COVID-19 Epidemiological Update
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Key highlights
- During the four-week reporting period from 24 June to 21 July 2024, weekly SARS-CoV-2 PCR percent test positivity increased from 7.4% in the beginning week of the reporting period to 13.0% in the last week, as detected in integrated sentinel surveillance within the Global Influenza Surveillance and Response System (GISRS). During this period, an average of 17 358 specimens across 85 countries were tested for SARS-CoV-2 each week. The highest percent positivity was reported in the European Region (ranging from 21.0% to 22.0% across 30 countries), followed by the Region of the Americas (10.5% to 22.0% across 20 countries), the Western Pacific Region (4.1% to 8.4% across nine countries), the South-East Asia Region (5.6% to 6.2% across six countries), Eastern Mediterranean Region (4.5% to 4.7% across five countries), and the Africa Region (1.9% to 2.8% across 15 countries).
- Globally, JN.1 is the most reported variant of interest (VOI), now reported by 135 countries, accounting for 25.7% of sequences in week 29, having declined from a prevalence of 30.2% in week 26. 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 six VUMs: JN.1.7, JN.1.18, KP.2, KP.3, KP.3.1.1, and LB.1. SARS-CoV-2 variants KP.3.1.1 and LB.1, both descendent lineages of JN.1 and variants under monitoring (VUMs), increased prevalence globally. They accounted for 18.6% and 9.3% of sequences in week 29 (week ending on 21 July 2024) compared to 9.4% and 7.6% in week 26, respectively. From available sequences shared globally, KP.3, KP.2, JN.1.7, and JN.1.18 (all VUMs) are declining. KP.3 accounted for 29.4% of sequences in week 29 compared to 32.8% in week 26, while KP.2 declined to 12.8% in week 29 from 15.3% reported in week 26.
- Wastewater surveillance remains important as an early warning system and monitoring SARS-CoV-2 circulation. Around 30 countries from five WHO Regions have publicly available wastewater surveillance information. According to estimates obtained from wastewater surveillance, clinical detection of cases underestimates the real burden from 2 to 19-fold.
- Globally, during the 28-day period from 24 June to 21 July 2024, 96 countries reported COVID-19 cases, and 35 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 increased during the 28-day period, with over 186 000 new cases and more than 2800 new deaths, an increase of 30% and 26%, respectively, compared to the previous 28 days (27 May to 23 June 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.
During the 28-day period from 24 June to 21 July 2024, 46 and 35 countries provided data at least once on COVID-19 hospitalizations and admissions to an intensive care unit (ICU), respectively. From available data, over 23,000 new hospitalizations and more than 600 new ICU admissions were reported during this period. Among the countries reporting these data consistently over the current and past reporting period, there was an overall increase of 11% and 3% in new hospitalizations and new ICU admissions, respectively. The increasing trends in hospitalization and ICU admissions is mainly driven by countries from the Region of the Americas and the European Region.

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

**Data as of 21 July 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 the 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 (24 June to 21 July 2024), the percent positivity of the specimens tested from sentinel sites increased from 7.4% to 13.0% from an average of 85 countries per week. During this period, on average 17,358 specimens per week were tested for SARS-CoV-2 (Table 1).

Globally, the number of new weekly cases increased by 30% during the 28-day period of 24 June to 21 July 2024 as compared to the previous 28-day period, with over 186,000 new cases reported from 96 countries across the entire period (Figure 1, Table 1). The number of new weekly deaths increased by 26% as compared to the previous 28-day period, with over 2,800 new fatalities reported from 35 countries. As of 21 July 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.*\⁷,†\⁷,‡\⁷

Reported cases do not accurately represent infection rates due to the reduction in testing and reporting globally. During this 28-day period, only 41% (96 of 234) and 15% (35 of 234) of countries reported at least one case and death to WHO respectively. 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 21 July 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 (24 June to July 21 July 2024), the highest SARS-CoV-2 activity was observed in the European Region (ranging from 21.0% to 22.0% across 30 countries), followed by the Region of the Americas (from 10.5% to 22.0% across 20 countries), the Western Pacific Region (from 4.1% to 8.4% across nine countries), the South-East Asia Region (from 5.6% to 6.2% across six countries), Eastern Mediterranean Region (from 4.5% to 4.7% across five countries), and the Africa Region (from 2.8% and 1.9% across 15 countries) (Table 1).

At the country level, 85 countries reported SARS-CoV-2 test positivity from sentinel sites at least once during the reporting period (Figure 3). From the first to the fourth week of the reporting period, 8% (24/85) of countries reported an increase of more than 2.5% in weekly percent positivity. The top five highest increase in percent test positivity during the reporting period was reported from Republic of Moldova (from 0% to 75.0%), followed by Belgium (from 31.4% to 67.0%), Switzerland (from 9.0% to 40.0%), Saint Vincent and the Grenadines (from 0% to 26.3%), and Guatemala (from 7.7% to 33.3%). At the end of the reporting week ending on 21 July 2024, 31% (26/85) of countries reported elevated SARS-CoV-2 activity (10% test positivity or more) with the five highest being the Republic of Moldova (75.0%), Belgium (67.0%), Switzerland (40.0%), Spain (39.3%), and Mexico (37.0%).
Table 1. SARS-CoV-2 test positivity as reported from sentinel sites by WHO Region during four-week reporting period (24 June to 21 July 2024)

<table>
<thead>
<tr>
<th>WHO Region</th>
<th>TPR trend for the past eight weeks†</th>
<th>Number of countries reporting at least once</th>
<th>Weekly percent test positivity* (number of specimens tested)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2024-26</td>
</tr>
<tr>
<td>Africa</td>
<td></td>
<td>15</td>
<td>2.8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(1204)</td>
</tr>
<tr>
<td>Americas</td>
<td></td>
<td>20</td>
<td>10.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3566)</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td></td>
<td>5</td>
<td>4.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(710)</td>
</tr>
<tr>
<td>Europe</td>
<td></td>
<td>30</td>
<td>21.8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2245)</td>
</tr>
<tr>
<td>South-East Asia</td>
<td></td>
<td>6</td>
<td>5.6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(1168)</td>
</tr>
<tr>
<td>Western Pacific</td>
<td></td>
<td>9</td>
<td>4.1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(10 033)</td>
</tr>
<tr>
<td>Global</td>
<td></td>
<td>85</td>
<td>7.4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(18 926)</td>
</tr>
</tbody>
</table>

†From week 22 to week 29 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 21 July 2024 (A); 8 January to 21 July 2024 (B)**

**See Annex 1: Data, table, and figure note
At the regional level, the number of newly reported 28-day cases increased across three of the six WHO regions: the Western Pacific Region (+12%), the Region of the Americas (+40%), and the European Region (+43%); while case numbers decreased in two WHO regions: the African Region (-28%), and the South-East Asia Region (-24%). The number of newly reported 28-day deaths increased across four regions: the African Region (>100%), the Region of the Americas (+26%), the European Region (+31%), and the Western Pacific Region (+18%); while death numbers decreased in one WHO region: the South-East Asia Region (-17%). There was no reporting of deaths from the Eastern Mediterranean Region.

At the country level (Figure 4 and 5), the highest numbers of new 28-day cases were reported from Italy (27 376 new cases; >100%), the Russian Federation (22 574 new cases; -42%), the United Kingdom (19 788 new cases; +42%), Greece (17 391 new cases; >100%), and New Zealand (16 857 new cases; -16%). The highest numbers of new 28-day deaths (Figure 6 and 7) were reported from the United States of America (1801 new deaths; +30%), Portugal (298 new deaths; +34%), Italy (130 new deaths; >100%), New Zealand (126 new deaths; +35%), and Greece (114 new deaths; >100%).

<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>129 365 (69%)</td>
<td>43%</td>
<td>279 633 124 (36%)</td>
<td>730 (26%)</td>
<td>31%</td>
<td>2 273 749 (32%)</td>
<td>32/61</td>
<td>16/61</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>37 814 (20%)</td>
<td>12%</td>
<td>208 532 852 (27%)</td>
<td>149 (5%)</td>
<td>18%</td>
<td>421 274 (6%)</td>
<td>10/35</td>
<td>2/35</td>
</tr>
<tr>
<td>Americas</td>
<td>10 639 (6%)</td>
<td>40%</td>
<td>193 297 893 (25%)</td>
<td>1 902 (67%)</td>
<td>26%</td>
<td>3 023 983 (43%)</td>
<td>24/56</td>
<td>9/56</td>
</tr>
<tr>
<td>South-East Asia</td>
<td>8 381 (4%)</td>
<td>-24%</td>
<td>61 311 446 (8%)</td>
<td>39 (1%)</td>
<td>-17%</td>
<td>808 799 (11%)</td>
<td>6/10</td>
<td>4/10</td>
</tr>
<tr>
<td>Africa</td>
<td>764 (0%)</td>
<td>-28%</td>
<td>9 582 327 (1%)</td>
<td>13 (0%)</td>
<td>&gt;100%</td>
<td>175 526 (2%)</td>
<td>24/50</td>
<td>4/50</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>NA (0%)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>351 975 (5%)</td>
<td>0/22</td>
<td>0/22</td>
</tr>
<tr>
<td>Global</td>
<td>186 963 (100%)</td>
<td>30%</td>
<td>775 776 317 (100%)</td>
<td>2 833 (100%)</td>
<td>26%</td>
<td>7 055 319 (100%)</td>
<td>96/234</td>
<td>35/234</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 3. SARS-CoV-2 percent test positivity from sentinel sites during the week ending on 21 July 2024

SARS-CoV-2 percent test positivity from sentinel sites (data for week ending 21 July 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 21 July 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 21 July 2024**

**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 21 July 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 21 July 2024**

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

At the global level, during the 28 days from 24 June to 21 July 2024, a total of 23,396 new hospitalizations and 615 new ICU admissions were reported from 46 and 35 countries, respectively (Tables 3 and 4). Among the countries reporting these data consistently over the current and past reporting period, there was an overall increase of 11% and 3% in new hospitalizations and new ICU admissions, respectively, compared to the previous 28 days (27 May to 23 June 2024) (Tables 3 and 4). The increasing trend is mainly driven by countries from the Region of the Americas and the European Region. 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 24 June to 21 July 2024, 46 (20%) countries reported data to WHO on new hospitalizations at least once (Table 3). The Region of the Americas had the highest proportion of countries reporting data on new hospitalizations (22 countries; 39%), followed by the European Region (14 countries; 23%), South-East Asia Region (two countries; 20%), the Western Pacific Region (five countries; 14%), and the African Region (three countries; 6%). 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 40 (17%) (Table 3).

Among the 40 countries consistently reporting new hospitalizations, 21 (53%) countries registered an increase of 20% or greater in hospitalizations during the past 28 days compared to the previous 28-day period: North Macedonia (10 vs 1; >100%), Bahamas (13 vs 3; >100%), Bosnia and Herzegovina (8 vs 2; >100%), Malta (331 vs 83; >100%), Slovakia (30 vs 10; >100%), Turks and Caicos Islands (3 vs 1; >100%), Georgia (26 vs 10; >100%), Mexico (606 vs 243; >100%), Costa Rica (203 vs 86; >100%), Italy (1824 vs 802; >100%), Colombia (1175 vs 518; >100%), Honduras (19 vs 9; >100%), Brunei Darussalam (61 vs 29; >100%), Greece (2504 vs 1199; >100%), Mauritius (10 vs 5; 100%), United States of America (3903 vs 2321; 68%), Argentina (179 vs 109; 64%), Czechia (23 vs 15; 53%), Malaysia (916 vs 676; 36%), Ireland (1532 vs 1198; 28%), and Chile 28 vs 22; 27%). The highest numbers of new hospitalizations were reported from Thailand (6704; -28%), United States of America (3903; +68%), and Greece (2504; >100%).
Table 3. Number of new hospitalization admissions reported by WHO regions, 24 June to 21 July compared to 27 May to 23 June 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>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of number of new countries (percentage)**</td>
<td>Number of new hospitalizations</td>
</tr>
<tr>
<td></td>
<td>Countries</td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>3/50 (6%)</td>
<td>10</td>
</tr>
<tr>
<td>Americas</td>
<td>22/56 (39%)</td>
<td>7652</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>0/22 (&lt;1%)</td>
<td>N/A+</td>
</tr>
<tr>
<td>Europe</td>
<td>14/61 (23%)</td>
<td>6474</td>
</tr>
<tr>
<td>South-East Asia</td>
<td>2/10 (20%)</td>
<td>6708</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>5/35 (14%)</td>
<td>2552</td>
</tr>
<tr>
<td>Global</td>
<td>46/234 (20%)</td>
<td>23 396</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 not applicable.
New ICU admissions

Across the six WHO regions, in the past 28 days, a total of 35 (15%) countries reported data to WHO on new ICU admissions at least once (Table 4). The Region of the Americas reported the highest proportion of countries reporting data on new ICU admissions (15 countries; 27%), followed by the European Region (11 countries; 18%), the Western Pacific Region (six countries; 17%) and the African Region (three countries; 6%). No countries from the South-East Asia Region and the Eastern Mediterranean Region shared data during the period. The proportion of countries that consistently reported new ICU admissions for the period was 12% (28 countries).

Among the 28 countries consistently reporting new ICU admissions, seven (25%) countries showed an increase of 20% or greater in new ICU admissions during the past 28 days compared to the previous 28-day period: Panama (6 vs 1; >100%), Ecuador (17 vs 6; >100%), Greece (35 vs 13; >100%), Malaysia (18 vs 7; >100%), Mexico (24 vs 11; >100%), Italy (43 vs 20; >100%), and Costa Rica (9 vs 6; 50%). The highest number of new ICU admissions was reported from Brazil (283; 14%), Australia (76; -38%), and Italy (43; >100%).

Table 4. Number of new ICU admissions reported by WHO regions, 24 June to 21 July 2024 compared to 27 May to 23 June 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>3/50 (6%)</td>
<td>0*</td>
<td>3/50 (6%)</td>
</tr>
<tr>
<td>Americas</td>
<td>15/56 (27%)</td>
<td>373</td>
<td>13/56 (23%)</td>
</tr>
<tr>
<td>Eastern Medit.</td>
<td>0/22 (&lt;1%)</td>
<td>N/A*</td>
<td>N/A</td>
</tr>
<tr>
<td>Europe</td>
<td>11/61 (18%)</td>
<td>113</td>
<td>7/61 (12%)</td>
</tr>
<tr>
<td>South-East Asia</td>
<td>0/10 (&lt;1%)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>6/35 (17%)</td>
<td>129</td>
<td>5/35 (14%)</td>
</tr>
<tr>
<td>Global</td>
<td>35/234 (15%)</td>
<td>615</td>
<td>28/234 (12%)</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 8. 28-day global COVID-19 hospitalization and ICU admission trends, from 03 February 2020 to 21 July 2024 (A); and from 18 September 2023 to 21 July 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 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 among those hospitalized.

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, ICU admissions per 1000 hospitalizations have 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. 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 they reached 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 21 July 2024 (A), and 18 September 2023 to 21 July 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 24 June to 21 July 2024, 23 060 SARS-CoV-2 sequences were shared through GISAID. In comparison, in the two previous 28-day periods, there were 33 169 and 26 276 sequences shared, respectively. The data are retrospectively updated periodically 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, KP.3.1.1 and LB.1

Table 5 shows the number of countries reporting VOIs and VUMs, and their prevalence from epidemiological week 26 (24 to 30 June 2024) to week 29 (15 to 21 July 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 135 countries), accounting for 25.7% of sequences in week 29 and having declined from a prevalence of 30.2% in week 26 (Figure 11, Table 6). Its parent lineage, BA.2.86, continues to show very low prevalence, accounting for 0.1-0.2% of sequences in each week between week 26 and week 29 (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 six listed VUMs are all JN.1 descendent lineages. KP.3.1.1 and LB.1 are showing increasing prevalence globally, KP.3, KP.2, JN.1.7 and JN.1.18 are declining. KP.3 accounted for 29.4% of sequences in week 29 compared to 32.8% in week 26, KP.2 accounted for 12.8% of sequences in week 29 compared to 15.3% in week 26, JN.1.7 accounted for 0.3% of sequences in week 29 compared to 0.6% in week 26, JN.1.18 accounted for 1.1% of sequences in week 29 compared to 2.1% in week 26, LB.1 accounted for 9.3% in week 29 compared to 7.6% in week 26, and KP.3.1.1 accounted for 18.6% of sequences in week 29 compared to 9.4% in week 26.

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, KP.3.1.1 has rapidly expanded with the European region over the past 28-days to reach over 25% of sequences from week 29. Conversely, KP.3.1.1 has been rare within the Western Pacific region (WPR) over the past 28-days, accounting for less than 2% of sequences in this period. There are further differences in prevalence within regions, for example KP.3.1.1 accounts for more than 35% of sequences in Spain in the past 28-days, compared to 16% in the United Kingdom. Further, whereas on average the prevalence of KP.3 is higher (48%-54%) than that of KP.2 (5%-15%) in the WPR in the last 28 days, KP.2 represents more than 45% of circulating variants over the same time period in Singapore (with KP.3 at 7%), with the opposite trend seen in Japan where KP.3 accounts for more than 85% of circulating variants and KP.2 less than 3%.
With rates of testing and sequencing declining 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 26 to week 29 of 2024

<table>
<thead>
<tr>
<th>Lineage*</th>
<th>Countries§</th>
<th>Sequences§</th>
<th>2024-26</th>
<th>2024-27</th>
<th>2024-28</th>
<th>2024-29</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>BA.2.86</td>
<td>100</td>
<td>23631</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>JN.1</td>
<td>135</td>
<td>238985</td>
<td>30.2</td>
<td>25.7</td>
<td>25.5</td>
<td>25.7</td>
</tr>
<tr>
<td><strong>VUMs</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JN.1.7</td>
<td>66</td>
<td>8894</td>
<td>0.6</td>
<td>0.5</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>KP.2</td>
<td>65</td>
<td>15001</td>
<td>15.3</td>
<td>13.8</td>
<td>13.3</td>
<td>12.8</td>
</tr>
<tr>
<td>KP.3</td>
<td>54</td>
<td>22719</td>
<td>32.8</td>
<td>34.4</td>
<td>31.6</td>
<td>29.4</td>
</tr>
<tr>
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<td>34</td>
<td>5028</td>
<td>9.4</td>
<td>13.9</td>
<td>17.2</td>
<td>18.6</td>
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<td>JN.1.18</td>
<td>82</td>
<td>4325</td>
<td>2.1</td>
<td>1.3</td>
<td>1.7</td>
<td>1.1</td>
</tr>
<tr>
<td>LB.1</td>
<td>54</td>
<td>5314</td>
<td>7.6</td>
<td>8.0</td>
<td>7.7</td>
<td>9.3</td>
</tr>
<tr>
<td>Recombinant</td>
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<td>486904</td>
<td>1.7</td>
<td>2.1</td>
<td>2.2</td>
<td>2.5</td>
</tr>
<tr>
<td>Unassigned</td>
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<td>3781</td>
<td>0.1</td>
<td>0.1</td>
<td>0.0</td>
<td>-</td>
</tr>
<tr>
<td>Others</td>
<td>90</td>
<td>12215</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.3</td>
</tr>
</tbody>
</table>

§ 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, KP.3.1.1 and LB.1
Figure 10. Global 28-day prevalence of VOIs (BA.2.86 and JN.1) and VUMs (LB.1, JN.1.7, JN.1.18, KP.3, and KP.3.1.1), 24 June to 21 July 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 24 June to 21 July 2024.
Figure 10. Panel A shows the number, and Panel B the percentage, of all circulating variants from 24 June to 21 July 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 24 June to 21 July 2024, downloaded on 3rd August 2024.

Figure 11. The (A) number and (B) percentage of SARS-CoV-2 sequences, from 24 June to 21 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

SAR-CoV-2 test positivity from sentinel sites and morbidity and mortality trends

African Region

The SARS-CoV-2 weekly percent test positivity from sentinel sites in the African Region changed from 2.8% to 1.9%, as reported from 15 countries at least once during the four-week period. One country reported an increase of more than 2.5% in percent test positivity during the four-week reporting period: South Africa (from 3.3% to 7.1%). No country has shown elevated SARS-CoV-2 activity (10% or more) in the final week. During the reporting period, the weekly average number of specimens tested was 1032.

During the 28-day reporting period (24 June to 21 July), the African Region reported over 764 new cases, a 28% decrease compared to the previous 28-day period (27 May to 23 June 2024). 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 Algeria (77 vs six new cases; >100%), Ethiopia (18 vs four new cases; >100%), Burkina Faso (eight vs three new cases; >100%), Zambia (83 vs 33 new cases; >100%), Uganda (two vs one new cases; +100%), Côte d’Ivoire (four vs three new cases; +33%), Mauritania (four vs three new cases; +33%), and Madagascar (11 vs nine new cases; +22%). The highest numbers of new cases were reported from Mauritius (155 new cases; 12.2 new cases per 100 000; -18%), Democratic Republic of the Congo (129 new cases; <1 new case per 100 000; -13%), and Zambia (83 new cases; <1 new case per 100 000; >100%).

Source: Influenza and SARS-CoV-2 surveillance data from GISRS reported to FluNet; WHO
The number of new 28-day deaths in the Region increased by >100% as compared to the previous 28-day period, with 13 new deaths reported. The highest numbers of new deaths were reported from Zambia (8 new deaths; <1 new death per 100 000; no death reported the previous 28-day period), Democratic Republic of the Congo (3 new deaths; <1 new death per 100 000; >100%), and Madagascar (1 new death; <1 new death per 100 000; no death reported the previous 28-day period).

Updates from the African Region

![Graph showing cases and deaths in the African Region](chart.png)
Region of the Americas

The SARS-CoV-2 weekly percent test positivity from sentinel sites in the Region of Americas changed from 10.5% to 22.0%, as reported from the 20 countries reporting at least once during the four-week period. Six countries reported an increase of more than 2.5% in percent test positivity during the four-week reporting period: Saint Vincent and the Grenadines (from 0% to 26.3%), Guatemala (from 7.7% to 33.3%), Mexico (from 22.0% to 36.5%), Colombia (from 2.5% to 16.8%), Costa Rica (from 20.8% to 27.3%), and Ecuador (from 5.3% to 10.0%). Eight countries showed elevated SARS-CoV-2 activity (10% or more) in the final week: Mexico (36.5%), Guatemala (33.3%), Costa Rica (27.3%), Saint Vincent and the Grenadines (26.3%), Belize (20.0%), Colombia (16.8%), Honduras (16.0%), and Ecuador (10.0%). During the reporting period, the weekly average number of specimens tested was 4124.

During the 28-day reporting period (24 June to 21 July 2024), the Region of the Americas reported over 10 000 new cases, a 40% increase compared to the previous 28-day period. Sixteen (29%) 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 Bahamas (384 vs 81 new cases; >100%), Turks and Caicos Islands (42 vs 12 new cases; >100%), Mexico (2 152 vs 653 new cases; >100%), Belize (three vs one new cases; >100%), Colombia (2 892 vs 1 206 new cases; +140%), El Salvador (27 vs 13 new cases; >100%), Costa Rica (910 vs 486 new cases; +87%), Honduras (28 vs 16 new cases; +75%), Nicaragua (20 vs 12 new cases; +67%), Guatemala (six vs four new cases; +50%), Guyana (160 vs 114 new cases; +40%), Barbados (149 vs 107 new cases; +39%), Jamaica (172 vs 130 new cases; +32%), Panama (227 vs 177 new cases; +28%), Argentina (492 vs 393 new cases; +25%), and Ecuador (468 vs 389 new cases; +20%). The highest numbers of new cases were reported from Colombia (2892 new cases; 5.7 new cases per 100 000; +140%), Canada (2191 new cases; 5.8 new cases per 100 000; -29%), and Mexico (2152 new cases; 1.7 new cases per 100 000; >100%).

Source: Influenza and SARS-CoV-2 surveillance data from GISRS reported to FluNet; WHO
The number of new 28-day deaths in the Region increased by 26% as compared to the previous 28-day period, with 1902 new deaths reported. The highest numbers of new deaths were reported from the United States of America (1801 new deaths; <1 new death per 100 000; +30%), Canada (32 new deaths; <1 new death per 100 000; -42%), and Mexico (30 new deaths; <1 new death per 100 000; -14%).

Updates from the Region of the Americas
Eastern Mediterranean Region

The SARS-CoV-2 weekly percent test positivity from sentinel sites in the Eastern Mediterranean Region changed from 4.7% to 4.5%, as reported from the 5 countries reporting at least once during the four-week period. Three countries reported an increase of more than 2.5% in percent test positivity during the four-week reporting period: Oman (from 10.5% to 17.9%), Jordan (from 0% to 4.2%), and the United Arab Emirates (from 3.5% to 6.6%). Only one country showed elevated SARS-CoV-2 activity (10% or more) in the final week: Oman (17.9%). During the reporting period, the weekly average number of specimens tested for SARS-CoV-2 was 511.

Source: Influenza and SARS-CoV-2 surveillance data from GISRS reported to FluNet; WHO
The Eastern Mediterranean Region did not report data during this period

Updates from the Eastern Mediterranean Region
European Region

The SARS-CoV-2 weekly percent test positivity from sentinel sites in the European Region during the four-week reporting period changed from 21.8% to 21.0%, as reported from the 30 countries reporting at least once during the four-week reporting period. Nine countries reported an increase of more than 2.5% in percent test positivity during the four-week reporting period: Republic of Moldova (from 0% to 75.0%), Belgium (from 31.2% to 66.7%), Switzerland (from 9.1% to 40.0%), Netherlands (from 10.5% to 33.3%), Czechia (from 9.1% to 25.0%), Greece (from 16.9% to 31.3%), Germany (from 12.0% to 20.8%), Ukraine (from 2.2% to 10%), and Norway (from 13.6% to 18.6%). Fifteen countries showed elevated SARS-CoV-2 activity (10% or more) in the final week: Republic of Moldova (75.0%), Belgium (66.7%), Switzerland (40.0%), Spain (39.3%), Netherlands (33.3%), Greece (31.3%), Czechia (25.0%), Germany (20.8%), Norway (18.6%), Denmark (16.9%), Ireland (15.4%), Turkey (15.3%), The United Kingdom (15.1%), Luxembourg (10.7%), and Ukraine (10.0%). During the reporting period, the weekly average number of specimens tested for SARS-CoV-2 was 1988.

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

During the 28-day reporting period (24 June to 21 July 2024), the European Region reported over 129 000 new cases, a 43% increase compared to the previous 28-day period (27 May to 23 June). Thirty (48%) 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 Republic of Moldova (503 vs 79 new cases; >100%), North Macedonia (114 vs 20 new cases; >100%), Liechtenstein (nine vs two new cases; >100%), Romania (4 027 vs 949 new cases; >100%), Italy (27 376 vs 7 266 new cases; >100%), Malta (865 vs 232 new cases; >100%), Austria (49 vs 17 new cases; >100%), Cyprus (3 394 vs 1 190 new cases; >100%), Poland (2 672 vs 936 new cases; >100%), Luxembourg (1 225 vs 442 new cases; >100%), the Netherlands (1 772 vs 709 new cases; >100%), Hungary (119 vs 49 new cases; >100%), Norway (2 353 vs 968 new cases; >100%), Sweden (1 282 vs 530 new cases; >100%), Belgium (5 448 vs 2 314 new cases; >100%), Iceland (235 vs 101 new cases; >100%), Azerbaijan (147 vs 65 new cases; >100%), Slovenia (261 vs 120 new cases; >100%), Lithuania (931 vs 432 new cases; >100%), Slovakia (87 vs 41 new cases; >100%), Ukraine (176 vs 83 new cases; >100%), Greece (17 391 vs 8...
447 new cases; +100%), Bosnia and Herzegovina (12 vs six new cases; +100%), Czechia (927 vs 472 new cases; +96%), Switzerland (1 799 vs 994 new cases; +81%), Georgia (354 vs 202 new cases; +75%), Bulgaria (158 vs 101 new cases; +56%), Ireland (3 893 vs 2 628 new cases; +48%), the United Kingdom (19 788 vs 13 971 new cases; +42%), and Portugal (9 423 vs 7 322 new cases; +29%). The highest numbers of new cases were reported from Italy (27 376 new cases; 45.9 new cases per 100 000; >100%), the Russian Federation (22 574 new cases; 15.5 new cases per 100 000; -42%), and the United Kingdom (19 788 new cases; 29.1 new cases per 100 000; +42%).

The number of new 28-day deaths in the Region increased by 31% as compared to the previous 28-day period, with 730 new deaths reported. The highest numbers of new deaths were reported from Portugal (298 new deaths; 2.9 new deaths per 100 000; +34%), Italy (130 new deaths; <1 new death per 100 000; >100%), and Greece (114 new deaths; 1.1 new deaths per 100 000; >100%).

Updates from the European Region
South-East Asia Region

The SARS-CoV-2 weekly percent test positivity from sentinel sites in the South-East Region during the four weeks reporting period changed from 5.5% to 6.2%, as reported from the six countries reporting during the four-week period 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 0% to 8.7%) and Nepal (from 6.2% to 13.2%). One country showed elevated SARS-CoV-2 activity (10% or more) in the final week: Nepal (13.2%). During the reporting period, the weekly average number of specimens tested for SARS-CoV-2 was 1002.

During the 28-day period (24 June to 21 July 2024), the South-East Asia Region reported over 8381 new cases, a 24% decrease compared to the previous 28-day period. One (9%) 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 (233 vs 91 new cases; +100%). The highest numbers of new cases were reported from Thailand (6704 new cases; 9.6 new cases per 100 000; -28%), India (908 new cases; <1 new case per 100 000; +17%), and Bangladesh (372 new cases; <1 new case per 100 000; -30%).

The number of new 28-day deaths in the Region decreased by 17% as compared to the previous 28-day period, with 39 new deaths reported. The highest numbers of new deaths were reported from Thailand (35 new deaths; <1 new death per 100 000; +17%), India (2 new deaths; <1 new death per 100 000; -78%), and Bangladesh (1 new death; <1 new death per 100 000; -50%).

Source: Influenza and SARS-CoV-2 surveillance data from GISRS reported to FluNet; WHO
Updates from the South-East Asia Region
Western Pacific Region

The SARS-CoV-2 weekly percent test positivity from sentinel sites in the Western Pacific Region changed from 4.1% to 8.4%, as reported across 9 countries reporting at least once during the four-week period. Three countries reported an increase of more than 2.5% in percent test positivity during the four-week reporting period: Republic of Korea (from 7.4 to 24.6%), Lao People’s Democratic Republic (from 7.8% to 19.1%) and China (from 3.8% to 7.7%). Two countries showed elevated SARS-CoV-2 activity (10% or more) in the final week: Republic of Korea (24.6%) and Lao People’s Democratic Republic (19.1%). During the reporting period, the weekly average number of specimens tested for SARS-CoV-2 was 8402.

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

During the 28-day reporting period (24 June to 21 July 2024), the Western Pacific Region reported over 37 000 new cases, a 12% increase compared to the previous 28-day period. Seven (20%) 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 Cook Islands (17 vs one new cases; +1600%), Commonwealth of the Northern Mariana Islands (115 vs 28 new cases; >100%), Lao People's Democratic Republic (12 vs three new cases; >100%), French Polynesia (27 vs 11 new cases; >100%), China (6 781 vs 3 245 new cases; >100%), Brunei Darussalam (1 665 vs 918 new cases; +81%), and Malaysia (12 297 vs 9 545 new cases; +29%). The highest numbers of new cases were reported from New Zealand (16 857 new cases; 349.6 new cases per 100 000; -16%), Malaysia (12 297 new cases; 38 new cases per 100 000; +29%), and China (6781 new cases; <1 new case per 100 000; >100%).

The number of new 28-day deaths in the Region increased by 18% as compared to the previous 28-day period, with 149 new deaths reported. The highest numbers of new deaths were reported from New Zealand (126 new deaths; 2.6 new deaths per 100 000; +35%), and China (23 new deaths; <1 new death per 100 000; -28%).
Updates from the Western Pacific Region

Reported 4 weeks commencing
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 communities with 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 reported to RespiMart from other sources of respiratory virus surveillance can be viewed [here](#).