COVID-19 Weekly Epidemiological Update

Edition 136 published 30 March 2023

In this edition:

Global overview

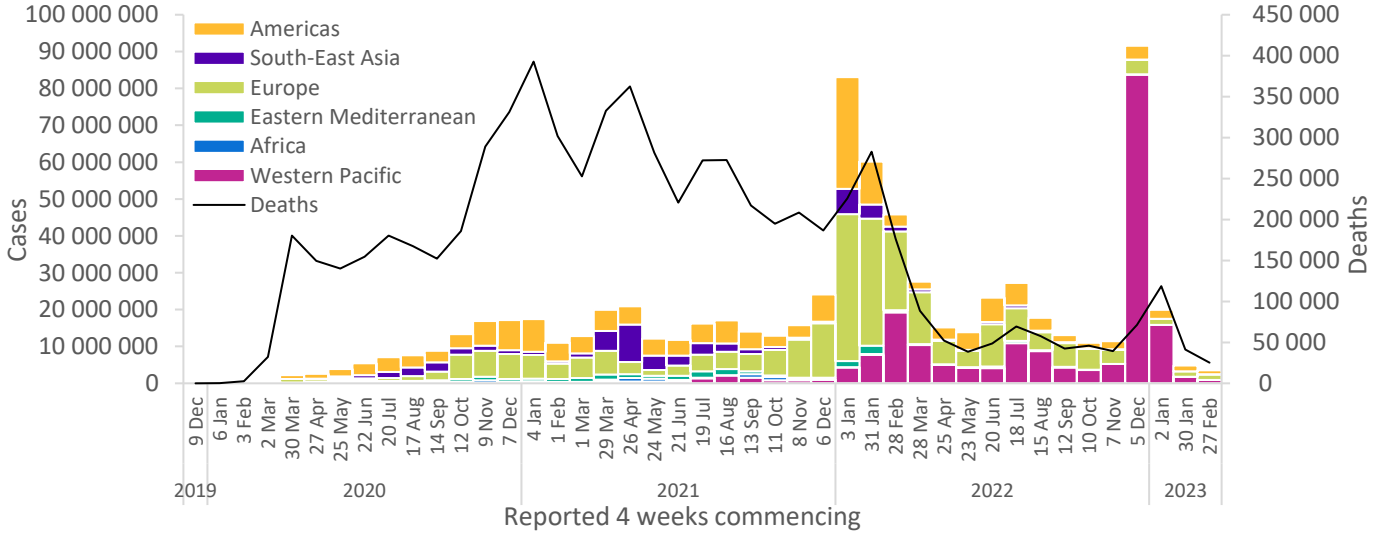
Data as of 26 March 2023

Globally, nearly 3.6 million new cases and over 25 000 deaths were reported in the last 28 days (27 February to 26 March 2023), a decrease of 27% and 39%, respectively, compared to the previous 28 days (Figure 1, Table 1). Despite this overall downward trend, it is important to note that several countries have recently reported significant increases in cases. As of 26 March 2023, over 761 million confirmed cases and over 6.8 million deaths have been reported globally.

Current trends in reported COVID-19 cases are underestimates of the true number of global infections and reinfections as shown by prevalence surveys.[1–4] This is partly due to the reductions in testing and delays in reporting in many countries. Data presented in this report may be incomplete and should therefore be interpreted with caution. 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 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 26 March 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 Western Pacific Region (-49%), the Region of the Americas (-29%), the African Region (-10%), and the European Region (-1%); while case increased in two WHO regions: the Eastern Mediterranean Region (+142%), and the South-East Asia Region (+152%). The number of newly reported 28-day deaths decreased across five regions: the Western Pacific Region (-72%), the African Region (-43%), the Region of the Americas (-38%), the European Region (-7%), and the South-East Asia Region (-6%); while deaths increased in the Eastern Mediterranean Region (+95%).

At the country level, the highest numbers of new 28-day cases were reported from the United States of America (678 002 new cases; -38%), the Russian Federation (333 073 new cases; +6%), the Republic of Korea (270 378 new cases; -23%), China (255 961 new cases; -52%), and Japan (242 894 new cases; -68%). The highest numbers of new 28-day deaths were reported from the United States of America (7909 new deaths; -35%), the United Kingdom (2719 new deaths; -1%), Japan (1519 new deaths; -68%), China (1230 new deaths; -79%), and Germany (1085 new deaths; -34%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 26 March 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 (%)
Europe	1 483 116 (41%)	-1%	**274 525 310 (36%)**	10 357 (41%)	-7%	**2 206 379 (32%)**
Americas	1 109 251 (31%)	-29%	**191 449 695 (25%)**	10 736 (43%)	-38%	**2 942 206 (43%)**
Western Pacific	905 512 (25%)	-49%	**201 742 543 (26%)**	3400 (14%)	-72%	**408 554 (6%)**
Eastern Mediterranean	36 571 (1%)	142%	**23 294 268 (3%)**	464 (2%)	95%	**349 992 (5%)**
South-East Asia	27 679 (1%)	152%	**60 794 014 (8%)**	175 (1%)	-6%	**804 018 (12%)**
Africa	14 867 (<1%)	-10%	**9 514 814 (1%)**	25 (<1%)	-43%	**175 327 (3%)**
Global	**3 576 996 (100%)**	**-27%**	**761 321 408 (100%)**	**25 157 (100%)**	**-39%**	**6 886 489 (100%)**

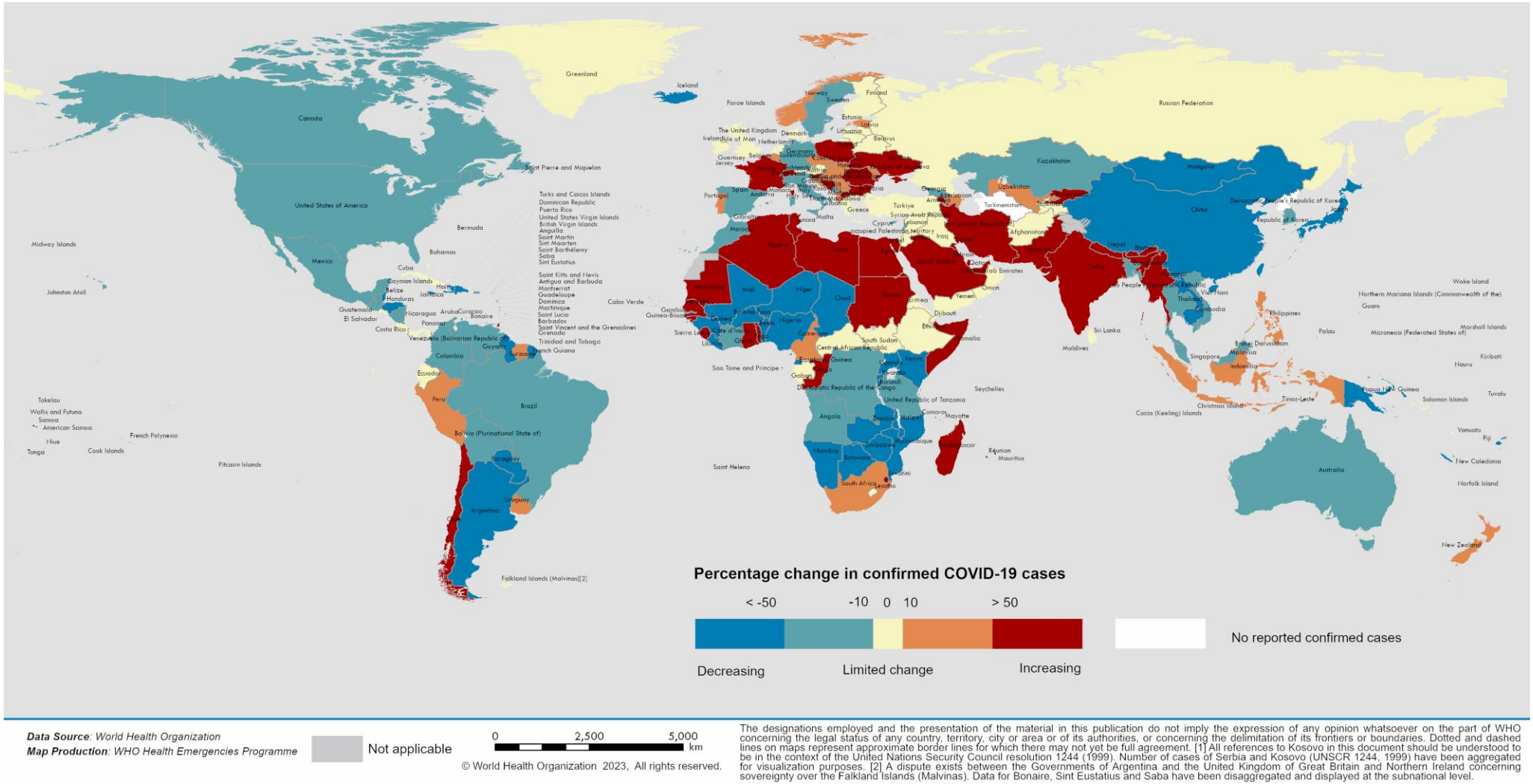
**Percent change in the number of newly confirmed cases/deaths in the past 28 days, compared to 28 days prior. Data from previous weeks are updated continuously with adjustments received from countries.*

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

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

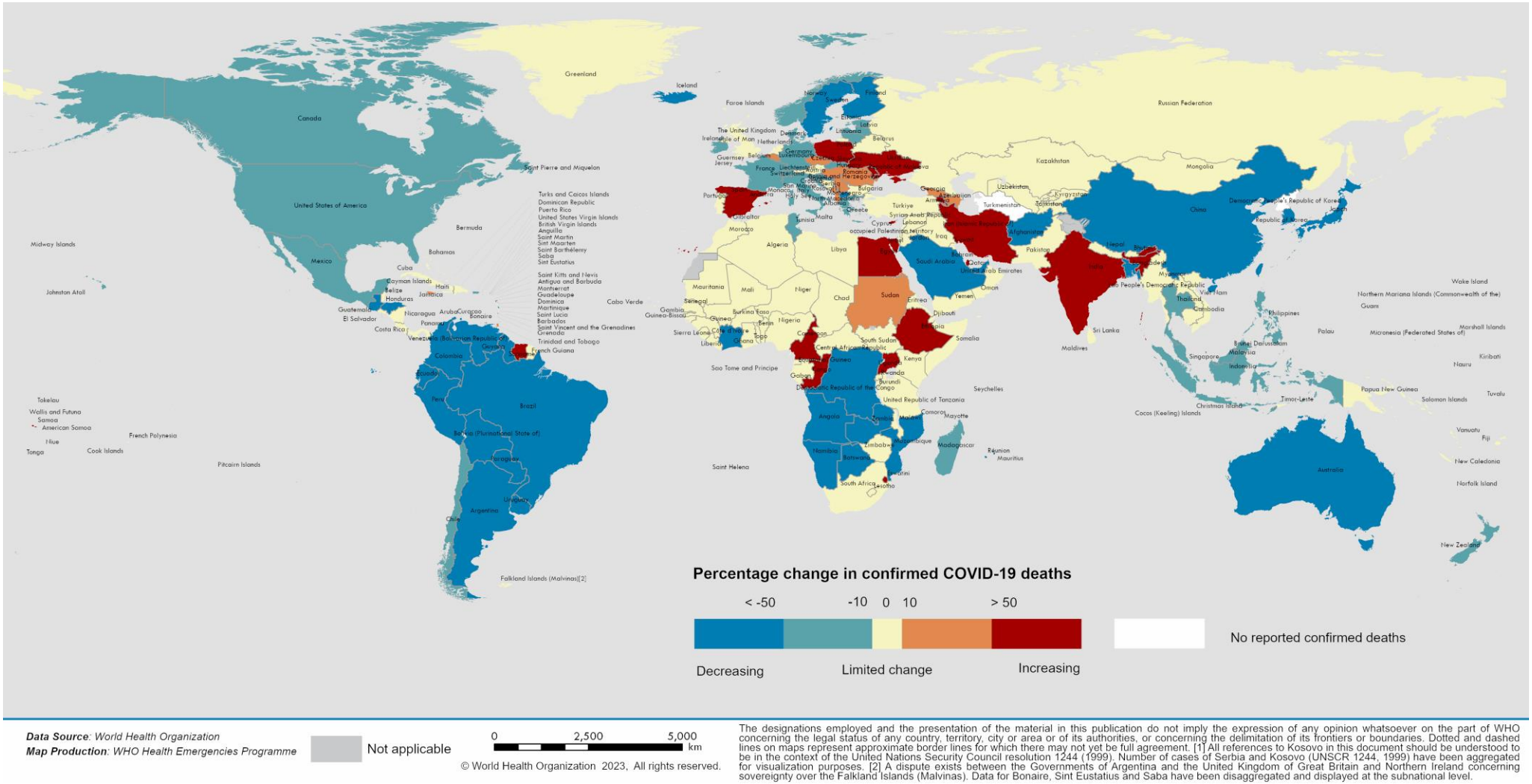
- WHO COVID-19 Dashboard
- WHO Monthly Operational Update and past editions of the Weekly Epidemiological Update on COVID-19
- WHO COVID-19 detailed surveillance data dashboard
- WHO COVID-19 policy briefs

Figure 2. Percentage change in confirmed COVID-19 cases over the last 28 days relative to the previous 28 days, as of 26 March 2023**



**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 26 March 2023**



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

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

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

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

Geographic spread and prevalence

Globally, from 27 February to 26 March 2023 (28 days), 54 922 SARS-CoV-2 sequences were shared through GISAID.

Currently, WHO is closely tracking one variant of interest (VOI), XBB.1.5, and six variants under monitoring (VUMs). The VUMs are BQ.1, BA.2.75, CH.1.1, XBB, XBF and XBB.1.16; XBB.1.16 was added to this list on 22 March 2023. XBB.1.16 is a recombinant of BA.2.10.1 and BA.2.75 and has three additional mutations in the SARS-CoV-2 spike protein (E180V, F486P and K478R) compared to its parent lineage XBB. The F486P mutation is shared with XBB.1.5. Mutations at position 478 of the SARS-CoV-2 spike protein have been associated with decreased antibody neutralization, increased transmissibility, and pathogenicity.[i,ii,iii,iv] As of 27 March, 712 XBB.1.16 sequences have been reported from 21 countries. However, so far reports do not indicate a rise in hospitalizations, ICU admissions, or deaths due to XBB.1.16. Further, there are currently no reported laboratory studies on markers of disease severity for XBB.1.16.

Globally, XBB.1.5 accounts for 45.1% of cases in epidemiological week 10 (6 to 12 March 2023) compared to 35.6% in week 6 (6 to 12 February 2023). To date, XBB.1.5 has been detected in 90 countries. A comparison of sequences submitted to GISAID from week 6 to week 10 shows declining or stable trends for all VUMs except for XBB, which increased from 6.2% to 19.7%. The observed trends of the other variants were as follows: BQ.1 declined from 22.7% to 8.4%, BA.2.75 declined from 7.1% to 1.7%, and CH.1.1 and XBF remained stable (7.2% to 6.4% and 1.4% to 1.4%, respectively). Table 2 shows the number of countries reporting the VOI and VUMs, and their prevalence from week 6 to week 10.

Table 2. Weekly prevalence of SARS-CoV-2 VOIs and VUMs, week 6 to week 10 of 2023

Lineage	Countries	Sequences	2023-06	2023-07	2023-08	2023-09	2023-10
XBB.1.5*	90	115 426	35.63	39.27	42.97	46.99	45.06
BQ.1*	141	399 188	22.68	18.40	14.18	10.73	8.37
BA.2.75*	119	100 181	7.09	6.20	6.00	2.94	1.71
CH.1.1*	85	36 425	7.17	7.12	7.02	6.89	6.43
XBB*	119	73 147	6.15	7.40	9.63	12.88	19.73
XBF*	47	8063	1.40	1.29	1.25	1.19	1.40
Other+	207	6 685 701	1.07	1.32	1.16	1.16	4.89
Unassigned	95	286 544	7.23	9.61	9.81	11.74	11.87

Denotes descendent lineages. The prevalence XBB.1.16 is included in XBB*. +Others are other circulating lineages excluding the VOI, VUMs, BA.1*, BA.2*, BA.3*, BA.4*, BA.5*

[i] SARS-CoV-2 variants, spike mutations and immune escape: https://www.nature.com/articles/s41579-021-00573-0

[ii] Emerging Vaccine-Breakthrough SARS-CoV-2 Variants: https://www.ncbi.nlm.nih.gov/research/coronavirus/publication/35133792

[iii] SARS-CoV-2 Spike Mutations, L452R, T478K, E484Q and P681R, in the Second Wave of COVID-19 in Maharashtra, India: https://www.ncbi.nlm.nih.gov/research/coronavirus/publication/34361977

[iv] Antibody-Mediated Neutralization of Authentic SARS-CoV-2 B.1.617 Variants Harboring L452R and T478K/E484Q: https://www.ncbi.nlm.nih.gov/research/coronavirus/publication/34578275

Additional resources

- Tracking SARS-CoV-2 Variants
- WHO statement on updated tracking system on SARS-CoV-2 variants of concern and variants of interest
- WHO XBB.1.5 rapid risk assessment, 24 February 2023
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- VIEW-hub: repository for the most relevant and recent vaccine data

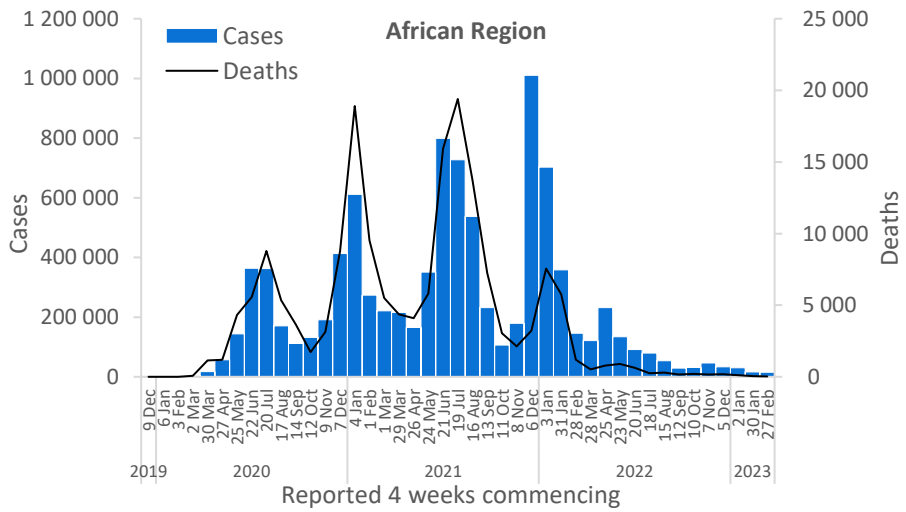
WHO regional overviews

Data for 27 February to 26 March 2023

African Region

The African Region reported over 14 000 new cases, a 10% decrease as compared to the previous 28-day period. Fifteen (30%) 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 Guinea-Bissau (270 vs seven new cases; +3757%), Sao Tome and Principe (68 vs two new cases; +3300%), and Mauritania (27 vs two new cases; +1250%). The highest numbers of new cases were reported from South Africa (8856 new cases; 14.9 new cases per 100 000; +50%), Mauritius (1509 new cases; 118.7 new cases per 100 000; +72%), and Zambia (708 new cases; 3.9 new cases per 100 000; -76%).

The number of new 28-day deaths in the Region decreased by 43% as compared to the previous 28-day period, with 25 new deaths reported. The highest numbers of new deaths were reported from Zimbabwe (11 new deaths; <1 new death per 100 000; +10%), Cameroon (three new deaths; <1 new death per 100 000; no deaths reported the previous 28-day period), and Zambia (three new deaths; <1 new death per 100 000; -77%).

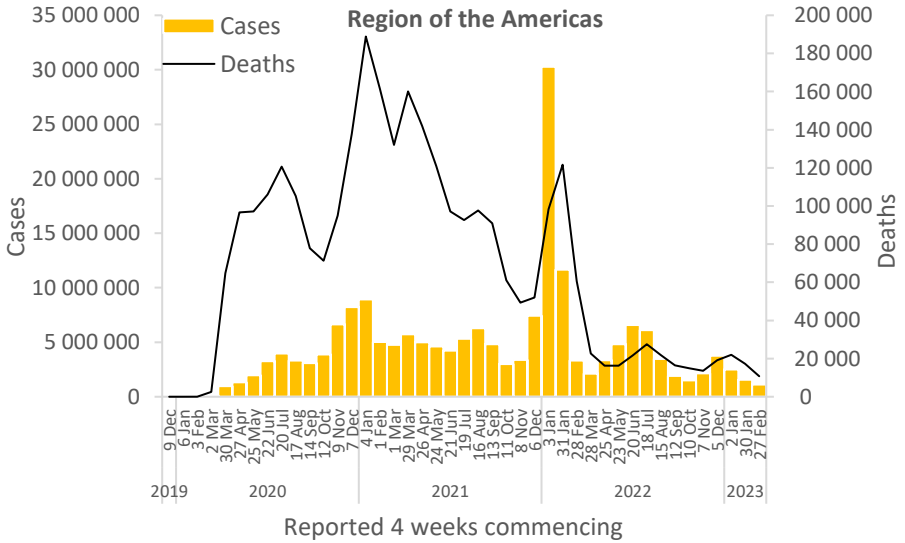


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 1.1 million new cases, a 29% decrease as compared to the previous 28-day period. Six (11%) 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 Chile (88 868 vs 46 079 new cases; +93%), Saint Barthélemy (27 vs 14 new cases; +93%), and Trinidad and Tobago (1998 vs 1152 new cases; +73%). The highest numbers of new cases were reported from the United States of America (678 002 new cases; 204.8 new cases per 100 000; -38%), Brazil (184 146 new cases; 86.6 new cases per 100 000; -20%), and Chile (88 868 new cases; 464.9 new cases per 100 000; +93%).

The number of new 28-day deaths in the Region decreased by 38% as compared to the previous 28-day period, with 10 736 new deaths reported. The highest numbers of new deaths were reported from the United States of America (7909 new deaths; 2.4 new deaths per 100 000; -35%), Brazil (989 new deaths; <1 new death per 100 000; -55%), and Canada (572 new deaths; 1.5 new deaths per 100 000; -29%).

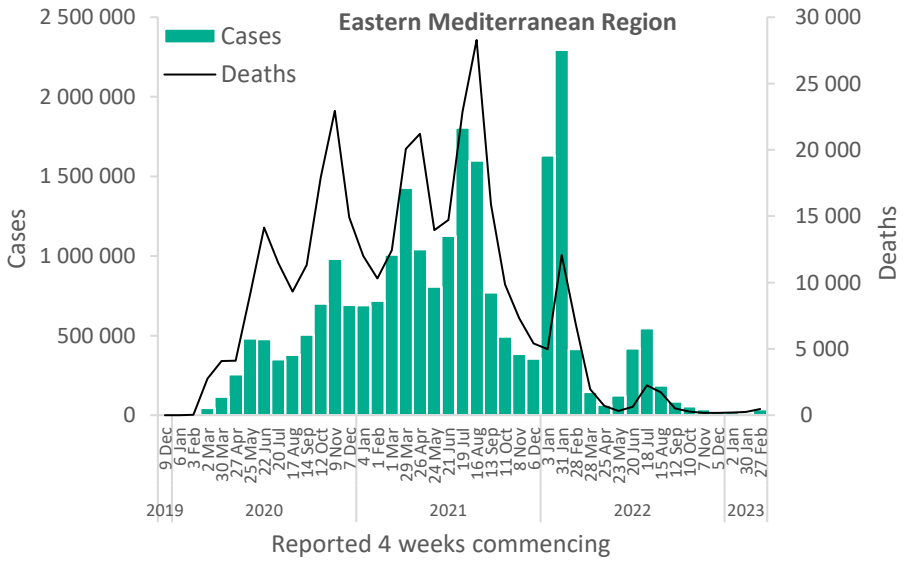


Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 36 000 new cases, a 142% increase as compared to the previous 28-day period. Eleven (50%) 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 the Islamic Republic of Iran (16 829 vs 3656 new cases; +360%), Kuwait (1316 vs 310 new cases; +325%), and Libya (35 vs 12 new cases; +192%). The highest numbers of new cases were reported from the Islamic Republic of Iran (16 829 new cases; 20.0 new cases per 100 000; +360%), the United Arab Emirates (4753 new cases; 48.1 new cases per 100 000; +88%), and Qatar (4188 new cases; 145.4 new cases per 100 000; +181%).

The number of new 28-day deaths in the Region increased by 95% as compared to the previous 28-day period, with 464 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (354 new deaths; <1 new death per 100 000; +261%), Lebanon (37 new deaths; <1 new death per 100 000; similar to the previous 28-day period), and Tunisia (25 new deaths; <1 new death per 100 000; -11%).

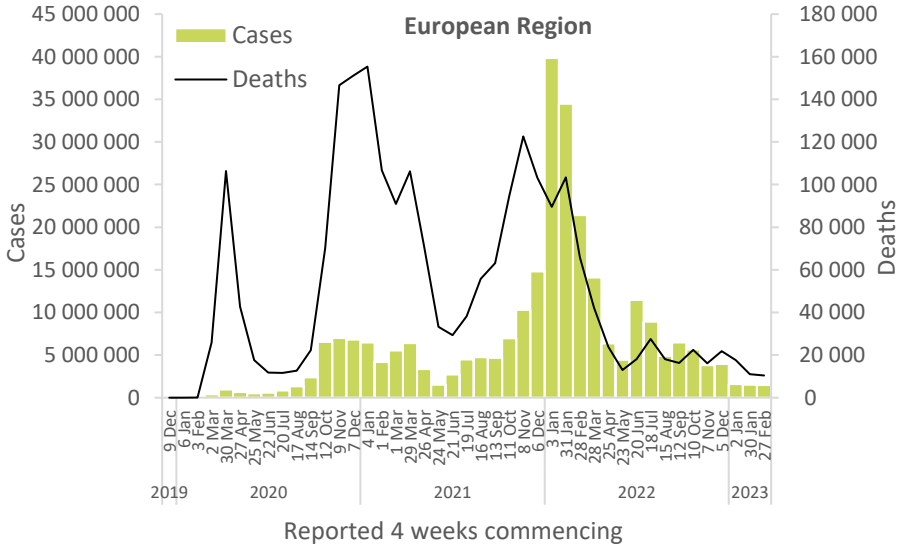


Updates from the Eastern Mediterranean Region

European Region

The European Region reported over 1.4 million new cases, similar (-1%) to the previous 28-day period. Twenty-two (36%) 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 Kyrgyzstan (136 vs 42 new cases; +224%), Ukraine (56 540 vs 19 308 new cases; +193%), and Armenia (1688 vs 615 new cases; +174%). The highest numbers of new cases were reported from the Russian Federation (333 073 new cases; 228.2 new cases per 100 000; +6%), Germany (203 983 new cases; 245.3 new cases per 100 000; -47%), and France (161 637 new cases; 248.5 new cases per 100 000; +64%).

The number of new 28-day deaths in the Region decreased by 7% as compared to the previous 28-day period, with 10 357 new deaths reported. The highest numbers of new deaths were reported from the United Kingdom (2719 new deaths; 4.0 new deaths per 100 000; -1%), Germany (1085 new deaths; 1.3 new deaths per 100 000; -34%), and the Russian Federation (1043 new deaths; <1 new death per 100 000; -1%).

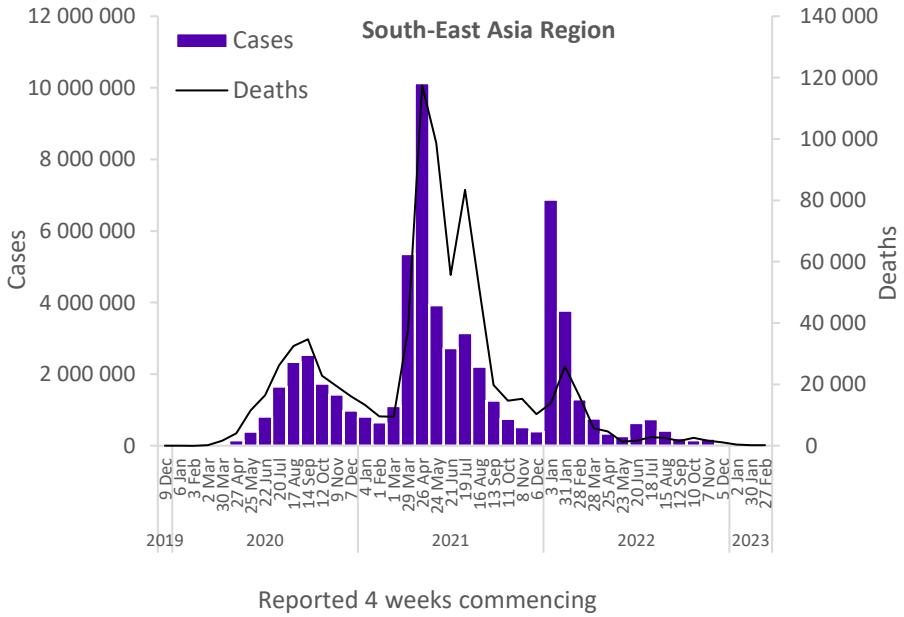


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported over 27 000 new cases, a 152% increase as compared to the previous 28-day period. Seven (64%) of the 11 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in India (18 130 vs 3378 new cases; +437%), the Maldives (39 vs 17 new cases; +129%), and Nepal (83 vs 44 new cases; +89%). The highest numbers of new cases were reported from India (18 130 new cases; 1.3 new cases per 100 000; +437%), Indonesia (8405 new cases; 3.1 new cases per 100 000; +39%), and Thailand (597 new cases; <1 new case per 100 000; -43%).

The number of new 28-day deaths in the Region decreased by 6% as compared to the previous 28-day period, with 175 new deaths reported. The highest numbers of new deaths were reported from Indonesia (86 new deaths; <1 new death per 100 000; -18%), India (62 new deaths; <1 new death per 100 000; +114%), and Thailand (24 new deaths; <1 new death per 100 000; -48%).

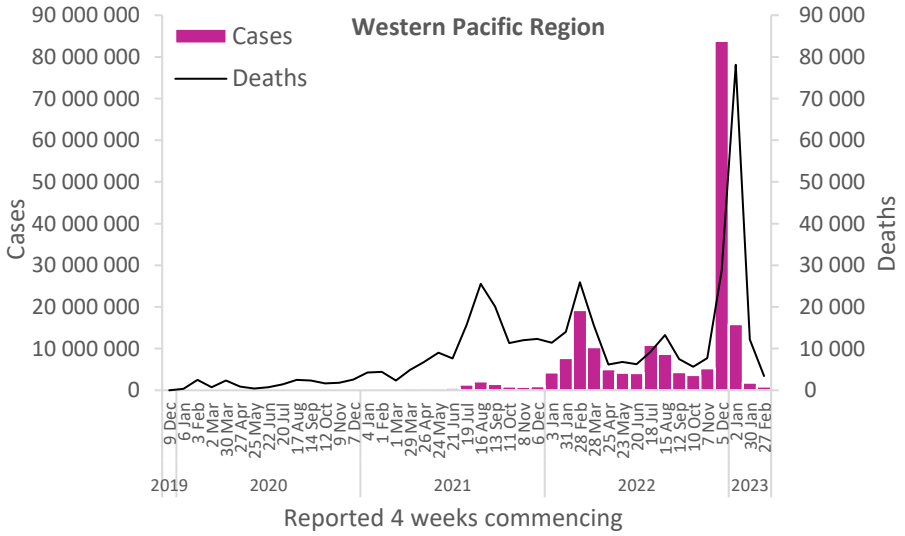


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported over 905 000 new cases, a 49% decrease as compared to the previous 28-day period. Eight (23%) 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 Samoa (257 vs 25 new cases; +928%), Micronesia (Federated States of) (1755 vs 277 new cases; +534%), and the Marshall Islands (105 vs 34 new cases; +209%). The highest numbers of new cases were reported from the Republic of Korea (270 378 new cases; 527.4 new cases per 100 000; -23%), China (255 961 new cases; 17.4 new cases per 100 000; -52%), and Japan (242 894 new cases; 192 new cases per 100 000; -68%).

The number of new 28-day deaths in the Region decreased by 72% as compared to the previous 28-day period, with 3400 new deaths reported. The highest numbers of new deaths were reported from Japan (1519 new deaths; 1.2 new deaths per 100 000; -68%), China (1230 new deaths; <1 new death per 100 000; -79%), and the Republic of Korea (274 new deaths; <1 new death per 100 000; -51%).



Updates from the Western Pacific Region

Hospitalizations and ICU admissions

At the global level, during the past 28 days (20 February to 19 March 2023), a total of 60 080 new hospitalizations and 2470 new intensive care unit (ICU) admissions were reported. This represents a reduction in new hospitalizations and ICU admissions of 9% and 5%, respectively, compared to the previous 28 days (23 January to 19 February 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, 42 (18%) countries reported data to WHO on new hospitalizations at least once. The region with the highest proportion of countries reporting data on new hospitalizations was the European Region (24 countries; 39%), followed by the Eastern Mediterranean Region (five countries; 23%), the South-East Asia Region (two countries; 18%), the Region of the Americas (five countries; 9%), the African Region (four countries; 8%), and the Western Pacific Region (two countries; 6%). The proportion of countries that consistently[v] reported new hospital admissions for the period was 10% (24 countries).

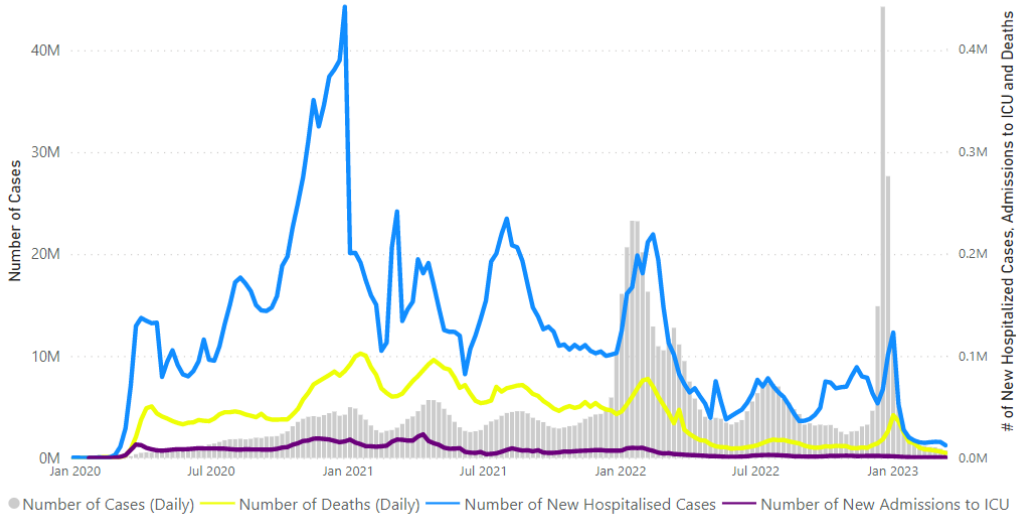
Among 24 countries consistently reporting new hospitalizations, eight (33%) countries registered an increase of 20% or greater during the 28 days compared to the previous 28 days period: the Netherlands (2799 vs 1384; +102%), Belgium (3492 vs 2079; +68%), Malta (80 vs 48; +67%), Luxembourg (72 vs 48; +50%), Ukraine (15 378 vs 10 388; +48%), Qatar (72 vs 50; +44%), Tunisia (76 vs 56; +36%), and Slovakia (1129 vs 878; +29%). The highest number of new hospitalizations was reported from Ukraine (15 378 vs 10 388; +48%), France (8095 vs 7134; +13%), and Italy (4878 vs 6 476; -25%).

Across the six WHO regions, in the past 28 days, 29 (12%) countries reported data to WHO on new ICU admissions at least once. The region with the highest proportion of countries reporting data on new ICU admissions was the European Region (16 countries; 26%), followed by the Eastern Mediterranean Region (three countries; 14%), the Western Pacific Region (four countries; 11%), the South-East Asia Region (one country; 9%), the Region of the Americas (three countries; 5%), and the African Region (two countries; 4%). The proportion of countries that consistently [v] reported new ICU admissions for the period was 8% (18 countries).

Among 18 countries that consistently reported ICU admission data, three (17%) countries showed an increase of 20% or greater in new ICU admissions during the 28 days period compared to the previous 28 days: the Netherlands (181 vs 78; +132%), Pakistan (21 vs 13; +62%), and Czechia (99 vs 78; +27%). The highest numbers of new ICU admissions were reported from France (779 vs 731; +7%), Ukraine (457 vs 402; +14%), and Italy (183 vs 267; -31%).

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

Figure 4. COVID-19 cases, deaths, hospitalizations, and ICU admissions reported weekly to WHO, as of 19 March 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 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.[5]

References

1. Cohen C, Kleynhans J, von Gottberg A, et al. SARS-CoV-2 incidence, transmission, and reinfection in a rural and an urban setting: results of the PHIRST-C cohort study, South Africa, 2020–21. *The Lancet Infectious Diseases*. 2022;22(6):821-834. doi:10.1016/S1473-3099(22)00069-X

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