This week’s topics

1. Overview of respiratory virus epidemiology in the EU/EEA - weekly monitoring
2. Increase in parvovirus B19 detections – Multi-country – 2024
4. Chikungunya and dengue – Multi-country (World) – Monitoring global outbreaks - Monthly update
5. Poliomyelitis – Multi-country – Monthly monitoring of global outbreaks

Executive Summary

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

Syndromic surveillance in primary and secondary care indicates that respiratory activity continues to decrease and has returned to baseline levels in most EU/EEA countries.

Seasonal influenza activity at the EU/EEA level continues to decrease.

- For four weeks in a row, the primary care pooled test positivity at the EU/EEA level has remained below 10%, with 83% of the countries reporting test positivity below the epidemic threshold. Similarly, the pooled test positivity in secondary care was below 10% and continued to decrease.
- The decrease in seasonal influenza activity was observed earlier this year compared to the trends over the past ten years (excluding the 2020/2021 season where almost no activity was observed during the COVID-19 pandemic).
- Most countries now report baseline or low levels of influenza intensity and baseline rates of influenza-like illness (ILI). Countries continue to report a mix of geographical spread, indicating continued heterogeneity of influenza activity at country level.
- In week 15, influenza type B accounted for 84% of the influenza virus detections in the EU/EEA. For three weeks in a row, more Influenza B than Influenza A was detected, although the detections remain low and continue to decrease, with only one country reporting elevated activity driven by Influenza B.
RSV activity remained at low levels in the EU/EEA and in most reporting countries.

SARS-CoV-2 activity remained low in all EU/EEA countries.

**Increase in parvovirus B19 detections – Multi-country – 2024**

- An increase in the number of parvovirus B19 infections has been recently reported by Denmark, Ireland, the Netherlands, Norway and France.
- Although a detailed epidemiological analysis is lacking due to the disease not being under surveillance in most countries, the data available show increased infection rates across several age groups, with young children being mostly affected.
- High rates of virus circulation in the community pose a risk for pregnant women that have not been exposed to the virus previously and have therefore not developed protective immunity.
- Up to 10% of pregnant women infected with parvovirus B19 during the first 20 gestational weeks can experience complications such as hydrops foetalis and miscarriage.
- Other groups at risk of severe illness include individuals with blood disorders or immunosuppression.

**Cholera – Comoros and Mayotte – 2024 – Weekly monitoring**

- On 15 April 2024, four new cases were detected in Mayotte. Since 18 March, and as of 15 April 2024, 10 confirmed cholera cases and no deaths have been reported. All cases detected in Mayotte are individual, with exposure history outside of the country.
- Due to the ongoing outbreak in Comoros, the frequent movement of people from Comoros to Mayotte, and unfavourable living conditions in Mayotte, the likelihood of community transmission in Mayotte remains high.
- Since the last available update on 10 April, and as of 18 April, 896 new cholera cases and 18 new deaths have been reported in Comoros. As of 18 April 2024, 1 964 confirmed cholera cases and 45 deaths have been reported in the country.

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

- In 2024, approximately 160 000 chikungunya virus disease (CHIKV) cases and 50 deaths were reported worldwide. A total of 17 countries reported CHIKV cases from the Americas (11), Asia (5), and Africa (1). No autochthonous cases of CHIKV were reported in Europe in 2024.
- Since the beginning of 2024, over five million dengue cases and over 2 000 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 16 April, four cases of acute flaccid paralysis (AFP) due to wild poliovirus infection have been reported, including two cases in Pakistan and two cases in Afghanistan.
- In 2024, and as of 16 April, 14 cases of AFP caused by cVDPV2 were reported in seven countries: Guinea (1), Somalia (1), Nigeria (8), Yemen (1), South Sudan (1), Chad (1) and Mali (1).
- In 2024, and as of 16 April, one case of AFP caused by cVDPV1 was reported in DRC.
1. Overview of respiratory virus epidemiology in the EU/EEA - weekly monitoring

Overview:

Respiratory virus activity
- ILI and acute respiratory infection (ARI) consultation rates are continuing to decrease or remaining stable at low levels (19 reporting countries). Moving Epidemic Method (MEM) thresholds were available for 18 countries, five of which observed consultation rates above baseline levels. 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 4% (pooled country data: 9%; interquartile range (IQR) of country values: 3–8%), with most countries reporting a decrease in test positivity. In week 15, 15 of 18 countries reported a test positivity below 10%. Qualitative assessments of seasonal influenza activity from 21 countries indicate decreasing intensity in recent weeks (eight baseline, nine low, four medium). Of 20 countries reporting geographical spread of seasonal influenza, eight reported sporadic spread, three local, four regional and five widespread.
- Among the 88 sentinel primary care detections of seasonal influenza, 74 (84%) were typed as influenza virus type B and 14 (16%) were typed as influenza virus type A. Of the influenza type B detections, 36 were further defined as B/Victoria lineage, while the remaining 38 were of unknown lineage. Of the influenza type A detections that were further subtyped, five (42%) were A(H1)pdm09 and seven (58%) were A(H3). The remaining two influenza type A detections were of unknown subtype. It is worth noting that one country accounted for 62% of the total number of reported influenza B detections.
- The median sentinel primary care RSV positivity was 0% (pooled: 2%; IQR: 0–3%). 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 0% (pooled: 1.2%; IQR: 0–2%). 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 five countries reporting data up to week 15.
- The median SARI test positivity for seasonal influenza was 0.7% (pooled: 3%; IQR: 0–3%), with decreasing or stable trends observed in most countries reporting this indicator. All countries reporting non-sentinel hospital or ICU data observed decreasing trends.
- The median SARI test positivity for RSV was 1% (pooled: 3%; IQR: 0–3%), with decreasing or stable trends observed in all 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 0.6% (pooled: 1%; IQR: 0–3%). Both SARI positivity and non-sentinel indicators of severity remained at low levels in all countries.
- EuroMOMO pooled estimates of weekly excess all-cause mortality for the participating European countries were within expected levels.

Virus characterisation
Influenza
- 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).
- From week 40, 2023 to week 15, 2024, 2 933 A(H1)pdm09, 1 122 A(H3) and 157 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, 1 957 were reported as clade 5a.2a
and 929 were subclade 5a.2a.1. Of the A(H3) viruses that have been assigned to a clade, 10 were reported as
- clade 2a.3a, 1 078 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 WHO’s 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.

SARS-CoV-2 variants for weeks 13–14 (25 March to 7 April 2024)
- The estimated distribution (median and IQR of proportions from two countries) of variants of concern (VOCs) or variants of interest (VOIs) was 76% (68–83%) for BA.2.86 (which includes JN.1 isolates) and 0% for XBB.1.5-like (which now includes XBB.1.5+F456L). These estimates should be interpreted with caution as they are based on data from only two countries; a result of the very low number of sequences deposited in recent weeks during a period of low SARS-CoV-2 transmission.

Period overview (week 25, 2023 to week 15, 2024)
Following relatively low respiratory illness transmission over the summer period, consultation rates increased in primary care settings from September 2023. Consultation rates were highest at different timepoints in each country during the winter period, with peak rates reached between week 50, 2023 and week 7, 2024. As of week 15, 2024, consultation rates continued to decrease and have returned to baseline levels in most EU/EEA countries. 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. A decreasing trend in influenza activity has been observed since week 4, 2024, with a mixed picture at the country level. Compared to trends observed in previous influenza epidemics, seasonal influenza activity decreased earlier this season. Severe disease due to influenza has affected all age groups. Since week 6, 2024, 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 during the first part of the season. As of week 13, B/Victoria lineage was the most detected virus, although the number of detections was low. RSV activity began increasing around week 41, reaching a peak in week 50, followed by a decreasing trend. RSV has had 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 14, 2024. Influenza activity at the EU/EEA level continues to decrease, and pooled positivity in primary care has been below the 10% positivity threshold for three consecutive weeks. Even if the respiratory virus circulation is decreasing, it remains essential to continue 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 its 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: 12 April 2024

2. Increase in parvovirus B19 detections – Multi-country – 2024

Overview:

Update:
On 16 April 2024, public health authorities in France posted a message on EpiPulse describing a signal detected in July 2023 regarding an unusual number of severe paediatric cases admitted with parvovirus B19 infection. Several perinatal medicine services reported cases of parvovirus B19 infection in pregnant women and an unusual number of miscarriages and abortions. Following these initial reports, French authorities performed an analysis which confirmed a sharp increase in parvovirus B19 infections since the end of 2023, continuing into the first trimester of 2024. The increase affects all French regions and all age/gender categories of the population. The weekly number of parvovirus B19 cases observed in 2023-2024 is well above the average observed over the previous five seasons. The number of deaths related to parvovirus B19 infection has risen since 2023. In the first trimester of 2024, five deaths were reported among children, under one year of age, a number higher than the average number of deaths during previous years. Four of the five deaths were among newborns and due to congenital infections.

On 11 April 2024, public health authorities in the Netherlands posted a message on EpiPulse saying that they had also observed an increase in parvovirus B19 detections since the end of 2023. This increase has continued in the first few months of 2024. In the Netherlands parvovirus B19 infections are not notifiable. However, an increase in parvovirus B19 detections has been observed in blood and plasma donors at the national blood bank, in national virological surveillance, and in reports from local health authorities of an increase in fifth disease (slapped-cheek disease) in the paediatric population since November 2023.

On 12 April 2024, public health authorities in Ireland posted a message on EpiPulse describing increased detections during the first months of 2024. Parvovirus B19 is not notifiable in Ireland. The National Virus Reference Laboratory analysed data between 2016 and the end of the first quarter of 2024 and reported this information to Irish public health authorities. During the first quarter of 2024, 102 PCR positive results were identified, which is significantly higher than the annual number of positive PCR results for the years 2020 to 2023 (ranging from 30 to 61 cases annually) inclusive.

During the previous peak of parvovirus B19 infections in Ireland in 2017/2018, there were a total of 208 positive PCR results in 2017 and 341 in 2018. There have been 51 positive parvovirus B19 IgM samples detected in Quarter 1 of 2024. The total number of positive IgM samples during the years 2020 to 2023 ranged from 60 to 84. During the previous peak in activity in 2017 and 2018, a total of 213 and 366 positive IgM samples were recorded respectively. The positivity rate of parvovirus B19 IgM increased in the first quarter of 2024 to 3.5%. This is higher than the average recorded positivity rates for 2019 to 2023, but lower than the average positivity rates seen in 2017 (3.6%) and 2018 (4.8%).

Background:
On 22 March 2024, public health authorities in Denmark posted a message in EpiPulse reporting an increase in detections of parvovirus B19 in pregnant women during the first quarter of 2024.
Following this notification, public health authorities in Norway also reported an increase in positive tests – mainly for IgM but also via PCR – in the adult population (aged 30–59 years). The positivity rate increased from late January 2024.

**ECDC assessment:**

Two-thirds of the adult population are expected to be immune to parvovirus B19 due to prior infection which often occurs during childhood. Sporadic clusters are not uncommon, with local epidemics occurring in cycles that tend to peak every four to 10 years. Studies have shown that up to 30-40% of pregnant women may be susceptible to B19 infection. Infection in the first 20 weeks of pregnancy can lead to serious adverse outcomes in the foetus which include hydrops fetalis and intrauterine death in up to 10% of cases. Pregnant women susceptible to parvovirus B19 infections are usually infected via household or occupational exposure.

Parvovirus B19 infection is not under systematic surveillance in most EU/EEA Member States, therefore a full assessment of the situation in the EU is not possible.

Pregnant women susceptible to parvovirus B19 should be aware of the risk of infection from children with parvovirus B19 infection (presenting with a 'slapped cheek' rash) in their family or workplace. Clinician awareness should be enhanced for prompt testing in order to facilitate the detection of outbreaks and protect pregnant women, particularly those working in high-risk occupations (e.g. healthcare workers, daycare, teachers, etc). Since up to 20% of infections are asymptomatic, exposure may not be apparent.

**Actions:**

ECDC is monitoring this event via epidemic intelligence activities and encourages EU Member States to post information on the national situation in EpiPulse.

**Last time this event was included in the Weekly CDTR:** 05 April 2024

### 3. Cholera – Comoros and Mayotte – 2024 – Weekly monitoring

**Overview:**

**Update**

On 15 April, the Prefect of Mayotte and the regional health agency of Mayotte reported four new cholera cases in Mayotte. The cases have been identified in the administrative detention centre and treated accordingly.

The Mayotte Regional Health Authorities are providing antibiotic chemoprophylaxis and vaccinating close contacts and people living in the area surrounding the location where cases have been identified.

Since the first case was detected on 18 March, and as of 15 April, 10 confirmed cholera cases and no deaths have been reported. A total of 60 contacts of the cases have received antibiotic chemoprophylaxis and 441 contacts have been vaccinated.

Further information on case definition and close contacts is available on the Prefect of Mayotte website.

Since the last available update on 10 April, and as of 18 April, Comoros health authorities have reported 896 new cholera cases and 18 new deaths. Since the outbreak was declared on 2 February in the Union of the Comoros*, a total of 1 964 cases and 45 deaths have been reported on the three islands. In all, 1 654 cases have recovered.

* Note that the report from other sources is irregular and data on the date of symptom onset are 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.

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 18 March.

Background
There is frequent undocumented population movement between the Comoros archipelago and the French territory of Mayotte. No cholera cases had been reported 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:**
Considering the continued detection of confirmed cases of cholera in Mayotte, including at a detention centre, ECDC assesses the likelihood of cholera community transmission in Mayotte as high. The impact of the cholera outbreak in Mayotte is considered to be moderate. The overall risk of cholera for the population in Mayotte is therefore assessed to be high.

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 its epidemic intelligence activities.

**Last time this event was included in the Weekly CDTR:** 12 April 2024

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

**Overview:**

**Chikungunya virus disease (CHIKVD)**
In 2024 and as of 31 of March, over 160,000 CHIKVD cases and over 50 deaths have been reported worldwide. A total of 17 countries reported CHIKVD cases from the Americas (11), Asia (5), and Africa (1).

The majority of countries reporting high CHIKVD burden are from the Americas, in South and Central America. Countries reporting the highest number of cases are Brazil (161,794), Paraguay (5,105), Argentina (272), and Bolivia (182). Details of other countries in the Americas reporting CHIKVD cases can be found on PAHO’s dedicated website.

Outside of the Americas, CHIKVD cases have been reported in Asia from Timor Leste (195), Thailand (182), India (154), Pakistan (36), and Malaysia (13). One African country reported CHIKVD cases in 2024: Senegal (6).

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

CHIKVD associated deaths have been reported from Brazil (51).
**Dengue**
Since the beginning of 2024, five million dengue cases and 2000 dengue-related deaths have been reported from 69 countries/territories. Most cases globally have been reported from the WHO PAHO region, with Brazil reporting most cases (over four million: [Situation Report No 13 - Dengue Epidemiological Situation in the Region of the Americas - Epidemiological Week 12, 2024 - PAHO/WHO | Pan American Health Organization](https://www.paho.org/wed/webpage.action?hrId=394)).

Guadeloupe and Martinique continue to face an epidemic classified as in phase 4 and level 1, while dengue circulation in Saint-Barthelemy and Saint-Martin is also ongoing, but at lower levels since mid-March. According to the [surveillance report for dengue dated 11 April 2024](https://www.paho.org/wed/webpage.action?hrId=394), there is a stable trend in hospitalisation due to dengue in Guadeloupe and Martinique.

In French Guyana, over 7 000 confirmed dengue cases have been reported since the beginning of 2024, with the weekly number of cases showing a decreasing trend in recent weeks after a peak in January 2024 ([French Guyana - 28/03/2024 Epi update](https://www.paho.org/wed/webpage.action?hrId=394)).

In La Reunion, according to the [report published on 11 April 2024](https://www.paho.org/wed/webpage.action?hrId=394), 495 dengue cases have been reported since the beginning of the year. Given recent increases in cases in La Reunion, the epidemiological situation has been classified as Level 2B which corresponds to ‘intensified autochthonous viral circulation with the risk of evolving into an epidemic’ ([Increase in dengue cases in Reunion Island | Reunion Island Regional Health Agency (sante.fr)](https://www.paho.org/wed/webpage.action?hrId=394)). In addition, two cases were reported from Mayotte on 9 April 2024.

Dengue circulation has also been reported in the WHO SEARO Region and WPRO Region as well as in Africa in March 2024.

*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, should be avoided due to under-reporting, variations in surveillance system structure, different case definitions from country to country and over time, and use of syndromic definitions.*

**ECDC assessment:**
Chikungunya virus disease and dengue affect people in most countries of the tropics and subtropics. EU/EEA citizens travelling to and living in 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 [CHIKVD](https://www.ecdc.europa.eu/en/publications-data) and [dengue](https://www.ecdc.europa.eu/en/publications-data) in mainland EU/EEA have so far occurred between June and November.


**Actions:**
ECDC monitors these threats through its epidemic intelligence activities, and reports on a monthly basis. A summary of the worldwide overview of [dengue](https://www.ecdc.europa.eu/en/publications-data) and [CHIKVD](https://www.ecdc.europa.eu/en/publications-data) is available on ECDC’s website.
Last time this event was included in the Weekly CDTR: 22 March 2024

Maps and graphs

Figure 1. Three-month Chikungunya virus disease case notification rate per 100 000 population, January-March 2024.

Source: ECDC

Figure 2. 12-month Chikungunya virus disease case notification rate per 100 000 population, April 2023-March 2024.

Source: ECDC
Figure 3. 12-month dengue virus disease case notification rate per 100,000 population, April 2023-March 2024.

Source: ECDC

Figure 4. Three-month dengue virus disease case notification rate per 100,000 population, January-March 2024.

Source: ECDC
5. 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 20 March 2024, the 38th 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 21 March 2024 and as of 16 April 2024, two new cases of AFP caused by WPV1 have been reported in Afghanistan.

**Circulating vaccine-derived poliovirus (cVDPV):**
Since the previous update on 21 March 2024 and as of 16 April 2024, the following new cases of polio due to cVDPV have been reported, with date of symptom onset in 2023 and in 2024:

- One new case of AFP caused by cVDPV1 was reported in 2023 and one in 2024, both were reported from the Democratic Republic of the Congo (DRC).
- There were six new cases of AFP caused by cVDPV2 reported from three countries: Chad (1), South Sudan (3), Nigeria (4).
- No cases of AFP due to cVDPV3 were reported in 2023 and in 2024.

Summary:

**Wild poliovirus (WPV):**
In 2024, four cases of AFP due to wild poliovirus infection have been reported, two in Pakistan and two in Afghanistan.

**Circulating vaccine-derived poliovirus (cVDPV):**
With date of symptom onset in 2023 (as of 16 April 2024):
In 2023, 134 cases of AFP caused by cVDPV1 have been reported from three countries: the DRC (106), Madagascar (24) and Mozambique (4).

In 2023, 390 cases of AFP caused by cVDPV2 were reported from 22 countries: Benin (3), Burkina Faso (2), Burundi (1), Central African Republic (14), Chad (55), Côte d’Ivoire (6), the DRC (117), Guinea (47), Indonesia (6), Israel (1), Kenya (8), Mali (15), Mauritania (1), Mozambique (1), Niger (2), Nigeria (87), Somalia (8), South Sudan (3), Tanzania (3), Yemen (8), Zambia (1) and Zimbabwe (1).

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

With date of symptom onset in 2024 (as of 16 April 2024):
In 2024, one case of AFP caused by cVDPV1 was reported in DRC.

In 2024, 14 new cases of AFP caused by cVDPV2 were reported in seven countries: Guinea (1), Somalia (1), Nigeria (8), Yemen (1), South Sudan (1), Chad (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 vaccination 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: 22 March 2024