COVID-19 Epidemiological Update

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- Latest COVID-19 vaccination data, covering quarter 1 2024
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Key highlights

- SARS-CoV-2 PCR percent positivity was 6.3% across 80 countries during the week ending on 26 May 2024 compared to 7.1% across 87 countries in the previous week, as detected in integrated sentinel surveillance as part of the Global Influenza Surveillance and Response System (GISRS) and reported to FluNet.

- KP.2 and KP.3, both descendent lineages of JN.1 and variants under monitoring (VUMs) continue to show increasing trends. They accounted for 22.7% and 22.4% of the sequences in week 21 compared to 14.6% and 13.0% in week 18, respectively. Globally, JN.1 is the most reported variant of interest (VOI) (now reported by 132 countries), accounting for 47.1% of sequences in week 21, having declined from a prevalence of 56.0% in week 18. The last risk evaluation for 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; three VOIs: EG.5, BA.2.86 and JN.1; and four VUMs: JN.1.7, JN.1.18, KP.2 and KP.3.

- Globally, during the 28-day period from 29 April to 26 May 2024, 94 countries reported COVID-19 cases and 28 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 129 000 new cases and more than 1800 new deaths, a decrease of 11% and 36%, respectively, compared to the previous 28 days (1 to 28 April 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 underestimates the real burden from 2 to 19-fold.

- During the 28-day period from 29 April to 26 May 2024, 47 and 37 countries provided data at least once on COVID-19 hospitalizations and admissions to an intensive care unit (ICU), respectively. From the available data, over 15 000 new hospitalizations and more than 400 new ICU admissions were reported during the 28-day period. Among the countries reporting these data consistently over the current and past reporting period, there was an overall decrease of 57% and 38% in new hospitalizations and new ICU admissions, respectively. The decreasing trend is mainly driven by the countries from the Region of the Americas, while reporting countries from other regions showed increases in hospitalizations and ICU admission.

- WHO published the latest COVID-19 Vaccination Insights Report for quarter one (Jan-Mar) 2024. Globally, 9.8 million individuals received a dose of COVID-19 vaccine across 73 reporting Member States (MS) containing 22% of the global population. Among older adults, 4.9 million individuals received a dose across the 60 MS reporting on uptake in this group, corresponding to an uptake rate of 0.42% so far this year. Among healthcare workers, 234 000 individuals received a dose across the 40 MS reporting on uptake in this group, corresponding to an uptake rate of 0.17% so far this year.

- 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 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 6 June 2024)
- Forest Plots displaying results of COVID-19 VE studies (last updated 10 June 2024)
- Special focus WEU on interpreting relative VE (29 June 2022, pages 6-8)
- Neutralization plots (last updated 10 Jun 2024)
- WHO COVID-19 VE Resources
- Immunization Analysis and Insights
Global overview

Data as of 26 May 2024

Globally, the number of new cases decreased by 11% during the 28-day period of 29 April to 26 May 2024 as compared to the previous 28-day period, with over 0.1 million new cases reported (Figure 1, Table 1). The number of new deaths decreased by 36% as compared to the previous 28-day period, with about 1900 new fatalities reported. As of 26 May 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 40% (94 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 21, 20 to 26 May 2024) from sentinel sites show that the SARS-CoV-2 PCR percent positivity from 72 reporting countries averages approximately 6.2% (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.

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 26 May 2024 (A); 13 November 2023 to 26 May 2024 (B)**

A

B

**See Annex 1: Data, table, and figure note**
At the regional level, the number of newly reported 28-day cases decreased across four of the six WHO regions: the Eastern Mediterranean Region (-52%), the African Region (-36%), the European Region (-24%), and the Region of the Americas (-23%); while case numbers increased in two WHO regions: the Western Pacific Region (+14%), and the South-East Asia Region (+43%). The number of newly reported 28-day deaths decreased across five regions: the African Region (-100%), the Eastern Mediterranean Region (-50%), the Region of the Americas (-38%), the Western Pacific Region (-35%), and the European Region (-34%); while death numbers increased in the South-East Asia Region (+36%).

At the country level, the highest numbers of new 28-day cases were reported from the Russian Federation (45,662 new cases; -34%), Australia (19,638 new cases; +10%), New Zealand (13,245 new cases; +18%), the United Kingdom (10,540 new cases; +58%), and Thailand (7,355 new cases; +71%). The highest numbers of new 28-day deaths were reported from the United States of America (1,319 new deaths; -36%), Russian Federation (152 new deaths; -40%), New Zealand (62 new deaths; +27%), Australia (50 new deaths; -66%), China (49 new deaths; -4%), and Thailand (45 new deaths; +137%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 26 May 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>68,584 (53%)</td>
<td>-24%</td>
<td>279,404,655 (36%)</td>
<td>266 (14%)</td>
<td>-34%</td>
<td>2,272,390 (32%)</td>
<td>34/61 (56%)</td>
<td>13/61 (21%)</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>42,519 (33%)</td>
<td>14%</td>
<td>208,459,855 (27%)</td>
<td>161 (9%)</td>
<td>-35%</td>
<td>420,999 (6%)</td>
<td>12/35 (34%)</td>
<td>3/35 (9%)</td>
</tr>
<tr>
<td>South-East Asia</td>
<td>10,704 (8%)</td>
<td>43%</td>
<td>61,292,047 (8%)</td>
<td>75 (4%)</td>
<td>36%</td>
<td>808,713 (11%)</td>
<td>6/10 (60%)</td>
<td>4/10 (40%)</td>
</tr>
<tr>
<td>Americas</td>
<td>6,996 (5%)</td>
<td>-23%</td>
<td>193,398,659 (25%)</td>
<td>1,388 (73%)</td>
<td>-38%</td>
<td>3,020,756 (43%)</td>
<td>18/56 (32%)</td>
<td>7/56 (12%)</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>638 (0%)</td>
<td>-52%</td>
<td>23,417,911 (3%)</td>
<td>1 (0%)</td>
<td>-50%</td>
<td>351,975 (5%)</td>
<td>1/22 (5%)</td>
<td>1/22 (5%)</td>
</tr>
<tr>
<td>Africa</td>
<td>448 (0%)</td>
<td>-36%</td>
<td>9,579,844 (1%)</td>
<td>0 (0%)</td>
<td>-100%</td>
<td>175,510 (2%)</td>
<td>23/50 (46%)</td>
<td>0/50 (&lt;1%)</td>
</tr>
<tr>
<td>Global</td>
<td>129,889 (100%)</td>
<td>-11%</td>
<td>775,553,735 (100%)</td>
<td>1,891 (100%)</td>
<td>-36%</td>
<td>7,050,356 (100%)</td>
<td>94/234 (40%)</td>
<td>28/234 (12%)</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 2020 to 26 May 2024

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

Source: Influenza and SARS-CoV-2 surveillance data from GISRS reported to FluNet; WHO Global Influenza Programme
Global COVID-19 Vaccination Updates

From January 2024, WHO and the global immunization community shifted COVID-19 vaccine uptake indicators from measuring ‘continuous coverage’ since the start of the vaccine rollout to measuring annual uptake. This change was made to reflect (i) shifts in policy recommendations towards targeting high-risk groups while shifting focus away from targeting otherwise healthy individuals and (ii) increasing evidence demonstrating time since last dose received as a more important indicator of vaccine-induced protection than the number of doses received. As such, previous measures of COVID-19 vaccination coverage were frozen as at end of December 2023 and measures of uptake were reset upon transition to the new indicators. During 2024, WHO will report cumulative on a quarterly basis on uptake in 2024. Subsequently, WHO will collect data on COVID-19 vaccine uptake on an annual basis, as it does for seasonal influenza vaccination coverage. Uptake figures below represent the number of individuals reached by COVID-19 vaccination programs so far in 2024 across reporting WHO Member States (MS).

On 7 June 2024, WHO published the COVID-19 vaccination insights report analysing and presenting data covering the first quarter of 2024 (Q1 2024) (January - March). Under the updated monitoring approach described above, in Q1 2024, 9.8 million individuals across target groups were reported as having received a COVID-19 vaccine dose, from 73 MS containing 22% of the global population. Among older adults, 4.9 million individuals received a dose across the 60 MS reporting on uptake in this group, corresponding to an uptake rate of 0.42% across those MS so far this year. Among healthcare workers, 234 000 individuals received a dose across the 40 MS reporting on uptake in this group, corresponding to an uptake rate of 0.17% across those MS so far this year.

Strong variations in uptake are observed across regions and income strata in all population groups. Across all groups, uptake in the AMR and EUR regions and in high- and upper middle-income MS was greater than in other regions and income groups. In older adults, uptake in EUR (1%) and AMR (0.9%) was considerably more than in other regions, all between 0.0 – 0.2% uptake. Also in older adults, HICs had an uptake rate of 0.87%, as compared with 0.37% in LICs. In healthcare workers, again, uptake in AMR (0.51%) and EUR (0.09%) was more than in the other regions, all between 0.0 and 0.05% uptake. Uptake in healthcare workers varied less, however, between income groups, with all groups ranging between 0.01 and 0.2% uptake in that group.

During Q1 2024, 63 WHO MS reported on current national COVID-19 vaccination policies for at least one population group. Among those 63 MS, 45 reported recommending periodic revaccination in at least one population group. Across target groups, older adults are most commonly reported as being recommended to be periodically revaccinated against COVID-19. Adults with chronic conditions are also frequently targeted under national policies for repeated vaccination, with over half of responding MS reporting this. Children & adolescents were the group most commonly not recommended for vaccination with 42% (23/54) of responding MS reporting not administering does to this group.
Figure 3. Number of confirmed COVID-19 cases reported over the last 28 days per 100,000 population, as of 26 May 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

**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 26 May 2024**

**See Annex 1: Data, table, and figure notes**
Figure 5. Number of COVID-19 deaths reported over the last 28 days per 100 000 population, as of 26 May 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

Data Source: World Health Organization, United Nations Population Division (population prospect 2025), Eurostat
Map Production: WHO Health Emergencies Programme

**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 26 May 2024**

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

At the global level, during the 28 days from 29 April to 26 May 2024, a total of 15 204 new hospitalizations and 462 new intensive care unit (ICU) admissions were reported from 47 and 37 countries, respectively (Figure 7). Among the countries reporting these data consistently over the current and past reporting period, there was an overall decrease of 57% and 38% in new hospitalizations and new ICU admissions, respectively compared to the previous 28 days (1 to 28 April 2024) (Tables 2 and 3). The decreasing trend is mainly driven by the countries from the Region of the Americas, 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 29 April to 26 May 2024, 47 (20%) countries reported data to WHO on new hospitalizations at least once (Figure 7). The Region of the Americas had the highest proportion of countries reporting data on new hospitalizations (19 countries; 34%), followed by the European Region (17 countries; 28%), South-East Asia Region (two countries; 20%), 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§ reported new hospitalizations for the period was 17% (39 countries) (Table 2).

Among the 39 countries consistently reporting new hospitalizations, 12 (31%) countries registered an increase of 20% or greater in hospitalizations during the past 28 days compared to the previous 28-day period: Bahamas (6 vs 2; >100%), Brunei Darussalam (16 vs 7; >100%), North Macedonia (2 vs 1; +100%), New Zealand (1204 vs 640; +88%), Malaysia (360 vs 199; +81%), Thailand (7355 vs 4299; +71%), Ukraine (5 vs 3; +67%), Panama (17 vs 11; +55%), Malta (19 vs 13; +46%), Greece (435 vs 307; +42%), Ireland (449 vs 343; +31%), and Cyprus (19 vs 15; +27%). The highest numbers of new hospitalizations were reported from Thailand (7355 vs 4299; +71%), United States of America (1257 vs 24 128; -95%), and New Zealand (1204 vs 640; +88%).

§ “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, 29 April to 26 May 2024 compared to 1 to 28 April 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>4/50 (8%)</td>
<td>0#</td>
<td>2/50 (6%)</td>
</tr>
<tr>
<td>Americas</td>
<td>19/56 (34%)</td>
<td>3165</td>
<td>19/56 (24%)</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>17/61 (28%)</td>
<td>1544</td>
<td>11/61 (18%)</td>
</tr>
<tr>
<td>South-East Asia</td>
<td>2/10 (20%)</td>
<td>7357</td>
<td>2/10 (20%)</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>5/35 (14%)</td>
<td>3138</td>
<td>5/35 (14%)</td>
</tr>
<tr>
<td>Global</td>
<td>47/234 (20%)</td>
<td>15 204</td>
<td>39/234 (17%)</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.

Note: Lower magnitude of number hospitalizations is impacted by recent change in reporting requirement in USA. The number of hospitalizations from USA is now reported by a network of hospitals (COVIDNet).
New ICU admissions

Across the six WHO regions, in the past 28 days, a total of 37 (16%) 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 (six countries; 17%), and the African Region (four countries; 8%). The Eastern Mediterranean and South-East Asia Regions did not share 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, four (17%) countries showed an increase of 20% or greater in new ICU admissions during the past 28 days compared to the previous 28-day period: Netherlands (8 vs 3; >100%), Ireland (4 vs 2; +100%), Greece (9 vs 5; +80%), and New Zealand (41 vs 26; +58%). The highest numbers of new ICU admissions were reported from Brazil (169 vs 442; -62%), Australia (91 vs 77; +18%), and New Zealand (41 vs 26; +58%)

Table 3. Number of new ICU admissions reported by WHO regions, 29 April to 26 May 2024 compared to 1 to 28 April 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>4/50 (8%)</td>
<td>1</td>
<td>2/50 (4%)</td>
</tr>
<tr>
<td>Americas</td>
<td>12/56 (21%)</td>
<td>250</td>
<td>11/56 (19%)</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>38</td>
<td>7/61 (11%)</td>
</tr>
<tr>
<td>South-East Asia</td>
<td>0/10 (&lt;1%)</td>
<td>N/A</td>
<td>0/10 (&lt;1%)</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>6/35 (17%)</td>
<td>170</td>
<td>6/35 (17%)</td>
</tr>
<tr>
<td>Global</td>
<td>37/235 (16%)</td>
<td>462</td>
<td>26/235 (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 10 February 2020 to 26 May 2024 (A); and from 18 September 2023 to 26 May 2024 (B)

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

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

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

Overall, the ICU-to-hospitalization ratio has been decreasing since the peak in July 2021 when the ratio was 0.25, 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 0.2 in March, and declining to 0.13 in May 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 of admissions 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 2024, it has remained under 0.15, varying between 0.06 to 0.10. 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 04 May 2020 to 26 May 2024 (A), and 18 September 2023 to 26 May 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 29 April to 26 May 2024, 15,300 SARS-CoV-2 sequences were shared through GISAID. In comparison, in the two previous 28-day periods, there were 18,312 and 27,058 sequences shared, respectively. The data are updated 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): EG.5, BA.2.86 and JN.1
• Variants under monitoring (VUMs): JN.1.7, JN.1.18, KP.2 and KP.3

Table 4 shows the number of countries reporting VOIs and VUMs, and their prevalence from epidemiological week 18 (29 April to 5 May 2024) to week 21 (20 to 26 May 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 132 countries), accounting for 47.1% of sequences in week 21 and having declined from a prevalence of 56.0% in week 18 (Figure 10, Table 4). Its parent lineage, BA.2.86, continues to decline in prevalence, accounting for 0.0% (only one sequence) in week 21 compared to 0.6% in week 18 (Figure 10, Table 4). The last risk evaluation for JN.1 was published on 15 April 2024, with an overall public health risk remaining low at the global level based on the newly gathered evidence as per the previous risk evaluation published on 9 February 2024.

The other VOI, EG.5, had only one sequence each in weeks 18 and 21 (Figure 10, Table 4).

The four listed VUMs are all JN.1 descendent lineages. KP.2 and KP.3 are showing increasing prevalence globally, JN.1.18 is stable, and JN.1.7 is declining in prevalence. KP.2 accounted for 22.7% of sequences in week 21 compared to 14.6% in week 18, KP.3 accounted for 22.4% of sequences in week 21 compared to 13.0% in week 18, JN.1.7 accounted for 2.7% of sequences in week 21 compared to 7.5% in week 18, and JN.1.18 accounted for 1.8% of sequences in week 21 compared to 1.6% in week 18.

However, there are regional and intra-regional differences in the reported VOIs and VUMs. For example, there were differences in the prevalence of KP.2 and KP.3, respectively, in week 21 for the regions with sufficient sequence data (Table 5); the Region of the Americas [17.4% vs 29.8%], the Western Pacific Region [37.8% vs 14.4%], and the European Region [12.9% vs 22.9%]. For the Region of the Americas and week 21, there were further differences between KP.2 and KP.3, with the United States of America reporting higher prevalence of the former [18.6% vs 11.5%] and Canada reporting higher prevalence of the latter [17.1% vs 34.5%]. Noteworthy, the two variants have hardly been detected in the South American and Caribbean countries, with JN.1 and JN.1.7 being the most reported variants.

With declining rates of testing and sequencing globally (Figure 10), it is increasingly challenging to estimate the severity impact of emerging SARS-CoV-2 variants. There are currently no reported laboratory or epidemiological reports indicating any association between VOIs/VUMs and increased disease severity. As shown in Figure 9 and Figure 10, low and unrepresentative levels of SARS-CoV-2 genomic surveillance continue to pose challenges in adequately assessing the variant landscape.
### Table 4. Weekly prevalence of SARS-CoV-2 VOIs and VUMs, week 18 of 2024 to week 21 of 2024

<table>
<thead>
<tr>
<th>Lineage*</th>
<th>Countries§</th>
<th>Sequences§</th>
<th>2024-18</th>
<th>2024-19</th>
<th>2024-20</th>
<th>2024-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOIs</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>EG.5</td>
<td>112</td>
<td>220231</td>
<td>0.0</td>
<td>0.1</td>
<td>0.1</td>
<td>0.0</td>
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<tr>
<td>BA.2.86</td>
<td>99</td>
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<td>0.6</td>
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<td>0.0</td>
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<tr>
<td>JN.1</td>
<td>132</td>
<td>208186</td>
<td>56.0</td>
<td>53.3</td>
<td>51.3</td>
<td>47.1</td>
</tr>
<tr>
<td>VUMs</td>
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<tr>
<td>JN.1.7</td>
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<td>7464</td>
<td>7.5</td>
<td>5.5</td>
<td>4.1</td>
<td>2.7</td>
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<tr>
<td>KP.2</td>
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<td>5060</td>
<td>14.6</td>
<td>15.6</td>
<td>18.1</td>
<td>22.7</td>
</tr>
<tr>
<td>KP.3</td>
<td>31</td>
<td>3824</td>
<td>13.0</td>
<td>16.6</td>
<td>18.8</td>
<td>22.4</td>
</tr>
<tr>
<td>JN.1.18</td>
<td>71</td>
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<td>1.6</td>
<td>1.7</td>
<td>2.3</td>
<td>1.8</td>
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<tr>
<td>Unassigned</td>
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<td>30403</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</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, JN.1* does not include JN.1.7, JN.1.18, KP.2 and KP.3

### Table 5. Weekly prevalence of SARS-CoV-2 VOIs and VUMs by WHO regions, week 18 to week 21 of 2024

<table>
<thead>
<tr>
<th>Lineage* (week 18-2024 to 21-2024)</th>
<th>AMR</th>
<th>AFR*</th>
<th>EMR*</th>
<th>EUR</th>
<th>SEAR*</th>
<th>WPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOIs</td>
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<td></td>
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</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>
<tr>
<td>VUMs</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JN.1.7</td>
<td>↓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JN.1.18</td>
<td>↑</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 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 and KP.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 VOIs (EG.5, BA.2.86 and JN.1) and VUMs (JN.1.7, JN.1.18, KP.2 and KP.3), 29 April to 26 May 2024*

Global 28-day prevalence of VOIs (EG.5, BA.2.86 and JN.1) and VUMs (JN.1.7, JN.1.18, KP.2 and KP.3), 29 April to 26 May 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 29 April to 26 May 2024
Figure 10. The (A) number and (B) percentage of SARS-CoV-2 sequences, from 29 April to 26 May 2024

Panel A shows the number, and Panel B the percentage, of all circulating variants from 29 April to 26 May 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 29 April to 26 May 2024, downloaded on 10th June 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, 15 April 2024
- WHO BA.2.86 Initial Risk Evaluation, 21 November 2023
- WHO EG.5 Updated Risk Evaluation, 21 November 2023
**WHO regional overviews**
*Data for 1 to 28 April 2024*

**African Region**

The African Region reported over 440 new cases, a 36% decrease as compared to the previous 28-day period. Six (12%) 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 Madagascar (25 vs eight new cases; +212%), Burkina Faso (six vs two new cases; +200%), Namibia (seven vs four new cases; +75%), Cameroon (56 vs 33 new cases; +70%), Angola (60 vs 37 new cases; +62%), and Sierra Leone (26 vs 16 new cases; +62%). The highest numbers of new cases were reported from Democratic Republic of the Congo (85 new cases; <1 new case per 100,000; -53%), Angola (60 new cases; <1 new case per 100,000; +62%), and Cameroon (56 new cases; <1 new case per 100,000; +70%).

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 just under 7000 new cases, a 23% decrease as compared to the previous 28-day period. Five (9%) 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 British Virgin Islands (26 vs one new cases; +2500%), Barbados (112 vs 15 new cases; +647%), El Salvador (seven vs one new cases; +600%), Bahamas (36 vs 19 new cases; +89%), and Jamaica (25 vs 15 new cases; +67%). The highest numbers of new cases were reported from Canada (4897 new cases; 13 new cases per 100 000; +13%), Chile (598 new cases; 3.1 new cases per 100 000; -75%), and Colombia (568 new cases; 1.1 new cases per 100 000; -5%).

The number of new 28-day deaths in the Region decreased by 38% as compared to the previous 28-day period, with 1388 new deaths reported. The highest numbers of new deaths were reported from the United States of America (1319 new deaths; <1 new death per 100 000; -36%), Canada (37 new deaths; <1 new death per 100 000; -47%), and Chile (22 new deaths; <1 new death per 100 000; -78%).

Updates from the Region of the Americas
**Eastern Mediterranean Region**

The Eastern Mediterranean Region reported over 630 new cases, a 52% 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. Only Afghanistan reported new cases during the 28-day period: (638 new cases; 1.6 new cases per 100 000; -48%).

The number of new 28-day deaths in the Region decreased by 50% as compared to the previous 28-day period, with 1 new death reported. New deaths were reported from Afghanistan (1 new death; <1 new death per 100 000; similar to the previous 28-day period).

Updates from the [Eastern Mediterranean Region](#)
European Region

The European Region reported over 68 000 new cases, a 24% decrease as compared to the previous 28-day period. Thirteen (21%) 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 Portugal (1 439 vs 301 new cases; +378%), Malta (57 vs 14 new cases; +307%), Iceland (47 vs 17 new cases; +176%), Luxembourg (126 vs 76 new cases; +66%), Slovenia (55 vs 34 new cases; +62%), the United Kingdom (10 540 vs 6 689 new cases; +58%), Ireland (1 073 vs 682 new cases; +57%), Estonia (81 vs 52 new cases; +56%), Sweden (437 vs 292 new cases; +50%), Switzerland (547 vs 366 new cases; +49%), Norway (417 vs 285 new cases; +46%), Belgium (736 vs 554 new cases; +33%), and Croatia (164 vs 123 new cases; +33%). The highest numbers of new cases were reported from the Russian Federation (45 662 new cases; 31.3 new cases per 100 000; -34%), the United Kingdom (10 540 new cases; 15.5 new cases per 100 000; +58%), and Greece (2834 new cases; 26.4 new cases per 100 000; -37%).

The number of new 28-day deaths in the Region decreased by 34% as compared to the previous 28-day period, with 266 new deaths reported. The highest numbers of new deaths were reported from the Russian Federation (152 new deaths; <1 new death per 100 000; -40%), Sweden (28 new deaths; <1 new death per 100 000; +75%), and Portugal (26 new deaths; <1 new death per 100 000; +30%).

Updates from the European Region
South-East Asia Region

The South-East Asia Region reported over 10 000 new cases, a 43% increase as compared to the previous 28-day period. Three (27%) 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 Myanmar (321 vs 141 new cases; +128%), Indonesia (60 vs 27 new cases; +122%), and Thailand (7 355 vs 4 299 new cases; +71%). The highest numbers of new cases were reported from Thailand (7355 new cases; 10.5 new cases per 100 000; +71%), India (2557 new cases; <1 new case per 100 000; -1%), and Bangladesh (397 new cases; <1 new case per 100 000; -12%).

The number of new 28-day deaths in the Region increased by 36% as compared to the previous 28-day period, with 75 new deaths reported. The highest numbers of new deaths were reported from Thailand (45 new deaths; <1 new death per 100 000; +137%), India (27 new deaths; <1 new death per 100 000; -18%), and Sri Lanka (2 new deaths; <1 new death per 100 000; no death reported the previous 28-day period).

Updates from the South-East Asia Region
Western Pacific Region

The Western Pacific Region reported over 42 000 new cases, a 14% increase as compared to the previous 28-day period. Three (9%) 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 Brunei Darussalam (550 vs 166 new cases; +231%), Cambodia (32 vs 13 new cases; +146%), and Malaysia (3 035 vs 2 183 new cases; +39%). The highest numbers of new cases were reported from Australia (19 638 new cases; 77 new cases per 100 000; +10%), New Zealand (13 245 new cases; 274.7 new cases per 100 000; +18%), and China (5842 new cases; <1 new case per 100 000; +2%).

The number of new 28-day deaths in the Region decreased by 35% as compared to the previous 28-day period, with 161 new deaths reported. The highest numbers of new deaths were reported from New Zealand (62 new deaths; 1.3 new deaths per 100 000; +27%), Australia (50 new deaths; <1 new death per 100 000; -66%), and China (49 new deaths; <1 new death per 100 000; -4%).

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.