

COVID-19 Weekly Epidemiological Update

Edition 143 published 18 May 2023

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Global overview

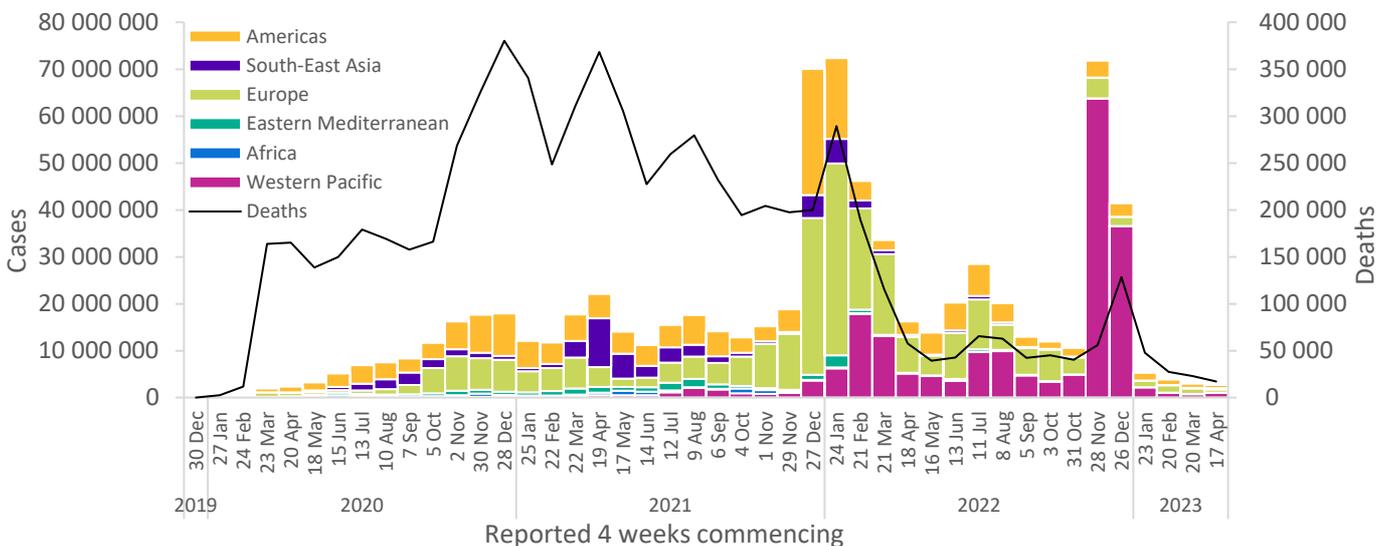
Data as of 14 May 2023

Globally, nearly 2.6 million new cases and over 17 000 deaths were reported in the last 28 days (17 April to 14 May 2023), a decrease of 14% and 26%, respectively, compared to the previous 28 days (20 March to 16 April 2023) (Figure 1, Table 1). The situation is mixed at regional levels, with increases in reported cases seen in the South-East Asia and Western Pacific regions and increases in deaths in South-East Asia. As of 14 May 2023, over 766 million confirmed cases and over 6.9 million deaths have been reported globally.

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

We present changes in epidemiological trends using a 28-day interval. This wider time window helps to account for reductions and delays in reporting, smooth out weekly fluctuations in case numbers, and continue to provide a clear picture of where the pandemic is accelerating or decelerating. Disaggregated data are still accessible on the [WHO COVID-19 dashboard](#), where the full dataset is available for download.

Figure 1. COVID-19 cases reported by WHO Region, and global deaths by 28-day intervals, as of 14 May 2023**



**See [Annex 1: Data, table, and figure note](#)

At the regional level, the number of newly reported 28-day cases decreased or remained stable across four of the six WHO regions: the Eastern Mediterranean Region (-42%), the European Region (-41%), the Region of the Americas (-34%), and the African Region (+2%); while cases increased in two WHO regions: the Western Pacific Region (+47%), and the South-East Asia Region (+52%). The number of newly reported 28-day deaths decreased across five regions: the European Region (-43%), the Eastern Mediterranean Region (-42%), the Region of the Americas (-17%), the Western Pacific Region (-14%), and the African Region (-5%); while deaths increased in the South-East Asia Region (+153%).

At the country level, the highest numbers of new 28-day cases were reported from the Republic of Korea (418 960 new cases; +46%), the United States of America (355 376 new cases; -34%), Japan (229 877 new cases; +15%), India (162 559 new cases; +32%), and Brazil (153 829 new cases; -28%). The highest numbers of new 28-day deaths were reported from the United States of America (5333 new deaths; -22%), Brazil (1305 new deaths; +11%), France (925 new deaths; +31%), the Russian Federation (882 new deaths; -11%), and India (656 new deaths; +110%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 14 May 2023**

WHO Region	New cases in last 28 days (%)	Change in new cases in last 28 days *	Cumulative cases (%)	New deaths in last 28 days (%)	Change in new deaths in last 28 days *	Cumulative deaths (%)
Western Pacific	1 043 696 (40%)	47%	203 391 662 (27%)	1 402 (8%)	-14%	411 475 (6%)
Europe	687 604 (27%)	-41%	276 255 507 (36%)	5 814 (34%)	-43%	2 235 211 (32%)
Americas	606 308 (23%)	-34%	192 718 073 (25%)	8 143 (48%)	-17%	2 957 032 (43%)
South-East Asia	214 656 (8%)	52%	61 138 297 (8%)	1 225 (7%)	153%	805 667 (12%)
Eastern Mediterranean	31 904 (1%)	-42%	23 369 877 (3%)	502 (3%)	-42%	351 195 (5%)
Africa	8 407 (<1%)	2%	9 530 159 (1%)	20 (<1%)	-5%	175 365 (3%)
Global	2 592 575 (100%)	-14%	766 404 339 (100%)	17 106 (100%)	-26%	6 935 958 (100%)

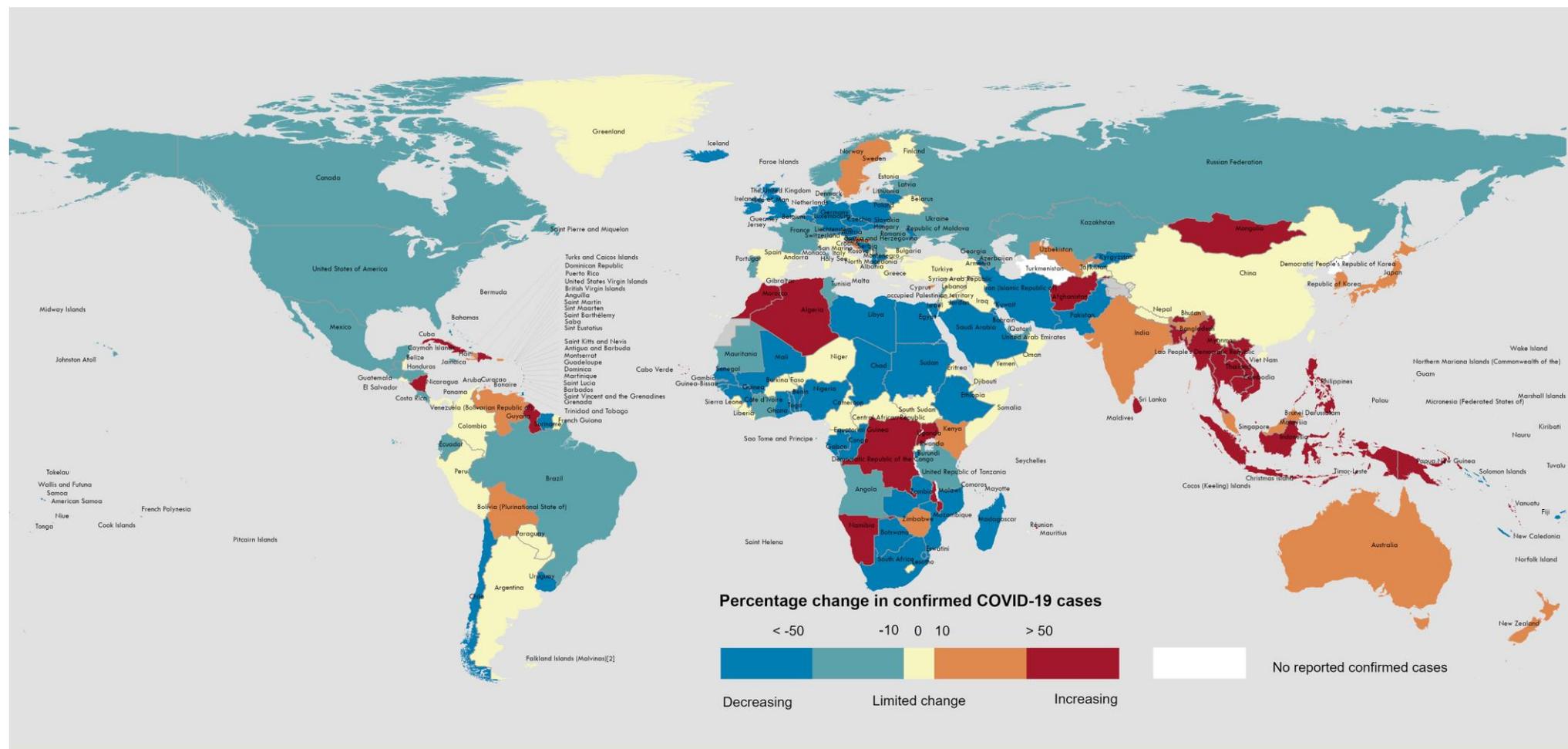
*Percent change in the number of newly confirmed cases/deaths in the past 28 days, compared to 28 days prior. Data from previous weeks are updated continuously with adjustments received from countries.

**See [Annex 1: Data, table, and figure notes](#)

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

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

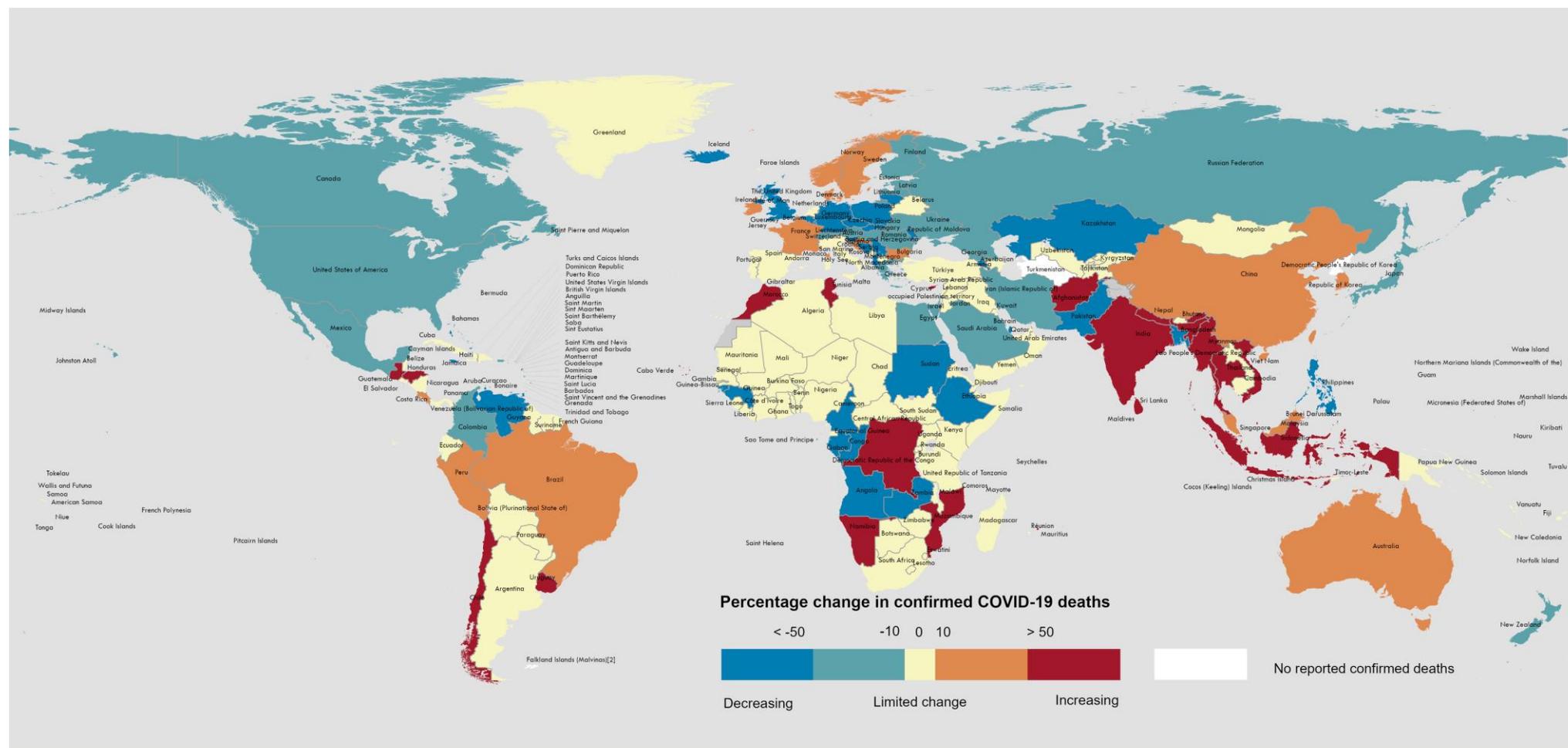
Figure 2. Percentage change in confirmed COVID-19 cases over the last 28 days relative to the previous 28 days, as of 14 May 2023**



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

**See [Annex 1: Data, table, and figure notes](#)

Figure 3. Percentage change in confirmed COVID-19 deaths over the last 28 days relative to the previous 28 days, as of 14 May 2023**



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

Not applicable



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**See [Annex 1: Data, table, and figure notes](#)

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

Geographic spread and prevalence

Globally, from 17 April to 14 May 2023 (28 days), 24 884 SARS-CoV-2 sequences were shared through GISAID. WHO is currently monitoring two variants of interest (VOIs), XBB.1.5 and XBB.1.16, along with seven variants under monitoring (VUMs) and their descendent lineages. The VUMs are BA.2.75, CH.1.1, BQ.1, XBB, XBB.1.9.1, XBB.1.9.2, and XBB.2.3. On 18 May 2023, XBB.2.3 was added to the list of VUMs. XBB.2.3 is a descendent lineage of XBB, which is a recombinant of two BA.2 descendent lineages.

Globally, XBB.1.5 has been reported from 110 countries. In epidemiological week 17 (24 to 30 April 2023), XBB.1.5 accounted for 43.8% of sequences, a decrease from 51.9% in epidemiological week 13 (27 March to 2 April 2023). XBB.1.16 has been reported from 49 countries. In week 17, XBB.1.16 accounted for 11.6% of sequences, an increase from 4.9% in week 13.

Available evidence does not show an increase in severity for XBB descendent lineages. An epidemiological study conducted in Singapore assessing the severity of SARS-CoV-2 variants in 3798 participants found no significant differences in COVID-19 infection or hospitalization outcomes across XBB descendent lineages, including the VOIs XBB.1.16 and XBB.1.5.ⁱ Additionally, a recent laboratory study showed that XBB.1.16 and XBB.1.5 have similar viral entry and neutralization evasion characteristics.ⁱⁱ

Table 2 shows the number of countries reporting the VOIs and VUMs and their prevalence from week 13 to week 17. Among the VUMs, XBB, XBB.1.9.1, XBB.1.9.2, and XBB.2.3 have shown increasing trends in recent weeks. Other VUMs show declining trends during the same reporting period. VOI and VUMs that have shown increasing trends are highlighted in orange, and those with decreasing trends are highlighted in green.

Table 2. Weekly prevalence of SARS-CoV-2 VOIs and VUMs, week 13 to week 17 of 2023

Lineage	Countries	Sequences	2023-13	2023-14	2023-15	2023-16	2023-17
XBB.1.5* (VOI)	110	212 878	51.89	50.43	49.01	47.30	43.76
XBB.1.16* (VOI)	49	8 686	4.91	6.55	8.12	9.24	11.56
BA.2.75*	123	110 226	3.32	3.47	3.19	1.28	0.95
CH.1.1*	91	44 977	4.87	3.84	3.70	3.13	2.82
BQ.1*	149	408 797	4.28	3.76	2.86	1.94	1.44
XBB*	125	63 887	5.78	6.00	6.90	7.64	9.85
XBB.1.9.1*	79	22 140	9.75	10.50	11.92	13.67	13.94
XBB.1.9.2*	55	5 559	2.73	2.72	3.13	4.09	4.11
XBB.2.3*	49	3 787	1.85	2.56	2.93	3.42	4.64
Unassigned	103	149 151	2.40	2.36	1.49	1.39	0.09
Other [†]	207	6 707 822	5.61	6.22	6.53	7.39	9.54

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

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

ⁱ Severity of SARS-CoV-2 Omicron XBB subvariants in Singapore: <https://www.medrxiv.org/content/10.1101/2023.05.04.23289510v1.full.pdf>

ⁱⁱ Host cell entry and neutralisation sensitivity of the SARS-CoV-2 XBB.1.16 lineage: <https://www.nature.com/articles/s41423-023-01030-z>

Additional resources

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

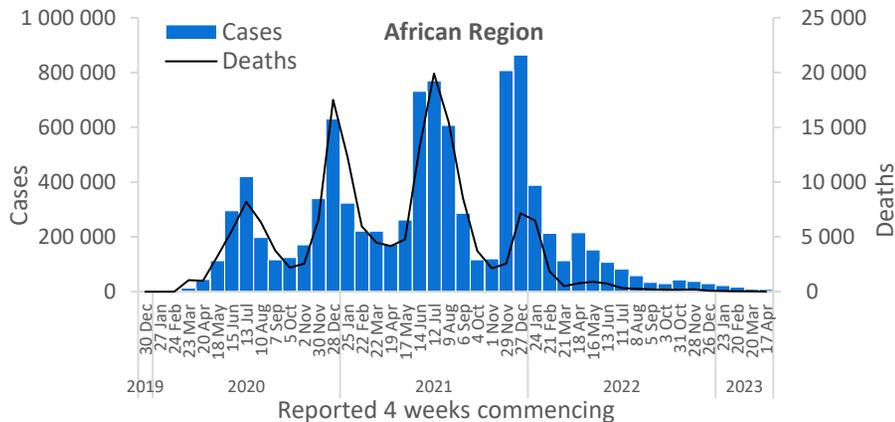
WHO regional overviews

Data for 17 April to 14 May 2023

African Region

The African Region reported 8407 new cases, a 2% increase as compared to the previous 28-day period. Eight (16%) of the 50 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Cabo Verde (460 vs 29 new cases; +1486%), the Democratic Republic of the Congo (708 vs 83 new cases; +753%), and Uganda (223 vs 61 new cases; +266%). The highest numbers of new cases were reported from Mauritius (5419 new cases; 426.1 new cases per 100 000; +179%), the Democratic Republic of the Congo (708 new cases; <1 new case per 100 000; +753%), and Cabo Verde (460 new cases; 82.7 new cases per 100 000; +1486%).

The number of new 28-day deaths in the Region decreased by 5% as compared to the previous 28-day period, with 20 new deaths reported. The highest numbers of new deaths were reported from Mauritius (six new deaths; <1 new death per 100 000; no deaths reported the previous 28-day period), Zimbabwe (six new deaths; <1 new death per 100 000; similar to the previous 28-day period), and the Democratic Republic of the Congo (three new deaths; <1 new death per 100 000; no deaths reported the previous 28-day period).

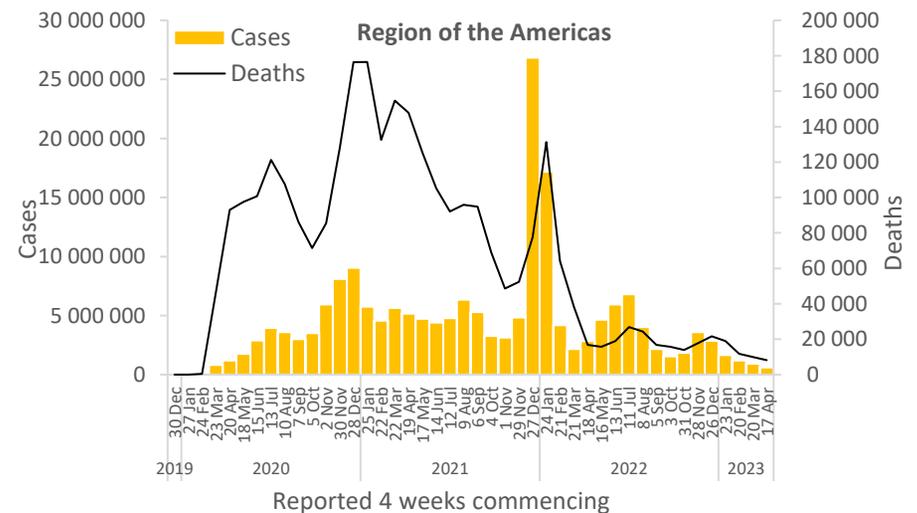


Updates from the [African Region](#)

Region of the Americas

The Region of the Americas reported over 606 000 new cases, a 34% decrease as compared to the previous 28-day period. Fourteen (25%) of the 56 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Turks and Caicos Islands (23 vs three new cases; +667%), Guyana (86 vs 16 new cases; +438%), and Saint Vincent and the Grenadines (29 vs seven new cases; +314%). The highest numbers of new cases were reported from the United States of America (355 376 new cases; 107.4 new cases per 100 000; -34%), Brazil (153 829 new cases; 72.4 new cases per 100 000; -28%), and Mexico (32 772 new cases; 25.4 new cases per 100 000; -31%).

The number of new 28-day deaths in the Region decreased by 17% as compared to the previous 28-day period, with 8143 new deaths reported. The highest numbers of new deaths were reported from the United States of America (5333 new deaths; 1.6 new deaths per 100 000; -22%), Brazil (1305 new deaths; <1 new death per 100 000; +11%), and Peru (525 new deaths; 1.6 new deaths per 100 000; +48%).

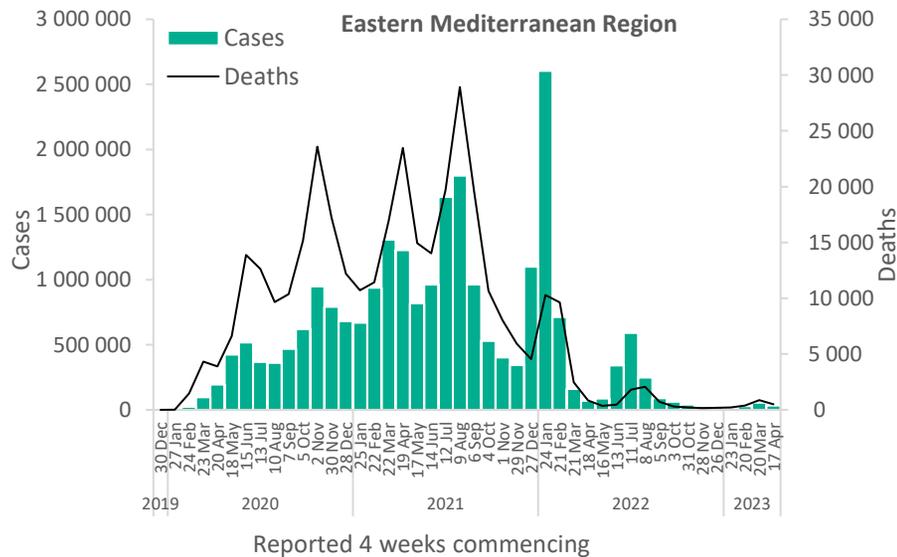


Updates from the [Region of the Americas](#)

Eastern Mediterranean Region

The Eastern Mediterranean Region reported nearly 32 000 new cases, a 42% decrease as compared to the previous 28-day period. Two (9%) of the 22 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Morocco (1291 vs 304 new cases; +325%), and Afghanistan (6108 vs 2863 new cases; +113%). The highest numbers of new cases were reported from the Islamic Republic of Iran (7585 new cases; 9.0 new cases per 100 000; -68%), Afghanistan (6108 new cases; 15.7 new cases per 100 000; +113%), and Qatar (5744 new cases; 199.4 new cases per 100 000; -36%).

The number of new 28-day deaths in the Region decreased by 42% as compared to the previous 28-day period, with 502 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (396 new deaths; <1 new death per 100 000; -47%), Tunisia (40 new deaths; <1 new death per 100 000; +82%), and Lebanon (29 new deaths; <1 new death per 100 000; -9%).

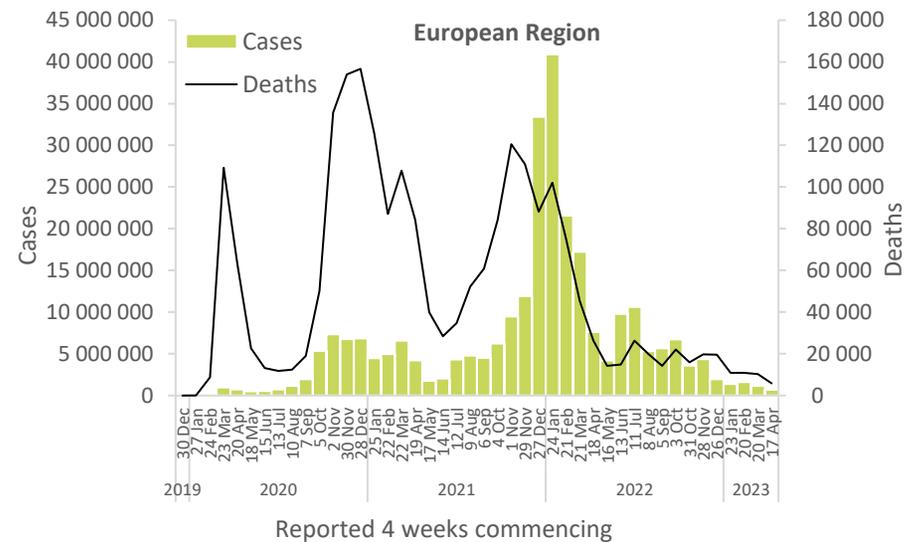


Updates from the [Eastern Mediterranean Region](#)

European Region

The European Region reported over 687 000 new cases, a 41% decrease as compared to the previous 28-day period. Six (10%) of the 61 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Andorra (70 vs 37 new cases; +89%), Sweden (4371 vs 3176 new cases; +38%), and San Marino (287 vs 213 new cases; +35%). The highest numbers of new cases were reported from France (150 334 new cases; 231.1 new cases per 100 000; -31%), the Russian Federation (133 039 new cases; 91.2 new cases per 100 000; -49%), and Italy (82 452 new cases; 138.2 new cases per 100 000; -7%).

The number of new 28-day deaths in the Region decreased by 43% as compared to the previous 28-day period, with 5814 new deaths reported. The highest numbers of new deaths were reported from France (925 new deaths; 1.4 new deaths per 100 000; +31%), the Russian Federation (882 new deaths; <1 new death per 100 000; -11%), and Italy (640 new deaths; 1.1 new deaths per 100 000; -1%).

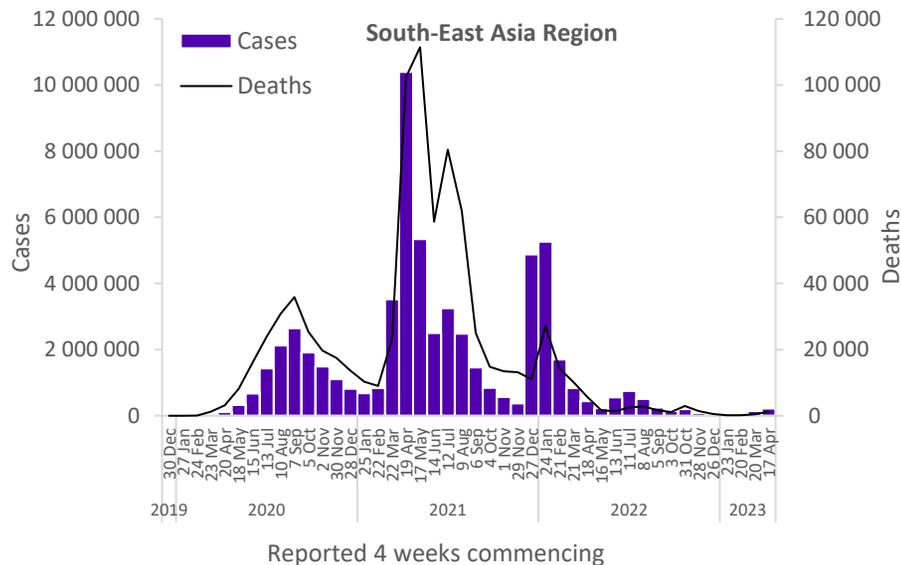


Updates from the [European Region](#)

South-East Asia Region

The South-East Asia Region reported over 214 000 new cases, a 52% increase as compared to the previous 28-day period. Nine (82%) of the 10 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Myanmar (3089 vs 168 new cases; +1739%), Thailand (6 954 vs 920 new cases; +656%), and Timor-Leste (17 vs four new cases; +325%). The highest numbers of new cases were reported from India (162 559 new cases; 11.8 new cases per 100 000; +32%), Indonesia (39 891 new cases; 14.6 new cases per 100 000; +148%), and Thailand (6954 new cases; 10 new cases per 100 000; +656%).

The number of new 28-day deaths in the Region increased by 153% as compared to the previous 28-day period, with 1225 new deaths reported. The highest numbers of new deaths were reported from India (656 new deaths; <1 new death per 100 000; +110%), Indonesia (486 new deaths; <1 new death per 100 000; +220%), and Thailand (47 new deaths; <1 new death per 100 000; +262%).

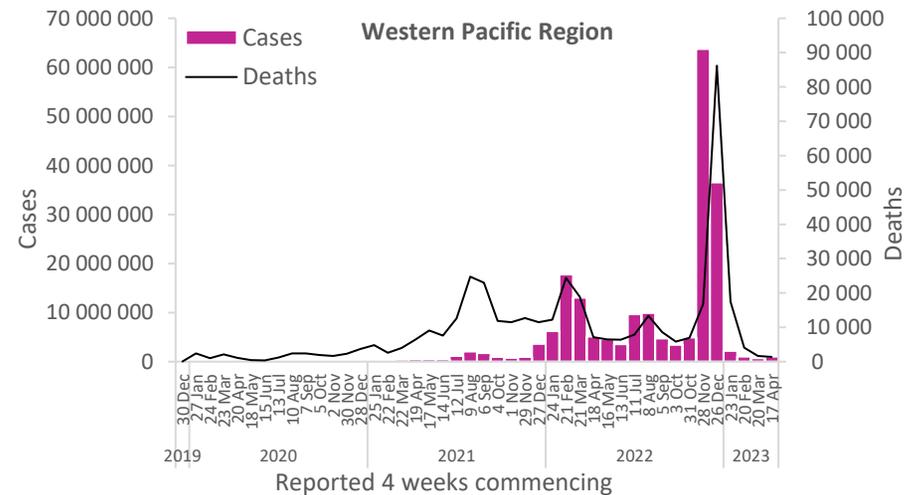


Updates from the [South-East Asia Region](#)

Western Pacific Region

The Western Pacific Region reported over one million new cases, a 47% increase as compared to the previous 28-day period. Fourteen (40%) of the 35 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Viet Nam (59 211 vs 3217 new cases; +1741%), Mongolia (322 vs 32 new cases; +906%), and the Philippines (27 567 vs 6543 new cases; +321%). The highest numbers of new cases were reported from the Republic of Korea (418 960 new cases; 817.2 new cases per 100 000; +46%), Japan (229 877 new cases; 181.8 new cases per 100 000; +15%), and Australia (116 621 new cases; 457.3 new cases per 100 000; +46%).

The number of new 28-day deaths in the Region decreased by 14% as compared to the previous 28-day period, with 1402 new deaths reported. The highest numbers of new deaths were reported from Japan (474 new deaths; <1 new death per 100 000; -33%), Australia (362 new deaths; 1.4 new deaths per 100 000; +25%), and the Republic of Korea (231 new deaths; <1 new death per 100 000; +15%).



Updates from the [Western Pacific Region](#)

Hospitalizations and ICU admissions

At the global level, during the past 28 days (10 April to 7 May 2023), a total of 110 082 new hospitalizations and 3059 new intensive care unit (ICU) admissions were reported (Figure 5). This represents a 25% decrease in new hospitalizations and 1% increase in ICU admissions compared to the previous 28 days (13 March to 9 April 2023). The presented hospitalization data are preliminary and might change as new data become available. Furthermore, hospitalization data are subject to reporting delays. These data also likely include both hospitalizations with incidental cases of SARS-CoV-2 infection and those due to COVID-19 disease.

Globally, during the past 28 days, 45 (19%) countries reported data to WHO on new hospitalizations at least once (Figure 4). The European Region had the highest proportion of countries reporting data on new hospitalizations (22 countries; 36%), followed by the South-East Asia Region (three countries; 27%), the African Region (eight countries; 16%), the Eastern Mediterranean Region (three countries; 14%), the Region of the Americas (six countries; 11%), and the Western Pacific Region (three countries; 9%). The proportion of countries that consistentlyⁱⁱⁱ reported new hospitalizations for the period was 11% (25 countries).

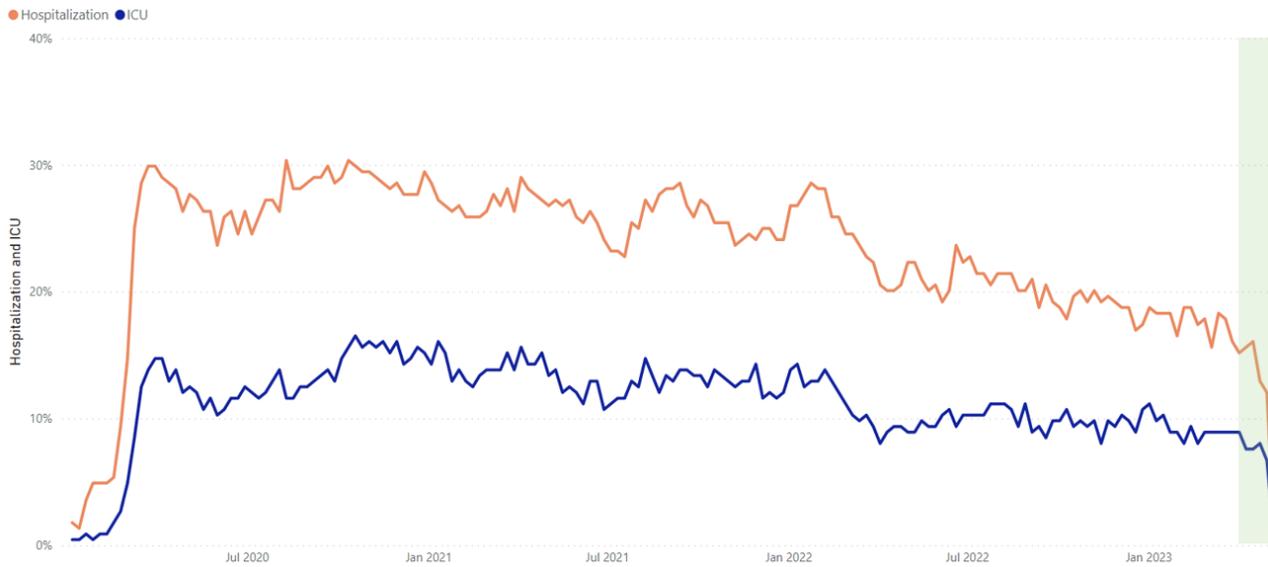
Among the 25 countries consistently reporting new hospitalizations, four (16%) countries registered an increase of 20% or greater in hospitalizations during the past 28 days compared to the previous 28-day period: Mongolia (302 vs 33; +815%), Afghanistan (81 vs 13; +523%), Indonesia (8125 vs 2106; +286%), and Singapore (2201 vs 1248; +76%). The highest number of new hospitalizations was reported from the United States of America (45 308 vs 65 238; -31%), Ukraine (11 473 vs 17 423; -34%), and France (10 907 vs 10 450; +4%).

Across the six WHO regions, in the past 28 days, a total of 38 (16%) countries reported data to WHO on new ICU admissions at least once (Figure 4). The European Region had the highest proportion of countries reporting data on new ICU admissions (18 countries; 30%), followed by the Eastern Mediterranean Region (five countries; 23%), the South-East Asia Region (two country; 18%), the Western Pacific Region (five countries; 14%), the Region of the Americas (five countries; 9%), and the African Region (three countries; 6%). The proportion of countries that consistentlyⁱⁱⁱ reported new ICU admissions for the period was 9% (21 countries).

Among the 21 countries consistentlyⁱⁱⁱ reporting new ICU admissions, six (29%) countries showed an increase of 20% or greater in new ICU admissions during the past 28 days compared to the previous 28-day period: Indonesia (346 vs 113; +206%), Singapore (49 vs 27; +81%), Sweden (56 vs 42; +33%), Lithuania (34 vs 27; +26%), Brunei (10 vs 8; +25%), and Ireland (17 vs 14; +21%). The highest numbers of new ICU admissions were reported from France (1111 vs 960; +16%), Italy (391 vs 335; +17%), and Ukraine (367 vs 438; -16%).

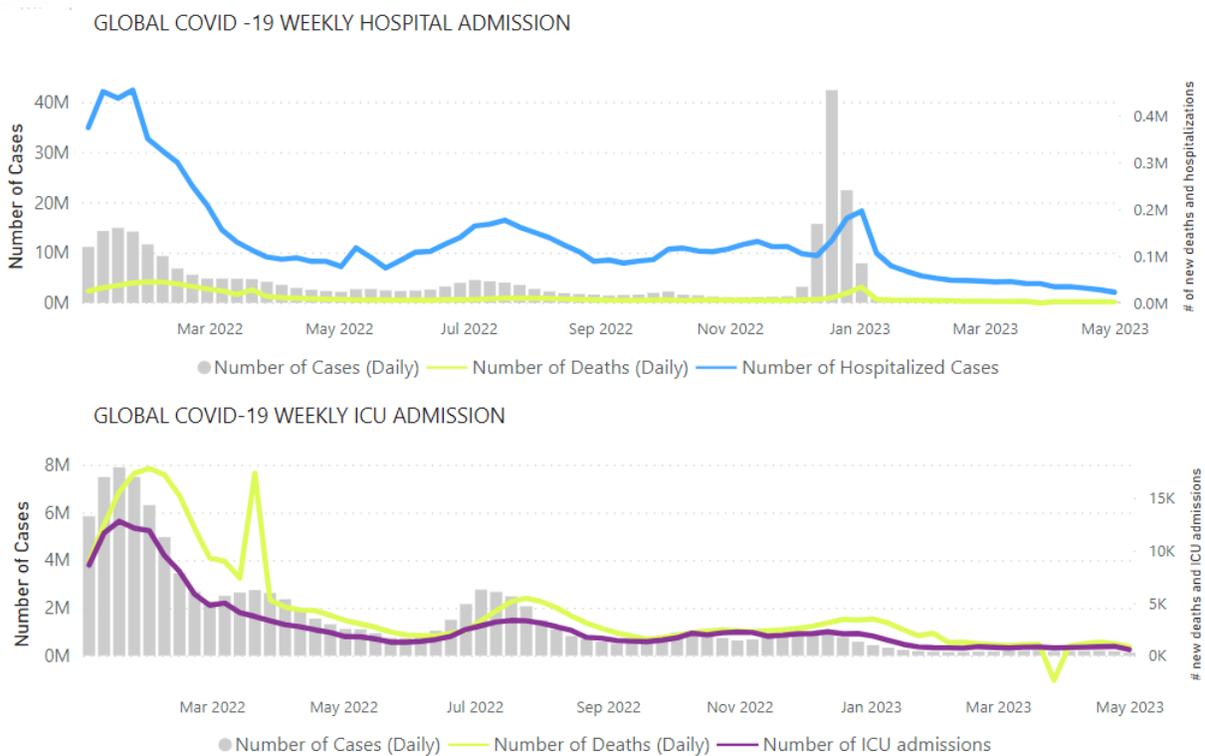
ⁱⁱⁱ “Consistently” as used here refers to countries that submitted data for new hospitalizations and intensive care unit admissions for the four consecutive weeks that make up the 28-day period.

Figure 4. Weekly proportion of countries reporting new hospitalizations and ICU admissions: epidemiological week 1, 2020 to week 18, 2023



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

Figure 5. COVID-19 cases, deaths, hospitalizations, and ICU admissions reported weekly to WHO, as of 14 May 2023



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

Source: WHO Detailed Surveillance Dashboard

Annex 1. Data, table, and figure notes

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

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

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

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

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

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

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

WHO continues to monitor all SARS-CoV-2 variants and to track changes in prevalence and viral characteristics. The current trends describing the circulation of variants should be interpreted with due consideration of the limitations of the COVID-19 surveillance systems. These include differences in sequencing capacity and sampling strategies between countries, changes in sampling strategies over time, reductions in tests conducted and sequences shared by countries, and delays in uploading sequence data to GISAID.¹

References

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