

## WEEKLY BULLETIN

# Communicable Disease Threats Report

**Week 12, 17–23 March 2024**

## This week's topics

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## Executive summary

### Overview of respiratory virus epidemiology in the EU/EEA - weekly monitoring

- Syndromic surveillance in primary and secondary care indicate that respiratory activity is decreasing but remains above baseline levels in under half of reporting EU/EEA countries. The activity is largely driven by influenza.
- **All indicators pointed to elevated but decreasing influenza activity in the EU/EEA.**
  - At the EU/EEA level, a decreasing trend in pooled sentinel primary care positivity for influenza has been observed since week 4, 2024, although the majority of reporting countries remained above the 10% positivity threshold for influenza.
  - The majority of countries now report medium or low levels of influenza intensity, widespread but decreasing geographical spread, and baseline rates of influenza-like illness (ILI). Stable or decreasing trends in indicators of activity and severe disease were also observed in most reporting countries.
  - A(H1)pdm09 continues to be the most commonly detected virus in the EU/EEA. Influenza B is now dominant in five countries although the number of influenza B detections remain low overall.
  - Interim influenza vaccine effectiveness estimates for the 2023–2024 season indicate that up to 53% and 44% of vaccinated individuals in primary care or hospital settings, respectively, were protected against mild and severe influenza.
- **RSV activity continued to decrease to low levels at the EU/EEA level and in most reporting countries**
- **SARS-CoV-2 activity remained low in all EU/EEA countries.**

## SARS-CoV-2 variant classification

Since the last update on 15 March 2024, and as of 22 March 2024, **no changes** have been made to ECDC variant classifications for variants of concern (VOC), variants of interest (VOI), variants under monitoring and de-escalated variants.

As of 15 March 2024, given the low level of circulation for '**XBB.1.5-like**', '**XBB.1.5-like+F456L**' and '**XBB.1.5-like+L455F+F456L**', they will be merged into a single VOI designation: '**XBB.1.5-like**'. This update will simplify the presentation of SARS-CoV-2 variant data in [ERVISS](#) from week 11, 2024 and does not require any change in current reporting of SARS-CoV-2 variants by countries.

The variant landscape in the EU/EEA is clearly dominated by **BA.2.86**. As of 18 March 2024, the median proportion for BA.2.86 in the EU/EEA for week 9 (26 February 2024 to 3 March 2024) is 85.2% (range: 74.3–94.9%).

**BA.2.87.1** lineage was classified as a VUM on 2 February 2024. A small number of sequences of this lineage (9) were detected in South Africa, with collection dates ranging from 20 September to 12 December 2023. As of 18 March 2024, BA.2.87.1 has not been detected outside South Africa. This lineage has been circulating in South Africa at low levels since September 2023, without any clear signs of an increase in proportion or an impact on epidemiological indicators. BA.2.87.1 is genetically distinct from currently circulating variants, carrying around 100 mutations compared to the parental lineage BA.2. It also has a distinct N-terminal domain in the spike protein, including several large deletions, and could potentially be associated with a significant shift in antigenic properties. However, to date no virus neutralisation data are available for BA.2.87.1, and further studies are needed to elucidate the properties of this variant. BA.2.87.1 is unlikely to have an impact on the epidemiological situation in the EU/EEA in the near future.

**XBB.1.5-like** lineages are circulating in very low proportions in the EU/EEA, with a median proportion of 2.6% (range: 0.0–17.1%).

## Hepatitis A mostly associated with sexual transmission among MSM - multi-country- 2024

- A cross-border event of hepatitis A (genotype IA) with 46 cases reported in the Netherlands (3) and Portugal (43) has been ongoing since December 2023, mainly among MSM.
- The strain is similar to the ones circulating in the EU/EEA in 2016–2018 largely among MSM.
- There is a risk of re-emergence of hepatitis A in the EU/EEA, particularly among MSM.
- ECDC advice for preventing the occurrence of further cases is provided in the assessment.

## Increase of cases of pertussis - Multi-country - 2023

- In recent months, several EU/EEA Member States and Neighbourhood countries have reported an increase in the number of pertussis cases compared to the pre-pandemic period.
- According to available data, the age groups mostly affected are children and younger adolescents. In addition, infants and young children who are too young to be fully vaccinated have also been affected, including several deaths.
- Pertussis is an endemic disease worldwide, even in the presence of a programme with high vaccination coverage, with peaks in disease spread every three-to-five years. The current increase is potentially linked to lower circulation during COVID-19 pandemic, combined with suboptimal vaccination uptake in certain groups during the COVID-19 pandemic.
- Infants are those at greatest risk of severe disease and death, with virtually all deaths observed in infants under three months in the EU/EEA.
- Protecting infants from severe disease and death is the main objective of vaccination programmes. Key interventions are the timely administration of the first dose of a pertussis-containing vaccine to infants and maternal vaccination programmes which have proved effective in protecting new-borns.

## Invasive Group A streptococcal infection - Multi-country - 2023-2024

- Countries in the EU/EEA are reporting iGAS cases at the levels of pre-pandemic seasons
- Two countries (NL and the UK) are reporting the emergence of a new emm type 3.93 with unknown implications on severity, as of now.

## Chikungunya and dengue – Multi-country (World) – Monitoring global outbreaks - Monthly update

- In 2024, approximately 70 000 chikungunya virus disease (CHIKVD) cases and 15 deaths were reported worldwide. A total of 16 countries reported CHIKVD cases from the Americas (11), Asia (4), and Africa (1). No autochthonous cases of CHIKVD were reported in Europe in 2024.
- Since the beginning of 2024 over two million dengue cases and over 500 dengue-related deaths have been reported globally. No autochthonous/non-travel-associated dengue cases have been reported in Europe in 2024.
- The current likelihood of local transmission events of chikungunya and dengue viruses occurring in areas where the vector is present in mainland EU/EEA is very low, as the environmental conditions are unfavourable for vector activity and virus replication in vectors.
- Doctors in the EU/EEA should be aware of the increased risk of dengue among travellers from affected countries presenting with compatible symptoms in order to ensure prompt diagnosis and clinical management of cases.

**Poliomyelitis – Multi-country – Monthly monitoring of global outbreaks**

- In 2024, and as of 21 March 2024, ten cases of acute flaccid paralysis (AFP) due to poliomyelitis have been reported. Two AFP cases were caused by WPV1 (Pakistan) and eight cases were caused by cVDPV2. The cVDPV2 cases were reported from five countries: Guinea (1), Somalia (1), Nigeria (4), Yemen (1) and Mali (1).
- In 2023, 12 cases of WPV1 were reported from Afghanistan (6) and Pakistan (6).
- In 2023, 133 cases of AFP caused by cVDPV1 were reported from three countries: the DRC (105), Madagascar (24) and Mozambique (4) (no increase since the previous report).
- In 2023, 389 cases of AFP caused by cVDPV2 were reported from 22 countries: Benin (3), Burkina Faso (2), Burundi (1), Central African Republic (14), Chad (54), Côte d'Ivoire (6), the DRC (118), Guinea (47), Indonesia (6), Israel (1), Kenya (8), Mali (15), Mauritania (1), Mozambique (1), Niger (2), Nigeria (87), Somalia (8), South Sudan (2), Tanzania (3), Yemen (8), Zambia (1) and Zimbabwe (1) (no increase since the previous report).

**Western equine encephalitis – Multicountry – 2023**

- Since the previous report and as of 12 March 2024, 37 new WEE human cases (confirmed, probable, and suspected) have been reported in the Americas. All new cases were reported in Argentina.
- Since 28 November 2023 and as of 12 March 2024, a total of 203 WEE human cases (confirmed, probable, and suspected) have been reported in Argentina (199) and Uruguay (4). A total of seven deaths have been reported in Argentina.
- WEE is a mosquito-borne disease caused by the WEE virus. Birds are the main reservoir, while equines and humans are dead-end hosts. Outbreaks in equines have been reported in Argentina and Uruguay.
- The risk for the EU/EEA is very low because humans and horses are dead-end hosts, there is no direct migration of birds from South America to Europe, and conditions in Europe are currently unfavourable for vector-borne transmission.

**Cholera – Comoros and Mayotte – 2024**

- On 19 March 2024, the prefect of Mayotte reported the first imported confirmed case of cholera in the French territory of Mayotte.
- In light of the information available on the local living conditions in Mayotte, the detection of this first case increases the risk of community transmission in the island from moderate to high.
- This event is in the context of an ongoing outbreak in the neighbouring Union of Comoros reported by ECDC in the past weeks.
- Since the last available update on 13 March and as of 17 March, 92 new cholera cases have been reported in Comoros.

# 1. Overview of respiratory virus epidemiology in the EU/EEA - weekly monitoring

## Overview

### Respiratory virus activity

- Decreasing or stable trends were observed in most of the 21 countries reporting consultation rates in week 11 of patients presenting to general practitioners with respiratory illness ((ILI and/or acute respiratory infection (ARI)). Moving Epidemic Method (MEM) thresholds were available for 19 countries (eight for ARI, 18 for ILI), of which nine observed consultation rates above baseline levels for ILI and/or ARI. Short-term forecasts of ILI and ARI rates in EU/EEA countries are published on ECDC's [RespiCast](#).
- In primary care sentinel settings, the median test positivity at the EU/EEA level was highest for influenza, at 15% (pooled country data: 11%; interquartile range (IQR) of country values: 6–18%), with stable or decreasing trends observed in most countries. Of 17 countries reporting at least 10 tests, 12 remained above the 10% primary care positivity threshold. Qualitative assessments of seasonal influenza activity from 22 countries indicate decreasing intensity in recent weeks, but with 17 countries still reporting above-baseline activity (10 low, seven medium). Fifteen of 23 countries reported widespread geographical spread of seasonal influenza. All countries reporting influenza detections from non-sentinel sources observed decreasing or stable trends.
- Among the 241 sentinel primary care detections of seasonal influenza, 164 (68%) were typed as influenza virus type A and 77 (32%) were typed as influenza virus type B. Of the influenza type A detections that were further subtyped, 82 (73%) were A(H1)pdm09 and 31 (27%) were A(H3). The remaining 51 influenza type A detections were of unknown subtype. Of the influenza type B detections, 39 were further defined as B/Victoria lineage, while the remaining 38 were of unknown lineage. Influenza B is now dominant in five of the 16 countries reporting data sufficient to assess dominant type.
- The median sentinel primary care RSV positivity was 2% (pooled: 3%; IQR: 0–4%). Decreasing or stable trends were observed at the country level in both sentinel positivity and non-sentinel detections.
- The median sentinel primary care positivity for SARS-CoV-2 remained low at 1% (pooled: 2%; IQR: 0–3%). Decreasing or stable trends were observed at the country level in both sentinel positivity and non-sentinel detections.

### Severe disease

- Rates of severe acute respiratory infection (SARI) from sentinel secondary sites were stable or decreasing and at levels comparable to the same time last year in all seven countries reporting data up to week 11. Six of these countries reported testing data for all three pathogens.
- The median SARI test positivity for seasonal influenza was 9% (pooled: 7%; IQR: 3–11%), with decreasing trends observed in most of the countries reporting this indicator. All countries reporting non-sentinel hospital or ICU data observed decreasing trends.
- The median SARI test positivity for RSV was 6% (pooled: 7%; IQR: 5–7%), with decreasing or stable trends observed in most of the countries reporting this indicator. The highest pooled test positivity continued to be in children aged 0–4 years, but a decreasing trend has been observed since week 52, 2023.
- The median SARI test positivity for SARS-CoV-2 was 3% (pooled: 3%; IQR: 1–8%). Positivity remained low in all age groups. Both SARI positivity and non-sentinel indicators of severity show a gradually decreased trend since week 50 and low levels in all countries.
- [EuroMOMO](#) pooled estimates of weekly excess all-cause mortality showed 'mortality for the participating European countries are within expected levels, after a longer period of elevated mortality'.

### Virus characterisation

#### Influenza

- WHO [recommends](#) that trivalent vaccines for use during the 2023–2024 influenza season in the northern hemisphere contain the following (egg-based and cell culture or recombinant-based vaccines respectively): an A/Victoria/4897/2022 or A/Wisconsin/67/2022 (H1N1)pdm09-like virus (subclade 5a.2a.1); an A/Darwin/9/2021 or A/Darwin/6/2021 (H3N2)-like virus (clade 2a); and a B/Austria/1359417/2021 (B/Victoria lineage)-like virus (subclade V1A.3a.2).
- From week 40, 2023 to week 11, 2024, 2 087 A(H1)pdm09, 784 A(H3) and 112 B/Victoria viruses from sentinel and non-sentinel sources were genetically characterised. Of the A(H1)pdm09 viruses that have been assigned to a clade, 1 261 were reported as clade 5a.2a and 809 were subclade 5a.2a.1. Of the A(H3) viruses that have been assigned to a clade, 10 were reported as clade 2a.3a, 740 were subclade 2a.3a.1, one was subclade 2a.3b, and 30 were subclade 2a. All B/Victoria viruses were reported as subclade V1A.3a.2.
- Antigenic characterisation data presented in the WHO [2024-2025 northern hemisphere vaccine composition report](#) indicate current northern hemisphere vaccine components are well matched to circulating 5a.2a and 5a.2a.1 A(H1N1)pdm09 subclades and V1A.3a.2 B/Victoria subclades. While components also appear well

matched for 2a.3a A(H3) clade viruses, 2a.3a.1 clade viruses are less well matched. Based on human post-vaccination serology studies, haemagglutination inhibition and virus neutralisation against some recent 2a.3a.1 viruses were significantly reduced for some serum panels.

- ECDC has [published](#) interim influenza vaccine effectiveness estimates for the 2023–2024 season. Analysis of data submitted from multi-country primary care and hospital study sites between September 2023 and January 2024 indicated that up to 53% and 44% of vaccinated individuals in primary care or hospital settings, respectively, were protected against mild and severe influenza.
- Updated WHO [recommendations](#) for the composition of trivalent vaccines for use during the 2024–2025 influenza season in the northern hemisphere are as follows (egg-based and cell culture or recombinant-based vaccines respectively): an A/Victoria/4897/2022 or A/Wisconsin/67/2022 (H1N1)pdm09-like virus (subclade 5a.2a.1); an A/Thailand/8/2022 or A/Massachusetts/18/2022 (H3N2)-like virus (subclade 2a.3a.1); and a B/Austria/1359417/2021 (B/Victoria lineage)-like virus (subclade V1A.3a.2).

#### SARS-CoV-2 variants for weeks 8-9 (19 February to 3 March 2024)

- The estimated distribution (median and IQR of proportions from eight countries) of variants of concern (VOCs) or variants of interest (VOIs) was 90% (84–93%) for BA.2.86 (which includes JN.1 isolates), 1% (0–6%) for XBB.1.5-like (which now includes XBB.1.5+F456L). These proportions have been stable since week 5.

#### Period overview (week 25, 2023 to week 10, 2024)

Following relatively low respiratory illness transmission over the summer period, consultation rates increased in primary care settings from September. Transmission of SARS-CoV-2 began increasing in late summer, with clear increases observed at the EU/EEA level up to week 49 and decreases in activity thereafter. Activity is currently low in most EU/EEA countries. Similarly, a steady decrease in severe disease has been observed since week 50. COVID-19 has predominantly affected individuals aged 65 years and above. Week 50 marked the start of the seasonal influenza epidemic. As of week 11, activity remained above the 10% epidemic threshold in most countries, however a decreasing overall trend has been observed since week 4. Severe disease due to influenza has impacted all age groups. Since week 6, a decrease in the severe disease indicators for seasonal influenza has been observed in most EU/EEA countries. Both influenza type A and type B viruses have been detected, with a dominance of A(H1)pdm09 viruses in the first part of the season, followed by an increasing proportion, but with relatively low numbers of detections, of influenza type B. levels. RSV activity began increasing around week 41, reaching a peak in week 50 followed by a decreasing trend. RSV continues to have the greatest impact among children aged 0–4 years.

#### ECDC assessment

After marking the start of the seasonal influenza epidemic in the EU/EEA in week 50, 2023, seasonal influenza continued to circulate at higher levels than SARS-CoV-2 and RSV in primary care sentinel systems during week 11, 2024, although influenza activity has been decreasing over the past five weeks. Even if the respiratory virus circulation is decreasing, it remains essential to closely monitor the impact of influenza and other respiratory viruses on hospital and ICU admissions.

#### Actions

ECDC monitors rates of respiratory illness presentation and respiratory virus activity in the EU/EEA, presenting findings in the European Respiratory Virus Surveillance Summary ([ERVISS.org](#)). Updated weekly, ERVISS describes the epidemiological and virological situation for respiratory virus infections across the EU/EEA and follows the principles of integrated respiratory virus surveillance outlined in '[Operational considerations for respiratory virus surveillance in Europe](#)'.

ECDC published an [epidemiological update](#) that describes the epidemiological situation for acute respiratory infections in EU/EEA countries and provides updated ECDC recommendations to mitigate their impact.

ECDC published guidance on [vaccination rollout for autumn/winter 2023](#) which stresses the importance of influenza and COVID-19 vaccination to protect individuals at increased risk of severe disease – e.g. people aged 60 years and above, and other vulnerable individuals (such as those with underlying comorbidities), irrespective of age.

#### Sources: [ERVISS](#)

Last time this event was included in the Weekly CDTR: 19 March 2024.

## 2. SARS-CoV-2 variant classification

### Overview

#### Weekly update on SARS-CoV-2 variants

Since the last update on 15 March 2024, and as of 22 March 2024, **no changes** have been made to ECDC variant classifications for variants of concern (VOC), variants of interest (VOI), variants under monitoring and De-escalated variants.

As of 15 March 2024, given the low level of circulation for '**XBB.1.5-like**', '**XBB.1.5-like+F456L**' and '**XBB.1.5-like+L455F+F456L**', they will be merged into a single VOI designation: '**XBB.1.5-like**'. This update will simplify the presentation of SARS-CoV-2 variant data in [ERVISS](#) from week 11, 2024 and does not require any change in current reporting of SARS-CoV-2 variants by countries.

The variant landscape in the EU/EEA is clearly dominated by **BA.2.86**. As of 18 March 2024, the median proportion for BA.2.86 in the EU/EEA for week 9 (26 February 2024 to 3 March 2024) is 85.2% (range: 74.3–94.9%). Among the five EU/EEA countries reporting at least 20 sequences to GISAID EpiCoV for week 8, the proportions of BA.2.86 lineages were as follows: France (90.4%), Ireland (81.0%), Poland (74.3%), Spain (85.2%), Sweden (94.9%).

A large proportion of the BA.2.86 sequences belong to the sub-lineage **JN.1**. As of 19 December 2023, due to its rapid increase in proportion, [WHO classified](#) JN.1 as a separate VOI from the parent lineage BA.2.86. The most probable driver of the success of BA.2.86-descendant lineages is immune escape in a population where immunity is increasingly derived from XBB-variants.

**BA.2.87.1** lineage was classified as a VUM on 2 February 2024. A small number of sequences of this lineage (9) were identified in South Africa, with collection dates ranging from 20 September to 12 December 2023. As of 18 March 2024, BA.2.87.1 has not been detected outside South Africa. This lineage has been circulating in South Africa at low levels since September 2023, without any clear signs of an increase in proportion or an impact on epidemiological indicators. BA.2.87.1 is genetically distinct from currently circulating variants, carrying around 100 mutations compared to the parental lineage BA.2. It also has a distinct N-terminal domain in the spike protein, including several large deletions, and could therefore potentially be associated with a significant shift in antigenic properties. However, to date no virus neutralisation data are available for BA.2.87.1, and further studies are needed to elucidate the properties of this variant. BA.2.87.1 is unlikely to have an impact on the epidemiological situation in the EU/EEA in the near future.

**XBB.1.5-like** lineages are circulating in very low proportions in the EU/EEA, with a median proportion of 2.6% (range: 0.0–17.1%).

For the latest information on variants, please see ECDC's [webpage on variants](#).

### Actions

For the latest update on SARS-CoV-2 variant classifications, please see [ECDC's webpage on variants](#). Variant surveillance data, including the distribution of VOC and VOI variant proportions in the EU/EEA and detailed country-specific COVID-19 updates, are available as part of the [European Respiratory Virus Surveillance Summary \(ERVISS\)](#).

**Last time this event was included in the Weekly CDTR:** 15 March 2024.

### 3. Hepatitis A mostly associated with sexual transmission among MSM - multi-country- 2024

#### Overview

Between January 1 and March 18, 2024, 43 confirmed cases of hepatitis A were reported in Portugal, 26 (60%) with locally acquired infection. Of the 43 cases, 16 (37.2%) were in the context of sexual transmission, eight (18.6%) were food-related, two (4.7%) were caused by faecal-oral transmission excluding vertical or sexual, one case (2.3%) was transmitted in the context of drugs use and for 16 cases 37.2% there was no information on transmission. Of the 43 cases, 37 (86%) were among male individuals, 26 (60%) were aged between 20-49 years. 31 (72%) cases occurred in the region of Lisbon and the Tajus River, with 16 (37%) cases in foreign residents in Portugal, and no serious or fatal cases reported. Public health authorities [report](#) that sequencing of hepatitis A virus (HAV) from six confirmed cases identified two clusters of the strain VRD 521 (genotype IA), previously seen circulating in the multi-country outbreak in 2016-2018. Two of the six sequences are the same as the original VRD strain from 2016, and the other four have two nucleotide differences. Between 2015 and 2023, 867 confirmed cases of hepatitis A were notified in Portugal, with the majority (64.4%) being reported in 2017, coinciding with the aforementioned outbreak associated with transmission among men who have sex with men (MSM).

On 28 February 2024, the Netherlands reported via EpiPulse three cases of hepatitis A from December 2023 with the same HAV sequence as one of the clusters in Portugal, and circulating in Europe from 2016 to 2018. All three Dutch cases were men with MSM contacts and one had travel history to Brazil. These three cases of hepatitis A were the only ones with MSM contacts in 2023. No additional epidemiological relations could be established between the cases. Dutch authorities were able to determine two nearly complete genome sequences from their cases. These two shared 31 nucleotide differences, with the consensus of 28 whole genome and nearly whole genome sequences from the period 2016-2018. This indicates that this strain has been circulating from 2018 to 2023, possibly in a region with high level of population immunity thanks to childhood exposure or vaccination.

#### ECDC assessment

The currently circulating strain is similar to the ones circulating in the EU/EEA in 2016-2018, largely among MSM. The likelihood of new cases occurring in the EU/EEA is assessed as high and there is a moderate risk of hepatitis A, particularly among MSM in the light of further mixing and travel among MSM expected during the spring season and Pride events. There is some immunity that may exist following the vaccination of the European MSM population in the 2016-2018 outbreak and in a pre-travel context. There could possibly be less protection among the MSM population coming from countries with less protection against the disease which do not offer people the hepatitis A vaccine before travelling to Europe

MSM are at risk of HAV infection when engaging in sexual practices that facilitate faecal-oral transmission of the virus. Hepatitis A vaccination, which is safe and highly effective, is the main option for response in the context of the current circulation of HAV genotype IA among MSM. The World Health Organisation and most EU/EEA countries recommend hepatitis A vaccination for MSM. ECDC guidance recommends that hepatitis A vaccination be delivered and promoted to MSM. This is particularly important for MSM living in or travelling to areas reporting outbreaks, MSM travelling to endemic areas, attending mass gatherings or at risk of severe outcomes - e.g. due to underlying chronic disease.

Post-exposure prophylaxis should also be provided to identified sexual contacts, household contacts and other relevant close contacts of cases through the administration of hepatitis A vaccine and human normal immune globulin in accordance with national guidelines in order to prevent secondary cases.

In addition to vaccination, other options can contribute to the prevention of transmission among MSM: the use of condoms for anal sex, which have the additional benefit of offering protection against other sexually transmitted infections, and good personal hygiene (e.g. washing hands and genital areas before and after sex). For the provision of primary prevention advice, authorities should consider engaging with civil society, social media, media outlets and dating apps to raise awareness among MSM about the risk of contracting HAV and the importance of vaccination. MSM who have already contracted the infection should be referred to sexual health services for further testing. Attention should be paid to the prevention of secondary transmission from primary cases through other routes by following good personal and kitchen/food handling hygiene.

Further details on options for response can be found in the 2017 [rapid risk assessment](#) on HAV mostly affecting MSM, the 2018 rapid risk assessment [Multi-country outbreak of hepatitis A virus genotype IA infections affecting EU countries in 2018](#), and the ECDC document [Public health guidance on HIV and STI prevention among men who have sex with men](#).

#### Actions

ECDC monitors the situation via epidemic intelligence activities and encourages Member States to report via EpiPulse cases or clusters of Hepatitis A in MSM that are genetically linked.

## 4. Increase of cases of pertussis - Multi-country - 2023

### Overview

#### Epidemiological summary for EU/EEA Member States:

**Update:** An increase in the number of pertussis cases has been reported since mid-2023 in EU/EEA Member States (Belgium, Croatia, Denmark, Spain, Sweden, Norway) (for the previous report, please visit [CDTR published on 22 December 2023](#)). The increase has continued in 2024 with some countries reporting pertussis-related deaths (Czechia, Netherlands). The number of cases reported in Czechia are the largest in the past sixty years. The increase in cases appears to be affecting all age groups, with the majority of cases being diagnosed among children 15-19 years of age and among vaccinated individuals.

[Croatia](#) reported 6 261 cases of pertussis from 1 January 2023 to 15 March 2024. Of these cases, 67% are among youths aged between 10 and 19 years of age (10-14 years: 2 657 cases, 15-19 years 1 541 cases). Children below one year of age account for 3% of the cases (191 cases). The highest number of patients is recorded in the City of Zagreb and the Split-Dalmatia County. In 2023, Croatia reported 4151 cases.

[Czechia](#) reported 3 101 pertussis cases, including one death, from 1 January to [17 March 2024](#), according to the National Institute of Public Health. The number of cases has increased gradually since the beginning of the year, with the largest number reported in week 11 (ending on 17 March 2024) with 827 cases. Cases have been detected in all age groups, but mostly affected teenagers aged 15-19 years. There have been 59 cases in children below one year of age. Among cases detected in 2024, 3.4% were hospitalised, and of these, 64.4% were below one year of age. One death has been reported in a person in the age-group 55-64 years. The most affected regions are South Bohemia (641) and Central Bohemia (470). According to [media](#) quoting public health authorities, cases detected so far in 2024 are already the highest reported for any year since 1963.

[Denmark](#) continues to report high numbers of pertussis cases in 2024 with 822 laboratory confirmed cases as of 20 March. In 2023, Denmark reported 6 063 cases - the highest annual number reported since 2007. The largest number of pertussis cases reported in a calendar year during the past decade was recorded in 2019, with a total of 3 696 cases. All age groups are affected with most of the cases reported in 2023 and in 2024 seen in age groups 5-14 and 15-24 years. Children below one year of age account for 2.1% (18 cases) in 2024 and 2.6% (158 cases) in 2023. In 2023, vaccination status was unknown for almost one third of reported cases (1 938 cases). Where vaccination status was known, 2.3% (137 cases) were unvaccinated, .7% (101 cases) were vaccinated with one dose, 1.88% (114 cases) with 2 doses, 8.7% with three doses (527 cases) and 33.3% (2 017 cases) received four or more doses.

[Luxembourg](#) reported an increase of pertussis, with 21 new cases reported since the beginning of 2024 and as of February. Overall, 46 cases have been reported since October 2023. In 2023, 18 cases were recorded.

[Norway](#) reported 707 cases of pertussis in 2024 and as of 20 March, according to the data from the National Institute of Public Health. In 2023, 1 201 cases were reported. Of the cases in 2024, 59.7% were in children 0-19 years of age (104 cases in age group 0-9 and 318 cases in age group 10-19 years). For reference, in the years 2015-2019, between 1 904 and 2 534 cases of pertussis were reported annually. In response, this year Norway proposed introducing vaccination for pregnant women.

[Netherlands](#) reported 1 749 cases from 1 January to 10 March 2024, including four infant deaths in February and March - mortality that exceeds 1-2 annual deaths in the past decade. Of the reported cases in 2024, 8.4% (147 cases) are children below one year of age. In the past weeks 200 to 300 children have been diagnosed per week, at least 20 of which were infants. Half of the infants with pertussis have been hospitalised in the recent weeks. In 2023, the Netherlands reported 2 712 cases. For comparison, the highest number of cases in the past decade was reported in 2012 with 13 828 cases, including two deaths. In the Netherlands the maternal pertussis vaccination was introduced in December 2019, with an estimated uptake between 66-70%. Children receive their own vaccinations at (2)-3-5-11 months (at two months when no maternal vaccination), and a booster at four years of age. No boosters are given at a later age. The vaccination rate of both the infant series and the booster has been decreasing the past decade and these were both below 90% for the most recent registered birth cohorts.

According to the [risk assessment](#) produced by Belgium in September 2023, until August 2023, 767 pertussis notifications were reported in Flanders and 418 confirmed cases by the National Reference Centre. Most cases were reported in the age groups 5-9 and 10-14 years. Attempts have been made to raise awareness of pertussis among physicians and efforts are being made to improve the coverage of maternal vaccination. The risk for Belgium was assessed as low ([Primary risk assessment: Increase in cases of pertussis, Belgium, September 2023](#)). One death in a [neonate](#) was reported in December 2023. According to [data](#) published by the national public health

authorities, maternal vaccination coverage in Belgium varies greatly from one region to another (85% in Flanders, 49% in Wallonia, 37% in Brussels).

[Spain](#) reported 5 242 cases in 2024 and as of week 8, 2024. According to [other sources](#), quoting official reports, most recent cases have occurred among children 5-14 years old, mainly vaccinated. Over half of the cases have been reported in Catalonia. In [2023](#), 1 942 pertussis cases were reported in Spain, compared to 232 reported in 2022.

According to information on GPHIN on 20 March 2024, an increase in pertussis has been reported in other countries around the world, including Australia, Brazil, Bolivia, Canada, Israel, Serbia, United States of America, and United Kingdom.

According to [media](#), Czechia has been experiencing vaccine shortages. In addition, the United States published a report which stated that they were experiencing shortages of Tdap vaccines due to the discontinuation of the production from a manufacturer. In 2016, ECDC produced a [Rapid Risk Assessment](#) on the shortage of acellular pertussis-containing vaccines and its impact on immunisation programmes in the EU/EEA .

### **ECDC assessment**

Pertussis is an endemic disease in the EU/EEA and worldwide, with peaks every 3-5 years, even in the presence of high vaccination coverage. The objective of the pertussis vaccination programmes is to protect infants from severe disease. An effective vaccination programme capable of ensuring the timely administration of the first dose of a pertussis-containing vaccine to infants is of utmost importance. Maternal vaccination programmes have also been associated with a reduction of disease in infants in several countries when implemented. Notification in older age groups is affected by different levels of implementation of laboratory diagnosis, as well as clinical suspicion.

The observed increase in notifications requires further efforts at country level to identify and vaccinate those with no or incomplete vaccination history, as well as enforce timely infant vaccination to protect those most vulnerable, in accordance with national guidelines and recommendations. Maternal vaccination programmes have also been shown to be effective.

The disease should be suspected in very young children presenting with severe respiratory symptoms, irrespective of the presence of a cough. Communication campaigns should aim to raise awareness among paediatricians and neonatologists on ongoing outbreaks, to encourage them to suspect and test for pertussis and initiate treatment early among cases and contacts, in accordance with national guidelines and recommendations.

### **Actions**

ECDC continues to monitor the situation through epidemic intelligence activities.

**Last time this event was included in the Weekly CDTR:** 22 December 2023.

# 5. Invasive Group A streptococcal infection - Multi-country - 2023-2024

## Overview

### Summary

During the 2023-2024 season, iGAS surveillance continued in some EU/EEA countries. Among these, the Netherlands and Sweden reported higher or similar number of cases compared to 2022-2023 season. In other countries, such as [Ireland](#), cases continued to be reported but in lower levels compared to 2022-2023 season. In addition, [Greece](#) has started to record iGAS cases in 2023 at national level and has registered 94 cases including 23 deaths.

In the [Netherlands](#), reported iGAS cases during season 2023-2024 are similar to season 2022-2023. Cases of iGAS increased since December 2023, reaching the highest number of cases reported in February 2024. iGAS cases in children between 0 to 5 years old remain at lower levels compared with season 2022-2023.

In [Sweden](#), during 2023-2024 season a higher number of iGAS cases is being reported compared to season 2022-2023. In 2024, the highest number of cases were registered in week 7, showing a decreasing trend afterwards. The most affected age group is 70 years old and above.

Outside of the EU/EEA, the [United Kingdom](#) have reported a total of 1 243 laboratory notifications of iGAS infections during this season (week 37 to week 6). This is considered a normal seasonal pattern and constitutes a decrease in the number of cases reported compared to 2022-2023 season. However, lags in reporting may affect the total number of cases reported for the last weeks. During this season, a clonal expansion has been observed in the *emm3.93* subtype.

Recent [media reports](#) informed about an increase of iGAS cases in Japan, where the M1 type was identified. The M1 type is considered to be common in Europe.

### Background

iGAS infections are rare life-threatening systematic infections manifesting as sepsis, lower respiratory infections including empyema, skin and soft tissue, musculoskeletal infections etc. Children with and recovering from viral infections, (e.g. varicella, influenza, etc.) are likely at higher risk of developing iGAS infection.

iGAS cases are not notifiable at the EU level, although 12 countries have previously reported having surveillance systems in place. There is heterogeneity in the types of surveillance systems, syndromes monitored, and case definitions. In 2022-23, multiple countries in the EU/EEA saw an increase of iGAS reported cases including [Ireland](#), [France](#), [Denmark](#) as well as outside the EU in the [UK](#).

### ECDC assessment

After the peaks of reported iGAS cases in 2022-23 seasons, more EU countries have implemented iGAS surveillance systems, although a harmonised case definition has not been established. iGAS infections are in general severe but rare and mostly affect young children recovering from viral infections and in some cases elderly >65years of age. A new *emm* type, M3.93, is reported to be dominating in the Netherlands in this season and expanding in the UK, but there is no indication of increased resistance to antibiotics or increased severity of infection, as of now. Season 2023-24 seems to be similar with pre-pandemic iGAS seasons in terms of timing and case numbers, with the exception of Sweden with case counts higher than last season. The overall risk from these infections is low at the population level. Increased awareness for early detection and treatment is important.

### Actions

ECDC is monitoring iGAS

### Further information

ECDC coordinated a multicountry study on paediatric iGAS infections for the season 2022-23, where eight countries submitted data. Preliminary analysis of the data shows that the most affected age group is young children 0-4 years of age. Emm typing of GAS isolates showed predominance of M1 and M12 types in the 2022-23 season.

# 6. Chikungunya and dengue – Multi-country (World) – Monitoring global outbreaks - Monthly update

## Overview

### Chikungunya virus disease (CHIKVD)

In 2024 and as of 29 of February, approximately 70 000 CHIKVD cases and 15 deaths have been reported worldwide. A total of 16 countries reported CHIKVD cases from the Americas (11), Asia (4), and Africa (1).

The majority of countries reporting high CHIKVD burden are located in South and Central America. Countries reporting highest number of cases are Brazil (71 487), Paraguay (2 760), Argentina (156), and Bolivia (126). Additional countries in the Americas reporting CHIKVD cases can be found at [PAHO's dedicated website](#).

Outside of the Americas, CHIKVD cases have been reported in Asia from Timor Leste (195), Thailand (139), Pakistan (26), and Malaysia (6). One African country reported CHIKVD cases in 2024: Senegal (3).

No autochthonous cases of CHIKVD have been reported in Europe in 2024.

CHIKVD associated deaths have been reported from Brazil (15).

### Dengue

Since the beginning of 2024 over two million dengue cases and over 500 dengue-related deaths have been reported globally. Most cases were [reported](#) in the WHO PAHO region with a cumulative number of 1 874 021 suspected cases reported until week 8 of 2024 (ending 25 February 2024). According to the PAHO report of 7 March 2024, this is an increase of 249% compared to the same period in 2023. Brazil has reported over 1.5 million cases in 2024 already, and 278 deaths. Vaccination against dengue has started in Brazil and measures such as enhanced monitoring are being implemented ([Emergency Operations Center will monitor dengue cases in São Paulo — Ministry of Health \(www.gov.br\)](#); [Technical Note, Ministry of Health, Brazil](#) and [Press Release, Ministry of Health, Brazil](#)).

Guadeloupe, Martinique, Saint-Barthélemy and Saint-Martin [continue](#) to face an epidemic classified as being in phase 4 and level 1 for Guadeloupe and Martinique and as phase 3 for Saint-Barthélemy and Saint-Martin. According to the [surveillance report for dengue of 29 February 2024](#), there is a decreasing trend in the cases presenting with dengue symptoms in Guadeloupe and Saint Barthélemy, with similar trends observed in visits to emergency departments. In Martinique and Saint-Martin, increasing trends in cases with dengue symptoms have been observed since the beginning of the year. However, the number of cases presenting with symptoms at emergency departments is decreasing.

Increases in dengue have been reported in French Guyana since the beginning of the year, with over 5000 cases reported as of February 2024. Although case numbers remain elevated, the weekly number of confirmed cases decreased from week 7 to week 8 ([Epidemiological Report of dengue, Guyane, 29/02/2024](#) and [Epidemiological Surveillance Bulletin, Guyane 2024-08 and 2024-09](#)).

Until 23 February 2024, 84 dengue cases had been [reported](#) in 2024 in La Réunion. So far there have been twice as many cases reported this year as in the same period in 2023. Overall, [in 2023, La Réunion reported](#) 218 dengue cases.

Dengue circulation was also reported in the WHO [SEARO Region](#) and [WPRO Region](#) in February 2024.

According to the [Weekly Epidemic Intelligence Bulletin published on 4 March 2024 by Africa CDC](#), 5 427 dengue cases (2 686 confirmed and 2 741 suspected) have been reported in Africa from Ethiopia (1 621 cases; 2 deaths), Mali (1 349 cases; 0 deaths), Mauritius (2 433 cases; 2 deaths), Sao Tome and Principe (9 cases; 0 deaths) and Senegal (25 cases; 0 deaths).

### Note

*The data presented in this report originate from both official public health authorities and non-official sources, such as news media and depending on the source autochthonous and non-autochthonous cases may be included. Data completeness depends on the availability of reports from surveillance systems and their accuracy, which varies between countries. All data should be interpreted with caution and comparisons, particularly across countries, avoided, due to under-reporting, variations in surveillance system structure, varying case definitions between countries and over time, and use of syndromic definitions.*

## ECDC assessment

Chikungunya virus disease and dengue affect people in most countries of the tropics and sub-tropics. EU/EEA citizens travelling to the affected areas should apply personal protective measures against mosquito bites.

The likelihood of onward transmission of dengue and chikungunya virus in mainland EU/EEA is linked to importation of the virus by viraemic travellers into receptive areas with established and active competent vectors (e.g. *Aedes albopictus* and *Aedes aegypti*). *Aedes albopictus* is established in a large part of Europe. *Aedes aegypti* is established in Cyprus, on the eastern shores of the Black Sea, and in the outermost region of Madeira.

The current likelihood of the occurrence of local transmission events of chikungunya and dengue viruses in areas where the vectors are present in mainland EU/EEA is very low, as the environmental conditions are unfavourable for vector activity and virus replication in vectors. In 2023, locally-acquired dengue cases were reported by France, Italy, and Spain.

All autochthonous outbreaks of [CHIVD](#) and [dengue](#) in mainland EU/EEA have so far occurred between June and November.

More information on autochthonous transmission of [chikungunya](#) and [dengue](#) virus in the EU/EEA is available on ECDC's webpages, and in ECDC's factsheets on [dengue](#) and [CHIKVD](#).

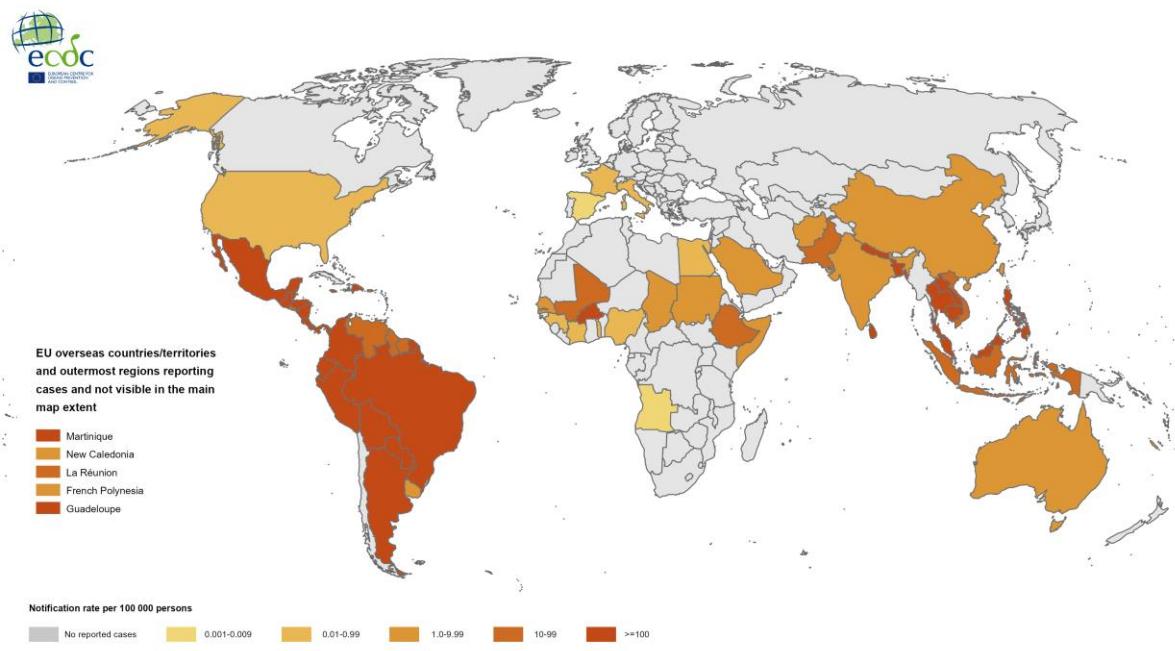
## Actions

ECDC monitors these threats through its epidemic intelligence activities, and reports on a monthly basis. A summary of the worldwide overview of [dengue](#) and [CHIKVD](#) is available on ECDC's website.

**Last time this event was included in the Weekly CDTR:** 16 February 2024.

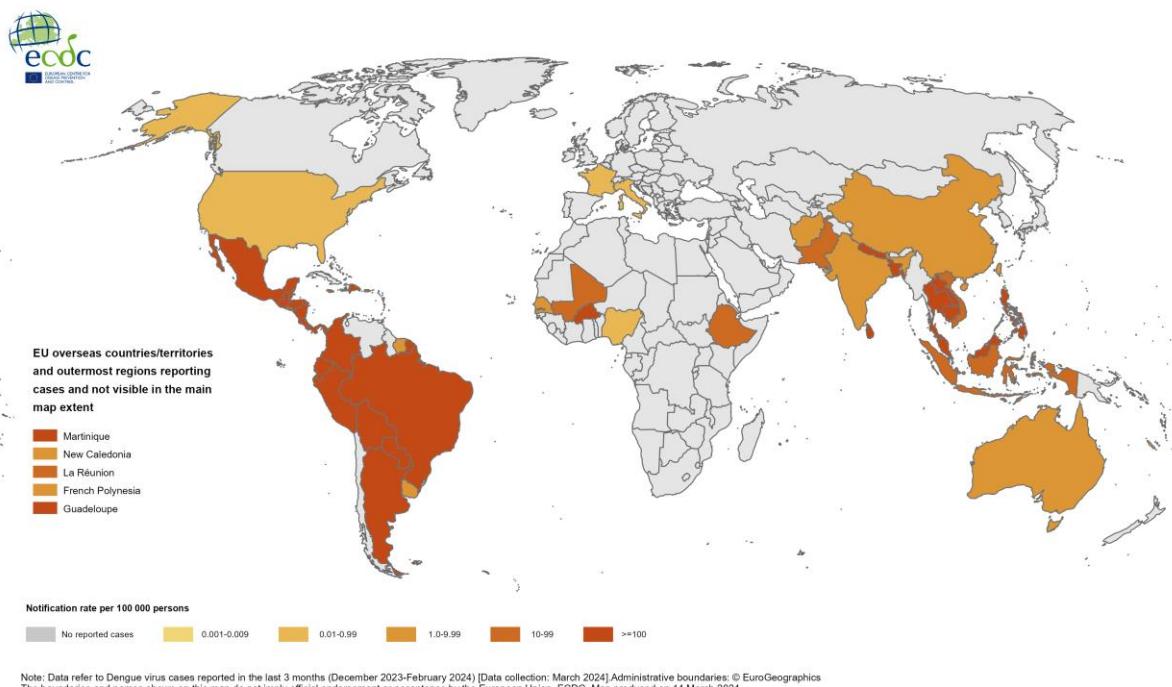
## Maps and graphs

**Figure 1. 12-month dengue virus disease case notification rate per 100 000 population, March 2023–February 2024**



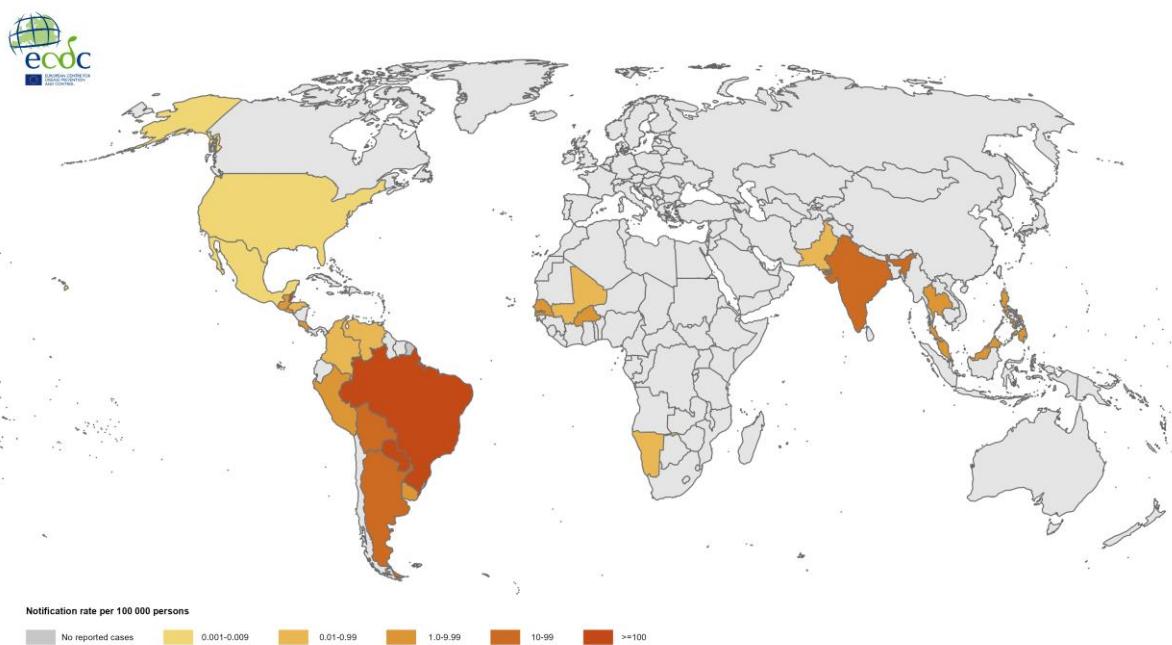
Source: ECDC

**Figure 2. Three-month dengue virus disease case notification rate per 100 000 population, December 2023–February 2024**



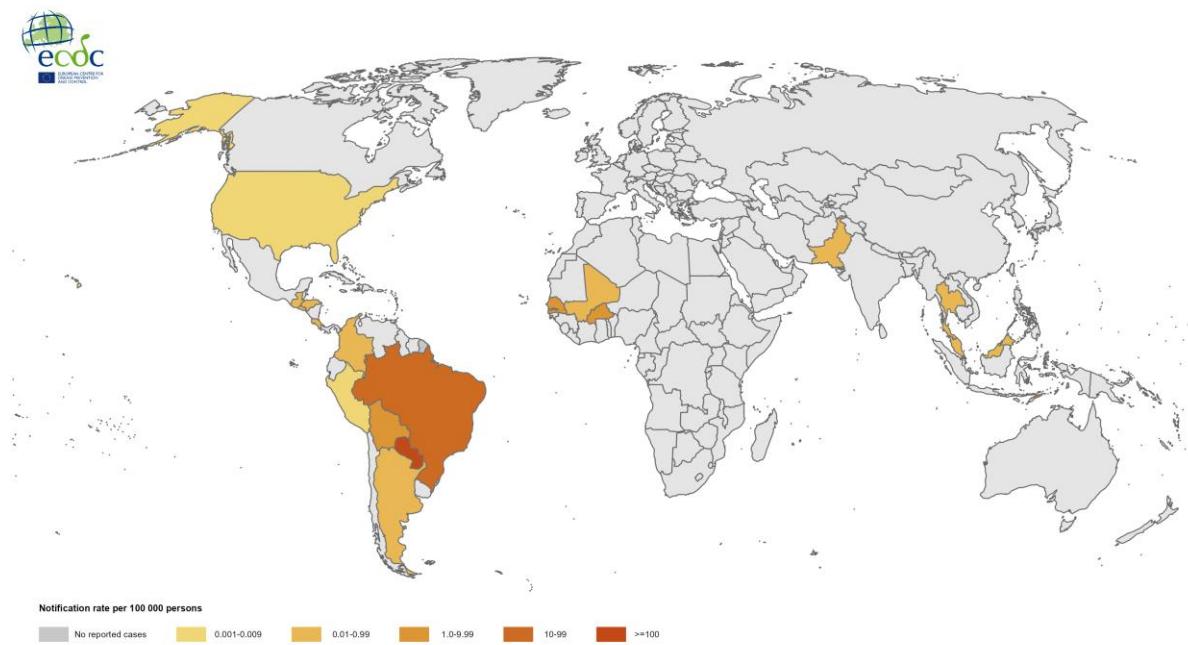
Source: ECDC

**Figure 3. 12-month Chikungunya virus disease case notification rate per 100 000 population, March 2023–February 2024**



Source: ECDC

**Figure 4. Three-month Chikungunya virus disease case notification rate per 100 000 population, December 2023–February 2024**



Source: FCDC

## 7. Poliomyelitis – Multi-country – Monthly monitoring of global outbreaks

### Overview

Global public health efforts to eradicate polio are continuing through the immunisation of every child until transmission of the virus stops and the world becomes polio free. On 5 May 2014, polio was declared a public health emergency of international concern (PHEIC) by the World Health Organization (WHO) due to concerns over the increased circulation and international spread of wild poliovirus in 2014.

On 12 December 2023, the [37th meeting](#) of the Polio Emergency Committee under the International Health Regulations (IHR) (2005) was held to discuss the international spread of poliovirus and it was agreed that it remains a PHEIC. It was recommended that the Temporary Recommendations be extended for a further three months.

In June 2002, the WHO European Region was officially declared polio free.

### Update:

#### ***Wild poliovirus type 1 (WPV1):***

Since 20 February 2024 and as of 21 March 2024, two new cases of AFP caused by WPV1 have been reported in Pakistan (2).

#### ***Circulating vaccine-derived poliovirus (cVDPV):***

Since the previous update on 20 February 2024 and as of 21 March 2024, the following new cases of polio due to cVDPV were reported with the date of onset of symptoms in 2023 and in 2024:

- There were no new cases of AFP caused by cVDPV1 reported in 2023 and no cases in 2024.
- There were 17 new cases of AFP caused by cVDPV2 reported from five countries: Guinea (1), Somalia (3), Nigeria (6), Yemen (4), Mali (3).
- There were eight new cases of AFP caused by cVDPV1 reported in five countries: Guinea (1), Somalia (1), Nigeria (4), Yemen (1), and Mali (1) with date of onset in 2024.
- No cases of AFP due to cVDPV3 were reported in 2023 and in 2024.

### Summary

#### ***Wild poliovirus (WPV):***

In 2024, two cases of AFP due to wild poliovirus infections have been reported in Pakistan.

#### ***Circulating vaccine-derived poliovirus (cVDPV):***

##### With the date of onset of symptoms in 2023:

In 2023, and as of 21 March 2024, 133 cases of AFP caused by cVDPV1 have been reported from three countries: the DRC (105), Madagascar (24) and Mozambique (4) (no new cases since the previous report on 20 February 2024).

In 2023, 389 cases of AFP caused by cVDPV2 were reported from 22 countries: Benin (3), Burkina Faso (2), Burundi (1), Central African Republic (14), Chad (54), Côte d'Ivoire (6), the DRC (118), Guinea (47), Indonesia (6), Israel (1), Kenya (8), Mali (15), Mauritania (1), Mozambique (1), Niger (2), Nigeria (87), Somalia (8), South Sudan (2), Tanzania (3), Yemen (8), Zambia (1) and Zimbabwe (1).

In 2023, no cases of AFP caused by cVDPV3 were reported.

##### With the date of onset of symptoms in 2024:

No new cases of AFP caused by cVDPV1 were reported in 2024.

In 2024, and as of 21 March, eight new cases of AFP caused by cVDPV2 were reported in five countries: Guinea (1), Somalia (1), Nigeria (4), Yemen (1), and Mali (1).

In 2024, no cases of AFP caused by cVDPV3 were reported.

**Sources:** [Global Polio Eradication Initiative](#) | [ECDC](#) | [ECDC dashboard](#) | [WPV3 eradication certificate](#)

### ECDC assessment

The WHO European Region, including the EU/EEA, has remained polio free since 2002. Inactivated polio vaccines are used in all EU/EEA countries.

As long as there are non-vaccinated or under-vaccinated population groups in European countries and poliomyelitis is not eradicated globally, the risk of the virus being reintroduced in Europe remains. One EU/EEA country (Romania) and three neighbouring countries (Bosnia and Herzegovina, Montenegro, and Ukraine) remain at high risk of a sustained polio outbreak following wild poliovirus importation or the emergence of circulating vaccine-

derived poliovirus (cVDPV). This is due to suboptimal programme performance and low population immunity, according to the [\*\*European Regional Certification Commission for Poliomyelitis Eradication \(RCC\)\*\*](#) report published in February 2023, referring to data from 2021. According to the same report, eight EU/EEA countries are at intermediate risk of sustained polio outbreaks. The continuing circulation of wild poliovirus type 1 (WPV1) in Pakistan and Afghanistan, and the detection of WPV1 cases in Mozambique in 2022 (which are genetically linked to a strain from Pakistan), shows that there is still a risk of the disease being imported into the EU/EEA. The outbreaks of cVDPV that emerge and circulate due to lack of polio immunity in the population also illustrate the potential risk for further international spread.

To limit the risk of reintroduction and sustained transmission of WPV and cVDPV in the EU/EEA, it is crucial to maintain high vaccine coverage in the general population and increase vaccination uptake in pockets of under-immunised populations. EU/EEA countries should review their polio vaccination coverage data and ensure that there are no immunity gaps in the population and that there is capacity to identify virus circulation through well-performing surveillance systems.

ECDC endorses WHO's temporary recommendations for EU/EEA citizens who are residents of or long-term visitors (>4 weeks) to countries categorised by [WHO](#) as having the potential risk of causing international spread of polio: an additional dose of poliovirus vaccine should be administered between four weeks and 12 months prior to international travel. Travellers to areas with active transmission of a wild or vaccine-derived poliovirus should be vaccinated according to their national schedules.

**ECDC links:** [ECDC comment on risk of polio in Europe](#) | [ECDC risk assessment](#)

#### **Actions**

ECDC provides updates on the polio situation on a monthly basis. ECDC also monitors polio cases worldwide through its epidemic intelligence activities in order to highlight polio eradication efforts and identify events that increase the risk of wild poliovirus being reintroduced into the EU/EEA.

ECDC maintains a [dashboard](#) showing countries that are still endemic for polio and have ongoing outbreaks of cVDPV.

**Last time this event was included in the Weekly CDTR:** 23 February 2024.

## 8. Western equine encephalitis – Multicountry – 2023

### Overview

#### Update

Since the previous report and as of 12 March 2024, 37 new WEE human cases (confirmed, probable, and suspected) have been reported in the Americas. All new cases were reported in Argentina. This brings the cumulative total of WEE cases to 203, including seven deaths, reported in the Americas since the start of the outbreak.

Since 28 November 2023 and as of 12 March 2024, a total of 199 WEE human cases (confirmed, probable, and suspected) have been reported in Argentina. Among these, 94 are confirmed cases that have been reported in Buenos Aires (53), Santa Fe (20), Córdoba (10), Entre Ríos (6), CABA - Buenos Aires Autonomous City (2), Santiago del Estero (1), La Pampa (1), and Río Negro (1) provinces. In addition, seven deaths have been reported in Buenos Aires (3), Santa Fe (2), Córdoba (1), and Entre Ríos (1). Most of the human cases are reported in the Central region of Argentina, where the highest number of outbreaks among equids has been notified.

Since 30 January 2024, Uruguay has reported a total of four human WEE confirmed cases in San Jose (2), Maldonado (1), and Montevideo (1). No deaths associated with WEE have been reported in Uruguay.

#### Summary

Epidemiological surveillance of WEE in humans in Argentina was initiated on 28 November 2023, after the initial alert at national level. On 20 December 2023, the Ministry of Health of Argentina reported that a case of Western equine encephalitis (WEE) was detected in Santa Fe. The report was followed by a Disease News Item (DON) published by WHO on 28 December 2023. According to the DON, the patient developed symptoms in November and was working in an area where WEE cases had been reported in equines. Human WEE cases have been reported in the past in Argentina, in 1983 and 1996.

#### Background

WEE is a mosquito-borne disease caused by the Western equine encephalitis virus (WEEV; genus *Alphavirus*, family *Togaviridae*). The main reservoir for WEEV is birds, while humans and equines are dead-end hosts. Up to 18 January 2024, 47 and 1 171 outbreaks in equines have been reported to WAHIS in Uruguay and Argentina, respectively. Prior to this event, the last outbreaks in equines were reported in Mexico in 2019, after which the situation was resolved. The most recent human case was in Uruguay in 2009.

Detailed laboratory guidelines for the detection of WEEV infection in humans were published by WHO PAHO on 20 December 2023. The European Union reference laboratories for equine diseases provide a Standard Operating Procedure for the detection of WEE in equine animals (WOAH, accessed on 23/01/2024), and the requirements for diagnostics techniques and vaccines for WEE are described in Chapter 3.6.5 of the World Organisation for Animal Health (WOAH) diagnostic manual.

#### ECDC assessment

WEE epidemics involving thousands of cases used to be widespread in the Americas in the 1940s, from Canada to Argentina. Since then, case numbers have decreased, with no human cases since 2009. There is no clear explanation for the decline that has been observed in the last decade. More specifically, lack of evidence for a decline in virulence of WEEV has been reported, but ecological factors have been hypothesised to play a role (Forrester et al., 2008). Serological studies provide only patchy evidence of potential virus circulation in South America. For instance, there is some serological evidence of WEEV circulation in horses in 2007, both in Central-West Brazil (Pauvolid-Correa et al., 2010) and Uruguay (Burgueno et al., 2018). A study in Argentina, carried out from 2013 to 2016, did not identify any serological evidence of WEEV circulation in horses (Albrieu-Llinas et al., 2021). Other studies investigating seroprevalence in 182 humans in S. Paulo State in 2000 delivered negative test results (Romano Lieber et al., 2000), as was the case for 298 young men tested in 2021 in the Amazonas State in Brazil (Salgado et al., 2021). In addition, studies carried out in Trinidad did not find any serological evidence of virus circulation in humans (Thompson et al., 2012).

There is not much information yet about the current prevalence of WEEV in mosquitoes and wild birds, but knowing that equines and humans (which are dead-end hosts) are being affected, it can be assumed that it is circulating among mosquitoes and wild birds. Therefore, to reduce the potential exposure to humans, personal protective measures against mosquito bites should be applied in affected areas. These include the use of repellents, protective clothing, door and window screens, and mosquito nets.

The risk for the EU/EEA is very low because humans and horses are dead-end hosts and there is no direct migration of birds from South America to Europe.

**Actions**

ECDC is monitoring the event through epidemic intelligence activities.

**Further information:**

- [Equine encephalomyelitis \(Western\) - WOAH - World Organisation for Animal Health](#)
- [Epidemiological alert - Risk to human health associated with Western Equine Encephalitis Virus infection in Equines - 19 December 2023 - PAHO/WHO | Pan American Health Organization](#)
- [Ministerio de Salud Argentina - Encefalitis Equina del Oeste: Circular para la vigilancia epidemiológica y laboratorial, la prevención y el control \(08/12/2023\)](#)

**Last time this event was included in the Weekly CDTR:** 19 March 2024.

# 9. Cholera – Comoros and Mayotte – 2024

## Overview

### Update

On 19 March 2024, the prefect of Mayotte reported the first imported confirmed case of cholera in the island. The patient is a woman who arrived from Anjouan by kwassa in the north of the island of Mayotte on 17 March. She called the Samu (Emergency Medical Aid Service) after vomiting on 18 March. She was hospitalized at the Mayotte Central Hospital and isolated. According to media, she was living in Passamaïnty (a village in the commune of Mamoudzou, the capital city of Mayotte) when the symptoms arose.

Following the detection of the imported cholera case in Mayotte, the prefecture of the French Territory released a public statement listing the public health measures taken. An initial medical and paramedical investigation team went to the patient's home to identify contact and co-exposed cases and provide them with initial treatment. On 19 March a second team was deployed to the area to disinfect the site, carry out environmental analyses and provide health recommendations to people in the neighbourhood. These teams will remain on site to monitor the appearance of any symptoms.

In Comoros, since 13 March and as of 17 March, media quoting the Regional Director of Health of Comoros reported 92 new cholera cases, bringing a total of 319 cumulative cholera cases reported in the three islands since the beginning of the outbreak. A ministerial note published 18 March, stated that on Week 11 the country registered the highest number of cases since the outbreak started. Week 11 coincides with the beginning of Ramadan, when it is expected that social behaviours related to hygiene might change.

Since the outbreak was declared on 2 February in the Union of the Comoros\*, a total of 319 cases and 12 deaths have been reported a total of 189 cases have recovered and 27 patients remain at treatment sites.

*irregular and data on the date of symptom onset is not available.*

### Summary

On 31 January 2024, a boat from Tanzania carrying 25 people arrived in Moroni, the capital of the Comoros archipelago. One person on board died of suspected cholera and several others were symptomatic. The Comoros Ministry of Health declared a cholera outbreak on 2 February. The first locally transmitted cases in Comoros were reported on 5 February in Moroni. Cholera cases were also detected in Moheli and Anjouan by the end of February and the first week of March. On 18 March 2024, Mayotte reported the detection of the first confirmed case on the Island.

Following the increase in cholera cases in Comoros during February, the Mayotte Regional Health Agency (ARS Mayotte) announced that health surveillance capacities would be strengthened on the island, including risk communication for health professionals and passengers. The first imported cholera case was detected in Mayotte on 19 March.

### Background

There is frequent undocumented population movement between the Comoros archipelago and the French territory of Mayotte. No cholera cases have been recorded in Mayotte since 2000.

Cholera is a bacterial disease caused by the bacterium *Vibrio cholerae*. The main risk factors are associated with poor water, sanitation and hygiene practices. Several countries in eastern and southern Africa are currently responding to cholera outbreaks. Response efforts are constrained by global shortages of cholera vaccines.

### ECDC assessment

Following the importation of a first confirmed case of cholera to Mayotte, ECDC assesses the likelihood of cholera community transmission in Mayotte as high. The impact of a cholera outbreak in Mayotte is considered to be moderate. The overall risk of cholera for the Mayotte population is therefore assessed to be high.

The case imported was isolated early, although the number of contacts and possible exposed people remain uncertain. Early detection and response activities are essential and have been reinforced in the French territory of Mayotte, as well as increasing awareness among healthcare workers and at points of entry.

### Actions

ECDC is in contact with French authorities and relevant partners and is monitoring the situation through epidemic intelligence activities.

**Last time this event was included in the Weekly CDTR:** 15 March 2024.