



News:

- **WHO:** WHO chief Tedros Adhanom Ghebreyesus visited rebel-held northwest Syria on 1 March, highlighting the dire humanitarian situation in the region almost a month after it was rocked by devastating earthquakes.
- **WHO:** [Countries of the WHO have begun negotiations on a global accord on pandemic prevention](#), preparedness and response, using the “zero draft” as a basis for negotiating an agreement to protect nations and communities from future pandemic emergencies. (see also side 4)
- **ECDC:** As of 3 March 2023, [ECDC will de-escalate BA.2, BA.4 and BA.5 from its list of SARS-CoV-2 variants of concern \(VOC\)](#), as these parental lineages are no longer circulating. ECDC will continue to categorise and report on specific SARS-CoV-2 sub-lineages in circulation that are relevant to the epidemiological situation. (side 3)
- **WHO/ECDC:** published their next update of the joint [Mpox Surveillance Bulletin](#) on 01 March 2023.
- **OCHA:** Nearly 400,000 people have been affected by a [tropical cyclone that hit Madagascar and Mozambique](#) last month, according to the UN’s aid coordination agency, OCHA. Tropical Storm Freddy has led to significant rainfall and displaced tens of thousands of people.
- **CLIMATE LAW:** [More than 100 countries](#) are backing [Vanuatu’s bid to bring climate change](#) to the International Court of Justice. Some 105 nations are co-sponsoring a resolution to be tabled at the UN General Assembly – the key step to nudge the issue before the UN’s top court. Among the notable omissions: big polluters and economic engines like Brazil, China, India, Indonesia, Russia, South Africa, and the United States.
- **Mali:** Mali’s military junta has picked plenty of fights since seizing power in 2020. It has rowed with neighbouring countries, sparred with its former colonial ruler, and battled with jihadists. As if this wasn’t enough, it is also now locked in a dispute with non-jihadist armed groups (including former separatists) who control major towns in the north.

Topics:

- Global situation: COVID-19 (slide 2)
- ECDC de-escalation of variants of concern (slide 3)
- The WHO’s pandemic treaty (slide 4)
- Has Seasonal Influenza Returned to Pre-pandemic Patterns? (slide 5)
- WHO recommendations for influenza vaccine composition 2023/24 (slide 6)
- Other infectious diseases (slide 7 + 8)
- Madagascar, Mozambique - Tropical cyclone FREDDY AND Cholera outbreak in Mozambique (slide 9)

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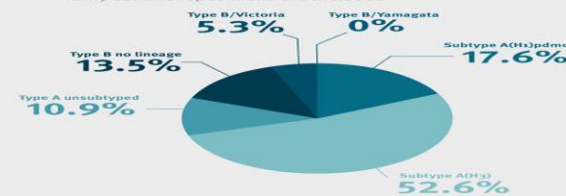
Influenza in Europe

Data from EU and EEA countries for the 2022–2023 season
Week 8 (20 Feb – 26 Feb 2023)



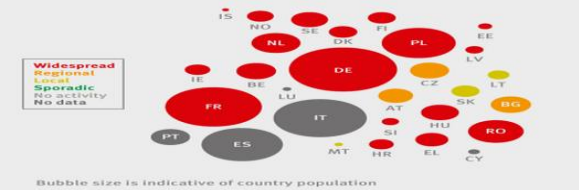
Influenza viruses circulating in 2022–2023

Only sentinel specimens are included



Influenza geographic spread

Based on sentinel reports of influenza-like illness and/or acute respiratory infections



Influenza trend

Based on the percentage of sentinel specimens found positive, by week



COVID-19 Situation by WHO Region, as of 1 March

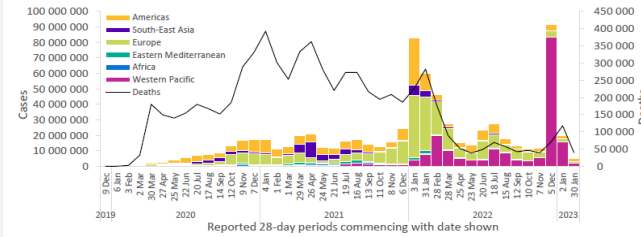
Global epidemiological situation overview; WHO as of 26 February 2023

Globally, over 4.8 million new cases and over 39 000 deaths were reported in the last 28 days (30 January to 26 February 2023), a decrease of 76% and 66%, respectively, compared to the previous 28 days (Figure 1, Table 1). As of 26 February 2023, over 758 million confirmed cases and over 6.8 million deaths have been reported globally.

Current trends in reported COVID-19 cases are underestimates of the true number of global infections and reinfections as shown by prevalence surveys.1–4 This is partly due to the reductions in testing and delays in reporting in many countries. Data presented in this report may be incomplete and should, therefore, be interpreted with caution. Additionally, data from previous weeks are continuously updated to incorporate retrospective changes in reported COVID-19 cases and deaths made by countries.

At the country level, the highest numbers of new 28-day cases were reported from the United States of America (1 085 170 new cases; -29%), Japan (752 935 new cases; -77%), China (537 561 new cases; -95%), Germany (376 450 new cases; +6%), and the Republic of Korea (349 277 new cases; -66%). The highest numbers of new 28-day deaths were reported from the United States of America (12 111 new deaths; -17%), China (5915 new deaths; -91%), Japan (4818 new deaths; -52%), Brazil (2186 new deaths; -24%), and the United Kingdom (2027 new deaths; -48%).

Figure 1. COVID-19 cases reported by WHO Region, and global deaths by 28-day intervals, as of 26 February 2023**



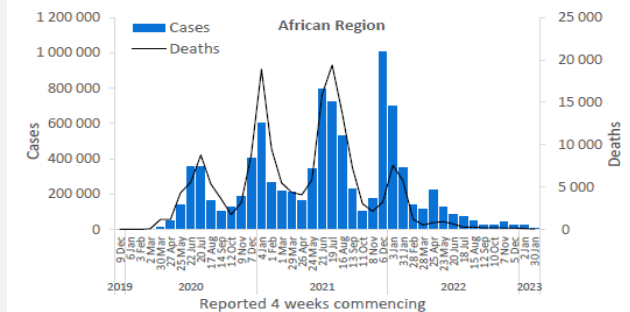
WHO regional overviews

Data for 30 January to 26 February 2023

African Region

The African Region reported over 14 000 new cases, a 53% decrease as compared to the previous 28-day period. Nine (18%) 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 Mali (211 vs eight new cases; +2538%), Chad (23 vs two new cases; +1050%), and Nigeria (130 vs 13 new cases; +900%). The highest numbers of new cases were reported from South Africa (4729 new cases; 8.0 new cases per 100 000; -33%), Zambia (2964 new cases; 16.1 new cases per 100 000; -43%), and Zimbabwe (1619 new cases; 10.9 new cases per 100 000; -25%).

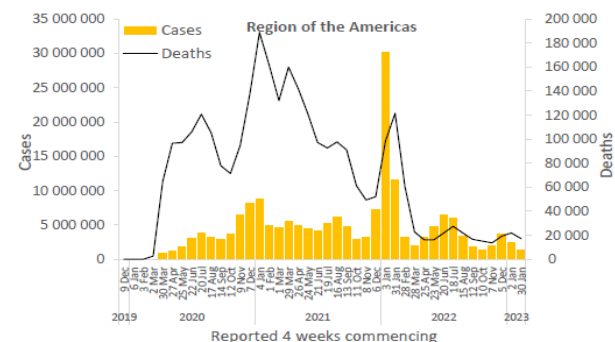
The number of new 28-day deaths in the Region decreased by 66% as compared to the previous 28-day period, with 37 new deaths reported. The highest numbers of new deaths were reported from Zambia (13 new deaths; <1 new death per 100 000; -24%), Mozambique (six new deaths; <1 new death per 100 000; +50%), and Zimbabwe (five new deaths; <1 new death per 100 000; -74%).



Region of the Americas

The Region of the Americas reported over 1.5 million new cases, a 38% decrease as compared to the previous 28-day period. Two (4%) of the 56 countries for which data are available reported increases in new cases of 20% or greater: Saint Lucia (201 vs 44 new cases; +357%), and Jamaica (789 vs 616 new cases; +28%). The highest numbers of new cases were reported from the United States of America (1 085 170 new cases; 327.8 new cases per 100 000; -29%), Brazil (229 264 new cases; 107.9 new cases per 100 000; -50%), and Mexico (72 227 new cases; 56 new cases per 100 000; -34%).

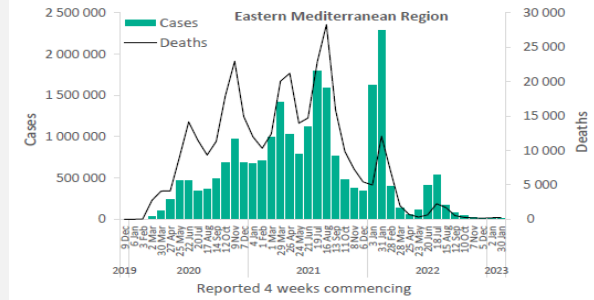
The number of new 28-day deaths in the Region decreased by 22% as compared to the previous 28-day period, with 17 208 new deaths reported. The highest numbers of new deaths were reported from the United States of America (12 111 new deaths; 3.7 new deaths per 100 000; -17%), Brazil (2186 new deaths; 1.0 new death per 100 000; -24%), and Canada (743 new deaths; 2.0 new deaths per 100 000; -29%).



Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 15 000 new cases, a 22% decrease as compared to the previous 28-day period. Three (14%) of the 22 countries for which data are available reported increases in new cases of 20% or greater: in Kuwait (310 vs 176 new cases; +76%), Saudi Arabia (1400 vs 824 new cases; +70%), and the Islamic Republic of Iran (3656 vs 2906 new cases; +26%). The highest numbers of new cases were reported from the Islamic Republic of Iran (3656 new cases; 4.4 new cases per 100 000; +26%), Lebanon (3315 new cases; 48.6 new cases per 100 000; -39%), and the United Arab Emirates (2523 new cases; 25.5 new cases per 100 000; +15%).

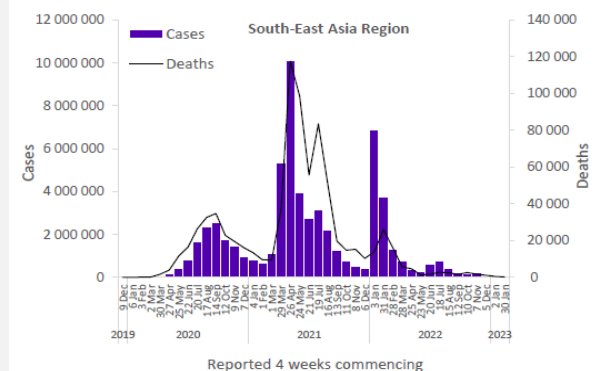
The number of new 28-day deaths in the Region increased by 18% as compared to the previous 28-day period, with 238 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (98 new deaths; <1 new death per 100 000; +66%), Saudi Arabia (45 new deaths; <1 new death per 100 000; -10%), and Lebanon (37 new deaths; <1 new death per 100 000; -5%).



South-East Asia Region

The South-East Asia Region reported just under 11 000 new cases, a 36% decrease as compared to the previous 28-day period. No country has reported increases in new cases of 20% or greater compared to the previous 28-day period. The highest numbers of new cases were reported from Indonesia (6055 new cases; 2.2 new cases per 100 000; -36%), India (3378 new cases; <1 new case per 100 000; -15%), and Thailand (1051 new cases; 1.5 new cases per 100 000; -66%).

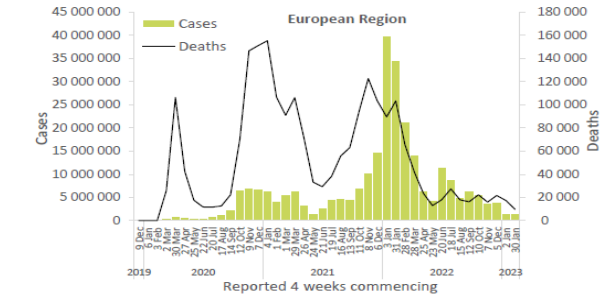
The number of new 28-day deaths in the Region decreased by 57% as compared to the previous 28-day period, with 186 new deaths reported. The highest numbers of new deaths were reported from Indonesia (105 new deaths; <1 new death per 100 000; -43%), Thailand (46 new deaths; <1 new death per 100 000; -77%), and India (29 new deaths; <1 new death per 100 000; -17%).



European Region

The European Region reported over 1.4 million new cases, a 7% decrease as compared to the previous 28-day period. Fourteen (23%) 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 Republic of Moldova (8779 vs 2123 new cases; +314%), Poland (36 982 vs 9696 new cases; +281%), and Armenia (615 vs 228 new cases; +170%). The highest numbers of new cases were reported from Germany (376 450 new cases; 452.6 new cases per 100 000; +6%), the Russian Federation (314 716 new cases; 215.7 new cases per 100 000; +133%), and Austria (124 999 new cases; 1404.3 new cases per 100 000; +86%).

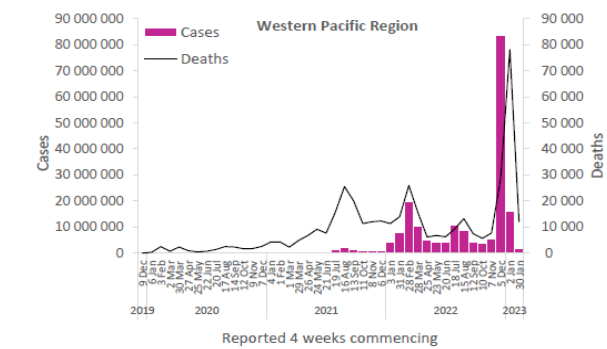
The number of new 28-day deaths in the Region decreased by 44% as compared to the previous 28-day period, with 9784 new deaths reported. The highest numbers of new deaths were reported from the United Kingdom (2027 new deaths; 3.0 new deaths per 100 000; -48%), Italy (1190 new deaths; 2.0 new deaths per 100 000; -40%), and the Russian Federation (1051 new deaths; <1 new death per 100 000; -14%).



Western Pacific Region

The Western Pacific Region reported over 1.7 million new cases, an 89% decrease as compared to the previous 28-day period. Two (6%) of the 35 countries for which data are available reported increases in new cases of 20% or greater: Nauru (559 vs 67 new cases; +734%), and Papua New Guinea (57 vs 38 new cases; +50%). The highest numbers of new cases were reported from Japan (752 935 new cases; 595.3 new cases per 100 000; -77%), China (537 561 new cases; 36.5 new cases per 100 000; -95%), and the Republic of Korea (349 277 new cases; 681.3 new cases per 100 000; -66%).

The number of new 28-day deaths in the Region decreased by 84% as compared to the previous 28-day period, with 12 132 new deaths reported. The highest numbers of new deaths were reported from China (5915 new deaths; <1 new death per 100 000; -91%), Japan (4818 new deaths; 3.8 new deaths per 100 000; -52%), and the Republic of Korea (556 new deaths; 1.1 new deaths per 100 000; -53%).



ECDC de-escalates BA.2, BA.4 and BA.5 from its list of variants of concern

As of 3 March 2023, ECDC will de-escalate BA.2, BA.4 and BA.5 from its list of SARS-CoV-2 variants of concern (VOC), as these parental lineages are no longer circulating. ECDC will continue to categorise and report on specific SARS-CoV-2 sub-lineages in circulation that are relevant to the epidemiological situation.

ECDC categorised Omicron (B.1.1.529) as a VOC in November 2021 on the basis that this variant was predicted to have a substantial negative impact on the COVID-19 epidemiological situation in the EU/EEA—Omicron was the most highly mutated SARS-CoV-2 variant to-date, with substantial immune escape capabilities relative to prior SARS-CoV-2 variants. Omicron quickly established itself as the dominant SARS-CoV-2 lineage globally, resulting in a surge of COVID-19 cases.

In early 2022, a large number of Omicron-descendent sub-lineages emerged (BA.1, BA.2, BA.3, BA.4, BA.5), with ECDC categorising these sub-lineages separately to better distinguish their relative impacts to the epidemiological situation. Amongst these sub-lineages, BA.2, BA.4 and BA.5 consistently circulated in the EU/EEA until late 2022.

The current epidemiological situation is hallmarked by a highly diverse landscape of co-circulating BA.2 and BA.5 descendent variants, which have different properties to their parental lineages and require individual assessment. ECDC currently lists the most prominent amongst these under the categories ‘variant of interest’ (VOI) and ‘variant under monitoring’ (VUM):

Variant of interest (VOI)

- BQ.1 (BA.5 descendent)
- BA.2.75 (BA.2 descendent)
- XBB (BA.2.10.1 / BA.2.75 descendent)
- XBB.1.5 (BA.2.10.1 / BA.2.75 descendent) new VOI

Variant under monitoring (VUM)

- BF.7 (BA.5 descendent)
- BA.2.3.20 (BA.2 descendent)
- CH.1.1 (BA.2.75 descendent)
- BN.1 (BA.2.75 descendent)
- XBC (Delta (21I) / BA.2 recombinant)
- XAY (Delta (AY.45) / BA.2 recombinant)

The absence of SARS-CoV-2 variants categorised as ‘of concern’ reflects the current stable epidemiological situation in the EU/EEA. **However, it does not signal the end of the threat posed by SARS-CoV-2 and possible future variants that may emerge.**

Recommendations for public health authorities

ECDC encourages countries to remain vigilant, by reinforcing representative surveillance systems, sequencing capacity, and reporting, as outlined in the July 2022 guidance [Operational considerations for respiratory virus surveillance in Europe](#) and most recent [COVID-19 surveillance reporting protocols](#).

Establishing strong and sustainable respiratory virus surveillance in the community will be critical moving forward to reliably assess the relative contribution of different SARS-CoV-2 variant threats to the EU/EEA.

Source: [ECDC](#)

ECDC Communicable Disease Threats Report

Source: [ECDC](#)

ECDC assessment of the XBB.1.5 sub-lineage

The XBB.1.5 is a sub-lineage of XBB with an additional spike RBD mutation S486P. This lineage was first detected in the United States with the sample collection dated from 22 October 2022, and it has been seen increasing in numbers since then. The parental lineage, XBB and its sub-lineages including, XBB.1.5 are categorised as a variant of interest (VOI) [1].

As of 3 March 2023, 66 650 sequences have been deposited in GISAID EpiCoV belonging to the XBB.1.5 lineage. Most of these submissions are from the United States (43 851 sequences), the United Kingdom (5 981 sequences) and the rest of Europe (9 190 sequences).

The [US CDC nowcast system](#) estimates the current proportion of the variant at around 85% (previous week 79.1%) in the US. For the last week with complete data (week 5, 2023), the US CDC reports the proportion of XBB.1.5 at 62% (previous week 53%).

This lineage is currently estimated to have a large growth advantage relative to the previously circulating lineages in North America (60%) and Europe (64%) (estimates provided by [CoV-spectrum](#), based on data from GISAID EpiCoV), though these estimates are associated with significant uncertainty. The US CDC reports a doubling time of the proportion of XBB.1.5 of nine days. The rapid growth in the US does not necessarily mean that the variant will become dominant in the EU/EEA, major differences in variant circulation between North America and Europe have been observed several times before during the pandemic.

The most likely explanation of the growth advantage is the already high level of immune escape capabilities demonstrated by XBB, combined with the effect of the spike change S486P. This mutation has previously been rare during the pandemic, probably due to it requiring two nucleotide substitutions in the same codon to change from Phenylalanine to Proline. Other variants with this change have however emerged without becoming successful. A [recent preprint](#) demonstrates that XBB.1.5 is not associated with a higher reduction in neutralisation by vaccine and convalescent sera compared to XBB.1, but that it is associated with a higher ACE2 affinity, which could indicate that the advantage of XBB.1.5 compared to XBB.1 might be caused by an increase in intrinsic transmissibility. Further laboratory and epidemiological investigations are required to elucidate the mechanism of the growth advantage conferred by this change specifically in the XBB variant. There is currently not enough information available to assess any change in infection severity associated with the variant.

Based on GISAID EpiCoV data as of 27 February 2023, XBB.1.5 is increasing in proportions in most EU/EEA countries with adequate sequence reporting volume. The estimated proportions for week 6, 2023 and week 5, 2023 (in parenthesis) are: Austria 18% (9.1%), Belgium 20% (19%), Denmark 31% (15%), Finland 11% (9.7%), France 32% (23%), Germany 26% (18%), Iceland 52% (37%), Ireland 56% (38%), Italy 17% (15%), the Netherlands 41% (30%), Poland 21% (15%), Spain 52% (31%) and Sweden 15% (14%). The presence of XBB.1.5 in the EU/EEA accounts a median proportion of 24% (range: 11–56%) in the countries that reported data for week 6, 2023.

There is a risk that this variant may have an increasing effect on the number of cases of COVID-19 in the EU/EEA, but not within the coming month as the variant is currently only present at very low levels. Due to uncertainties associated with the growth rate of the variant, this assessment is associated with a high degree of uncertainty. [A threat assessment brief on XBB.1.5](#) was published on 13 January 2023.

Other News

On 1 March 2023, the German Federal Government published an [update](#) on protection measures against COVID-19. According to the update, from 1 March onwards, employees and residents in healthcare facilities and nursing homes will be exempted from wearing masks. However, visitors to healthcare facilities and nursing homes will still be required to wear masks.

On 24 February 2023, the European Medicines Agency (EMA) published a [resolution](#) on Lagevrio (molnupiravir) refusing its marketing authorisation. According to the resolution, the clinical benefits of Lagevrio could not be demonstrated in the treatment of adults with COVID 19, who do not require supplemental oxygen and are at increased risk of developing severe COVID-19. Lagevrio was developed as a medicine for the treatment of adults with COVID-19, who did not require supplemental oxygen and were at increased risk of developing severe COVID-19.

The World Health Organization's pandemic treaty

Global equity underpins the first draft and must remain a key priority

The Covid-19 pandemic showed that gross inequities in population morbidity, mortality, and access to medicines persist between nations, reflecting the colonial histories and current political status of international governance. These patterns of inequity emerge directly from colonialism's racism, violence, resource extraction, and exploitation. It is therefore welcome that "equity" underpins the World Health Organization's call to action to its member states, as they negotiate a new international instrument to advance collective action for pandemic prevention, preparedness, and response—the pandemic treaty.¹ The treaty aims to create legally binding obligations between countries and to establish new global mechanisms for pandemics under the auspices of WHO.

On 1 February 2023, WHO released a *Zero Draft of the Pandemic Treaty* for its member states' consideration at the meetings of the intergovernmental negotiating body in February and April 2023.²

Decolonising international law

The draft contains several provisions that seek to operationalise equity through international law, including redistributing resources. This could be the first step towards decolonising international law for infectious diseases, a specialism that has largely retained a 19th century colonial framework of international cooperation for disease control. As the sociologist and medical historian Alexandre White wrote, the International Health Regulations—the current international law for public health emergencies of international concern—"position Europe and more broadly the West as the sites that must be protected from the infectious disease threats of the rest of the world."³ The International Health Regulations prioritise notification of potential public health emergencies at risk of spreading internationally,³ focus on containment over prevention,⁴ and are relatively silent on response measures.⁵ This places a disproportionate burden on low and middle income countries and invariably favours high income countries with greater resources, including those disproportionately accumulated through colonialism, which reinforces global inequity, racism, and injustice. Whether the pandemic treaty perpetuates this framing—creating an unjust world more vulnerable to pandemics—or begins to diverge from the coloniality that underpins international infectious disease law will depend on negotiations of the draft text and certain critical provisions.

The epidemiological use of the term "pandemic" usually describes the worldwide spread of an epidemic. The WHO draft's definition of pandemic is much narrower: encapsulating the "global spread of a pathogen that . . . overwhelm[s] health systems with severe morbidity and high mortality . . . causing social and economic disruptions." This narrowed scope will limit the operation of some of the treaty's equity provisions to circumstances that are oriented to the interests of high income countries and exclude health emergencies such as localised epidemics of Ebola virus disease, Marburg virus disease, or mpox, or pandemics that do not overwhelm health systems but disproportionately affect vulnerable populations. Careful drafting of what occurs in the periods between pandemics might tackle these concerns.

Inclusion of "common but differentiated responsibilities" is a principle well established in international environmental law, which recognises that some states hold more resources than others globally and should bear a commensurate degree of differentiated responsibility. High income countries have indicated an unwillingness to incorporate this principle into global health law, arguing that it is inconsistent with universal obligations for pandemic preparedness and response.⁶ But having "common but differentiated responsibilities" is about achieving universality by placing special obligations on parties with resources—including those obtained through colonialisation—to achieve global equity.

A range of operative provisions seek to tackle global inequities in accessing diagnostics, vaccines, and therapeutics. These include establishing a predictable global supply chain that ensures global supply of pharmaceutical raw materials and ingredients; reinforcing multilateral mechanisms to incentivise the transfer of technology and knowledge; and excluding indemnity clauses of indefinite or excessive duration from supply and purchase contracts.

Most significant for international law is the inclusion of proposed procedures for a "pathogen access and benefit sharing" system. Access to, and benefit sharing of, genetic resources—including microbial genetic biological material—was expressly developed in international environmental law to tackle historical and ongoing colonial exploitation and extraction of genetic resources by wealthy nations that then benefited further from the use of those resources. Decolonisation has been intimately tied with sovereign control over genetic resources and equitable distribution of their economic benefits.⁷ In the draft treaty, pathogen access and benefit sharing would apply in pandemics and in between them, with the intent of establishing a multilateral, fair, equitable, and timely system for accessing pathogens with pandemic potential and their genomic sequences and for the equitable sharing of benefits that arise from their use. This includes real time access by WHO to 20% of pandemic related product volumes, such as vaccines, distributed on the basis of public health risk and needs, especially to developing countries. Although there is no broad prohibition of the use of advance purchase agreements to secure national vaccine supply,⁸ the draft text requires countries with manufacturing facilities to commit to securing such minimum supply to WHO.

Effective participation is necessary but not sufficient

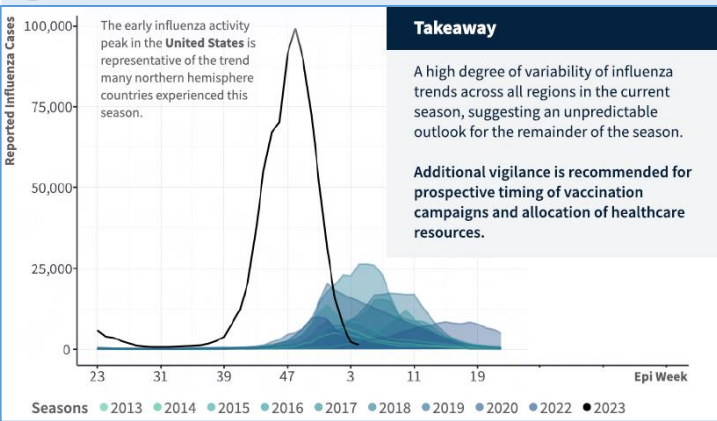
Whether member states reinforce equity in the pandemic treaty draft text—or water down provisions—will have direct repercussions for the next pandemic. This requires member states and WHO to guarantee effective participation of all member states, strong civil society engagement, and transparency in the processes.⁹ New treaties risk simply replicating history, further embedding colonialism in the development of international law.¹⁰ Incorporating legal measures aimed at decolonisation such as common but differentiated responsibilities and pathogen access and benefit sharing into the pandemic treaty is one step towards reframing international law for infectious diseases and realising global equity. This is not only a matter of justice; a more equitable world is one that prevents the conditions that give rise to pandemics, is more prepared, and is more able to respond when outbreaks become pandemics.¹¹

Source: *BMJ 2023; 380* doi: <https://doi.org/10.1136/bmj.p463> (Published 28 February 2023) Cite this as: *BMJ 2023;380:p463*

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Has Seasonal Influenza Returned to Pre-pandemic Patterns?



Summary

Changes in testing protocols, healthcare capacity and health seeking behaviours make it difficult to compare influenza activity seen before the pandemic with current patterns. This report leverages reported cases and test percent positivity to evaluate the current season in comparison to pre-pandemic years. Additional statistics on hospitalizations and deaths can be used to further evaluate disease burden.

While most countries did not appear to experience an especially severe epidemic, many countries experienced unusual timing of peak influenza activity. **The season appears to be winding down in the northern hemisphere; however, patterns in the southern hemisphere indicate the potential for a late-season influenza B wave.**

Possible Clues from the Southern Hemisphere

➤ **Takeaway:** Two-wave epidemic patterns were observed in 10 of 16 countries evaluated in the southern hemisphere in 2022. In the northern hemisphere, some countries in the European region are demonstrating early trends of rebounding cases after previously observing a peak in influenza activity. The timing between multiple waves in the southern hemisphere ranged from 14 to 38 weeks, indicating it is still too early to determine whether a double wave could be experienced in some locations in the northern hemisphere.

With the reappearance of seasonal influenza in the southern hemisphere in 2022, higher-than-expected activity was not reported in most countries.

The most notable trend from the past season in the southern hemisphere was the number of countries reporting unusually timed activity and/or additional peaks within the season.

Most (75%) of the countries in the southern hemisphere observed atypical seasonal trends

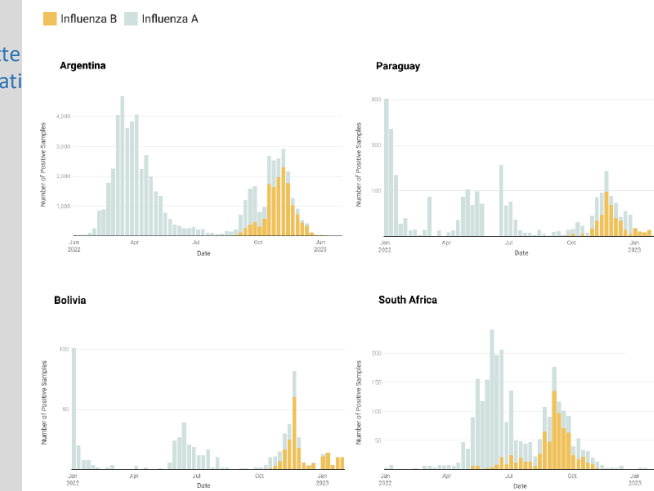
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| Early peak in case activity: 6 of 16 countries | Late peak in case activity: 6 of 16 countries | Multiple waves during the first epidemic season since 2020: 10+ countries |
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Similar to the northern hemisphere, several countries observed higher peak cases in 2022 and increased testing (except for Chile, Zambia, and Peru).

Countries of Note

Countries in the southern hemisphere where multiple wave patterns were observed include South Africa. These countries also observed increased circulation of influenza A strains.

Weekly Number of Positive Samples by Influenza Type, in Countries Observing Multi-Wave Patterns



Interpretation

It is too soon to determine whether the northern hemisphere season will continue to wane, or whether an additional wave of influenza B activity may be experienced. Continued mitigation measures are necessary, given the uncertainty of influenza seasonal trends and the combined burden of influenza-like illnesses (ILIs) including COVID-19. Maintaining testing will ensure adequate surveillance to respond to any late-season activity. Promotion of personal and public health measures (including masking, improved ventilation, hand hygiene, sanitation, and vaccination) is warranted to reduce the spread of respiratory viruses.

Regions Experiencing High Activity

Of 136 countries with sufficient data, 11 countries observed both high cases and test percent positivity. This indicates an overall high level of influenza activity in comparison to average seasonal activity. All of which are in the Northern Hemisphere. These include Austria, Belarus, Chile, Haiti, Malaysia, Mexico, Finland, Ireland, Netherlands, Poland, and Slovakia.

➤ **Takeaway:** While the season started earlier than usual for many countries in the northern hemisphere, few countries experienced a season characterized by higher-than-usual activity so far in 2022-2023.

Regions Observing High Testing

44 countries observed high cases which appear to have been influenced by a higher-than-usual level of testing in comparison to average seasonal activity preceding the pandemic. Majority of them were situated in the northern hemisphere. Some countries also reported trends of increasing / elevated percent positivity, suggesting further activity may still occur, extending the tail-end of the season.

➤ **Takeaway:** While changes in surveillance protocols and healthcare-seeking behaviours can influence reported case volumes, directionality can be used to understand trends in disease activity. Testing patterns, test-seeking behaviour, and access to healthcare for testing have likely been affected by the COVID-19 pandemic. To understand whether the burden of illness was greater than usual in countries with high testing rates, further evaluations of sequela such as hospitalizations and deaths are required. A few countries in the northern hemisphere are observing increased trends in cases and test positivity recently after an initial epidemic wave subsided.

Regions Experiencing Unusual Peak Timing

Many countries observed unusually timed seasonal activity in 2022-2023. 57 countries observed an early start to the influenza season, while only 8 countries observed later-than-usual peak influenza activity. Unpredictability in timing of influenza activity is expected until normal global patterns of influenza circulation have been re-established.

➤ **Takeaway:** When unusually timed peaks occur within countries that usually experience regular seasonality, this impacts the optimal timing for influenza vaccination campaigns and challenges healthcare capacity planning. Many countries globally have observed unusual timing to epidemic waves of seasonal influenza in 2022, with more observing earlier-than-usual peak activity.

Strains in Circulation and Clues from the Southern Hemisphere

Influenza A has been the dominant strain observed globally this season, with some exceptions. Some countries in the southern hemisphere observed a second wave mainly comprised of influenza B cases following a wave of influenza A. It is still too early to determine whether countries in the northern hemisphere may experience a similar pattern of activity.

WHO recommendations for influenza vaccine composition for the 2023-2024 northern hemisphere influenza season



Source: [WHO](#)

Outlook for the Northern Hemisphere

Proportions of Influenza A and B Strains in Global Circulation

Since June 6, 2022 (the approximate onset of influenza activity in the southern hemisphere), influenza type A has been the dominant strain circulating globally (77.2% of sequenced samples). A greater proportion of the subtyped influenza A strains were A(H3N2) at 37.5% compared to A(H1N1pdm09) at 22.2%.

Most Influenza B circulation has been of the Victoria lineage, with very few sequences of the Yamagata lineage observed. The highest prevalence of influenza B was in the Central Asia region followed by the North Asia region. Influenza B was the

dominant type sequenced in majority of countries in the southern hemisphere (8 of 14 countries) except for South Africa, Zambia, Mozambique, Madagascar, Timor-Leste, and Uruguay.

In the current northern hemisphere season, Influenza A comprised of majority of the sequenced samples (>50%) in 112 countries (84.8%) compared to influenza B in 22 countries (16.7%).

➤ **Takeaway:** Countries in the northern hemisphere that experienced earlier-than-usual activity, together with the timing of vaccine rollouts, and a season predominated by influenza A, may mean that there is more limited population-level immunity to influenza B into the late-winter and spring months. Additional out-of-season resurgence cannot be ruled out if elevated influenza B activity continues.

Context

While reported cases and test positivity are declining to relatively low levels in most countries in the northern hemisphere, the prevalence of influenza B is increasing. This may be an early indicator of a pending increase in disease activity later in the season.

- Epidemics driven by influenza B waves tend to occur later than those driven by influenza A ¹
- While conclusive information is unavailable, estimates of vaccine effectiveness over the course of a season suggests limited protection following more than 3-6 months post-vaccination (with the degree of waning differing by influenza type) ²
- Of countries reporting cases, 20 of 85 observed over half of influenza cases as subtype B
- In the northern hemisphere, 42 countries reported a 50%+ increase in the proportion of influenza B cases compared to week 1 to 3 (including Austria, Belarus, Canada, Slovakia, and Switzerland)

Progression of Influenza B in the Northern Hemisphere in 2023

| Epi Week | Percent of Sequenced Samples Subtyped as Influenza B |
|----------|--|
| 1 to 3 | 12.3% |
| 4 to 6 | 31.0% |

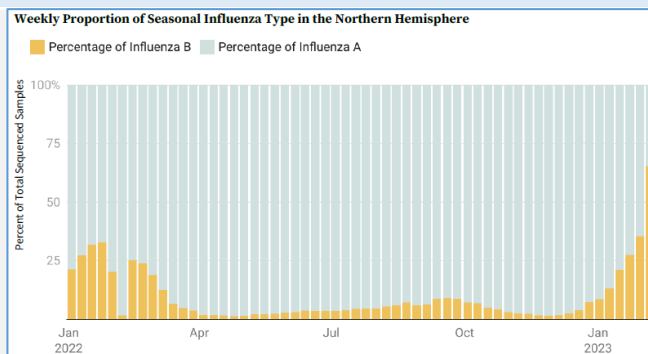
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Notable Regional Shifts in the Prevalence of Influenza B among Sequenced Samples

| Region | Epi Week 1 to 3 | Epi Week 4-6 | Change |
|----------------|-----------------|--------------|--------|
| North America | 2.2% | 9.8% | +345% |
| Eastern Europe | 12.0% | 37.6% | +214% |

The largest percent increase in influenza B subtypes was reported in the North American and the Eastern European regions. The total volume of cases continues to decline in most of these countries. Some countries are showing potential early signs of rebounding cases, including Slovakia, Switzerland, and Germany



WHO recommendation for influenza vaccine composition 2023/2024

On the 24 February 2023 the WHO announced the recommendations for the viral composition of influenza vaccines for the 2023-2024 influenza season in the northern hemisphere. The announcement was made at an information session at the end of a 4-day meeting on the [Composition of Influenza Virus Vaccines](#), a meeting that is held twice annually.

WHO organizes these consultations with an advisory group of experts gathered from WHO Collaborating Centres and WHO Essential Regulatory Laboratories to analyse influenza virus surveillance data generated by the WHO Global Influenza Surveillance and Response System. The recommendations issued are used by the national vaccine regulatory agencies and pharmaceutical companies to develop, produce, and license influenza vaccines for the following influenza season.

The periodic update of viruses contained in influenza vaccines is necessary for the vaccines to be effective due to the constant evolving nature of influenza viruses, including those circulating and infecting humans.

*The WHO recommends that **quadrivalent vaccines** for use in the 2023-2024 northern hemisphere influenza season contain the following:*

Egg-based vaccines

- an A/Victoria/4897/2022 (H1N1)pdm09-like virus;
- an A/Darwin/9/2021 (H3N2)-like virus; and
- a B/Austria/1359417/2021 (B/Victoria lineage)-like virus; and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

Cell culture- or recombinant-based vaccines

- an A/Wisconsin/67/2022 (H1N1)pdm09-like virus;
- an A/Darwin/6/2021 (H3N2)-like virus;
- a B/Austria/1359417/2021 (B/Victoria lineage)-like virus; and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

*WHO recommends that **trivalent vaccines** for use in the 2023-2024 influenza season in the northern hemisphere contain the following:*

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Other Infectious Disease Outbreaks



Highly Pathogenic Avian Influenza H5N1 - China

On 24-Feb-2023, the WHO was notified about a human case of Highly Pathogenic Avian Influenza (HPAI) A(H5N1) in the Jiangsu province of China. Although unconfirmed by official reports, news media state that genetic sequencing indicates this case to be of the A(H5N1) 2.3.4.4b clade, which has gained attention due to recent findings that it can be passed between mammalian species.

Sublocation affected: Jiangsu Sheng

Timeline of Events:

- 31-Jan-2023: A 53-year-old woman with a history of contact with poultry from the Jiangsu province, China developed symptoms congruent with influenza
- 04-Feb-2023: The affected individual was hospitalized
- 24-Feb-2023: The WHO was notified about a positive case of A(H5N1)
- 01-Mar-2023: News media reports that genetic sequencing shows the source of infection to be from the A(H5N1) 2.3.4.4b clade. The patient's status is unknown

The event is considered as a **low concern** due to:

1. In close contact with sick or dead poultry, or
2. Who live in or near contaminated environments, such as live bird markets

Additional considerations for the assessed level of concern:

- Although there has not been confirmation of human-to-human transmission of H5N1 thus far, there is a small risk of the virus adopting a more efficient human-to-human transmission cycle with each new infection.
- Genome sequencing confirmation of the clade 2.3.4.4b of this human case is required to assess the full risk of the event. There have been multiple events of the present clade being identified amongst mammals (such as minks in Spain, sea lions in Peru) and many concerns have been raised as a threat to humans and the risk of a pandemic.
- It is noteworthy to raise that previous human cases of this same clade have been reported since 2020, and thus this would not constitute the first event if confirmed with the clade 2.3.4.4.b. Greater importance should be placed on timely detection and the sharing of genome sequencing of new human cases.
- Lastly, it is also important to consider there might be a degree of under-reporting given that a majority of human cases present with mild influenza-like illness symptoms, and may not seek medical attention. Due to this, a full risk assessment is challenging.

Source: [WHO](#)

Unknown Hemorrhagic Fever – Cameroon

Cameroonian health authorities have reported two cases of undiagnosed hemorrhagic fever in Olamze, a district which is approximately 100km or a 2-hour drive across the border to Nsok-Nsomo in Kie-Ntem Province, Equatorial Guinea. The cases are suspected to be Marburg disease given the proximity to Kie-Ntem Province, which has been the focal region of the Marburg virus outbreak declared on Monday 13-Feb-2023.

Situational Highlights

On 10-Feb-2023, Cameroon restricted movement along its border with Equatorial Guinea following reports of undiagnosed hemorrhagic fever in Equatorial Guinea. Additionally, on the same day Gabon implemented systematic testing of a sample of travellers crossing the border from both Equatorial Guinea and Cameroon, and increased public education on hemorrhagic fevers for the village populations along the borders.

On 13-Feb-2023, Equatorial Guinea declared its first Marburg virus outbreak, following laboratory confirmation of the virus in Kie-Ntem Province, Equatorial Guinea.

On 13-Feb-2023, Cameroonian health authorities have reported two suspected Marburg cases in Olamze. Olamze is in close proximity to the border of Kie-Ntem Province, Equatorial Guinea. However, neither of the individuals are reported to have previous travel history to Equatorial Guinea. Health authorities state that 42 contacts of the affected individuals have been identified and contact tracing is ongoing while test results are pending.

Source: [REUTERS](#)

Highly Pathogenic Avian Influenza H5N1 - Cambodia

Sublocation affected: Phnom Penh, Prey Veng

On 25 February 2023, the Ministry of Health provided an official update on avian influenza H5N1 in Cambodia. The following summarizes all new relevant information:

1. Initial genome sequencing performed in Cambodia has identified the virus as H5 clade 2.3.2.1c, which has been circulating in the country in birds and poultry for many years and has sporadically caused infection in humans in contact with contaminated environments or infected birds
2. This H5N1 bird flu virus (clade 2.3.2.1c) is different from the H5N1 bird flu virus causing outbreaks in Europe and the Americas among wild avian species, poultry, and mammals (identified as clade 2.3.4.4b)
3. H5 clade 2.3.2.1c has not been associated thus far with efficient human-to-human transmission
4. Since the two primary confirmed cases (of which one resulted in a death), 29 laboratory samples had been taken by health officials. Of these, 16 samples were from people who had direct contact with the two primary confirmed human cases, while the remaining 13 were from people from the local area who displayed influenza-like symptoms. Negative results have been received for all 29 of these tested individuals.

The event is considered as a **low concern** due to:

1. In close contact with sick or dead poultry, or
2. Who live in or near contaminated environments, such as live bird markets

This second case is not unexpected. Additional cases may surge from the same environment as the index case, given:

1. Human infections are primarily acquired through direct contact with infected animals or contaminated environments which has already been identified in Prey Veng province
2. As per WHO, avian influenza viruses have not yet acquired the ability of sustained transmission among humans

SOURCE: [MediaNews: \[1\] \[2\]](#), [WHO](#)

Poliomyelitis – Israel

On 28-Feb-2023, a case of poliovirus (unspecified if wild or vaccine-derived) was reported in an unvaccinated child in the city of Safed, in the Northern District of Israel. Media reports have indicated that the affected is an eight-year-old child who presented to a local hospital with weakness in the limbs and a laboratory confirmed the presence of poliovirus

There is limited epidemiological information, including details about the strain, any travel history, and the likely source of the infection. Health authorities are currently investigating other potential cases among family members and neighbours via contact tracing.

According to local media, several samples of polio (unspecified strain) from sewage have been positive in the last couple of months.

Historical Background:

- On 6-Mar-2022 health authorities in Israel confirmed the first case of vaccine-derived poliomyelitis (VDP) since 1989 in a four-year-old resident of the city of Jerusalem
- Genome sequencing of the human confirmed case and further environmental sampling determined that both cVDP-2 and cVDP-3 have been circulating since 2022 in Israel
- Given the cVDPV outbreak, health authorities launched an extensive vaccination campaign for children and adolescents up to the age of 17 in March 2022
- The campaign, which targeted almost 17,000 children, appeared successful, and in July the ministry announced control over the outbreak

The event is considered as a **medium concern** due to:

- The potential of the virus spreading within Israel's unvaccinated and partially vaccinated communities and surrounding countries. Israel has a high average estimated vaccine coverage, well above the 90% herd immunity target, so a widespread outbreak is unlikely. However, there may be communities with lower coverage than required for herd immunity that are at higher risk.
- The re-emergence of poliomyelitis, a previously controlled disease, has been highlighted as a potential threat due to the high risk of importation events from endemic regions and a reduction in the gains on vaccine-preventable diseases as a result of the COVID-19 pandemic.

Source: [\[1\]](#) [\[2\]](#) [\[3\]](#)

Other Infectious Disease Outbreaks/ Conflicts



Chikungunya - Paraguay

Chikungunya disease activity continues to rapidly rise in Paraguay. On 25-Feb-2023, the Ministry of Health issued an epidemiological statement which reported an unusually high number of fatalities; in addition, cases of meningoencephalitis have been reported in newborns as a result of chikungunya.

Sublocation affected: Jiangsu Sheng

Surveillance Data (as of 28-Feb-2023): Reported: 29,362 human cases; Deaths: 28 human cases

Statement:

- The latest report from the General Directorate of Health Surveillance (26-Feb-2023) reports 12,189 new cases in the last three weeks.
- 90% of the cases of chikungunya continue to be concentrated in the metropolitan area - San Lorenzo (1,461), Capiatá (805), Lambaré (785), Fernando de la Mora (735) and Luque (712) as the localities with the highest number of confirmed cases of the disease.
- On 28-Feb-2023, the Ministry of Health issued an epidemiological statement which reported a total of 28 deaths in the country, which is unusual as no previous epidemics reported fatalities. Among the reported deaths, there are five children under one year of age and 19 people over 60 years of age.
- The report also states that there have been 94 cases of chikungunya in newborns (less than 28 days old). Four of the pediatric deaths are infants under 28 days old and one in a 31-day-old infant.
- Of the infected neonates, 34 had meningoencephalitis (an acute infection of the central nervous system).
- It was been recommended for individuals who have recently given birth to remain in the hospital for up to a week to test for chikungunya.
- PAHO and the WHO have sent teams to aid the epidemic.

The event is considered as a **medium concern at the local and regional levels, and lower at the global level given:**

1. Impact on hospital capacity. Media reports stated that the country is undergoing a hospital crisis in recent months due to the increase in chikungunya cases and other arboviruses. It was reported that there was a lack of beds for the children infected; the number of ICU beds dedicated have doubled in number since the start of the epidemic. As a result, some pediatric patients were sent to other healthcare centers for treatment.
2. Maternal-fetal transmission has been documented during pregnancy, where the highest risk occurs with intrapartum maternal viremia, and often leads to severe neonatal infection. Neonates present with fever, excessive crying, and varied dermatological manifestations (maculopapular rash) at three to five days of life. Neurological complications such as meningoencephalitis are the most common finding in these cases and may result in neurodevelopmental delay. However, children exposed outside the intrapartum period do not experience such issues. Therefore, the disease represents a substantial risk for neonates born to viraemic mothers. This should be taken into account by clinicians and public health authorities in the event of chikungunya outbreaks continuing.

Source: [\[1\]](#) [\[2\]](#) [\[3\]](#)

Influenza Europe; Weeks 08/2023 (20 February-26 February 2023)

- The percentage of all sentinel primary care specimens from patients presenting with ILI or ARI symptoms that tested positive for an influenza virus decreased from 28% in the previous week to 25% in week 8/2023 which remains above the epidemic threshold (10%).
- 21 of 38 countries or areas reported medium or high intensity and 21 of 37 countries reported widespread activity indicating substantial seasonal influenza virus circulation across the Region.
- Of the 22 countries with seasonal activity above epidemic threshold of 10% positivity, Sweden, Slovenia, Netherlands, France, and Slovakia reported activity above 40% positivity in sentinel primary care.
- Influenza type A and type B viruses were detected in sentinel and non-sentinel surveillance, with influenza type B predominating in both systems.
- Hospitalized patients with confirmed influenza virus infection were reported from ICU (with similar proportions of influenza type A and type B), other wards (with similar proportions of influenza type A and type B) and SARI surveillance (with mainly influenza A(H1N1)pdm09 subtype viruses reported). Eight countries or areas reported influenza positivity rates above 10% in SARI surveillance.

Source: [Flu News Europe](#)

Marburg Virus Disease - Equatorial Guinea- Follow Up

Two more people in Equatorial Guinea have died of Marburg virus disease, bringing the toll of fatalities to 11.

- On 25-Feb-2023, the WHO provided a follow-up statement on the Marburg virus outbreak in Equatorial Guinea. A summary of epidemiological information is provided below:
- Ongoing epi-investigations have indicated that at least eight deaths occurred between 7-Jan and 7-Feb 2023 among individuals who presented with fever, followed by weakness, vomiting, and blood-stained diarrhea. Additional information has indicated that two cases also presented with skin lesions and bleeding from the ear.
- On 9-Feb 2023, eight blood samples were collected from contacts and sent to the Centre Interdisciplinaire de Recherches Médicales de Franceville (CIRMF) in Gabon, where they tested negative for both Ebola and Marburg viruses by real-time polymerase chain reaction (RT-PCR).
- An additional eight blood samples were collected from other contacts and sent to the Institute Pasteur in Dakar, Senegal, on 12-Feb 2023. One of these samples was confirmed positive for Marburg virus by RT-PCR. This case presented with fever, non-bloody vomiting, bloody diarrhea, and convulsions and died on 10-Feb 2023 at Ebebiyin District Hospital. The case also had epidemiological links to four deceased cases.
- After almost two weeks without the detection of any cases, two more deaths were reported on 28-Feb-2023.
- There are no known cases among healthcare workers. Forty-eight contact cases have been documented, four of whom have developed symptoms, and three have been quarantined in a local hospital.

Sublocation affected: Provincia de Kie-Ntem (Nsok-Nsomo)

The event is considered to be of **high concern at the local and regional levels, and lower at the global level given:**

- There is a high possibility that all chains of transmission have not been identified since only one case died in a health facility, while the other eight died in the community and their burial conditions are unknown
- There is insufficient information about the most recent two deaths, including details on the location, any epidemiological links, or information on any contacts, adding further uncertainty regarding the extent of exposure in the community.

Source: [\[1\]](#) [\[2\]](#)

The WHO statement was released on 25-Feb-2023, however there is uncertainty and little information surrounding the most recent deaths.

Madagascar, Mozambique - Tropical cyclone FREDDY - Including Cholera outbreak in Mozambique in flood prone areas

Overview:

- On 2-4 March, the remnants of tropical cyclone FREDDY continued eastward over the Mozambique Channel, from Mozambique toward Madagascar, strengthening. On the afternoon (UTC) of 4 March it re-formed, as a tropical storm. On 6 March at 6.00 UTC, its centre was located over the sea approximately 90 km south-west of the coastal City of Toliara (Atsimo-Andrefana Region, south-western Madagascar).
- In Madagascar, the latest rains brought by Freddy have left at least four people dead, over 3,100 people displaced and more than 3,300 houses flooded (2,695) or destroyed (618) in Toliara and Morombe districts, according to preliminary reports by the National Bureau of Risk and Disaster Management (BNGRC) as of 6 March.
- In Mozambique, nearly 166,600 people have been affected by Tropical Storm Freddy, according to National Institute for Disaster Management (INGD). Authorities reported that nearly 9,900 displaced people took shelter in 40 accommodation sites in Inhambane, Gaza, Sofala and Maputo, and about 800 people have been rescued. More than 28,300 houses were destroyed (1,667), damaged (13,966) or flooded (12,733). At least 25 health facilities and 919 classrooms were destroyed, leaving 68,280 children out of school. Over 38,100 hectares of crops were impacted and more than 18,700 hectares of crops have been lost.
- The previous passage of FREDDY on late February caused 17 fatalities across both Madagascar and Mozambique.
- The number of internally displaced populations in Madagascar and Mozambique has increased with tens of thousands.
- In Mozambique, an **outbreak of cholera** has been growing exponentially since December 2022 with geographic spread to new districts. Heavy rainfall in the first weeks of February as well as the displacement due to cyclone Freddy threatens to further worsen the situation (see report on the left by WHO).
- On 7-11 March, FREDDY is forecast to strengthen and to continue northwestward over the Mozambique Channel, again toward central-northern Mozambique, with maximum sustained winds up to 145 km/h (Tropical cyclone).
- Over the next 24 hours, heavy rainfall, strong wind and storm surges are forecast over south-western and western Madagascar. A Red Warning is in force over this area.

Source: [OCCHA](#)

Source: [WHO](#)

Cholera – Mozambique, as of 24 Feb

Situation at a glance

In Mozambique, an outbreak of cholera has been growing exponentially since December 2022 with geographic spread to new districts. Heavy rainfall in the first weeks of February threatens to further worsen the situation.

The first case of cholera in the current outbreak was reported to the Ministry of Health and WHO from Lago district in Niassa province on 14 September 2022. As of 19 February 2023, a cumulative total of 5237 suspected cases and 37 deaths (Case Fatality Ratio (CFR) 0.7%) have been reported in 29 districts from six out of 11 provinces in the country. Of the at least 182 cases tested, 99 cases (54%) were laboratory confirmed for cholera by culture.

All six provinces currently affected by cholera are flood-prone areas. As the rainy season continues, it is anticipated that more districts will be affected. With this outbreak, cholera has affected many districts that had not reported any cases in over five years and where, as a result, the response capacity is limited.

In addition, there is inadequate access to sources of safe drinking water for the population that is already challenged with poor hygiene and sanitation.

Mozambique is one of many countries in the region facing a cholera outbreak at the moment. Notably, neighbouring Malawi is facing the deadliest cholera outbreak in its history. Considering the frequency of cross-border movement and the history of cross-border spread of cholera during this outbreak, WHO considers the risk of further disease spread as very high at the national and regional levels.

Description of the outbreak

The first case of cholera in the current outbreak was reported to the Ministry of Health and WHO from Lago district in Niassa province on 14 September 2022.

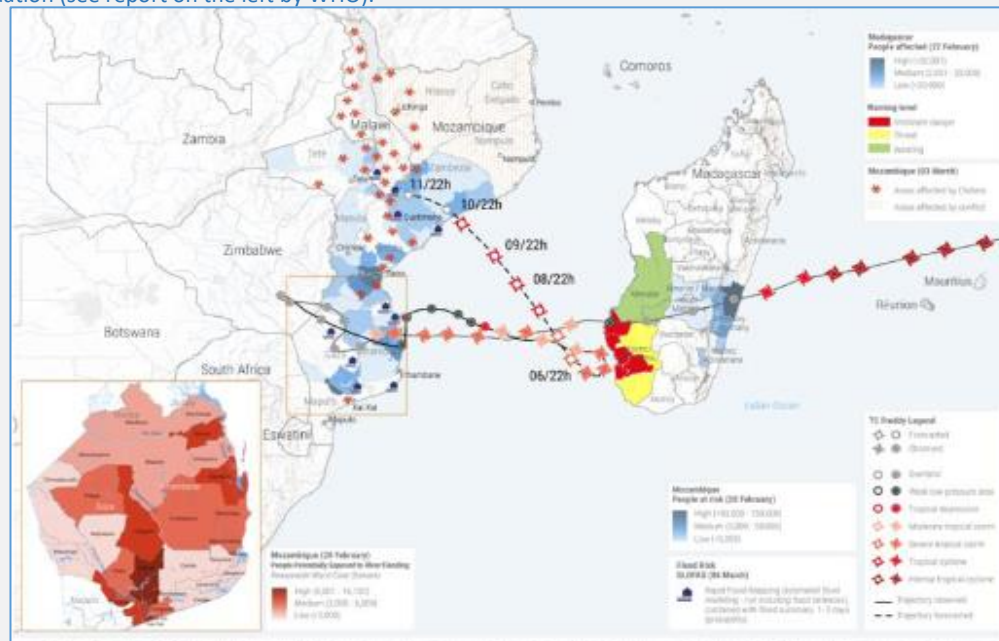
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Prior to the current outbreak, there were cholera outbreaks in eight districts in three provinces during the first half of 2022, which were declared over. The current outbreak of cholera in Mozambique covers a wider geographic area and has a higher CFR compared with the previous outbreak. Moreover, most of the affected districts had not reported cholera cases for more than five years and many of the health professionals do not have experience in responding to a cholera outbreak. Weak surveillance with late reporting, inadequate WASH conditions, a weak health system and exhausted workforce responding to multiple emergencies pose a threat to continued disease progression, as do the ongoing heavy rains of the season.

WHO risk assessment

Cholera is endemic in Mozambique, however, the current outbreak has greater geographical extent than outbreaks reported in 2019-2022, when no more than three provinces were affected during the year. All six provinces currently affected by cholera are located in the Zambezia Valley, which is a flood-prone area. As the rainy season continues, it is anticipated that more districts will be affected. The flooding is leading to displacement and disruption of the water supply system. There is inadequate access to safe drinking water sources for the population that is already challenged with poor hygiene and sanitation and the current rainy season could contribute to sustained disease transmission.

Several affected provinces are bordering Malawi, which is currently facing its deadliest cholera outbreak in history. The borders with Malawi are porous with frequent movement across the border between the two countries. There remains a high risk of spread to other countries in the region, including Tanzania and Zimbabwe and further to South Africa. Considering the history of cross-border spread of cholera during this outbreak, the risk of further disease spread is therefore considered very high at the national and regional levels.



Map ©2024. Source: FreddY - Malawi Forecast (01/03/23) - La Météo en France, République de Madagascar, République de Madagascar, République de Madagascar and ©2024. Reproduction of Flood Hazards by Land Use and Urban Form (Map showing districts with the highest population density in 10 flooding zones, the moderate risk zone (orange), 2019 Mozambique Flood Hazards (2019, 2020, 2021). The boundaries and names shown on this map do not imply official endorsement or approval by the United Nations.