

COVID-19 Epidemiological Update

Edition 163 published 19 January 2024

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Key highlights

- Globally, during the 28-day period from 11 December 2023 to 7 January 2024, 106 countries reported COVID-19 cases and 51 countries reported COVID-19 deaths. Note that this does not reflect the actual number of countries where cases or deaths are occurring, as many countries have stopped or changed frequency of reporting.
- From the available data, the number of reported cases has increased while deaths have decreased during the 28-day period, with over 1.1 million new cases and 8700 new deaths, an increase of 4% and a decrease of 26%, respectively, compared to the previous 28 days (13 November to 10 December 2023). Trends in the number of reported new cases and deaths should be interpreted with caution due to decreased testing and sequencing, alongside reporting delays in many countries. According to estimates obtained from wastewater surveillance, clinical detection of cases underestimates the real burden from 2 to 19-fold.
- SARS-CoV-2 PCR percent positivity, as detected in integrated sentinel surveillance as part of the Global Influenza Surveillance and Response System (GISRS) and reported to FluNet was around 8% as of 7 January 2024.
- During the 28-day period from 11 December 2023 to 7 January, 53 and 42 countries provided data at least once on COVID-19 hospitalizations and admissions to an intensive care unit (ICU), respectively. From the available data, over 173 000 new hospitalizations and over 1900 new ICU admissions were reported during the 28-day period. Amongst the countries reporting these data consistently over the current and past reporting period, there was an overall increase of 40% and 13% in new hospitalizations and new ICU admissions, respectively.
- Globally, JN.1 is the most reported VOI (now reported by 71 countries), accounting for 65.5% of sequences in week 52 compared to 24.8% in week 48 (Figure 10, Table 6). Its parent lineage, BA.2.86, is stable and accounted for 7.8% of sequences in week 52 compared to 7.0% in week 48 (Figure 10, Table 6). [The initial risk evaluation for JN.1](#) was published on 19 December 2023, with an overall evaluation of low public health risk at the global level based on available evidence. WHO is currently tracking several SARS-CoV-2 variants: five VOIs – XBB.1.5, XBB.1.16, EG.5 BA.2.86 and JN.1; and five VUMs: DV.7, XBB, XBB.1.9.1, XBB.1.9.2 and XBB.2.3
- The [Global WHO Coronavirus \(COVID-19\) Dashboard](#) has been updated and adapted with a new interface on 22 December 2023 to support WHO and Member States' work to transition from COVID-19 as an emergency to longer-term disease management, as outlined in WHO's 3 May 2023 COVID-19 [2023-2025 Updated Strategic Preparedness and Response Plan](#). The new dashboard will progressively incorporate more components throughout 2024. The previous link of the Global WHO Coronavirus (COVID-19) Dashboard will still be active and redirect users to the new one from 22 December onward. Please note that start time of the redirection can differ around the world by up to 24 hours.

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

- [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](#)
- [COVID-19 surveillance reporting requirements update for Member States](#)
- [Summary Tables of COVID-19 vaccine effectiveness \(VE\) studies and results \(last updated 11 January 2024\)](#)
- [Forest Plots displaying results of COVID-19 VE studies \(last updated 15 January 2024\)](#)
- [Special focus WEU on interpreting relative VE \(29 June 2022, pages 6-8\)](#)
- [Neutralization plots \(last updated 15 January 2024\)](#)
- [WHO COVID-19 VE Resources](#)

Global overview

Data as of 7 January 2024

Globally, the number of new weekly cases remained stable during the 28-day period of 11 December 2023 to 7 January 2024 as compared to the previous 28-day period, with over 1.1 million new cases reported (Figure 1, Table 1). The number of new weekly deaths decreased by 26% as compared to the previous 28-day period, with 8700 new fatalities reported. As of 7 January 2024, over 774 million confirmed cases and over 7 million deaths have been reported globally. According to estimates obtained from viral loads in wastewater surveillance, clinical detection of cases underestimated the real burden 2 to 19-fold^{1,2,3}

Reported cases do not accurately represent infection rates due to the reduction in testing and reporting globally. During this 28-day period, only 45% (106 of 234) of countries reported at least one case to WHO. It is important to note that this statistic does not reflect the actual number of countries where cases exist. Additionally, data from the previous 28-day period are continuously being updated to incorporate retrospective changes made by countries regarding reported COVID-19 cases and deaths. Data presented in this report are therefore incomplete and should be interpreted considering these limitations. Some countries continue to report high burdens of COVID-19, including increases in newly reported cases and, more importantly, increases in hospitalizations and deaths – the latter of which are considered more reliable indicators given reductions in testing. Global and national data on SARS-CoV-2 PCR percent positivity are available on [WHO's integrated influenza and other respiratory viruses surveillance dashboard](#). Recent data (epidemiological week one, 1 to 7 January 2024) from sentinel sites show that the SARS-CoV-2 PCR percent positivity from reporting countries averages approximately 8% (Figure 2).

As many countries discontinue COVID-19-specific reporting and integrate it into respiratory disease surveillance, WHO will use all available sources to continue monitoring the COVID-19 epidemiological situation, especially data on morbidity and impact on health systems. COVID-19 remains a major threat, and WHO urges Member States to maintain, not dismantle, their established COVID-19 infrastructure. It is crucial to sustain, *inter alia*, early warning, surveillance and reporting, variant tracking, early clinical care provision, administration of vaccine to high-risk groups, improvements in ventilation, and regular communication.

1 Show us the data: global COVID-19 wastewater monitoring effectors, equity, and gaps

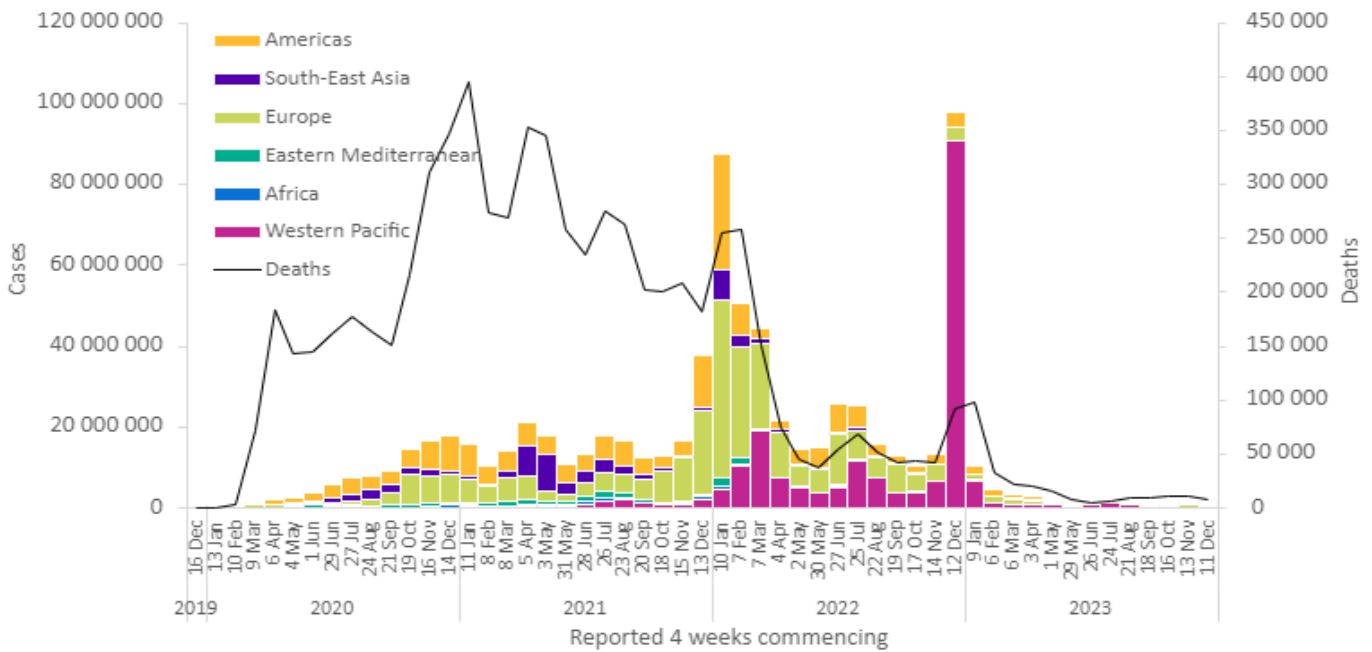
2. Capturing the SARS-CoV-2 infection pyramid within the municipality of Rotterdam using longitudinal sewage surveillance

3. Omicron COVID-19 Case Estimates Based on Previous SARS-CoV-2 Wastewater Load, Regional Municipality of Peel, Ontario, Canada

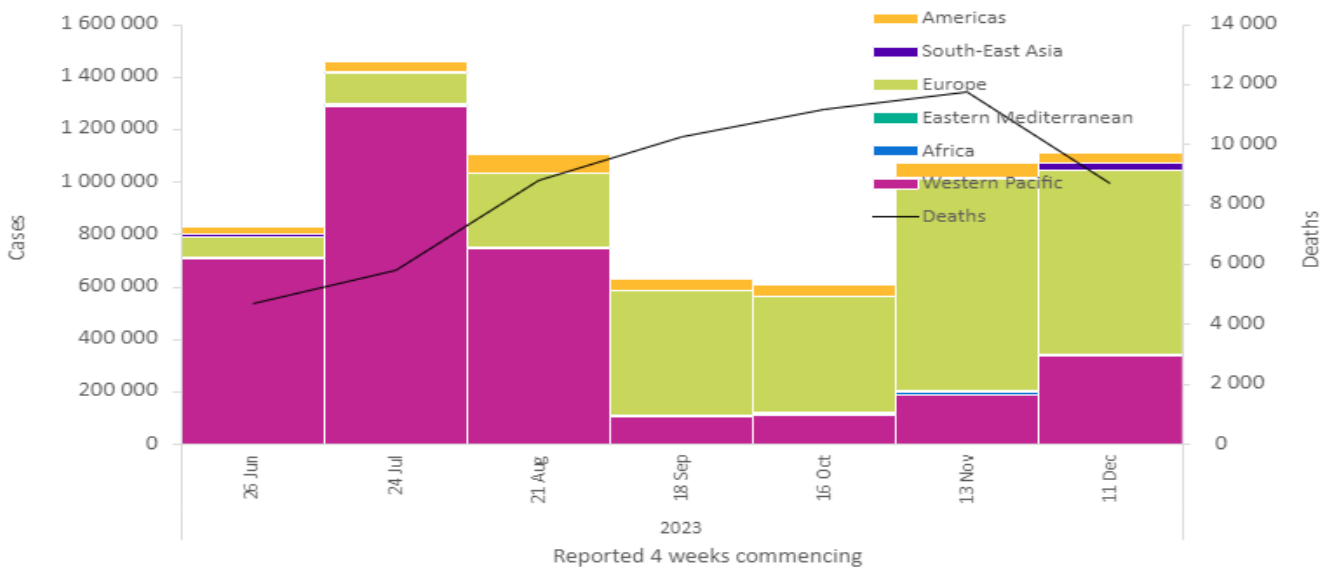
Current trends in reported COVID-19 cases and deaths should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected. Additionally, data from previous weeks are continuously updated to retrospectively incorporate changes in reported COVID-19 cases and deaths made by countries.

Figure 1. COVID-19 cases and global deaths by 28-day intervals reported by WHO Region, as of 7 January 2024 (A); 26 June to 17 January 2024 (B)**

A



B



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

At the regional level, the number of newly reported 28-day cases decreased across four of the six WHO regions: the African Region (-63%), the Region of the Americas (-18%), the Eastern Mediterranean Region (-13%), and the European Region (-13%); while case numbers increased in two WHO regions: the Western Pacific Region (+77%), and the South-East Asia Region (+379%). The number of newly reported 28-day deaths decreased or remained stable across five regions: the African Region (-113%), the Eastern Mediterranean Region (-53%), the Western Pacific Region (-45%), the Region of the Americas (-41%), and the European Region (-3%); while death numbers increased in the South-East Asia Region (+564%).

At the country level, the highest numbers of new 28-day cases were reported from the Russian Federation (235 198 new cases; -30%), Singapore (174 643 new cases; +117%), Italy (163 599 new cases; -18%), Greece (68 590 new cases; +81%), and Malaysia (67 206 new cases; +164%). The highest numbers of new 28-day deaths were reported from Italy (1016 new deaths; -21%), the Russian Federation (679 new deaths; +45%), Poland (543 new deaths; +229%), Sweden (446 new deaths; -47%), and Greece (322 new deaths; +79%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 7 January 2024**

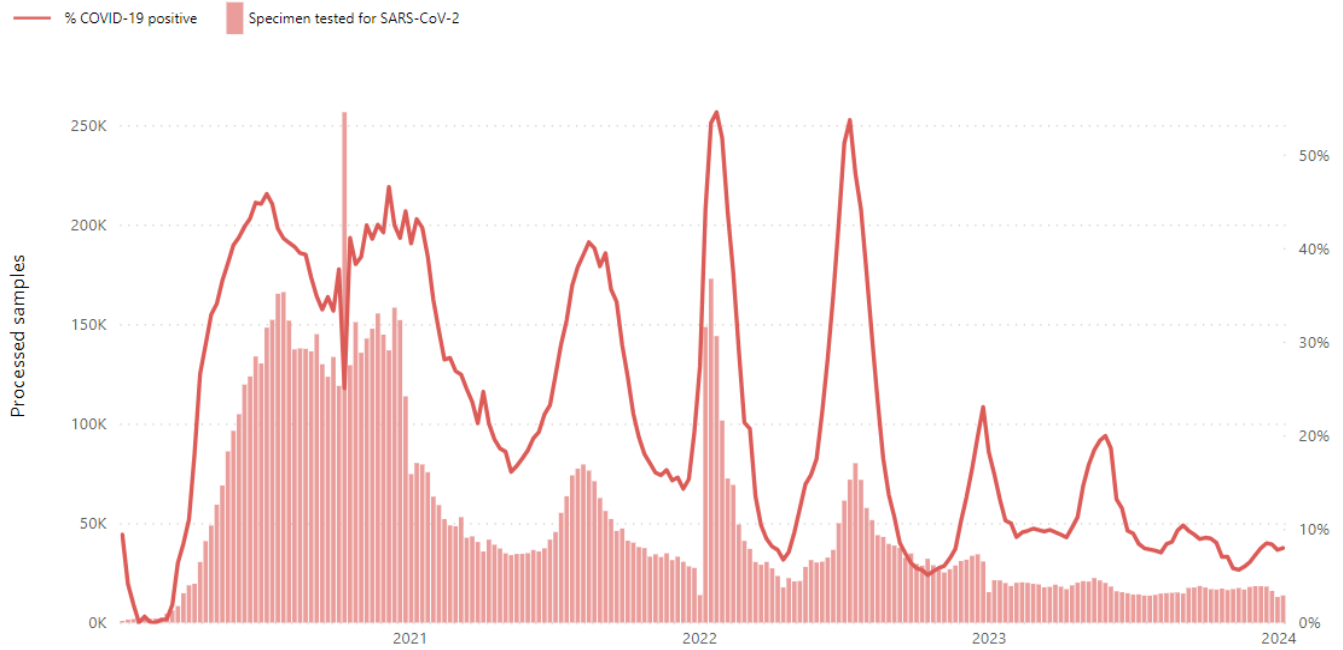
WHO Region	New cases in last 28 days (%)	Change in new cases in last 28 days *	Cumulative cases (%)	New deaths in last 28 days (%)	Change in new deaths in last 28 days *	Cumulative deaths (%)	Countries reporting cases in the last 28 days	Countries reporting deaths in the last 28 days
Europe	701 053 (63%)	-13%	278 615 939 (36%)	4 194 (48%)	-3%	2 265 734 (32%)	34/61 (56%)	23/61 (38%)
Western Pacific	338 056 (30%)	77%	208 014 763 (27%)	416 (5%)	-45%	419 274 (6%)	17/35 (49%)	8/35 (23%)
Americas	42 330 (4%)	-18%	193 223 732 (25%)	3 869 (44%)	-41%	2 992 342 (43%)	17/56 (30%)	9/56 (16%)
South-East Asia	26 469 (2%)	379%	61 241 866 (8%)	186 (2%)	564%	808 278 (12%)	6/10 (60%)	4/10 (40%)
Africa	3 354 (0%)	-63%	9 568 385 (1%)	-2 (0%)	-113%	175 473 (3%)	28/50 (56%)	4/50 (8%)
Eastern Mediterranean	2 464 (0%)	-13%	23 409 749 (3%)	37 (0%)	-53%	351 870 (5%)	4/22 (18%)	3/22 (14%)
Global	1 113 726 (100%)	4%	774 075 198 (100%)	8 700 (100%)	-26%	7 012 984 (100%)	106/234 (45%)	51/234 (22%)

*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](#)

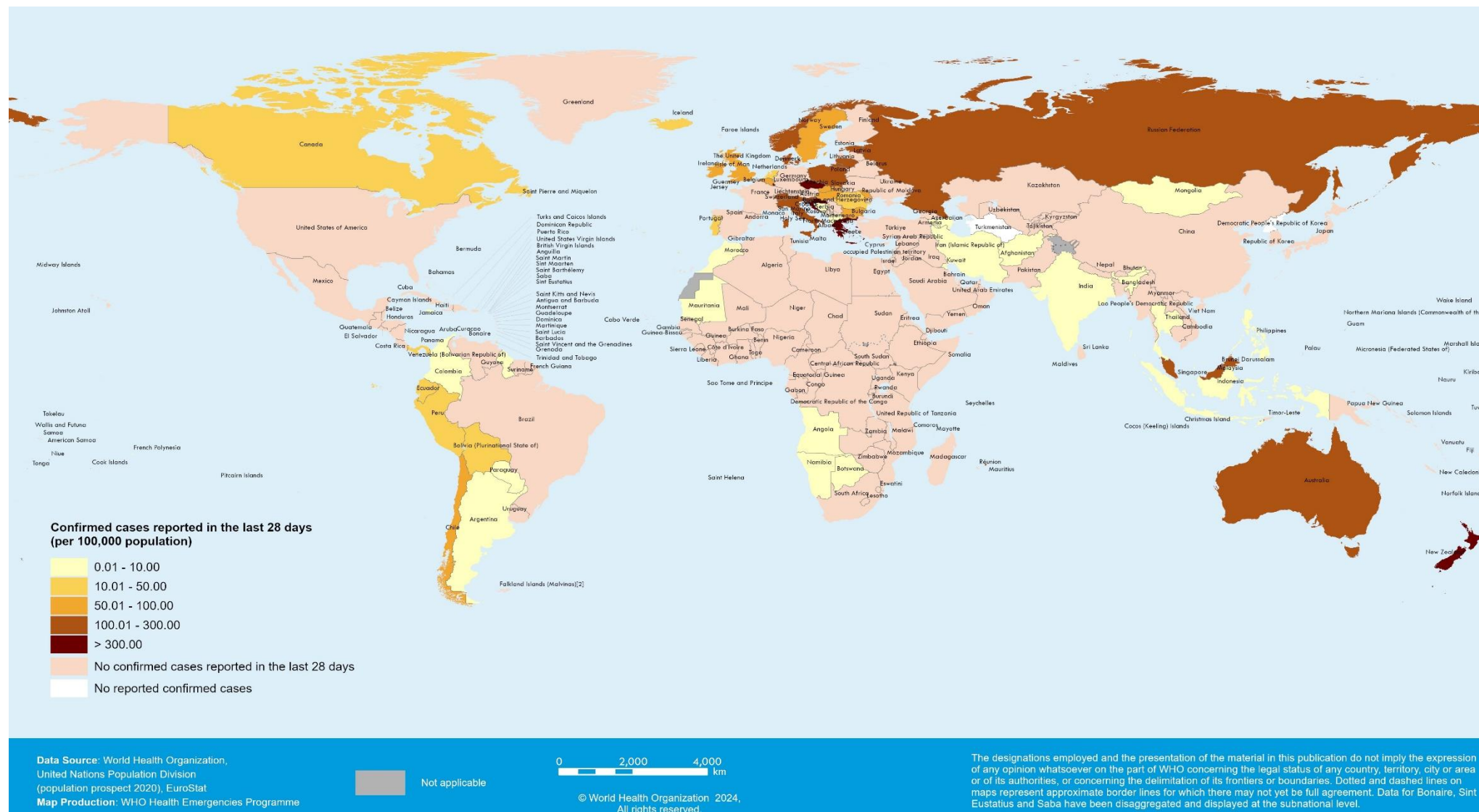
Figure 2. SARS-CoV-2 specimens tested and test positivity rates reported to FluNet from sentinel sites; 5 January 2020 to 7 January 2024

SARS-CoV-2 tested specimens reported to FluNet from countries, areas and territories



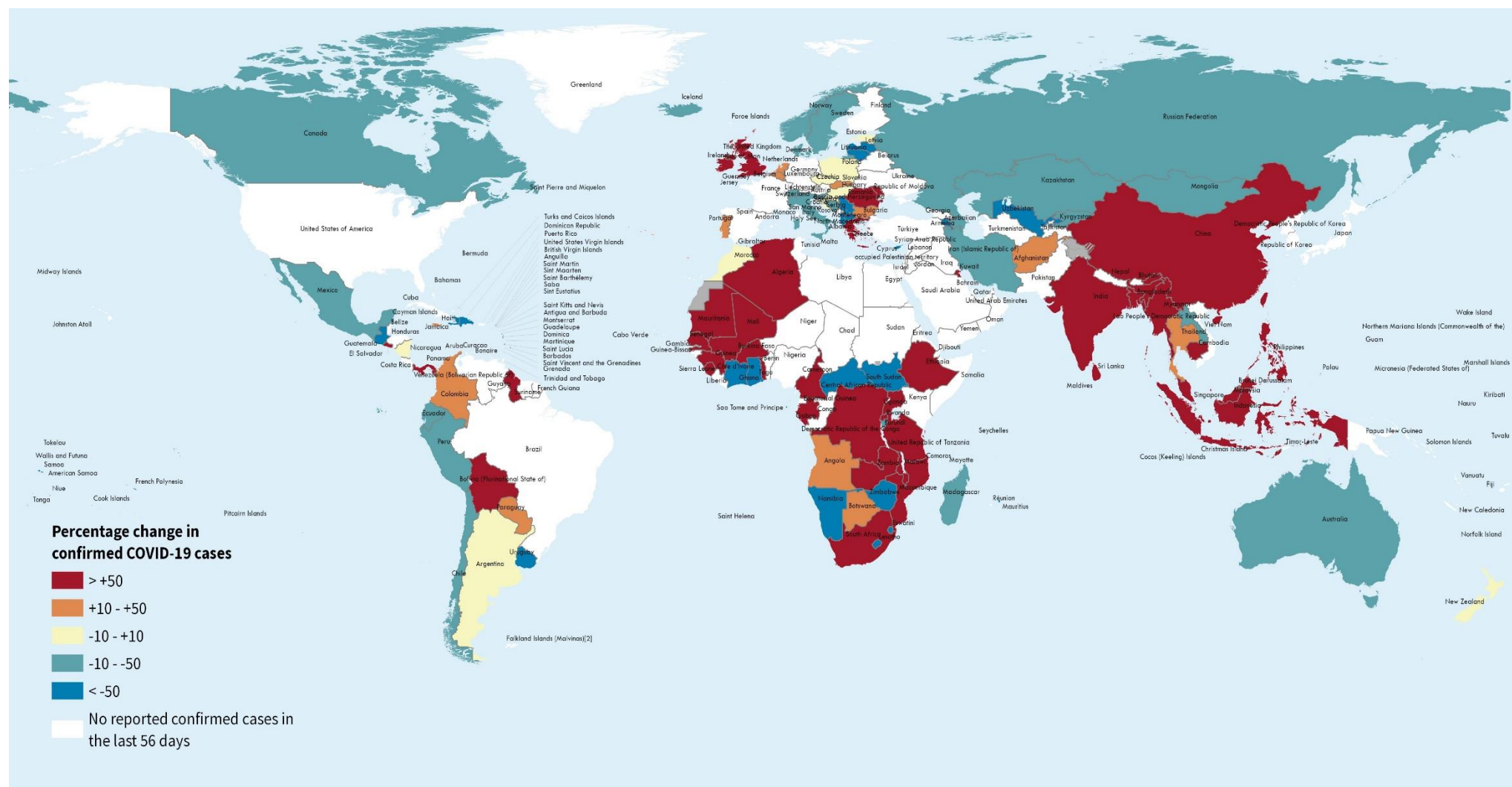
Source: *Influenza and SARS-CoV-2 surveillance data from GISRS reported to FluNet; WHO Global Influenza Programme*

Figure 3. Number of confirmed COVID-19 cases reported over the last 28 days per 100 000 population, as of 7 January 2024**



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

Figure 4. Percentage change in confirmed COVID-19 cases over the last 28 days relative to the previous 28 days, as of 7 January 2024**



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

Not applicable

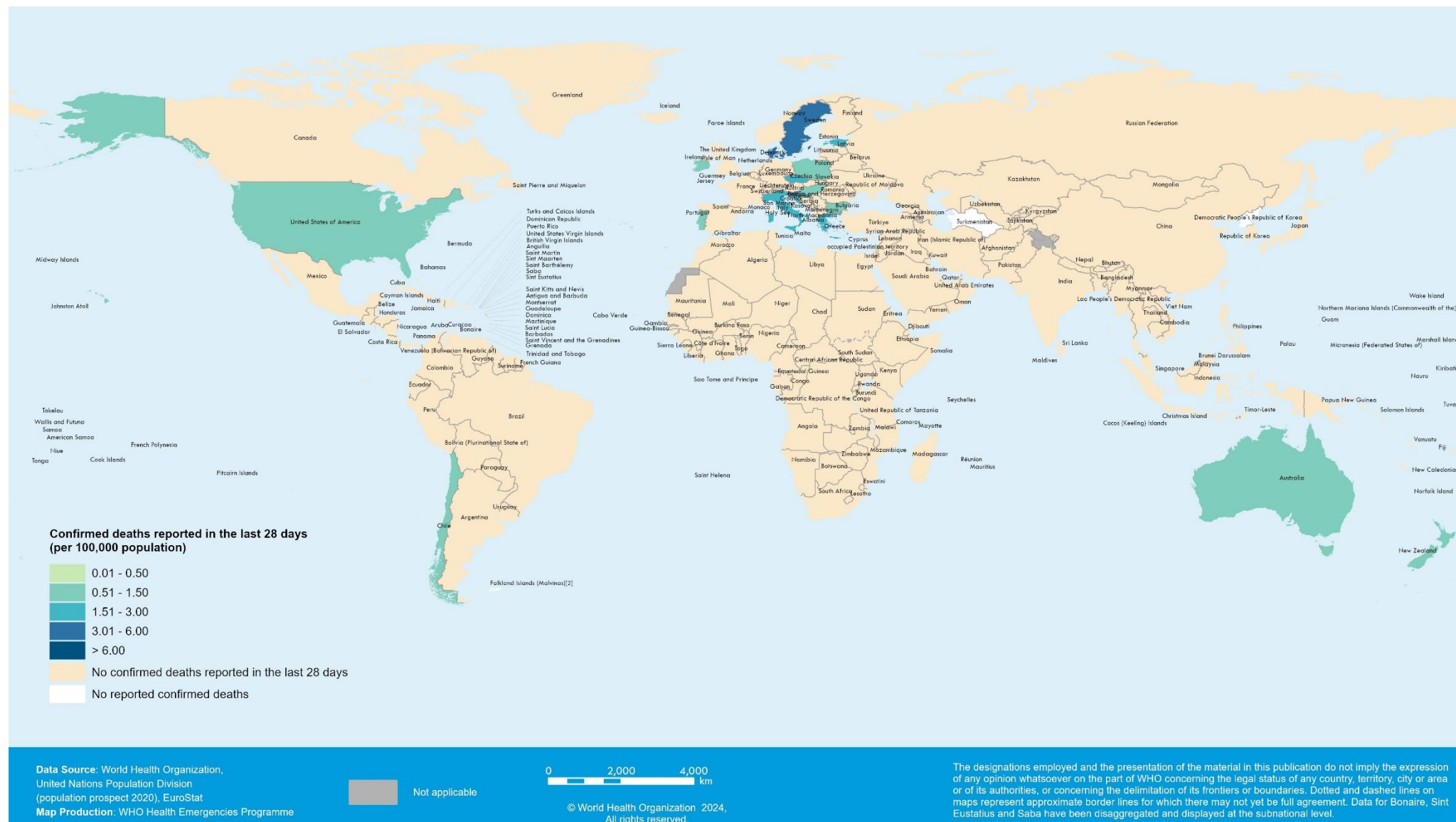


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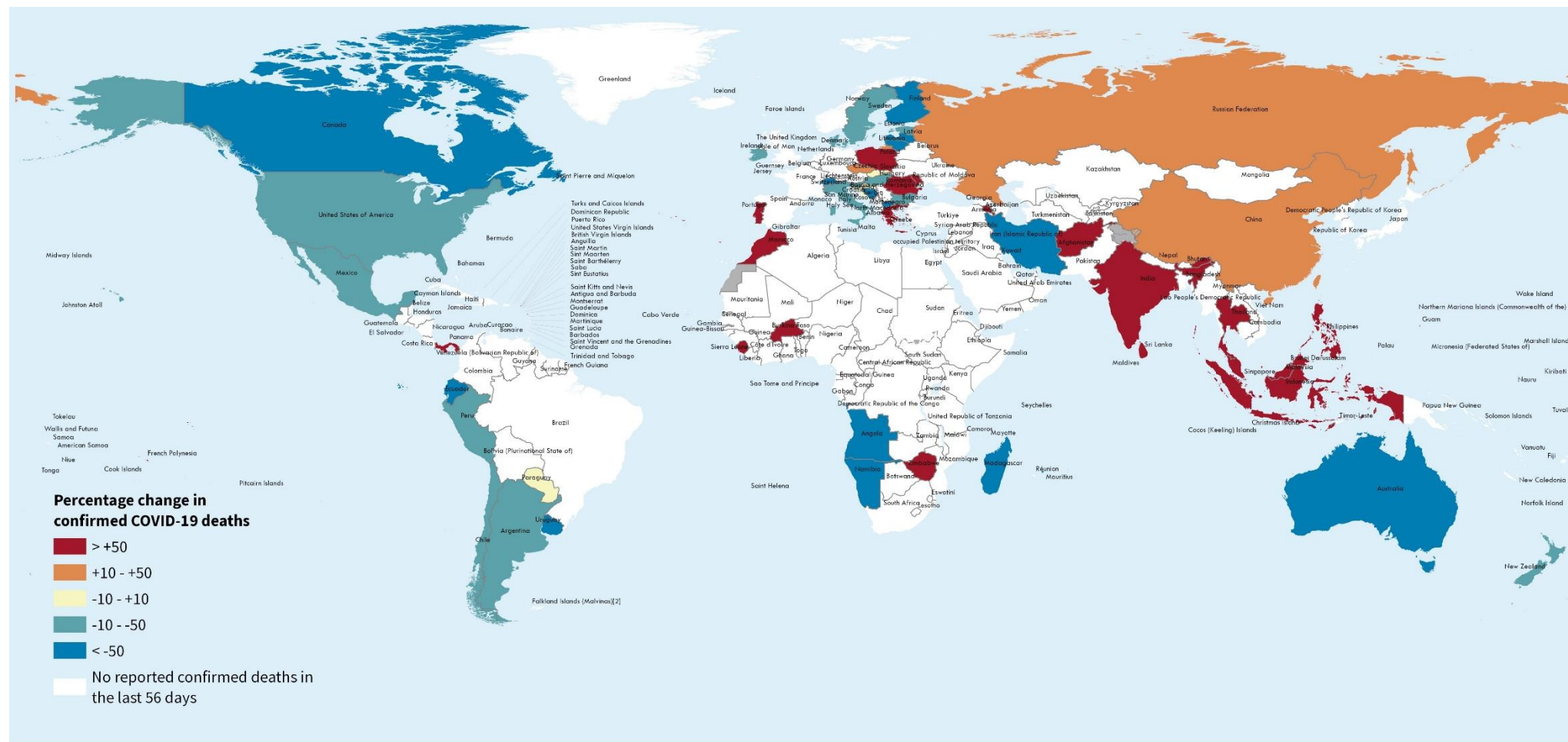
**See [Annex 1: Data, table, and figure notes](#)

Figure 5. Number of COVID-19 deaths reported over the last 28 days per 100 000 population, as of 7 January 2024 **



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

Figure 6. Percentage change in confirmed COVID-19 deaths over the last 28 days relative to the previous 28 days, as of 7 January 2024**



Data Source: World Health Organization

Map Production: WHO Health Emergencies Programme

Not applicable

0 2,500 5,000 km

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

Hospitalizations and ICU admissions

At the global level, during the past 28 days (11 December 2023 to 7 January 2024), a total of 173 547 new hospitalizations and 1 966 new intensive care unit (ICU) admissions were reported from 53 and 42 countries, respectively (Figure 7). This represents 32% increase and 3% decrease, respectively, compared to the previous 28 days (13 November to 10 December 2023). Note that the absence of reported data from some countries to WHO does not imply that there are no COVID-19-related hospitalizations in those countries. 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.

New hospitalizations

During the past 28 days, 53 (23%) countries reported data to WHO on new hospitalizations at least once (Figure 7). The Region of the Americas had the highest proportion of countries reporting data on new hospitalizations (19 countries; 34%), followed by the European Region (15 countries; 25%), the African Region (12 countries; 24%), the South-East Asia Region (two countries; 20%), and the Western Pacific Region (five countries; 14%). No country in the Eastern Mediterranean Region shared data. The number of countries that consistently reported new hospitalizations for the period was 9% (22 countries) (Table 2).

Among the 22 countries consistently reporting new hospitalizations, 8 (36%) countries registered an increase of 20% or greater in hospitalizations during the past 28 days compared to the previous 28-day period: Indonesia (1337 vs 149; +797%), Malta (79 vs 21; +276%), Brunei Darussalam (588 vs 161; +265%), Malaysia (9312 vs 4137; +125%), Greece (6366 vs 3792; +68%), Singapore (2619 vs 1719; +52%), United States of America (128 073 vs 84 981; +51%), and Ireland (1353 vs 967; +40%).

The highest numbers of new hospital admissions were reported from the United States of America (128 073 vs 84 981; +51%), Malaysia (9312 vs 4137; +125%), and Italy (8845 vs 13 857; -36%).

Table 2. Number of new hospitalization admissions reported by WHO regions, 11 December 2023 to 7 January 2024 compared to 16 October to 13 November to 10 December 2023

Region	Countries reported at least once in the past 28 days		Countries reported consistently in the past and previous 28 days*		
	Number of countries (percentage)**	Number of new hospitalizations	Number of countries (percentage)**	Number of new hospitalizations	Percent change in new hospitalizations
Africa	12/50 (24%)	61	3/50 (6%)	6	-45%
Americas	19/56 (34%)	134 789	5/56 (9%)	129 408	+48%
Eastern Mediterranean	0/22 (<1%)	N/A***	0/22 (<1%)	N/A	N/A
Europe	15/61 (25%)	23 039	9/61 (15%)	22 574	-9%
South-East Asia	2/10 (20%)	1358	2/10 (20%)	1358	+690%
Western Pacific	5/35 (14%)	14 300	5/35 (14%)	14 300	+88%
Global	53/234 (23%)	173 547	24/234 (10%)	167 646	+40%

*Percent change is calculated for countries reporting consistently both in the past 28 days and the previous 28 days (comparison period).

**Number of countries reported / total number of countries in the region (percentage of reporting).

*** N/A represents not available or applicable.

Table 3. Countries that consistently reported new hospitalizations by WHO region, 11 December 2023 to 7 January 2024 compared to 13 November to 10 December 2023.

WHO Region	Country	New Hospitalization in past 28 days	New Hospitalization in previous 28-day period	% Change from previous 28-day period
Africa	Mauritania	0	0	N/A
Africa	Mali	0	0	N/A
Africa	Angola	6	11	-45%
Americas	Turks and Caicos Islands	0	0	N/A
Americas	United States of America	128073	84981	51%
Americas	Canada	1335	2685	-50%
Americas	Saint Lucia	0	7	-100%
Americas	Honduras	0	5	-100%
Europe	Malta	79	21	276%
Europe	Greece	6366	3792	68%
Europe	Ireland	1353	967	40%
Europe	Netherlands	2474	2196	13%
Europe	Slovakia	925	1015	-9%
Europe	Czechia	2083	2317	-10%
Europe	Estonia	420	474	-11%
Europe	Italy	8845	13857	-36%
Europe	Portugal	29	57	-49%
South-East Asia	Indonesia	1337	149	797%
South-East Asia	Bangladesh	21	23	-9%
Western Pacific	Brunei Darussalam	588	161	265%
Western Pacific	Malaysia	9312	4137	125%
Western Pacific	Singapore	2619	1719	52%
Western Pacific	New Zealand	1726	1484	16%
Western Pacific	Mongolia	55	106	-48%

*N/A represents not applicable

*WHO emphasizes the importance of maintaining reporting and encourages countries to report the absence of new admissions (“zero reporting”) if there are no new hospital or ICU admissions during the week.

New ICU admissions

Across the six WHO regions, in the past 28 days, a total of 42 (19%) countries reported data to WHO on new ICU admissions at least once (Figure 8). The African Region had the highest proportion of countries reporting data on new ICU admissions (13 countries; 26%), followed by the European Region (12 countries; 20%), the Region of the Americas (10 countries, 14%), the Western Pacific Region (six countries; 17%) , and the South-East Asia Region (one country; 10%). No country in the Eastern Mediterranean Region reported ICU data during the period. The proportion of countries that consistently reported new ICU admissions for the period was 8% (18 countries). Among the 18 countries consistently reporting new ICU admissions, eight (44%) 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 (164 vs 18; +811%), Malaysia (135 vs 15; +800%), Singapore (77 vs 38; +103%), Estonia (18 vs 10; +80%), Ireland (20 vs 13; +54%), Netherlands (120 vs 86; +40%), Greece (120 vs 88; +36%), and Czechia (182 vs 146; +25%)

The highest numbers of new ICU admissions were reported from Italy (464 vs 492; -6%), Czechia (182 vs 146; +25%), and Indonesia (164 vs 18; +811%).

Table 4. Number of new ICU admissions reported by WHO regions, 11 December 2023 to 7 January 2024 compared to 13 November to 10 December 2023

WHO Region	Countries reported at least once in the past 28 days		Countries reported consistently in the past and previous 28 days*		
	Number of countries (percentage)**	Number of new ICU admissions	Number of countries (percentage)**	Number of new ICU admissions	Percent change in new ICU admissions
Africa	13/50 (26%)	6	1/50 (2%)	0	N/A
Americas	10/56 (18%)	386	2/56 (16%)	99	-55%
Eastern Mediterranean	0/22 (<1%)	N/A***	0/22 (<1%)	N/A	N/A
Europe	12/61 (20%)	1097	8/61 (13%)	1032	+3%
South-East Asia	1/10 (10%)	164	1/10 (10%)	164	+811%
Western Pacific	6/35 (17%)	313	6/35 (14%)	256	+86%
Global	42/235 (19%)	1966	18/235 (8%)	1551	+13%

*Percent change is calculated for countries reporting consistently both in the past 28 days and the previous 28 days (comparison period).

**Number of countries reported / total number of countries in the region (percentage of reporting).

*** N/A represents data not available or applicable.

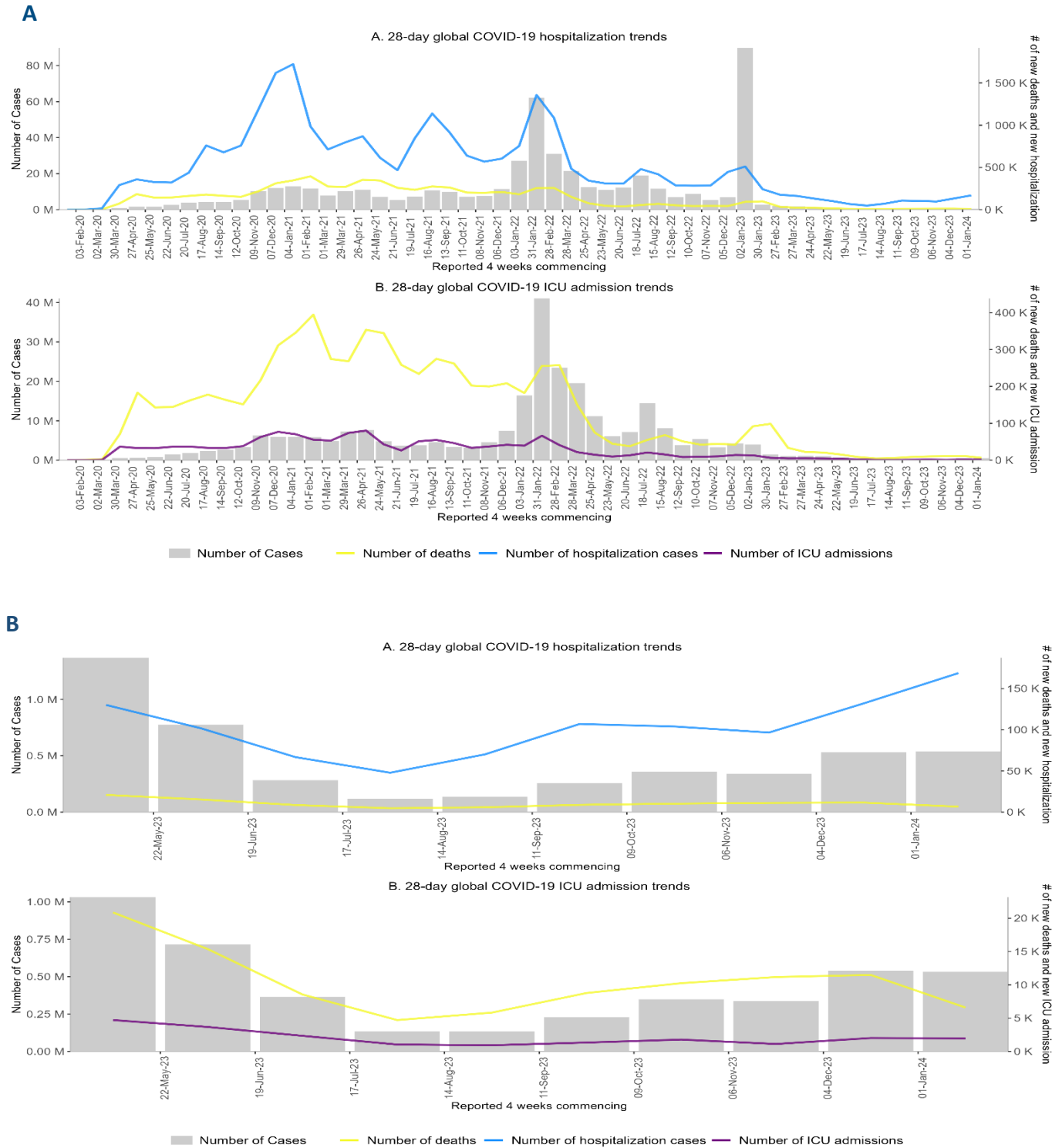
* WHO emphasizes the importance of maintaining reporting and encourages countries to report the absence of new admissions (“zero reporting”) if there are no new hospital or ICU admissions during the week.

Table 5. Countries that consistently reported new ICU admissions by WHO regions, 11 December 2023 to 7 January 2024 compared to 13 November to 10 December 2023.

WHO Region	Country	New ICU admissions in past 28 days	New ICU admissions in previous 28 days	% Change in ICU admissions from previous 28-day period
Africa	Mauritania	0	0	N/A
Americas	Canada	99	221	-55%
Americas	Honduras	0	0	N/A
Europe	Italy	464	492	-6%
Europe	Czechia	182	146	25%
Europe	Netherlands	120	86	40%
Europe	Greece	120	88	36%
Europe	Sweden	101	158	-36%
Europe	Ireland	20	13	54%
Europe	Estonia	18	10	80%
Europe	Slovakia	7	9	-22%
South-East Asia	Indonesia	164	18	811%
Western Pacific	Malaysia	135	15	800%
Western Pacific	Singapore	77	38	103%
Western Pacific	New Zealand	39	38	3%
Western Pacific	Brunei Darussalam	5	5	0%
Western Pacific	Mongolia	0	0	N/A
Western Pacific	Australia	163	220	-26%

* N/A represents not applicable+ WHO emphasizes the importance of maintaining reporting and encourages countries to report the absence of new admissions (“zero reporting”) if there are no new hospital or ICU admissions during the week.

Figure 7. 28-day global COVID-19 new hospitalizations and ICU admissions, from 3 February 2020 to 7 January 2024 (A); and from 1 May 2023 to 7 January 2024 (B)



Note: Recent weeks are subject to reporting delays and data might not be complete, thus the data should be interpreted with caution. Cases included in grey bars are only from countries reporting hospitalizations or ICU admissions, respectively.

Severity indicators

The ICU-to-hospitalization ratio and death-to-hospitalization ratio have been key indicators for understanding COVID-19 severity throughout the pandemic. The ICU-to-hospitalization ratio is used to assess the proportion of patients requiring ICU admission in relation to the total number of hospitalizations. The death-to-hospitalization ratio is used to assess the proportion of deaths in relation to hospitalized patients.

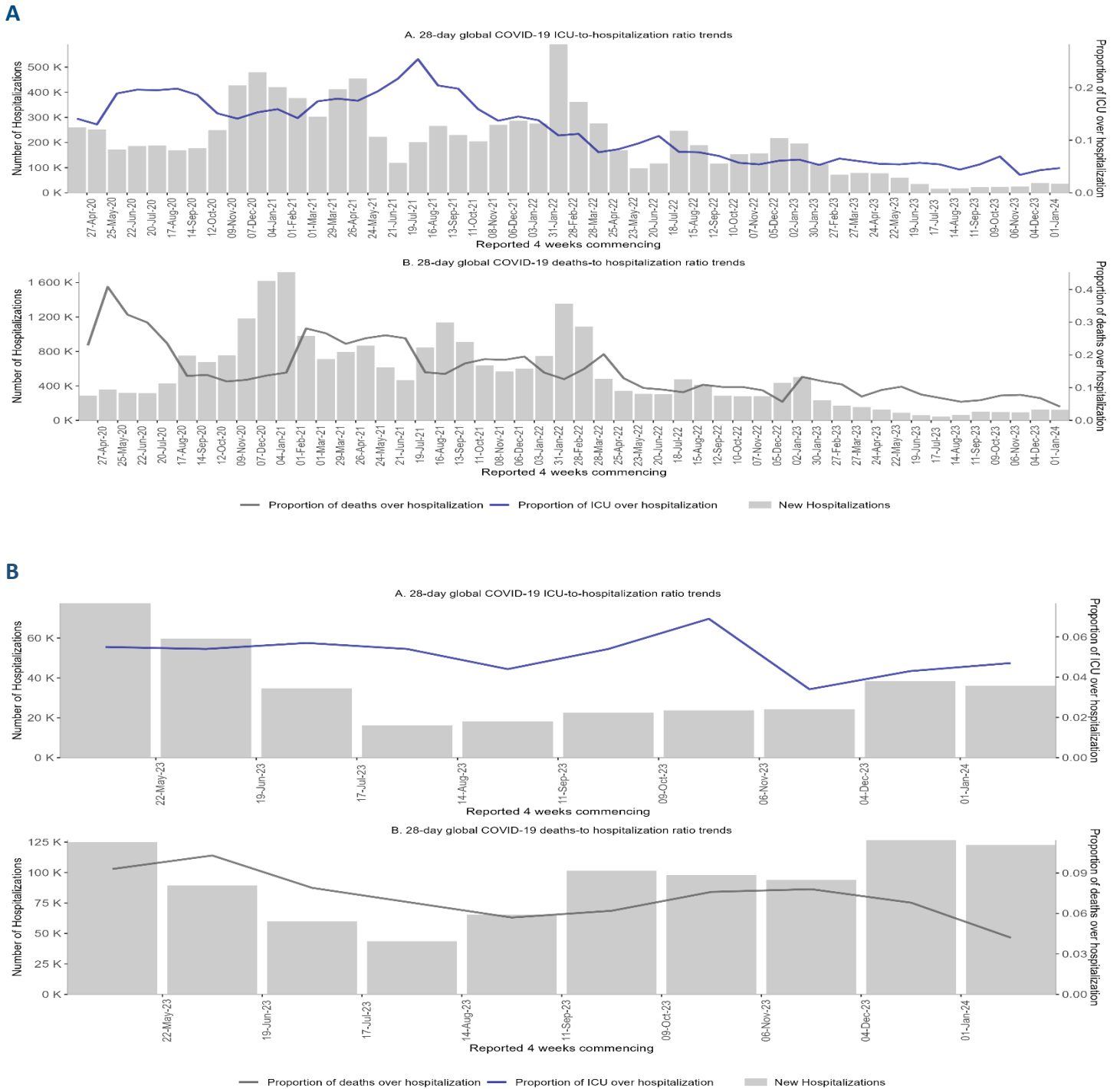
These indicators are subject to the same limitations mentioned above and their calculations are limited to the countries reporting all relevant data elements (hospitalizations, ICU admissions and deaths) in a given reporting period. It should be noted that there may be differences in reporting among countries. For instance, in some countries, hospitalization data may include ICU admissions, whereas in others, ICU admissions may be reported separately. Furthermore, it is important to consider that some deaths might have occurred outside of hospital facilities.

Overall, the ICU-to-hospitalization ratio has been decreasing since the peak in July 2021 when the ratio was 0.26, dropping below 0.15 since the beginning of 2022, and around 0.05 since the start of 2023 (Figure 8). The trend has been stable in recent weeks. This suggests that a decreasing proportion of new hospitalizations require intensive care.

Similarly, the death-to-hospitalization ratio has been showing a general decline since July 2021. Since January 2023, it has remained under 0.15, varying between 0.06 to 0.14. This is an encouraging trend indicating a lower mortality risk among hospitalized individuals.

Please note that the causes for these decreases cannot be directly interpreted from these data, but likely include a combination of increases in infection-derived or vaccine-derived immunity, improvements in early diagnosis and clinical care, reduced strain on health systems, and other factors. It is not possible to infer a decreased intrinsic virulence amongst newer SARS-CoV-2 variants from these data.

Figure 8. COVID-19 ICU-to-hospitalization ratio and death-to-hospitalization ratio, from 27 April 2020 to 7 January 2023 (A), and 22 May to 7 January 2024 (B)



Note: Recent weeks are subject to reporting delays and should not be interpreted as a declining trend. The ICU ratio figure is created from the data of the countries reported both new hospitalizations and new ICU admissions. The death ratio figure is created from the data of the countries that reported both new hospitalization and new deaths.

Source: [WHO COVID-19 Detailed Surveillance Dashboard](#)

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

Geographic spread and prevalence

Globally, during the 28-day period from 11 December 2023 to 7 January 2024, 33 659 SARS-CoV-2 sequences were shared through GISAID. In comparison, in the two previous 28-day periods, there were 112 909 and 192 222 sequences shared, respectively. The data are periodically retrospectively updated to include sequences with earlier collection dates, so the number of submissions in a given time period may change.

WHO is currently tracking several SARS-CoV-2 variants, including:

- Five variants of interest (VOIs): XBB.1.5, XBB.1.16, EG.5, BA.2.86 and JN.1
- Five variants under monitoring (VUMs): DV.7, XBB, XBB.1.9.1, XBB.1.9.2 and XBB.2.3

Table 6 shows the number of countries reporting VOIs and VUMs, and their prevalence from epidemiological week 48 (27 November to 3 December 2023) to week 52 (25 December to 31 December 2023). The VOIs and VUMs exhibiting increasing trends are highlighted in yellow, those that have remained stable are highlighted in blue, and those with decreasing trends are highlighted in green.

Globally, JN.1 is currently the dominant circulating VOI (reported by 71 countries), accounting for 65.5% of sequences in week 52 compared to 24.8% in week 48 (Figure 10, Table 6). Its parent lineage, BA.2.86, is stable and accounted for 7.8% of sequences in week 52 compared to 7.0% in week 48 (Figure 10, Table 6). The [initial risk evaluation for JN.1](#) was published on 19 December 2023, with an overall evaluation of low public health risk at the global level based on available evidence.

The other VOIs, XBB.1.5, XBB.1.16 and EG.5, have decreased in global prevalence during the same period: XBB.1.5 accounted for 3.3% of sequences in week 52, a decrease from 8.3% in week 48; XBB.1.6 accounted for 1.5% of sequences in week 52, a decrease from 6.3% in week 48; EG.5 accounted for 16.6% of sequences in week 52, a decrease from 43.6% in week 48 (Figure 10, Table 6).

All VUMs have shown a decreasing trend over the reporting period (Table 6).

Sufficient sequencing data to calculate variant prevalence at the regional level during weeks 48 to 52 were available from four WHO regions: the Region of the Americas, the Western Pacific Region, the South-East Asia Region, and the European Region (Table 7). Among the VOIs, JN.1 was the most reported variant and showing an increasing trend in all the four regions. Except for XBB.1.16 that showed a small increase in the Western Pacific Region, the other VOIs and all the VUMs in all four regions observed decreasing or stable trends.

With declining rates of testing and sequencing globally (Figure 10), it is increasingly challenging to estimate the severity impact of emerging SARS-CoV-2 variants. There are currently no reported laboratory or epidemiological reports indicating any association between VOIs/VUMs and increased disease severity. As shown in Figure 9 and Figure 10, low and unrepresentative levels of SARS-CoV-2 genomic surveillance continue to pose challenges in adequately assessing the variant landscape.

Table 6. Weekly prevalence of SARS-CoV-2 VOIs and VUMs, week 48 to week 52 of 2024

Lineage	Countries [§]	Sequences [§]	2023-48	2023-49	2023-50	2023-51	2023-52
VOIs							
XBB.1.5*	138	368017	8.3	6.8	5.5	4.6	3.3
XBB.1.16*	125	120423	6.3	4.7	3.3	2.7	1.5
EG.5*	102	187160	43.6	37.1	30.7	23.3	16.6
BA.2.86*	62	12848	7.0	7.8	8.6	6.9	7.8
JN.1*	71	37804	24.8	34.9	45.1	56.8	65.5
VUMs							
DV.7*	49	5275	0.5	0.4	0.2	0.2	0.2
XBB*	141	73870	1.5	1.5	1.5	1.2	0.8
XBB.1.9.1*	126	95843	4.2	3.6	2.3	1.6	1.8
XBB.1.9.2*	106	40567	0.4	0.2	0.2	0.1	0.1
XBB.2.3*	116	48863	2.3	2.3	1.7	1.7	0.9
Unassigned	66	29247	0.2	0.2	0.1	0.2	0.8



[§] Number of countries and sequences are since the emergence of the variants.

* Includes descendant lineages, except those individually specified elsewhere in the table. For example, XBB* does not include XBB.1.5, XBB.1.16, EG.5, XBB.1.9.1, XBB.1.9.2, and XBB.2.3.

Table 7. Weekly prevalence of SARS-CoV-2 VOIs and VUMs by WHO regions, week 48 to week 52 of 2023

Lineage (week 2023-48 to 2023-52)	AMRO	AFRO [‡]	EMRO [‡]	EURO	SEARO	WPRO
VOIs						
XBB.1.5*	↓			↓	↓	↓
XBB.1.16*	↓			↓	↓	↑
EG.5*	↓			↓	↓	↓
BA.2.86*	↔			↔	↓	↔
JN.1*	↑			↑	↑	↑
VUMs						
DV.7*	↓			↓	N/A	↓
XBB*	↓			↓	↓	↓
XBB.1.9.1*	↓			↓	↓	↔
XBB.1.9.2*	↓			↓	N/A	↔
XBB.2.3*	↓			↓	↓	↓

↑ Increasing trend
 ↓ Decreasing trend
 ↔ Stable trend

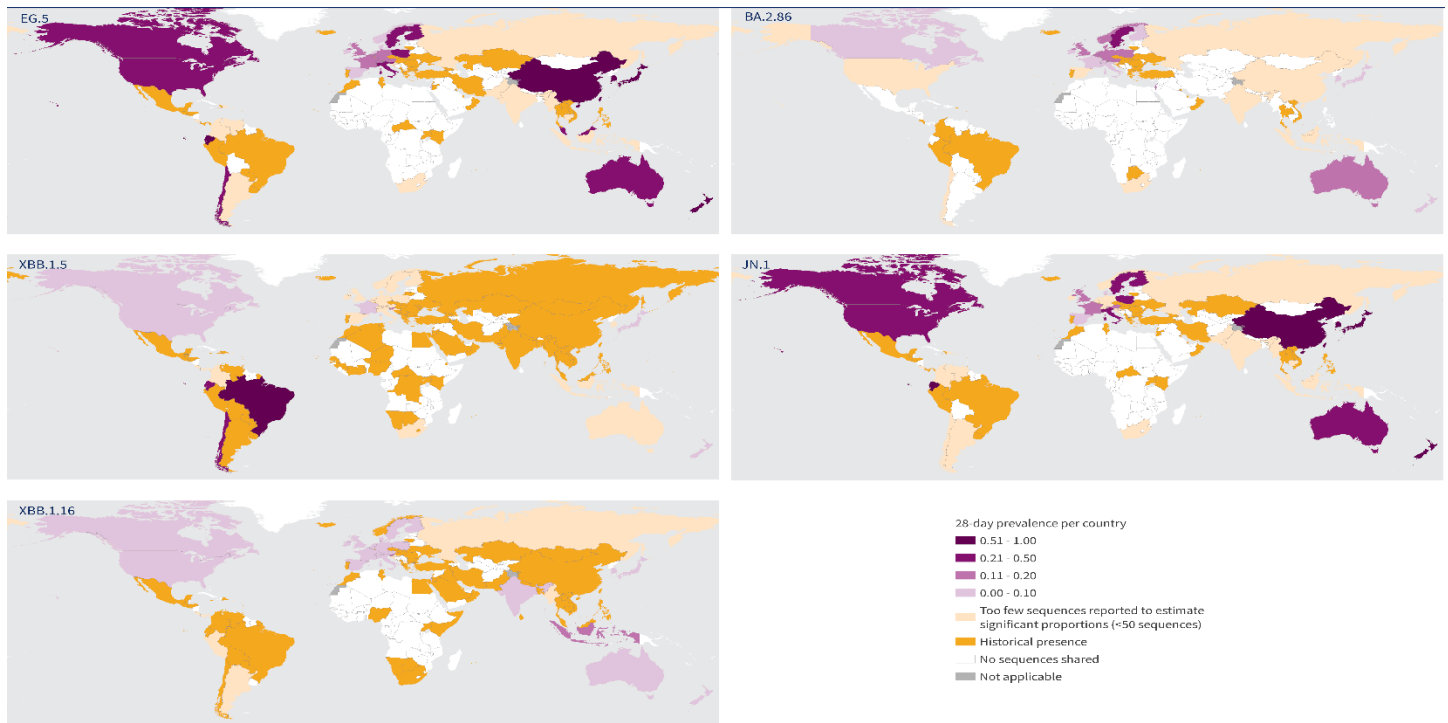
 Insufficient Data
 Most Prevalent variant(s)

* Includes descendant lineages, except those individually specified elsewhere in the table. For example, XBB* does not include XBB.1.5, XBB.1.16, EG.5, XBB.1.9.1, XBB.1.9.2, and XBB.2.3.

[‡] due to the small numbers of sequences submitted in these regions, it has not been possible to determine trends for the VOIs and VUMs in these regions; this is also represented by the shaded cells in the table.

Figure 9. Global 28-day prevalence of EG.5, XBB.1.5, XBB.1.16, BA.2.86, and JN.1, from 11 December 2023 to 7 January 2024 **

Global 28-day prevalence of EG.5, XBB.1.5, XBB.1.16, BA.2.86 and JN.1 (11 December 2023 to 07 January 2024)



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 borders or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization, Global Initiative on Sharing All Influenza Data
Map Production: WHO Health Emergencies Programme
Map Date: 12 January 2024



* Reporting period to account for delay in sequence submission to GISAID.

+ Historical presence indicates countries previously reporting sequences of VOIs but have not reported within the period from 4 November to 3 December 2023

Figure 10. The (A) number and (B) percentage of SARS-CoV-2 sequences, from 3 July to 31 December 2023

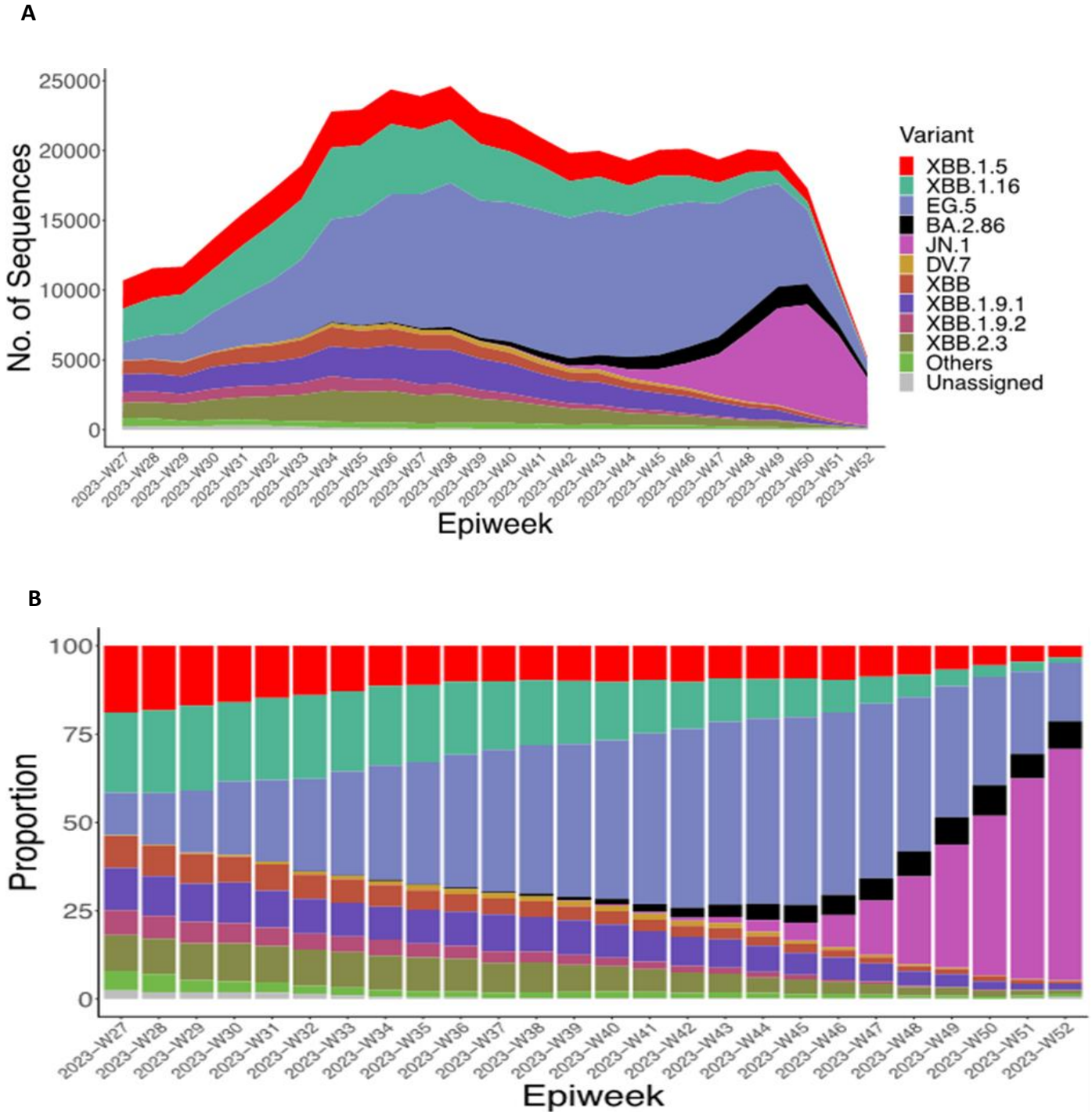


Figure 10. Panel A shows the number, and Panel B the percentage, of all circulating variants since July to December 2023. The variants shown here include descendent lineages, except for the descendent lineage(s) listed here. The *Unassigned* category includes lineages pending for a PANGO lineage name designation, whereas the *Other* category includes lineages that are assigned but not listed here. Source: SARS-CoV-2 sequence data and metadata from GISAID, from 3 July to 31 December 2023.

Additional resources

- [Tracking SARS-CoV-2 Variants](#)
- [WHO statement on updated tracking system on SARS-CoV-2 variants of concern and variants of interest](#)
- [SARS-CoV-2 variant risk evaluation framework, 30 August 2023](#)
- [WHO JN.1 Initial Risk Evaluation, 13 December 2023](#)
- [WHO BA.2.86 Initial Risk Evaluation, 21 November 2023](#)
- [WHO EG.5 Updated Risk Evaluation, 21 November 2023](#)
- [WHO XBB.1.5 Updated Risk Assessment, 20 June 2023](#)
- [WHO XBB.1.16 Updated Risk Assessment, 5 June 2023](#)

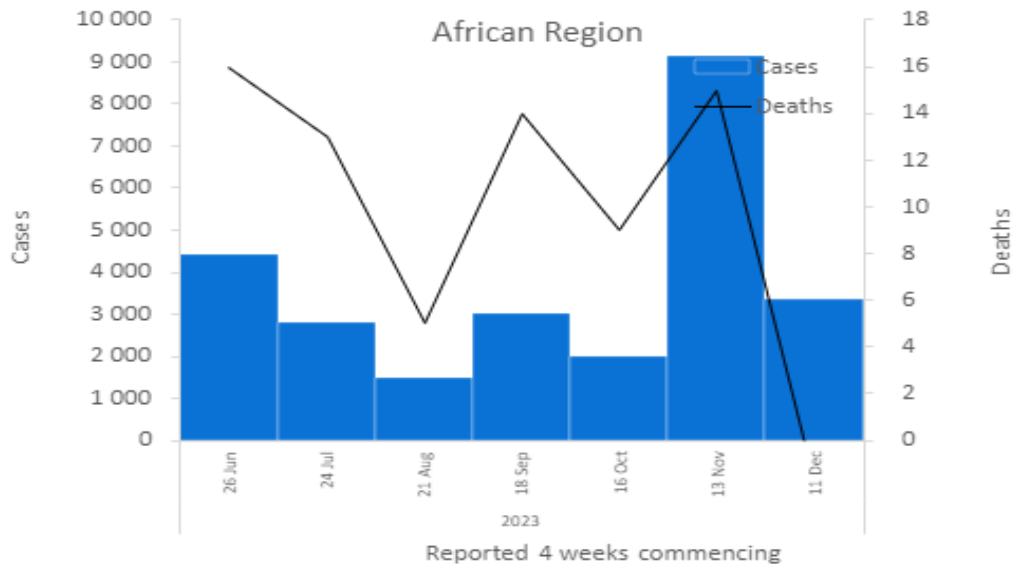
WHO regional overviews

Data for 11 December 2023 to 7 January 2024

African Region

The African Region reported over 3354 new cases, a 63% decrease as compared to the previous 28-day period. Five (10%) 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 Mauritania (30 vs six new cases; +400%), Senegal (17 vs six new cases; +183%), Mali (two vs one new case; +100%), Burundi (78 vs 51 new cases; +53%), and Angola (417 vs 316 new cases; +32%). The highest numbers of new cases were reported from Mauritius (3228 new cases; 253.8 new cases per 100 000; -57%), Angola (417 new cases; 1.3 new cases per 100 000; +32%), and Burundi (78 new cases; <1 new case per 100 000; +53%).

The number of new 28-day deaths in the Region decreased by 113% as compared to the previous 28-day period, with no new deaths reported. The highest numbers of new deaths were reported from Mauritius (1 new death; <1 new death per 100 000; -50%), and Namibia (1 new death; <1 new death per 100 000; -67%).

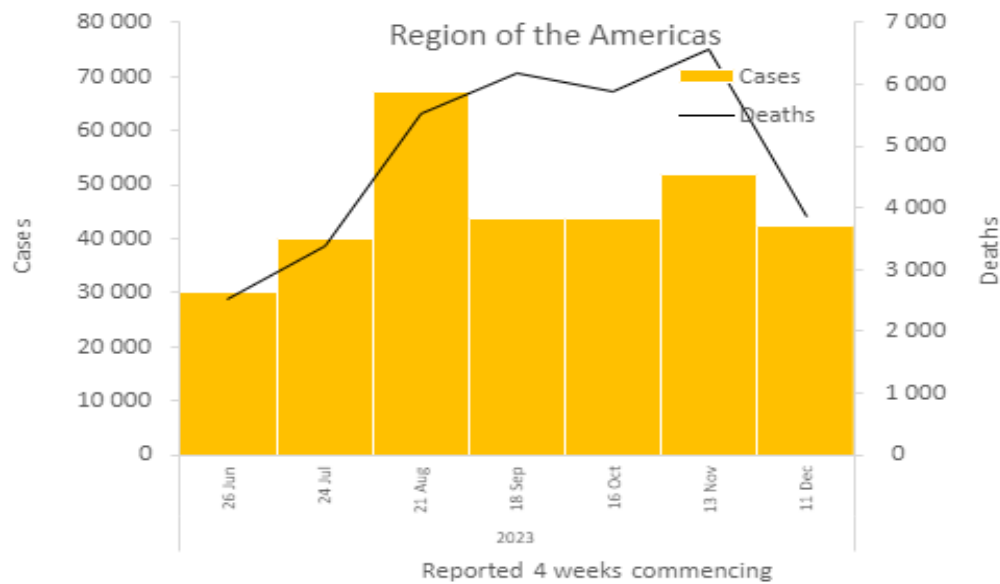


Updates from the [African Region](#)

Region of the Americas

The Region of the Americas reported over 42 000 new cases, an 18% decrease as compared to the previous 28-day period. Seven (12%) 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 Panama (822 vs 180 new cases; +357%), Barbados (33 vs 14 new cases; +136%), Plurinational State of Bolivia (1563 vs 670 new cases; +133%), Guyana (six vs three new cases; +100%), Colombia (1 680 vs 1 266 new cases; +33%), Paraguay (92 vs 73 new cases; +26%), and Jamaica (32 vs 26 new cases; +23%). The highest numbers of new cases were reported from Canada (18 947 new cases; 50.2 new cases per 100 000; -18%), Chile (9693 new cases; 50.7 new cases per 100 000; -25%), and Peru (4657 new cases; 14.1 new cases per 100 000; -38%).

The number of new 28-day deaths in the Region decreased by 41% as compared to the previous 28-day period, with 3869 new deaths reported. The highest numbers of new deaths were reported from the United States of America (3552 new deaths; 1.1 new deaths per 100 000; -40%), Canada (128 new deaths; <1 new death per 100 000; -60%), and Chile (114 new deaths; <1 new death per 100 000; -46%).

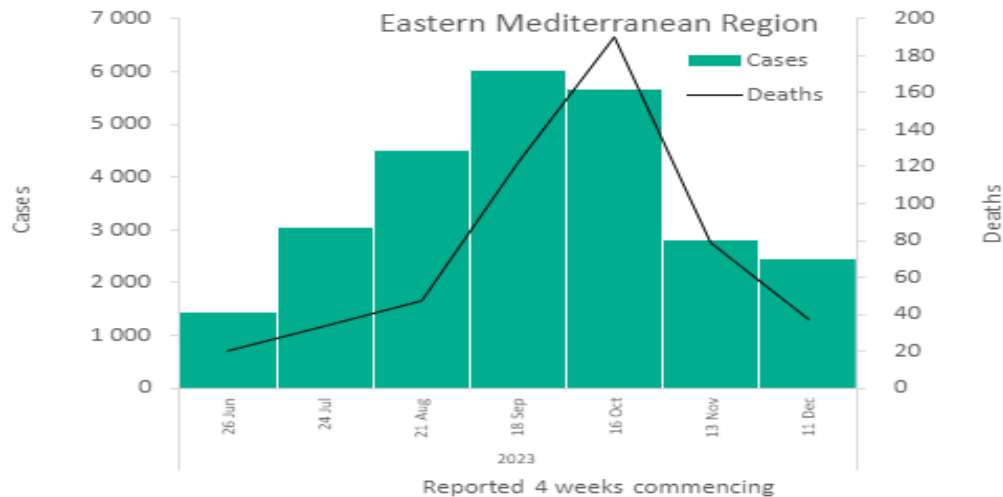


Updates from the [Region of the Americas](#)

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 2464 new cases, a 13% decrease as compared to the previous 28-day period. One (5%) 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 Kuwait (102 vs 39 new cases; +162%). The highest numbers of new cases were reported from Afghanistan (1256 new cases; 3.2 new cases per 100 000; +14%), the Islamic Republic of Iran (663 new cases; <1 new case per 100 000; -48%), and Morocco (443 new cases; 1.2 new cases per 100 000; +6%).

The number of new 28-day deaths in the Region decreased by 53% as compared to the previous 28-day period, with 37 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (27 new deaths; <1 new death per 100 000; -63%), Afghanistan (8 new deaths; <1 new death per 100 000; +60%), and Morocco (2 new deaths; <1 new death per 100 000; +100%).

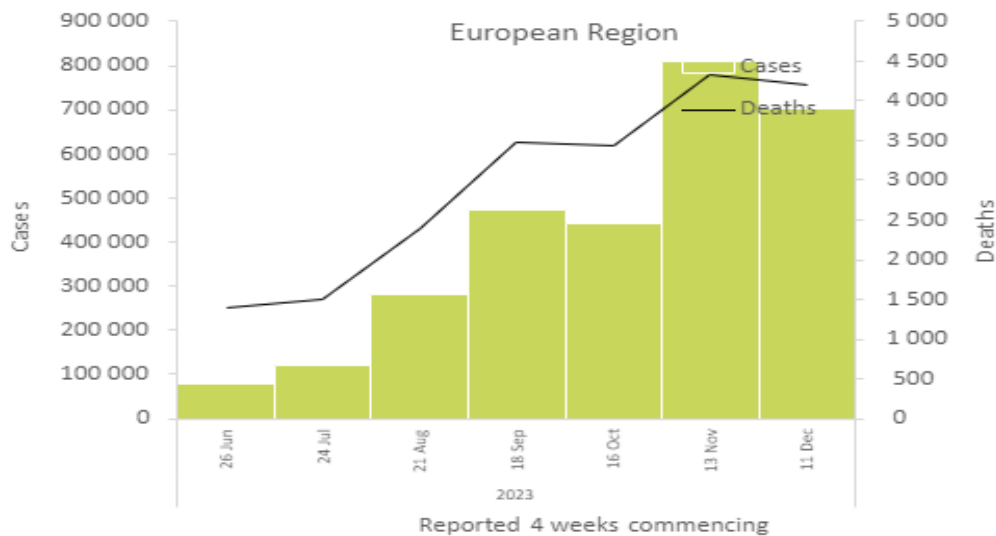


Updates from the [Eastern Mediterranean Region](#)

European Region

The European Region reported over 701 000 new cases, a 13% decrease as compared to the previous 28-day period. 10 (16%) of the 62 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Malta (310 vs 75 new cases; +313%), Republic of Moldova (2951 vs 1485 new cases; +99%), Ireland (3433 vs 1856 new cases; +85%), Greece (68 590 vs 37 925 new cases; +81%), the United Kingdom (37 787 vs 22 791 new cases; +66%), Romania (7380 vs 4916 new cases; +50%), Portugal (4451 vs 3103 new cases; +43%), Belgium (10 653 vs 8 623 new cases; +24%), Luxembourg (2 054 vs 1 696 new cases; +21%), and Netherlands (5330 vs 4442 new cases; +20%). The highest numbers of new cases were reported from the Russian Federation (235 198 new cases; 161.2 new cases per 100 000; -30%), Italy (163 599 new cases; 274.3 new cases per 100 000; -18%), and Greece (68 590 new cases; 639.9 new cases per 100 000; +81%).

The number of new 28-day deaths in the Region decreased by 3% as compared to the previous 28-day period, with 4194 new deaths reported. The highest numbers of new deaths were reported from Italy (1016 new deaths; 1.7 new deaths per 100 000; -21%), the Russian Federation (679 new deaths; <1 new death per 100 000; +45%), and Poland (543 new deaths; 1.4 new deaths per 100 000; +229%).

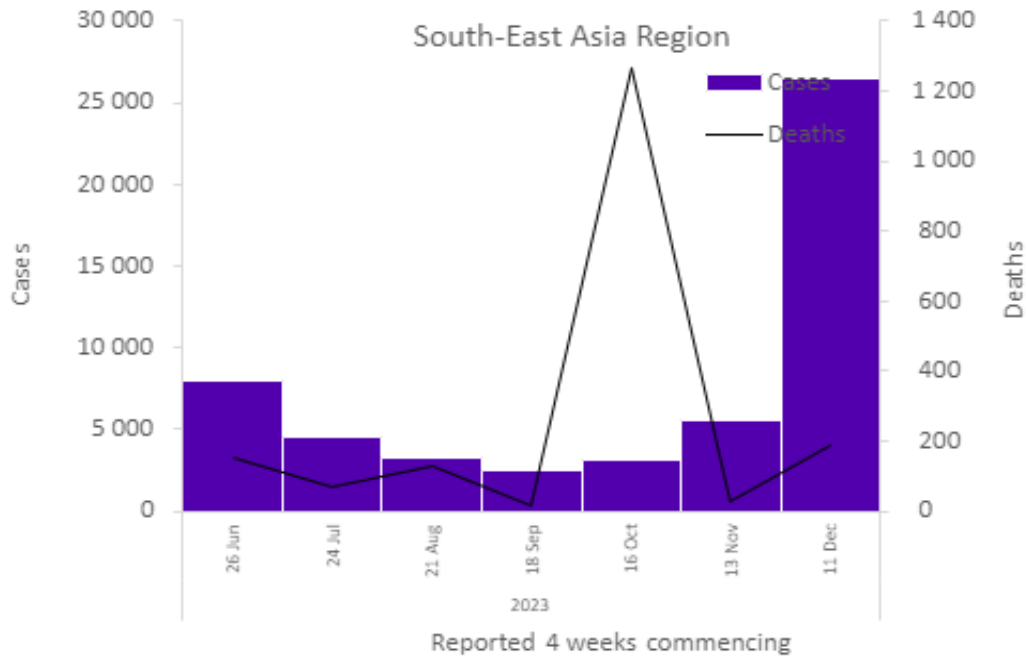


Updates from the [European Region](#)

South-East Asia Region

The South-East Asia Region reported over 26 000 new cases, a 379% increase as compared to the previous 28-day period. Five (45%) 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 (15 079 vs 1599 new cases; +843%), Myanmar (110 vs 20 new cases; +450%), Indonesia (8 610 vs 1727 new cases; +399%), Bangladesh (276 vs 141 new cases; +96%), and Sri Lanka (67 vs 42 new cases; +60%). The highest numbers of new cases were reported from India (15 079 new cases; 1.1 new cases per 100 000; +843%), Indonesia (8610 new cases; 3.1 new cases per 100 000; +399%), and Thailand (2327 new cases; 3.3 new cases per 100 000; +17%).

The number of new 28-day deaths in the Region increased by 564% as compared to the previous 28-day period, with 186 new deaths reported. The highest numbers of new deaths were reported from India (86 new deaths; <1 new death per 100 000; +682%), Indonesia (72 new deaths; <1 new death per 100 000; +1340%), and Thailand (21 new deaths; <1 new death per 100 000; +91%).

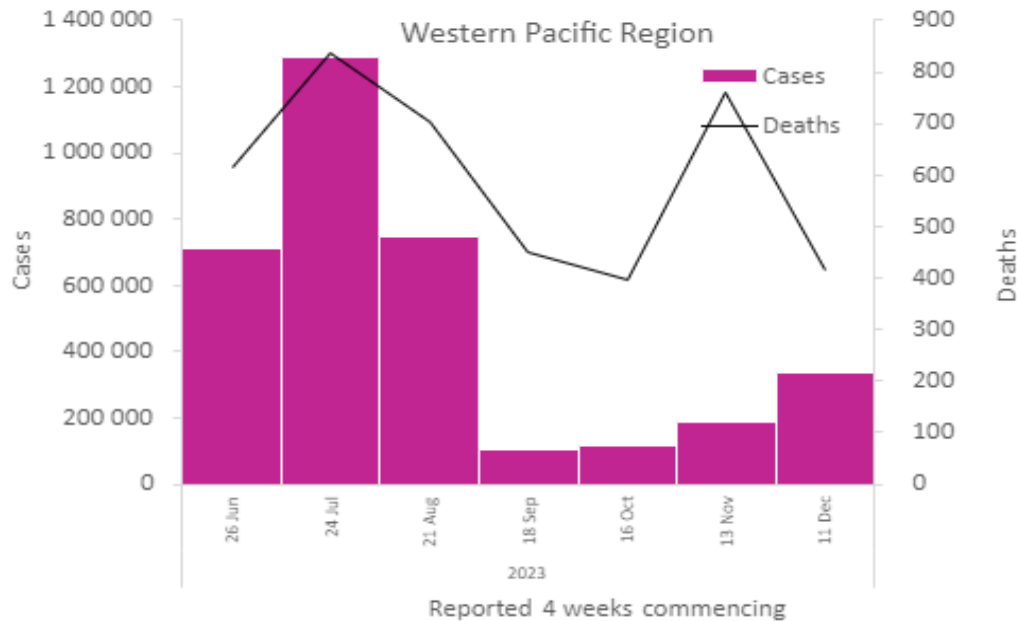


Updates from the [South-East Asia Region](#)

Western Pacific Region

The Western Pacific Region reported over 338 000 new cases, a 77% increase as compared to the previous 28-day period. Ten (29%) 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 Niue (98 vs six new cases; +1533%), Palau (16 vs two new cases; +700%), Tonga (62 vs 12 new cases; +417%), Cook Islands (29 vs six new cases; +383%), Cambodia (76 vs 16 new cases; +375%), Brunei Darussalam (16 648 vs 4 207 new cases; +296%), Malaysia (67 206 vs 25 484 new cases; +164%), the Philippines (10 262 vs 4672 new cases; +120%), Singapore (174 643 vs 80 296 new cases; +117%), and China (2 514 vs 1 674 new cases; +50%). The highest numbers of new cases were reported from Singapore (174 643 new cases; 2985.2 new cases per 100 000; +117%), Malaysia (67 206 new cases; 207.6 new cases per 100 000; +164%), and Australia (41 965 new cases; 164.6 new cases per 100 000; -18%).

The number of new 28-day deaths in the Region decreased by 45% as compared to the previous 28-day period, with 416 new deaths reported. The highest numbers of new deaths were reported from Australia (185 new deaths; <1 new death per 100 000; -67%), Malaysia (97 new deaths; <1 new death per 100 000; +259%), and New Zealand (54 new deaths; 1.1 new deaths per 100 000; -49%).



Updates from the [Western Pacific Region](#)

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. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

A record of historic data adjustment 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.

'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.

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, including descendent lineages of VOCs, to track changes in prevalence and viral characteristics. The current trends describing the circulation of Omicron descendent lineages should be interpreted with due consideration of the limitations of current COVID-19 surveillance. 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.