COVID-19 Weekly Epidemiological Update
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Global overview
Data as of 10 April 2022

Globally, during the week of 4 through 10 April 2022, the number of new COVID-19 cases and deaths has continued to decline for a third consecutive week, with over 7 million cases and over 22 000 deaths reported, a decrease of 24% and 18% respectively, as compared to the previous week (Figure 1).

All regions reported decreasing trends in the number of new weekly cases and deaths (Table 1). As of 10 April 2022, over 496 million confirmed cases and over 6 million deaths have been reported globally.

These trends should be interpreted with caution as several countries are progressively changing their COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 10 April 2022**

**See Annex 1: Data, table, and figure notes
At the country level, the highest numbers of new weekly cases were reported from the Republic of Korea (1 459 454 new cases; -29%), Germany (1 019 649 new cases; -26%), France (927 073 new cases; -3%), Viet Nam (453 647 new cases; -43%), and Italy (447 322 new cases; -8%).

The highest numbers of new weekly deaths were reported from the United States of America (3 682 new deaths; -9%), Republic of Korea (2 186 new deaths; -6%), the Russian Federation (2 008 new deaths; -15%), Germany (1 686 new deaths; +6%), and Brazil (1 120 new deaths; -22%).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 10 April 2022**

<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>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>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>3 554 764 (49%)</td>
<td>-26%</td>
<td>207 509 074 (42%)</td>
<td>9 920 (44%)</td>
<td>-16%</td>
<td>1 957 395 (32%)</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>2 879 100 (40%)</td>
<td>-26%</td>
<td>49 898 300 (10%)</td>
<td>4 431 (20%)</td>
<td>-21%</td>
<td>217 386 (4%)</td>
</tr>
<tr>
<td>Americas</td>
<td>516 017 (7%)</td>
<td>-4%</td>
<td>151 456 460 (31%)</td>
<td>5 980 (27%)</td>
<td>-19%</td>
<td>2 709 204 (44%)</td>
</tr>
<tr>
<td>South-East Asia</td>
<td>204 527 (3%)</td>
<td>-8%</td>
<td>57 400 374 (12%)</td>
<td>1 358 (6%)</td>
<td>-15%</td>
<td>780 833 (13%)</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>43 920 (1%)</td>
<td>-4%</td>
<td>21 630 352 (4%)</td>
<td>565 (3%)</td>
<td>-18%</td>
<td>341 304 (6%)</td>
</tr>
<tr>
<td>Africa</td>
<td>23 323 (&lt;1%)</td>
<td>-17%</td>
<td>8 612 215 (2%)</td>
<td>82 (&lt;1%)</td>
<td>-40%</td>
<td>171 219 (3%)</td>
</tr>
<tr>
<td>Global</td>
<td>7 221 651 (100%)</td>
<td>-24%</td>
<td>496 507 539 (100%)</td>
<td>22 336 (100%)</td>
<td>-18%</td>
<td>6 177 354 (100%)</td>
</tr>
</tbody>
</table>

*Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior  
**See Annex 1: Data, table, and figure notes

For the latest data and other updates on COVID-19, please see:  
- [WHO COVID-19 Dashboard](https://covid19.who.int)  
- [WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update](https://www.who.int)
Figure 2. COVID-19 cases per 100,000 population reported by countries, territories and areas, 4 – 10 April 2022*

*See Annex 1: Data, table, and figure notes
Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 4 – 10 April 2022*

Deaths reported in the last 7 days (per 100,000 population)

- 0.01 - 0.50
- 0.51 - 1.50
- 1.51 - 3.00
- 3.01 - 6.00
- > 6.00
- No deaths reported in the last 7 days
- No reported cases

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

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**See Annex 1: Data, table, and figure notes**
Special Focus: Update on SARS-CoV-2 variants of interest and variants of concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact 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 to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of 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 encouraged to investigate and report on the impacts of these variants. When referring to the genomic sequence of SARS-CoV-2 identified from the first cases (December 2019), the term ‘index virus’ should be used.

Geographic spread and prevalence of VOCs

The Omicron variant remains the dominant variant circulating globally, accounting for nearly all sequences recently reported to GISAID. Among the 379,278 sequences uploaded to GISAID with specimens collected in the last 30 days, 376,082 (99.2%) were Omicron, 125 (<0.1%) were Delta and 2,961 (0.8%) sequences were not assigned to a Pango lineage. These trends should be interpreted with due consideration of the limitations of surveillance systems, including differences in sequencing capacity and sampling strategies between countries, as well as laboratory turnaround times for sequencing and delays in reporting.

Omicron VOC

WHO continues to monitor several descendent lineages under the Omicron VOC, including BA.1, BA.2, BA.3 as well as now BA.4 and BA.5. It also includes BA.1/BA.2 circulating recombinant forms, such as XE. The full list can be found here https://cov-lineages.org/lineage_list.html

A small number of sequences of BA.4 and BA.5 descendent lineages have now been detected in a few countries. Both have additional mutations in the Spike region (S:L452R, S:F486V) and unique mutations outside of Spike. The S:L452R and S:F486V mutations are associated with potential immune escape characteristics. In addition, the majority of BA.4 and BA.5 sequences have the 69-70 deletion responsible for S gene target failure (SGTF) in some PCR assays. This may prove useful for surveillance purposes in places where BA.2 is dominant, as the 69-70 deletion is largely not present in BA.2 sequences.

WHO is working with scientists to further assess the characteristics of these lineages and their public health implications. WHO recommends countries to continue surveillance, where possible, and rapid data sharing on publicly available databases.

¹Includes sequences submitted to GISAID with sample collected dates from 9 March to 7 April 2022 (last reported sample at the time of data extraction), excluding low coverage sequences. Proportions are estimated for countries submitting more than 100 total sequences. In the past 30 days, 42 countries submitted a total of 100 sequences and above on GISAID.
Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19
- VIEW-hub: repository for the most relevant and recent vaccine data
- WHO Statement on Omicron sublineage BA.2

Special Focus: Update on WHO COVID-19 global rapid risk assessment

The COVID-19 pandemic continues to evolve, as does our understanding of the SARS-CoV-2 virus, and the response needed to control its spread and impact. In WHO’s most recent rapid risk assessment, which was completed on 6 April 2021, the global public health risk was assessed to remain very high due to the ongoing risks to human health, risk of spread and risk of insufficient control capacities.

Under the Emergency Response Framework, WHO undertakes risk assessments and situation analyses on a regular basis to inform its response to emerging situations. In addition, WHO periodically reviews the current risk status of public health events through an in-depth hazard, exposure and context assessment. This also includes a review of the vulnerabilities and capacities available to respond to the public health event and to investigate the current risk to human health, risks of ongoing spread globally, and risk of insufficient control capacities. Such assessments are used as an internal WHO decision-making tool, and to support independent deliberations, including but not limited to meetings of the International Health Regulations (IHR 2005) Emergency Committee regarding the COVID-19 pandemic.

To date, 13 global rapid risk assessments have been undertaken for COVID-19, and additional assessments have been conducted for specific events, such as the emergence of SARS-CoV-2 variants. Here, we provide a synopsis of the most recent in-depth global rapid risk assessment for COVID-19.

Despite a reduction in SARS-CoV-2 testing observed since the beginning of 2022 in many Member States, the COVID-19 pandemic continues with intense transmission and high levels of death primarily among unvaccinated at-risk populations. The highly transmissible Omicron variant of concern has rapidly replaced all other circulating variants in almost all countries in which it has been reported, and has become dominant globally.

Omicron’s properties of immune escape have been associated with the rapid and almost synchronous increase in the global incidence of COVID-19 cases reported until the end of January 2022. A further increase observed at the beginning of March was driven primarily by a delayed increase in case incidence in the Western Pacific Region and a rebound in the number of new cases reported in the European Region. This trend was likely due to a combination of factors, including the predominance of the Omicron Pango lineages BA.1, and then BA.2, with a transmission advantage over other Omicron lineages; relaxation of public health and social measures (PHSM); and waning of humoral immunity following vaccination and/or prior infection. The recent detection of emerging recombinants of the Delta-Omicron and Omicron descendent lineages requires ongoing close monitoring.

Unlike previous waves, the most recent wave due to Omicron can be characterized by a decoupling between the number of cases, hospitalizations (particularly for intensive care) and deaths in many countries. However, data continue to show that those who are unvaccinated remain at higher risk of severe disease following infection with Omicron as compared to those who have been vaccinated. Despite the reduction in severity, the massive increases
in cases with Omicron have led to large numbers of hospitalizations, putting further pressure on healthcare systems, and in some countries, similar or higher numbers of deaths when compared to previous peaks.

While vaccine effectiveness (VE) wanes against Omicron for all disease outcomes as compared to other VOCs following the primary vaccination series, VE estimates for Omicron remain the highest for severe disease. Furthermore, there is evidence that a booster dose substantially improves VE for all outcomes; however, more data are needed to characterize the duration of this protection.

Over 11 billion vaccine doses have been distributed globally. Nevertheless, substantial inequities remain, with only 11% of those in low-income countries (LICs) having completed the primary series; and major differences among regions, with vaccination coverage ranging from 82% in the Western Pacific Region to 13% in the African Region. There is particular concern about reaching the most vulnerable populations who remain unvaccinated, particularly those of older age and those with comorbidities. Globally, an estimated 35% of those aged 60 years and over are awaiting completion of the primary vaccination series. Despite low vaccination coverage in the African Region, the most recent estimates of combined seroprevalence (vaccine and infection-derived humoral immune response) were 72.6% (95% CI: 71.7-73.5%). Considering the low vaccine coverage, such seroprevalence estimates highlight the extent of SARS-CoV-2 transmission across the Region.

WHO Emergency Use Listing (EUL) approved diagnostic tests, including nucleic acid amplification tests (e.g. polymerase chain reaction (PCR) assays) with more than one viral target or antigen-detection rapid diagnostic tests (Ag-RDTs), remain effective at detecting Omicron infection, including BA.1 and BA.2. WHO is concerned that during recent months, some countries have significantly reduced SARS-CoV-2 testing, despite widespread availability of diagnostic tests. Unless robust surveillance systems are retained, countries may lose the ability to accurately interpret epidemiological trends, implement the appropriate measures necessary to reduce transmission and monitor and assess the evolution of the virus.

Despite current high rates of transmission of SARS-CoV-2, many countries have dropped most PHSM without following a layered or staged approach to relaxation. This can lead to the erosion of public trust and PHSM may not be easily re-implemented should the future need arise, for example following the emergence of a new VOC. Each country faces different circumstances based on the epidemiological situation and the context. WHO has published an updated Strategic Preparedness, Readiness and Response Plan to End the Global COVID-19 Emergency in 2022 which outlines future scenarios of COVID-19 and how the current strategy needs to be adjusted taking into account the difficulties posed by the pandemic in the light of the many other public health and global challenges. This is particularly apparent during other emergencies including the war in Ukraine and protracted conflicts in many other countries.

The confidence in the available information on the global public health risk remains moderate. There are still gaps in knowledge about the phenotypic impact of emerging SARS-CoV-2 variants and recombinants; the long-term duration of infection and vaccine-derived protection, particularly against severe disease and hospitalization; and the impact of lifting and changing PHSM on transmission, hospitalization and mortality.

**Additional resources**

- [Further information about the WHO risk assessment process](#)
- [COVID-19 IHR Emergency Committe](#)
WHO regional overviews: Epidemiological week 4 – 10 April 2022*

African Region

The African Region has continued to report a decreasing trend in new cases since January 2022, with just under 23 000 new weekly cases reported, representing a 17% decrease as compared to the previous week. However, seven (14%) countries in the Region reported an increase of over 20% in cases, with some of the greatest proportional increases observed in Lesotho (58 vs 15 new cases; +287%), Mali (53 vs 23 new cases; +130%) and Mayotte (67 vs 52 new cases; +29%). The highest numbers of new cases were reported from Réunion (10 996 new cases; 1228.2 new cases per 100 000 population; +13%), South Africa (9182 new cases; 15.5 new cases per 100 000; -6%), and Seychelles (510 new cases; 518.6 new cases per 100 000; -1%).

The number of new weekly deaths in the Region decreased by 40% as compared to the previous week, with over 8 000 new deaths reported. The highest numbers of new deaths were reported from South Africa (50 new deaths; <1 new death per 100 000 population; -38%), Réunion (11 new deaths; 1.2 new deaths per 100 000; +57%), and Zimbabwe (11 new deaths; <1 new deaths per 100 000; +22%).

Region of the Americas

With just over half a million new weekly cases and just below 6000 new weekly deaths (representing decreases of 4% and 19% respectively as compared to the previous week), the decreasing trend observed since mid-January 2022 has continued in the Region of the Americas. However, twelve (21%) countries in the Region reported increases in new cases of 20% or greater, including the United States Virgin Islands (108 vs 45 new cases; +140%), Sint Maarten (89 vs 41 new cases; +117%), Puerto Rico (4236 vs 2396 new cases; +77%) and Argentina (22468 vs 12894 new cases; +74%). The highest numbers of new cases were reported from the United States of America (208 732 new cases; 63.1 new cases per 100 000; +4%), Brazil (148 798 new cases; 70.0 new cases per 100 000; -14%), and Canada (60 099 new cases; 159.2 new cases per 100 000; +7%).

The highest numbers of new deaths were reported from the United States of America (3682 new deaths; 1.1 new deaths per 100 000; -9%), Brazil (1120 new deaths; <1 new death per 100 000; -22%), and Chile (308 new deaths; 1.6 new deaths per 100 000; -21%).

Updates from the African Region

Updates from the Region of the Americas
Eastern Mediterranean Region

In the Eastern Mediterranean Region, new weekly cases have continued to decline since early February 2022. Just under 44,000 new weekly cases were reported last week, a 4% decrease as compared to the previous week. However, three (14%) countries in the Region have reported increases in new cases of 20% or greater, with the largest observed in the occupied Palestinian territory (537 vs 282 new cases; +90%) and the Islamic Republic of Iran (22,378 vs 17,582; +27%). The highest numbers of new cases were reported from the Islamic Republic of Iran (22,378 new cases; 26.6 new cases per 100,000; +27%), Egypt (3,913 new cases; 3.8 new cases per 100,000; -11%), and Bahrain (3,871 new cases; 227.5 new cases per 100,000; -26%).

The number of new weekly deaths in the Region decreased by 18% when compared to the previous week, with over 550 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (300 new deaths; <1 new death per 100,000; -2%), Tunisia (102 new deaths; <1 new death per 100,000; -35%), and Egypt (56 new deaths; <1 new death per 100,000; similar to the previous week’s figures).

European Region

In the European Region, new weekly cases have continued to decline for a third consecutive week after the increase observed in mid-March 2022, with over 3.5 million new cases reported, a 26% decrease as compared to the previous week. None of the countries in the Region reported increases in new cases of 20% or greater. The highest numbers of new cases were reported from Germany (1,019,649 new cases; 122.6 new cases per 100,000; -26%), France (927,073 new cases; 142.5 new cases per 100,000; -3%), and Italy (447,322 new cases; 75.0 new cases per 100,000; -8%).

Also the number of new weekly deaths has continued to decrease in the Region, with over 9,900 new deaths reported, a 16% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (2,008 new deaths; 1.4 new deaths per 100,000; -15%), Germany (1,686 new deaths; 2.0 new deaths per 100,000; +6%), and the United Kingdom (1,026 new deaths; 1.5 new deaths per 100,000; -35%).
South-East Asia Region

The South-East Asia Region reported over 204 000 new weekly cases, an 8% decline as compared to the previous week, continuing the decreasing trend observed since mid-January 2022. However, Bhutan reported an increase in new weekly cases of 70% (10785 vs 6357 new cases). The highest numbers of new cases were reported from Thailand (171 890 new cases; 246.3 new cases per 100 000; -6%), Indonesia (12 726 new cases; 4.7 new cases per 100 000; -39%), and Bhutan (10 785 new cases; 1397.7 new cases per 100 000; +70%).
The Region reported just over 1300 new weekly deaths, representing a 15% decrease as compared to the previous week. The highest numbers of new deaths were reported from Thailand (668 new deaths; 1.0 new deaths per 100 000; +8%), India (340 new deaths; <1 new death per 100 000; similar to the previous week’s figures), and Indonesia (338 new deaths; <1 new death per 100 000; -45%).

Western Pacific Region

After the peak reached in early March 2022, cases have continued to decline in the Western Pacific Region, with over 2.8 million new weekly cases reported, representing a 26% decrease as compared to the previous week. However, five (16%) countries in the Region reported an increase of 20% or greater, with some of the largest increases observed American Samoa (1208 vs 600 new cases; +101%), Samoa (1607 vs 917 new cases; +75%) and Fiji (67 vs 39 new cases; +72%). The highest numbers of new cases were reported from the Republic of Korea (1 459 454 new cases; 2846.6 new cases per 100 000; -29%), Viet Nam (453 647 new cases; 466.1 new cases per 100 000; -43%), and Australia (392 569 new cases; 1539.5 new cases per 100 000; -2%).
The number of new weekly deaths shows a decrease of 21% as compared to the previous week, with just under 4400 new deaths reported. The highest numbers of new deaths were reported from the Republic of Korea (2186 new deaths; 4.3 new deaths per 100 000; -6%), China (645 new deaths; <1 new death per 100 000; -33%), and the Philippines (406 new deaths; <1 new death per 100 000; -8%).

Updates from the South-East Asia Region

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. 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.

Due to public health authorities conducting data reconciliation exercises that remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. 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 purpose.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Open WHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public: Protect yourself; Questions and answers; Travel advice