COVID-19 Epidemiological Update

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Key highlights

- During the four-week reporting period from 27 May to 23 June 2024, weekly SARS-CoV-2 PCR percent test positivity increased from 5.6% to 7.1%, as detected in integrated sentinel surveillance within the Global Influenza Surveillance and Response System (GISRS). During this period, an average of 16 888 specimens from 84 countries were tested for SARS-CoV-2 each week. The highest SARS-CoV-2 activity was observed in the European Region (ranged between 10.5% and 22.2% from 29 countries), followed by the Region of the Americas (ranged between 5.0% and 6.7% from 19 countries), the Eastern Mediterranean Region (ranged between 8.4% and 6.1% from five countries), South-East Asia Region (range between 5.8% and 6.0% from six countries), the Western Pacific Region (ranged between 4.7% and 3.5% from nine countries), and the African Region (ranged between 2.7% and 2.8% from 16 countries).
- KP.3 and LB.1, both descendent lineages of JN.1 and variants under monitoring (VUMs), showed an increasing prevalence globally. They accounted for 40.3% and 7.0% % of sequences in week 25 (week ending on 23 June) compared to 24.4% and 5.6% in week 22, respectively. KP.2 accounted for 16.7% of sequences in week 25 compared to 17.5% in week 22. Globally, JN.1 is the most reported variant of interest (VOI), now reported by 133 countries, accounting for 30.3% of sequences in week 25, having declined from a prevalence of 43.9% in week 22. The last risk evaluation of JN.1 was published on 15 April 2024, 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; two VOIs: BA.2.86 and JN.1; and five VUMs: JN.1.7, JN.1.18, KP.2, KP.3 and LB.1.
- Globally, during the 28-day period from 27 May to 23 June 2024, 95 countries reported COVID-19 cases and 31 countries reported COVID-19 deaths. *Note that this does not reflect the actual number of countries where cases or deaths occur, as many countries have stopped or changed the frequency of reporting.* From the available data, the number of reported cases and deaths have decreased during the 28-day period, with over 135 000 new cases and more than 2000 new deaths, a stable trend and a slight decrease (3%), respectively, compared to the previous 28 days (29 April to 26 May 2024). T*rends 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.
- During the 28-day period from 27 May to 23 June 2024, 47 and 36 countries provided data at least once on COVID-19 hospitalizations and admissions to an intensive care unit (ICU), respectively. From the available data, over 20 000 new hospitalizations and more than 500 new ICU admissions were reported. Among the countries reporting these data consistently over the current and past reporting period, there was an overall increase of 31% and 12% in new hospitalizations and new ICU admissions, respectively. The increasing trend

in hospitalization is mainly driven by countries from the Region of the Americas, the European Region, South-East Asia Region, and the Western Pacific Region while countries from the European and Western Pacific regions accounted for the increase in ICU admissions.

- The global WHO COVID-19 dashboard was updated and adapted with a new interface on 22 December 2023 to support WHO and Member States' transition from COVID-19 as an emergency to longer-term disease management, as outlined in WHO's COVID-19 2023-2025 Updated Strategic Preparedness and Response Plan. The new dashboard will progressively incorporate more components throughout 2024. The link of the previous Global WHO Coronavirus (COVID-19) Dashboard is still active and redirects users to the new one.

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

- WHO Monthly Operational Update and past editions of the 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 4 July 2024)
- Forest Plots displaying results of COVID-19 VE studies (last updated 8 July 2024)
- Special focus WEU on interpreting relative VE (29 June 2022, pages 6-8)
- Neutralization plots (last updated 8 July 2024)
- WHO COVID-19 VE Resources/Immunization Analysis and Insights

Global overview

Data as of 23 June 2024

SARS-CoV-2 test positivity rate from sentinel sites reflects the circulation of the virus in the communities with limited impact from reduced surveillance activities. With the integration of SARS-CoV-2 into existing respiratory disease surveillance systems, more countries started to report SARS-CoV-2 infections to Global Influenza Surveillance and Response System (GISRS). Global and national data on SARS-CoV-2 PCR percent positivity are available on WHO's integrated influenza and other respiratory viruses surveillance dashboard.

Globally, during the four-week reporting period (from 27 May to 23 June 2024), the percent positivity of the specimens tested from sentinel sites slightly increased from 5.6% to 7.1% from an average of 84 countries per week. During this period, on average 16 888 specimens per week were tested for SARS-CoV-2 (Table 1).

Globally, the number of new weekly cases remained stable during the 28-day period of 27 May to 23 June 2024 as compared to the previous 28-day period, with over 0.1 million new cases reported (Figure 2, Table 2). The number of new weekly deaths slightly decreased compared to the previous 28-day period, with over 2 000 new fatalities reported. As of 23 June 2024, over 775 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.[*,†,‡]

Reported cases do not accurately represent infection rates due to the reduction in testing and reporting globally. During this 28-day period, only 41% (95 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 with cases. 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.

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 illness 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 early warning, surveillance and reporting, variant tracking, early clinical care provision, administration of vaccine to high-risk groups, improvements in ventilation, and regular communication.

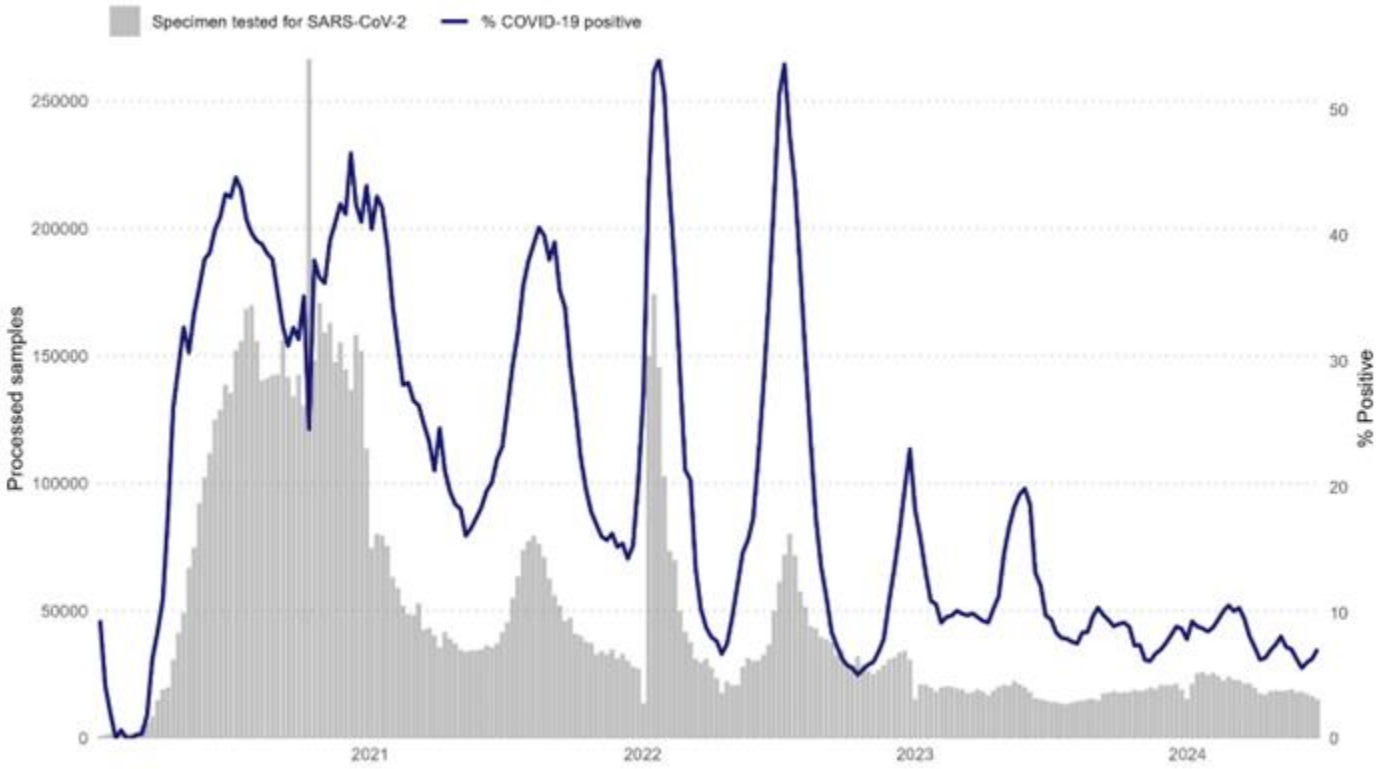
[*] *Show us the data: global COVID-19 wastewater monitoring effectors, equity, and gaps*

[†] *Capturing the SARS-CoV-2 infection pyramid within the municipality of Rotterdam using longitudinal sewage surveillance*

[‡] *Omicron COVID-19 Case Estimates Based on Previous SARS-CoV-2 Wastewater Load, Regional Municipality of Peel, Ontario, Canada*

SARS-CoV-2 Test Positivity

Figure 1. Weekly SARS-CoV-2 percent test positivity reported to FluNet from sentinel sites, from 05 January 2020 to 23 June 2024

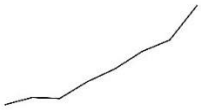
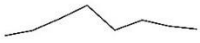


Source: Influenza and SARS-CoV-2 surveillance data from GISRS reported to FluNet; WHO Global Influenza Programme

At the regional level, during the reporting period (27 May to 23 June 2024), the highest SARS-CoV-2 activity was observed in the European Region (ranged between 10.5% and 22.2% from 29 countries), followed by the Region of the Americas (ranged between 5.0% and 6.7% from 19 countries), Eastern Mediterranean Region (ranged between 8.4% and 6.1% from five countries), the South-East Asia Region (ranged between 5.8% and 6.0% from six countries), the Western Pacific Region (ranged between 4.7% and 3.5% from nine countries), and the Africa Region (ranged between 2.7% and 2.8% from 16 countries) (Table 1).

At the country level, 84 countries reported SARS-CoV-2 test positivity from sentinel sites at least once during the reporting period. From the first to fourth week of the reporting period 19 countries reported an increase of more than 2.5% in weekly percent positivity. The highest increase in percent test positivity during the reporting period was reported from Luxembourg (from 0% to 28%), followed by Ireland (from 6% to 29%), Netherlands (from 9% to 29%), Spain (from 21% to 39%), and The United Kingdom (from 8% to 19%). At the end of week ending on 23 June 2024, 18 countries reported an elevated SARS-CoV-2 activity (10% or more) with the five highest being Suriname (100%), Spain (39%), Belgium (33%), Papua New Guinea (33%), and Ireland (29%).

Table 1. SARS-CoV-2 test positivity as reported from sentinel sites by WHO Region during four-week reporting period (27 May to 23 June 2024)

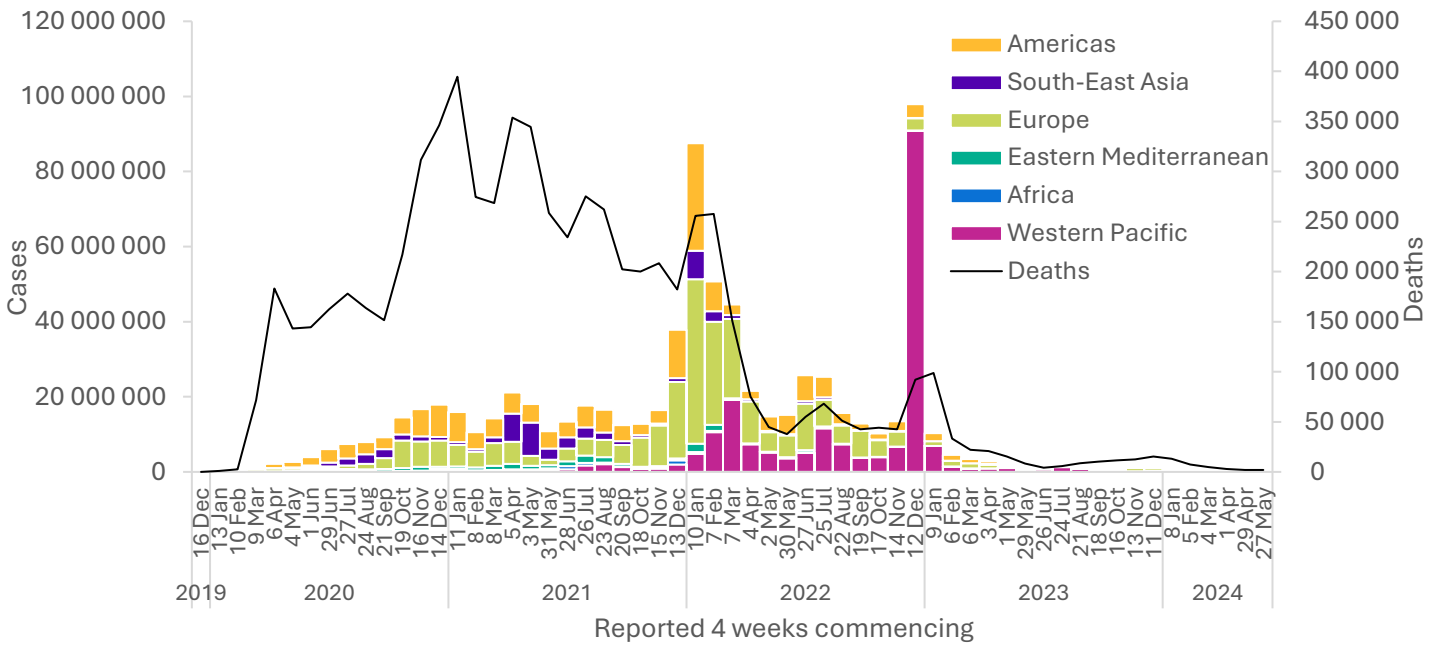
WHO Region	TPR trend for the past eight weeks¥	Number of countries reporting at least once	Weekly percent test positivity* (number of specimens tested)			
			2024-22	2024-23	2024-24	2024-25
Africa		16	2.67% (1200)	2.72% (1251)	3.21% (965)	2.82% (886)
Americas		19	4.97% (3760)	5.16% (3856)	5.94% (3856)	6.70% (2805)
Eastern Mediterranean		5	8.44% (865)	7.07% (707)	5.33% (244)	6.06% (99)
Europe		29	10.45% (2383)	13.86% (2463)	15.78% (2440)	22.18% (2381)
South-East Asia		6	5.82% (997)	7.66% (966)	6.53% (796)	6.00% (816)
Western Pacific		9	4.67% (9043)	4.39% (8175)	4.12% (8229)	3.54% (8370)
Global		**84**	**5.60% (18 248)**	**6.05% (17 418)**	**6.35% (16 530)**	**7.11% (15 357)**

*¥From week 18 to week 25 2024*Percent test positivity is calculated by dividing the number of SARS-CoV-2 detections by the number of specimens tested for SARS-CoV-2 and expressed in percentage. Data from previous weeks are updated continuously with adjustments received from countries*

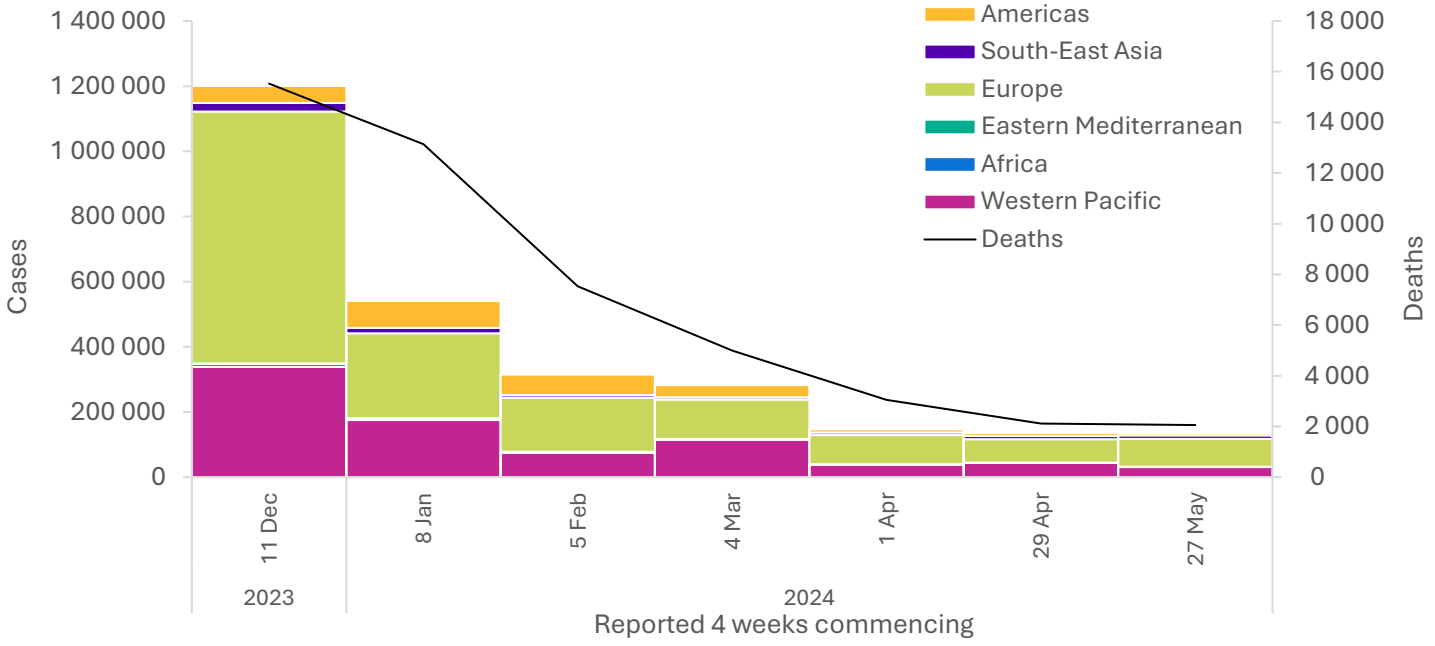
COVID-19 Morbidity and Mortality trends

Figure 2. COVID-19 cases and global deaths by 28-day intervals reported by WHO Region, as of 23 June 2024 (A); 11 December 2023 to 23 June 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 in the Western Pacific Region (-29%) and the Region of the Americas (-21%), remained stable in the South-East Asia Region (+3%); while case numbers increased in the European Region (+21%), and the African Region (+39%). No country from the Eastern Mediterranean Region submitted data on cases during the period. The number of newly reported 28-day deaths decreased across four regions: the South-East Asia Region (-37%), the Western Pacific Region (-22%), the Region of the Americas (-12%), and the African Region (0%); while death numbers increased in the European Region (+65%). There was no reporting of deaths from the Eastern Mediterranean Region.

At the country level, the highest numbers of new 28-day cases were reported from the Russian Federation (38 978 new cases; -15%), New Zealand (19 993 new cases; +51%), the United Kingdom (13 845 new cases; +30%), Thailand (9329 new cases; +27%), and Greece (8444 new cases; +198%). The highest numbers of new 28-day deaths were reported from the United States of America (1284 new deaths; -8%), Portugal (223 new deaths; +758%), the Russian Federation (146 new deaths; -4%), New Zealand (93 new deaths; +50%), Greece (34 new deaths; +143%), and China (32 new deaths; -35%).

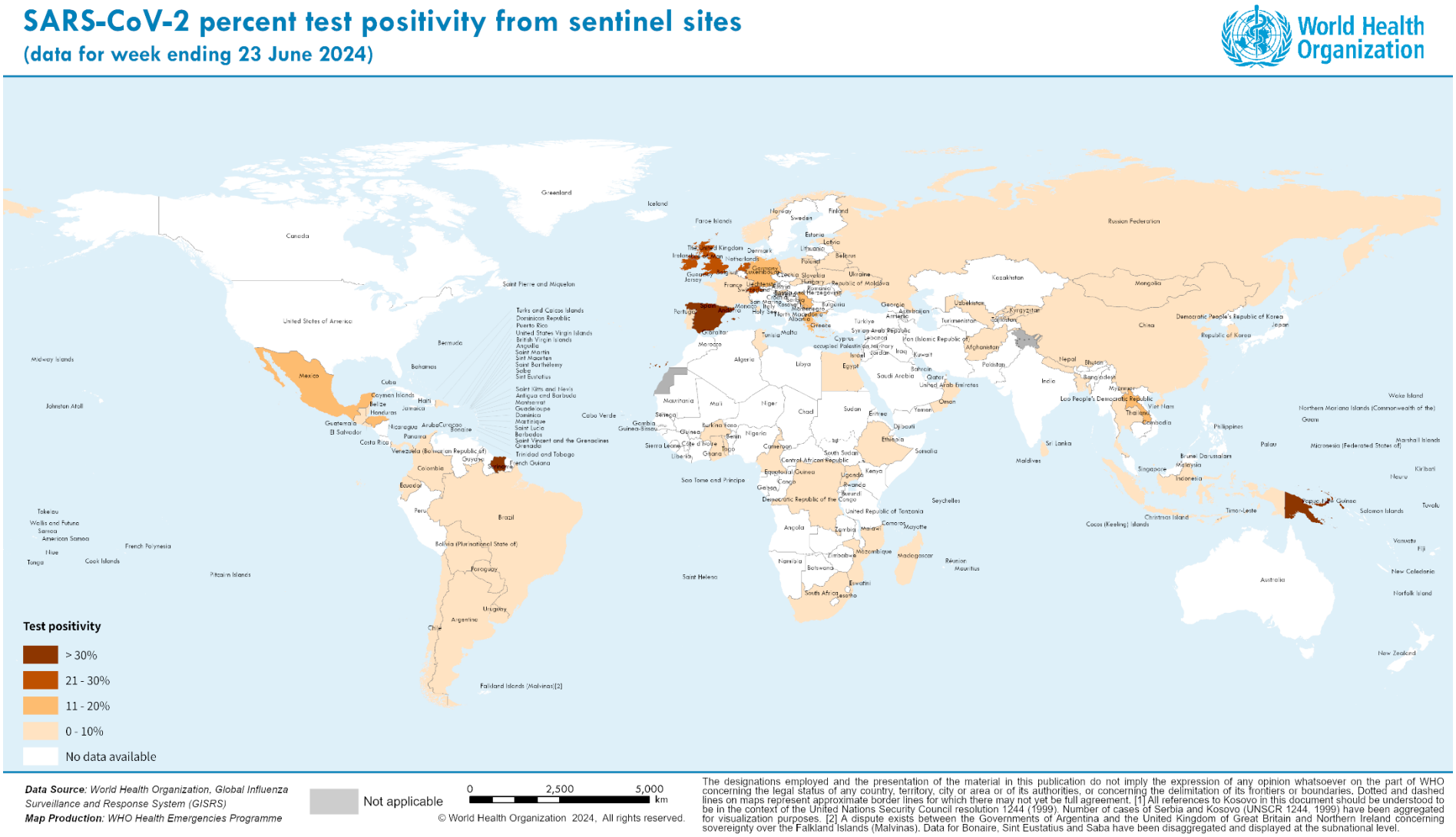
Table 2. Newly reported and cumulative COVID-19 confirmed cases and deaths by WHO Region, as of 23 June 2024**

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	85 822 (63%)	21%	**279 493 438 (36%)**	502 (24%)	65%	**2 272 963 (32%)**	33/61 (54%)	15/61 (25%)
Western Pacific	30 994 (23%)	-29%	**208 492 217 (27%)**	126 (6%)	-22%	**421 125 (6%)**	14/35 (40%)	3/35 (9%)
South-East Asia	11 018 (8%)	3%	**61 303 065 (8%)**	47 (2%)	-37%	**808 760 (11%)**	6/10 (60%)	4/10 (40%)
Americas	6 671 (5%)	-21%	**193 405 437 (25%)**	1 379 (67%)	-12%	**3 022 789 (43%)**	20/56 (36%)	9/56 (16%)
Africa	651 (0%)	39%	**9 580 532 (1%)**	0 (0%)	NA%	**175 510 (2%)**	22/50 (44%)	0/50 (<1%)
Eastern Mediterranean	0 (0%)	N/A	**23 417 911 (3%)**	0 (0%)	N/A	**351 975 (5%)**	0/22 (<1%)	0/22 (<1%)
Global	**135 156 (100%)**	**0%**	**775 693 364 (100%)**	**2 054 (100%)**	**-3%**	**7 053 135 (100%)**	**95/234 (41%)**	**31/234 (13%)**

**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.*

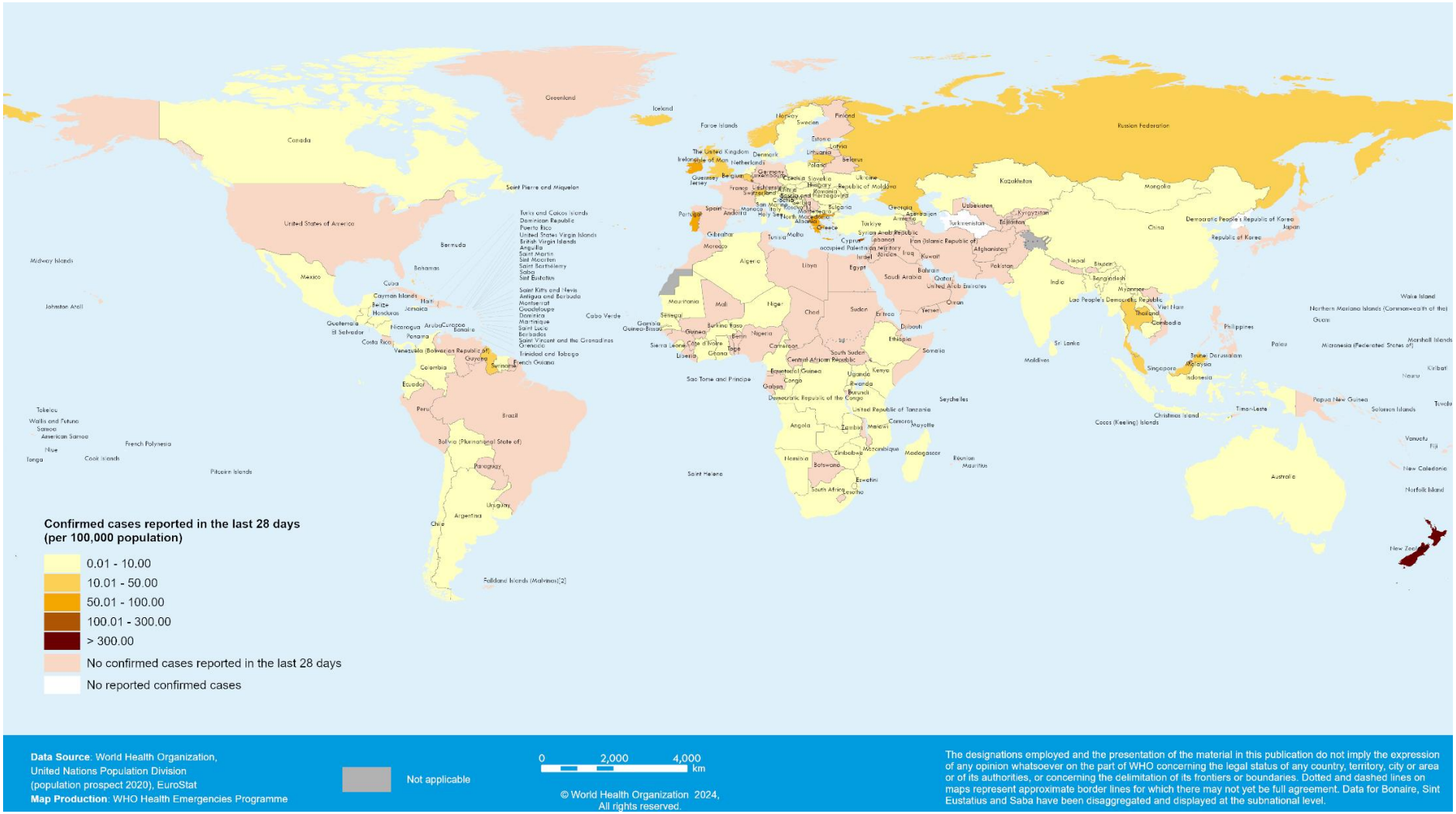
***See Annex 1: Data, table, and figure notes*

Figure 3. SARS-CoV-2 percent test positivity from sentinel sites during the week ending on 23 June 2024



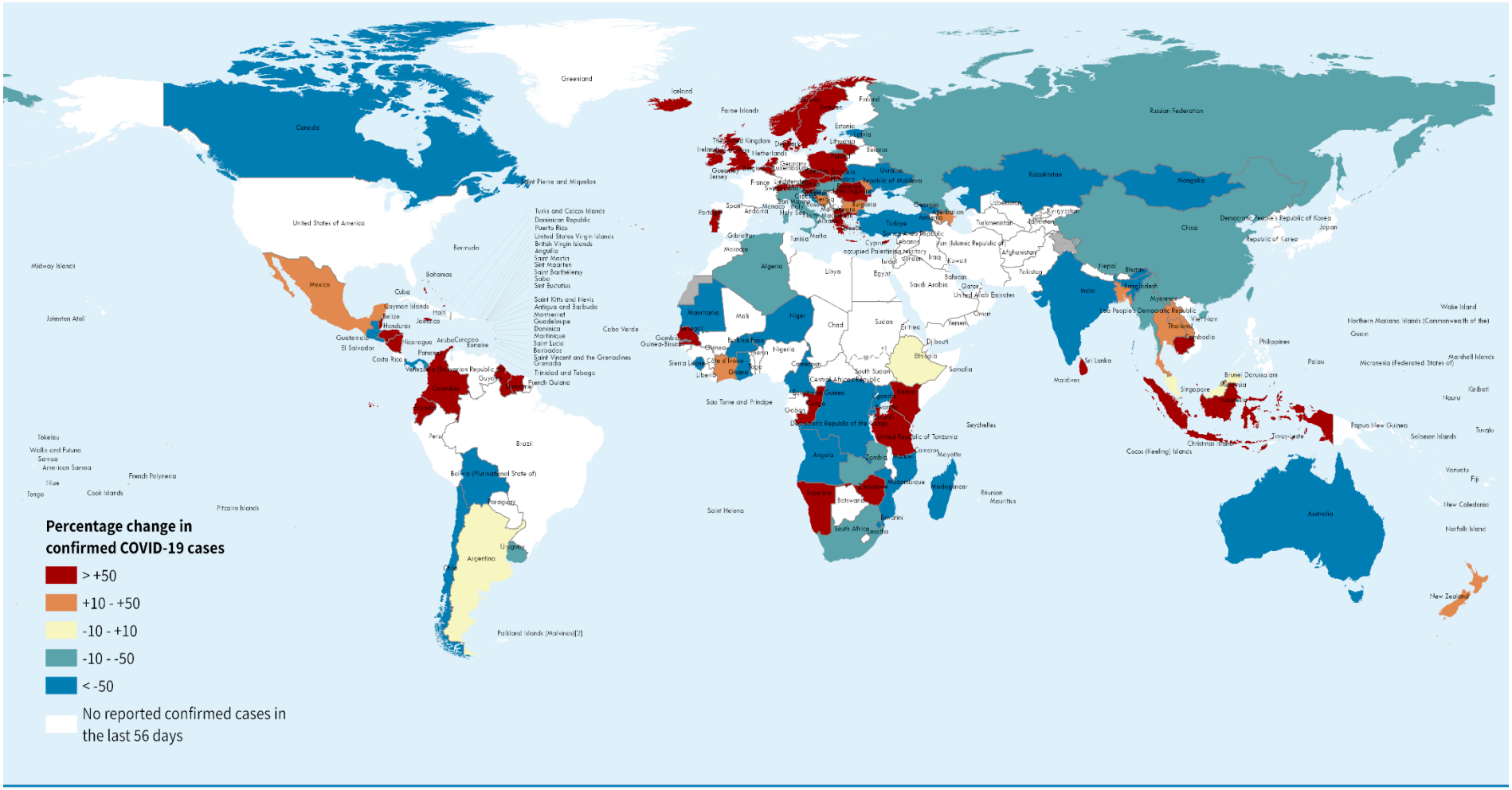
Source: Influenza and SARS-CoV-2 surveillance data from GISRS reported to FluNet; WHO *Global Influenza Programme*

Figure 4. Number of confirmed COVID-19 cases reported over the last 28 days per 100 000 population, as of 23 June 2024**



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

Figure 5. Percentage change in confirmed COVID-19 cases over the last 28 days relative to the previous 28 days, as of 23 June 2024**



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

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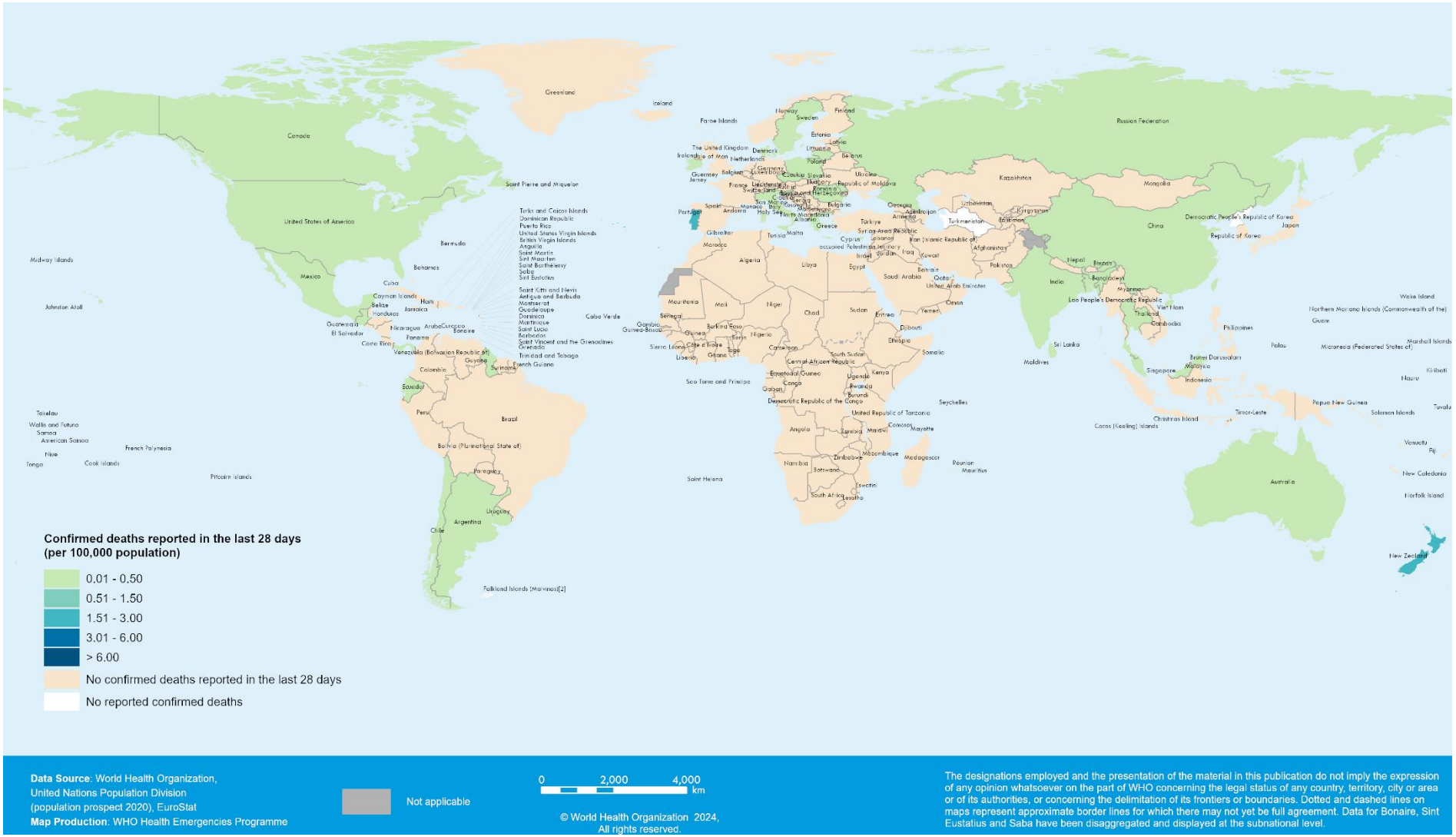
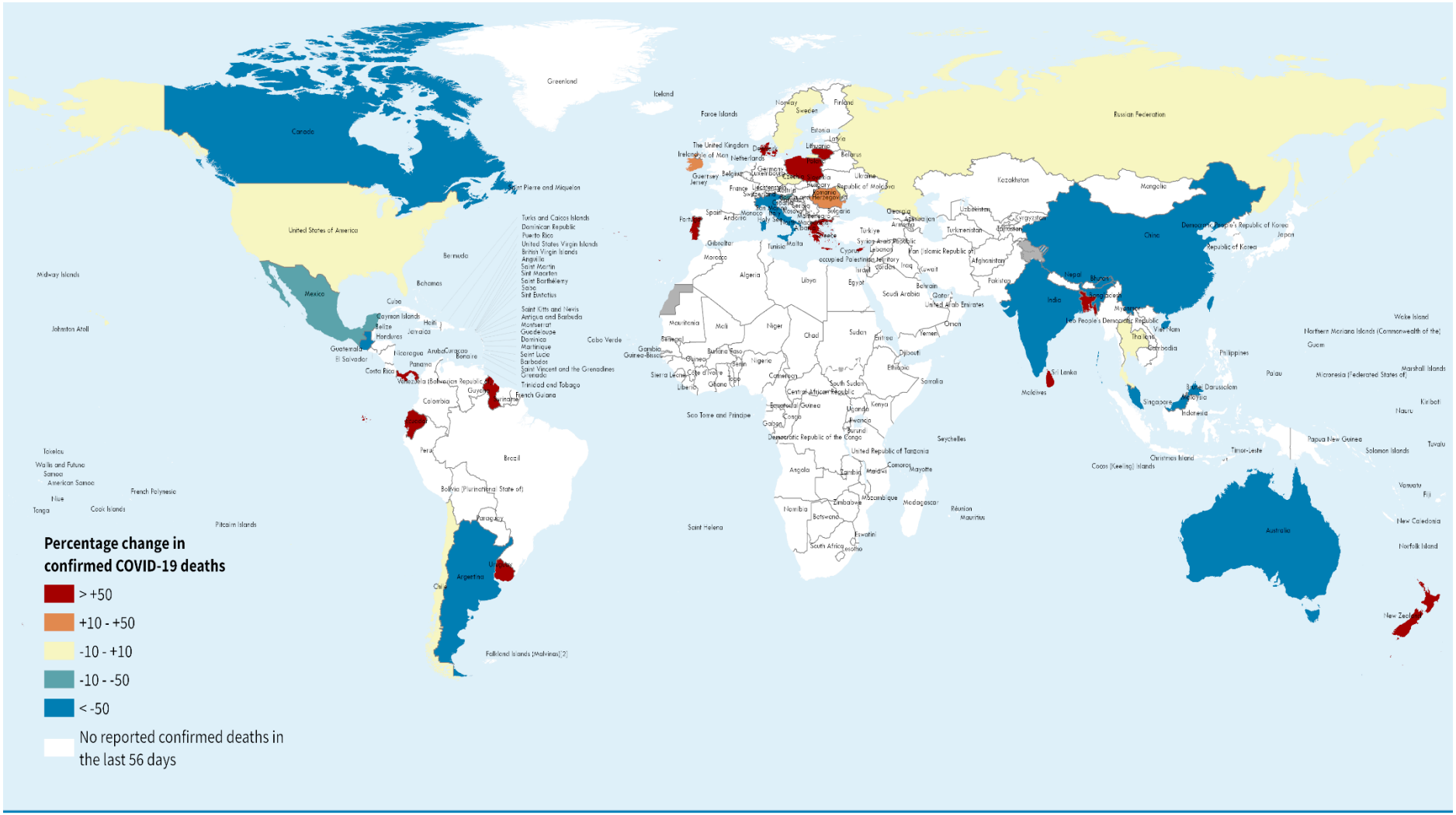
**See *Annex 1: Data, table, and figure notes*

Figure 6. Number of COVID-19 deaths reported over the last 28 days per 100 000 population, as of 23 June 2024 **



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

Figure 7. Percentage change in confirmed COVID-19 deaths over the last 28 days relative to the previous 28 days, as of 23 June 2024**



Data Source: World Health Organization
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**See *Annex 1: Data, table, and figure notes*

Hospitalizations and ICU admissions

At the global level, during the 28 days from 27 May to 23 June 2024, a total of 20 542 new hospitalizations and 524 new ICU admissions were reported from 47 and 36 countries, respectively (Figure 7). Among the countries reporting these data consistently over the current and past reporting period, there was an overall increase of 31% and 12% in new hospitalizations and new ICU admissions, respectively compared to the previous 28 days (29 April to 26 May 2024) (Tables 3 and 4). The increasing trend is mainly driven by countries from the Region of the Americas and the European Region, while countries from other regions reported increases. 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 28-day period from 27 May to 23 June 2024, 47 (20%) countries reported data to WHO on new hospitalizations at least once (Figure 8). The Region of the Americas had the highest proportion of countries reporting data on new hospitalizations (20 countries; 36%), followed by the South-East Asia Region (three countries; 30%), the European Region (15 countries; 25%), the Western Pacific Region (five countries; 14%), and the African Region (four countries; 8%). No country in the Eastern Mediterranean Region shared data during the period. The number of countries that consistently[4] reported new hospitalizations for the period was 35 (15%) (Table 3).

Among the 35 countries consistently reporting new hospitalizations, 14 (40%) countries registered an increase of 20% or greater in hospitalizations during the past 28 days compared to the previous 28-day period: Bangladesh (21 vs 1; >100%), Honduras (9 vs 1; >100%), Malta (83 vs 19; >100%), Cyprus (56 vs 19; >100%), Greece (1198 vs 435; >100%), Ireland (1160 vs 457; >100%), Cambodia (516 vs 233; >100%), Brunei Darussalam (29 vs 16; +81%), Ecuador (268 vs 155; +73%), New Zealand (1614 vs 1115; +45%), United State of America (2183 vs 1524; +43%), Argentina (139 vs 99; 40%), Portugal (207 vs 160; +29%), and Thailand (9329 vs 7355; +27%). The highest numbers of new hospitalizations were reported from Thailand (9329 vs 7355; +27%), United States of America (2183 vs 1528; +43%), and New Zealand (1614 vs 1115; +45%).

Table 3. Number of new hospitalization admissions reported by WHO regions, 27 May to 23 June compared to 29 April to 26 May 2024

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	4/50 (8%)	0	2/50 (4%)	0	N/A
Americas	20/56 (36%)	4732	18/56 (32%)	4721	+24%
Eastern Mediterranean	0/22 (<1%)	N/A[+]	0/22 (<1%)	N/A	N/A
Europe	15/61 (25%)	3127	9/61 (15%)	2769	+148%
South-East Asia	3/10 (30%)	9354	2/10 (20%)	9350	+27%
Western Pacific	5/35 (14%)	3329	4/35 (11%)	2852	+6%
Global	**47/234 (20%)**	**20 542**	**35/234 (15%)**	**19 692**	**+31%**

**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 not applicable.

New ICU admissions

Across the six WHO regions, in the past 28 days, a total of 36 (15%) countries reported data to WHO on new ICU admissions at least once (Figure 8). The Region of the Americas had the highest proportion of countries reporting data on new ICU admissions (13 countries; 23%), followed by the European Region (13 countries; 21%), the Western Pacific Region (six countries; 17%), South-East Asia Region (one country, 10%), and the African Region (three countries; 6%). No country in the Eastern Mediterranean Region shared data during the period. The proportion of countries that consistently reported new ICU admissions for the period was 10% (24 countries) (Table 4).

Among the 24 countries consistently reporting new ICU admissions, seven (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: Ireland (9 vs 1; >100%), New Zealand (66 vs 33; +100%), Ecuador (6 vs 3; +100%), Greece (13 vs 9; +44%), Mexico (10 vs 7; +43%), and Australia (118 vs 91; +30%). The highest numbers of new ICU admissions were reported from Brazil (215 vs 209; +3%), Australia (118 vs 91; +30%), and New Zealand (66 vs 33; +100%)

Table 4. Number of new ICU admissions reported by WHO regions, 27 May to 23 June 2024 compared to 29 April to 26 May 2024

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	3/50 (6%)	0	2/50 (4%)	0[#]	N/A
Americas	13/56 (23%)	270	12/56 (21%)	269	-8%
Eastern Mediterranean	0/22 (<1%)	N/A[+]	0/22 (<1%)	N/A	N/A
Europe	13/61 (21%)	37	5/61 (8%)	22	+120%
South-East Asia	1/10 (10%)	1	0/10 (<1%)	N/A	N/A
Western Pacific	6/35 (17%)	216	5/35 (14%)	206	+42%
Global	**36/235 (15%)**	**524**	**24/235 (10%)**	**497**	**+12%**

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

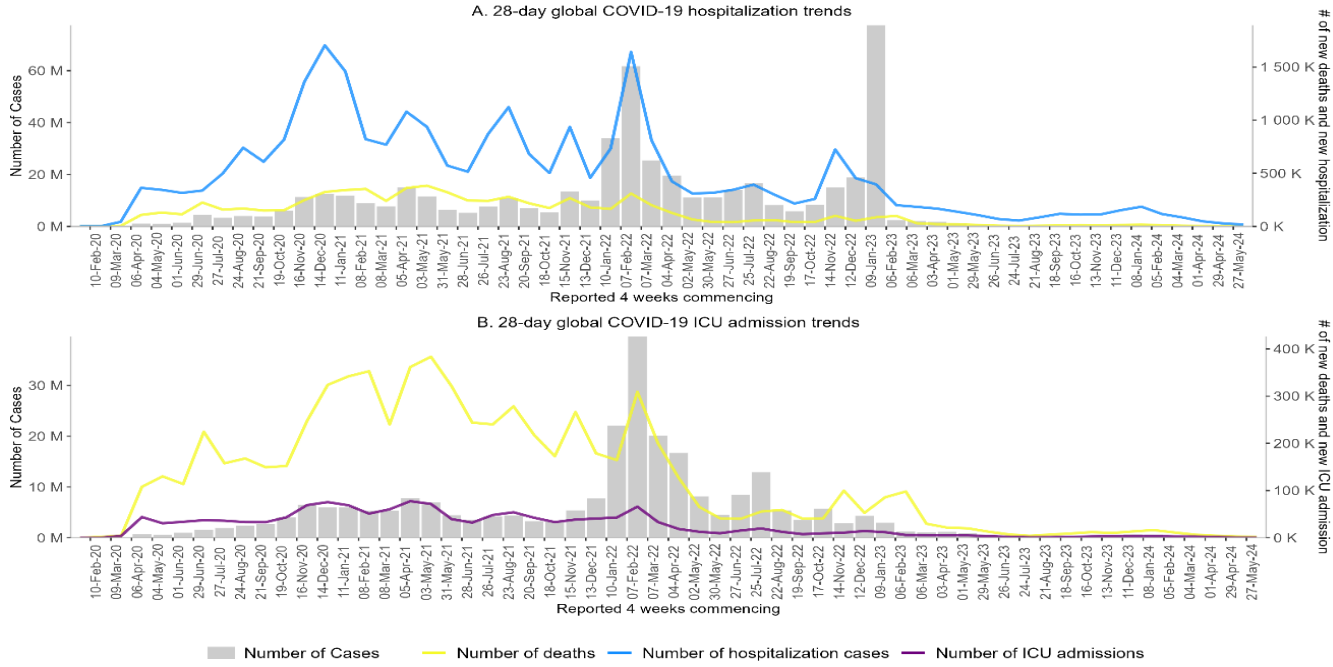
***Number of countries reported / total number of countries in the region (percentage of reporting).*

[+] N/A represents data not available or applicable.

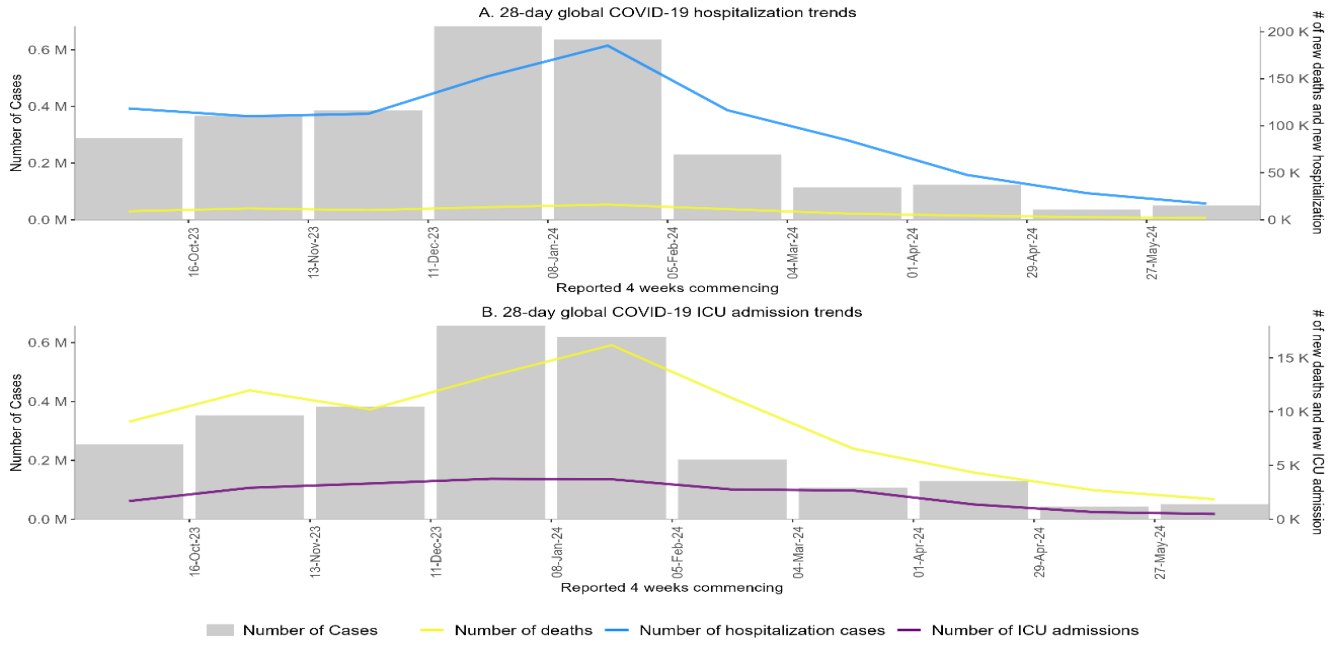
[#] WHO emphasizes the importance of maintaining reporting and encourages countries to report the absence of new admissions ("zero reporting") if there are no new hospital or ICU admissions during the week.

Figure 8. 28-day global COVID-19 hospitalization and ICU admission trends, from 03 February 2020 to 23 June 2024 (A); and from 18 September 2023 to 23 June 2024 (B)

A



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 incidence of ICU admissions per 1000 hospitalizations and the mortality rate per 1000 hospitalizations serve as critical indicators for assessing the severity of COVID-19 during the pandemic, especially since case-based surveillance is no longer systematically conducted. The ICU admissions per 1000 hospitalizations allow us to evaluate the number of patients requiring intensive care in relation to the total number of hospitalizations while number of deaths per 1000 hospitalization allow us to monitor deaths occurring for each 1000 hospitalization.

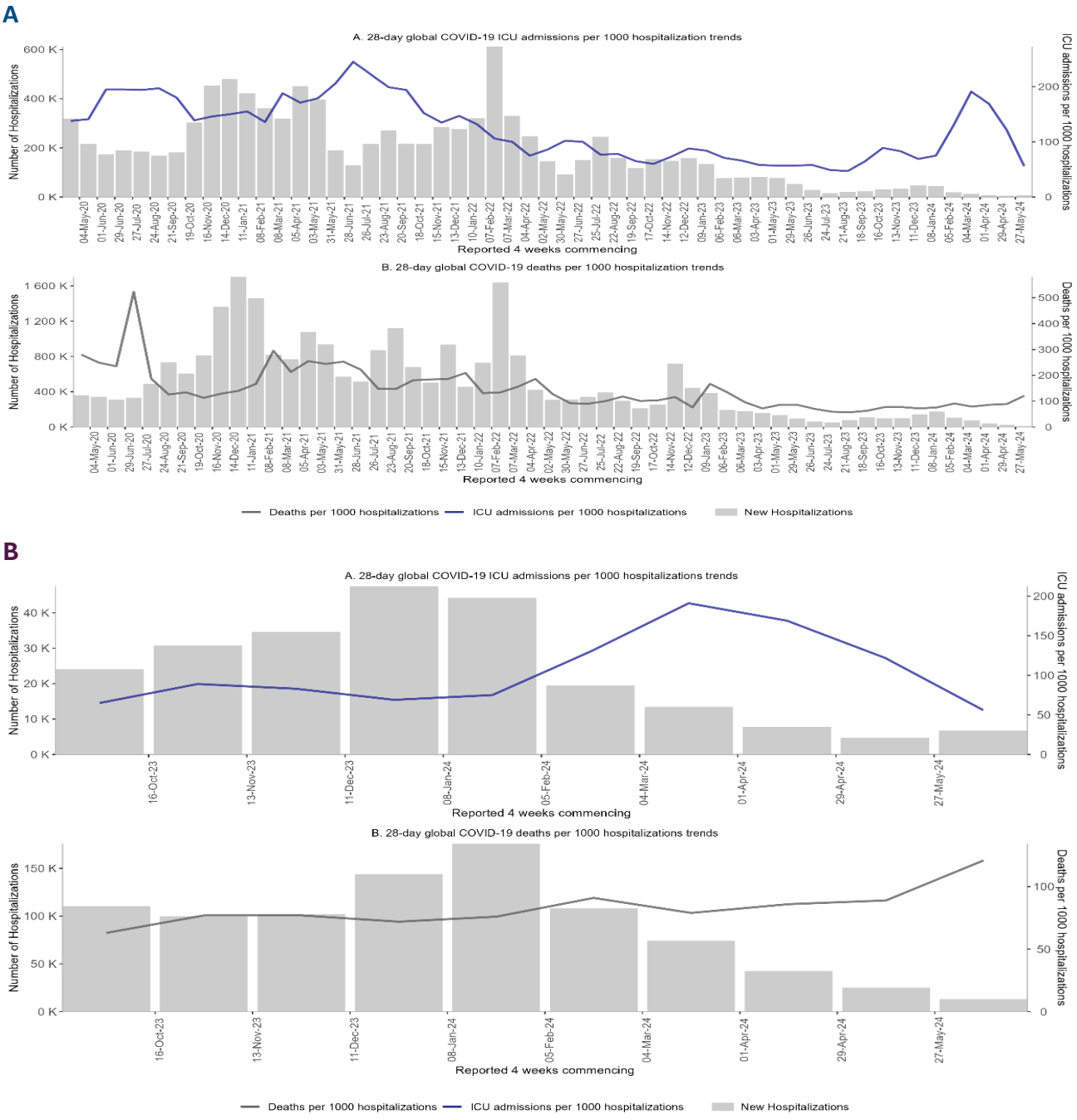
These indicators are subject to the same limitations mentioned in hospitalizations and ICU admissions section and their calculations are limited to the countries reporting all relevant data elements (hospitalizations, ICU admissions and deaths) in a given reporting period. It should be noted that there 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 admissions per 1000 hospitalizations has been decreasing since the peak in July 2021 when the rate was 245 per 1000 hospitalizations, dropping below 132 per 1000 hospitalizations since the beginning of 2022, and to less than 69 per 1000 hospitalizations by the end of 2023 (Figure 8). Since the beginning of 2024, there has been an increase in this rate, rising to above 191 per 1000 hospitalizations in March, and declining to 122 per 1000 hospitalizations in May 2024. We should note that due to limited reporting this does not suggest a global increase in the rate of new hospitalizations requiring intensive care. The number of countries reporting both ICU admissions and hospitalizations continues to decline, and a downward trend of admissions is observed in most of the reporting countries (Table 3 and 4). The combination of these two factors facilitates the fluctuations in the global trend driven by only one or two countries.

The deaths per 1000 hospitalization showed a consistent decline from June 2021 when it reached at 253 per 1000 hospitalizations to a low level of 57 per 1000 hospitalizations in August 2023. However, starting from January 2024, the rate has gradually risen reaching 121 deaths per 1000 hospitalizations by the end of June 2024 (Figure 9).

Please note that the causes for these trends cannot be directly interpreted from these data, but likely include a combination of increases or decreases 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 changed intrinsic virulence amongst newer SARS-CoV-2 variants from these data.

Figure 9. COVID-19 ICU per 1000 hospitalization and death per 1000 hospitalization, from 31 March 2020 to 23 June 2024 (A), and 18 September 2023 to 23 June 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 27 May to 23 June 2024, 20 358 SARS-CoV-2 sequences were shared through GISAID. In comparison, in the two previous 28-day periods, there were 24 550 and 20 747 sequences shared, respectively. The data are 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:
- Variants of interest (VOIs): BA.2.86 and JN.1
- Variants under monitoring (VUMs): JN.1.7, JN.1.18, KP.2, KP.3 and LB.1

Table 5 shows the number of countries reporting VOIs and VUMs, and their prevalence from epidemiological week 22 (27 May to 2 June 2024) to week 25 (17 to 23 June 2024). 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 the most reported VOI (now reported by 133 countries), accounting for 30.3% of sequences in week 25 and having declined from a prevalence of 43.9% in week 22 (Figure 11, Table 5). Its parent lineage, BA.2.86, continues to decline in prevalence, accounting for 0.1% [only five sequences] in week 25 compared to 0.4% in week 22 (Figure 10, Table 6). The last risk evaluation of JN.1 was published on 15 April 2024, with an overall evaluation of low public health risk at the global level based on available evidence.

The four listed VUMs are all JN.1 descendent lineages. KP.3 and LB.1 are showing increasing prevalence globally, KP.2 and JN.1.18 are stable, and JN.1.7 is declining. KP.2 accounted for 16.7% of sequences in week 25 compared to 17.5% in week 22, KP.3 accounted for 40.3% of sequences in week 25 compared to 24.4% in week 22, JN.1.7 accounted for 1.0% of sequences in week 25 compared to 2.4% in week 22, JN.1.18 accounted for 1.9% of sequences in week 25 compared to 2.2% in week 22, and LB.1 accounted for 7.0% in week 25 compared to 5.6% in week 22.

There is heterogeneity in the number of sequences shared by regions and the relative proportions of SARS-CoV-2 variants between and within regions. For example, the majority of the global BA.2.86 sequences are shared by the region of the Americas (AMR), the Western Pacific region (WPR) and the South-East Asia region (SEAR), BA.2.86 represents <1% of the SARS-CoV-2 sequences from these regions over the past 28-days. On the other hand, BA.2.86 represented between ~8% of variants in the AFR region and none from the eastern mediterranean region (EMR) over the same period. Further, whereas overall prevalence of KP.3 is higher (ranging from 26 to 46%) than that of KP.2 (ranging from 18% to 25%) in the WPR in the last 28 days, KP.2 represents more than 60% of circulating variants over the same time period in Singapore (with KP.3 at less than 5%), with the opposite trend seen in Japan where KP.3 accounting for more than 60% of circulating variants and KP.2 at less than 4%.

With declining rates of testing and sequencing globally (Figure 11), 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 10 and Figure 11, low and unrepresentative levels of SARS-CoV-2 genomic surveillance continue to pose challenges in adequately assessing the variant landscape.

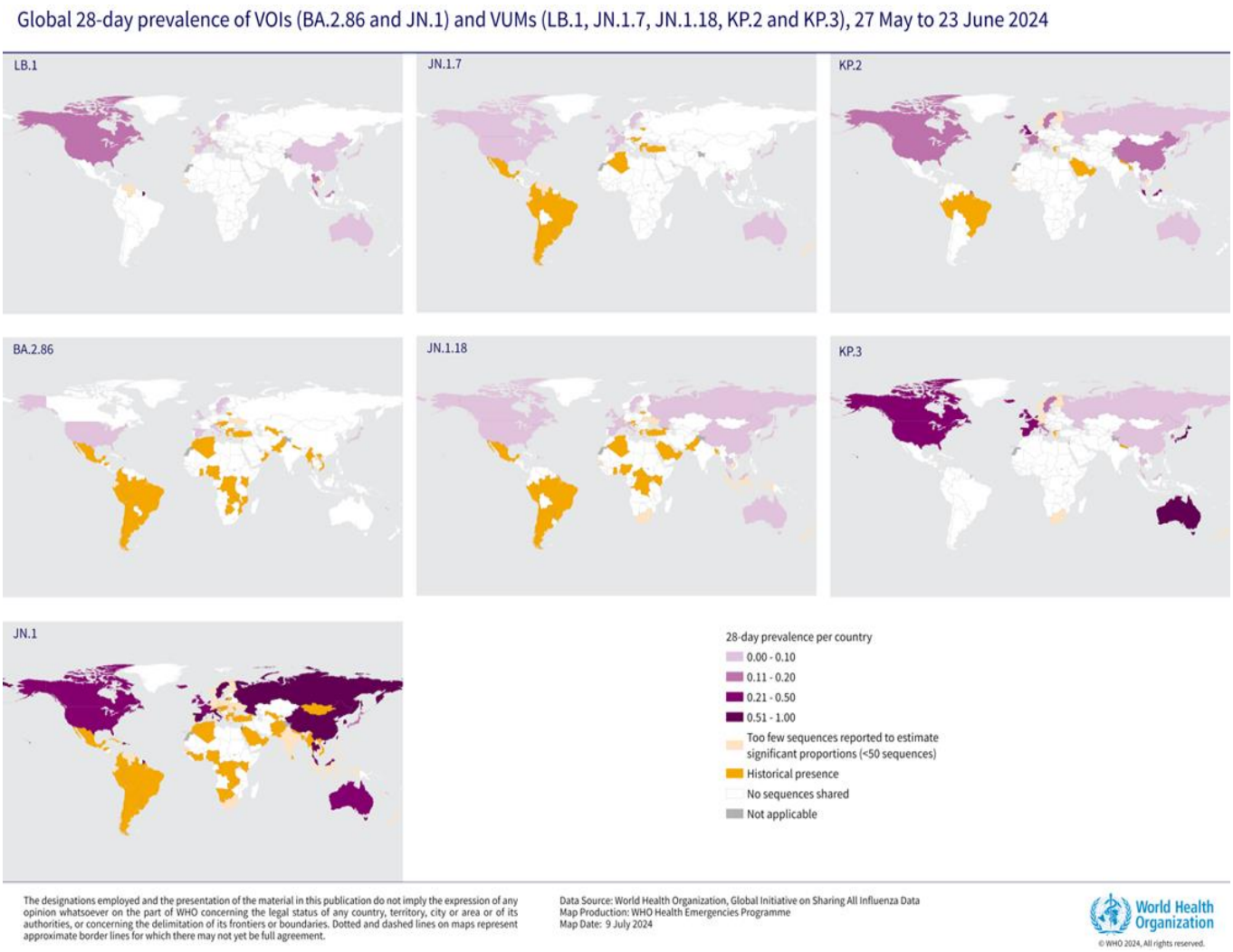
Table 5. Weekly prevalence of SARS-CoV-2 VOIs and VUMs, week 22 to week 25 of 2024

Lineage*	Countries§	Sequences§	2024-22	2024-23	2024-24	2024-25
VOIs						
BA.2.86	100	23467	0.4	0.1	0.3	0.1
JN.1	133	225012	43.9	36.9	33.7	30.3
VUMs						
JN.1.7	63	8399	2.4	1.8	1.4	1.0
KP.2	52	9960	17.5	21.0	15.6	16.7
KP.3	42	12270	24.4	28.9	36.5	40.3
JN.1.18	76	3521	2.2	1.6	2.0	1.9
LB.1	40	2626	5.6	6.6	7.2	7.0
Recombinant	141	484892	3.5	3.0	3.0	2.1
Unassigned	57	3748	0.0	0.1	0.1	0.4
Others	89	12139	0.1	0.1	0.2	0.2

§ Number of countries and sequences are since the emergence of the variants. Note, however, that this does not apply to recombinants, unassigned and the other variants categories, and only from 1 June 2023.

* Includes descendant lineages, except those individually specified elsewhere in the table. For example, JN.1* does not include JN.1.7, JN.1.18, KP.2, KP.3 and LB.1

Figure 10. Global 28-day prevalence of VOIs (BA.2.86 and JN.1) and VUMs (JN.1.7, JN.1.18, KP.2, KP.3 and LB.1), 27 May to 23 June 2024*



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

+ Historical presence indicates countries previously reporting sequences of VOIs and VUMs but have not been reported within the period from 27 May to 23 June 2024

Figure 11. The (A) number and (B) percentage of SARS-CoV-2 sequences, from 27 May to 23 June 2024

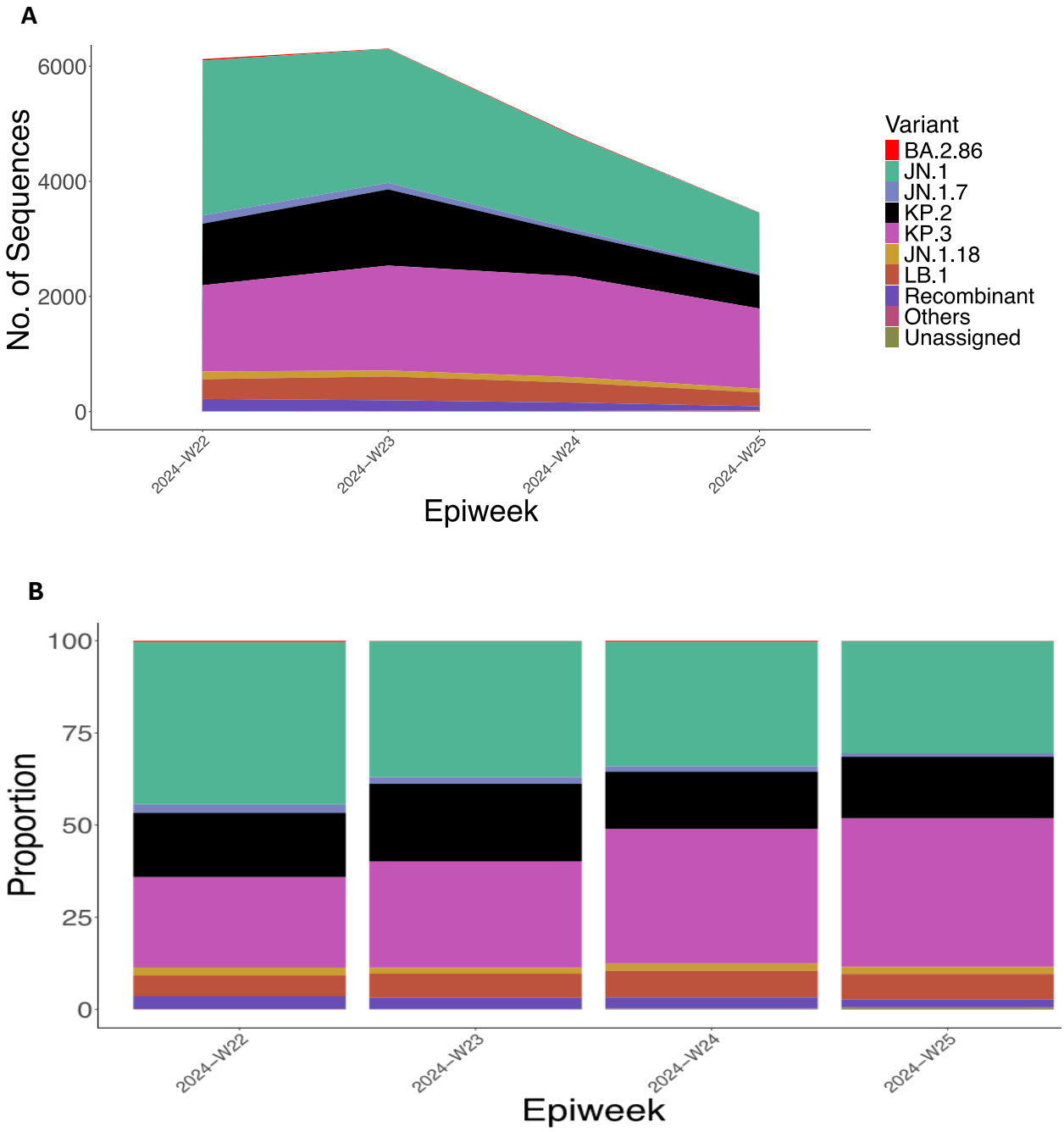


Figure 10. Panel A shows the number, and **Panel B** the percentage, of all circulating variants from 27 May to 23 June 2024. The variants shown here include descendent lineages, except for the descendent lineage(s) listed here. The *Unassigned* category includes lineages pending for a PANGO lineage name designation, *Recombinant* includes all SARS-CoV-2 recombinant lineages not listed here, and the *Other* category includes lineages that are assigned but not listed here. Source: SARS-CoV-2 sequence data and metadata from GISAID, from 27 May to 23 June 2024, downloaded on 8th July 2024.

Additional resources

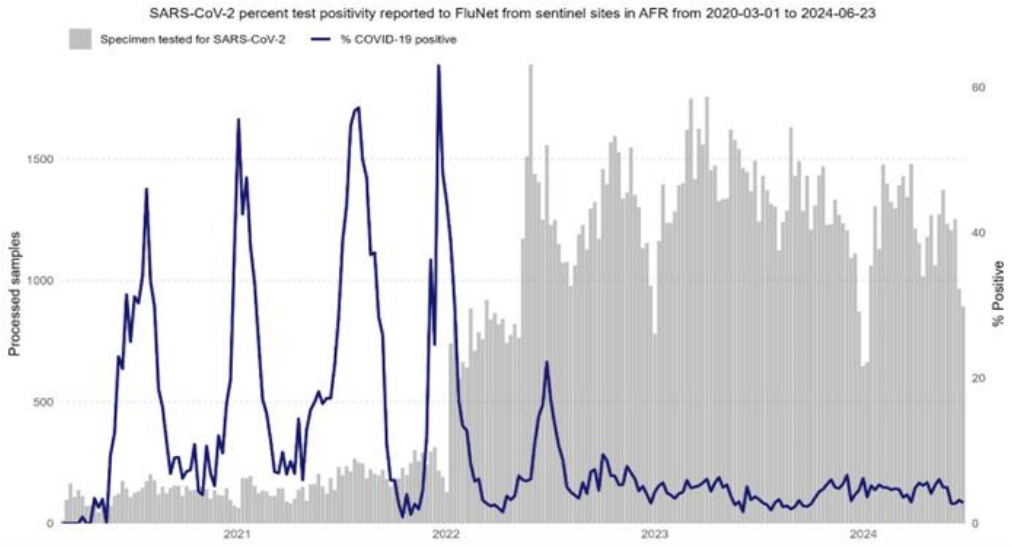
- Tracking SARS-CoV-2 Variants
- WHO statement on updated tracking system on SARS-CoV-2 variants of concern and variants of interest
- SARS-CoV-2 variant risk evaluation framework, 30 August 2023
- WHO JN.1 Updated Risk Evaluation, 9 February 2024
- WHO BA.2.86 Initial Risk Evaluation, 21 November 2023

WHO regional overviews

Regional trends of SAR-CoV-2 test positivity from sentinel sites

African Region

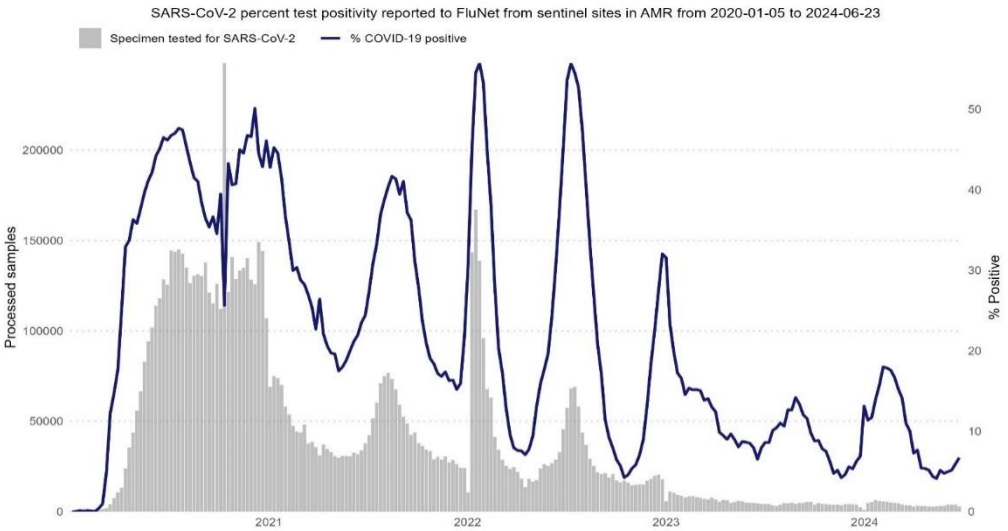
The African Region SARS-CoV-2 weekly percent test positivity from sentinel sites changed from 2.7 to 2.82% reported from 16 countries reporting at least once during the four-week reporting period. Two countries reported an increase of more than 2.5% in percent test positivity during the four-week reporting period: Democratic Republic of the Congo (from 0% to 4.88%) and South Africa (1.8% to 5.1%). No countries have shown an elevated SARS-CoV-2 activity (10% or more) in the final week. During the reporting period, the weekly average number of specimens tested was 1075.



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

Region of the Americas

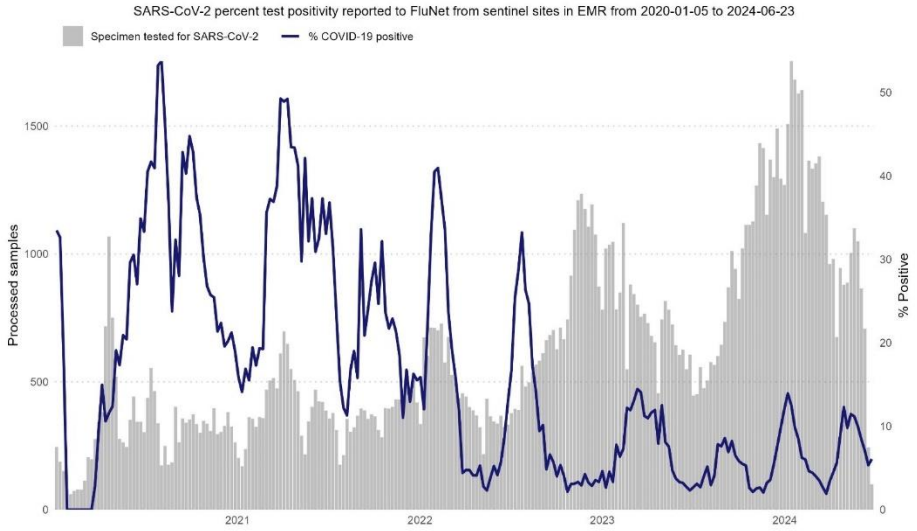
The Region of Americas SARS-CoV-2 weekly percent test positivity from sentinel sites changed from 4.97% to 6.7% reported from 19 countries reporting at least once during the four-week reporting period. Four countries reported an increase of more than 2.5% in percent test positivity during the four-week reporting period: Mexico (from 9.8% to 16.2%), Dominican Republic (0% to 4.6%), Panama (2.1% to 4.9%), and Honduras (11.8% to 14.3%). Among the countries that reported an increase, three showed an elevated SARS-CoV-2 activity (10% or more) in the final week: Suriname (100%), Mexico (16.2%), and Honduras (14.3%). During the reporting period, the weekly average number of specimens tested was 3569.



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

Eastern Mediterranean Region

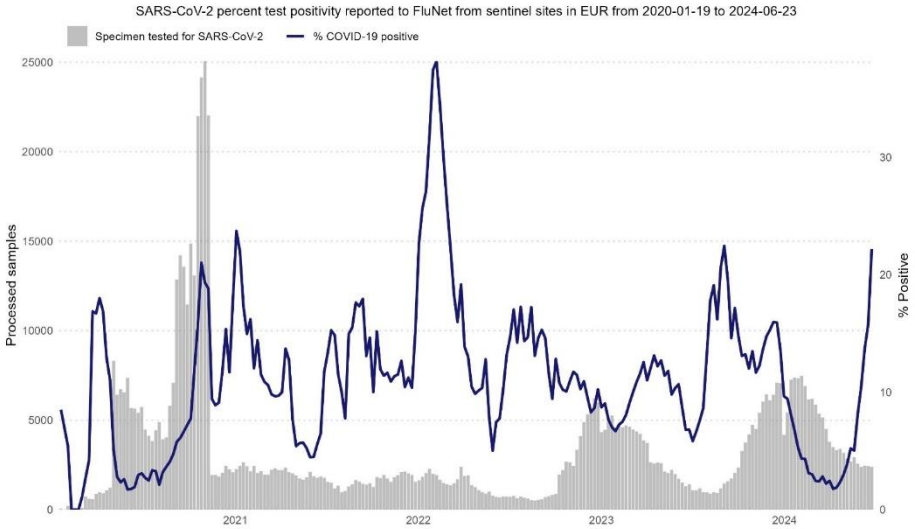
The Eastern Mediterranean Region SARS-CoV-2 weekly percent test positivity from sentinel sites changed from 8.4% to 6.1% reported from 5 countries reporting at least once during the four weeks reporting period. One country reported an increase of more than 2.5% in percent test positivity during the four-week reporting period: Egypt (from 5.0% to 8.7%). No country showed an elevated SARS-CoV-2 activity (10% or more) in the final week. During the reporting period, the weekly average number of specimens tested for SARS-CoV-2 was 478.



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

European Region

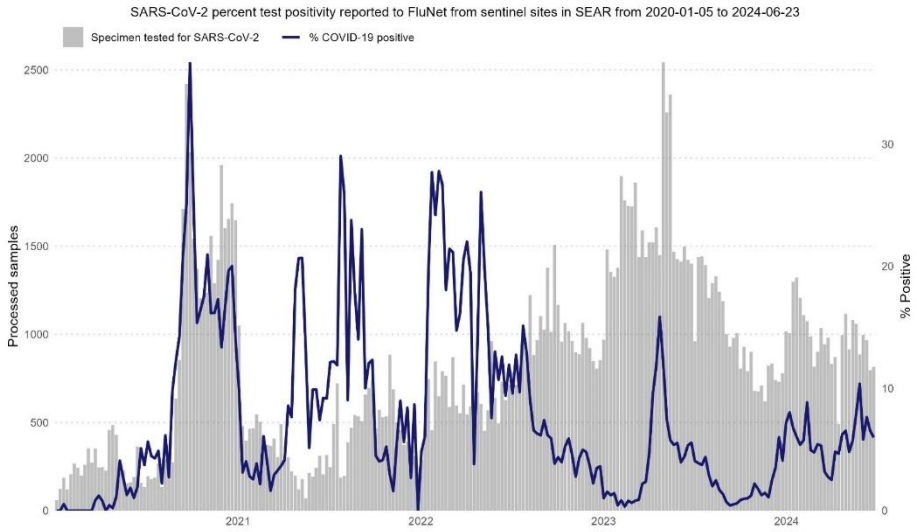
The European Region SARS-CoV-2 weekly percent test positivity from sentinel sites during the four weeks reporting period changed from 10.45% to 22.18% reported from 29 countries. Nine countries reported an increase of more than 2.5% in percent test positivity during the four-week reporting period: Luxembourg (from 0% to 28.6%), Ireland (6.1% to 29.2%), Netherlands (9.1% to 29.2%), Spain (20.7% to 38.6%), The United Kingdom (8.4% to 19.1%), Denmark (1.5% to 10.8%), Germany (1.3% to 10.5%), Norway (0% to 4.2%), and Greece (11.9% to 15.5%). Twelve countries showed an elevated SARS-CoV-2 activity (10% or more) in the final week: Spain (38.6%), Belgium (33.3%), Ireland (29.2%), Netherlands (29.2%), Luxembourg (28.6%), Switzerland (26.3%), Portugal (25.0%), The United Kingdom (19.1%), Greece (15.5%), Serbia (14.3%), Denmark (10.8%), and Germany (10.5%). During the reporting period, the weekly average number of specimens tested for SARS-CoV-2 was 2416.



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

South-East Asia Region

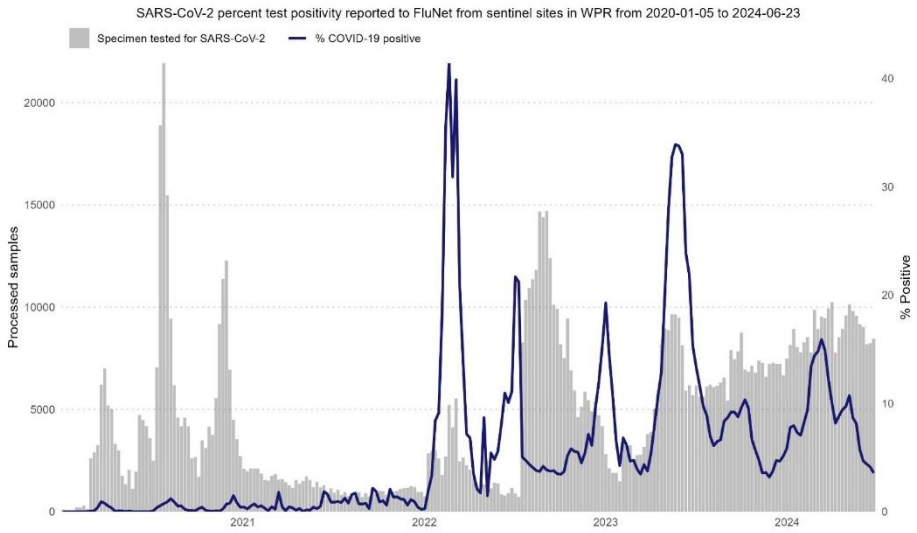
The South-East Region SARS-CoV-2 weekly percent test positivity from sentinel sites during the four weeks reporting period changed from 5.8% to 6.0% reported from 6 countries reporting at least once. Two countries reported an increase of more than 2.5% in percent test positivity during the four-week reporting period: Indonesia (from 2.3% to 7.4%) and Bangladesh (2.8% to 6.2%). No country showed an elevated SARS-CoV-2 activity (10% or more) in the final week. During the reporting period, the weekly average number of specimens tested for SARS-CoV-2 was 893.



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

Western Pacific Region

The Western Pacific Region SARS-CoV-2 weekly percent test positivity from sentinel sites changed from 4.7% to 3.5% reported from 9 countries reporting at least once during the four weeks reporting period. One country reported an increase of more than 2.5% in percent test positivity during the four-week reporting period: Lao People's Democratic Republic (from 1.5% to 11.3%). Three countries showed an elevated SARS-CoV-2 activity (10% or more) in the final week: Papua New Guinea (33.3%), Singapore (12.2%), and Lao People's Democratic Republic (11.3%). During the reporting period, the weekly average number of specimens tested for SARS-CoV-2 was 8454.



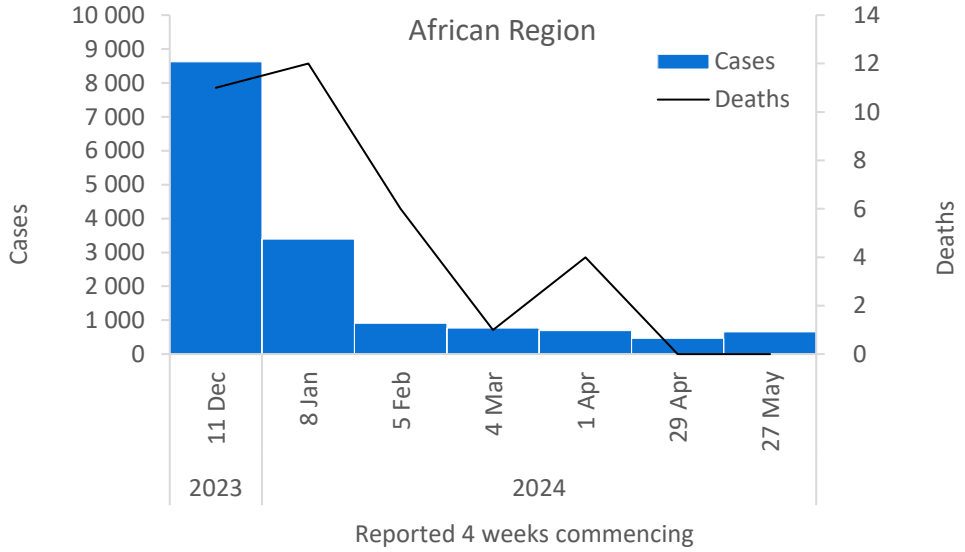
Source: *Influenza and SARS-CoV-2 surveillance data from GISRS reported to FluNet; WHO*

Morbidity and Mortality

Data from 27 May to 23 June 2024

African Region

The African Region reported over 651 new cases, a 39% 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 Senegal (295 vs 12 new cases; +2358%), Namibia (89 vs seven new cases; +1171%), Congo (six vs one new cases; +500%), Seychelles (87 vs 17 new cases; +412%), the United Republic of Tanzania (four vs one new cases; +300%), Côte d'Ivoire (three vs two new cases; +50%), Zambia (33 vs 24 new cases; +38%), and Mozambique (23 vs 19 new cases; +21%). The highest numbers of new cases were reported from Senegal (295 new cases; 1.8 new cases per 100 000; +2358%), Namibia (89 new cases; 3.5 new cases per 100 000; +1171%), and Seychelles (87 new cases; 88.5 new cases per 100 000; +412%). No deaths have been reported during the reporting period.

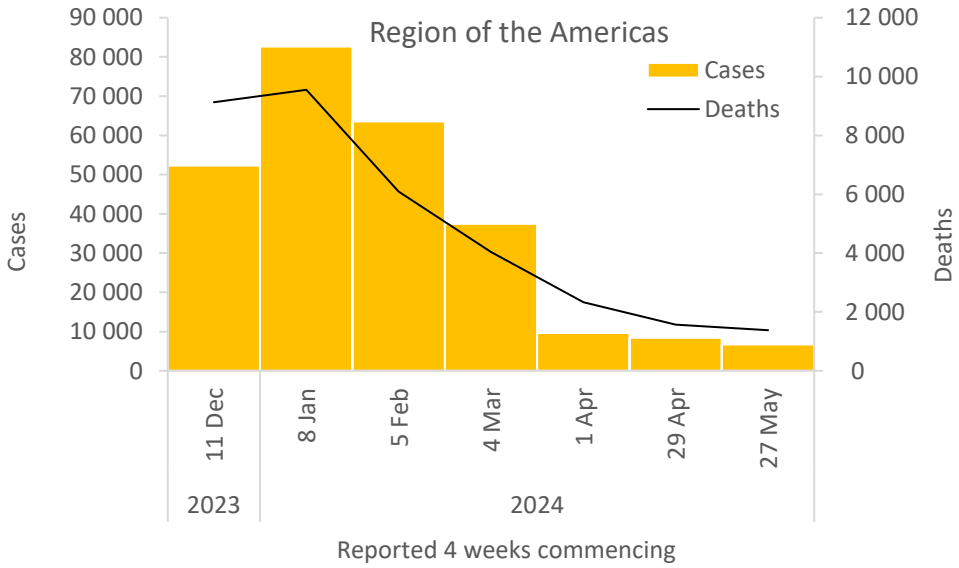


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 6671 new cases, a 21% decrease as compared to the previous 28-day period. 12 (21%) 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 Honduras (16 vs three new cases; +433%), Jamaica (127 vs 25 new cases; +408%), El Salvador (33 vs seven new cases; +371%), Guyana (114 vs 27 new cases; +322%), Suriname (three vs one new cases; +200%), Nicaragua (12 vs five new cases; +140%), British Virgin Islands (67 vs 28 new cases; +139%), Colombia (1 206 vs 568 new cases; +112%), Bahamas (68 vs 36 new cases; +89%), Ecuador (389 vs 213 new cases; +83%), Mexico (647 vs 471 new cases; +37%), and Guatemala (four vs three new cases; +33%). The highest numbers of new cases were reported from Canada (3075 new cases; 8.1 new cases per 100 000; -47%), Colombia (1206 new cases; 2.4 new cases per 100 000; +112%), and Mexico (647 new cases; <1 new case per 100 000; +37%).

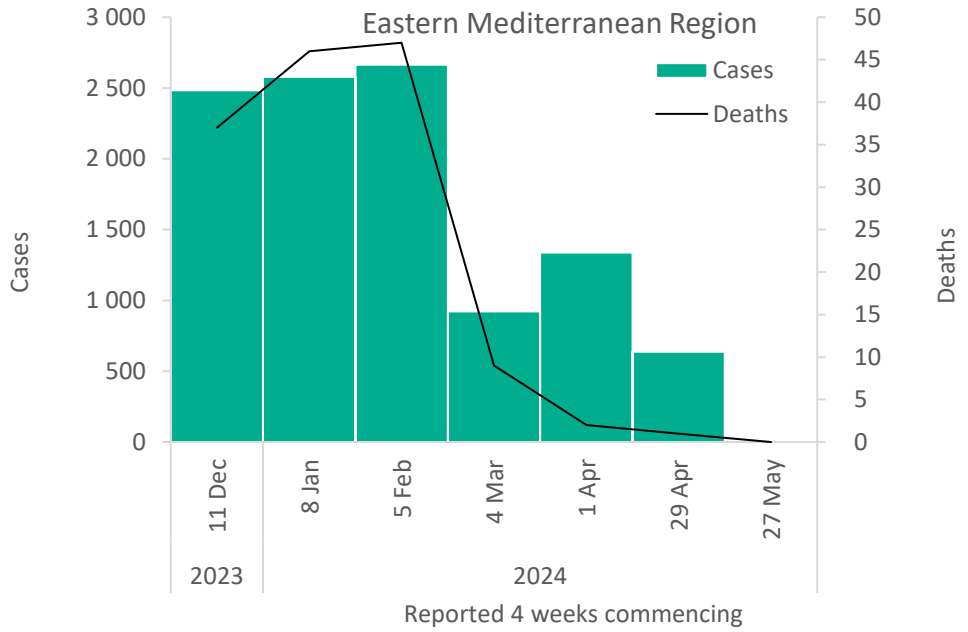
The number of new 28-day deaths in the Region decreased by 12% as compared to the previous 28-day period, with 1379 new deaths reported. The highest numbers of new deaths were reported from the United States of America (1284 new deaths; <1 new death per 100 000; -8%), Mexico (32 new deaths; <1 new death per 100 000; -20%), and Canada (31 new deaths; <1 new death per 100 000; -67%).



Updates from the Region of the Americas

Eastern Mediterranean Region

The Eastern Mediterranean Region did not report during the reporting period.

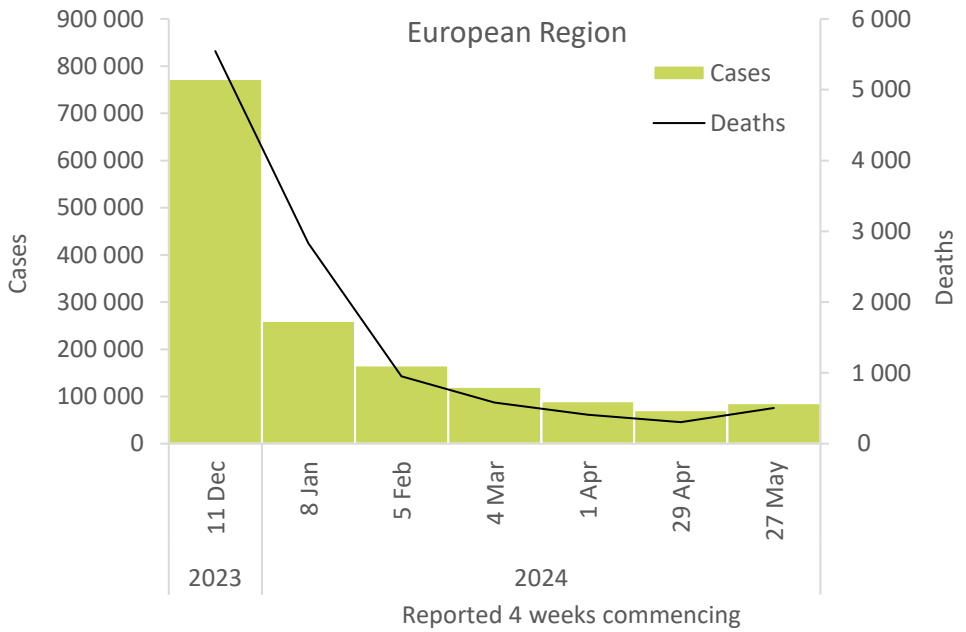


Updates from the [Eastern Mediterranean Region]

European Region

The European Region reported over 85 000 new cases, a 21% increase as compared to the previous 28-day period. 24 (39%) 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 Austria (17 vs three new cases; +467%), Portugal (7 338 vs 1 438 new cases; +410%), Malta (232 vs 57 new cases; +307%), Luxembourg (442 vs 126 new cases; +251%), Belgium (2 313 vs 737 new cases; +214%), Greece (8 444 vs 2 837 new cases; +198%), Cyprus (1 190 vs 426 new cases; +179%), Netherlands (680 vs 263 new cases; +159%), North Macedonia (20 vs eight new cases; +150%), Ireland (2 628 vs 1 072 new cases; +145%), Norway (968 vs 417 new cases; +132%), Romania (949 vs 430 new cases; +121%), Iceland (101 vs 47 new cases; +115%), Slovenia (120 vs 57 new cases; +111%), Liechtenstein (two vs one new cases; +100%), Poland (936 vs 508 new cases; +84%), Switzerland (982 vs 548 new cases; +79%), Slovakia (41 vs 23 new cases; +78%), Czechia (469 vs 268 new cases; +75%), Denmark (420 vs 240 new cases; +75%), the United Kingdom (13 845 vs 10 613 new cases; +30%), Bulgaria (101 vs 79 new cases; +28%), Lithuania (432 vs 338 new cases; +28%), and Sweden (531 vs 437 new cases; +22%). The highest numbers of new cases were reported from the Russian Federation (38 978 new cases; 26.7 new cases per 100 000; -15%), the United Kingdom (13 845 new cases; 20.4 new cases per 100 000; +30%), and Greece (8444 new cases; 78.8 new cases per 100 000; +198%).

The number of new 28-day deaths in the Region increased by 65% as compared to the previous 28-day period, with 502 new deaths reported. The highest numbers of new deaths were reported from Portugal (223 new deaths; 2.2 new deaths per 100 000; +758%), the Russian Federation (146 new deaths; <1 new death per 100 000; -4%), and Greece (34 new deaths; <1 new death per 100 000; +143%).

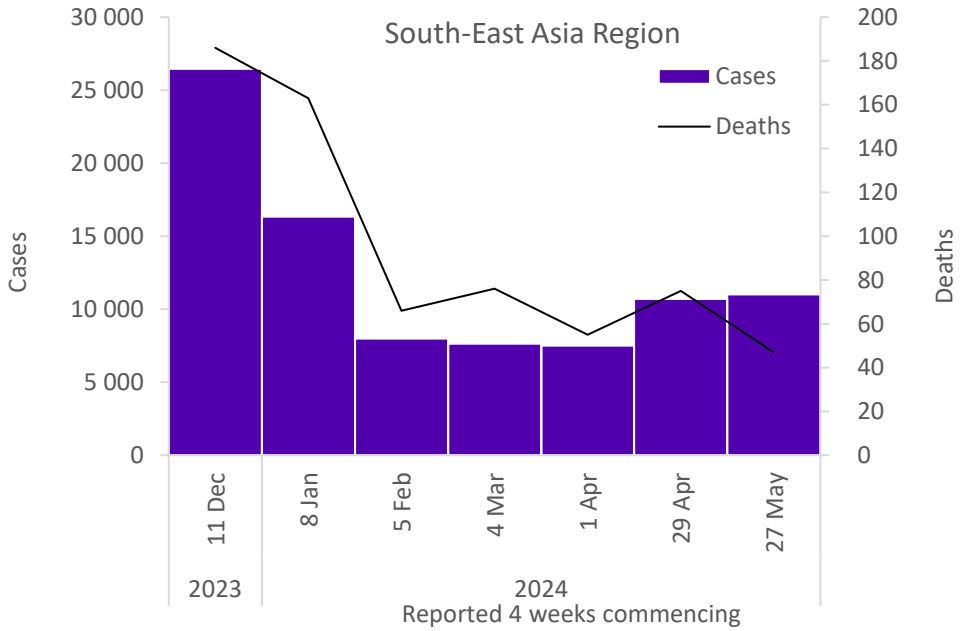


Updates from the *European Region*

South-East Asia Region

The South-East Asia Region reported over 11 000 new cases, a 3% increase as compared to the previous 28-day period. Four (36%) 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 Indonesia (91 vs 60 new cases; +52%), Sri Lanka (20 vs 14 new cases; +43%), Bangladesh (533 vs 397 new cases; +34%), and Thailand (9 329 vs 7 355 new cases; +27%). The highest numbers of new cases were reported from Thailand (9329 new cases; 13.4 new cases per 100 000; +27%), India (774 new cases; <1 new case per 100 000; -70%), and Bangladesh (533 new cases; <1 new case per 100 000; +34%).

The number of new 28-day deaths in the Region decreased by 37% as compared to the previous 28-day period, with 47 new deaths reported. The highest numbers of new deaths were reported from Thailand (30 new deaths; <1 new death per 100 000; -33%), India (9 new deaths; <1 new death per 100 000; -67%), and Sri Lanka (6 new deaths; <1 new death per 100 000; +200%).

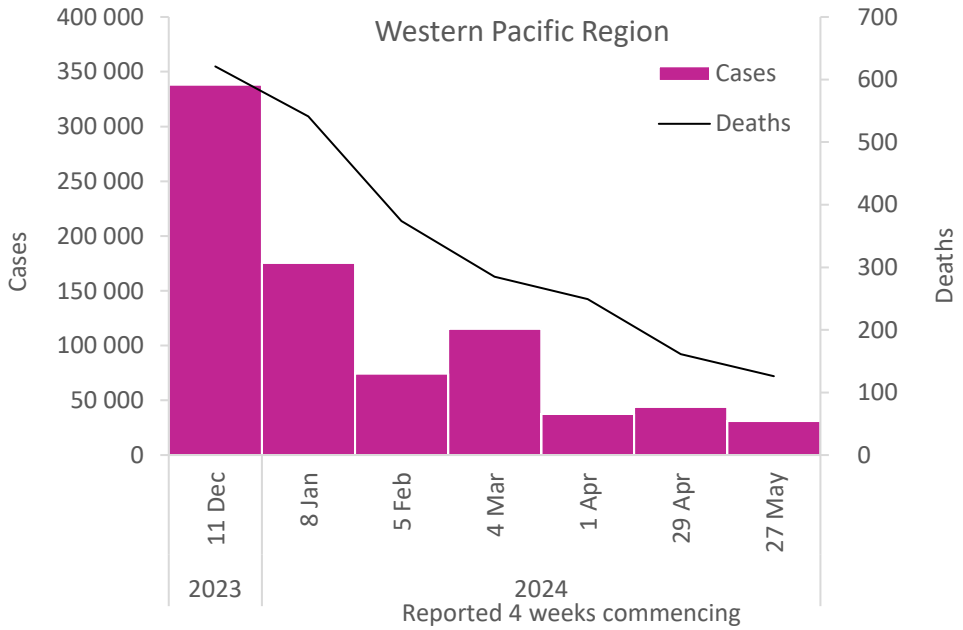


Updates from the South-East Asia Region

Western Pacific Region

The Western Pacific Region reported just under 31 000 new cases, a 29% decrease as compared to the previous 28-day period. Four (11%) 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 Cambodia (129 vs 32 new cases; +303%), Brunei Darussalam (918 vs 550 new cases; +67%), Malaysia (6 724 vs 4 403 new cases; +53%), and New Zealand (19 993 vs 13 245 new cases; +51%). The highest numbers of new cases were reported from New Zealand (19 993 new cases; 414.6 new cases per 100 000; +51%), Malaysia (6724 new cases; 20.8 new cases per 100 000; +53%), and China (3245 new cases; <1 new case per 100 000; -44%).

The number of new 28-day deaths in the Region decreased by 22% as compared to the previous 28-day period, with 126 new deaths reported. The highest numbers of new deaths were reported from New Zealand (93 new deaths; 1.9 new deaths per 100 000; +50%), China (32 new deaths; <1 new death per 100 000; -35%), and Malaysia (1 new death; <1 new death per 100 000; no death reported the previous 28-day period).



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. In some instances, reporting frequencies between national and subnational level might be different and retrospectively completed. 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.

Annex 3. SARS-CoV-2 test positivity

SARS-CoV-2 test positivity as detected in integrated sentinel surveillance as part of the Global Influenza Surveillance and Response System (GISRS) and reported to FluNet has fast become the most important measure of the circulation of the virus in the communities with limited impact from reduced surveillance activities.

Only data on respiratory specimens tested for SARS-CoV-2 and reported to FluNet from sentinel surveillance were included in the report. Countries may monitor respiratory virus activity using other surveillance approaches; however, those data were not included. Data from other sources of respiratory virus surveillance reported to RespiMart can be viewed here.