

WEEKLY BULLETIN

Communicable Disease Threats Report

Week 43, 22–28 October 2023

Today's disease topics

1. Poliomyelitis – Multi-country (World) – Monitoring global outbreaks
2. SARS-CoV-2 variant classification
3. West Nile virus One Health seasonal surveillance – 2023
4. Mass gathering monitoring – Rugby World Cup 2023, France
5. Increase of cryptosporidiosis cases – Multi-country – 2023

Executive Summary

Poliomyelitis – Multi-country (World) – Monitoring global outbreaks

- In 2023, and as of 24 October 2023, three new cases of acute flaccid paralysis (AFP) caused by wild poliovirus type 1 (WPV1) have been reported from Afghanistan (1) and Pakistan (2).
- In 2023, and as of 24 October 2023, 28 new cases caused by circulating vaccine-derived poliovirus type 1 (cVDPV1) have been reported from the Democratic Republic of the Congo (DRC) (18) and Madagascar (10).
- In 2023, and as of 24 October 2023, 32 new cases of AFP caused by circulating vaccine-derived poliovirus type 2 (cVDPV2) have been reported from nine countries.

SARS-CoV-2 variant classification

- Since the last update on 6 October 2023, and as of 27 October 2023, no changes have been made to ECDC's classifications for variants of concern (VOCs), variants of interest (VOIs), variants under monitoring (VUMs) or de-escalated variants.
- **XBB.1.5-like+F456L** variants currently dominate the global and EU/EEA SARS-CoV-2 variant landscape. As of 23 October 2023, XBB.1.5-like lineages are circulating in a median proportion of 65.5% in EU/EEA countries (range: 46–77%). The overall proportion of XBB.1.5-like + F456L lineages levelled off in the EU/EEA, with stable trends observed over the past few weeks.
- **XBB.1.5-like+L455F+F456L** variants show increasing trends, with a median proportion of 19% in EU/EEA countries (range: 1.9–31%). The lineages mainly present in this umbrella are HK.3 lineages and GK* lineages.
- **BA.2.86** is an emerging SARS-CoV-2 lineage characterised by a high number of spike mutations that are distinct from ancestral BA.2 and currently circulating XBB-derived variants. BA.2.86 is circulating in low proportions in the EU/EEA (median 2.45% in the EU/EEA overall, up to 8.1% in Denmark). In the last two weeks, a slight increase in **JN.1** sequences (a sublineage of BA.2.86) has been observed, although the numbers have been low. JN.1 sequences carry an additional spike L455S mutation compared with BA.2.86.

West Nile virus One Health seasonal surveillance – 2023

- Since the last update, and as of 25 October 2023, 13 human cases of West Nile virus (WNV) infection have been reported by EU/EEA countries and 1 human case has been reported by an EU-neighbouring country.
- The following area reported an autochthonous human case of WNV infection for the first time: Ústecký kraj in Czechia.
- Since the beginning of the 2023 transmission season, 673 human cases of WNV infection have been reported by EU/EEA countries and 91 by EU-neighbouring countries.
- Since the beginning of the 2023 WNV transmission season, and as of 25 October 2023, there have been 128 outbreaks among equids and 231 outbreaks among birds reported by EU/EEA countries.

Mass gathering monitoring – Rugby World Cup 2023, France

- ECDC is monitoring infectious disease events, possibly associated with the Rugby World Cup in 2023.
- An ongoing measles outbreak in the town of Guilherand Granges, Ardèche department, France has led to 63 reported cases as of 26 October 2023. This ongoing local outbreak does not pose a direct risk to the Rugby World Cup 2023 events in France.

Increase of cryptosporidiosis cases – Multi-country – 2023

- An increase of cryptosporidiosis cases has been noted in Ireland, Luxembourg, the Netherlands, and the United Kingdom since the end of August and during September 2023.
- This is probably due to favourable environmental conditions (heat waves, heavy rainfall and flooding) in southern Europe and summer travel patterns in this region.
- ECDC is continuing to monitor the event in EpiPulse and with the affected countries.

1. Poliomyelitis – Multi-country (World) – Monitoring 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 25 August 2023, the **36th 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.

On 21 September 2023, WHO released a [statement](#) declaring the end of the poliovirus outbreak in Ukraine that began in October 2021. This decision was supported by the European Regional Commission for the Certification of Poliomyelitis Eradication during its annual meeting on 8 September 2023.

Wild poliovirus type 1 (WPV1):

Since 19 September 2023, and as of 24 October 2023, three new cases (with the date of onset of symptoms in 2023) of acute flaccid paralysis (AFP) caused by WPV1 have been reported from Afghanistan (1) and Pakistan (2).

Circulating vaccine-derived poliovirus (cVDPV):

Since the previous update, one new case of polio due to circulating vaccine-derived poliovirus type 1 (cVDPV1) has been reported in the Democratic Republic of the Congo (DRC), with the date of onset of symptoms in 2022.

Since the previous update, the following cases of polio due to cVDPV have been reported with the date of onset of symptoms in 2023:

- There have been 28 new cases of AFP caused by cVDPV1, reported from the DRC (18) and Madagascar (10).
- There have been 32 new cases of AFP caused by cVDPV2, reported from nine countries: Central African Republic (1), Chad (4), Côte d'Ivoire (3), the DRC (15), Guinea (2), Kenya (1), Mali (3), Nigeria (2) and Yemen (1).
- No cases of AFP due to cVDPV3 have been reported.

Summary:**Wild poliovirus (WPV):**

In 2022, and as of 19 September 2023, 30 cases of AFP caused by WPV1 have been reported. These have been reported from the two endemic countries, Pakistan (20) and Afghanistan (2), and one non-endemic country: Mozambique (8). One associated death has been reported in Pakistan.

In 2023, and as of 24 October 2023, 10 cases of AFP caused by WPV1 have been reported from Afghanistan (6) and Pakistan (4), with the date of onset of symptoms in 2023.

Circulating vaccine-derived poliovirus (cVDPV):With the date of onset of symptoms in 2022:

In 2022, and as of 19 September 2023, 189 cases of AFP caused by cVDPV1 have been reported from five countries: Congo (1), the DRC (146), Mozambique (22), Madagascar (16) and Malawi (4).

Overall in 2022, 685 cases of AFP caused by cVDPV2 have been reported from 20 countries: Algeria (3), Benin (13), Burundi (1), Cameroon (3), Central African Republic (6), Chad (44), the DRC (368), Eritrea (1), Ethiopia (1), Ghana (3), Indonesia (1), Mali (2), Mozambique (4), Niger (16), Nigeria (48), Somalia (5), Sudan (1), Togo (2), the United States (1) and Yemen (162).

In 2022, one case of AFP caused by cVDPV3 was reported from Israel.

With the date of onset of symptoms in 2023:

In 2023, and as of 24 October 2023, 104 cases of AFP caused by cVDPV1 have been reported from three countries: the DRC (78), Madagascar (23) and Mozambique (3).

In 2023, 221 cases of AFP caused by cVDPV2 have been reported from 17 countries: Benin (3), Burkina Faso (2), Burundi (1), Central African Republic (12), Chad (37), Côte d'Ivoire (5), the DRC (100), Guinea (7), Indonesia (3), Israel (1), Kenya (6), Mali (9), Nigeria (26), Somalia (3), Tanzania (2), Yemen (3) and Zambia (1).

In 2023, no cases of AFP caused by cVDPV3 have been 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), 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. Furthermore, the worrying outbreaks of cVDPV, which emerges and circulates due to lack of polio immunity in the population, 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 to (>4 weeks) 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 4 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 CDTR: 22 September 2023

2. SARS-CoV-2 variant classification

Overview:

Weekly update on SARS-CoV-2 variants:

Since the last update on 6 October 2023, and as of 27 October 2023, no changes have been made to ECDC's classifications for variants of concern (VOCs), variants of interest (VOIs), variants under monitoring (VUMs) or de-escalated variants.

XBB.1.5-like + F456L lineages currently dominate the global and EU/EEA SARS-CoV-2 variant landscape. As of 23 October 2023, XBB.1.5-like lineages are circulating in a median proportion of 65.5% in EU/EEA countries (range: 46–77%). The overall proportion of XBB.1.5-like + F456L lineages levelled off in the EU/EEA, with stable trends observed over the past few weeks.

XBB.1.5-like+L455F+F456L variants show increasing trends with a median proportion of 21% in EU/EEA countries (range: 5.4–41%). The lineages mainly present in this umbrella are HK.3 lineages and GK* lineages. [Preliminary studies](#) indicate that XBB.1.5-like+L455F+F456L variants may bind more efficiently to human ACE-2 and have similar immune evasive properties compared to XBB.1.5-like+F456L variants and XBB.1.5-like+L455F variants. Virtually all of the lineages are already included in the existing VOIs XBB.1.5-like+F456L but are being monitored specifically as VUMs.

The combination of these mutations (L455F and F456L) has also been increasing in BA.2.75 lineages. The **DV.7.1** variants that carry these mutations have been detected more frequently and are circulating in a median proportion of 2.7% in the EU/EEA (range: 0–8.3%).

BA.2.86 is an emerging SARS-CoV-2 lineage characterised by a high number of spike mutations that are distinct from ancestral BA.2 and currently circulating XBB-derived variants. BA.2.86 is circulating in low proportions in the EU/EEA (median 2.45% in the EU/EEA overall, up to 8.1% in Denmark). In the last two weeks, a slight increase in **JN.1** sequences (a sublineage of BA.2.86) has been observed, although the numbers have been low. JN.1 sequences carry an additional spike L455S mutation compared with BA.2.86.

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

ECDC assessment:

For the most recent risk assessment, please visit [ECDC's dedicated webpage](#).

Actions:

For the latest update on SARS-CoV-2 variants, please see [ECDC's webpage on variants](#). Detailed country-specific COVID-19 updates are available on the [European Respiratory Virus Surveillance Summary \(ERVISS\)](#).

Last time this event was included in the CDTR: 20 October 2023

3. West Nile virus One Health seasonal surveillance – 2023

Overview:

This is the 22nd weekly update of the 2023 West Nile virus (WNV) monitoring season.

Since last week's update, and as of 25 October 2023, EU/EEA countries reported 13 human cases of West Nile virus (WNV) infection. Cases were reported by Romania (8), France (3), Czechia (1) and Spain (1). One EU-neighbouring country (Serbia) reported one human case of WNV infection.

This week, among the reporting countries, the following NUTS3 or GAUL1 region has reported an autochthonous human case of WNV infection for the first time: Ústecký kraj in Czechia.

This week, among the reporting countries, the following NUTS3 or GAUL1 regions have reported autochthonous human cases of WNV infection for the first time since the start of this season: Ústecký kraj in Czechia and Dâmbovița in Romania.

Since the beginning of the 2023 transmission season, and as of 25 October 2023, EU/EEA countries have reported 673 human cases of WNV infection in Italy (313), Greece (161, of which 1 with unknown place of infection), Romania (100), France (38), Hungary (29), Spain (15), Croatia (6), Cyprus (5), Germany (5) and Czechia (1). EU/EEA countries have reported 56 deaths in Greece (21), Italy (20), Romania (12) and Spain (3). EU-neighbouring countries have reported 91 human cases of WNV infection in Serbia (90) and North Macedonia (1), as well as two deaths in Serbia.

During the current transmission season, within the reporting countries, autochthonous human cases of WNV infection were reported from 138 different NUTS3 or GAUL1 regions, of which the following regions reported autochthonous human cases of WNV infection for the first time ever: Ústecký kraj in Czechia; Gironde, Charente-Maritime, Alpes-Maritimes, Charente and Haute-Corse in France; Sömmerda in Germany; Kastoria and Ioannina in Greece; Imperia, Taranto, Lecce, Cosenza, Bari, Salerno and Verbano-Cusio-Ossola in Italy; Gorj and Timiș in Romania; and Cáceres, Huelva, Valencia/València, Barcelona and Toledo in Spain.

Since the beginning of the 2023 transmission season, 128 outbreaks among equids and 231 outbreaks among birds have been reported by EU/EEA countries. Outbreaks among equids have been reported by France (36), Spain (32), Hungary (26), Italy (21), Germany (11), Austria (1) and Portugal (1). Outbreaks among birds have been reported by Italy (183), Germany (18), Spain (17), Bulgaria (6), Hungary (3), France (2), Austria (1) and Greece (1).

Please refer to the [West Nile virus infection webpage](#) for maps and a dashboard.

Sources: The European Surveillance System (TESSy), Animal Disease Information System (ADIS)

ECDC assessment:

As the weather conditions are now becoming less favourable for vector-borne transmission in most of the affected areas, the intensity of WNV circulation is expected to decrease in the coming weeks.

As of 25 October 2023, the most recent onset date reported was 17 October 2023. Within the last 30 days, from 26 September to 25 October, a total of 21 cases were reported with onset dates falling within this period.

Czechia reported a case for the first time this season in a region that has not reported cases in the past. The confirmed case's date of onset was 6 June 2023. Ústecký kraj was the most probable place of infection, as it is located near Vogtlandkreis in Germany, where a case was reported the previous year.

In accordance with the [Commission Directive 2014/110/EU](#), prospective blood donors should be deferred for 28 days after leaving a risk area for locally acquired WNV infection, unless the result of an individual nucleic acid test is negative.

Actions:

During the WNV transmission season, ECDC publishes a dashboard and an epidemiological summary every Friday.

Further information:

Data on human cases of WNV are collected via The European Surveillance System (TESSy), managed by ECDC. Imported cases are not included in this report. The following EU-neighbouring countries reported human cases of WNV infection to ECDC: Albania, Kosovo*, Montenegro, North Macedonia, Serbia and Türkiye.

Animal data (i.e. outbreaks among equids and birds) are collected through the Animal Disease Information System (ADIS) of the European Commission. Reporting of WNV in equids and birds is mandatory at the EU/EEA level.

The distribution of human infections covers EU/EEA and EU-neighbouring countries, whereas the distribution of outbreaks among equids and birds only relates to EU/EEA countries.

**This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo Declaration of Independence.*

Last time this event was included in the CDTR: 20 October 2023

4. Mass gathering monitoring – Rugby World Cup 2023, France

Overview:

The **Rugby World Cup 2023** (RWC) is taking place in France from 8 September to 28 October 2023, with matches played in nine venues in 10 host cities. In total, 20 teams are participating, including teams from four EU/EEA countries, and there will be 48 matches. The participating teams are from France, New Zealand, Italy, Uruguay, Namibia, South Africa, Ireland, Scotland, Tonga, Romania, Wales, Australia, Fiji, Georgia, Portugal, England, Japan, Argentina, Samoa and Chile. The games are taking place in nine stadiums across the country in Bordeaux, Lille, Lyon, Marseille, Nantes, Nice, Saint Denis, Saint-Étienne and Toulouse. The capacities of the stadiums range from 33 103 in Stadium de Toulouse to 80 023 in Stade de France, Saint Denis, where the final matches will be played.

More than 600 000 international visitors are expected to visit France for the Rugby World Cup, with over 2.5 million tickets sold, according to a [media report](#). Over half the international visitors are from the United Kingdom (UK), followed by Australia, the Netherlands, New Zealand and other countries.

As with other sporting events and large gatherings, crowding and high-risk behaviour with prolonged close contact will occur both inside and outside of the hosting venues. Participants and spectators are therefore encouraged to follow a list of recommendations, as described in [ECDC's weekly CDTR report for week 36](#).

Weekly monitoring update

On 26 October 2023, the Auvergne-Rhône-Alpes Regional Health Agency [reported](#) five additional cases of measles, detected in the previous week. Overall, 63 people have been diagnosed with measles, including two hospitalisations, between 19 September and 26 October 2023. Most cases are students from the middle school in Guilherand-Granges (Ardèche) and several students are from three primary schools. An outbreak investigation is ongoing. This ongoing local outbreak does not pose a direct risk to the Rugby World Cup 2023 events in France.

No new cross-border public health events related to the RWC were detected between 18 and 26 October 2023.

Other events of interest

No other events of interest have been detected this week.

ECDC assessment:

The risk to EU/EEA citizens of infection with communicable diseases during the Rugby World Cup 2023 is considered low if preventive measures are applied. As with other mass gathering events, the risk of communicable disease outbreaks is greatest for respiratory, food- and waterborne diseases, and vector-borne diseases.

Actions:

ECDC is monitoring this event through its epidemic intelligence activities for mass gatherings between 4 September and 3 November 2023, in collaboration with the French authorities, and will include weekly updates in the Communicable Disease Threats Report (CDTR).

Last time this event was included in the CDTR: 26 October 2023

5. Increase of cryptosporidiosis cases – Multi-country – 2023

Overview:

On 13 October 2023, the Health Protection Surveillance Centre (HPSC) of Ireland posted a [press release](#) concerning a rise in cases of cryptosporidiosis being reported over the last month among Irish tourists returning from areas of Spain, particularly Salou in Catalonia. The HPSC is advising people to take extra hygiene precautions when travelling to areas reporting an increase in cryptosporidiosis cases. According to [media](#) quoting health authorities in Ireland, 656 cases of cryptosporidiosis have been recorded this year, with a notable increase since the end of August 2023, including 51 cases (37 of which were confirmed) associated with travel history to Salou in Catalonia.

An increase in cases of cryptosporidiosis has also been reported in the United Kingdom (UK) ([Eurosurveillance](#)). Between weeks 33 and 39 in 2023, there have been 2 411 laboratory-confirmed cases of cryptosporidiosis in the UK, of which 2 032 were reported in England. Of the 394 cryptosporidiosis cases in England that provided information on travel, 215 (55%) reported foreign travel in the 14 days preceding their illness. Of these cases, 96 (45%) noted travel to Spain (mainland and/or Balearic Islands). Comparisons with available data from four regions in England and Wales during a similar period in 2022 suggest a greater exposure to swimming (odds ratio: 1.61; 95% confidence interval: 1.04–2.48). However, there are not enough significant case clusters associated with swimming pools or water parks for this alone to explain the large increase.

In addition, unusual increases in laboratory reports of cryptosporidiosis cases were noted in Luxembourg and the Netherlands in September 2023. In the Netherlands, 129 cases were detected by a subset of reporting laboratories in September 2023, compared with an average of 72 cases during September for the period 2016 to 2019 (range: 58–97 cases). In Luxembourg, there were 97 laboratory-confirmed notifications between week 34 and week 41 in 2023, compared with 21 notifications in 2022 during the same period.

ECDC assessment:

An increase in cryptosporidiosis cases has been noted in Ireland, Luxembourg, the Netherlands and the United Kingdom since the end of August and particularly in September 2023. This could be due to a combination of factors related to travel and the extreme climate conditions (heat waves, heavy rainfall and flooding) that have affected southern Europe this summer.

[Cryptosporidiosis](#) is a parasitic disease. Transmission is faecal-oral, via ingestion of infectious oocysts, by direct contact with infected persons or animals, or through contaminated water and food. *Cryptosporidium* oocysts can survive for months in moist soil or water and survive harsh environmental conditions (e.g. heat or cold) for extended periods of time. The oocysts are usually resistant to most common disinfectants, such as chlorine.

The infective dose is very low and ingestion of about 10–30 oocysts has been reported to cause infection. In healthy individuals, the infection can be asymptomatic; however, the most common presentation is watery diarrhoea that spontaneously resolves within a couple of weeks. In contrast, patients with impaired immune systems may develop profuse, life-threatening, watery diarrhoea.

To better understand the sources of infections and the likelihood of further cases being reported linked to travel, additional cross-border investigations are needed.

It is important to note that cryptosporidiosis is under-reported in many countries, which limits the ability to accurately assess the risk within the EU/EEA.

Actions:

ECDC continues to monitor the event in EpiPulse and with the countries affected.

Last time this event was included in the CDTR: 20 October 2023