COVID-19 Weekly Epidemiological Update

Edition 69, published 7 December 2021

In this edition:

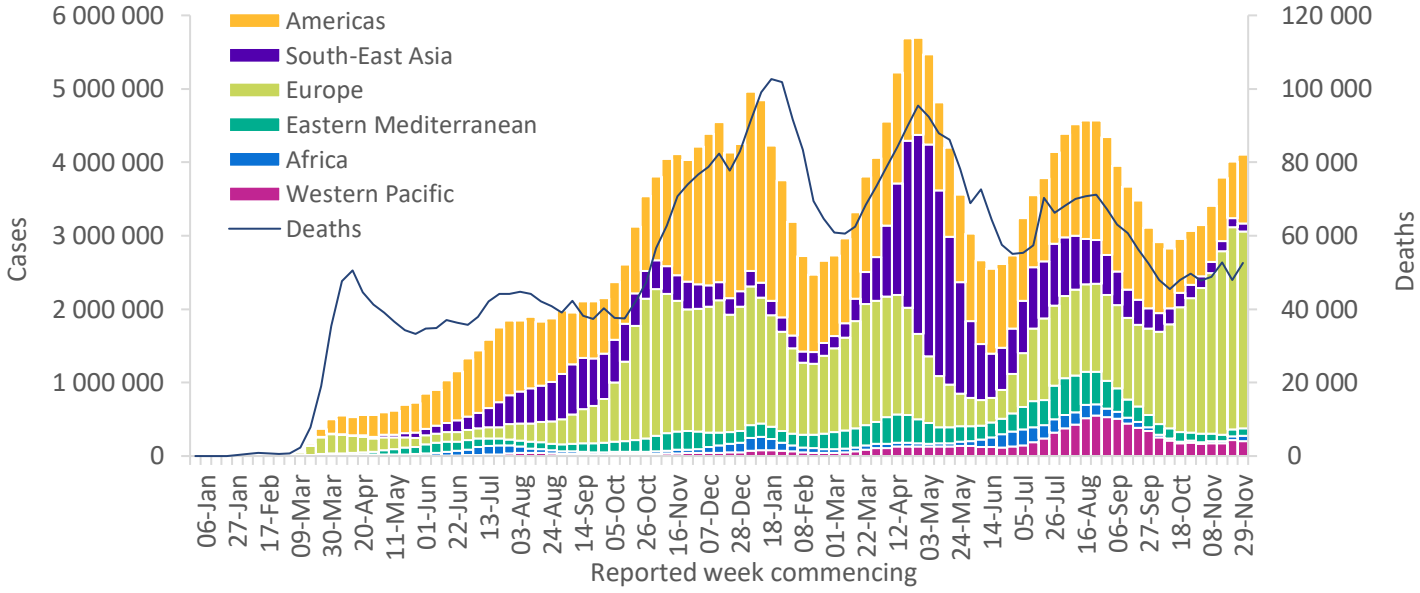
Global overview

Data as of 5 December 2021

Globally, weekly case incidence plateaued this week (29 November - 5 December 2021), with over 4 million confirmed new cases reported, similar to the number reported in the previous week's figures. However, new weekly deaths increased by 10% as compared to the previous week, with over 52 500 new deaths reported. As of 5 December, nearly 265 million confirmed cases and over 5.2 million deaths have been reported globally.

The African Region and the Region of the Americas reported increases in new weekly cases of 79% and 21%, respectively, while the Western Pacific and South-East Asia regions both reported decreases of 10%. The number of new weekly cases reported by the European and Eastern Mediterranean regions were similar to the numbers reported in the previous week. New weekly deaths increased by 49% in the South-East Asia Region and 38% in the Region of the Americas, while the weekly deaths decreased in the African and Eastern Mediterranean Regions by 13% and 8%, respectively. The number of new deaths were similar to those reported in the previous week in both the European and the Western Pacific regions.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 5 December 2021**



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

The regions reporting the highest weekly case incidence per 100 000 population continue to be the European Region (288.0 new cases per 100 000 population) and the Region of the Americas (91.4 new cases per 100 000 population). Both regions also reported the highest weekly incidence in deaths of 3.1 and 1.3 per 100 000 population, respectively while <1 new death per 100 000 was reported in all other regions.

The highest numbers of new cases were reported from the United States of America (752 394 new cases; a 30% increase), Germany (396 429 new cases; similar to the previous week's figures), the United Kingdom (310 696 new cases; similar to the previous week's figures), France (283 500 new cases; a 49% increase) and the Russian Federation (231 240 new cases; similar to the previous week's figures).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 5 December 2021**

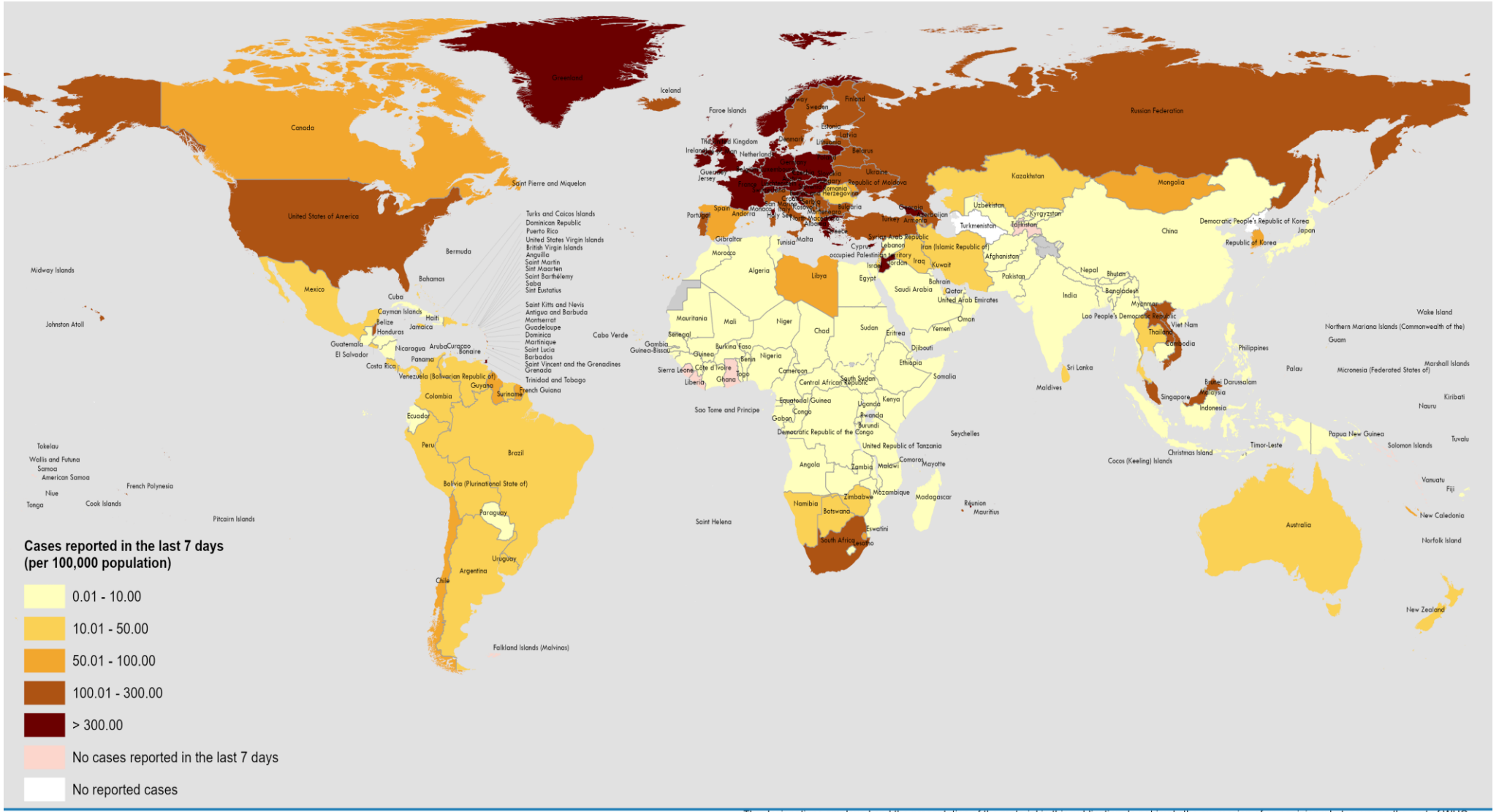
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	2 687 257 (65%)	-3%	88 925 399 (34%)	28 990 (55%)	-2%	1 569 599 (30%)
Americas	935 062 (23%)	21%	97 679 255 (37%)	12 987 (25%)	38%	2 360 315 (45%)
Western Pacific	199 495 (5%)	-10%	10 370 429 (4%)	3 220 (6%)	2%	144 204 (3%)
South-East Asia	109 044 (3%)	-10%	44 638 985 (17%)	5 324 (10%)	49%	711 660 (14%)
Eastern Mediterranean	94 724 (2%)	0%	16 846 148 (6%)	1 622 (3%)	-8%	310 727 (6%)
Africa	79 491 (2%)	79%	6 354 835 (2%)	498 (1%)	-13%	153 275 (3%)
Global	**4 105 073 (100%)**	**2%**	**264 815 815 (100%)**	**52 641 (100%)**	**10%**	**5 249 793 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
**See *Annex 2: Data, table, and figure notes*

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

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

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 29 November - 5 December 2021**

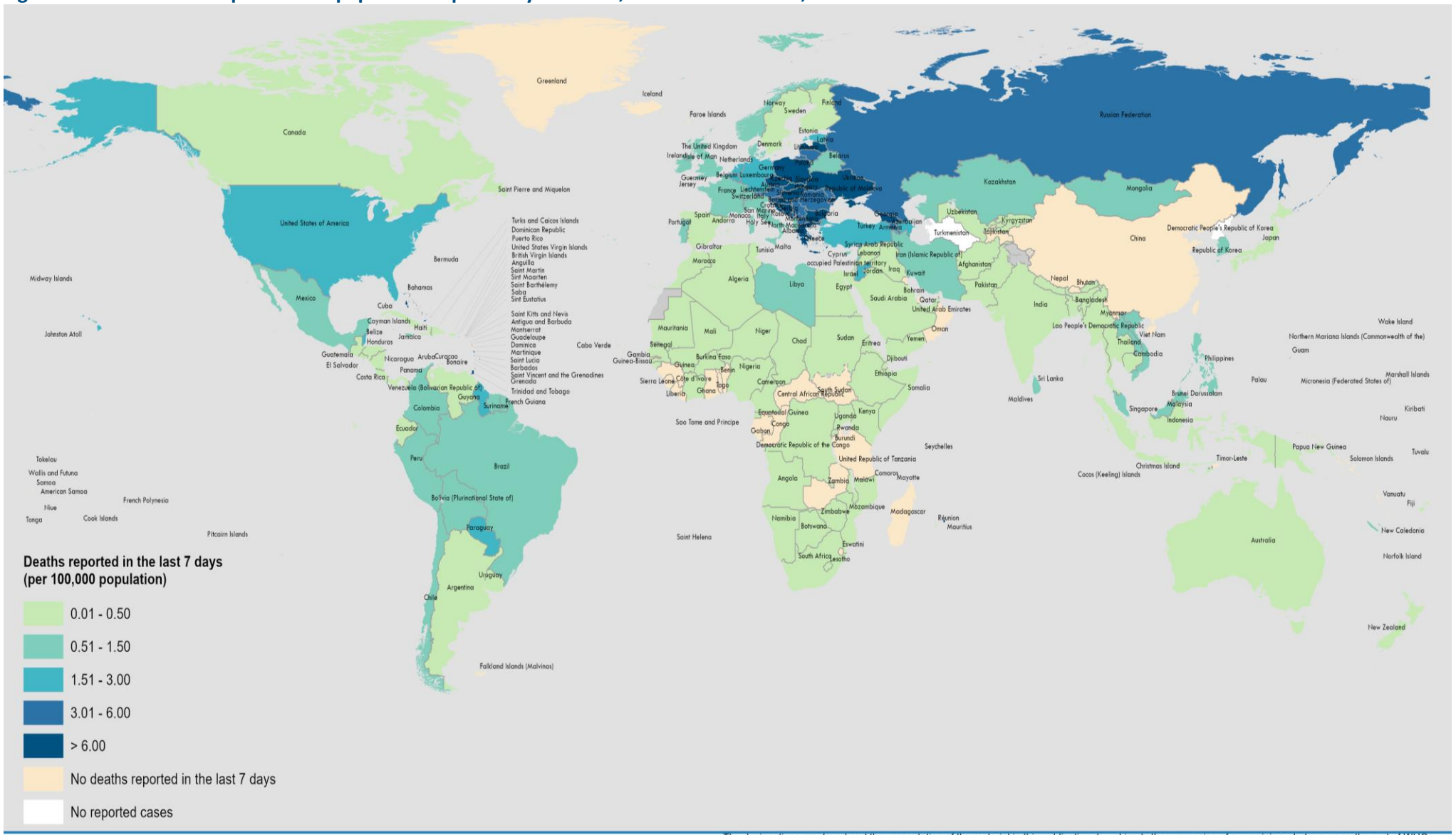


***Data Source**: World Health Organization*
United Nations Population Division (Population prospect 2020)
***Map Production**: WHO Health Emergencies Programme*

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

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

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 29 November - 5 December 2021**



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

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied by national authorities to control disease spread. Potential Variants of Concern (VOCs), Variants of Interest (VOIs) or Variants Under Monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

The current global epidemiology of SARS-CoV-2 is characterized by a predominance of the Delta variant, declining trend in the proportion of Alpha, Beta and Gamma, and the emergence of Omicron which was designated as a Variant of Concern on 26 November (Figures 4 and 5). At present, Omicron cases have been reported in 57 countries across all WHO regions. While most of the cases identified in these countries are currently travel-related, this may change as more information becomes available. Of 899 935 sequences uploaded to GISAID with specimens collected in the last 60 days[i], 897 886 (99.8%) were Delta, 713 (0.1%) were Omicron, 286 (<0.1%) Gamma, 154 (<0.1%) Alpha, 64 (<0.1%) Beta, and <0.1% comprised other circulating variants (including VOIs Mu and Lambda).

Sub-regional and country-level variation continues to be observed; most notably within some South American countries, where the progression of the Delta variant has been more gradual, and other variants (e.g., Gamma, Lambda, Mu) still contribute a large proportion of reported sequences.

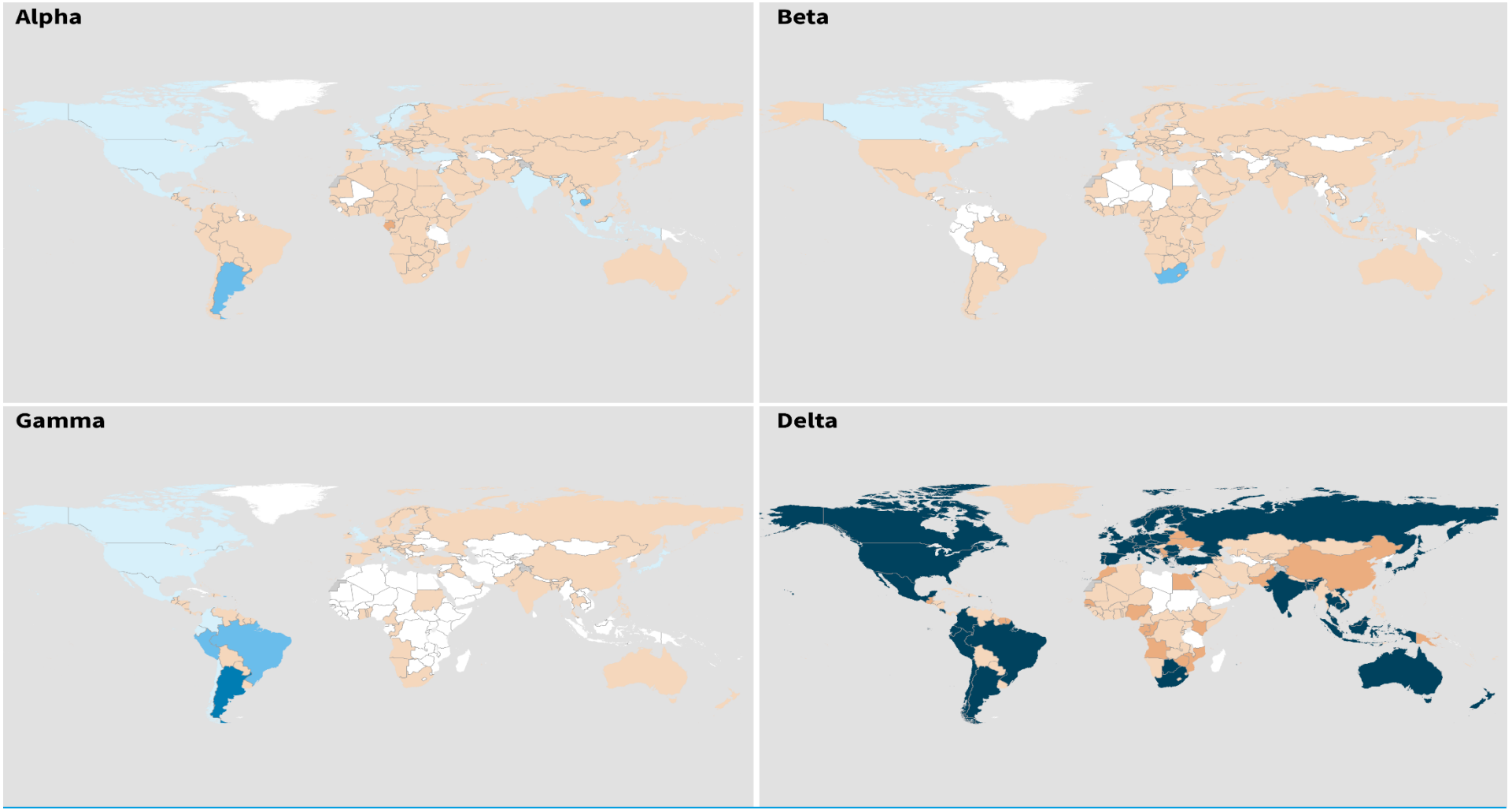
To note, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

Additional resources

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

[i] Includes sequences submitted to GISAID with sample collected dates from 3 October to 2 December 2021 (last reported sample at the time of data extraction), excluding low coverage sequences.

Figure 4. Prevalence of Variants of Concern (VOCs) Alpha, Beta, Gamma and Delta in the last 60 days and historic detections, data as of 7 December 2021



*Prevalence calculated as a proportion of VOC sequences among total sequences uploaded to GISAID with sample collection dates within the past 60 days prior to the latest date of collection, excluding low coverage sequences, limited to countries with ≥100 total sequences in the same period. Countries assigned by location of sample collection.
**Includes both official reports to WHO and unofficial reports of VOC detections.

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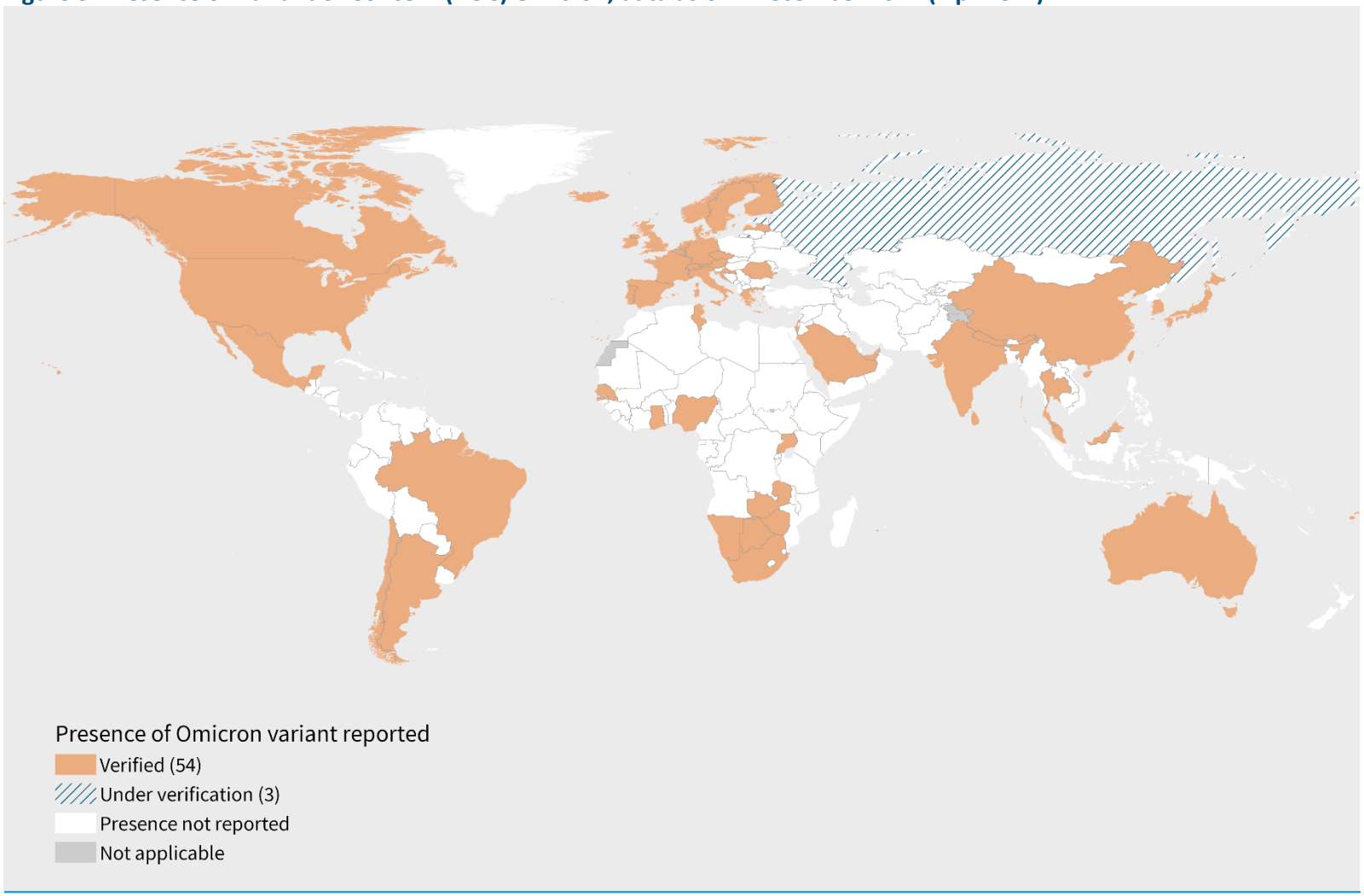
Prevalence data based on sequences reported to GISAID, excluding low coverage sequences. See also Annex 1 for reported VOC detections by country/territory/area

Figure 5. Presence of Variant of Concern (VOC) Omicron, data as of 7 December 2021 (4 pm CET)



Data Source: World Health Organization, GISAID
Map Production: WHO Health Emergencies Programme

Presence of the Omicron variant is based on information reported to WHO. It includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). See also Annex 1 for reported VOC detections by country/territory/area.

Update on Variant of Concern Omicron

Background

Omicron is the fifth SARS-CoV-2 variant to be designated as a Variant of Concern (VOC) by WHO, following the designation of the Alpha, Beta, Gamma and Delta variants. The first known laboratory-confirmed case of Omicron was identified from a specimen collected on 9 November 2021 in South Africa, with the variant (Pango nomenclature B.1.1.529) first reported to WHO on 24 November. In consultation with the Technical Advisory Group on Virus Evolution (TAG-VE), WHO designated B.1.1.529 as a VOC on 26 November in view of the potential for enhanced transmissibility and/or a degree of immune escape, given the number of mutations (26-32) in the spike protein, as well as concerning initial epidemiological reports from South Africa, including signals of increased risk of reinfection. Here, we present an update on the current situation in terms of the epidemiology and transmissibility, clinical severity, risk of reinfection and the potential impact on diagnostics, vaccines and therapeutics.

As more data are analysed and understood about the potential implications that Omicron may have on the epidemiology, transmissibility, clinical severity, prevention and treatment of SARS-CoV-2 infection, our understanding of this variant will continue to evolve, and we will issue updates as further evidence becomes available.

Epidemiology

In South Africa, where Omicron was first reported, the case incidence of COVID-19 has continued to rise since the second week of November, with 62 021 new cases reported between 29 November and 5 December, a 111% increase compared to the previous week. An increase in the test positivity rate (TPR) has also been seen from 1.2% the week beginning the 7 November, to 22.4% the week beginning the 2 December.[1] An initial increase in incidence in Gauteng province in mid-November was thought in part, to be due to a cluster of cases among students at a university.[2] Very large increases in the weekly incidence of cases have also been seen in some countries neighbouring South Africa including: Eswatini (1990%); Zimbabwe (1361%); Mozambique (1207%), Namibia (681%) and Lesotho (219%). These other countries have very low vaccination coverage ranging from 12.1% of the total population fully vaccinated in Namibia to 26.7% in Lesotho. In South Africa 25.2% of the total population is fully vaccinated. While drivers of these increases remain unknown, it is plausible that spread of Omicron in combination with enhanced testing following the declaration of a VOC, play a role, together with the relaxation of public health and social measures (PHSMs) and sub-optimal immunization coverage.

Among countries in other regions reporting increasing spread of the Omicron variant, hundreds of cases of this variant have now been reported from countries in other regions.[3] Since the last update published on 30 November, additional countries across all six WHO Regions have reported confirmed cases of the Omicron variant. As of 7 December 2021, the Omicron variant has been confirmed in 57 countries. However, given the predominant circulation of the Delta variant in many countries, particularly in countries in the European Region and in the United States of America, it is too early to draw any conclusions about the impact of Omicron will have on the global epidemiology of COVID-19.

Transmissibility

While there seems to be evidence that the Omicron variant may have a growth advantage over other circulating variants it is unknown whether this will translate into increased transmissibility. Based on several assumptions about

the growth advantage, timing of introduction in the European Region, and population mixing and public health and social measures (PHSM) implementation, the European Centre for Disease Prevention and Control,[4] forecasted that if 1% of SARS-CoV-2 infections are due to the Omicron variant, it will become dominant in Europe, comprising >50% of the new infections, by 1 January 2022, with a growth advantage of >120%; and by 1 March 2022 with a growth advantage of >30%.

Ongoing and planned epidemiological studies, including detailed cluster investigations, contact-tracing and household transmission studies, coupled with neutralization studies from people previously vaccinated or infected and studies of vaccine effectiveness will help improve our understanding of the interplay between increased transmissibility and immune escape as drivers of increased transmission.

Clinical severity

Currently only limited data are available, making it challenging to assess any changes in disease severity with the Omicron variant. As of 6 December, all of the 212 confirmed cases identified in 18 European Union countries for which there was information available on severity were asymptomatic or mild.[3] While South Africa saw an 82% increase in hospital admissions due to COVID-19 (from 502 to 912) during the week 28 November – 4 December 2021, it is not yet known the proportion of these with the Omicron variant.[5] Even if the severity is equal or potentially even lower than for Delta variant, it is expected that hospitalizations will increase if more people become infected and that there will be a time lag between an increase in the incidence of cases and an increase in the incidence of deaths. Further information is needed to fully understand the clinical picture of those infected with the Omicron variant and WHO encourages countries to contribute to the collection and sharing of hospitalized patient data through the WHO COVID-19 Clinical Data Platform.

Risk of reinfection

Preliminary analysis suggests that the mutations present in the Omicron variant may reduce neutralising activity of antibodies resulting in reduced protection from natural immunity. This may explain why the variant seems to be spreading rapidly in a highly immune population such as South Africa, in which current vaccination coverage in adults is about 35%, but in which seroprevalence levels are estimated to be as high as 60-80% due to past infections, according to recent epidemiological studies and modelling.[6]

A modelling study (pre-print) based on data from nearly three million individuals in South Africa with a laboratory confirmed infection at least 90 days prior found an increase in the risk of re-infection during November 2021 compared to time periods earlier in the pandemic (estimated relative hazard ratio for reinfection versus primary infection of 2.39 (95%CI 1.88-3.11 from 1 – 27 November 2021 compared to wave 1 (June – September 2020), corresponding with the emergence of the Omicron variant. This information provides an initial assessment of the risk of re-infection however, further studies are needed to confirm this, including the ability of the Omicron variant to infect or re-infect those who have been vaccinated, as well as to determine the severity of these breakthrough or re-infections.[7]

Impact on diagnostics

SARS-CoV-2 infection can be diagnosed using either molecular tests (NAAT, PCR) or antigen-detection assays. Interim guidance on diagnostic testing for SARS-CoV-2 can be found here and on the use of antigen-detection tests can be found here. PCR tests that include multiple gene targets are unlikely to be affected and should continue to be used

to detect SARS-CoV-2 infection, including the Omicron variant. This has been confirmed by statements issued by suppliers as well as the US FDA, based on sequence analysis.
The majority of Omicron variant sequences reported include a 69-70 deletion mutation in the Spike protein. There are some public sequences lacking this mutation and, at the present time, it is unclear if this reflects true sequence diversity or is a sequencing artifact. Presence of the 69-70 deletion causes dropout of some S-gene targets in PCR assays, such as the TaqPath COVID-19 Combo Kit and TaqPath COVID-19 CE-IVD RT-PCR Kit (Thermo Fisher Scientific). This S-gene target failure (SGTF) can be used as a marker suggestive of Omicron. However, confirmation should be performed by sequencing the sample, as this deletion is found in other VOCs (e.g., Alpha and subsets of Gamma and Delta) currently circulating at low levels globally, but possibly circulating at higher levels locally.

All four WHO emergency use listing (EUL) approved antigen-detection rapid diagnostic tests (Ag-RDTs), listed here, target the Nucleocapsid protein of SARS-COV-2.The vast majority of Omicron sequences reported to date include the G204R and R203K mutations in the Nucleocapsid protein, which are present in many other variants currently in circulation. This has not been reported to affect the accuracy of Ag-RDTs to detect SARS-CoV-2. In addition, the majority of Omicron sequences contain a 3 amino acid deletion at positions 31-33 and the P13L mutation in the Nucleocapsid protein. The specific impact of these mutations on the performance of Ag RDTs is currently unclear.

Official statements from several Ag-RDT suppliers, including two with EUL-approved assays, indicate that based on sequence analysis, the performance of their tests is not impacted by the Omicron variant. Preliminary laboratory evidence is emerging that independently confirms that Ag-RDTs can accurately diagnose infection with the Omicron variant. To date, there have been no reported misdiagnoses (false negative results) for any WHO EUL approved diagnostic product in relation to Omicron.

Impact on vaccines

There is a need for more data to assess whether the mutations present on the Omicron variant may result in reduced protection from vaccine derived immunity and data on vaccine effectiveness, including the use of additional vaccination doses. WHO will continue to work with partners to monitor and evaluate these data once they become available. Vaccine effectiveness studies are vital to understand how vaccines protect against infection, symptomatic and severe disease, and death. WHO guidance on best practices to conduct these types of studies can be found on our website.

Impact on treatments

WHO continues to work with researchers to understand the effectiveness of treatments against the Omicron variant; however, Interleukin-6 Receptor Blockers and corticosteroids are expected to continue to be effective in the management of patients with severe disease.

Conclusions

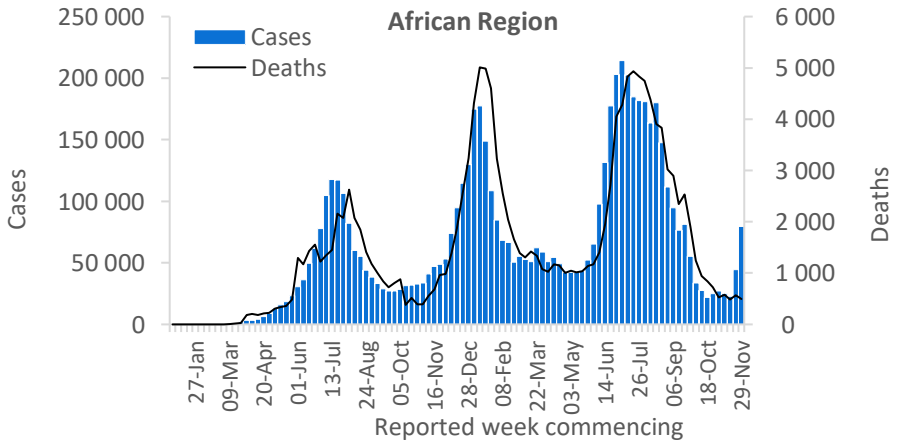
Whilst many questions about the Omicron variant remain unanswered, more information will continue to emerge in the coming weeks, with the TAG-VE and other groups reviewing and analysing data as it becomes available. It is important to continue to accelerate access to vaccines globally and for countries to continue to enhance surveillance, reporting initial cases or clusters to WHO and share genome sequences on publicly available databases such as GISAID. We recommend the public continue to prevent the spread of SARS-CoV-2 by improving ventilation of indoor spaces, wearing well-fitted masks, avoiding crowded spaces, practising hand hygiene and keeping an appropriate physical distance from others.

WHO regional overviews Epidemiological week 29 November – 5 December 2021

African Region

The case incidence in the African Region continues to increase with over 79 000 new cases reported during the week of 29 November to 5 December, a 79% increase. However, weekly deaths have continued to decrease, with just under 500 new deaths reported in the past week, a 13% decrease. Twenty-one of the 49 countries in the region (43%) reported an increase of >10% in new cases as compared to the previous week, with the highest numbers of new cases reported from South Africa (62 021 new cases; 104.6 new cases per 100 000; a 111% increase), Zimbabwe (4572 new cases; 30.8 new cases per 100 000; a 1361% increase) and Réunion (2140 new cases; 239.0 new cases per 100 000; a 14% increase). However, proportionally, very large increases in the incidence of cases were also seen in Eswatini (1900%), Mozambique (1207%) and Namibia (681%).

Six of the 49 countries in the Region reported an increase of over 10% in the number of new weekly deaths, with the highest numbers of new deaths reported from South Africa (174 new deaths; <1 new death per 100 000; a 21% decrease), Mauritius (126 new deaths; 9.9 new deaths per 100 000; an 31% increase), and Ethiopia (58 new deaths; <1 new death per 100 000; a 9% decrease).

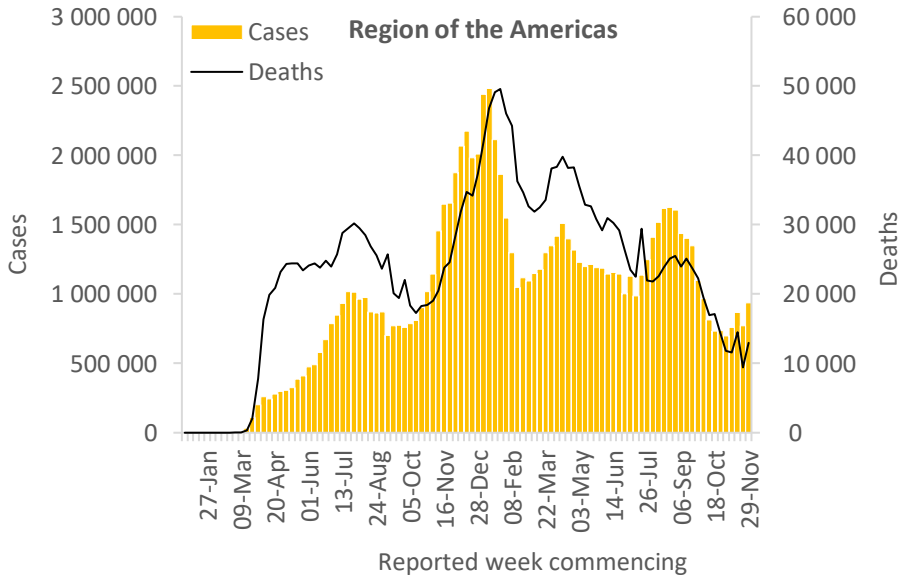


Updates from the African Region

Region of the Americas

The Region of the Americas reported a 21% increase in case incidence in the past week, with over 935 000 new cases reported. This trend is largely driven by the increase in the incidence of cases reported in the United States of America (752 394 new cases; 227.3 new cases per 100 000; a 30% increase). Twenty-seven percent (15/56) of countries in the region reported increases of over 10%. In addition to the United States of America, countries reporting the highest numbers of cases included Brazil (61 779 new cases; 29.1 new cases per 100 000; similar to the previous week's figures) and Canada (20 188 new cases; 53.5 new cases per 100 000; similar to the previous week's figures).

The incidence of deaths also increased with just under 13 000 new deaths reported, a 38% increase compared to the previous week. The highest numbers of new deaths were reported from the United States of America (8527 new deaths; 2.6 new deaths per 100 000; a 56% increase), Brazil (1443 new deaths; <1 new death per 100 000; a 9% decrease) and Mexico (1002 new deaths; <1 new death per 100 000; a 55% increase).

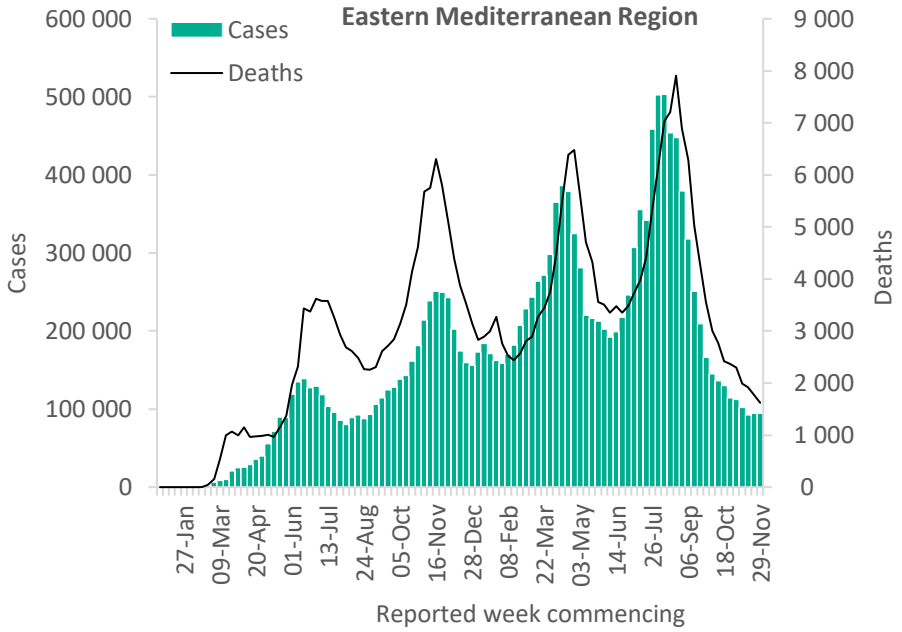


Updates from the Region of the Americas

Eastern Mediterranean Region

The weekly incidence of cases in the Eastern Mediterranean Region remained stable with over 94 000 new cases reported. The weekly incidence of deaths decreased by 8%, with over 1600 reported. However, nearly half (10/22) of countries in the region reported a >10% increase in weekly incidence of cases. Most cases continued to be reported from three countries: Jordan (32 108 new cases; 314.7 new cases per 100 000; a 15% increase), the Islamic Republic of Iran (26 255 new cases; 31.3 new cases per 100 000; an 18% decrease), and Lebanon (10 406 new cases; 152.5 new cases per 100 000; an 11% increase).

The highest numbers of new deaths continued to be reported from the Islamic Republic of Iran (575 new deaths; <1 new death per 100 000; an 18% decrease), Egypt (377 new deaths; <1 new death per 100 000; a 13% decrease), and Jordan (200 new deaths; 2.0 new deaths per 100 000; a 19% increase).

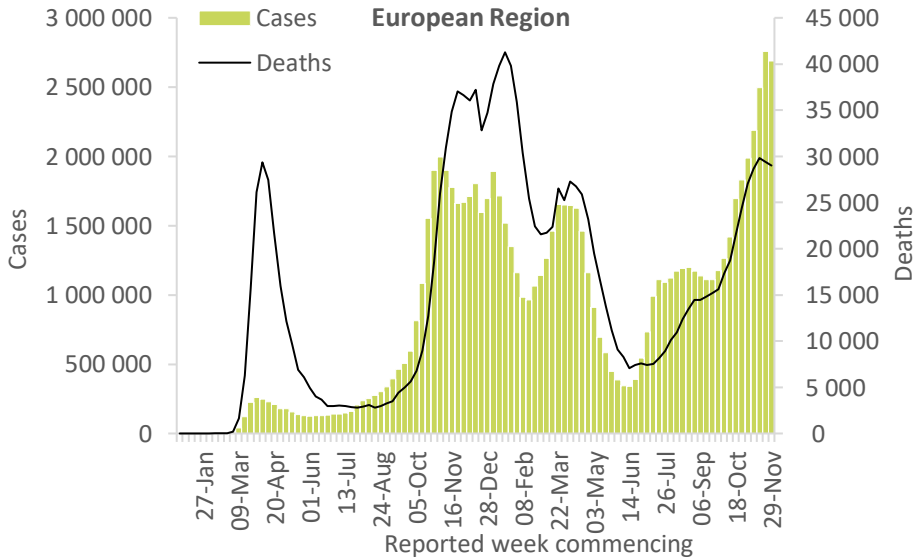


Updates from the Eastern Mediterranean Region

European Region

Following an increase in the incidence of cases from mid-October, the weekly number of new cases in the European Region plateaued this week with just over 2.6 million new cases reported. The incidence in deaths also remained stable compared to the previous week, with over 29 000 new deaths reported. Fewer countries (11/61, 18%) reported an increase in new weekly cases of over 10% compared to the previous week. Germany and the United Kingdom continue to report the highest number of new cases with 396 429 new cases (476.7 new cases per 100 000; similar to the previous week's figures) and 310 696 new cases (457.7 new cases per 100 000; similar to the previous week's figures), respectively, with France reporting the third highest number of new cases (283 500 new cases; 435.9 new cases per 100 000; a 49% increase).

The highest numbers of new deaths continued to be reported from the Russian Federation (8523 new deaths; 5.8 new deaths per 100 000; similar to the previous week's figures); Ukraine (3163 new deaths; 7.2 new deaths per 100 000; an 18% decrease) and Poland (2636 new deaths; 6.9 new deaths per 100 000; a 19% increase).

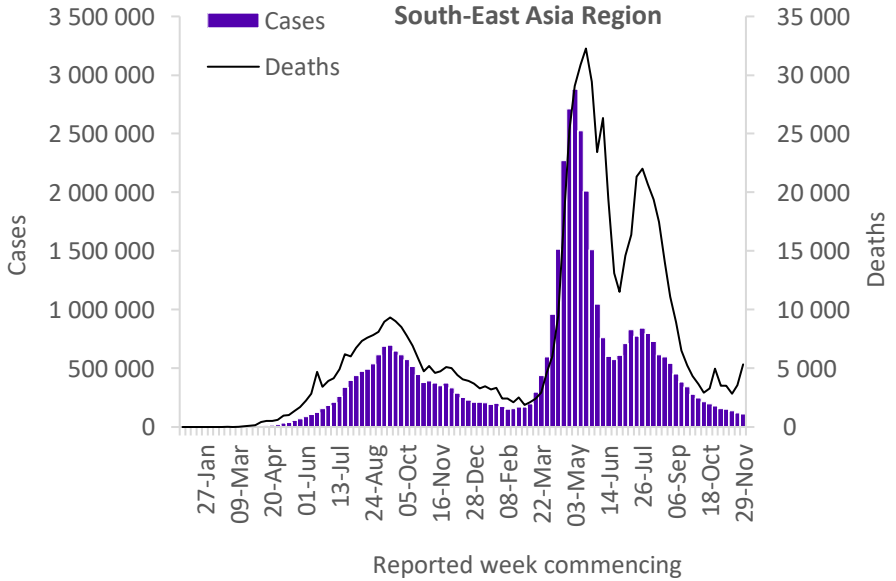


Updates from the European Region

South-East Asia Region

Since July 2021, the incidence of cases in the South-East Asia Region has continued to decline with over 109 000 new cases reported this week, a 10% decrease as compared to the previous week. Only one country reported an increase of over 10%, Timor- Leste (6 new cases; <1 case per 100 000; a 100% increase). The highest number of new cases continued to be reported from India (60 732 new cases; 4.4 new cases per 100 000; similar to the previous week's figures), Thailand (34 428 new cases; 49.3 new cases per 100 000; an 18% decrease) and Sri Lanka (5162 new cases; 24.1 new cases per 100 000; a 12% decrease).

The number of new weekly deaths however, increased by 49% as compared to the previous week, with over 5300 new deaths reported this week, the majority being reported from India (4772 new deaths; <1 new death per 100 000; a 65% increase). While Thailand and Sri Lanka reported the second and third highest number of deaths this past week, both countries reported a decline (237 new deaths; <1 new death per 100 000; a 26% decrease, and 156 new deaths; <1 new death per 100 000; a 12% decrease, respectively).

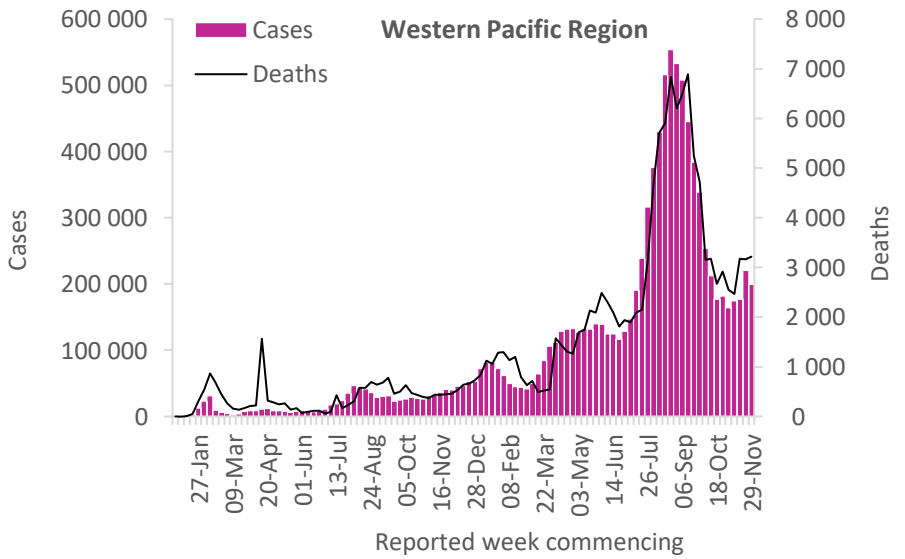


Updates from the South-East Asia Region

Western Pacific Region

Following an increase in the weekly case incidence in the Western Pacific Region from early November, in the past week a 10% decrease was seen with just under 200 000 new cases reported. However, five of the 27 countries in the region reported an increase in case incidence of >10%, including French Polynesia (3976%), China (147%), the Northern Mariana Islands (75%), the Republic of Korea (26%) and Fiji (20%). The highest number of new cases continued to be reported from Viet Nam (97 374 new cases; 100.0 new cases per 100 000; a 14% decrease), Malaysia (34 897 new cases; 107.8 new cases per 100 000; an 8% decrease) and the Republic of Korea (32 142 new cases; 62.7 new cases per 100 000; a 26% increase).

The region reported over 3200 new deaths this week, similar to the previous week's figures. Two of the three countries reporting the highest numbers of new deaths showed an increasing trend: Viet Nam (1369 new deaths; 1.4 new deaths per 100 000; a 36% increase) and the Republic of Korea (304 new deaths; <1 new death per 100 000; an 11% increase), while the Philippines reported a decrease (1025 new deaths; <1 new death per 100 000; a 21% decrease).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 7 December, highlights include the following:

- Kenya increases uptake and equity for COVID-19 vaccinations
- Supporting Omicron variant detection and COVID-19 response in southern Africa
- New oxygen production stations to be constructed in Yemen
- "Data for action": WHO/Europe pilots enhanced Emergency Response Information Management System (ERIMS) with Azerbaijan
- Home-based care for COVID-19 patients begins with community engagement in Lao People's Democratic Republic
- Progress on a subset of indicators from the SPRP 2021 Monitoring and Evaluation Framework
- Updates on WHO's financing to support countries in SPRP 2021 implementation and provision of critical supplies

Technical guidance and other resources

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

Annexes

Annex 1. List of countries/territories/areas reporting variants of concern as of 7 December 2021

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Afghanistan	●	-	●	-	-
Albania	●	-	○	-	-
Algeria	●	-	●	-	-
Andorra	○	○	○	-	-
Angola	●	●	●	●	-
Anguilla	●	-	●	-	-
Antigua and Barbuda	●	●	●	●	-
Argentina	●	●	●	●	●*
Armenia	●	-	●	-	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	●*
Austria	●	●	●	●	●*
Azerbaijan	●	-	○	-	-
Bahamas	●	-	●	●	-
Bahrain	●	●	●	●	-
Bangladesh	●	●	●	○	-
Barbados	●	-	●	●	-
Belarus	●	-	○	-	-
Belgium	●	●	●	●	●*
Belize	●	-	●	●	-
Benin	●	●	●	●	-
Bermuda	●	●	●	-	-
Bhutan	●	●	●	-	-
Bolivia (Plurinational State of)	●	-	●	●	-
Bonaire	●	-	●	●	-
Bosnia and Herzegovina	●	●	○	●	-
Botswana	○	●	●	-	●*
Brazil	●	●	●	●	●*
British Virgin Islands	●	-	●	●	-
Brunei Darussalam	●	●	●	-	-
Bulgaria	●	●	●	-	-
Burkina Faso	●	-	●	-	-
Burundi	●	●	●	-	-
Cabo Verde	●	-	●	-	-
Cambodia	●	●	●	-	-
Cameroon	●	●	●	●*	-
Canada	●	●	●	●	●*
Cayman Islands	●	●	●	●	-
Central African Republic	●	●	●	-	-
Chad	●	-	-	-	-
Chile	●	●	●	●	●*
China	●	●	●	●	●*
Colombia	●	-	●	●	-
Comoros	-	●	●	-	-
Congo	●	●	●	●	-
Costa Rica	●	●	●	●	-
Croatia	●	●	○	●	●*
Cuba	●	●	●	-	-
Curaçao	●	●	●	●	-
Cyprus	●	●	○	-	-
Czechia	●	●	●	●	●*
Côte d'Ivoire	●	●	○	-	-
Democratic Republic of the Congo	●	●	●	-	-
Denmark	●	●	●	●	●*
Djibouti	●	●	●*	-	-
Dominica	●	-	●	-	-
Dominican Republic	●	-	●	●	-
Ecuador	●	-	●	●	-
Egypt	●	-	●	-	-
El Salvador	●	-	●	●	-
Equatorial Guinea	●	●	●	-	-
Estonia	●	●	○	○	○*
Eswatini	○	●	●	-	-
Ethiopia	●	●	●	-	-
Falkland Islands (Malvinas)	●	●	-	-	-
Faroe Islands	●	-	-	●	-
Fiji	○	-	●	-	●*
Finland	●	●	●	●	●*
France	●	●	●	●	●*
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	●	●	-	-
Gambia	●	-	●	-	-
Georgia	●	○	●	-	-
Germany	●	●	●	●	●*
Ghana	●	●	●	●	●*
Gibraltar	●	-	○	-	-
Greece	●	●	●	●	●*
Greenland	-	-	●	-	-
Grenada	●	-	●	●	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	●	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Guinea	●	●	●	-	-
Guinea-Bissau	●	●	●	-	-
Guyana	-	-	●	●	-
Haiti	●	-	●	●	-
Honduras	●	-	●	●	-
Hungary	●	○	○	●	-
Iceland	●	●	●	●	●*
India	●	●	●	●	●*
Indonesia	●	●	●	-	-
Iran (Islamic Republic of)	●	●	●	-	-
Iraq	●	●	●	●	-
Ireland	●	●	●	●	●*
Israel	●	●	●	●	●*
Italy	●	●	●	●	●*
Jamaica	●	-	●	-	-
Japan	●	●	●	●	●*
Jordan	●	●	●	●	-
Kazakhstan	●	○	●	-	-
Kenya	●	●	●	-	-
Kosovo[1]	●	○	○	-	-
Kuwait	●	●	●	-	-
Kyrgyzstan	●	●	●	-	-
Lao People's Democratic Republic	●	-	●	-	-
Latvia	●	●	○	●	●*
Lebanon	●	-	●	-	-
Lesotho	-	●	○	-	-
Liberia	●	●	●	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	○	○	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Lithuania	●	●	○	●	-
Luxembourg	●	●	●	●	●*
Madagascar	●	●	-	-	-
Malawi	●	●	●	-	-
Malaysia	●	●	●	-	●*
Maldives	●	-	●	-	●*
Mali	-	-	●	-	-
Malta	●	○	○	●	-
Martinique	●	●	●	●	-
Mauritania	●	●	●	-	-
Mauritius	●	●	●	-	-
Mayotte	●	●	○	-	-
Mexico	●	●	●	●	●*
Monaco	●	●	●	-	-
Mongolia	●	-	●	-	-
Montenegro	●	-	○	○	○*
Montserrat	●	-	●	●	-
Morocco	●	●	●	-	-
Mozambique	●	●	●	-	-
Myanmar	●	-	●	-	-
Namibia	●	●	●	●	●*
Nepal	●	-	●	-	●*
Netherlands	●	●	●	●	●*
New Caledonia	●	-	●	-	-
New Zealand	●	●	●	●	-
Nicaragua	●	●	●	●	-
Niger	●	-	●	-	-
Nigeria	●	●	●	-	●*
North Macedonia	●	●	○	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Northern Mariana Islands (Commonwealth of the)	○	-	●	-	-
Norway	●	●	●	●	●*
Occupied Palestinian Territory	●	●	●	-	-
Oman	●	●	●	-	-
Pakistan	●	●	●	●	-
Panama	●	●	●	●	-
Papua New Guinea	-	-	●	-	-
Paraguay	●	-	●	●	-
Peru	●	-	●	●	-
Philippines	●	●	●	●	-
Poland	●	○	●	●	-
Portugal	●	●	●	●	●*
Puerto Rico	●	●	●	●	-
Qatar	●	●	●	-	-
Republic of Korea	●	●	●	●	●*
Republic of Moldova	●	-	●	-	-
Romania	●	●	●	●	●*
Russian Federation	●	●	●	○	○*
Rwanda	●	●	●	-	-
Réunion	●	●	○	●	●*
Saba	-	-	●	-	-
Saint Barthélemy	●	-	●	-	-
Saint Kitts and Nevis	-	-	●	-	-
Saint Lucia	●	-	●	-	-
Saint Martin	●	●	●	-	-
Saint Pierre and Miquelon	-	-	●	-	-
Saint Vincent and the Grenadines	-	-	●	●	-
Sao Tome and Principe	●	-	○	-	-
Saudi Arabia	●	●	●	-	●*

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Senegal	●	●	●	-	●*
Serbia	●	-	●	-	-
Seychelles	●	●	●	-	-
Sierra Leone	-	●	●	-	-
Singapore	●	●	●	●	●*
Sint Maarten	●	●	●	●	-
Slovakia	●	●	●	-	-
Slovenia	●	●	●	●	-
Somalia	●	●	●	-	-
South Africa	●	●	●	○	●*
South Sudan	●	●	●	-	-
Spain	●	●	●	●	●*
Sri Lanka	●	●	●	-	●*
Sudan	●	●	-	●	-
Suriname	●	●	●	●	-
Sweden	●	●	●	●	●*
Switzerland	●	●	●	●	●*
Thailand	●	●	●	●	●*
Timor-Leste	●	-	●	-	-
Togo	●	●	●	●	-
Trinidad and Tobago	●	-	●	●	-
Tunisia	●	●	●	-	●*
Turkey	●	●	●	●	-
Turks and Caicos Islands	●	-	●	●	-
Uganda	●	●	●	-	●*
Ukraine	●	○	○	-	-
United Arab Emirates	●	●	●	●	●*
United Kingdom	●	●	●	●	●*
United Republic of Tanzania	-	●	-	-	-
United States Virgin Islands	●	●	●	●	-
United States of America	●	●	●	●	●*
Uruguay	●	●	●	●	-
Uzbekistan	●	●	○	-	-
Vanuatu	-	-	●	-	-
Venezuela (Bolivarian Republic of)	●	-	●	●	-
Viet Nam	●	●	●	-	-
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	●	-	●*
Zimbabwe	●	●	●	-	●*

**Newly reported in this update. "●" indicates that information for this variant was received by WHO from official sources. "○" indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available. **Includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern. See also Annex 2: Data, table, and figure notes*

Annex 2. Data, table, and figure notes

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

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

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

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

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