COVID-19 Weekly Epidemiological Update

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- SARS-CoV-2 variants of concern and Omicron subvariants under monitoring
- WHO regional overviews
- Hospitalizations and ICU admissions

Global overview
Data as of 1 January 2023

Globally, more than 3 million new cases and 10 000 deaths have been reported in the week of 26 December 2022 to 1 January 2023 (Figure 1, Table 1). This represents a reduction in weekly cases and deaths of 22% and 12%, respectively. However, those trends need to be interpreted considering the reduction in testing and delays in reporting in many countries during the year-end holiday season. Therefore, data presented in this report, especially for the most recent week, are incomplete and the decreasing trends should be interpreted in that context as they may change with updated information provided following the holiday period.

In the last 28 days (5 December 2022 to 1 January 2023), over 14.5 million cases and over 46 000 new fatalities were reported globally – an increase of 25% and 21%, respectively, compared to the previous 28 days. As of 1 January 2023, over 656 million confirmed cases and over 6.6 million deaths have been reported globally.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 1 January 2023**

**See Annex 1: Data, table, and figure note
At the country level, the highest numbers of new weekly cases were reported from Japan (946 130 new cases; -18%), the Republic of Korea (457 745 new cases; -3%), the United States of America (393 587 new cases; -21%), China (218 019 new cases; +45%), and Brazil (206 944 new cases; -19%). The highest numbers of new weekly deaths were reported from the United States of America (2501 new deaths; -14%), Japan (1941 new deaths; -3%), Brazil (1110 new deaths; +19%), France (803 new deaths; similar to the previous week), and China (648 new deaths; +48%).

Current trends in reported COVID-19 cases are underestimates of the true number of global infections and reinfections as shown by prevalence surveys. Therefore, the data should be interpreted with caution as several countries have progressively changed COVID-19 testing strategies, resulting in lower numbers of tests performed and consequently lower numbers of cases detected. Additionally, data from previous weeks are continuously updated to retrospectively incorporate changes in reported COVID-19 cases and deaths made by countries.

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 1 January 2023**

<table>
<thead>
<tr>
<th>WHO Region</th>
<th>New cases in last 7 days (%)</th>
<th>Change in new cases in last 7 days *</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 7 days (%)</th>
<th>Change in new deaths in last 7 days *</th>
<th>Cumulative deaths (%)</th>
<th>New deaths in last 28 days (%)</th>
<th>Change in new deaths in last 28 days *</th>
<th>Cumulative deaths (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Pacific</td>
<td>1 671 510 (55%)</td>
<td>-12%</td>
<td>6 912 050 (48%)</td>
<td>29%</td>
<td>106 781 875 (16%)</td>
<td>3233 (30%)</td>
<td>7%</td>
<td>11 594 (25%)</td>
<td>49%</td>
<td>296 540 (4%)</td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>548 940 (18%)</td>
<td>-43%</td>
<td>3 773 609 (26%)</td>
<td>-1%</td>
<td>269 940 463 (41%)</td>
<td>2866 (27%)</td>
<td>-29%</td>
<td>15 263 (33%)</td>
<td>1%</td>
<td>2 157 684 (32%)</td>
<td></td>
</tr>
<tr>
<td>Americas</td>
<td>803 105 (26%)</td>
<td>-20%</td>
<td>3 721 828 (26%)</td>
<td>74%</td>
<td>186 265 607 (28%)</td>
<td>4385 (41%)</td>
<td>-9%</td>
<td>18 270 (39%)</td>
<td>35%</td>
<td>2 891 057 (43%)</td>
<td></td>
</tr>
<tr>
<td>South-East Asia</td>
<td>8009 (&lt;1%)</td>
<td>-26%</td>
<td>58 908 (&lt;1%)</td>
<td>-69%</td>
<td>60 738 097 (9%)</td>
<td>172 (2%)</td>
<td>-32%</td>
<td>1122 (2%)</td>
<td>-30%</td>
<td>803 229 (12%)</td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>2570 (&lt;1%)</td>
<td>-73%</td>
<td>28 797 (&lt;1%)</td>
<td>-38%</td>
<td>9 448 439 (1%)</td>
<td>13 (&lt;1%)</td>
<td>-32%</td>
<td>168 (&lt;1%)</td>
<td>2%</td>
<td>175 140 (3%)</td>
<td></td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>4153 (&lt;1%)</td>
<td>-16%</td>
<td>22 613 (&lt;1%)</td>
<td>-38%</td>
<td>23 222 798 (4%)</td>
<td>35 (&lt;1%)</td>
<td>-19%</td>
<td>164 (&lt;1%)</td>
<td>-9%</td>
<td>349 089 (5%)</td>
<td></td>
</tr>
<tr>
<td>Global</td>
<td>3 038 287 (100%)</td>
<td>-22%</td>
<td>14 517 805 (100%)</td>
<td>25%</td>
<td>656 398 043 (100%)</td>
<td>10 704 (100%)</td>
<td>-12%</td>
<td>46 581 (100%)</td>
<td>21%</td>
<td>6 672 752 (100%)</td>
<td></td>
</tr>
</tbody>
</table>

*Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior, and 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

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

- WHO COVID-19 Dashboard
- WHO COVID-19 Monthly Operational Update and previous editions of the Weekly Epidemiological Update
- WHO COVID-19 detailed surveillance data dashboard
- WHO COVID-19 policy briefs
Figure 2. COVID-19 cases per 100,000 population reported by countries, territories and areas, 26 December 2022 to 1 January 2023**

**See Annex 1: Data, table, and figure notes**
Figure 3. COVID-19 deaths per 100,000 population reported by countries, territories and areas, 26 December 2022 to 1 January 2023**

**See Annex 1: Data, table, and figure notes**
SARS-CoV-2 variants of concern and Omicron subvariants under monitoring

Geographic spread and prevalence

Globally, from 2 December 2022 to 2 January 2023, 105,428 SARS-CoV-2 sequences were shared through GISAID. Among these, 103,723 sequences were the Omicron variant of concern (VOC), accounting for 98.4% of sequences reported globally in the past 30 days.

BA.5 and its descendent lineages are still dominant globally, accounting for 63.7% of sequences submitted to GISAID as of week 50 (12 to 18 December 2022), even though their prevalence is decreasing. The prevalence of BA.2 and its descendent lineages is rising, mainly due to BA.2.75* (* indicates inclusion of descendent lineages); together they account for 15.2% of sequences submitted. BA.4 and its descendent lineages are declining with a prevalence of 0.7% as of week 50. Unassigned sequences (presumably Omicron) account for 13.6% of sequences submitted to GISAID in week 50, while the other lineages account for 6.1%.

At the global level, six variants currently under monitoring account for 74.4% of prevalence as of week 50 and have replaced the former BA.5 descendent lineages. These six variants under monitoring (and the respective prevalence) are BQ.1* (44.9%), a sublineage of BA.5, BA.5 with one or several of five mutations (S:R346X, S:K444X, S:V445X, S:N450D, S:N460X) (10.3%), BA.2.75* (11.8%), BA.4.6* (0.6%), and BA.2.3.20* (<0.1%). In week 50, the prevalence of XBB* was 6.8%, which includes XBB.1.5 which had an increase in sequences in week 50 (667 sequences) compared to week 49 (5 to 11 December 2022) where 525 sequences were reported. Based on current evidence, there is no indication of increased severity associated with these variants under monitoring compared to the former Omicron lineages.

The TAG-VE (Technical Advisory Group on SARS-CoV-2 Virus Evolution) convened on 3 January 2022 to discuss the COVID-19 situation in mainland China. The TAG-VE has released a statement which can be found here.

Additional resources

- Tracking SARS-CoV-2 Variants
- TAG-VE statement on Omicron sublineages BQ.1 and XBB
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- VIEW-hub: repository for the most relevant and recent vaccine data
WHO regional overviews:
Epidemiological week 26 December 2022 to 1 January 2023

African Region

The African Region reported over 2570 new cases, a 73% decrease as compared to the previous week. Five (10%) of the 50 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Nigeria (35 vs 17 new cases; +106%), Mali (two vs one new cases; +100%), and Zambia (512 vs 320 new cases; +60%). The highest numbers of new cases were reported from Ethiopia (905 new cases; <1 new case per 100 000; -11%), Zambia (512 new cases; 2.8 new cases per 100 000; +60%), and South Africa (348 new cases; <1 new case per 100 000; -88%).

The number of new weekly deaths in the region decreased by 32% as compared to the previous week, with 13 new deaths reported. The highest numbers of new deaths were reported from Zimbabwe (four new deaths; <1 new death per 100 000; -33%), Madagascar (two new deaths; <1 new death per 100 000; +100%), and Zambia (two new deaths; <1 new death per 100 000; -33%).

Region of the Americas

The Region of the Americas reported over 803 000 new cases, a 20% decrease as compared to the previous week. Two (4%) of the 56 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Honduras (2230 vs 943 new cases; +136%), and Paraguay (3272 vs 1889 new cases; +73%). The highest numbers of new cases were reported from the United States of America (393 587 new cases; 118.9 new cases per 100 000; -21%), Brazil (206 944 new cases; 97.4 new cases per 100 000; -19%), and Argentina (72 558 new cases; 160.5 new cases per 100 000; +17%).

The number of new weekly deaths in the region decreased by 9% as compared to the previous week, with 4385 new deaths reported. The highest numbers of new deaths were reported from the United States of America (2501 new deaths; <1 new death per 100 000; -14%), Brazil (1110 new deaths; <1 new death per 100 000; +19%), and Peru (194 new deaths; <1 new death per 100 000; +4%).

Updates from the African Region

Updates from the Region of the Americas
Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 4150 new cases, a 16% decrease as compared to the previous week. Two (9%) of the 22 countries for which data are available reported increases in new cases of 20% or greater: Libya (21 vs nine new cases; +133%) and Lebanon (682 vs 486 new cases; +40%). Some of the highest numbers of new cases were reported from Qatar (1441 new cases; 50 new cases per 100 000; -18%) and the United Arab Emirates (459 new cases; 4.6 new cases per 100 000; -1%)

The number of new weekly deaths in the region decreased by 19% as compared to the previous week, with 35 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (12 new deaths; <1 new death per 100 000; -14%), Saudi Arabia (10 new deaths; <1 new death per 100 000; -29%), and Tunisia (five new deaths; <1 new death per 100 000; -29%).

European Region

The European Region reported just under 549 000 new cases, a 43% decrease as compared to the previous week. Four (7%) of the 61 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Kyrgyzstan (10 vs four new cases; +150%), Kosovo[1] (35 vs 18 new cases; +94%), and Malta (167 vs 133 new cases; +26%). The highest numbers of new cases were reported from France (156 133 new cases; 240.1 new cases per 100 000; -48%), Germany (149 260 new cases; 179.5 new cases per 100 000; -35%), and Italy (83 202 new cases; 139.5 new cases per 100 000; -37%).

The number of new weekly deaths in the region decreased by 29% as compared to the previous week, with 2866 new deaths reported. The highest numbers of new deaths were reported from France (803 new deaths; 1.2 new deaths per 100 000; similar number of deaths reported the previous week), Italy (474 new deaths; <1 new death per 100 000; -41%), and the Russian Federation (379 new deaths; <1 new death per 100 000; -1%).

Updates from the Eastern Mediterranean Region

Updates from the European Region
South-East Asia Region

The South-East Asia Region reported over 8000 new cases, a 26% decrease as compared to the previous week. Six (60%) of the 10 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Timor-Leste (nine vs three new cases; +200%), Nepal (36 vs 20 new cases; +80%), and Myanmar (73 vs 57 new cases; +28%). The highest numbers of new cases were reported from Indonesia (4057 new cases; 1.5 new cases per 100 000; -38%), Thailand (2111 new cases; 3 new cases per 100 000; -27%), and India (1543 new cases; <1 new case per 100 000; +34%).

The number of new weekly deaths in the region decreased by 32% as compared to the previous week, with 172 new deaths reported. The highest numbers of new deaths were reported from Indonesia (82 new deaths; <1 new death per 100 000; -41%), Thailand (75 new deaths; <1 new death per 100 000; -16%), and India (12 new deaths; <1 new death per 100 000; -43%).

Western Pacific Region

The Western Pacific Region reported over one million new cases, a 12% decrease as compared to the previous week. Four (11%) of the 35 countries for which data are available reported increases in new cases of 20% or greater, with the highest proportional increases observed in Micronesia (Federated States of) (165 vs 21 new cases; +686%), Niue (123 vs 72 new cases; +71%), and Singapore (8324 vs 5481 new cases; +52%). The highest numbers of new cases were reported from Japan (946130 new cases; 748.1 new cases per 100 000; -18%), the Republic of Korea (457745 new cases; 892.8 new cases per 100 000; -3%), and China (218019 new cases; 14.8 new cases per 100 000; +45%).

The number of new weekly deaths in the region increased by 7% as compared to the previous week, with 3233 new deaths reported. The highest numbers of new deaths were reported from Japan (1941 new deaths; 1.5 new deaths per 100 000; -3%), China (648 new deaths; <1 new death per 100 000; +48%), and the Republic of Korea (429 new deaths; <1 new death per 100 000; +9%).

Updates from the South-East Asia Region

Updates from the Western Pacific Region
Hospitalizations and ICU admissions

At the global level, during epidemiological week 51 (19 to 25 December 2022), a total of 23,696 new hospitalizations and 32 new intensive care unit (ICU) admissions were reported. The presented hospitalization data are preliminary and might change as new data become available. Furthermore, hospitalization data are subject to reporting delays – especially for week 51, in which completeness of reporting is lower than usual due to the year-end holiday season. These data are also likely to include both hospitalizations with incidental cases of SARS-CoV-2 infection and those due to COVID-19 disease.

Globally, in week 51, nine (4% of all) countries reported data to WHO on new hospitalizations. The African Region reported hospitalization data from Ethiopia, Zambia and Zimbabwe; the Western Pacific Region reported from China and Singapore; the Region of the Americas reported from Mexico, Bonaire and Curaçao; and the Eastern Mediterranean Region reported from Qatar. To date, no country in the European and the South-East Asia Regions has reported data on new hospital admissions during the week.

Across the six WHO regions, in week 51, a total of five (2%) countries reported data to WHO on new ICU admissions. The region with the highest proportion of countries reporting data on new ICU admissions was the Eastern Mediterranean Region (two countries; 9%) followed by the African Region (one country; 2%), the Western Pacific Region (one country; 3%), and the Region of the Americas (one country; 2%). No country in the European Region and the South-East Asia Region has so far reported data on new ICU admissions during the week.

All three countries reporting more than 50 new hospitalizations showed an increasing trend compared to the previous week: China (22,416 vs 15,161 new hospitalizations; +48%), Mexico (1,037 vs 915 new hospitalizations; +13%), and Singapore (184 vs 165 new hospitalizations; +12%).

Figure 4. COVID-19 cases, deaths, hospitalizations, and ICU admissions reported weekly to WHO, as of 25 December 2022

Note: Recent weeks are subject to reporting delays and should not be interpreted as a declining trend.

Source: WHO Detailed Surveillance Dashboard

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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. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources.

A record of historic data adjustment made 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. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

‘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 except, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.


Updates on the COVID-19 outbreak in the Democratic People’s Republic of Korea are not included in this report as the number of laboratory-confirmed COVID-19 cases is not reported.
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 the COVID-19 surveillance systems. 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.5
References


