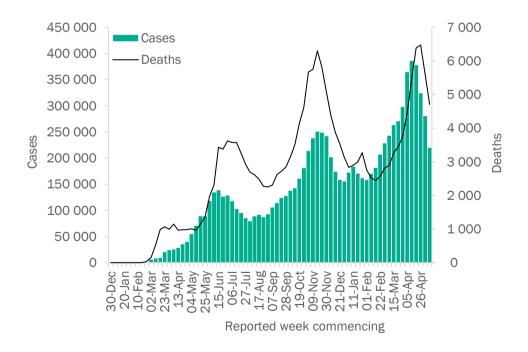
The highest numbers of new deaths were reported from Brazil (13 514 new deaths; 6.4 new deaths per 100 000; a 12% decrease), the United States of America (4143 new deaths; 1.3 new deaths per 100 000; a 12% decrease), and Colombia (3383 new deaths; 6.6 new deaths per 100 000; an 8% increase).



#### **Eastern Mediterranean Region**

The Eastern Mediterranean Region reported over 220 000 new cases and over 4700 new deaths, a 22% and a 16% decrease respectively compared to the previous week. Case and death incidences have decreased steeply for the past four and two weeks respectively. The highest numbers of new cases were reported from the Islamic Republic of Iran (99 205 new cases; 118.1 new cases per 100 000; a 20% decrease), Iraq (28 359 new cases; 70.5 new cases per 100 000; a 26% decrease), and Pakistan (20 511 new cases; 9.3 new cases per 100 000; a 29% decrease).

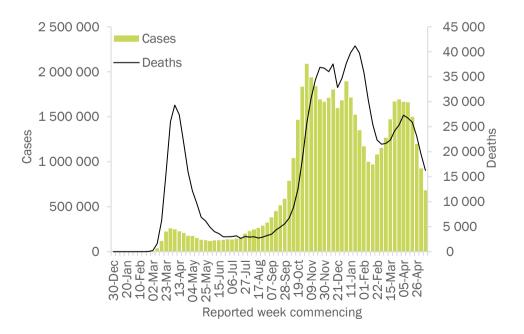
The highest numbers of new deaths were reported from the Islamic Republic of Iran (2109 new deaths; 2.5 new deaths per 100 000; a 13% decrease), Pakistan (670 new deaths; 0.3 new deaths per 100 000; a 20% decrease), and Tunisia (429 new deaths; 3.6 new deaths per 100 000; a 21% decrease).



#### **European Region**

The European Region reported just under 685 000 new cases and over 16 000 new deaths, a 26% and a 16% decrease respectively compared to the previous week. The number new of cases and deaths continued their downward trend for a sixth and fifth consecutive week respectively. The highest numbers of new cases were reported from France (93 546 new cases; 143.8 new cases per 100 000; a 24% decrease), Turkey (90 721 new cases; 107.6 new cases per 100 000; a 46% decrease), and Germany (73 105 new cases; 87.9 new cases per 100 000; a 29% decrease).

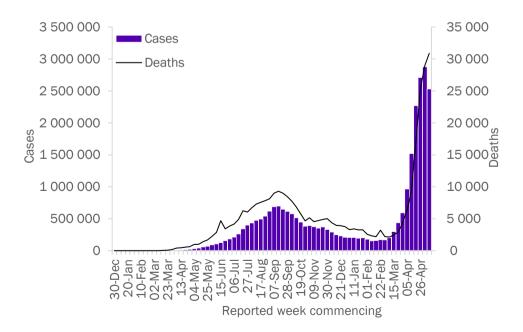
The highest numbers of new deaths were reported from Russian Federation (2545 new deaths; 1.7 new deaths per 100 000; a 3% increase), Turkey (1791 new deaths; 2.1 new deaths per 100 000; a 20% decrease), and Ukraine (1682 new deaths; 3.8 new deaths per 100 000; a 6% decrease).



#### **South-East Asia Region**

The South-East Asia Region reported over 2.5 million new cases and over 30 000 new deaths, a 12% decrease and a 7% increase respectively compared to the previous week. Case incidence decreased after nine consecutive weeks of increases, although the absolute number remains at its highest level since the beginning of the pandemic. Death incidence continued to increase for a ninth consecutive week. The highest numbers of new cases were reported from India (2 387 663 new cases; 173.0 new cases per 100 000; a 13% decrease), Nepal (61 814 new cases; 212.2 new cases per 100 000; an 8% increase), and Indonesia (26 908 new cases; 9.8 new cases per 100 000; a 27% decrease).

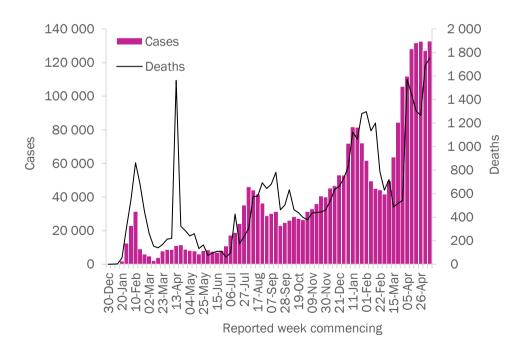
The highest numbers of new deaths were reported from India (27 922 new deaths; 2.0 new deaths per 100 000; a 4% increase), Nepal (1224 new deaths; 4.2 new deaths per 100 000; a 266% increase), and Indonesia (1125 new deaths; 0.4 new deaths per 100 000; a 5% decrease).



### **Western Pacific Region**

The Western Pacific Region reported over 132 000 new cases and over 1700 new deaths, both increasing by 4% compared to the previous week. Both weekly case and death incidences were the highest reported in the Region since the beginning of the pandemic. The highest numbers of new cases were reported from Japan (44 961 new cases; 35.5 new cases per 100 000; a 26% increase), the Philippines (43 339 new cases; 39.5 new cases per 100 000; a 10% decrease), and Malaysia (29 386 new cases; 90.8 new cases per 100 000; a 16% increase). These three countries comprised 89% of all cases reported in the Region in the past week.

The highest numbers of new deaths were reported from the Philippines (782 new deaths; 0.7 new deaths per 100 000; a 15% decrease), Japan (640 new deaths; 0.5 new deaths per 100 000; a 21% increase), and Malaysia (209 new deaths; 0.6 new deaths per 100 000; a 54% increase).



## Key weekly updates

#### WHO Director-General's key messages

Opening remarks at the media briefing on COVID-19 – 17 May 2021:

- WHO Director-General Dr Tedros urged Member States to continue donating vaccines to COVAX in an effort to increase vaccine-supply to low-income countries, which are presently receiving only about 0.3% of all supply. UNICEF Executive Director Henrietta Fore also called vaccine equity, warning of a huge shortfall in the vaccine supply to COVAX, in a statement released by UNICEF.
- This week marks UN Global Road Safety, with the aim to lower speeds to significantly reduce the risk of death and injury. Although increased public health and social measures during the pandemic has meant more people have been working from home and overall there has been less road traffic, the number of traffic-related deaths did not decrease to the same degree.

#### **Updates and publications**

- Continuity of essential health services: Facility assessment tool
- Health systems for health security Strengthening prevention, preparedness and response to health emergencies
- Programmatic innovations to address challenges in tuberculosis prevention and care during the COVID-19 pandemic
- Health worker communication for COVID-19 vaccination flow diagram
- COVID-19 vaccine explainer: AstraZeneca ChAdOx1-S/nCoV-19 [recombinant], COVID-19 vaccine
- COVID-19 vaccine introduction and deployment Costing tool (CVIC tool)
- WHO COVID-19 infection prevention and control (IPC) pillar achievements. February 2020 January 2021
- WHO and UNICEF launch new tools for the promotion of adolescent mental health
- Using COVID-19 lockdown road-crash data to inform transport safety policy, Cali, Colombia

## **Technical guidance and other resources**

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- <u>The Strategic Preparedness and Response Plan (SPRP)</u> outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - o African Region
  - o Region of the Americas
  - o <u>Eastern Mediterranean Region</u>
  - o South-East Asia Region
  - o <u>European Region</u>
  - o Western Pacific Region
- Recommendations and advice for the public:
  - o Protect yourself
  - o **Questions and answers**
  - o <u>Travel advice</u>
  - EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 16 May 2021\*\*

Reporting Country/Territory/Area	lew cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Africa	40 175	3 399 382	303.0	940	84 844	7.6	
South Africa	16 326	1 611 143	2 716.5	459	55 183	93.0	Community transmission
Botswana	3 745	52 162	2 218.1	27	761	32.4	Community transmission
Ethiopia	3 615	265 832	231.2	105	3 976	3.5	Community transmission
Kenya	2 141	165 379	307.6	118	3 001	5.6	Community transmission
Angola	1 877	30 354	92.4	25	655	2.0	Community transmission
Cabo Verde	1 840	27 951	5 027.3	14	246	44.2	Community transmission
Algeria	1 294	125 194	285.5	45	3 366	7.7	Community transmission
Namibia	1 220	51 113	2 011.6	27	710	27.9	Community transmission
Madagascar	1 131	40 005	144.5	38	754	2.7	Community transmission
Seychelles	1 012	9 184	9 338.4	2	30	30.5	Community transmission
Ghana	387	93 243	300.1	0	783	2.5	Community transmission
Gabon	367	23 799	1 069.3	0	143	6.4	Community transmission
Uganda	366	42 674	93.3	1	347	0.8	Community transmission
Zambia	352	92 409	502.7	3	1 260	6.9	Community transmission
Rwanda	348	25 934	200.2	4	342	2.6	Community transmission
Nigeria	320	165 702	80.4	1	2 066	1.0	Community transmission
Côte d'Ivoire	275	46 619	176.7	6	297	1.1	Community transmission
Democratic Republic of the Congo	261	30 546	34.1	4	776	0.9	Community transmission
Mozambique	244	70 410	225.3	5	826	2.6	Community transmission
Congo	196	11 343	205.6	0	148	2.7	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Central African Republic	192	6 866	142.2	2	95	2.0	Community transmission
Mauritania	170	18 806	404.5	1	457	9.8	Community transmission
Senegal	163	40 828	243.8	7	1 124	6.7	Community transmission
Burundi	152	4 329	36.4	0	6	0.1	Community transmission
Zimbabwe	140	38 554	259.4	6	1 582	10.6	Community transmission
Togo	103	13 244	160.0	1	125	1.5	Community transmission
Eritrea	102	3 844	108.4	0	12	0.3	Community transmission
Guinea	101	22 734	173.1	1	151	1.1	Community transmission
Benin	100	7 984	65.9	1	101	0.8	Community transmission
Mali	94	14 176	70.0	12	511	2.5	Community transmission
Malawi	44	34 210	178.8	0	1 153	6.0	Community transmission
Eswatini	42	18 519	1 596.2	1	672	57.9	Community transmission
Mauritius	42	1 288	101.3	0	17	1.3	Clusters of cases
Sierra Leone	35	4 103	51.4	0	79	1.0	Community transmission
Chad	27	4 901	29.8	2	173	1.1	Community transmission
Burkina Faso	18	13 395	64.1	2	164	0.8	Community transmission
Gambia	17	5 946	246.0	0	175	7.2	Community transmission
Lesotho	17	10 790	503.7	1	320	14.9	Community transmission
South Sudan	15	10 652	95.2	- 1	115	1.0	Community transmission
Liberia	14	2 128	42.1	0	85	1.7	Community transmission
Niger	11	5 330	22.0	0	192	0.8	Community transmission
Sao Tome and Principe	9	2 327	1 061.8	0	35	16.0	Community transmission
Comoros	8	3 930	451.9	0	146	16.8	Community transmission
Guinea-Bissau	7	3 746	190.3	0	67	3.4	Community transmission
Cameroon	0	74 733	281.5	0	1 144	4.3	Community transmission
Equatorial Guinea	0	7 694	548.4	0	112	8.0	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories <sup>iii</sup>							
Réunion	1 193	22 644	2 529.2	19	169	18.9	Community transmission
Mayotte	42	20 176	7 395.5	1	171	62.7	Community transmission
Americas	1 201 726	64 757 485	6 331.5	31 439	1 583 343	154.8	
Brazil	437 076	15 519 525	7 301.3	13 514	432 628	203.5	Community transmission
United States of America	235 638	32 574 504	9 841.2	4 143	579 664	175.1	Community transmission
Argentina	151 332	3 269 466	7 234.0	2 981	69 853	154.6	Community transmission
Colombia	115 834	3 084 460	6 061.9	3 383	80 250	157.7	Community transmission
Canada	45 230	1 318 399	3 493.2	340	24 869	65.9	Community transmission
Peru	39 584	1 879 049	5 698.9	2 089	65 608	199.0	Community transmission
Chile	38 276	1 280 252	6 697.2	633	27 734	145.1	Community transmission
Uruguay	19 060	235 206	6 771.0	337	3 369	97.0	Community transmission
Costa Rica	17 255	282 741	5 550.3	182	3 547	69.6	Community transmission
Mexico	16 121	2 377 995	1 844.4	1 502	220 159	170.8	Community transmission
Paraguay	15 405	309 638	4 341.2	508	7 482	104.9	Community transmission
Bolivia (Plurinational State of)	13 580	329 733	2 824.7	269	13 451	115.2	Community transmission
Ecuador	10 599	409 520	2 321.1	555	19 692	111.6	Community transmission
Cuba	8 309	123 221	1 087.9	74	796	7.0	Community transmission
Venezuela (Bolivarian Republic of)	7 817	212 998	749.0	103	2 366	8.3	Community transmission
Honduras	6 926	225 256	2 274.3	352	5 937	59.9	Community transmission
Dominican Republic	5 672	276 272	2 546.8	46	3 569	32.9	Community transmission
Guatemala	5 287	240 170	1 340.6	128	7 845	43.8	Community transmission
Panama	3 281	370 043	8 576.2	34	6 292	145.8	Community transmission
Trinidad and Tobago	2 659	15 379	1 098.9	69	265	18.9	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Guyana	951	14 988	1 905.5	21	335	42.6	Community transmission
Suriname	774	11 707	1 995.6	9	223	38.0	Community transmission
El Salvador	660	70 915	1 093.3	32	2 182	33.6	Community transmission
Jamaica	645	47 233	1 595.1	40	843	28.5	Community transmission
Bahamas	300	11 073	2 815.8	5	217	55.2	Clusters of cases
Haiti	229	13 393	117.5	8	271	2.4	Community transmission
Saint Lucia	134	4 788	2 607.5	0	75	40.8	Community transmission
Nicaragua	74	5 649	85.3	1	184	2.8	Community transmission
Barbados	30	3 961	1 378.3	1	46	16.0	Community transmission
Belize	28	12 714	3 197.5	0	323	81.2	Community transmission
Saint Vincent and the Grenadines	20	1 932	1 741.5	0	12	10.8	Community transmission
Antigua and Barbuda	3	1 240	1 266.2	0	32	32.7	Clusters of cases
Dominica	3	178	247.3	0	0	0.0	Clusters of cases
Grenada	0	161	143.1	0	1	0.9	Sporadic cases
Saint Kitts and Nevis	0	45	84.6	0	0	0.0	Sporadic cases
Territories <sup>iii</sup>							
Puerto Rico	1 538	136 426	4 768.7	64	2 431	85.0	Community transmission
French Guiana	1 099	21 465	7 186.6	4	108	36.2	Community transmission
Aruba	89	10 826	10 139.9	4	104	97.4	Community transmission
United States Virgin Islands	57	3 267	3 128.6	0	27	25.9	Community transmission
Bermuda	32	2 466	3 960.0	2	32	51.4	Community transmission
British Virgin Islands	29	248	820.2	0	1	3.3	Clusters of cases
Curaçao	22	12 244	7 461.6	5	118	71.9	Community transmission
Sint Maarten	22	2 272	5 298.3	0	27	63.0	Community transmission
Bonaire	17	1 564	7 477.9	1	17	81.3	Community transmission
Cayman Islands	17	565	859.7	0	2	3.0	Sporadic cases

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Anguilla	10	109	726.6	0	0	0.0	Clusters of cases
Turks and Caicos Islands	2	2 404	6 209.0	0	17	43.9	Clusters of cases
Falkland Islands (Malvinas)	0	63	1 808.8	0	0	0.0	Sporadic cases
Guadeloupe	0	15 429	3 856.1	0	236	59.0	Community transmission
Martinique	0	11 490	3 061.8	0	87	23.2	Community transmission
Montserrat	0	20	400.1	0	1	20.0	No cases
Saba	0	7	362.1	0	0	0.0	Sporadic cases
Saint Barthélemy	0	994	10 055.6	0	1	10.1	Clusters of cases
Saint Martin	0	1 777	4 596.6	0	14	36.2	Community transmission
Saint Pierre and Miquelon	0	25	431.4	0	0	0.0	No cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	220 035	9 648 410	1 320.2	4 709	193 761	26.5	
Iran (Islamic Republic of)	99 205	2 739 875	3 262.0	2 109	76 633	91.2	Community transmission
Iraq	28 359	1 136 917	2 826.6	189	15 930	39.6	Community transmission
Pakistan	20 511	874 751	396.0	670	19 467	8.8	Community transmission
Bahrain	11 188	199 093	11 700.5	59	737	43.3	Community transmission
United Arab Emirates	10 486	544 931	5 509.7	19	1 629	16.5	Clusters of cases
Egypt	8 248	244 520	238.9	424	14 269	13.9	Clusters of cases
Saudi Arabia	6 827	432 269	1 241.7	88	7 147	20.5	Community transmission
Kuwait	6 725	290 801	6 809.4	52	1 687	39.5	Community transmission
Tunisia	6 320	325 832	2 756.9	429	11 779	99.7	Community transmission
Oman	5 569	204 913	4 012.7	101	2 184	42.8	Community transmission
Jordan	4 112	723 345	7 089.4	167	9 243	90.6	Community transmission
Lebanon	2 964	535 233	7 841.7	125	7 585	111.1	Community transmission
LEBATION							
Qatar	2 324	212 927	7 390.6	24	526	18.3	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Libya	1 482	181 179	2 636.8	22	3 085	44.9	Community transmission
Morocco	1 189	514 817	1 394.8	34	9 098	24.6	Community transmission
Syrian Arab Republic	374	23 693	135.4	45	1 693	9.7	Community transmission
Djibouti	79	11 414	1 155.3	2	151	15.3	Community transmission
Yemen	76	6 542	21.9	15	1 286	4.3	Community transmission
Somalia	71	14 486	91.1	6	753	4.7	Community transmission
Sudan	63	34 889	79.6	1	2 446	5.6	Clusters of cases
Territories <sup>iii</sup>							
occupied Palestinian territory	2 221	332 499	6 517.8	72	3 691	72.4	Community transmission
Europe	684 903	53 565 774	5 740.8	16 255	1 121 477	120.2	
Kosovo [1]	498	106 800		20	2 213		Community transmission
France	93 546	5 769 839	8 871.3	1 234	106 778	164.2	Community transmission
Turkey	90 721	5 106 862	6 055.2	1 791	44 537	52.8	Community transmission
Germany	73 105	3 593 434	4 320.8	1 321	86 096	103.5	Community transmission
Russian Federation	59 983	4 940 245	3 385.2	2 545	115 871	79.4	Clusters of cases
Italy	50 453	4 153 374	6 963.9	1 369	124 063	208.0	Clusters of cases
Netherlands	40 506	1 593 670	9 155.0	118	17 436	100.2	Community transmission
Ukraine	34 354	2 153 864	4 924.9	1 682	48 075	109.9	Community transmission
Sweden	24 139	1 037 126	10 042.3	20	14 275	138.2	Community transmission
Poland	21 027	2 854 079	7 519.0	1 652	71 664	188.8	Community transmission
Spain	19 524	3 598 452	7 602.5	154	79 281	167.5	Community transmission
Kazakhstan	16 050	414 345	2 206.7	173	4 933	26.3	Clusters of cases
The United Kingdom	15 761	4 448 855	6 553.4	72	127 675	188.1	Community transmission
Greece	15 254	375 831	3 506.4	387	11 365	106.0	Community transmission
Belgium	13 972	1 031 922	8 955.8	158	24 707	214.4	Community transmission
Georgia	8 456	330 375	8 281.8	161	4 442	111.4	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Czechia	7 779	1 652 840	15 455.9	234	29 901	279.6	Community transmission
Lithuania	7 709	265 536	9 503.5	5 69 4 103 146		146.8	Community transmission
Denmark	7 357	265 539	4 560.4	5	2 502	43.0	Community transmission
Belarus	7 040	374 714	3 965.5	69	2 691	28.5	Community transmission
Hungary	6 438	798 147	8 169.8	573	29 175	298.6	Community transmission
Austria	6 331	632 398	7 104.7	97	10 207	114.7	Community transmission
Serbia	6 316	705 890	10 190.8	125	6 664	96.2	Community transmission
Romania	6 080	1 071 334	5 542.7	582	29 485	152.5	Community transmission
Croatia	5 896	350 390	8 634.2	239	7 708	189.9	Community transmission
Switzerland	5 668	676 437	7 815.9	14	10 122	117.0	Community transmission
Latvia	4 266	127 597	6 688.6	49	2 257	118.3	Community transmission
Bulgaria	4 080	414 041	5 956.2	348	17 250	248.1	Clusters of cases
Azerbaijan	3 315	329 371	3 248.5	102	4 768	47.0	Clusters of cases
Slovenia	3 221	249 018	11 881.4	26	4 649	221.8	Clusters of cases
Norway	2 865	118 275	2 203.5	7	774	14.4	Clusters of cases
Portugal	2 590	841 848	8 176.5	15	17 006	165.2	Clusters of cases
Ireland	2 567	254 870	5 133.9	20	4 941	99.5	Community transmission
Uzbekistan	2 273	96 670	288.8	6	668	2.0	Clusters of cases
Kyrgyzstan	2 073	100 473	1 540.0	48	1 703	26.1	Clusters of cases
Slovakia	2 048	387 523	7 100.3	205	12 224	224.0	Clusters of cases
Estonia	1 927	127 053	9 560.2	21	1 222	92.0	Clusters of cases
Cyprus	1 736	70 899	7 984.1	12	346	39.0	Clusters of cases
Armenia	1 590	220 860	7 453.3	89	4 323	145.9	Community transmission
Bosnia and Herzegovina	1 324	202 313	6 166.5	196	9 007	274.5	Community transmission
Finland	1 317	89 878	1 626.7	9	931	16.8	Community transmission
Republic of Moldova	1 132	253 736	6 290.0	73	6 016	149.1	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
North Macedonia	745	154 636	7 422.4	118	5 197	249.5	Clusters of cases
Luxembourg	631	68 922	11 008.0	4	806	128.7	Community transmission
Montenegro	485	98 844	15 737.9	20	1 560	248.4	Clusters of cases
Albania	312	131 978	4 586.1	18	2 429	84.4	Clusters of cases
Israel	231	839 118	9 694.6	5	6 381	73.7	Community transmission
Andorra	104	13 510	17 485.3	0	127	164.4	Community transmission
Malta	40	30 478	5 923.1	0	417	81.0	Clusters of cases
Iceland	31	6 537	1 795.2	0	29	8.0	Community transmission
Monaco	14	2 493	6 352.6	0	32	81.5	Sporadic cases
Liechtenstein	11	3 073	7 930.9	0	57	147.1	Sporadic cases
San Marino	8	5 087	14 989.1	0	90	265.2	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories <sup>iii</sup>							
Faroe Islands	2	670	1 371.1	0	1	2.0	Sporadic cases
Jersey	2	3 236	3 002.0	0	69	64.0	Community transmission
Gibraltar	0	4 286	12 721.5	0	94	279.0	Clusters of cases
Greenland	0	31	54.6	0	0	0.0	No cases
Guernsey	0	822	1 275.1	0	14	21.7	Community transmission
Isle of Man	0	1 590	1 869.9	0	29	34.1	No cases
South-East Asia	2 529 924	28 082 564	1 389.3	30 881	340 078	16.8	
India	2 387 663	24 684 077	1 788.7	27 922	270 284	19.6	Clusters of cases
Nepal	61 814	447 704	1 536.6	1 224	4 856	16.7	Community transmission
Indonesia	26 908	1 736 670	634.9	1 125	47 967	17.5	Community transmission
Thailand	18 072	101 447	145.3	190	589	0.8	Clusters of cases
Sri Lanka	17 237	140 471	656.0	155	941	4.4	Clusters of cases

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Maldives	9 058	43 782	8 099.6	13	96	17.8	Clusters of cases
Bangladesh	7 669	779 796	473.5	246	12 124	7.4	Community transmission
Timor-Leste	1 314	4 279	324.5	4	8	0.6	Community transmission
Myanmar	112	143 059	262.9	2	3 212	5.9	Clusters of cases
Bhutan	77	1 279	165.8	0	1	0.1	Clusters of cases
Western Pacific	132 757	2 729 890	139.0	1 751	40 930	2.1	
Japan	44 961	677 988	536.1	640	11 463	9.1	Clusters of cases
Philippines	43 339	1 138 173	1 038.7	782	19 051	17.4	Community transmission
Malaysia	29 386	466 330	1 440.8	209	1 866	5.8	Community transmission
Republic of Korea	4 362	131 671	256.8	26	1 900	3.7	Clusters of cases
Mongolia	4 085	48 101	1 467.3	45	205	6.3	Clusters of cases
Cambodia	2 947	22 184	132.7	30	150	0.9	Sporadic cases
Papua New Guinea	1 702	13 928	155.7	15	136	1.5	Community transmission
Viet Nam	867	4 112	4.2	1	36	0.0	Clusters of cases
China	396	104 191	7.1	0	4 858	0.3	Clusters of cases
Lao People's Democratic Republic	337	1 570	21.6	2	2	0.0	Sporadic cases
Singapore	205	61 536	1 051.8	0	31	0.5	Sporadic cases
Australia	61	29 967	117.5	0	910	3.6	Clusters of cases
Fiji	32	168	18.7	1	4	0.4	Sporadic cases
New Zealand	4	2 290	47.5	0	26	0.5	Sporadic cases
Brunei Darussalam	2	232	53.0	0	3	0.7	Sporadic cases
Solomon Islands	0	20	2.9	0	0	0.0	No cases
Territories <sup>iii</sup>							
Guam	42	7 855	4 654.1	0	139	82.4	Clusters of cases
French Polynesia	25	18 815	6 697.9	0	141	50.2	Sporadic cases

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Northern Mariana Islands (Commonwealth of the)	4	173	300.6	0	2	3.5	Pending
Marshall Islands	0	4	6.8	0	0	0.0	No cases
New Caledonia	0	124	43.4	0	0	0.0	Sporadic cases
Samoa	0	1	0.5	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Wallis and Futuna	0	454	4 037.0	0	7	62.2	Sporadic cases
Global	4 809 520	162 184 263		85 975	3 364 446		

<sup>\*</sup>See Annex 3: Data, table and figure notes

Annex 2. List of countries/territories/areas reporting variants of concern as of 18 May 2021\*\*

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Afghanistan	•	-	-	-	-	-	-
Albania	•	-	-	-	-	-	
Algeria	•	-	-	-	-	-	•
Angola	•	•	-	0	-	-	-
Argentina	•	•*	•	•	•	-	_
Armenia	0	-	-	-	-	-	-
Aruba	•	•	•	-	•	-	_
Australia	•	•	•	0	0	-	-
Austria	•	•	•	•	•	-	_
Azerbaijan	•	-	-	-	-	-	_
Bahrain	•	•	-	•	•	-	-
Bangladesh	•	•	0	-	•	-	
Barbados	•	-	-	-	-	-	-
Belarus	•	-	-	-	-	-	_
Belgium	•	•	•	•	•	-	-
Belize	•	-	-	-	-	-	_
Bolivia (Plurinational State of)	•	-	-	-	-	-	
Bonaire	•	-	-	-	-	-	
Bosnia and Herzegovina	0	-	_	-	-	-	
Botswana	-	•	-	-	_	-	•
Brazil	•	•	•	-	-	-	-
Brunei Darussalam	•	•	-	-	-	-	
Bulgaria	•	-	-	-	-	-	

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Cabo Verde	•	-	-	-	-	-	-
Cambodia	•	-	-	0	-	-	-
Cameroon	•	•	-	-	-	-	-
Canada	•	•	•	•	•	•	-
Cayman Islands	•	-	-	-	-	-	-
Central African Republic	•	-	-	-	-	_	_
Chile	•	•	•	-	-	-	-
China	•	•	•	0	0	-	-
Colombia	•	-	•	-	-	-	-
Comoros	-	•	-	-	-	-	-
Congo	•*	-	-	-	-	-	-
Costa Rica	•	•	•	-	-	-	-
Côte d'Ivoire	•	•	-	-	-	-	-
Croatia	•	•	-	-	-	-	-
Cuba	•	•	-	-	-	-	-
Curaçao	•	-	-	-	-	-	-
Cyprus	•	-	-	-	-	-	-
Czechia	•	•	-	•	-	-	-
Democratic Republic of the Congo	•	•	_	-	•	-	_
Denmark	•	•	•	•	•	-	-
Dominica	-	-	-	-	•	-	-
Dominican Republic	•	_	_	-	_	-	-
Ecuador	•	-	•	-	-	-	-

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Egypt	•	-	-	-	-	-	-
Equatorial Guinea	•	•	-	-	-	-	-
Estonia	•	•	-	-	-	-	-
Eswatini	-	•	-	-	-	-	-
Ethiopia	0	-	-	-	-	-	-
Faroe Islands	-	-	•	-	-	-	-
Fiji	-	-	-	-	-	-	•
Finland	•	•	•	-	-	-	•
France	•	•	•	•	•	-	-
French Guiana	•	•	•	-	-	-	-
French Polynesia	•	-	•	-	-	-	-
Gabon	•	0	-	-	-	-	-
Gambia	•	-	-	-	-	-	-
Georgia	•	-	-	-	-	-	-
Germany	•	•	•	•	•	-	-
Ghana	•	•	-	-	-	-	-
Gibraltar	•	-	-	-	-	-	-
Greece	•	•	-	•	•	-	-
Grenada	•	-	-	-	-	-	-
Guadeloupe	•	•	-	•	-	-	-
Guam	•	•*	-	-	-	-	-
Guinea	•	-	-	-	-	-	-
Guyana	-	-	•	-	-	-	-
Haiti	-	-	•*	-	•	-	-
Hungary	•	0	-	-	-	-	-
Iceland	•	-	-	-	-	-	-

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
India	•	•	•	•	•	•	-
Indonesia	•	•	-	•	•	-	
Iran (Islamic Republic of)	•	•	-	-	_	-	•
Iraq	•	-	-	-	-	-	-
Ireland	•	•	•	•	•	-	-
Israel	•	•	•	•	•	-	-
Italy	•	•	•	•	•	-	-
Jamaica	•	-	-	-	-	-	-
Japan	•	•	•	0	0	-	-
Jordan	•	•	•	•	•	-	-
Kazakhstan	0	0	-	-	-	-	-
Kenya	0	•	-	-	-	-	•
Kosovo <sup>[1]</sup>	•	-	-	-	-	-	-
Kuwait	•	-	-	-	-	-	
Kyrgyzstan	•	•	-	-	-	-	•
Lao People's Democratic Republic	•	_	_	_	-	_	-
Latvia	•	•	•	-	-	-	_
Lebanon	•	-	-	-	-	-	-
Lesotho	-	•	-	-	-	-	-
Libya	•	•	-	-	-	-	-
Liechtenstein	•	-	-	-	-	-	-
Lithuania	•	•	•	-	-	-	
Luxembourg	•	•	•	•	•	-	
Madagascar	-	•	_	-	-	-	
Malawi	•	•	-	-	-	-	-

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Malaysia	•	•	-	•	0	-	-
Malta	•	0	•	-	-	-	-
Martinique	•	•	-	-	-	-	-
Mauritius	0	•	-	-	-	-	-
Mayotte	•	•	-	-	-	-	-
Mexico	•	•	•	•	•	-	-
Monaco	•	0	-	-	-	-	-
Montenegro	•	-	-	-	-	-	-
Morocco	•	-	-	-	-	-	•
Mozambique	-	•	-	-	-	-	-
Namibia	-	•	-	-	-	-	-
Nepal	•	-	-	•	-	-	-
Netherlands	•	•	•	•	•	-	-
New Caledonia	•	-	-	-	-	-	-
New Zealand	•	•	0	0	0	-	-
Niger	•	-	-	-	-	-	-
Nigeria	•	-	-	-	-	-	-
North Macedonia	•	•	-	-	-	-	-
Norway	•	•	•	•	•	-	-
occupied Palestinian territory	•	•	-	-	-	-	-
Oman	•	-	-	-	-	-	-
Pakistan	•	•	•	-	-	-	
Panama	•	•	•	-	•	-	-
Paraguay	-		•			_	_
Peru	•	-	•	-	-	-	-
Philippines	•	•	•	-	•	-	-

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Poland	•	0	•	-	•	-	-
Portugal	•	•	•	•	0	-	-
Puerto Rico	•	•	•	-	-	-	-
Qatar	•	•	-	-	-	-	-
Republic of Korea	•	•	•	0	0	-	-
Republic of Moldova	0	_	-	_	_	_	_
Réunion	•	•	•	-	0	-	-
Romania	•	•	•	-	•	-	-
Russian Federation	•	•	_	•	_	•	_
Rwanda	0	0	-	-	-	-	-
Saint Barthélemy	•	-	-	-	-	-	-
Saint Lucia	•	-	-	-	-	-	-
Saint Martin	•	•	-	-	-	-	-
Saudi Arabia	•	-	-	-	-	-	-
Senegal	•	-	-	-	-	-	
Serbia	•	-	-	-	-	-	-
Seychelles	-	•	-	-	-	-	
Singapore	•	•	•	0	•	-	-
Sint Maarten	•	•*	-	•	-	-	-
Slovakia	•	•	-	-	-	-	-
Slovenia	•	•	•	-	•	-	-
South Africa	•	•	-	-	•	-	-
Spain	•	•	•	•	•	-	-
Sri Lanka	•	•	-	-	•	-	
Suriname	•	•	•	-	-	-	-
Sweden	•	•	•	•	•	-	-

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Switzerland	•	•	0	•	•	-	-
Thailand	•	•	•	•	-	-	-
Togo	•	•	-	-	-	-	-
Trinidad and							
Tobago	•	-	•	-	-	-	-
Tunisia	•	•	-	-	-	-	-
Turkey	•	•	•	-	-	-	•
Turks and Caicos							
Islands	•	-	-	-	-	-	-

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Uganda	•*	•*	-	0	0	-	-
Ukraine	•	0	-	-	-	-	-
United Arab Emirates	•	•	•	-	-	-	-
United Kingdom	•	•	•	•	•	•	-
United Republic of Tanzania	-	0	-	-	-	-	-
United States of America	•	•	•	•	•	•	-

Country/Territory /Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Uruguay	•	-	•	-	-	-	-
Uzbekistan	•	•	-	-	•	-	-
Venezuela							
(Bolivarian							
Republic of)	-	-	•	-	-	-	-
Viet Nam	•	•	-	-	•	-	-
Wallis and Futuna	•	-	-	-	-	-	-
Zambia	-	•	-	-	-	-	-
Zimbabwe	-	0	-	-	-	-	-

<sup>\*</sup>Newly reported in this update. Columns B.1.617.1, B.1.617.2, B.1.617.3, B.1.617x were newly added this week.

<sup>&</sup>quot;●" indicates that information for this variant was received by WHO from official sources.

<sup>&</sup>quot;O" indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available.

<sup>\*\*</sup>See also *Annex 3: Data, table and figure notes* 

#### Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 758 cases and 13 deaths reported from international conveyances.

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

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

<sup>1</sup> Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

<sup>ii</sup> Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see:

Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.

- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that
  are not directly linked to imported cases, but which are all linked by time, geographic location and common
  exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of
  infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorizations are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
  - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups.
     Low risk of infection for the general population.
  - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days;
     transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
  - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
  - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

<sup>&</sup>quot;Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.



## **COVID-19 Weekly Epidemiological Update**

## Edition 41, published 25 May 2021

#### In this edition:

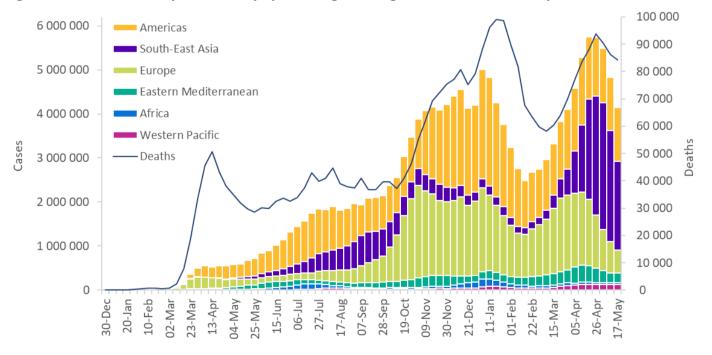
- Global overview
- Special focus: Update on SARS-CoV-2 Variants of Interest (VOIs) and Variants of Concern (VOCs)
- WHO regional overviews
- Key weekly updates

## **Global overview**

## Data as of 23 May 2021

Over the past week, the number of new cases and deaths continued to decrease, with over 4.1 million new cases and 84 000 new deaths reported; a 14% and 2% decrease, respectively, compared to the previous week (Figure 1). The European Region reported the largest decline in new cases and deaths in the past week, followed by the South-East Asia Region (Table 1). The numbers of cases reported by the Americas, Eastern Mediterranean, African, and Western Pacific Regions were similar to those reported in the previous week. The Western Pacific Region reported the largest increase in the number of deaths, while other regions reported decreases or similar numbers to the previous week. Despite a declining global trend over the past four weeks, incidence of COVID-19 cases and deaths remain high, and substantial increases have been observed in many countries throughout the world.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 23 May 2021\*\*



Reported week commencing

<sup>\*\*</sup>See Annex 3: Data, table and figure notes

The highest numbers of new cases in the last seven days were reported from India (1 846 055 new cases; 23% decrease), Brazil (451 424 new cases; 3% increase), Argentina (213 046 new cases; 41% increase), the United States of America (188 410 new cases; 20% decrease), and Colombia (107 590 new cases; 7% decrease).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 23 May 2021\*\*

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 222 225 (29%)	2%	65 980 739 (40%)	31 759 (38%)	1%	1 615 127 (47%)
Europe	524 944 (13%)	-25%	54 110 276 (33%)	12 983 (15%)	-21%	1 134 786 (33%)
South-East Asia	2 006 085 (48%)	-21%	30 088 649 (18%)	32 199 (38%)	4%	372 277 (11%)
Eastern Mediterranean	215 536 (5%)	-2%	9 863 946 (6%)	4 203 (5%)	-11%	197 964 (6%)
Africa	44 207 (1%)	4%	3 446 089 (2%)	1 034 (1%)	2%	85 964 (2%)
Western Pacific	131 655 (3%)	-1%	2 861 544 (2%)	2 128 (3%)	22%	43 058 (1%)
Global	4 144 658 (100%)	-14%	166 352 007 (100%)	84 306 (100%)	-2%	3 449 189 (100%)

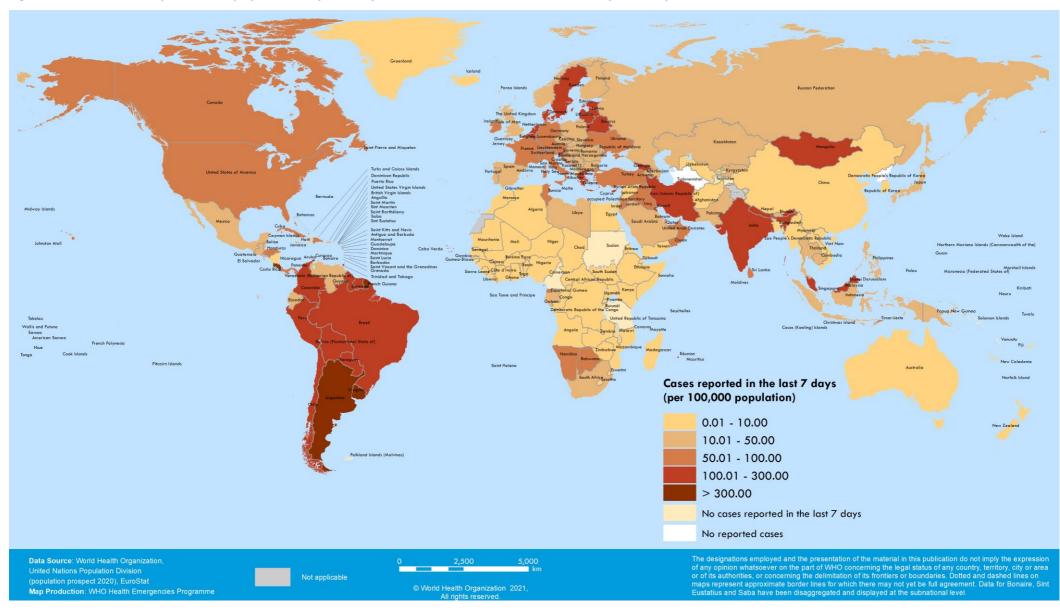
<sup>\*</sup>Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior

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

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

<sup>\*\*</sup>See Annex 3: Data, table and figure notes

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 17 May – 23 May 2021\*\*



<sup>\*\*</sup>See Annex 3: Data, table and figure notes

# Special Focus: Update on SARS-CoV-2 Variants of Interest (VOIs) and Variants of Concern (VOCs)

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 result in changes in transmissibility, clinical presentation and severity, or if they result in changes in public health and social measures (PHSM) implementation by national health authorities. Globally, systems have been established and are being strengthened to detect "signals" of potential Variants of Interest (VOIs) or Variants of Concern (VOCs) and assess these based on the risk posed to global public health. Table 2 lists currently designated global VOCs and VOIs. National authorities may choose to designate other variants of local interest/concern. Here we provide an update on emerging evidence surrounding phenotypic characteristics (Table 3) and the geographical distribution of designated VOCs.

Table 2: SARS-CoV-2 Variants of Concern (VOCs) and Variants of Interest (VOIs), as of 25 May 2021

PANGO lineage Nextstrain clade GISAID clade	Alternate name	First detected in	Earliest samples	Characteristic spike mutations
Variants of Concern (	VOCs)			
B.1.1.7 20I/501Y.V1 GR/501Y.V1	VOC 202012/01	United Kingdom	Sep 2020	69/70del, 144del, N501Y, A570D, D614G, P681H, T716I, S982A, D1118H
B.1.351 20H/501Y.V2 <sup>†</sup> GH/501Y.V2	VOC 202012/02	South Africa	May 2020	D80A, D215G, 241/243del, K417N, E484K, N501Y, D614G, A701V
B.1.1.28.1, alias P.1 20J/501Y.V3 GR/501Y.V3	VOC 202101/02	Brazil	Nov 2020	L18F, T20N, P26S, D138Y, R190S, K417T, E484K, N501Y, D614G H655Y, T1027I, V1176F
B.1.617* - G/452R.V3	-	India	Oct 2020	L452R, D614G, P681R, ± (E484Q, Q107H, T19R, del 157/158, T478K, D950N)
Variants of Interest (	VOIs)			
B.1.525 20A/S.484K G/484K.V3	-	Multiple countries	Dec 2020	Q52R, A67V, 69/70del, 144del, E484K, D614G, Q677H, F888L
B.1.427/B.1.429 20C/S.452R GH/452R.V1	CAL.20C/L452R	United States of America	Mar 2020	S13I, W152C, L452R, D614G
B.1.1.28.2, alias P.2 20B/S.484K GR	-	Brazil	Apr 2020	E484K, D614G, V1176F
B.1.1.28.3, alias P.3 -	PHL-B.1.1.28	Philippines	Jan 2021	141/143del, E484K, N501Y, D614G, P681H, E1092K, H1101Y, V1176F
B.1.526 (+E484K/S477N) 20C GH	-	United States of America	Nov 2020	L5F, T95I, D253G, D614G, A701V, + (E484K or S477N)
B.1.616 - GH	-	France	Feb 2021	H66D, G142V, 144del, D215G, V483A, D614G, H655Y, G669S, Q949R, N1187D

<sup>\*</sup> B.1.617 viruses are divided in three lineages (B.1.617.1, B.1.617.2 and B.1.617.3). Findings for lineages B.1.617.1 and B.1.617.2 were mainly used to designate B.1.617 a global VOC. Once more information becomes available, specific lineages may be designated.

#### Phenotypic characteristics

Available evidence on phenotypic impacts of VOCs and vaccine performance against VOCs are summarised in Tables 3 and 4. Further discussion on impacts is also provided in previous editions of our <a href="COVID-19 Weekly Epidemiological Update">COVID-19 Weekly Epidemiological Update</a>.

Table 3: Summary of phenotypic impacts\* of Variants of Concern (VOCs), as of 25 May 2021

VOC (lineage)	B.1.1.7	B.1.351	P.1	B.1.617
Transmissibility	Increased transmissibility <sup>1</sup> , Increased secondary attack rate <sup>1</sup>	Increased transmissibility <sup>2</sup>	Increased transmissibility <sup>1</sup>	Increased trans missibility <sup>3,4</sup>
Disease severity	•	Not confirmed, possible increased risk of in-hospital mortality <sup>7,8</sup>	Not confirmed, possible increased risk of hospitalization <sup>9</sup>	Under investigation
Risk of reinfection	Neutralizing activity retained <sup>10</sup> , risk of reinfection remain similar <sup>11,12</sup>	Reduction in neutralizing activity reported. T cell response elicited by D614G prototype virus remains effective against B.1.351 <sup>13–15</sup>	Moderate reduction in neutralizing activity reported <sup>16,17</sup>	Under investigation, possible modest reduction in neutralization activity (B.1.617.1) <sup>4</sup>
Impacts on diagnostics	Limited impact — S gene target failure (SGTF; no impact on overall result from multiple target RT-PCR No impact on Ag RDTs observed. <sup>18</sup>	No impact on RT-PCR or Ag RDTs observed <sup>16</sup>	None reported to date	None reported to date

<sup>\*</sup>Generalized findings as compared to wildtype/non-VOC viruses. Based on emerging evidence, including nonpeer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.

Further to our last detailed update published two weeks ago, new evidence is emerging that secondary attack rates for variant B.1.617.2 reported in the United Kingdom from 29 March to 28 April 2021 were higher than that of B.1.1.7, among travellers and non-travellers. <sup>19</sup>Secondary attack rates for B.1.617.2 and B.1.1.7 were measured by the proportion of positive tests among contacts of confirmed or probable cases infected with variants.

A pre-print study of three outbreaks among kindergarten-aged children in Germany suggested that children aged 1 to 5 years who were infected with variant B.1.1.7 were as susceptible and infectious as adults infected with B.1.1.7 (measured by secondary attack rates) in both kindergarten (23% vs. 30%; p=0.15) and household (32% vs. 39%; p=0.27) settings. $^{20}$ 

A study of seven European countries assessing disease severity of cases reported from 13 September 2020 to 13 March 2021 (n=23 343) reported that a significantly higher proportion of cases infected with one of the three VOCs: B.1.1.7, B.1.351 and P.1-were admitted to the hospital (11% for B.1.1.7/SGTF; 19% for B.1.351; 20% for P.1) compared to those infected with non-VOCs (7.5%, p < 0.01 for all VOCs). Similarly, a higher proportion of cases infected with these VOCs were admitted to the ICU (1.4% for B.1.1.7/SGTF, p < 0.01; 2.3% for B.1.351, p < 0.01; 2.1% for P.1, p < 0.01) compared to those infected with non-VOCs (0.6%).

Table 4. Summary of vaccine performance against Variants of Concern (VOC) relative to previously circulating (non-VOC) variants

B.1.1.7	B.1.351	P.1	B.1.617
Efficacy/effectiveness agains	t disease or infection		
Protection retained against disease	Reduced protection against disease, limited evidence	Protection likely against disease, very limited evidence on only one	Protection likely against disease (for B.1.617.2), very limited evidence on only
Severe disease: No/minimal loss: Pfizer BioNTech-Comirnaty <sup>21-25</sup> Symptomatic Disease & Infection: No/minimal loss: AstraZeneca- Vaxzevria, Novavax-Covavax, Pfizer BioNTech-Comirnaty <sup>6-15</sup> Asymptomatic infection: No/minimal loss: Pfizer BioNTech-Comirnaty <sup>22,36</sup> Inconclusive/Moderate- substantial loss, limited sample size:AstraZeneca- Vaxzevria <sup>27</sup>	Severe disease: No/minimal loss: Janssen Ad26.COV 2.5, PfizerBioNTech- Comirnaty <sup>23,37</sup> Mild-moderate disease: Moderate loss: Janssen- Ad26.COV 2.5, Novavax- Covavax <sup>37,38</sup> Inconclusive/substantial loss, Iimitedsample size: AstraZeneca-Vaxzevria <sup>39</sup> Infection: Moderate loss: PfizerBioNTech- Comirnaty <sup>23</sup> Asymptomatic infection:	Symptomatic Disease: No/minimal loss: Sinovac- Corona Vac <sup>40,41</sup> Infection: No/minimal loss: Sinovac- Corona Vac <sup>41</sup>	two vaccines  Symptomatic Disease: B.1.617.2: No/minimal loss: AstraZeneca- Vaxzevria after one dose and Pfizer BioNTech-Comirnaty after two doses 42  Minimal/modest loss: AstraZeneca- Vaxzevria after two doses 42
Neutralization	No evidence		
No/minimal loss: Bharat-Covaxin, Gamaleya-Sputnik V, Moderna-mRNA-1273, Novavax-Covavax, Pfizer BioNTech-Comirnaty, BeijingCNBG-BBIBP-CorV, Sinovac-CoronaVac <sup>43-64</sup> Minimal/moderate loss: Astra Zeneca-Vaxzevria <sup>27,58</sup>	Minimal/modest loss: Beijing CNBG-BBIBP-CorV, Sinovac-Corona Vac, Anhui ZL - Recombinant <sup>65–67</sup> Minimal to substantial loss: Moderna-mRNA-1273, Pfizer BioNTech-Comirnaty <sup>44,48,50–55,57–59,68–73</sup> Moderate to substantial loss: AstraZeneca-Vaxzevria, Gamaleya-Sputnik V, Novavax-Cova vax <sup>50,60,70,70</sup>	No/minimal loss: Astra Zeneca-Vaxzevria, Sinovac-Corona Vac 58,74  Minimal/moderate loss: Moderna-mRNA-1273, Pfizer BioNTech- Comirnaty 44,45,55,57,58,64,75,76	B.1.617 (sublineage unspecified) Minimal/modestloss: Bharat-Covaxin <sup>77</sup> B.1.617.1: Minimal/modestloss: SII-Covishield <sup>78</sup> Modest/moderateloss: Moderna- mRNA-1273, Pfizer BioNTech-Comirnaty <sup>73,79,80</sup> B.1.617.2, B.1.617.3: No sublineage-specific evidence

Further to our last update on vaccine performance against VOCs, new Phase III efficacy results from the United Kingdom have been made available and provide evidence that Novavax-Covavax is highly efficacious at preventing COVID-19 disease due to B.1.1.7. Efficacy against B.1.1.7 symptomatic disease  $\geq$  7 days after the second dose was 86.3% (95% CI: 71.3%-93.5%), similar to that against non-B.1.1.7 disease: 96.4% (95% CI: 73.8%-99.5%).<sup>26</sup>

In addition, two new preprint studies (not yet peer-reviewed) estimated vaccine effectiveness (VE) of Pfizer BioNTech-Comirnaty and AstraZeneca-Vaxzevria vaccines against COVID-19 mortality and hospitalization among older adults in the United Kingdom. Both studies were conducted between December 2020 and April 2021 when B.1.1.7 accounted for the vast majority of sequenced viruses in the United Kingdom. The first study evaluated VE against mortality within 28 days of a positive PCR test among individuals ≥ 70 years who

developed symptomatic disease and is the first peer-reviewed publication to estimate the effectiveness of AstraZeneca-Vaxzevria against mortality. Results show a single dose of AstraZeneca-Vaxzevria offers levels of protection against mortality among people who develop disease (VE: 55%, 95% CI: 41-66%) similar to a single dose of Pfizer BioNTech-Comirnaty (VE: 44%, 95% CI: 3-53%). VE of two doses of Pfizer BioNTech-Comirnaty against death among people who develop disease was 69% (95% CI: 31-86%). Data were insufficient to estimate effectiveness of two doses of AstraZeneca-Vaxzevria. This study estimates the protection of vaccination against death (in addition to protection against symptomatic disease), and, taken together with VE estimates against symptomatic disease in the same age group, suggest approximately 80% protection of a single dose of either vaccine and approximately 97% protection for two doses of Pfizer BioNTech-Comirnaty against mortality in older adults. A second study estimated overall VE against hospitalization ≥ 28 post first dose to be 73% (95% CI: 60-81%) for the AstraZeneca-Vaxzevria and 81% (95% CI: 76-85%) for Pfizer BioNTech-Comirnaty among individuals ≥ 80 years; VE against hospitalization ≥ 14 days post second dose of Pfizer BioNTech-Comirnaty was 93% (89-95%). These studies provide real-world evidence that AstraZeneca-Vaxzevria and Pfizer BioNTech-Comirnaty vaccine provide good protection against severe disease in settings where B.1.1.7 are prevalent.

A test-negative, case-control pre-print study in Sao Paulo state, Brazil, among adults  $\geq$  70 years of age from mid-January through April 2021 found a VE of 41.6% (95% CI: 26.9-53.3%) against symptomatic COVID-19  $\geq$  14 days after the second dose of Sinovac-CoronaVac<sup>41</sup> during a period of widespread P.1 circulation (P.1 comprised 83% of genotyped isolates in March and April 2021). VE was reported as 49.4% (95% CI: 26.9-65.0%) at  $\geq$  21 days after the second dose. These findings are consistent with clinical trial results conducted in health workers in Brazil when P.1 was not yet widespread.<sup>74</sup>

A new pre-print study from the United Kingdom suggested slightly lower effectiveness for Pfizer BioNTech-Comirnaty and AstraZeneca-Vaxzevria vaccines against symptomatic disease caused by B.1.617.2 compared to symptomatic diseased caused by B.1.1.7. VE of two doses of Pfizer BioNTech-Comirnaty was 93.4% (95% CI: 90.4-95.5%) against B.1.1.7 and 87.9% (95% CI: 78.2-93.2%) against B.1.617.2. VE of two doses of AstraZeneca-Vaxzevria was 66.1% (95% CI: 54.0-75.0%) against B.1.1.7 and 59.8% (95% CI: 28.9-77.3%) against B.1.617.2. According to the United Kingdom between June and December 2020, efficacy of two doses of AstraZeneca-Vaxzevria against symptomatic disease was 81.5% (67.9-89.4%) for non-B.1.1.7 lineages and 70.4% (43.6-84.5%) for B.1.1.7, a comparable result to that of the effectiveness study. Differences in point estimates for efficacy and effectiveness for AstraZeneca-Vaxzevria were not statistically significant, and therefore should not be over-interpreted.

Recent studies provide evidence of some loss of neutralization capacity of COVID-19 vaccines against B.1.617.1. One study found a two-fold reduction in neutralization capacity against B.1.617.1 after two doses of SII - Covishield compared to the prototype B.1 lineage (n=21).<sup>78</sup> These findings excluded ten samples that did not show neutralizing antibody titer against B.1 nor B.1.617.1, and 12 samples that showed neutralizing antibody titer only against B.1. Another study found a seven-fold reduction in neutralization of B.1.617.1 among sera from vaccinees receiving two doses of Moderna- mRNA-1273 (n=15) or Pfizer BioNTech-Comirnaty (n=10); however, a majority of sera were still able to neutralize the variant.<sup>80</sup> Two additional studies provided further evidence of modest to moderate loss of neutralization by Pfizer BioNTech-Comirnaty and Moderna- mRNA-1273 vaccines against the pseudotype virus bearing B.1.617.1 spike mutations that are shared with B.1.617.3.<sup>73,79</sup> Finally, a fifth study showed a two-fold loss of neutralization against B.1.617 for Bharat – Covaxin vaccine, a loss comparable to that seen with VOC 202012/01 (B.1.1.7); however, no information was available on the B.1.617 sublineages included in this study.<sup>77</sup> Taken together, these early studies suggest some loss of neutralization capacity against B.1.617; however, it is unclear whether this loss translates into decreased vaccine efficacy/effectiveness. Vaccine efficacy and real-world effectiveness evidence for B.1.617.1, B.1.617.2 or B.1.617.3 is limited.

#### Geographic distribution

As surveillance activities to detect SARS-CoV-2 variants are strengthened at local and national levels, including by strategic genomic sequencing, the number of countries/areas/territories (hereafter countries) reporting VOCs has continued to increase (Figures 3 and 4, Annex 2). This distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities, sharing of sequencing data to publicly available platforms and sampling strategies between countries.

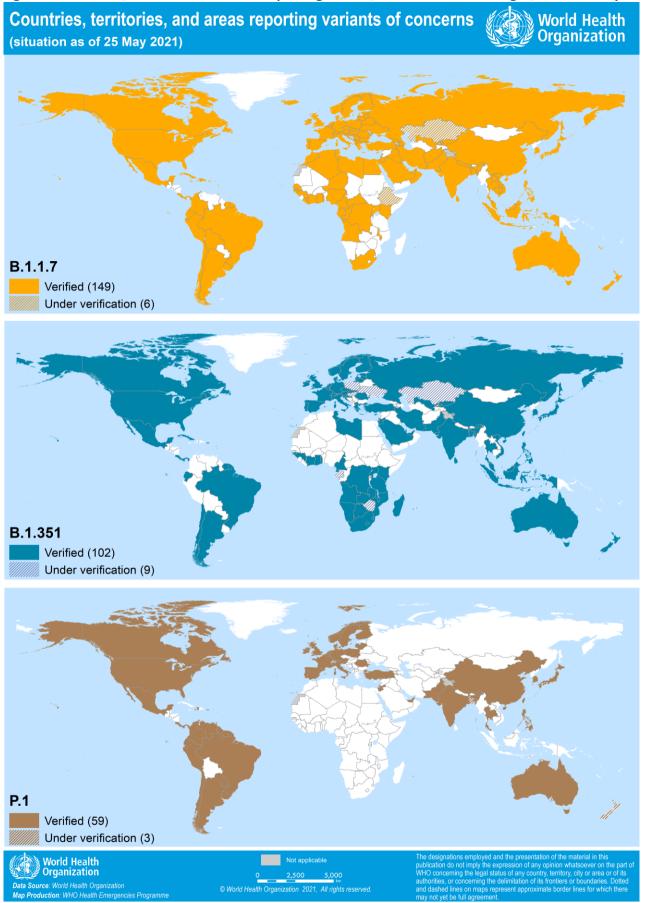
#### WHO recommendations

Virus evolution is expected, and the more SARS-CoV-2 circulates, the more opportunities it has to evolve. Reducing transmission through established and proven disease control methods, such as those outlined in the COVID-19 Strategic Preparedness and Response Plan, as well as avoiding introductions into animal populations are crucial aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critical to curb the spread of SARS-CoV-2 and its variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the PHSM, including infection prevention and control (IPC) measures in health facilities has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities. Authorities are also encouraged to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and to detect unusual events.

#### Additional resources

- Working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19
- COVID-19 Situation Reports from WHO Regional Offices and partners: <u>AFRO</u>, <u>AMRO/PAHO</u>, <u>EMRO</u>, <u>EURO/ECDC</u>, <u>SEARO</u>, <u>WPRO</u>
- ACT accelerator diagnostic pillar, FIND test directory

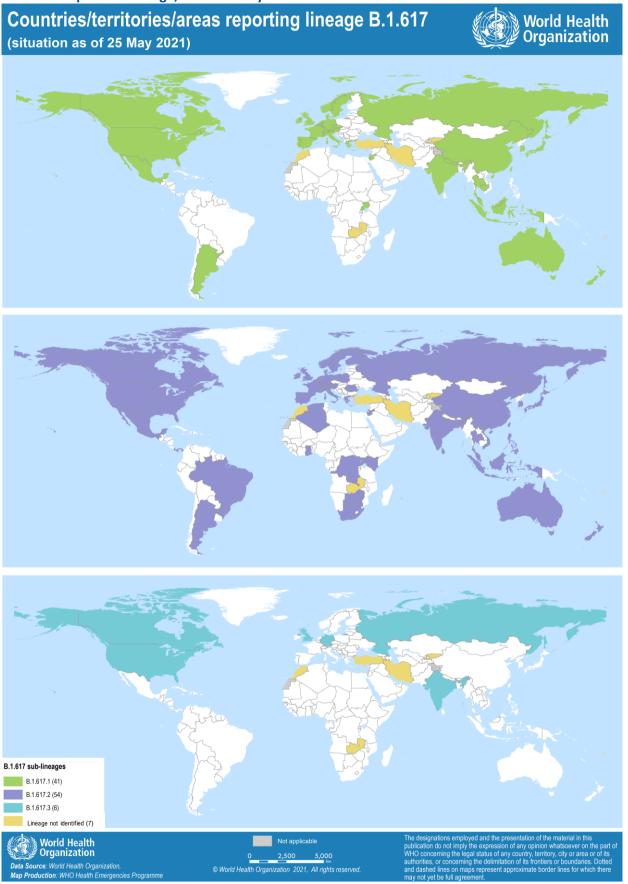
Figure 3. Countries, territories and areas reporting B.1.1.7, B.1.351 and P.1 lineages, as of 25 May 2021



<sup>\*</sup>Countries/territories/areas listed include both official and unofficial reports of VOC detections pending verification. Please see Annex 2 for details.

<sup>\*\*</sup>Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Efforts are ongoing to differentiate these in future reports.

Figure 4. Countries, territories and areas reporting B.1.617.1, B.1.617.2 and B.1.617.3 lineages, or B.1.617 with an unspecified lineage, as of 25 May 2021\*



<sup>\*</sup>Countries/territories/areas listed in include both official and unofficial of VOC detection pending verification. Please see Annex 2 for details.

\*\*Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Efforts are ongoing to differentiate these in future reports.

#### References

- Curran J, Dol J, Boulos L, et al. Transmission characteristics of SARS-CoV-2 variants of concern Rapid Scoping Review. medRxiv. Published online January 1, 2021:2021.04.23.21255515. doi:10.1101/2021.04.23.21255515
- 2. Tegally H, Wilkinson E, Giovanetti M, et al. Emergence of a SARS-CoV-2 variant of concern with mutations in spike glycoprotein. *Nature*. Published online 2021. https://doi.org/10.1038/s41586-021-03402-9
- 3. Cherian S, Potdar V, Jadhav S, et al. Convergent evolution of SARS-CoV-2 spike mutations, L452R, E484Q and P681R, in the second wave of COVID-19 in Maharashtra, India. bioRxiv. Published online January 1, 2021:2021.04.22.440932. doi:10.1101/2021.04.22.440932
- 4. Public Health England. SARS-CoV-2 Variants of Concern and Variants under Investigation in England. Technical Briefing 10. Public Health England; 2021. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/984274/Variants\_of\_Concern\_VO C\_Technical\_Briefing\_10\_England.
- 5. Bager P, Wohlfahrt J, Fonager J, Albertsen. Increased Risk of Hospitalisation Associated with Infection with SARS-CoV-2 Lineage B.1.1.7 in Denmark. doi:Bager, Peter and Wohlfahrt, Jan and Fonager, Jannik and Albertsen, Mads and Yssing Michaelsen, Thomas and Holten Møller, Camilla and Ethelberg, Steen and Legarth, Rebecca and Fischer Button, Mia Sara and Gubbels, Sophie Madeleine and Voldstedlund, Marianne and Mølbak, Kåre and Skov, Robert Leo and Fomsgaard, Anders and Grove Krause, Tyra, Increased Risk of Hospitalisation Associated with Infection with SARS-CoV-2 Lineage B.1.1.7 in Denmark. Available at SSRN: https://ssrn.com/abstract=3792894 or http://dx.doi.org/10.2139/ssrn.3792894
- 6. NERVTAG paper on COVID-19 variant of concern B.1.1.7. GOVUK. Published online 2021. https://www.gov.uk/government/publications/nervtag-paper-on-covid-19-variant-of-concern-b117.html %[2021/02/08/18:37:19]
- 7. Pearson CA, Eggo. Estimates of severity and transmissibility of novel South Africa SARS-CoV-2 variant 501Y.V2. https://cmmid.github.io/topics/covid19/reports/sa-novel-variant/2021\_01\_11\_Transmissibility\_and\_severity\_of\_501Y\_V2\_in\_SA.pdf
- Jassat W MC. Increased Mortality among Individuals Hospitalised with COVID-19 during the Second Wave in South Africa.; 2021. https://www.medrxiv.org/content/10.1101/2021.03.09.21253184v1
- 9. Funk T, Pharris A, Spiteri G, et al. Characteristics of SARS-CoV-2 variants of concern B.1.1.7, B.1.351 or P.1: data from seven EU/EEA countries, weeks 38/2020 to 10/2021. Eurosurveillance. 2021;26(16). doi:https://doi.org/10.2807/1560-7917.ES.2021.26.16.2100348
- 10. Muik A, Wallisch A-K, Sänger B, et al. Neutralization of SARS-CoV-2 lineage B.1.1.7 pseudovirus by BNT162b2 vaccine—elicited human sera. *Science*. Published online 2021:eabg6105. https://science.sciencemag.org/content/sci/early/2021/01/28/science.abg6105.full.pdf
- Gallais F, Gantner P, Bruel T, et al. Anti-SARS-CoV-2 Antibodies Persist for up to 13 Months and Reduce Risk of Reinfection. medRxiv. Published online January 1, 2021:2021.05.07.21256823. doi:10.1101/2021.05.07.21256823
- 12. Graham MS, Sudre CH, May A, et al. Changes in symptomatology, reinfection, and transmissibility associated with the SARS-CoV-2 variant B.1.1.7: an ecological study. Lancet Public Health. 2021;6(5):e335-e345. doi:10.1016/S2468-2667(21)00055-4
- 13. Wibmer CK, Ayres F, Hermanus T, et al. SARS-CoV-2 501Y.V2 escapes neutralization by South African COVID-19 donor plasma. *Nat Med*. Published online March 2021. https://www.ncbi.nlm.nih.gov/pubmed/33654292
- 14. Li R, Ma X, Deng J, et al. Differential efficiencies to neutralize the novel mutants B.1.1.7 and 501Y.V2 by collected sera from convalescent COVID-19 patients and RBD nanoparticle-vaccinated rhesus macaques. Cell Mol Immunol. Published online February 2021. https://www.ncbi.nlm.nih.gov/pubmed/33580167
- Cele S, Gazy I, Jackson L, et al. Escape of SARS-CoV-2 501Y.V2 variants from neutralization by convalescent plasma. :19. https://www.medrxiv.org/content/10.1101/2021.01.26.21250224v1
- Sabino EC, Buss LF, Carvalho MPS, et al. Resurgence of COVID-19 in Manaus, Brazil, despite high seroprevalence. The Lancet. 2021;397(10273):452-455. https://linkinghub.elsevier.com/retrieve/pii/S0140673621001835
- 17. Naveca F, Nasciment V, Souza V, et al. Phylogenetic relationship of SARS-CoV-2 sequences from Amazonas with emerging Brazilian variants harboring mutations E484K and N501Y in the Spike protein. Virological. Published online 2021. https://virological.org/t/phylogenetic-relationship-of-sars-cov-2-sequences-from-amazonas-with-emerging-brazilian-variants-harboring-mutations-e484k-and-n501y-in-the-spike-protein/585
- 18. SARS-CoV-2 lateral flow antigen tests: evaluation of VUI-202012/01. GOVUK. https://www.gov.uk/government/publications/sars-cov-2-lateral-flow-antigen-tests-evaluation-of-vui-20201201, http://files/62/sars-cov-2-lateral-flow-antigen-tests-evaluation-of-vui-20201201.html %[2021/02/08/16:54:26]
- 19. SARS-CoV-2 Variants of Concern and Variants under Investigation in England Technical Briefing 12. Public Health England; 2021.

  https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/988619/Variants\_of\_Concern\_VO C\_Technical\_Briefing\_12\_England.
  pdf
- 20. Loenenbach A, Markus I, Lehfeld A-S. Susceptibility and infectiousness of children and adults with SARS-CoV-2 variant B.1.1.7 deduced from three daycare centre outbreaks and related household situations; Germany, 2021. https://www.medrxiv.org/content/10.1101/2021.05.12.21256608v1
- 21. Goldberg Y, Mandel M, Woodbridge Y, et al. Protection of previous SARS-CoV-2 infection is similar to that of BNT162b2 vaccine protection: A three-month nationwide experience from Israel. medRxiv. Published online April 2021:2021.04.20.21255670-2021.04.20.21255670. doi:10.1101/2021.04.20.21255670
- Haas EJ, Angulo FJ, McLaughlin JM, et al. Impact and effectiveness of mRNA BNT162b2 vaccine against SARS-CoV-2 infections and COVID-19 cases, hospitalisations, and deaths following a nationwide vaccination campaign in Israel: an observational study using national surveillance data. *The Lancet*. 2021;0(0). doi:10.1016/S0140-6736(21)00947-8
- Abu-Raddad LJ, Chemaitelly H, Butt AA, National Study Group for COVID-19 Vaccination. Effectiveness of the BNT162b2 Covid-19 Vaccine against the B.1.1.7 and B.1.351 Variants. The New England journal of medicine. Published online May 2021. doi:10.1056/NEJMc2104974
- 24. Lopez Bernal J, Andrews N, Gower C, et al. Effectiveness of BNT162b2 MRNA Vaccine and ChAdOx1 Adenovirus Vector Vaccine on Mortality Following COVID-19. https://khub.net/documents/135939561/430986542/Effectiveness+of+BNT162b2+mRNA+vaccine+and+ChAdOx1+adenovirus+vector+vaccine+on+mortality+following+COVID-19.pdf/9884d371-8cc8-913c-211c-c2d7ce4dd1c3
- 25. Ismail SA, Vilaplana TG, Elgohari S, et al. Effectiveness of BNT162b2 mRNA and ChAdOx1 adenovirus vector COVID-19 vaccines on risk of hospitalisation among older adults in England: an observational study using surveillance data. :18.
- 26. Heath PT, Eva Galiza FP, David Neil Baxter M, et al. Efficacy of the NVX-CoV2373 Covid-19 Vaccine Against the B.1.1.7 Variant. medRxiv. Published online May 2021:2021.05.13.21256639-2021.05.13.21256639 doi:10.1101/2021.05.13.21256639
- 27. Emary KRW, Golubchik T, Aley PK, et al. Efficacy of ChAdOx1 nCoV-19 (AZD1222) vaccine against SARS-CoV-2 variant of concern 202012/01 (B.1.1.7): an exploratory analysis of a randomised controlled trial. The Lancet. 2021;397(10282):1351-1362. doi:10.1016/S0140-6736(21)00628-0
- 28. Lopez Bernal J, Andrews N, Gower C, et al. Effectiveness of the Pfizer-BioNTech and Oxford-AstraZeneca vaccines on covid-19 related symptoms, hospital admissions, and mortality in older adults in England: test negative case-control study. BMJ (Clinical research ed). 2021;373:n1088-n1088. doi:10.1136/bmj.n1088
- 29. Hall VJ, Foulkes S, Saei A, et al. Effectiveness of BNT162b2 mRNA Vaccine Against Infection and COVID-19 Vaccine Coverage in Healthcare Workers in England, Multicentre Prospective Cohort Study (the SIREN Study). SSRN Electronic Journal. Published online February 2021. doi:10.2139/ssrn.3790399
- 30. Yelin I, Katz R, Herzel E, et al. Associations of the BNT162b2 COVID-19 vaccine effectiveness with patient age and comorbidities. *medRxiv*. Published online March 2021:2021.03.16.21253686-2021.03.16.21253686. doi:10.1101/2021.03.16.21253686
- 31. Hyams C, Marlow R, Maseko Z, et al. Assessing the Effectiveness of BNT162b2 and ChAdOx1nCoV-19 COVID-19 Vaccination in Prevention of Hospitalisations in Elderly and Frail Adults: A Single Centre Test Negative Case-Control Study. SSRN Electronic Journal. Published online March 2021. doi:10.2139/ssrn.3796835
- 32. Shrotri M, Krutikov M, Palmer T, et al. Vaccine effectiveness of the first dose of ChAdOx1 nCoV-19 and BNT162b2 against SARS-CoV-2 infection in residents of Long-Term Care Facilities (VIVALDI study). med Rxiv. Published online March 2021:2021.03.26.21254391-2021.03.26.21254391. doi:10.1101/2021.03.26.21254391
- 33. Glampson B, Brittain J, Kaura A, et al. North West London Covid-19 Vaccination Programme: Real-world evidence for Vaccine uptake and effectiveness. *medRxiv*. Published online April 2021:2021.04.08.21254580-2021.04.08.21254580. doi:10.1101/2021.04.08.21254580
- Pritchard E, Matthews PC, Stoesser N, et al. Impact of vaccination on SARS-CoV-2 cases in the community: a population-based study using the UK's COVID-19 Infection Survey. medRxiv. Published online April 2021:2021.04.22.21255913-2021.04.22.21255913. doi:10.1101/2021.04.22.21255913
- 35. Mason T, Whitston M, Hodgson J, et al. Effects of BNT162b2 mRNA vaccine on Covid-19 infection and hospitalisation among older people: matched case control study for England. medRxiv. Published online 2021.
- 36. Jones NK, Rivett L, Seaman S, et al. Single-dose BNT162b2 vaccine protects against asymptomatic SARS-CoV-2 infection. eLife. 2021;10. doi:10.7554/elife.68808
- 37. Sadoff J, Gray G, Vandebosch A, et al. Safety and Efficacy of Single-Dose Ad26. COV2. S Vaccine against Covid-19. New England Journal of Medicine. Published online April 2021:NEJMoa2101544-NEJMoa2101544. doi:10.1056/NEJMoa2101544
- 38. Shinde V, Bhikha S, Hoosain Z, et al. Efficacy of NVX-CoV2373 Covid-19 Vaccine against the B.1.351 Variant. New England Journal of Medicine. Published online May 2021:NEJMoa2103055-NEJMoa2103055. doi:10.1056/NEJMoa2103055

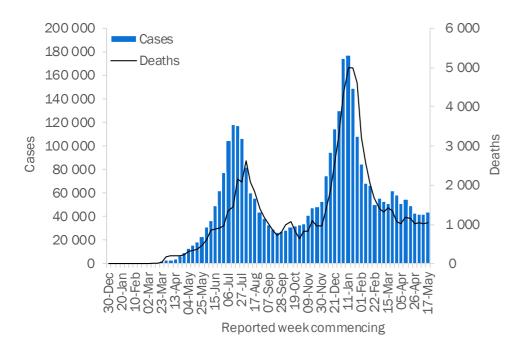
- 39. Madhi SA, Baillie V, Cutland CL, et al. Efficacy of the ChAdOx1 nCoV-19 Covid-19 Vaccine against the B.1.351 Variant. New England Journal of Medicine. Published online March 2021:NEJMoa2102214-NEJMoa2102214. doi:10.1056/NEJMoa2102214
- 40. Hitchings MD, Ranzani OT, Sergio Scaramuzzini Torres M, et al. Effectiveness of CoronaVac in the setting of high SARS-CoV-2 P.1 variant transmission in Brazil: A test-negative case-control study. med Rxiv. Published online April 2021:2021.04.07.21255081-2021.04.07.21255081. doi:10.1101/2021.04.07.21255081
- 41. Ranzani OT, Hitchings M, Neto MD, et al. Effectiveness of the CoronaVac vaccine in the elderly population during a P.1 variant-associated epidemic of COVID-19 in Brazil: A test-negative case-control study. *medRxiv*. Published online May 21. 2021;2021.05.19.21257472. doi:10.1101/2021.05.19.21257472
- 42. Lopez Bernal J, Andrews N, Gower C, et al. Effectiveness of COVID-19 vaccines against the B.1.617.2 variant. doi:https://doi.org/10.1101/2021.05.22.21257658
- 43. Edara VV, Floyd K, Lai L, et al. Infection and mRNA-1273 vaccine antibodies neutralize SARS-CoV-2 UK variant. medRxiv: the preprint server for health sciences. Published online February 2021:2021.02.02.21250799-2021.02.02.21250799. doi:10.1101/2021.02.02.21250799
- 44. Garcia-Beltran WF, Lam EC, St. Denis K, et al. Multiple SARS-CoV-2 variants escape neutralization by vaccine-induced humoral immunity. *Cell.* 2021;0(0). doi:10.1016/j.cell.2021.03.013
- 45. Liu Y, Liu J, Liu A, Liu J, Liu H, et al. Neutralizing Activity of BNT162b2-Elicited Serum. New England Journal of Medicine. 2021;384(15):1466-1468. doi:10.1056/nejmc2102017
- 46. Muik A, Wallisch A-K, Sänger B, et al. Neutralization of SARS-CoV-2 lineage B.1.1.7 pseudovirus by BNT162b2 vaccine-elicited human sera. bioRxiv. Published online January 2021:2021.01.18.426984-2021.01.18.426984. doi:10.1101/2021.01.18.426984
- 47. Trinité B, Pradenas E, Marfil S, et al. Previous SARS-CoV-2 infection increases B.1.1.7 cross-neutralization by vaccinated individuals. Equal contribution. bioRxiv. Published online March 2021:2021.03.05.433800-2021.03.05.433800. doi:10.1101/2021.03.05.433800
- 48. Wang Z, Schmidt F, Weisblum Y, et al. mRNA vaccine-elicited antibodies to SARS-CoV-2 and circulating variants. *Nature*. 2021;592(7855):616-616. doi:10.1038/s41586-021-03324-6
- 49. Wang P, Nair MS, Liu L, et al. Antibody Resistance of SARS-CoV-2 Variants B.1.351 and B.1.1.7. Nature. Published online March 2021:1-6. doi:10.1038/s41586-021-03398-2
- 50. Shen X, Tang H, Pajon R, et al. Neutralization of SARS-CoV-2 Variants B.1.429 and B.1.351. New England Journal of Medicine. Published online April 2021:NEJMc2103740-NEJMc2103740. doi:10.1056/nejmc2103740
- 51. Tada T, Dcosta BM, Samanovic-Golden M, et al. Neutralization of viruses with European, South African, and United States SARS-CoV-2 variant spike proteins by convalescent sera and BNT162b2 mRNA vaccine-elicited antibodies. bioRxiv: the preprint server for biology. Published online February 2021:2021.02.05.430003-2021.02.05.430003. doi:10.1101/2021.02.05.430003
- 52. Wu K, Werner AP, Moliva JI, et al. mRNA-1273 vaccine induces neutralizing antibodies against spike mutants from global SARS-CoV-2 variants. bioRxiv: the preprint server for biology. Published online January 2021;2021.01.25.427948-2021.01.25.427948. doi:10.1101/2021.01.25.427948
- Flanas D, Bruel T, Grzelak L, et al. Sensitivity of infectious SARS-CoV-2 B.1.1.7 and B.1.351 variants to neutralizing antibodies. *Nature Medicine*. Published online March 2021:1-8. doi:10.1038/s41591-021-01318-5
- 54. Becker M, Dulovic A, Junker D, et al. Immune response to SARS-CoV-2 variants of concern in vaccinated individuals. *medRxiv*. Published online March 2021;2021.03.08;21252958-2021.03.08;21252958. doi:10.1101/2021.03.08;21252958
- 55. McCallum M, Bassi J, De Marco A, et al. SARS-CoV-2 immune evasion by variant B.1.427/B.1.429. *bioRxiv*. Published online April 2021:2021.03.31.437925-2021.03.31.437925. doi:10.1101/2021.03.31.437925
- 56. Skelly DT, Harding Sir William AC, Gilbert-Jaramillo Sir William J, et al. Vaccine-induced immunity provides more robust heterotypic immunity than natural infection to emerging SARS-CoV-2 variants of concern. Published online February 2021. doi:10.21203/rs.3.rs-226857/v1
- 57. Hoffmann M, Arora P, Groß R, et al. SARS-CoV-2 variants B.1.351 and B.1.1.248: Escape from therapeutic 1 antibodies and antibodies induced by infection and vaccination 2 3. bioRxiv. Published online February 2021:2021.02.11.430787-2021.02.11.430787. doi:10.1101/2021.02.11.430787
- 58. Dejnirattisai W, Zhou D, Supasa P, et al. Antibody evasion by the P.1 strain of SARS-CoV-2. Cell. 2021;0(0). doi:10.1016/j.cell.2021.03.055
- 59. Kuzmina A, Khalaila Y, Voloshin O, et al. SARS-CoV-2 spike variants exhibit differential infectivity and neutralization resistance to convalescent or post-vaccination sera. *Cell Host and Microbe*. 2021;29(4):522-528.e2. doi:10.1016/j.chom.2021.03.008
- 60. Ikegame S, A Siddiquey MN, Hung C-T, et al. Qualitatively distinct modes of Sputnik V vaccine-neutralization escape by SARS-CoV-2 Spike variants. *medRxiv*. Published online April 2021:2021.03.31.21254660-2021.03.31.21254660. doi:10.1101/2021.03.31.21254660
- 61. Gonzalez C, Saade C, Bal A, et al. Live virus neutralisation testing in convalescent patients and subjects vaccinated 1 against 19A, 20B, 20J/501Y.V1 and 20H/501Y.V2 isolates of SARS-CoV-2 2 3. medRxiv. Published online May 2021:2021.05.11.21256578-2021.05.11.21256578. doi:10.1101/2021.05.11.21256578
- 62. Liu Y, Liu J, Xia H, et al. BNT162b2-Elicited Neutralization against New SARS-CoV-2 Spike Variants. New England Journal of Medicine. Published online May 2021:NEJMc2106083-NEJMc2106083. doi:10.1056/NEJMc2106083
- 63. Collier AY, McMahan K, Yu J, et al. Immunogenicity of COVID-19 mRNA Vaccines in Pregnant and Lactating Women. Published online 2021. doi:10.1001/jama.2021.7563
- 64. Pegu A, O'Connell S, Schmidt SD, et al. Durability of mRNA-1273-induced antibodies against SARS-CoV-2 variants. bioRxiv. Published online May 2021:2021.05.13.444010-2021.05.13.444010. doi:10.1101/2021.05.13.444010
- Huang B, Dai L, Wang H, et al. Neutralization of SARS-CoV-2 VOC501Y.V2 by human antisera elicited by both 1 inactivated BBIBP-CorV and recombinant dimeric RBD ZF2001 vaccines 2 3 Authors. *bioRxiv.* Published online February 2021:2021.02.01.429069-2021.02.01.429069. doi:10.1101/2021.02.01.429069
- 66. Wang G-L, Wang Z-Y, Duan L-J, et al. Susceptibility of Circulating SARS-CoV-2 Variants to Neutralization. New England Journal of Medicine. Published online April 2021:NEJMc2103022-NEJMc2103022. doi:10.1056/nejmc2103022
- 67. Cao Y, Yisimayi A, Bai Y, et al. Humoral immune response to circulating SARS-CoV-2 variants elicited by inactivated and RBD-subunit vaccines. *Cell Research*. Published online May 21, 2021:1-10. doi:10.1038/s41422-021-00514-9
- 68. Bates TA, Leier HC, Lyski ZL, et al. Neutralization of SARS-CoV-2 variants by convalescent and vaccinated serum. *medRxiv*. Published online April 2021:2021.04.04.21254881-2021.04.04.21254881. doi:10.1101/2021.04.04.21254881
- 69. Stamatatos L, Czartoski J, Wan Y-H, et al. mRNA vaccination boosts cross-variant neutralizing antibodies elicited by SARS-CoV-2 infection. Science. Published online March 2021:eabg9175-eabg9175. doi:10.1126/science.abg9175
- 70. Zhou D, Dejnirattisai W, Supasa P, et al. Evidence of escape of SARS-CoV-2 variant B.1.351 from natural and vaccine-induced sera. *Cell.* 2021;189(0):1-14. doi:10.1016/j.cell.2021.02.037
- 71. Chang X, Sousa Augusto G, Liu X, et al. BNT162b2 mRNA COVID-19 vaccine induces antibodies of broader cross-reactivity than natural infection but recognition of mutant viruses is up to 10-fold reduced. bioRxiv. Published online March 2021:2021.03.13.435222-2021.03.13.435222 doi:10.1101/2021.03.13.435222
- 72. Edara VV, Norwood C, Floyd K, et al. Infection- and vaccine-induced antibody binding and neutralization of the B.1.351 SARS-CoV-2 variant. *Cell Host and Microbe*. 2021;29(4):516-521.e3. doi:10.1016/j.chom.2021.03.009
- 73. Ferreira I, Datir R, Papa G, et al. SARS-CoV-2 B.1.617 emergence and sensitivity to vaccine-elicited antibodies. *bioRxiv*. Published online May 2021:2021.05.08.443253-2021.05.08.443253. doi:10.1101/2021.05.08.443253
- 74. Palacios R, Batista AP, Albuquerque CSN, et al. Efficacy and Safety of a COVID-19 Inactivated Vaccine in Healthcare Professionals in Brazil: The PROFISCOVStudy. SSRN Electronic Journal. Published online April 2021. doi:10.2139/ssrn.3822780
- 75. Wu K, Werner AP, Koch M, et al. Serum Neutralizing Activity Elicited by mRNA-1273 Vaccine. New England Journal of Medicine. 2021;384(15):1468-1470. doi:10.1056/NEJMc2102179
- 76. Wang P, Casner RG, Nair MS, et al. Increased Resistance of SARS-CoV-2 Variant P.1 to Antibody Neutralization. *bioRxiv*. Published online April 9, 2021:2021.03.01.433466. doi:10.1101/2021.03.01.433466
- 77. Yadav P, Sapkal GN, Abraham P, et al. Neutralization of variant under investigation B.1.617 with sera of BBV152 vaccinees. bioRxiv. Published online April 2021:2021.04.23.441101-2021.04.23.441101. doi:10.1101/2021.04.23.441101
- 78. Yadav PD, Sapkal GN, Abraham P, et al. Neutralization potential of Covishield vaccinated individuals against B.1.617.1. bioRxiv. Published online May 2021:2021.05.12.443645-2021.05.12.443645. doi:10.1101/2021.05.12.443645
- 79. Tada T, Zhou H, Dcosta BM, Samanovic MI, Mulligan MJ, Landau NR. The Spike Proteins of SARS-CoV-2 B.1.617 and B.1.618 Variants Identified in India Provide Partial Resistance to Vaccine-elicited and Therapeutic Monodonal Antibodies. *bioRxiv*. Published online May 2021:2021.05.14.444076-2021.05.14.444076. doi:10.1101/2021.05.14.444076
- 80. Edara V-V, Lai L, Sahoo MK, et al. Infection and vaccine-induced neutralizing antibody responses to the SARS-CoV-2 B.1.617.1 variant. bioRxiv. Published online 2021.

## **WHO** regional overviews

## **African Region**

The African Region reported over 44 000 new cases and over 1000 new deaths, a 4% and a 2% increase respectively compared to the previous week. The incidences of cases and deaths remain at similar rates to the previous four weeks. The highest numbers of new cases were reported from South Africa (21 429 new cases; 36.1 new cases per 100 000 population; a 31% increase), Ethiopia (3069 new cases; 2.7 new cases per 100 000; a 15% decrease), and Kenya (2729 new cases; 5.1 new cases per 100 000; a 27% increase).

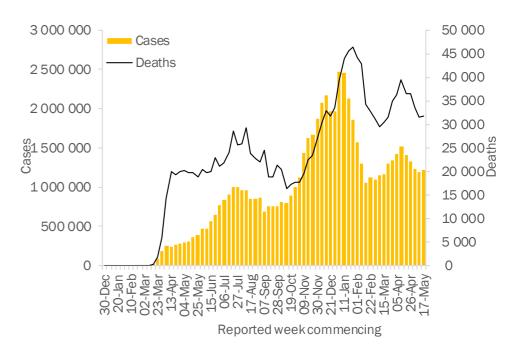
The highest numbers of new deaths were reported from South Africa (589 new deaths; 1.0 new deaths per 100 000 population; a 28% increase), Ethiopia (92 new deaths; 0.1 new deaths per 100 000; a 12% decrease), and Angola (60 new deaths; 0.2 new deaths per 100 000; a 140% increase).



## **Region of the Americas**

The Region of the Americas reported over 1.2 million new cases and over 31 000 new deaths. Overall case and death incidence has remained stable in recent weeks; however, sizeable increases have been observed in several countries. The highest numbers of new cases were reported from Brazil (451 424 new cases; 212.4 new cases per 100 000; a 3% increase), Argentina (213 046 new cases; 471.4 new cases per 100 000; a 41% increase), and the United States of America (188 410 new cases; 56.9 new cases per 100 000; a 20% decrease).

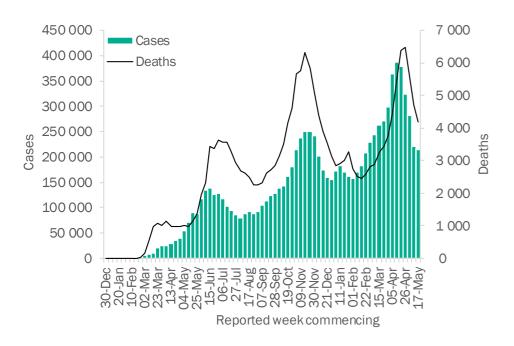
The highest numbers of new deaths were reported from Brazil (13 681 new deaths; 6.4 new deaths per 100 000; similar to the previous week), the United States of America (4032 new deaths; 1.2 new deaths per 100 000; a 3% decrease), and Argentina (3538 new deaths; 7.8 new deaths per 100 000; a 19% increase).



## **Eastern Mediterranean Region**

The Eastern Mediterranean Region reported over 215 000 new cases and over 4200 new deaths, a 2% and an 11% decrease respectively compared to the previous week. Overall case incidence has remained stable following sizeable increases observed in several countries in the region. Death incidence has decreased steeply for the past four weeks. The highest numbers of new cases were reported from the Islamic Republic of Iran (84 012 new cases; 100.0 new cases per 100 000; a 15% decrease), Iraq (27 232 new cases; 67.7 new cases per 100 000; a 4% decrease), and Pakistan (22 717 new cases; 10.3 new cases per 100 000; an 11% increase).

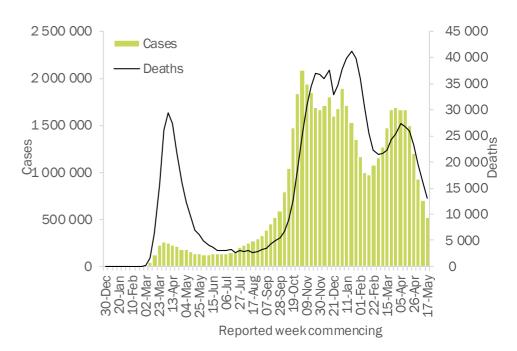
The highest numbers of new deaths were reported from the Islamic Republic of Iran (1748 new deaths; 2.1 new deaths per 100 000; a 17% decrease), Pakistan (710 new deaths; 0.3 new deaths per 100 000; a 6% increase), and Tunisia (403 new deaths; 3.4 new deaths per 100 000; a 6% decrease).



## **European Region**

The European Region reported just under 525 000 new cases and just under 13 000 new deaths, a 25% and a 21% decrease respectively compared to the previous week. A sharp downward trend in cases and deaths has been observed over the last five weeks. The highest numbers of new cases were reported from Turkey (71 786 new cases; 85.1 new cases per 100 000; a 21% decrease), the Russian Federation (61 260 new cases; 42.0 new cases per 100 000; a 2% increase), and Germany (55 524 new cases; 66.8 new cases per 100 000; a 24% decrease).

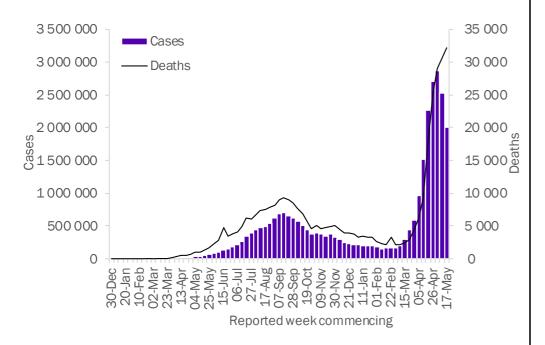
The highest numbers of new deaths were reported from the Russian Federation (2611 new deaths; 1.8 new deaths per 100 000; a 3% increase), Turkey (1534 new deaths; 1.8 new deaths per 100 000; a 14% decrease), and Ukraine (1293 new deaths; 3.0 new deaths per 100 000; a 23% decrease).



## **South-East Asia Region**

The South-East Asia Region reported over 2 million new cases and over 32 000 new deaths, a 21% decrease and a 4% increase respectively compared to the previous week. While the overall incidence of cases continues to decrease (driven primarily by trends in India), death incidence continued to increase for a tenth consecutive week, and sizeable increases have been observed in other countries in the region. The highest numbers of new cases were reported from India (1 846 055 new cases; 133.8 new cases per 100 000; a 23% decrease), Nepal (57 939 new cases; 198.9 new cases per 100 000; a 6% decrease), and Indonesia (33 270 new cases; 12.2 new cases per 100 000; a 24% increase).

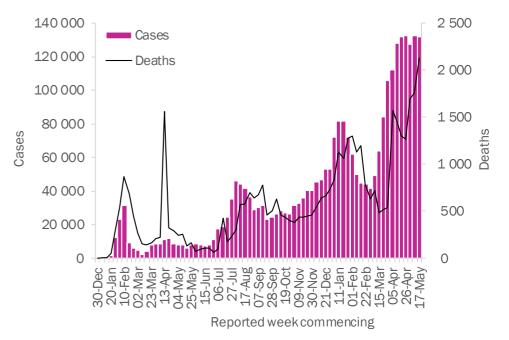
The highest numbers of new deaths were reported from India (28 982 new deaths; 2.1 new deaths per 100 000; a 4% increase), Nepal (1297 new deaths; 4.5 new deaths per 100 000; a 6% increase), and Indonesia (1238 new deaths; 0.5 new deaths per 100 000; a 10% increase).



## **Western Pacific Region**

The Western Pacific Region reported over 131 000 new cases (similar to the previous week) and over 2100 new deaths (a 22% increase). The absolute numbers of cases and deaths remain the highest reported since the beginning of the pandemic. The highest numbers of new cases were reported from the Philippines (40 034 new cases; 36.5 new cases per 100 000; an 8% decrease), Malaysia (38 785 new cases; 119.8 new cases per 100 000; a 32% increase), and Japan (36 286 new cases; 28.7 new cases per 100 000; a 19% decrease).

The highest numbers of new deaths were reported from the Philippines (895 new deaths; 0.8 new deaths per 100 000; a 14% increase), Japan (773 new deaths; 0.6 new deaths per 100 000; a 21% increase), and Malaysia (333 new deaths; 1.0 new deaths per 100 000; a 59% increase).



## Key weekly updates

#### WHO Director-General's key messages

## Opening remarks at the World Health Assembly – 24 May 2021:

- Although we have lost so many health and care workers already, we will lose many more as long as the
  pandemic rages. Almost 18 months into the defining health crisis of our age, the world remains in a very fragile
  and dangerous situation.
- No country should assume it is out of the woods, no matter its vaccination rate.
- WHO's Strategic Preparedness and Response Plan sets out the ten pillars that every country must apply in a tailored and dynamic way to reduce exposure, prevent infections, limit the spread, and save lives. Every country can do more:
  - o Increase surveillance, testing, sequencing, and sharing information;
  - Surge supplies needed to protect health workers;
  - Fight misinformation and disinformation;
  - o Empower people and communities to play their part;
  - Support businesses and workplaces to take steps to open up safely, where appropriate;
  - o Implement national vaccination strategies, vaccinate those most at risk, and donate vaccines to COVAX.
- We must be very clear: the pandemic is not over, and it will not be over until and unless transmission is controlled in every last country.

## **Additional updates**

On 21 May, <u>World leaders met at the Global Health Summit</u>, co-hosted by the European Commission and Italy as part of its G20 presidency, to <u>adopt an agenda to overcome the COVID-19 pandemic</u>, and develop and endorse a <u>Rome Declaration</u> of Principles.

#### **Upcoming events**

Science in 5: WHO's series on science and COVID-19

#### **Updates and publications**

- Preventing and mitigating COVID-19 at work
- <u>Statement of the COVID-19 subcommittee of the WHO Global Advisory Committee on Vaccine Safety (GACVS)</u> on safety signals related to the Johnson & Johnson/Janssen COVID-19 vaccine
- Support to countries' equitable and resilient recovery from the pandemic towards the health SDGs: The 2021 SDG3 GAP progress report
- Programmatic innovations to address challenges in tuberculosis prevention and care during the COVID-19
   pandemic
- The impact of COVID-19 on global health goals
- Fighting infection with information
- Preparing for the next human influenza pandemic: Celebrating 10 years of the Pandemic Influenza Preparedness Framework
- WHO and Switzerland launch global BioHub for pathogen storage, sharing and analysis
- New international expert panel to address the emergence and spread of zoonotic diseases

## **Technical guidance and other resources**

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- <u>The Strategic Preparedness and Response Plan (SPRP)</u> outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - o African Region
  - o Region of the Americas
  - o <u>Eastern Mediterranean Region</u>
  - o South-East Asia Region
  - o European Region
  - o Western Pacific Region
- Recommendations and advice for the public:
  - o Protect yourself
  - o **Questions and answers**
  - o Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 23 May 2021\*\*

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Africa	44 207	3 446 089	307.2	1 034	85 964	7.7	
South Africa	21 429	1 632 572	2 752.7	589	55 772	94.0	Community transmission
Ethiopia	3 069	268 901	233.9	92	4 068	3.5	Community transmission
Kenya	2 729	168 108	312.6	48	3 049	5.7	Community transmission
Botswana	1 989	54 151	2 302.7	23	784	33.3	Community transmission
Angola	1 795	32 149	97.8	60	715	2.2	Community transmission
Namibia	1 599	52 712	2 074.5	53	763	30.0	Community transmission
Algeria	1 457	126 651	288.8	45	3 411	7.8	Community transmission
Cabo Verde	1 247	29 198	5 251.6	10	256	46.0	Community transmission
Uganda	833	43 507	95.1	3	350	0.8	Community transmission
Madagascar	775	40 780	147.3	39	793	2.9	Community transmission
Seychelles	772	10 433	10 608.4	8	38	38.6	Community transmission
Equatorial Guinea	742	8 436	601.3	1	113	8.1	Community transmission
Zambia	697	93 106	506.5	7	1 267	6.9	Community transmission
Rwanda	490	26 424	204.0	6	348	2.7	Community transmission
Ghana	340	93 583	301.2	0	783	2.5	Community transmission
Côte d'Ivoire	323	46 942	178.0	1	298	1.1	Community transmission
Democratic Republic of the Congo	317	30 863	34.5	3	779	0.9	Community transmission
Gabon	308	24 107	1 083.1	4	147	6.6	Community transmission
Mauritania	308	19 114	411.1	1	458	9.9	Community transmission
Nigeria	277	165 979	80.5	1	2 067	1.0	Community transmission
Guinea	254	22 988	175.0	7	158	1.2	Community transmission
Senegal	195	41 023	245.0	5	1 129	6.7	Community transmission

Reporting Country/Territory/Areai	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Burundi	165	4 494	37.8	0	6	0.1	Community transmission
Mozambique	158	70 568	225.8	5	831	2.7	Community transmission
Central African Republic	144	7 010	145.1	1	96	2.0	Community transmission
Congo	133	11 476	208.0	2	150	2.7	Community transmission
Zimbabwe	125	38 679	260.2	4	1 586	10.7	Community transmission
Togo	108	13 352	161.3	0	125	1.5	Community transmission
Eritrea	88	3 932	110.9	2	14	0.4	Community transmission
Malawi	64	34 274	179.2	0	1 153	6.0	Community transmission
Mali	60	14 236	70.3	1	512	2.5	Community transmission
Benin	41	8 025	66.2	0	101	0.8	Community transmission
Mauritius	34	1 322	103.9	0	17	1.3	Clusters of cases
Niger	34	5 364	22.2	0	192	0.8	Community transmission
Gambia	32	5 978	247.4	3	178	7.4	Community transmission
Eswatini	31	18 550	1 598.9	0	672	57.9	Community transmission
Chad	22	4 923	30.0	0	173	1.1	Community transmission
Burkina Faso	19	13 414	64.2	1	165	0.8	Community transmission
South Sudan	18	10 670	95.3	0	115	1.0	Community transmission
Lesotho	16	10 806	504.4	0	320	14.9	Community transmission
Liberia	14	2 142	42.4	0	85	1.7	Community transmission
Sierra Leone	14	4 117	51.6	0	79	1.0	Community transmission
Comoros	10	3 940	453.1	0	146	16.8	Community transmission
Sao Tome and Principe	7	2 334	1 065.0	1	36	16.4	Community transmission
Guinea-Bissau	3	3 749	190.5	1	68	3.5	Community transmission
Cameroon	0	76 756	289.1	0	1 230	4.6	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territories <sup>iii</sup>							
Réunion	922	23 566	2 632.2	7	176	19.7	Community transmission

Reporting Country/Territory/Areai	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Mayotte	0	20 176	7 395.5	0	171	62.7	Community transmission
Americas	1 222 225	65 980 739	6 451.1	31 759	1 615 127	157.9	
_ Brazil	451 424	15 970 949	7 513.6	13 681	446 309	210.0	Community transmission
Argentina	213 046	3 482 512	7 705.4	3 538	73 391	162.4	Community transmission
United States of America	188 410	32 762 914	9 898.1	4 032	583 696	176.3	Community transmission
Colombia	107 590	3 192 050	6 273.3	3 469	83 719	164.5	Community transmission
Chile	43 161	1 323 413	6 923.0	652	28 386	148.5	Community transmission
Peru	36 517	1 915 566	5 809.7	1 961	67 569	204.9	Community transmission
Canada	33 722	1 352 121	3 582.5	293	25 162	66.7	Community transmission
Uruguay	23 334	258 540	7 442.7	391	3 760	108.2	Community transmission
Paraguay	17 591	327 229	4 587.8	633	8 115	113.8	Community transmission
Costa Rica	16 478	299 219	5 873.8	218	3 765	73.9	Community transmission
Bolivia (Plurinational State of)	16 337	346 070	2 964.7	406	13 857	118.7	Community transmission
Mexico	14 749	2 392 744	1 855.8	1 097	221 256	171.6	Community transmission
Cuba	8 611	131 832	1 163.9	67	863	7.6	Community transmission
Ecuador	8 320	417 840	2 368.3	488	20 180	114.4	Community transmission
Venezuela (Bolivarian Republic of)	8 044	221 042	777.3	117	2 483	8.7	Community transmission
Guatemala	6 936	247 106	1 379.3	151	7 996	44.6	Community transmission
Dominican Republic	6 413	282 685	2 605.9	37	3 606	33.2	Community transmission
Honduras	6 304	231 560	2 337.9	196	6 133	61.9	Community transmission
Trinidad and Tobago	3 556	18 935	1 353.0	83	348	24.9	Community transmission
Panama	3 265	373 308	8 651.9	29	6 321	146.5	Community transmission
El Salvador	1 305	72 220	1 113.4	29	2 211	34.1	Community transmission
Suriname	1 035	12 742	2 172.1	20	243	41.4	Community transmission
Guyana	1 026	16 014	2 036.0	20	355	45.1	Community transmission
Jamaica	666	47 899	1 617.6	69	912	30.8	Community transmission

Reporting Country/Territory/Areai	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Haiti	342	13 735	120.5	9	280	2.5	Community transmission
Bahamas	315	11 499	2 924.1	5	225	57.2	Clusters of cases
Saint Lucia	147	4 935	2 687.5	2	77	41.9	Community transmission
Nicaragua	82	5 731	86.5	1	185	2.8	Community transmission
Belize	50	12 764	3 210.0	0	323	81.2	Community transmission
Saint Vincent and the Grenadines	41	1 973	1 778.4	0	12	10.8	Community transmission
Barbados	24	3 985	1 386.7	1	47	16.4	Community transmission
Dominica	6	184	255.6	0	0	0.0	Clusters of cases
Antigua and Barbuda	4	1 255	1 281.5	0	42	42.9	Clusters of cases
Saint Kitts and Nevis	1	46	86.5	0	0	0.0	Sporadic cases
Grenada	0	161	143.1	0	1	0.9	Sporadic cases
Territories <sup>iii</sup>							
French Guiana	1 315	22 780	7 626.8	4	112	37.5	Community transmission
Puerto Rico	1 184	137 610	4 810.1	40	2 471	86.4	Community transmission
Guadeloupe	438	16 517	4 128.0	10	255	63.7	
Martinique	120	11 789	3 141.5	3	93	24.8	Community transmission
Sint Maarten	74	2 346	5 470.8	0	27	63.0	Community transmission
Aruba	66	10 892	10 201.7	2	106	99.3	Community transmission
Saint Martin	56	1 895	4 901.8	1	15	38.8	Community transmission
United States Virgin Islands	41	3 308	3 167.8	0	27	25.9	Community transmission
Bermuda	22	2 488	3 995.3	0	32	51.4	Community transmission
Curaçao	22	12 266	7 475.0	4	122	74.3	Community transmission
Bonaire	16	1 580	7 554.4	0	17	81.3	Community transmission
Cayman Islands	9	574	873.4	0	2	3.0	Sporadic cases
Saint Barthélemy	6	1 016	10 278.2	0	1	10.1	Clusters of cases
Turks and Caicos Islands	4	2 408	6 219.3	0	17	43.9	Clusters of cases

Reporting Country/Territory/Areai	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Anguilla	0	109	726.6	0	0	0.0	Clusters of cases
British Virgin Islands	0	248	820.2	0	1	3.3	Clusters of cases
Falkland Islands (Malvinas)	0	63	1 808.8	0	0	0.0	Sporadic cases
Montserrat	0	20	400.1	0	1	20.0	No cases
Saba	0	7	362.1	0	0	0.0	Sporadic cases
Saint Pierre and Miquelon	0	25	431.4	0	0	0.0	No cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Eastern Mediterranean	215 536	9 863 946	1 349.7	4 203	197 964	27.1	
Iran (Islamic Republic of)	84 012	2 823 887	3 362.1	1 748	78 381	93.3	Community transmission
Iraq	27 232	1 164 149	2 894.3	228	16 158	40.2	Community transmission
Pakistan	22 717	897 468	406.3	710	20 177	9.1	Community transmission
Bahrain	15 777	214 870	12 627.7	72	809	47.5	Community transmission
United Arab Emirates	9 585	554 516	5 606.6	19	1 648	16.7	Clusters of cases
Tunisia	8 267	334 099	2 826.9	403	12 182	103.1	Community transmission
Egypt	8 170	252 690	246.9	401	14 670	14.3	Clusters of cases
Saudi Arabia	7 578	439 847	1 263.4	90	7 237	20.8	Community transmission
Kuwait	7 422	298 223	6 983.2	37	1 724	40.4	Community transmission
Jordan	6 361	729 706	7 151.8	114	9 357	91.7	Community transmission
Oman	5 011	209 924	4 110.8	72	2 256	44.2	Community transmission
Lebanon	2 985	538 218	7 885.5	85	7 670	112.4	Community transmission
Afghanistan	2 244	65 728	168.8	60	2 802	7.2	Community transmission
Qatar	2 233	215 160	7 468.1	17	543	18.8	Community transmission
Morocco	1 995	516 812	1 400.2	21	9 119	24.7	Community transmission
Libya	1 720	182 899	2 661.8	20	3 105	45.2	Community transmission
Syrian Arab Republic	359	24 052	137.4	36	1 729	9.9	Community transmission
Somalia	137	14 623	92.0	14	767	4.8	Community transmission

Reporting Country/Territory/Areai	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Yemen	111	6 653	22.3	19	1 305	4.4	Community transmission
Djibouti	77	11 491	1 163.1	1	152	15.4	Community transmission
Sudan	0	34 889	79.6	0	2 446	5.6	Clusters of cases
Territories <sup>iii</sup>							
occupied Palestinian territory	1 543	334 042	6 548.0	36	3 727	73.1	Community transmission
Europe	524 944	54 110 276	5 799.2	12 983	1 134 786	121.6	
Kosovo [1]	370	107 170		16	2 229		Community transmission
Turkey	71 786	5 178 648	6 140.3	1 534	46 071	54.6	Community transmission
Russian Federation	61 260	5 001 505	3 427.2	2 611	118 482	81.2	Clusters of cases
Germany	55 524	3 648 958	4 387.5	1 284	87 380	105.1	Community transmission
France	51 986	5 820 918	8 949.8	637	107 403	165.1	Community transmission
Italy	34 816	4 188 190	7 022.3	1 090	125 153	209.8	Clusters of cases
Netherlands	29 215	1 622 761	9 322.1	100	17 536	100.7	Community transmission
Ukraine	28 657	2 182 521	4 990.5	1 293	49 368	112.9	Community transmission
Sweden	18 717	1 058 341	10 247.7	10	14 366	139.1	Community transmission
Spain	17 740	3 631 661	7 672.6	98	79 601	168.2	Community transmission
Belgium	16 164	1 048 880	9 102.9	131	24 841	215.6	Community transmission
Greece	13 098	388 929	3 628.6	369	11 734	109.5	Community transmission
The United Kingdom	12 466	4 460 450	6 570.5	41	127 716	188.1	Community transmission
Poland	11 543	2 865 622	7 549.4	1 264	72 928	192.1	Community transmission
Belarus	10 059	384 773	4 072.0	70	2 761	29.2	Community transmission
Kazakhstan	8 848	423 193	2 253.8	0	4 933	26.3	Clusters of cases
Georgia	7 198	337 573	8 462.2	180	4 622	115.9	Community transmission
Denmark	7 120	272 659	4 682.6	5	2 507	43.1	Community transmission
Switzerland	5 536	684 265	7 906.4	21	10 169	117.5	Community transmission
Lithuania	5 313	270 849	9 693.6	82	4 185	149.8	Community transmission
Czechia	5 053	1 657 893	15 503.1	119	30 020	280.7	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Austria	4 463	636 861	7 154.9	73	10 280	115.5	Community transmission
Romania	3 902	1 075 236	5 562.9	400	29 885	154.6	Community transmission
Serbia	3 783	709 673	10 245.5	102	6 766	97.7	Community transmission
Croatia	3 596	353 986	8 722.8	195	7 903	194.7	Community transmission
Hungary	3 525	801 672	8 205.8	300	29 475	301.7	Community transmission
Latvia	3 115	130 712	6 851.9	66	2 323	121.8	Community transmission
Ireland	3 033	258 258	5 202.2	0	4 941	99.5	Community transmission
Portugal	2 963	844 811	8 205.3	11	17 017	165.3	Clusters of cases
Azerbaijan	2 864	332 235	3 276.7	83	4 851	47.8	Clusters of cases
Bulgaria	2 524	416 565	5 992.5	237	17 487	251.6	Clusters of cases
Slovenia	2 513	251 531	12 001.3	19	4 675	223.1	Clusters of cases
Norway	2 479	120 754	2 249.7	7	781	14.6	Clusters of cases
Kyrgyzstan	2 038	102 511	1 571.2	48	1 751	26.8	Clusters of cases
Uzbekistan	1 781	98 451	294.2	12	680	2.0	Clusters of cases
Estonia	1 539	128 592	9 676.0	18	1 240	93.3	Clusters of cases
Slovakia	1 312	388 835	7 124.3	68	12 292	225.2	Clusters of cases
Finland	1 279	91 157	1 649.8	3	932	16.9	Community transmission
Armenia	1 088	221 948	7 490.1	69	4 392	148.2	Community transmission
Bosnia and Herzegovina	940	203 253	6 195.2	110	9 117	277.9	Community transmission
Cyprus	937	71 836	8 089.6	7	353	39.8	Clusters of cases
Republic of Moldova	865	254 601	6 311.4	56	6 072	150.5	Community transmission
Luxembourg	623	69 545	11 107.5	4	810	129.4	Community transmission
North Macedonia	392	155 028	7 441.2	99	5 296	254.2	Clusters of cases
Montenegro	350	99 240	15 801.0	11	1 572	250.3	Clusters of cases
Albania	198	132 176	4 593.0	13	2 442	84.9	Clusters of cases
Israel	198	839 316	9 696.9	17	6 398	73.9	Community transmission
Andorra	99	13 609	17 613.4	0	127	164.4	Community transmission

Reporting Country/Territory/Area <sup>i</sup>	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Malta	26	30 504	5 928.1	0	417	81.0	Clusters of cases
Iceland	19	6 556	1 800.4	0	29	8.0	Community transmission
Liechtenstein	9	3 088	7 969.6	0	57	147.1	Sporadic cases
Monaco	8	2 501	6 372.9	0	32	81.5	Sporadic cases
San Marino	2	5 089	14 995.0	0	90	265.2	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territories <sup>iii</sup>							
Faroe Islands	6	676	1 383.4	0	1	2.0	Sporadic cases
Greenland	3	34	59.9	0	0	0.0	No cases
Jersey	2	3 238	3 003.8	0	69	64.0	Community transmission
Isle of Man	1	1 591	1 871.1	0	29	34.1	No cases
Gibraltar	0	4 286	12 721.5	0	94	279.0	Clusters of cases
Guernsey	0	822	1 275.1	0	14	21.7	Community transmission
South-East Asia	2 006 085	30 088 649	1 488.5	32 199	372 277	18.4	
India	1 846 055	26 530 132	1 922.5	28 982	299 266	21.7	Clusters of cases
Nepal	57 939	505 643	1 735.4	1 297	6 153	21.1	Community transmission
Indonesia	33 270	1 769 940	647.1	1 238	49 205	18.0	Community transmission
Thailand	28 053	129 500	185.5	187	776	1.1	Clusters of cases
Sri Lanka	20 771	161 242	753.0	237	1 178	5.5	Clusters of cases
Maldives	10 583	54 365	10 057.5	27	123	22.8	Clusters of cases
Bangladesh	7 930	787 726	478.3	224	12 348	7.5	Community transmission
Timor-Leste	1 202	5 481	415.7	3	11	0.8	Community transmission
Myanmar	169	143 228	263.2	4	3 216	5.9	Clusters of cases
Bhutan	113	1 392	180.4	0	1	0.1	Clusters of cases
Western Pacific	131 655	2 861 544	145.7	2 128	43 058	2.2	
Philippines	40 034	1 178 207	1 075.2	895	19 946	18.2	Community transmission

Reporting Country/Territory/Areai	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification <sup>ii</sup>
Malaysia	38 785	505 115	1 560.6	333	2 199	6.8	Community transmission
Japan	36 286	714 274	564.7	773	12 236	9.7	Clusters of cases
Republic of Korea	4 259	135 929	265.1	31	1 931	3.8	Clusters of cases
Mongolia	3 830	51 931	1 584.1	39	244	7.4	Clusters of cases
Cambodia	3 021	25 205	150.8	26	176	1.1	Sporadic cases
China	2 524	106 715	7.3	5	4 863	0.3	Clusters of cases
Papua New Guinea	1 259	15 187	169.7	20	156	1.7	Community transmission
Viet Nam	1 007	5 119	5.3	5	41	0.0	Clusters of cases
Singapore	263	61 799	1 056.3	1	32	0.5	Sporadic cases
Lao People's Democratic Republic	212	1 782	24.5	0	2	0.0	Sporadic cases
Fiji	38	206	23.0	0	4	0.4	Sporadic cases
Australia	37	30 004	117.7	0	910	3.6	Clusters of cases
New Zealand	17	2 307	47.8	0	26	0.5	Sporadic cases
Brunei Darussalam	4	236	53.9	0	3	0.7	Sporadic cases
Solomon Islands	0	20	2.9	0	0	0.0	No cases
Territories <sup>iii</sup>							
Guam	41	7 896	4 678.4	0	139	82.4	Clusters of cases
French Polynesia	29	18 844	6 708.2	0	141	50.2	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	8	181	314.5	0	2	3.5	Pending
New Caledonia	1	125	43.8	0	0	0.0	Sporadic cases
Marshall Islands	0	4	6.8	0	0	0.0	No cases
Samoa	0	1	0.5	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Wallis and Futuna	0	454	4 037.0	0	7	62.2	Sporadic cases
Global	4 144 658	166 352 007		84 306	3 449 189		

<sup>\*</sup>See Annex 3: Data, table and figure notes

Annex 2. List of countries/territories/areas reporting variants of concern as of 25 May 2021\*\*

Country/Territory/ Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Afghanistan	•	-	-	-	-	-	-
Albania	•	-	-	-	-	-	-
Algeria	•	-	-	-	•*	-	-
Angola	•	•	-	-	-	-	-
Argentina	•	•	•	•	•	-	-
Armenia	0	-	-	-	-	-	-
Aruba	•	•	•	-	•	-	-
Australia	•	•	•	0	0	-	-
Austria	•	•	•	•	•	-	-
Azerbaijan	•	-	-	-	-	-	-
Bahrain	•	•	-	•	•	-	-
Bangladesh	•	•	0	-	•	-	-
Barbados	•	-	-	-	-	-	-
Belarus	•	-	-	-	-	-	-
Belgium	•	•	•	•	•	-	-
Belize	•	-	-	-	-	-	-
Bolivia (Plurinational State of)	•	-	-	-	-	-	-
Bonaire	•	-	-	-	-	-	-
Bosnia and Herzegovina	0	-	-	-	-	-	-
Botswana	-	•	-	-	•*	-	-
Brazil	•	•	•	-	•*	-	-
Brunei Darussalam	•	•	-	-	-	-	-
Bulgaria	•	-	-	-	-	-	-
Cabo Verde	•	-	-	-	-	-	-
Cambodia	•	-	-	0	-	-	-
Cameroon	•	•	-	-	-	-	-

Country/Territory/ Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Canada	•	•	•	•	•	•	-
Cayman Islands	•	-	-	-	-	-	-
Central African Republic	•	-	-	-	-	-	-
Chile	•	•	•	-	-	-	-
China	•	•	•	0	0	-	-
Colombia	•	-	•	-	-	-	-
Comoros	-	•	-	-	-	-	-
Congo	•	-	-	-	-	-	-
Costa Rica	•	•	•	-	-	-	-
Croatia	•	•	-	-	-	-	-
Cuba	•	•	-	-	-	-	-
Curaçao	•	-	•*	•*	-	-	-
Cyprus	•	•*	-	-	-	-	-
Czechia	•	•	-	•	-	-	-
Côte d'Ivoire	•	•	-	-	-	-	-
Democratic Republic of the Congo	•	•	-	-	•	-	-
Denmark	•	•	•	•	•	-	-
Dominica	•	-	-	-	-	-	-
Dominican Republic	•	-	-	-	-	-	-
Ecuador	•	•*	•	-	-	-	-
Egypt	•	-	-	-	-	-	-
Equatorial Guinea	•	•	-	-	-	-	-
Estonia	•	•	-	-	-	-	-
Eswatini	-	•	-	-	-	-	-
Ethiopia	0	-	-	-	-	-	-
Faroe Islands	-	-	•	-	-	-	-

Country/Territory/ Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Fiji	-	-	-	-	-	-	-
Finland	•	•	•	-	•*	-	-
France	•	•	•	•	•	-	-
French Guiana	•	•	•	-	-	-	-
French Polynesia	•	-	•	-	-	-	-
Gabon	•	0	-	-	-	-	-
Gambia	•	-	-	-	-	-	-
Georgia	•	-	-	-	-	-	-
Germany	•	•	•	•	•	•*	-
Ghana	•	•	-	-	•*	-	-
Gibraltar	•	-	-	-	-	-	-
Greece	•	•	-	•	•	-	-
Grenada	•	-	-	-	-	-	-
Guadeloupe	•	•	-	•	-	-	-
Guam	•	-	-	-	-	-	-
Guinea	•	•*	-	-	-	-	-
Guinea-Bissau	•*	•*	-	-	-	-	-
Guyana	-	-	•	-	-	-	-
Haiti	•	-	•	-	-	-	-
Hungary	•	0	-	-	-	-	-
Iceland	•	-	-	-	-	-	-
India	•	•	•	•	•	•	-
Indonesia	•	•	-	•	•	-	-
Iran (Islamic Republic of)	•	•	-	-	-	-	-
Iraq	•	-	-	-	-	-	_
Ireland	•	•	•	•	•	-	-
Israel	•	•	•	•	•	-	-

Country/Territory/ Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Italy	•	•	•	•	•	-	-
Jamaica	•	-	-	-	-	-	-
Japan	•	•	•	•	•	-	-
Jordan	•	•	•	•	•	-	-
Kazakhstan	0	0	-	-	-	-	-
Kenya	•	•	-	-	•*	-	-
Kosovo <sup>[1]</sup>	•	-	-	-	-	-	-
Kuwait	•	-	-	-	-	-	-
Kyrgyzstan	•	•	-	-	-	-	-
Lao People's Democratic Republic	•	-	-	-	-	-	-
Latvia	•	•	•	-	-	-	-
Lebanon	•	-	-	-	-	-	-
Lesotho	-	•	-	-	-	-	-
Liberia	•*	-	-	-	-	-	-
Libya	•	•	-	-	-	-	-
Liechtenstein	•	-	-	-	-	-	-
Lithuania	•	•	•	-	-	-	-
Luxembourg	•	•	•	•	•	-	-
Madagascar	-	•	-	-	-	-	-
Malawi	•	•	-	-	-	-	-
Malaysia	•	•	-	•	0	-	-
Malta	•	0	•	-	-	-	-
Martinique	•	•	-	-	-	-	-
Mauritius	0	•	-	-	-	-	-
Mayotte	•	•	-	-	-	-	-
Mexico	•	•	•	•	•	-	-
Monaco	•	0	-	-	-	-	-
Montenegro	•	-	-	-	-	-	-
Morocco	•	-	-	-	-	-	-

Country/Territory/ Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Mozambique	-	•	-	-	-	-	-
Namibia	-	•	-	-	-	-	-
Nepal	•	-	-	•	-	-	-
Netherlands	•	•	•	•	•	-	-
New Caledonia	•	-	-	-	-	-	-
New Zealand	•	•	0	0	0	-	-
Niger	•	-	-	-	-	-	-
Nigeria	•	-	-	-	-	-	-
North Macedonia	•	•	-	-	-	-	-
Norway	•	•	•	•	•	-	-
Occupied Palestinian Territory	•	•	-	-	-	-	-
Oman	•	-	-	-	-	-	-
Pakistan	•	•	•	-	-	-	-
Panama	•	•	•	-	•	-	-
Paraguay	-	-	•	-	-	-	-
Peru	•	-	•	-	-	-	-
Philippines	•	•	•	-	0	-	-
Poland	•	0	•	-	•	-	-
Portugal	•	•	•	•	0	-	-
Puerto Rico	•	•	•	-	-	-	-
Qatar	•	•	-	-	-	-	-
Republic of Korea	•	•	•	0	0	-	-
Republic of Moldova	0	-	-	-	-	-	-
Romania	•	•	•	-	•	-	-
Russian Federation	•	•	-	•	•*	•	-
Rwanda	•	0	-	-	-	-	-
Réunion	•	•	•	-	0	-	-
Saint Barthélemy	•	-	-	-	-	-	-
Saint Lucia	•	-	-	-	-	-	-

Country/Territory/ Area	8.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Saint Martin	•	•	-	-	-	-	-
Saudi Arabia	•	•*	-	-	-	-	-
Senegal	•	-	-	-	-	-	-
Serbia	•	-	-	-	-	-	-
Seychelles	-	•	-	-	-	-	-
Singapore	•	•	•	•	•	-	-
Sint Maarten	•	•	-	•	-	-	-
Slovakia	•	•	-	-	-	-	-
Slovenia	•	•	•	-	•	-	-
South Africa	•	•	-	-	•	-	-
Spain	•	•	•	•	•	-	-
Sri Lanka	•	•	-	-	•	-	-
Suriname	•	•	•	-	-	-	-
Sweden	•	•	•	•	•	-	-
Switzerland	•	•	0	•	•	-	-
Thailand	•	•	•	•	0*	-	-
Togo	•	•	-	-	-	-	-
Trinidad and Tobago	•	-	•	-	-	-	-
Tunisia	•	•	-	-	-	-	-
Turkey	•	•	•	-	-	-	-
Turks and Caicos Islands	•	-	-	-	-	-	-
Uganda	•	•	-	0	•	-	-
Ukraine	•	0	-	-	-	-	-
United Arab Emirates	•	•	•	-	-	-	-
United Kingdom	•	•	•	•	•	•	-
United Republic of Tanzania	-	•	-	-	-	-	-

Country/Territory/ Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
United States of America	•	•	•	•	•	•	-
Uruguay	•	-	•	-	-	-	-
Uzbekistan	•	•	-	-	-	-	-

Country/Territory/ Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Venezuela (Bolivarian Republic of)	-	-	•	-	-	-	-
Viet Nam	•	•	-	-	•	-	-

Country/Territory/ Area	B.1.1.7	B.1.351	P.1	B.1.617.1	B.1.617.2	B.1.617.3	B.1.617x
Wallis and Futuna	•	-	-	-	-	-	-
Zambia	-	•	-	-	-	-	-
Zimbabwe	-	0	-	-	•*	-	-

Variant B.1.617.1 for Angola was excluded this week based on further information received.

<sup>\*</sup>Newly reported in this update.

<sup>&</sup>quot;●" indicates that information for this variant was received by WHO from official sources.

<sup>&</sup>quot;o" indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available.

<sup>\*\*</sup>Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Efforts are ongoing to differentiate these in future reports.

<sup>\*\*</sup>See also Annex 3: Data, table and figure notes

#### Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 758 cases and 13 deaths reported from international conveyances.

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

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

<sup>1</sup> Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

"Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see:

Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.

- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.
- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorizations are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
  - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups.
     Low risk of infection for the general population.
  - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days;
     transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
  - o CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
  - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

<sup>&</sup>quot;Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.