

COVID-19 Weekly Epidemiological Update

Edition 60, published 5 October 2021

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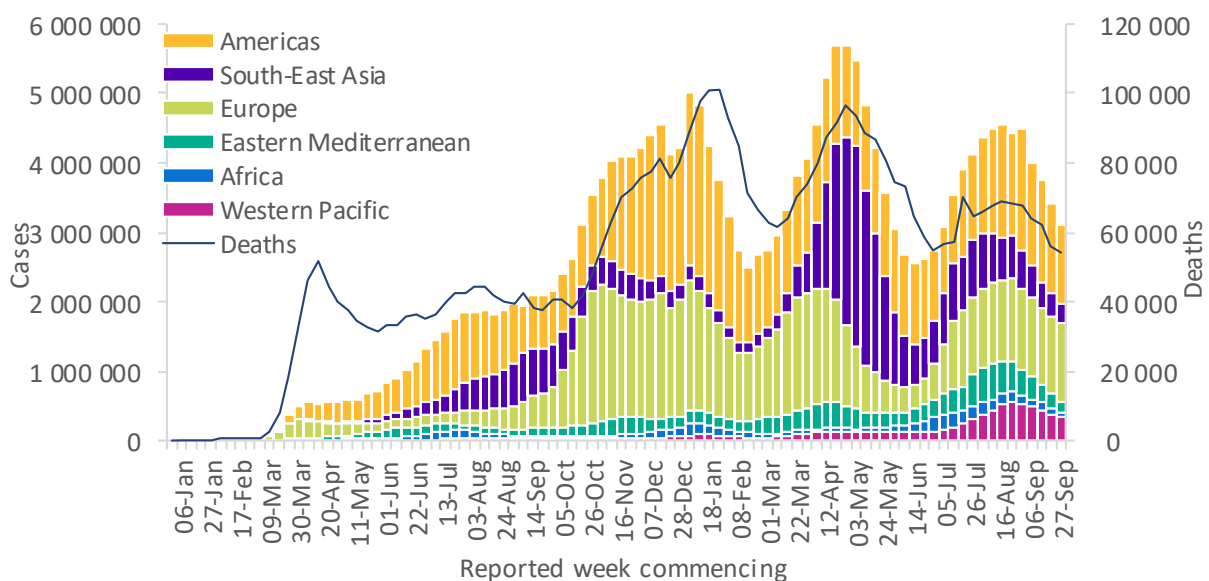
Global overview

Data as of 3 October 2021

Globally, the numbers of weekly COVID-19 cases and deaths continued to decline. This is a trend that has been observed since August (Figure 1). Over 3.1 million new cases and just over 54 000 new deaths were reported during the week of 27 September to 3 October 2021. Cases this week decreased by 9% as compared to the previous week, while the number of deaths remained similar to that of the past week (Table 1). All regions reported a decline in the number of new cases this week apart from the European Region which reported a number similar to that of the previous week. The largest decrease in new weekly cases was reported from the African Region (43%), followed by the Eastern Mediterranean Region (21%), the South-East Asia Region (19%), the Region of the Americas (12%) and the Western Pacific (12%). The cumulative number of confirmed cases reported globally is now over 234 million and the cumulative number of deaths is just under 4.8 million.

The number of new weekly deaths reported showed a large (>10%) decline for all regions except for the Regions of the Americas and Europe, which both reported a similar number of weekly deaths as compared to previous week. The largest decline in weekly deaths was reported from the African Region, with a 25% decline as compared to the previous week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 3 October 2021**



**See [Annex 2: Data, table and figure notes](#)

The regions reporting the highest weekly case incidence rates per 100 000 population were the European Region (123.1 new cases per 100 000 population) and the Region of the Americas (109.5 new cases per 100 000 population), while the same two regions reported this highest weekly incidence in deaths per 100 000 population; the Region of the Americas (2.4 new cases per 100 000 population) and the European Region (1.6 new cases per 100 000 population).

The highest numbers of new cases were reported from the United States of America (760 571 new cases; similar to the number reported in the previous week), the United Kingdom (239 781 new cases; similar to the number reported in the previous week), Turkey (197 277 new cases; similar to the number reported in the previous week), the Russian Federation (165 623 new cases; 13% increase), and India (161 158 new cases; 21% decrease).

Globally, cases of the Alpha variant have been reported in 195 countries, territories or areas (hereafter countries; two new countries added since last week), while 145 countries (3 new country since last week) have reported cases of the Beta variant; and 99 countries have reported cases of the Gamma variant (4 new countries since last week, with 1 report of the Gamma variant from last week being discarded upon sequencing) . The Delta variant has been reported in 192 countries (seven new countries since last week: 2 under verification and 5 verified), across all six WHO regions as of 5 October.

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 3 October 2021**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 120 999 (36%)	-12%	90 357 809 (39%)	24 311 (45%)	2%	2 220 453 (46%)
Europe	1 164 750 (37%)	5%	70 589 709 (30%)	15 403 (28%)	2%	1 342 600 (28%)
South-East Asia	278 657 (9%)	-19%	43 121 902 (18%)	4 318 (8%)	-18%	678 035 (14%)
Eastern Mediterranean	166 068 (5%)	-21%	15 825 445 (7%)	3 567 (7%)	-17%	290 562 (6%)
Western Pacific	338 603 (11%)	-12%	8 609 714 (4%)	4 725 (9%)	-10%	117 705 (2%)
Africa	49 333 (2%)	-43%	6 048 196 (3%)	1 897 (3%)	-25%	146 854 (3%)
Global	3 118 410 (100%)	-9%	234 553 539 (100%)	54 221 (100%)	-4%	4 796 222 (100%)

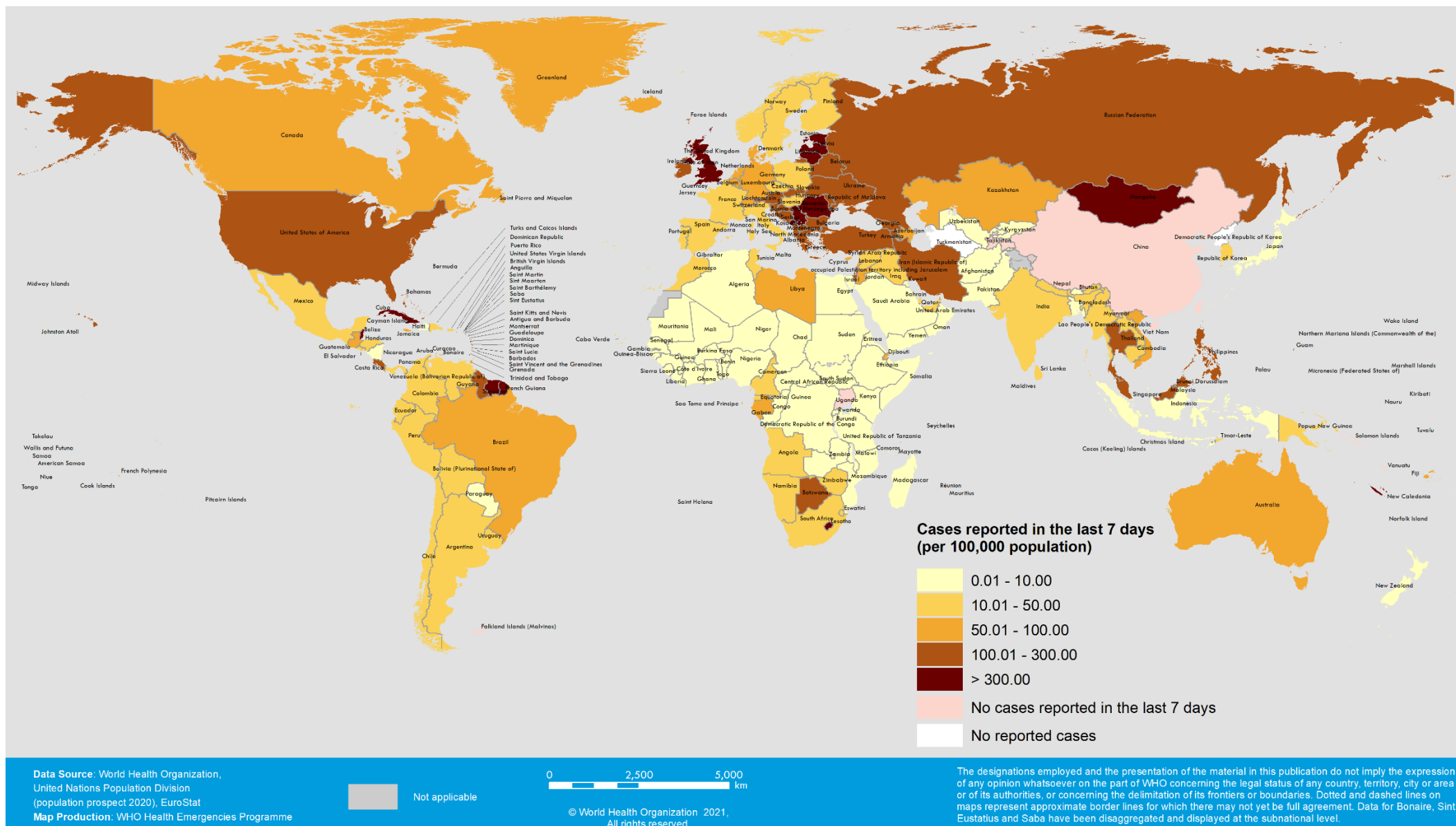
*Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior

**See [Annex 2: Data, table and figure notes](#)

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

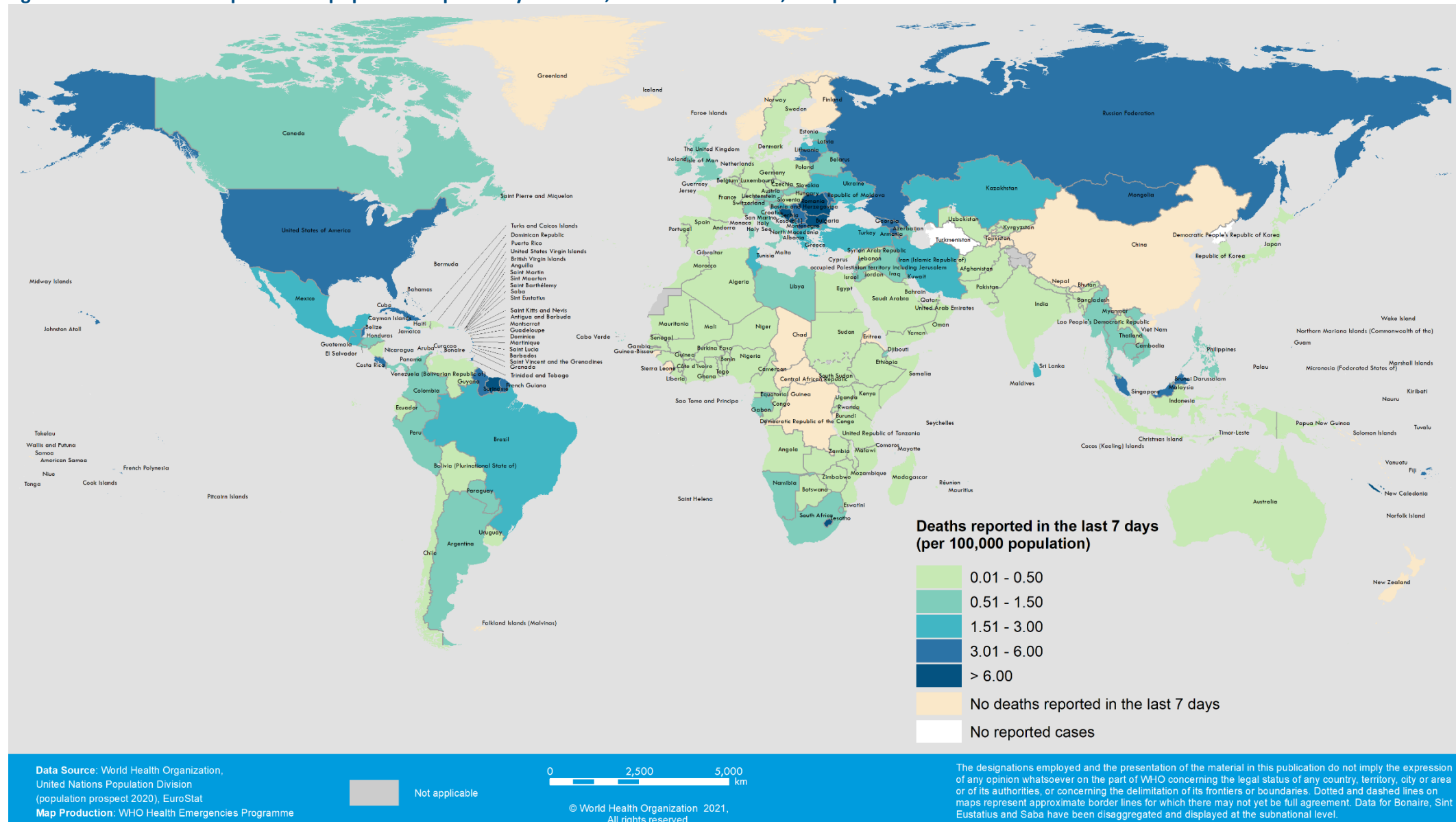
- [WHO COVID-19 Dashboard](#)
- [WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update](#)

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 27 September-3 October 2021**



**See Annex 2: Data, table and figure notes

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 27 September-3 October 2021**



**See Annex 2: Data, table and figure notes

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied by national authorities to control disease spread. “Signals” of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on impacts of these variants.

Updates to the WHO SARS-CoV-2 variant tracking website

Given the continuous need to understand the epidemiological and clinical impacts of VOCs and VOIs, WHO regularly monitors and reviews circulation of variants. The changes in the rise of new variants are being monitored in light of other co-circulating variants, such as Delta.

This may mean that Variants of Interest (VOIs) or Variants of Concern (VOCs) may be outcompeted by newly emerging variants, such as VOC Delta. As evidence becomes available, we will revise classifications accordingly. These revisions reflect the continuous evolution of circulating variants and their changing epidemiology (see criteria for variant classification [here](#)).

Geographic distribution

As surveillance activities to detect SARS-CoV-2 variants are strengthened at national and subnational levels, including through the strengthening of genomic sequencing capacities, the number of countries/areas/territories (hereafter countries) reporting VOCs continues to increase (Figure 4, Annex 1). This distribution should nonetheless be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

Phenotypic characteristics

A recent peer-reviewed study evaluating persons infected with the Delta variant in France measured and compared the relative viral load with three other SARS-CoV-2 variants: Alpha, Beta and the non-VOC (20A.EU2) SARS-CoV-2 variant, collected from four hospital laboratories in the Paris area.¹ A total of 738 real time polymerase chain reaction (RT-PCR) SARS-CoV-2 positive nasopharyngeal samples collected from newly diagnosed COVID-19 cases, were screened to determine SARS-CoV-2 viral lineages and measure viral load. The results showed significant differences in the relative viral loads between Delta and other variants: viral loads of 2.5-fold higher were observed compared to Beta (median 7.26 [6.10–8.37]) ($p < 0.05$) and to the non-VOC variant; while infections with Alpha and Delta variants had similar viral loads.

A cross-sectional study (not yet peer reviewed), focusing on demographic characteristics, including severity of the illness and mortality rate, was conducted in India among COVID-19 cases caused by the non-VOC (B.1) variant and the Delta variant (B.1.617.2).² Using viral genomic sequences from 9500 COVID-19 patients, the study found an increased number of infections among younger age groups (0-19 years) and women, a lower mean age for infection and symptomatic illness/hospitalization, higher

mortality, and more frequent incidences of post-vaccination infections with Delta variant compared to the non-VOC (B.1) variant.

A retrospective cohort study conducted in the United States of America between 1 December 2020 and 30 July 2021 used sentinel surveillance to estimate the risk of hospitalization following infection with VOC or VOI, adjusting for age, sex, and vaccination status.³ Of the 27 814 cases identified, 23 170 (83.3%) samples were sequenced through sentinel surveillance, of which 726 (3.1%) were hospitalized due to COVID-19. A higher hospitalization risk was found for infections with Gamma (HR 3.17, 95% CI 2.15–4.67), Beta (HR: 2.97, 95% CI 1.65–5.35), Delta (HR: 2.30, 95% CI 1.69–3.15), and Alpha (HR 1.59, 95% CI 1.26–1.99) compared to infections with a non-VOC variant. Following infection with a VOC, unvaccinated patients showed a higher hospitalization risk when compared to patients with non-VOC infections. Additionally, vaccinated patients showed an overall lower risk of hospitalization when compared to unvaccinated patients although there was no increased risk in these groups when comparing VOC and non-VOC infections.

Table 2: Summary of phenotypic impacts* of Variants of Concern

WHO label	Alpha	Beta	Gamma	Delta
Transmissibility	Increased transmissibility ⁴	Increased transmissibility ^{5,6}	Increased transmissibility ^{6,7}	Increased transmissibility and secondary attack rate ^{6,8}
Disease severity	Increased risk of hospitalization ⁹ , possible increased risk of severity and mortality ^{10,11}	Not confirmed, possible increased risk of in-hospital mortality ¹²	possible increased risk of hospitalization ¹³ , risk of severity ¹⁴	Increased risk of hospitalization ^{15,16}
Risk of reinfection	Neutralizing activity retained ¹⁷ , risk of reinfection remains similar ¹⁸	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective ¹⁹	Moderate reduction in neutralizing activity reported ²⁰	Reduction in neutralizing activity reported ^{21–23}
Impacts on diagnostics	Limited impact – S gene target failure (SGTF); no impact on overall result from multiple target RT-PCR, No impact on Ag RDTs observed ²⁴	No impact on RT-PCR or Ag RDTs observed ²³	None reported to date	None reported to date

*Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.

Table 3. Summary of vaccine performance against Variants of Concern

	WHO Emergency Use Listing (EUL) Qualified Vaccines							Vaccines without WHO EUL ⁺			
	AstraZeneca- Vaxzevria/Sil- Covishield	BeijingCNBG- BBIBP-CorV	Janssen- Ad26.COV 2.5	Moderna- mRNA-1273	Moderna- mRNA-1273/ Pfizer BioN BioNTech- Comirnaty	Pfizer BioNTech- Comirnaty	Sinovac- CoronaVac	Anhui ZI- Recombinant	Bharat-Covaxin	Gamaleya- Sputnik V	Novavax- Covavax
Alpha^{25,26}											
Summary of VE*	Protection retained against all outcomes										
- Severe disease	↔ ₂	-	-	↔ ₁	↔ ₁	↔ ₅	-	-	-	-	-
- Symptomatic disease	↔ to ↓ ₅	-	-	↔ ₁	↔ ₁	↔ ₄	-	-	-	-	↓ ₁
- Infection	↔ to ↓ ₃	-	-	↔ ₁	-	↔ ₂	-	-	-	-	-
Neutralization	↔ to ↓ ₅	↔ ₁	↔ ₃	↔ to ↓ ₁₁	↓ ₁	↔ to ↓ ₃₈	↔ to ↓ ₅	↔ ₂	↔ ₂	↔ ₃	↓ ₁
Beta²⁷⁻³⁰											
Summary of VE*	Protection retained against severe disease; reduced protection against symptomatic disease; limited evidence										
- Severe disease	-	-	↔ ₁	-	-	↔ ₂	-	-	-	-	-
- Symptomatic disease	↓↓↓ ₁	-	↔ ₁	-	-	↔ ₁	-	-	-	-	↓↓↓ ₁
- Infection	-	-	-	↔ ₁	-	↓ ₁	-	-	-	-	-
Neutralization	↓ to ↓↓ ₆	↔ to ↓ ₂	↓ to ↓↓ ₅	↓ to ↓↓ _B	↓↓↓ ₁	↓ to ↓↓ ₃₇	↓ to ↓↓ ₅	↔ to ↓ ₃	↓ ₂	↓ to ↓↓ ₃	↓↓↓ ₁
Gamma											
Summary of VE*	Unclear impact; very limited evidence										
- Severe disease	-	-	-	-	-	-	-	-	-	-	-
- Symptomatic disease	-	-	-	-	-	-	-	-	-	-	-
- Infection	-	-	-	-	-	-	↔ ₁	-	-	-	-
Neutralization	↓ ₂	-	↓ ₂	↓ ₆	-	↔ to ↓ ₂₁	↔ to ↓ ₄	↔ ₁	-	↓ ₂	-
Delta³¹											
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection; limited evidence										
- Severe disease	↔ ₂	-	-	↔ ₁	-	↔ ₄	-	-	-	-	-
- Symptomatic disease	↓ to ↓↓ ₄	-	-	-	-	↔ to ↓ ₄	-	-	↓ ₁	-	-
- Infection	↔ to ↓ ₂	-	-	-	-	↓ ₁	-	-	-	-	-
Neutralization	↓ to ↓↓ ₇	-	↓ ₃	↓ ₄	↓↓ ₁	↔ to ↓ ₁₄	↓ to ↓↓ ₃	↔ to ↓ ₂	↔ to ↓ ₃	↓ ₂	-

VE refers to vaccine effectiveness and vaccine efficacy

⁺As of submission of this update

*Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: “↔” <10% reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; “↓” 10 to <20% reduction in VE, or 2 to <5-fold reduction in neutralization; “↓↓” 20 to <30%

reduction in VE, or 5 to <10-fold reduction in neutralization; “↓↓↓” ≥30% reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used.

“Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty” indicates that both vaccines were evaluated together in study.

The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources page (<https://view-hub.org/resources>). For individual vaccine effectiveness studies, see ‘COVID-19 Vaccine Effectiveness Results Summary’, reference numbers noted with a ‘#’. For a list of all neutralization studies, see ‘COVID-19 Vaccine Neutralization Studies Table’.

References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table and are included in the reference section below.

Additional notes on VOC impacts on vaccines

- Studies reporting VOC-specific vaccine efficacy or effectiveness (VE) estimates for full vaccination (≥ 7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 randomised RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates for these outcomes, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca Vaxzevria for infection (when a phase 3 estimate of VE against infection due to non-VOC is available and used as comparator). In some instances, a study may be included for severe disease or infection outcome even without a comparator if a very high VE estimate is reported against a VOC (i.e., $>90\%$).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.
- Table 3 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than four months post final dose.

Table 3 presents the impact of variants on product specific vaccine efficacy/effectiveness (VE) and quantifies the reduction in VE in the setting of variants compared to VE in non-VOC settings. Of note, reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of approximately 85%. In addition, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection overall, as is the case for the AstraZeneca-Vaxzevria vaccine.

Since the [21 September update](#), six notable new studies have provided evidence of COVID-19 vaccine performance after full vaccination against VOCs.

A pre-print study from the United Kingdom provided VOC-specific estimates of the effectiveness of COVID-19 vaccines. This study found that Pfizer BioNTech-Comirnaty provided similar levels of protection against infection due to Alpha (VE: 94%, 95% CI: 90-96%) and Delta (VE: 90%, 95%CI: 87-92%) 14 or more days post second dose, among household contacts of confirmed cases, with follow-up time since full vaccination up to ~ 20.5 weeks for Alpha cases and ~ 29 weeks for Delta cases.³² AstraZeneca-Vaxzevria also had similar levels of protection against infection due to Alpha and Delta, with VE estimates of 71% (51-83%) and 72% (68-75%), respectively, with follow-up time since full vaccination up to ~ 8 weeks for Alpha cases and ~ 16 weeks for Delta cases.

A second study, not yet peer reviewed, evaluated the performance of Moderna-mRNA-1273 in the United States of America among persons who were included in a phase III randomized clinical trial of the vaccine, after study participants had been unblinded and persons in the placebo group were offered vaccination.³³ During the period from July to August 2021 (when Delta accounted for 97% of all cases sequenced), persons initially randomized to the vaccine arm and vaccinated between July and December 2020 experienced a higher incidence rate (IR) of symptomatic disease and severe disease (symptomatic disease IR: 77.1/1000 person-years; severe disease IR: 6.2/1000 person years) compared to persons initially assigned to the placebo group but vaccinated more recently between December 2020 and April 2021 (symptomatic disease

IR: 49.0/1000 person-years; severe disease IR: 3.3/1000 person years). This finding is suggestive of waning vaccine efficacy, although it was not possible to calculate an efficacy estimate using this case-only approach.

Two additional studies assessed performance of COVID-19 vaccines in outbreak settings. The first pre-print study evaluated the effectiveness of Pfizer BioNTech-Comirnaty in preventing infection and disease among residents and staff of a nursing home in Germany during an outbreak of the Alpha variant.³⁴ Two doses of the vaccine was 45% (0-69%), 68% (36-84%), and 88% (37-98%) effective at preventing infection, symptomatic disease, and hospitalization due to Alpha, respectively, seven or more days post second dose. The maximum follow-up after full vaccination was ~11 weeks. Authors also found that cycle threshold values at the time of SARS-CoV-2 detection were higher (suggesting lower viral load) among cases vaccinated more than 21 days prior compared to those vaccinated within 21 days of SARS-CoV-2 detection. Furthermore, the secondary attack rate was lower among household contacts of vaccinated cases (22.2%) than among household contacts of unvaccinated cases (66.7%). Another investigation of an outbreak of Delta in a prison in the USA found higher attack rates among unvaccinated (93%) persons as compared to those who had been vaccinated with Pfizer BioNTech-Comirnaty, Moderna-mRNA-1273, or Janssen-Ad26.COV 2.5, combined (70%).³⁵ In addition, higher attack rates were observed among persons vaccinated \geq 4 months prior to the outbreak (89%) compared to those vaccinated within two weeks to two months prior to the outbreak (61%). Among those vaccinated, 66% had received Pfizer BioNTech-Comirnaty, 27% had received Moderna-mRNA-1273, and 7% had received Janssen-Ad26.COV 2.5; all persons vaccinated \geq 4 months prior to the outbreak had received Pfizer BioNTech-Comirnaty.

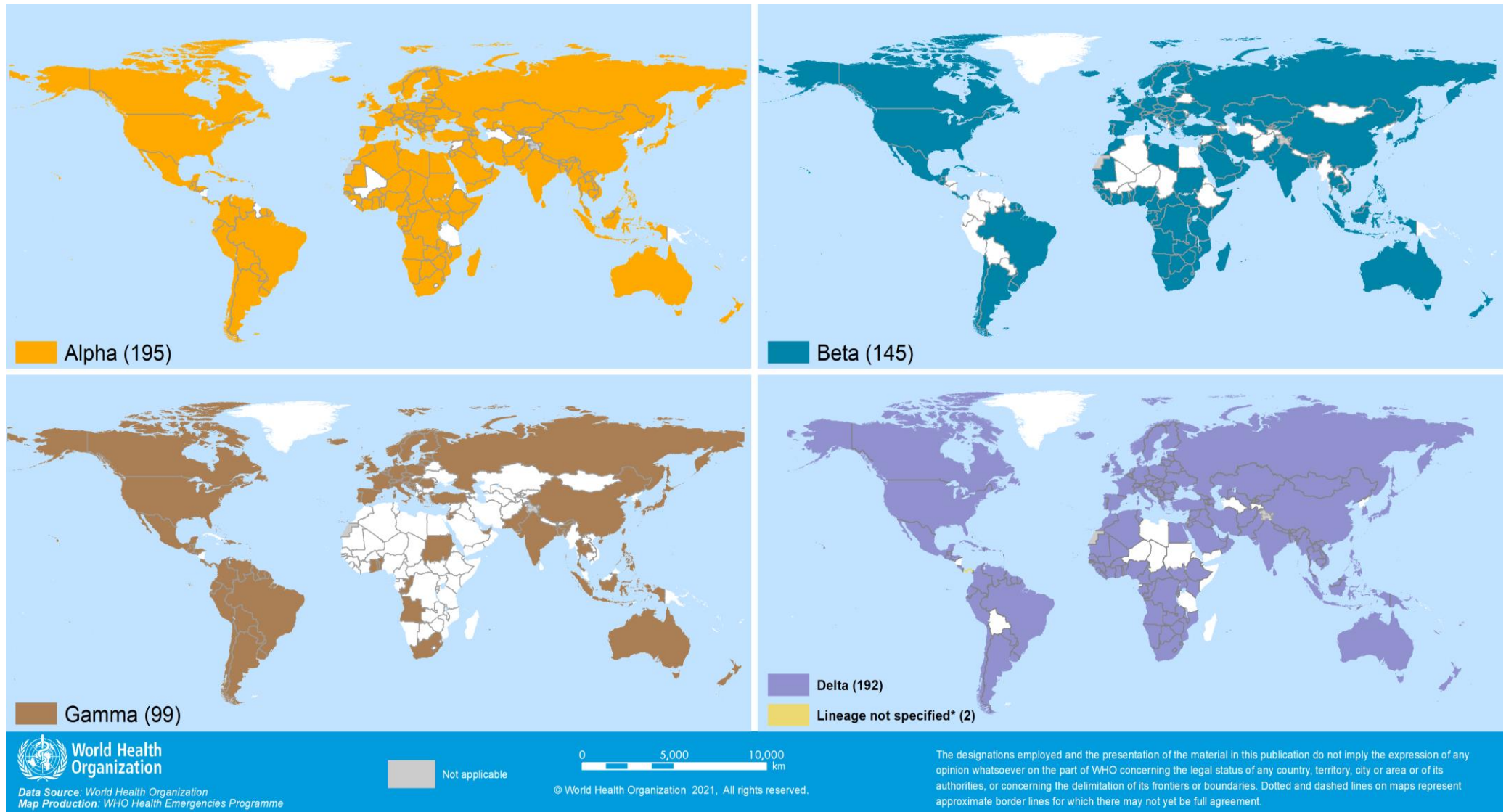
Finally, two retrospective cohort studies from Israel provide further data on the effectiveness of the Pfizer BioNTech-Comirnaty vaccine. The first, a peer-reviewed study, conducted during a period of high Alpha prevalence, found that the vaccine was over 95% effective for each at preventing infection, symptomatic disease, hospitalization, and death 22-28 days post receipt of the second dose among persons 16 years and older.³⁶ The second study, a pre-print, conducted during a time of high Delta prevalence, found Pfizer BioNTech-Comirnaty to be 91.5% (88.2-93.9%) effective against SARS-CoV-2 infection 8-28 days post second dose in children 12-15 years of age.³⁷

Together these studies provide further evidence of high effectiveness of the mRNA vaccines and AstraZeneca-Vaxzevria vaccine against SARS-CoV-2 infection, and symptomatic and severe COVID-19 disease due to Alpha and Delta variants, although there remains some indication of decreasing effectiveness against infection and symptomatic disease as time since complete vaccination.

Additional resources

- [Tracking SARS-CoV-2 Variants](#)
- [COVID-19 new variants: Knowledge gaps and research](#)
- [Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health](#)
- [Considerations for implementing and adjusting public health and social measures in the context of COVID-19](#)

Figure 5. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 5 October 2021**



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

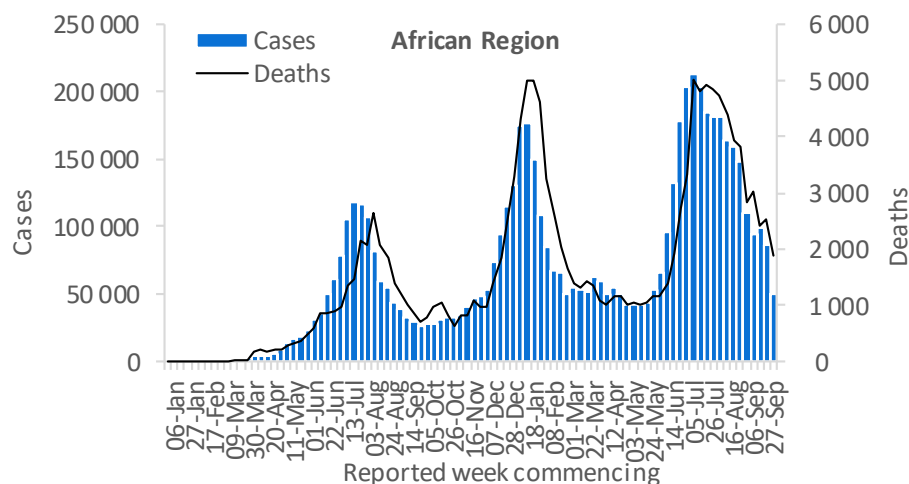
**Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details

WHO regional overviews Epidemiological week 27 September-3 October 2021

African Region

The African Region reported over 49 000 new cases and just under 1900 new deaths, decreases of 43% and 25% respectively as compared to the previous week. The declining trend in cases reported in the region and observed since early July continued this week. While this trend is true for most countries in the region, in the past week, seven countries reported increases of over 20% in new cases as compared to the previous week.

The highest numbers of new cases were reported from South Africa (9637 new cases; 16.2 new cases per 100 000 population; a 38% decrease), Ethiopia (7127 new cases; 6.2 new cases per 100 000; a 19% decrease), and Lesotho* (6943 new cases; 324.1 new cases per 100 000). The highest numbers of new deaths were reported from South Africa (752 new deaths; 1.3 new deaths per 100 000 population; a 15% decrease), Ethiopia (306 new deaths; <1 new death per 100 000; a 20% increase), and Lesotho* (231 new deaths; 10.8 new deaths per 100 000).



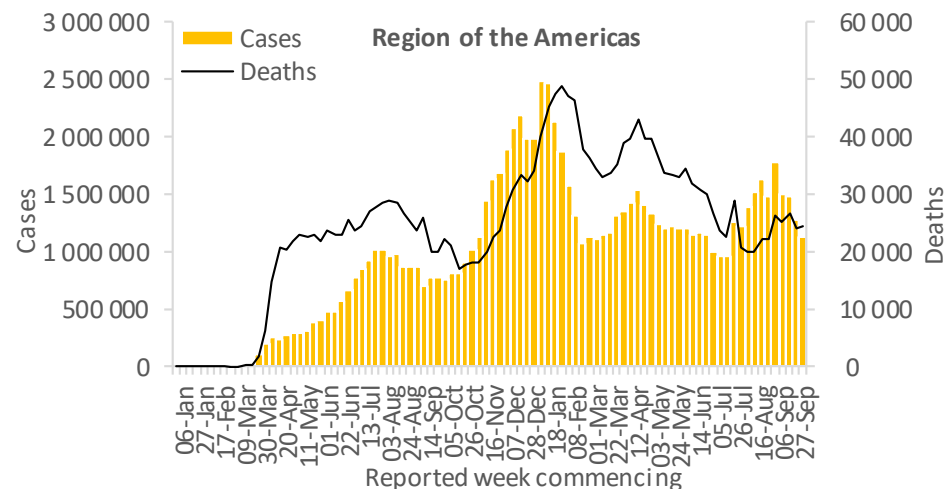
Updates from the [African Region](#)

* This marked increase was reported by Lesotho on 30 September 2021 as a batch number for both cases and deaths and will be reviewed as more information becomes available.

Region of the Americas

The Region of the Americas reported over 1.1 million new cases, a 12% decrease as compared to the previous week, and just over 24 000 new deaths, which was similar to the number reported the previous week. Overall, while the region has been reporting declining trends in both cases and deaths over the past month, the weekly incidence remains at levels below the peak seen in March.

The highest numbers of new cases were reported from the United States of America (760 571 new cases; 229.8 new cases per 100 000; similar to last week), Brazil (131 501 new cases; 61.9 new cases per 100 000; a 47% decrease), and Mexico (52 496 new cases; 40.7 new cases per 100 000; a 21% decrease). The highest numbers of new deaths were reported from the United States of America (13 736 new deaths; 4.1 new deaths per 100 000; a 12% increase), Brazil (4060 new deaths; 1.9 new deaths per 100 000; similar to last week), and Mexico (3275 new deaths; 2.5 new deaths per 100 000; a 21% decrease).

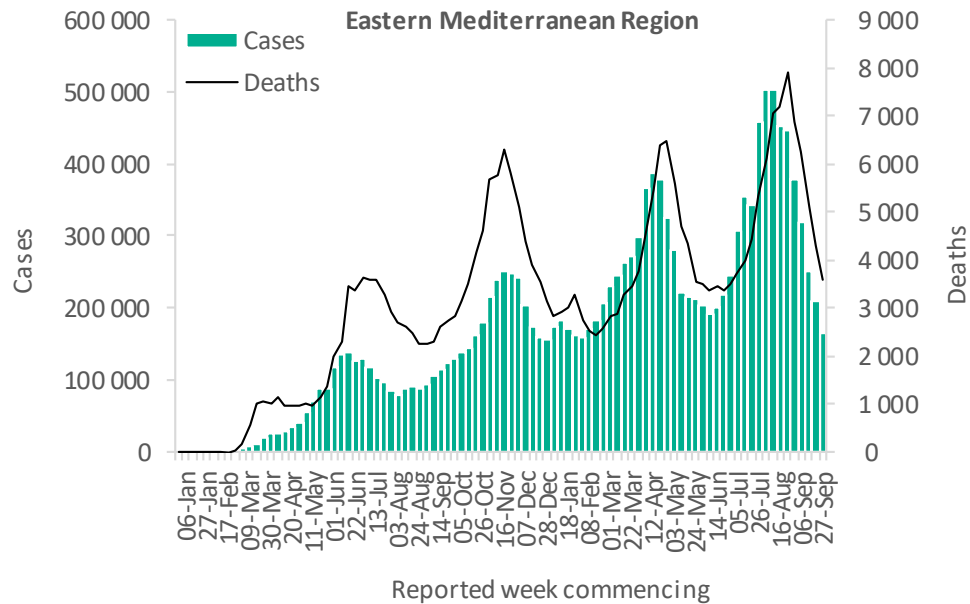


Updates from the [Region of the Americas](#)

Eastern Mediterranean Region

Since a peak in incidence in both cases and deaths in early August this year, weekly cases and deaths have continued to consistently decline in the Eastern Mediterranean Region. This week, the region reported over 166 000 new cases and over 3500 new deaths, decreases of 21% and 17% respectively as compared to the previous week. The highest numbers of new cases were reported from the Islamic Republic of Iran (91 972 new cases; 109.5 new cases per 100 000; a 17% decrease), Iraq (15 599 new cases; 38.8 new cases per 100 000; an 18% decrease), and Pakistan (11 314 new cases; 5.1 new cases per 100 000; a 28% decrease).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (1808 new deaths; 2.2 new deaths per 100 000; a 21% decrease), Pakistan (307 new deaths; <1 new death per 100 000; a 21% decrease), and Iraq (272 new deaths; <1 new death per 100 000; an 8% decrease).

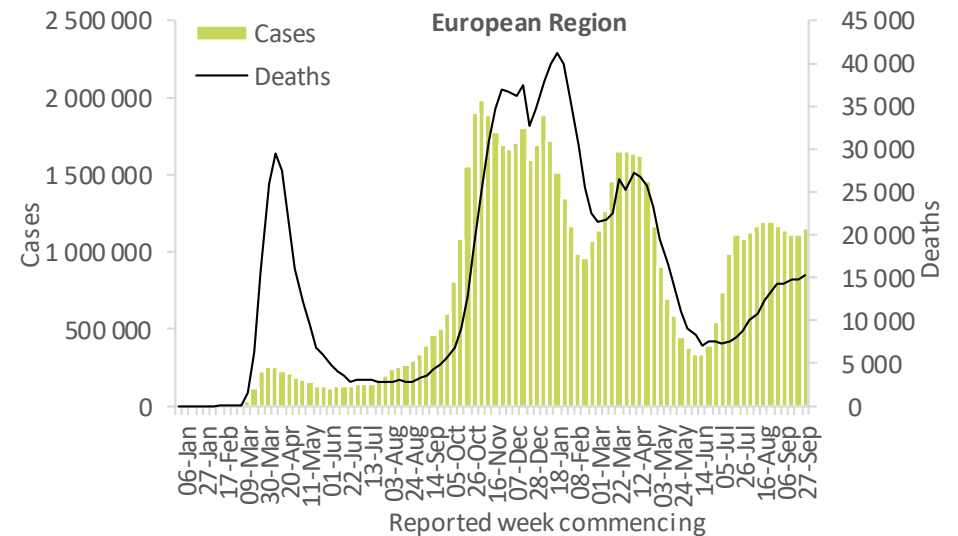


Updates from the [Eastern Mediterranean Region](#)

European Region

The European Region reported over 1.1 million new cases and over 15 000 new deaths, with both numbers similar to the numbers reported in the previous week. Following sharp declines in the incidence in both cases and deaths between March and June this year, numbers in the European Region spiked again in July and have since remained at higher but more stable levels ($\leq 5\%$ change) for the past three months. The highest numbers of new cases were reported from the United Kingdom (239 781 new cases; 353.2 new cases per 100 000; similar to previous week), Turkey (197 277 new cases; 233.9 new cases per 100 000; a number similar to that of the previous week), and the Russian Federation (165 623 new cases; 113.5 new cases per 100 000; a 13% increase).

The highest numbers of new deaths were reported from the Russian Federation (6018 new deaths; 4.1 new deaths per 100 000; a 6% increase), Turkey (1529 new deaths; 1.8 new deaths per 100 000; a number similar to that of previous week), and Ukraine (1149 new deaths; 2.6 new deaths per 100 000; a 53% increase).

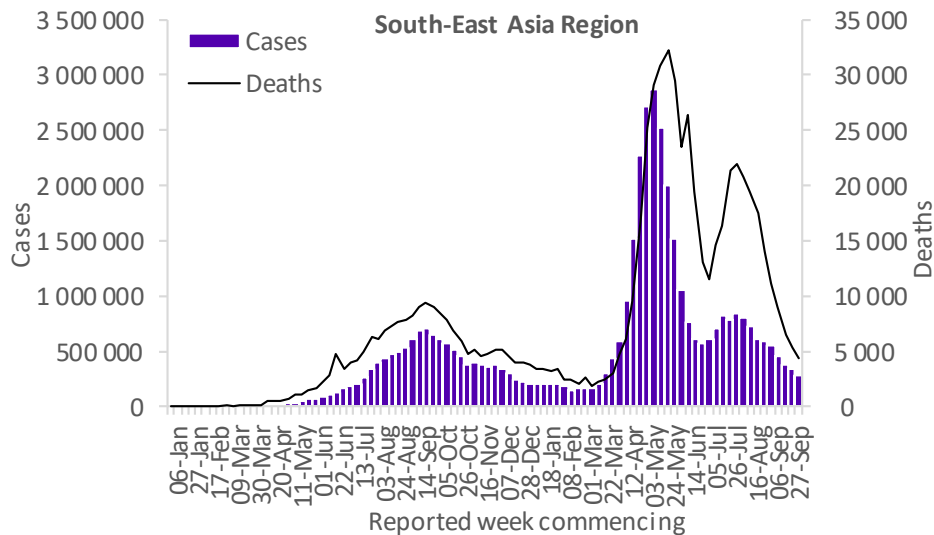


Updates from the [European Region](#)

South-East Asia Region

The South-East Asia Region reported over 278 000 new cases and over 4300 new deaths, decreases of 19% and 18% respectively as compared to the previous week. This sustained regional decline in both cases and deaths has been observed since late July. This week, only one country- Bhutan - reported an increase in cases - although absolute numbers reported remain low. Similarly, Nepal was the only country to report an increase in the number of new deaths this week (68 new deaths; a 21% increase). The highest numbers of new cases were reported from India (161 158 new cases; 11.7 new cases per 100 000; a 21% decrease), Thailand (75 794 new cases; 108.6 new cases per 100 000; an 11% decrease), and Indonesia (11 271 new cases; 4.1 new cases per 100 000; a 35% decrease).

The highest numbers of new deaths were reported from India (1899 new deaths; <1 new death per 100 000; a 9% decrease), Thailand (746 new deaths; 1.1 new deaths per 100 000; an 18% decrease), and Indonesia (706 new deaths; <1 new death per 100 000; a 29% decrease).

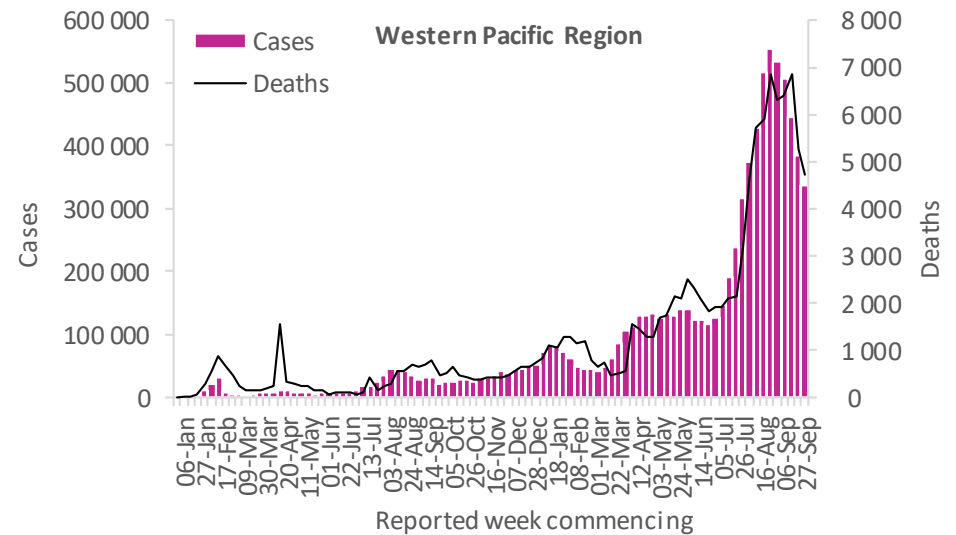


Updates from the [South-East Asia Region](#)

Western Pacific Region

The Western Pacific Region reported over 338 000 new cases and over 4700 new deaths, decreases of 12% and 10% respectively as compared to the previous week. After a sustained period of relatively stable numbers of both weekly cases and deaths, both began to rapidly increase from late June this year. However, this has been followed by consistent decreases in new cases and deaths observed in the region for over a month now and this is largely driven by declines in the Philippines and Malaysia. The highest numbers of new cases were reported from the Philippines (110 023 new cases; 100.4 new cases per 100 000; a 10% decrease), Malaysia (83 368 new cases; 257.6 new cases per 100 000; an 18% decrease), and Viet Nam (56 524 new cases; 58.1 new cases per 100 000; a 19% decrease).

The highest numbers of new deaths were reported from Malaysia (1406 new deaths; 4.3 new deaths per 100 000; a 33% decrease), the Philippines (1251 new deaths; 1.1 new deaths per 100 000; a 52% increase), and Viet Nam (1201 new deaths; 1.2 new deaths per 100 000; a 22% decrease).



Updates from the [Western Pacific Region](#)

Summary of the COVID-19 Weekly Operational Update

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

In this week's edition of the COVID-19 Weekly Operational Update, published on 4 October, highlights of country-level actions and WHO support to countries include:

- Nearly a third of African countries hit 10% COVID-19 vaccination goal: support to accelerate vaccine rollouts
- Supporting national vaccine cold chain system in Islamic Republic of Iran
- WHO/Europe supports COVID-19 intensive care in Georgia
- Fourth Intra-Action Review (IAR) Meeting to strengthen Indonesia's COVID-19 response
- Working together in Nicaragua to bring training to the front lines
- Progress on a subset of indicators from the SPRP 2021 Monitoring and Evaluation Framework
- Updates on WHO's financing to support countries in SPRP 2021 implementation and provision of critical supplies.

For more information, see the [Weekly operational update on COVID-19](#)

Annex

COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region (reported in previous issues) are now available at: <https://covid19.who.int/table>.

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 5 October 2021

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Afghanistan	●	-	-	●	-
Albania	●	-	-	○	-
Algeria	●	-	-	●	-
Andorra	○	○	-	○	-
Angola	●	●	●	●	-
Anguilla	●	-	-	●	-
Antigua and Barbuda	●	●	●	●	-
Argentina	●	●	●	●	-
Armenia	●	-	-	●	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	○	-
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	-
Bangladesh	●	●	○	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	●	●	-
Benin	●	-	●*	-	-
Bermuda	●	●	-	●	-
Bhutan	●	●	-	●	-
Bolivia (Plurinational State of)	●	-	●	-	-
Bonaire	●	-	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Bosnia and Herzegovina	●	●	●	○	-
Botswana	○	●	-	●	-
Brazil	●	●	●	●	-
British Virgin Islands	●	-	●	●	-
Brunei Darussalam	●	●	-	●	-
Bulgaria	●	●	-	●	-
Burkina Faso	●	-	-	●*	-
Burundi	●	●	-	●	-
Cabo Verde	●	-	-	●	-
Cambodia	●	●	-	●	-
Cameroon	●	●	-	●*	-
Canada	●	●	●	●	-
Cayman Islands	●	●	●	●	-
Central African Republic	●	●	-	●	-
Chad	●	-	-	-	-
Chile	●	●	●	●	-
China	●	●	●	○	-
Colombia	●	-	●	●	-
Comoros	-	●	-	-	-
Congo	●	○	●*	●	-
Costa Rica	●	●	●	●	-
Croatia	●	●	●	○	-
Cuba	●	●	-	●	-
Curaçao	●	●	●	●	●
Cyprus	●	●	-	○	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Czechia	●	●	●	●	-
Côte d'Ivoire	●	●	-	○	-
Democratic Republic of the Congo	●	●	-	●	-
Denmark	●	●	●	●	-
Djibouti	●	●	-	-	-
Dominica	●	-	-	●	-
Dominican Republic	●	-	●	●	-
Ecuador	●	-	●	●	-
Egypt	●	-	-	●	-
El Salvador	●	-	●	●	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	○	-
Eswatini	○	●	-	●	-
Ethiopia	●	-	-	●	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	●	-	●*	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Germany	●	●	●	●	-
Ghana	●	●	●*	●	-
Gibraltar	●	-	-	○	-
Greece	●	●	●	●	-
Grenada	●	-	-	●	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	●	-
Guinea	●	●	-	●	-
Guinea-Bissau	●	●	-	●	-
Guyana	-	-	●	●	-
Haiti	●	-	●	●	-
Honduras	●	-	●	●	-
Hungary	●	○	●	○	-
Iceland	●	●	●	●	-
India	●	●	●	●	-
Indonesia	●	●	○	●	-
Iran (Islamic Republic of)	●	●	-	●	-
Iraq	●	●	-	●	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	●	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	●	○	-	●	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	○	-
Kuwait	●	●	-	●	-
Kyrgyzstan	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Lao People's Democratic Republic	●	-	-	●	-
Latvia	●	●	●	○	-
Lebanon	●	-	-	●	-
Lesotho	-	●	-	○	-
Liberia	●	●*	-	●	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	○	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-
Madagascar	●*	●	-	-	-
Malawi	●	●	-	●	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Mali	-	-	-	●*	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	●	●	-	●	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	●	-	●	-
Mongolia	●	-	-	●	-
Montenegro	●	-	○	○	-
Montserrat	●	-	●	●	-
Morocco	●	●	-	●	-
Mozambique	●	●	-	●	-
Myanmar	●	-	-	●	-
Namibia	●	●	-	●	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
New Caledonia	●	-	-	●	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	●	-	●	-
North Macedonia	●	●	-	○	-
Northern Mariana Islands (Commonwealth of the)	○	-	-	●	-
Norway	●	●	●	●	-
Occupied Palestinian Territory	●	●	-	●	-
Oman	●	●	-	●	-
Pakistan	●	●	●	●	-
Panama	●	●	●	●	●
Papua New Guinea	-	-	-	●	-
Paraguay	●	-	●	●	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	-
Puerto Rico	●	●	●	●	-
Qatar	●	●	-	●	-
Republic of Korea	●	●	●	●	-
Republic of Moldova	●	-	-	●	-
Romania	●	●	●	●	-
Russian Federation	●	●	○	●	-
Rwanda	●	●	-	●	-
Réunion	●	●	●	○	-
Saba	-	-	-	●	-
Saint Barthélemy	●	-	-	●	-
Saint Kitts and Nevis	-	-	-	●	-
Saint Lucia	●	-	-	●	-
Saint Martin	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Saint Pierre and Miquelon	-	-	-	●	-
Saint Vincent and the Grenadines	-	-	●	●	-
Sao Tome and Principe	●	-	-	○	-
Saudi Arabia	●	●	-	●	-
Senegal	●	●	-	●	-
Serbia	●	-	-	●	-
Seychelles	●	●	-	●	-
Sierra Leone	-	●*	-	●	-
Singapore	●	●	●	●	-
Sint Maarten	●	●	●	●	-
Slovakia	●	●	-	●	-
Slovenia	●	●	●	●	-
Somalia	●	●	-	-	-
South Africa	●	●	○	●	-
South Sudan	●	●	-	●	-
Spain	●	●	●	●	-
Sri Lanka	●	●	-	●	-
Sudan	●	●	●	-	-
Suriname	●	●	●	●	-
Sweden	●	●	●	●	-
Switzerland	●	●	●	●	-
Syrian Arab Republic	-	-	-	○	-
Thailand	●	●	●	●	-
Timor-Leste	●	-	-	●	-
Togo	●	●	●*	●	-
Trinidad and Tobago	●	-	●	●	-
Tunisia	●	●	-	●	-
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Ukraine	●	○	-	○	-
United Arab Emirates	●	●	●	●	-
United Kingdom	●	●	●	●	-
United Republic of Tanzania	-	●	-	-	-
United States Virgin Islands	●	●	-	●	-
United States of America	●	●	●	●	-
Uruguay	●	●	●	●	-
Uzbekistan	●	●	-	○	-
Venezuela (Bolivarian Republic of)	●	-	●	●	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	-	●	-
Zimbabwe	●*	●*	-	●	-

*Newly reported in this update.

“Unspecified B.1.617” reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

“●” indicates that information for this variant was received by WHO from official sources.

“○” indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available.

**Includes countries/territories/areas reporting the detection of VOCs among travelers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern.

See also [Annex 2: Data, table and figure notes](#).

Annex 2. Data, table and figure notes

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

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

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

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

Technical guidance and other resources

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

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