COVID-19 Epidemiological Update

Edition 166 published 12 April 2024

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Key highlights

- SARS-CoV-2 PCR percent positivity was around 8.0% from 69 countries during the week ending on 31 March 2024, as detected in integrated sentinel surveillance as part of the Global Influenza Surveillance and Response System (GISRS) and reported to FluNet.
- Globally, JN.1 was the most reported variant of interest (VOI), now reported by 121 countries, accounting for 95.1% of sequences in week 13 compared to 93.0% in week 10. Its parent lineage, BA.2.86, has been declining and accounted for 1.6% of sequences in week 13 and week 10. The last risk evaluation for JN.1 was published on 9 February 2024, with an overall evaluation of low additional 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 three variants under monitoring (VUMs): XBB, XBB.1.9.1, and XBB.2.3 which have been de-escalated after having a prevalence of less than 1% for more than eight epidemiological weeks globally and across the WHO regions.
- Globally, during the 28-day period from 4 to 31 March 2024, 98 countries reported COVID-19 cases and 39 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 275 000 new cases and 4200 new deaths, a decrease of 11% and 41%, respectively, compared to the previous 28 days (5 February to 3 March 2024). 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 underestimate the real burden from 2 to 10-fold.
- During the 28-day period from 4 to 31 March 2024, 50 and 39 countries provided data at least once on COVID-19 hospitalizations and admissions to an intensive care unit (ICU), respectively. From the available data, over 49 000 new hospitalizations and more than 1200 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 decrease of 44% and 46% in new hospitalizations and new ICU admissions, respectively.
- The global WHO COVID-19 dashboard was 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 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 will still be active and redirect users to the new one from 22 December onward.
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 April 2024)
- Forest Plots displaying results of COVID-19 VE studies (last updated 8 April 2024)
- Special focus WEU on interpreting relative VE (29 June 2022, pages 6-8)
- Neutralization plots (last updated 8 April 2024)
- WHO COVID-19 VE Resources
- Immunization Analysis and Insights

Global overview

Data as of 31 March 2024

Globally, the number of new weekly cases decreased by 11% during the 28-day period of 4 to 31 March 2024 as compared to the previous 28-day period, with just under 0.3 million new cases reported (Figure 1, Table 1). The number of new weekly deaths decreased by 41% as compared to the previous 28-day period, with over 4200 new fatalities reported. As of 31 March 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.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 42% (98 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. 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 13, 25 to 31 March 2024) from sentinel sites show that the SARS-CoV-2 PCR percent positivity from reporting countries averages approximately 8.0% from 69 countries (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 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.

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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
Figure 1. COVID-19 cases and global deaths by 28-day intervals reported by WHO Region, as of 31 March 2024 (A); 18 September 2023 to 31 March 2024 (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 Region of the Americas (-45%), the European Region (-28%), the Eastern Mediterranean Region (-24%), and the South-East Asia Region (-5%); while case numbers increased in two WHO regions: the Western Pacific Region (+54%), and the African Region (+55%). The number of newly reported 28-day deaths decreased across five regions: the African Region (-100%), the Eastern Mediterranean Region (-73%), the Region of the Americas (-42%), the European Region (-42%), and the Western Pacific Region (-28%); while death numbers increased in the South-East Asia Region (+15%).

At the country level, the highest numbers of new 28-day cases were reported from the Russian Federation (94 657 new cases; -12%), New Zealand (78 794 new cases; +301%), Australia (22 492 new cases; -26%), Chile (21 050 new cases; -19%), and China (10 697 new cases; +43%). The highest numbers of new 28-day deaths were reported from the United States of America (3189 new deaths; -41%), the Russian Federation (288 new deaths; +20%), Chile (112 new deaths; -12%), Australia (95 new deaths; -56%), China (91 new deaths; +8%), and New Zealand (79 new deaths; +14%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 31 March 2024**

<table>
<thead>
<tr>
<th>WHO Region</th>
<th>New cases in last 28 days (%)</th>
<th>Change in new cases in last 28 days *</th>
<th>Cumulative cases (%)</th>
<th>New deaths in last 28 days (%)</th>
<th>Change in new deaths in last 28 days *</th>
<th>Cumulative deaths (%)</th>
<th>Countries reporting cases in the last 28 days</th>
<th>Countries reporting deaths in the last 28 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>118 816 (43%)</td>
<td>-28%</td>
<td>279 243 990 (36%)</td>
<td>538 (13%)</td>
<td>-42%</td>
<td>2 271 451 (32%)</td>
<td>34/61 (56%)</td>
<td>22/61 (36%)</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>114 586 (42%)</td>
<td>54%</td>
<td>208 379 324 (27%)</td>
<td>266 (6%)</td>
<td>-28%</td>
<td>420 714 (6%)</td>
<td>14/35 (40%)</td>
<td>4/35 (11%)</td>
</tr>
<tr>
<td>Americas</td>
<td>32 692 (12%)</td>
<td>-45%</td>
<td>193 361 300 (25%)</td>
<td>3 346 (79%)</td>
<td>-42%</td>
<td>3 015 459 (43%)</td>
<td>15/56 (27%)</td>
<td>6/56 (11%)</td>
</tr>
<tr>
<td>South-East Asia</td>
<td>7 636 (3%)</td>
<td>-5%</td>
<td>61 273 832 (8%)</td>
<td>76 (2%)</td>
<td>15%</td>
<td>808 583 (11%)</td>
<td>6/10 (60%)</td>
<td>5/10 (50%)</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>1 040 (0%)</td>
<td>-24%</td>
<td>23 414 772 (3%)</td>
<td>4 (0%)</td>
<td>-73%</td>
<td>351 935 (5%)</td>
<td>3/22 (14%)</td>
<td>2/22 (9%)</td>
</tr>
<tr>
<td>Africa</td>
<td>783 (0%)</td>
<td>55%</td>
<td>9 577 797 (1%)</td>
<td>0 (0%)</td>
<td>-100%</td>
<td>175 505 (2%)</td>
<td>26/50 (52%)</td>
<td>0/50 (&lt;1%)</td>
</tr>
<tr>
<td>Global</td>
<td>275 553 (100%)</td>
<td>-11%</td>
<td>775 251 779 (100%)</td>
<td>4 230 (100%)</td>
<td>-41%</td>
<td>7 043 660 (100%)</td>
<td>98/234 (42%)</td>
<td>39/234 (17%)</td>
</tr>
</tbody>
</table>

*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 February to 31 March 2024

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 31 March 2024**

Confirmed cases reported in the last 28 days (per 100,000 population)

- 0.01 - 10.00
- 10.01 - 50.00
- 50.01 - 100.00
- 100.01 - 300.00
- > 300.00

No confirmed cases reported in the last 28 days
No reported confirmed cases

Data Source: World Health Organization, United Nations Population Division
Map Production: WHO Health Emergencies Programme

**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 31 March 2024**

Percentage change in confirmed COVID-19 cases
- >+50
- +10 - +50
- -10 - +10
- -10 - -50
- < -50
- No reported confirmed cases in the last 56 days

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

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**
Figure 5. Number of COVID-19 deaths reported over the last 28 days per 100,000 population, as of 31 March 2024

Confirmed deaths reported in the last 28 days (per 100,000 population)
- 0.01 - 0.50
- 0.51 - 1.50
- 1.51 - 3.00
- 3.01 - 6.00
- > 6.00
- No confirmed deaths reported in the last 28 days
- No reported confirmed deaths

Map Production: WHO Health Emergencies Programme

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**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 31 March 2024**

**See Annex 1: Data, table, and figure note**
Hospitalizations and ICU admissions

At the global level, during the 28 days from 4 to 31 March 2024, a total of 49 297 new hospitalizations and 1212 new intensive care unit (ICU) admissions were reported from 50 and 39 countries, respectively (Figure 7). Amongst the countries reporting these data consistently over the current and past reporting period, there was an overall decrease of 44% and 46% in new hospitalizations and new ICU admissions, respectively compared to the previous 28 days (5 February to 3 March 2024) (Table 2 and 3). 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 4-31 March 2024, 50 (21%) 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 (22 countries; 39%), followed by the European Region (16 countries; 26%), the South-East Asia Region (two countries; 20%), and the African Region (six countries; 12%), and the Western Pacific Region (four countries; 14%). No country in the Eastern Mediterranean shared data during the period. The number of countries that consistently§ reported new hospitalizations for the period was 18% (41 countries) (Table 2).

Among the 41 countries consistently reporting new hospitalizations, 1 (3%) country registered an increase of 20% or greater in hospitalizations during the past 28 days compared to the previous 28-day period: Guatemala (15 vs 8; +88%). The highest numbers of new hospital admissions were reported from the United States of America (41 437 vs 72 595; -43%), Brazil (2899 vs 5307; -45%), and Colombia (858 vs 1852; -54%).

§ “Consistently” as used here refers to countries that submitted data for new hospitalizations and intensive care unit admissions for the eight consecutive weeks (for the reporting and comparison period).
Table 2. Number of new hospitalization admissions reported by WHO regions, 4 to 31 March 2024 compared to 5 February to 3 March 2024

<table>
<thead>
<tr>
<th>Region</th>
<th>Countries reported at least once in the past 28 days</th>
<th>Countries reported consistently in the past and previous 28 days*</th>
<th>Percent change in new hospitalizations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of countries (percentage)**</td>
<td>Number of new hospitalizations</td>
<td>Number of countries (percentage)**</td>
</tr>
<tr>
<td>Africa</td>
<td>6/50 (12%)</td>
<td>0#</td>
<td>4/50 (8%)</td>
</tr>
<tr>
<td>Americas</td>
<td>22/56 (39%)</td>
<td>46 403</td>
<td>18/56 (32%)</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>0/22 (&lt;1%)</td>
<td>N/A+</td>
<td>0/22 (&lt;1%)</td>
</tr>
<tr>
<td>Europe</td>
<td>16/61 (26%)</td>
<td>1931</td>
<td>14/61 (20%)</td>
</tr>
<tr>
<td>South-East Asia</td>
<td>2/10 (20%)</td>
<td>56</td>
<td>2/10 (20%)</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>4/35 (11%)</td>
<td>907</td>
<td>3/35 (9%)</td>
</tr>
<tr>
<td>Global</td>
<td>50/234 (21%)</td>
<td>49 297</td>
<td>41/234 (18%)</td>
</tr>
</tbody>
</table>

*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.
#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, during the 28 days from 4 to 31 March 2024, a total of 39 (17%) countries reported data to WHO on new ICU admissions at least once (Figure 8). The European Region had the highest proportion of countries reporting data on new ICU admissions (15 countries; 25%), followed by the Region of the Americas (12 countries; 21%), the Western Pacific Region (five countries; 14%), the African Region (six countries; 12%), and the South-East Asia (one country; 10%). 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 11% (26 countries) (Table 3).

Among the 26 countries consistently reporting new ICU admissions, three (14%) countries showed an increase of 20% or greater in new ICU admissions during the past 28 days compared to the previous 28-day period: Lithuania (9 vs 5; +80%), Guatemala (5 vs 4; +25%), and Chile (44 vs 42; +5%). The highest numbers of new ICU admissions were reported from Brazil (892 vs 1632; -45%), Australia (61 vs 117; -48%), and Chile (44 vs 42; +5%)

Table 3. Number of new ICU admissions reported by WHO regions, 4 to 31 March 2024 compared to 5 February to 3 March 2024

<table>
<thead>
<tr>
<th>Region</th>
<th>Countries reported at least once in the past 28 days</th>
<th>Countries reported consistently in the past and previous 28 days*</th>
<th>Percent change in new ICU admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of countries (percentage)**</td>
<td>Number of new ICU admissions</td>
<td>Number of countries (percentage)**</td>
</tr>
<tr>
<td>Africa</td>
<td>6/50 (12%)</td>
<td>0#</td>
<td>3/50 (6%)</td>
</tr>
<tr>
<td>Americas</td>
<td>12/56 (21%)</td>
<td>1029</td>
<td>6/56 (11%)</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>0/22 (&lt;1%)</td>
<td>N/A*</td>
<td>0/22 (&lt;1%)</td>
</tr>
<tr>
<td>Europe</td>
<td>15/61 (25%)</td>
<td>84</td>
<td>12/61 (20%)</td>
</tr>
<tr>
<td>South-East Asia</td>
<td>1/10 (10%)</td>
<td>15</td>
<td>1/10 (10%)</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>5/35 (14%)</td>
<td>84</td>
<td>4/35 (11%)</td>
</tr>
<tr>
<td>Global</td>
<td>39/234 (17%)</td>
<td>1212</td>
<td>26/234 (11%)</td>
</tr>
</tbody>
</table>

*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 7. 28-day global COVID-19 new hospitalizations and ICU admissions, from 03 February 2020 to 31 March 2024 (A); and from 23 May 2023 to 31 March 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 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 0.25, dropping below 0.15 since the beginning of 2022, and to less than 0.1 by the end of 2023 (Figure 8). Since the beginning of 2024, there has been an increase in this ratio, rising to above 0.1 in February, and reaching up to 0.19 in March 2024. We should note that due to limited reporting this does not suggest a global increase in the proportion of new hospitalizations requiring intensive care. The number of countries reporting both ICU admissions and hospitalizations continues to decline, and a downward trend is observed in most of the reporting countries (Table 2 and 3). The combination of these two factors facilitates the fluctuations in the global trend driven by only one or two countries.

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 trends 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 changed 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 31 March 2020 to 31 March 2024 (A), and 23 May 2023 to 31 March 2024 (B)

A

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 4 to 31 March 2024, 8396 SARS-CoV-2 sequences were shared through GISAID. In comparison, in the two previous 28-day periods, there were 33 925 and 62 364 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
- Variants under monitoring (VUMs): None

The most recent VUMs, i.e. XBB, XBB.1.9.1 and XBB.2.3, have been de-escalated after having a prevalence of less than 1% for more than eight epidemiological weeks globally and across the WHO regions.

Table 4 shows the number of countries reporting VOIs, and their prevalence from epidemiological week 10 (4 to 10 March 2024) to week 13 (25 to 31 March 2024). The VOIs 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 121 countries), accounting for 95.1% of sequences in week 13 compared to 93.0% in week 10 (Figure 10, Table 4). Its parent lineage, BA.2.86, is stable and accounted for 1.6% of sequences in week 13 and week 10 (Figure 10, Table 4). A risk evaluation for JN.1 was published on 9 February 2024, 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 either decreased or been stable in global prevalence during the same period: XBB.1.5 had no reported sequences in week 13, a decrease from 0.3% in week 10; for XBB.1.6, there was a slight increase from 0.2% (7 sequences) in week 10 to 0.4% (1 sequence) in week; for EG.5 there were no reported sequences in week 13, a decrease from 1.2% in week 10 (Figure 10, Table 4).

Sufficient sequencing data to calculate variant prevalence at the regional level during weeks 10 to 13 were available from three WHO regions: the Region of the Americas, the Western Pacific 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 three regions. The other VOIs in all three regions observed decreasing or stable trends.

With declining rates of testing and sequencing globally (Figure 10-A), 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 4. Weekly prevalence of SARS-CoV-2 VOIs and VUMs, week 10 of 2024 to week 13 of 2024

<table>
<thead>
<tr>
<th>Lineage</th>
<th>Countries§</th>
<th>Sequences§</th>
<th>2024-10</th>
<th>2024-11</th>
<th>2024-12</th>
<th>2024-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOIs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XBB.1.5</td>
<td>143</td>
<td>377893</td>
<td>0.3</td>
<td>0.0</td>
<td>0.1</td>
<td>-</td>
</tr>
<tr>
<td>XBB.1.16</td>
<td>131</td>
<td>126744</td>
<td>0.2</td>
<td>0.2</td>
<td>-</td>
<td>0.4</td>
</tr>
<tr>
<td>EG.5</td>
<td>112</td>
<td>214112</td>
<td>1.2</td>
<td>1.1</td>
<td>1.1</td>
<td>-</td>
</tr>
<tr>
<td>BA.2.86</td>
<td>91</td>
<td>21371</td>
<td>1.6</td>
<td>1.3</td>
<td>1.4</td>
<td>1.6</td>
</tr>
<tr>
<td>JN.1</td>
<td>121</td>
<td>162773</td>
<td>93.0</td>
<td>93.2</td>
<td>93.7</td>
<td>95.1</td>
</tr>
</tbody>
</table>

§ 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, and XBB.2.3.

Table 5. Weekly prevalence of SARS-CoV-2 VOIs and VUMs by WHO regions, week 10 to week 13 of 2024

<table>
<thead>
<tr>
<th>Lineage (week 10-2024 to 13-2024)</th>
<th>AMRO</th>
<th>AFRO*</th>
<th>EMRO*</th>
<th>EURO</th>
<th>SEARO*</th>
<th>WPRO</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOIs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XBB.1.5*</td>
<td>↓</td>
<td></td>
<td></td>
<td>↓</td>
<td></td>
<td>↓</td>
</tr>
<tr>
<td>XBB.1.16*</td>
<td>↓</td>
<td></td>
<td></td>
<td>↓</td>
<td></td>
<td>↓</td>
</tr>
<tr>
<td>EG.5*</td>
<td>↓</td>
<td></td>
<td></td>
<td>↓</td>
<td></td>
<td>↓</td>
</tr>
<tr>
<td>BA.2.86*</td>
<td>↓</td>
<td></td>
<td></td>
<td>↓</td>
<td></td>
<td>↓</td>
</tr>
<tr>
<td>JN.1*</td>
<td>↑</td>
<td></td>
<td></td>
<td>↑</td>
<td></td>
<td>↑</td>
</tr>
</tbody>
</table>

↑ Increasing trend
↓ Decreasing trend
⇔ Stable trend

* 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, 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, 4 to 31 March 2024 **

Global 28-day prevalence of EG.5, XBB.1.5, XBB.1.16, BA.2.86 and JN.1 (04 March 2024 to 31 March 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 to 31 March 2024
Figure 10. Panel A shows the number, and Panel B the percentage, of all circulating variants from week 10 to week 13 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, whereas the Other category includes lineages that are assigned but not listed here. Source: SARS-CoV-2 sequence data and metadata from GISAID, from 4 to 31 March 2024.
Additional resources

- Tracking SARS-CoV-2 Variants
- WHO Global COVID-19 Dashboard Variants Section
- 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 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 4 to 31 March 2024

African Region

The African Region reported over 783 new cases, a 55% increase 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 (124 vs 16 new cases; +675%), Mozambique (seven vs one new cases; +600%), Angola (30 vs five new cases; +500%), Seychelles (170 vs 52 new cases; +227%), and Burundi (three vs two new cases; +50%). The highest numbers of new cases were reported from Zambia (254 new cases; 1.4 new cases per 100 000; no case reported the previous 28-day period), Seychelles (170 new cases; 172.9 new cases per 100 000; +227%), and Mauritania (124 new cases; 2.7 new cases per 100 000; +675%).

The number of new 28-day deaths in the Region decreased by 100% as compared to the previous 28-day period, with no new deaths reported. 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 32 000 new cases, a 45% decrease as compared to the previous 28-day period. One (2%) 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 Nicaragua (four vs three new cases; +33%). The highest numbers of new cases were reported from Chile (21 050 new cases; 110.1 new cases per 100 000; -19%), Argentina (5442 new cases; 12 new cases per 100 000; -67%), and Canada (3315 new cases; 8.8 new cases per 100 000; -52%).

The number of new 28-day deaths in the Region decreased by 42% as compared to the previous 28-day period, with 3346 new deaths reported. The highest numbers of new deaths were reported from the United States of America (3189 new deaths; 1 new death per 100 000; -41%), Chile (112 new deaths; <1 new death per 100 000; -12%), and Canada (25 new deaths; <1 new death per 100 000; -80%).

Updates from the Region of the Americas
Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 1040 new cases, a 24% 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 Afghanistan (958 vs 446 new cases; +115%). The highest numbers of new cases were reported from Afghanistan (958 new cases; 2.5 new cases per 100 000; +115%), Kuwait (46 new cases; 1.1 new cases per 100 000; -59%), and Morocco (36 new cases; <1 new case per 100 000; -75%).

The number of new 28-day deaths in the Region decreased by 73% as compared to the previous 28-day period, with 4 new deaths reported. The highest numbers of new deaths were reported from Afghanistan (3 new deaths; <1 new death per 100 000; +200%), and Morocco (1 new death; <1 new death per 100 000; -50%).

Updates from the Eastern Mediterranean Region
**European Region**

The European Region reported over 118 000 new cases, a 28% decrease as compared to the previous 28-day period. No country has reported increases in new cases of 20% or greater compared to the previous 28-day period. The highest numbers of new cases were reported from the Russian Federation (94 657 new cases; 64.9 new cases per 100 000; -12%), the United Kingdom (6103 new cases; 9 new cases per 100 000; -41%), and Greece (3954 new cases; 36.9 new cases per 100 000; -57%).

The number of new 28-day deaths in the Region decreased by 42% as compared to the previous 28-day period, with 538 new deaths reported. The highest numbers of new deaths were reported from the Russian Federation (288 new deaths; <1 new death per 100 000; +20%), Italy (67 new deaths; <1 new death per 100 000; -66%), and Greece (38 new deaths; <1 new death per 100 000; -62%).

*Updates from the European Region*
South-East Asia Region

The South-East Asia Region reported over 7636 new cases, a 5% decrease as compared to the previous 28-day period. No country has reported increases in new cases of 20% or greater compared to the previous 28-day period. The highest numbers of new cases were reported from India (4148 new cases; <1 new case per 100 000; +2%), Thailand (2305 new cases; 3.3 new cases per 100 000; +16%), and Bangladesh (931 new cases; <1 new case per 100 000; -28%).

The number of new 28-day deaths in the Region increased by 15% as compared to the previous 28-day period, with 76 new deaths reported. The highest numbers of new deaths were reported from India (57 new deaths; <1 new death per 100 000; +39%), Thailand (14 new deaths; <1 new death per 100 000; similar to the previous 28-day period), and Bangladesh (2 new deaths; <1 new death per 100 000; -78%).

Updates from the South-East Asia Region
Western Pacific Region

The Western Pacific Region reported over 114 000 new cases, a 54% increase as compared to the previous 28-day period. Two (6%) 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 New Zealand (78 794 vs 19 632 new cases; +301%), and China (10 697 vs 7 502 new cases; +43%). The highest numbers of new cases were reported from New Zealand (78 794 new cases; 1634 new cases per 100 000; +301%), Australia (22 492 new cases; 88.2 new cases per 100 000; -26%), and China (10 697 new cases; <1 new case per 100 000; +43%).

The number of new 28-day deaths in the Region decreased by 28% as compared to the previous 28-day period, with 266 new deaths reported. The highest numbers of new deaths were reported from Australia (95 new deaths; <1 new death per 100 000; -56%), China (91 new deaths; <1 new death per 100 000; +8%), and New Zealand (79 new deaths; 1.6 new deaths per 100 000; +14%).

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.
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.