Today’s disease topics

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Executive Summary

Severe floods – Multi-country (Mediterranean) – 2023
- Storm Daniel affected several countries in the Mediterranean at the beginning of September 2023, including two EU countries: Bulgaria and Greece. Substantial damage has been caused in the affected areas.
- Türkiye has suffered infrastructural damages and fatalities.
- The most affected area has been north-eastern Libya, where the floods caused catastrophic damages and human losses, particularly in the city of Derna.
- About two weeks after Storm Daniel, a cluster of leptospirosis cases has been detected in affected areas in central Greece.

Avian influenza A(H9N2) – Multi-country (World) – Monitoring human cases
- A new case of avian influenza A(H9) has been reported in China. The case is a four-year-old girl from Sichuan province with onset of symptoms on 7 August 2023.
- Overall, 127 human cases of A(H9N2) have been reported, including 2 deaths.
- Most of the cases reported to date have been in China (114).
- No human cases have been reported in the EU/EEA and related A(H9N2) viruses are not present in poultry populations in the EU/EEA.
The risk of zoonotic influenza A(H9N2) transmission to the general public in EU/EEA countries is considered to be very low.

**Human cases with the swine influenza A(H1N2) variant virus – Multi-country – 2023**
- One new case of human infection with the swine influenza A(H1N2) variant virus has been reported in Montana state, United States (US).
- Overall, three influenza variant viruses were reported in the US, one with A(H3)v in Michigan and two with A(H1N2)v in Michigan and Montana.
- Overall, 23 cases have been reported globally since 2018, including 5 cases reported in EU/EEA countries (Austria, Denmark, France and the Netherlands). The last case in the EU/EEA was reported in the Netherlands in 2022.
- These events are rare and no human-to-human transmission has been detected.

**Avian influenza A(H5N6) – Multi-country – Monitoring human cases**
- A new case of avian influenza A(H5N6) virus infection in a 68-year-old male was reported in Chongqing municipality, China on 27 September 2023. The patient died on 20 August 2023 following hospitalisation.
- Since 2014, 88 cases have been reported in China (87) and Laos (1), of which 34 were fatal (CFR: 38.6%).
- To date, no instances of human-to-human transmission have been documented.
- The risk of zoonotic influenza transmission to the general public in EU/EEA countries remains very low.

**COVID-19 associated with SARS-CoV-2 – Multi-country (EU/EEA) – 2019–2023**
- By the end of week 38 (ending 24 September 2023), rates of respiratory illness in the community and numbers of COVID-19 cases continued to increase in over half the EU/EEA countries reporting data.
- Increased transmission of SARS-CoV-2 has translated into increases in hospital or ICU admissions and deaths in some countries, although the impact is still limited.
- Since the last update on 7 September 2023, and as of 28 September 2023, no changes have been made to ECDC’s variant 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 28 September 2023, the 12 EU/EEA countries reporting at least 10 sequences to GISAID EpiCoV for week 36 (4–10 September 2023) showed the following proportions of XBB.1.5-like + F456L lineages: Austria (64%), Belgium (64%), Denmark (63%), France (61%), Germany (61%), Iceland (71%), Ireland (71%), Italy (68%), the Netherlands (71%), Romania (26%), Spain (59%) and Sweden (65%). The overall proportion of XBB.1.5-like + F456L lineages continues to increase in the EU/EEA, although the trend is less pronounced compared to previous weeks.
- 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. As of 28 September 2023, 262 detections of BA.2.86 from 12 countries in the EU/EEA and 11 countries outside the EU/EEA have been reported in GISAID EpiCoV.

**West Nile virus One Health seasonal surveillance – 2023**
- Since the last update, and as of 27 September 2023, 85 human cases of West Nile virus (WNV) infection have been reported by EU/EEA countries and 9 by an EU-neighbouring country.
- The following areas reported autochthonous human cases of WNV infection for the first time this week: Ioannina in Greece; Cáceres in Spain; Charente, Gard and Vaucluse in France; and Taranto and Lecce in Italy.
- Since the beginning of the 2023 transmission season, 566 human cases of WNV infection have been reported by EU/EEA countries and 83 by EU-neighbouring countries.
- There have been 61 outbreaks among equids and 177 outbreaks among birds reported by EU/EEA countries since the beginning of the 2023 WNV transmission season, as of 27 September 2023.

**Cholera – Multi-country (World) – Monitoring global outbreaks**
- Since the last update on 30 August 2023 and as of 25 September 2023, 69 357 new cholera cases, including 506 new deaths, have been reported worldwide.
- New cases have been reported from Afghanistan, Burundi, Cameroon, Congo, Democratic Republic of the Congo, Ethiopia, Haiti, India, Iraq, Kenya, Mozambique, Pakistan, Philippines, Syria, Uganda, Yemen, Zambia and Zimbabwe. New deaths have been reported from Afghanistan, Cameroon, Congo, Democratic Republic of the Congo, Ethiopia, Haiti, Iraq, Kenya, Mozambique, Philippines, Syria, Uganda, Yemen and Zambia.
- Cholera cases have continued to be reported in western, eastern and southern parts of Africa, some parts of the Middle East, South East Asia and the Americas in recent months. The risk of cholera infection in travellers visiting these countries remains low, even though sporadic importation of cases to the EU/EEA remains possible.

**Mass gathering monitoring – Rugby World Cup 2023, France**
- ECDC is monitoring infectious disease events possibly associated with the Rugby World Cup 2023.
- During the period 23–29 September, an outbreak of measles was reported among local students in Guilherand-Granges (Ardèche), France. Investigations are still ongoing.
• Although no cross-border events have been reported so far, ECDC does not yet have the full information to assess the risk of spread into the larger community of attendants to the sporting events.

1. Severe floods – Multi-country (Mediterranean) – 2023

Overview:

Storm Daniel, as officially named by the national meteorological services in south-eastern Europe, led to several months’ worth of rain falling over a few days in early September. This led to flooding of homes, businesses and roads, destroying agricultural production areas and drowning hundreds of animals. At least 28 people have died across Greece (17), Türkiye (7) and Bulgaria (4) following the heavy rainfall and flash floods.

Greece

According to media quoting the National Public Health Organisation (NPHO) of Greece, five confirmed leptospirosis cases have been detected in areas affected by floods and an additional 17 are under investigation. According to epidemiological data from the NPHO, 20–25 leptospirosis cases are reported annually in Greece, with the Ionian islands having the highest incidence. However, this year, 42 leptospirosis cases have been reported between January and September 2023. One death from leptospirosis was reported in Corfu this week, but was not connected to the floods in central Greece.

Risk communication to the public and raising awareness among clinicians in the area are ongoing. Personal protective equipment (e.g. coveralls and galoches) are handed out to people cleaning their flooded homes. Syndromic surveillance, immunisation against tetanus and hepatitis A, as well as entomological surveillance are ongoing.

Unfortunately, as of 27 September 2023, another storm (Elias) is affecting the same areas in central Greece. This is causing more flooding and is expected to last until the end of the week.

Libya

Storm Daniel made landfall in Libya between 9–12 September 2023, causing the collapse of two dams. The floods and flash floods have affected several cities, including Al-Bayda, Al-Marj, Tobruk, Takenis, Al-Bayada and Battah, as well as the eastern coast all the way to Benghazi. The city of Derna experienced catastrophic flash flooding. As a result, more than 4 000 fatalities have been confirmed and more than 8 540 people remain missing according to the latest report from the UN Office for the Coordination of Humanitarian Affairs (OCHA). More than 43 000 people have been displaced, of which 17 000 may be children. The affected area hosts 49 000 registered refugees and asylum seekers and significant numbers of unregistered migrants, as well as 46 000 internally displaced people (IDPs). There is significant infrastructure damage including to healthcare facilities.

ECDC assessment:

Floods are the most common type of natural disaster in Europe. Flash floods are significant emergencies that are challenging to predict and result in considerable destruction. Such events have become more common in recent years and are expected to occur more frequently due to climate change. Affected regions and countries are facing the immediate response needs of rescue operations, evacuations and disruption of services. Collaboration between public health authorities and other local authorities (e.g. civil protection agencies, municipal governments) is needed to ensure access to clean water as soon as possible in the affected communities.

Affected countries and regions may consider setting up syndromic and event-based surveillance systems to rapidly detect and respond to possible outbreaks. Suspected cases of infectious diseases (including clusters of respiratory and gastrointestinal symptoms, rashes, etc.) on an agreed list would need to be reported to local and national public health authorities immediately to prompt a rapid response. Mechanisms to achieve early detection and awareness of disease clusters should be enhanced and availability of vaccines should be ensured. Hand and respiratory hygiene and the wearing of face masks are important, particularly for displaced people housed in shelters. Water management plans should minimise the risk of Legionella growth. Flooded areas also need to be monitored and potentially treated to prevent increases in mosquito populations, as all areas are endemic for West Nile virus. Risk communication to the affected communities is a critical part of the response to the flood crisis and it should be undertaken in a structured way that clearly delivers core messages and listens to the affected communities’ needs. Key principles of successful risk communication include the identification of a trusted spokesperson and the delivery of clear and actionable advice, with messaging tailored to the needs of the affected communities.
The occurrence of leptospirosis cases after flooding is not unexpected. Transmission to people involved in the cleaning of flooded homes, etc., usually happens through skin abrasions and mucous membranes coming into contact with floodwater, damp soil or silt contaminated from rodent urine and droppings.

Infectious disease risks following floods do not represent the greatest risks to the health and well-being of the flood-affected communities. Several other health risks, including disruption to healthcare, environmental hazards (e.g. carbon monoxide poisoning, exposure to dangerous chemicals), and psychological stress may cause acute and long-lasting health effects and an increase in all-cause mortality in these areas.

The assessment and options for response included in the ‘Rapid Risk Assessment: Extreme rainfall and catastrophic floods in western Europe’ from July 2021 remain valid.

**Actions:**

ECDC is following this event through its epidemic intelligence activities and will report when relevant communicable disease events occur. ECDC has been in contact with national health authorities in Greece and Bulgaria, offering expert assistance.

**Last time this event was included in the CDTR:** 28 September 2023

**2. Avian influenza A(H9N2) – Multi-country (World) – Monitoring human cases**

**Overview:**

A new human infection with avian influenza A(H9) has been reported in a four-year-old girl from Sichuan province with onset of mild symptoms on 7 August 2023. To date, no human-to-human transmission has been detected.

**Summary:** As of 29 September 2023, and since 1998, a total of 127 laboratory-confirmed cases of human infection with avian influenza A(H9N2) viruses, including 2 deaths, have been reported in 8 countries: China (114), Egypt (4), Bangladesh (3), Cambodia (2), Oman (1), Pakistan (1), India (1) and Senegal (1). Most of the cases were children with mild disease.

**Source:** Hong Kong Centre for Health Protection - Avian influenza weekly report for week 34

**ECDC assessment:**

Sporadic human cases of avian influenza A (H9N2) have been observed outside the EU/EEA, mainly in young children. Influenza A(H9N2) is not present in Europe’s poultry populations and therefore does not represent a risk for human health in the EU/EEA.

**Actions:**

ECDC monitors avian influenza strains through its epidemic intelligence and disease network activities and collaborates with the European Food Safety Authority (EFSA) and the EU reference laboratory for avian influenza to identify significant changes in the epidemiology of the virus. ECDC works with EFSA and the EU reference laboratory to produce a quarterly report on the avian influenza situation. The most recent report was published in September 2023.

**Last time this event was included in the CDTR:** 25 September 2023
Maps and graphs

Figure 1. Distribution of confirmed human cases of avian influenza A(H9N2) virus infection by year of onset and country, 1998–2023 (n=127), updated 17 August 2023

Source: ECDC

3. Human cases with the swine influenza A(H1N2) variant virus – Multi-country – 2023

Overview:

On 16 September 2023, the United States Centers for Disease Control and Prevention (US CDC, week 37) reported a human infection with the swine influenza A(H1N2) variant virus ((AH1N2)v) in Montana state in a person below 18 years old who attended an agricultural fair and did not require hospitalisation. Investigation is ongoing.

This is the second human case with swine influenza A(H1N2)v infection detected in the US this year. Previously, cases were reported in 2022 (six cases) and 2021 (four cases). All the cases are from different regions in the US and are considered sporadic cases.

Summary: Overall, 23 cases have been reported globally since 2018, of which five were reported in the EU/EEA: Austria (one case in 2021), Denmark (one case in 2019), France (one case in 2021) and the Netherlands (one case each in 2018 and 2022). Outside the EU/EEA, cases have been reported in Canada (3), Taiwan (3) and the US (12).

Source: US Centers for Disease Control and Prevention

ECDC assessment:

Sporadic human cases infected with an influenza virus of swine origin have been reported from several countries globally and are not unexpected in the EU/EEA. To date, no human-to-human transmission has been detected. Exposure to pigs or pig products have been reported in the past and represent the most common risk factor. Transmission events have also been observed in healthy people without underlying conditions. The cases need to be followed up to identify human-to-human transmission and implement control measures. Viruses from patients with severe conditions and an influenza-positive test should be further characterised, as well as shared with the national influenza reference laboratories and World Health Organization (WHO) Collaborating Centres.
Actions:
ECDC is monitoring zoonotic influenza events through its epidemic intelligence activities and disease experts in order to identify significant changes in the epidemiology of the virus. Cases should be immediately reported to the Early Warning and Response System (EWRS) and International Health Regulations (IHR).

Sources: 2022-E000482
Last time this event was included in the CDTR: 25 September 2023

4. Avian influenza A(H5N6) – Multi-country – Monitoring human cases

Overview:
Update: A new case of avian influenza A(H5N6) was reported on 27 September 2023 in Chongqing municipality, China. The patient was a 68-year-old male who had exposure to live domestic poultry before the onset of symptoms on 5 August 2023. He was admitted to hospital on 10 August 2023 and died on 20 August 2023. No new cases have been detected among his contacts.

Summary: Since 2014, and as of 29 September 2023, 88 laboratory-confirmed cases, including 34 deaths (CFR: 38.6%), of human infection with influenza A(H5N6) virus have been reported. The cases were reported from China (87) and Laos (1).

Sources: Press release of the Government of the Hong Kong Special Administrative Region, 27 September 2023

ECDC assessment:
Sporadic human cases of avian influenza A(H5N6) have been previously observed. No human-to-human transmission has been reported to date. Sporadic zoonotic transmission cannot be excluded. The implementation of personal protective measures for people directly exposed to poultry and birds potentially infected with avian influenza viruses will minimise the remaining risk. The risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered to be very low.

Actions:
ECDC monitors avian influenza strains through its epidemic intelligence and disease network activities and collaborates with the European Food Safety Authority (EFSA) and the EU reference laboratory for avian influenza to identify significant changes in the epidemiology of the virus. ECDC works with EFSA and the EU reference laboratory to produce a quarterly report on the avian influenza situation. The most recent report was published in September 2023.

Sources: 000320
Last time this event was included in the CDTR: 01 September 2023
Maps and graphs

Figure 1. Distribution of confirmed human cases of avian influenza A(H5N6) virus infection by year of onset and country, 2014–29 September 2023 (n=88)

Source: ECDC


Overview:

Summary:
By the end of week 38 (ending 24 September 2023), rates of respiratory illness in the community and numbers of COVID-19 cases continued to increase in over half the EU/EEA countries reporting data. Increased transmission of SARS-CoV-2 has translated into increases in hospital or ICU admissions and deaths in some countries, although the impact is still limited.

Consultation rates of patients presenting to sentinel general practitioners with respiratory illness (influenza-like illness (ILI)/acute respiratory infection (ARI)) are increasing in most of the countries reporting data to week 38, with the steepest increases observed among young children. Rates remain at similar levels to those observed in the same period last year. In the past two weeks, eight countries reported at least 10 weekly sentinel tests with an average weekly SARS-CoV-2 positivity between 5% and 29.7%, which represents a decrease compared to the previous week.

Among 18 countries reporting age-specific data on positive COVID-19 tests taken outside sentinel systems, 11 have observed increases in case numbers for up to 10 weeks among people aged 65 years and above. As the oldest age groups have the highest risk of severe disease, these figures highlight the importance of continuing to monitor disease and implement protective measures in older age groups.

Of 13 countries with data on hospital or ICU admissions/occupancy up to week 37, four reported recent increasing trends in at least one of these indicators compared with the previous week. Although levels remain relatively low, increases in death rates for up to three weeks were reported in those aged 65 years and above by 4 of 13 countries with age-specific death data.

Among the 17 countries reporting at least 10 results from SARS-CoV-2 sequencing or genotyping for weeks 36–37 (4–17 September 2023), the estimated distribution of variants of concern (VOCs) or variants of interest (VOIs) was 66.1% (27.0–75.0% from 16 countries) for XBB.1.5+F456L, 29.4% (18.0–83.3% from 17 countries) for XBB.1.5, 4.6% (0.3–16.7% from 6 countries) for XBB, and 2.3% (1.0–10.8% from 9 countries) for BA.2.75.
Weekly update on SARS-CoV-2 variants:

Since the last update on 7 September 2023, and as of 28 September 2023, no changes have been made to ECDC variant 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 28 September 2023, the 12 EU/EEA countries reporting at least 10 sequences to GISAID EpiCoV for week 36 (4–10 September 2023) showed the following proportions of XBB.1.5-like + F456L lineages: Austria (64%), Belgium (63%), France (61%), Germany (61%), Iceland (71%), Ireland (71%), Italy (68%), the Netherlands (71%), Romania (26%), Spain (59%) and Sweden (65%). The overall proportion of XBB.1.5-like + F456L lineages continues to increase, although the trend is less pronounced compared with previous weeks.

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. This SARS-CoV-2 lineage has been classified as a variant under monitoring (VUM) by ECDC as of 24 August 2023.

As of 28 September 2023, 262 cases of BA.2.86 have been reported to GISAID from 23 countries. In the EU/EEA, these were Belgium (3), Denmark (27), France (15), Germany (3), Greece (5), Iceland (1), Italy (1), Luxembourg (3), the Netherlands (3), Portugal (7), Spain (20) and Sweden (25). Outside of the EU/EEA, these were Australia (1), Canada (5), China (1), Israel (5), Japan (6), South Africa (20), South Korea (3), Switzerland (1), Thailand (5), the United Kingdom (68) and the United States (34). BA.2.86 has been circulating in a low proportion in the EU/EEA (less than 2%). Detection of this variant has been reported in waste water samples from several more countries, both within and outside of the EU/EEA.

More information on BA.2.86 is available in *Epidemiological update: COVID-19 transmission in the EU/EEA, SARS-CoV-2 variants, and public health considerations for Autumn 2023* published on 7 September 2023.

For the latest information on variants, please see ECDC’s webpage on variants.

Public Health Emergency of International Concern (PHEIC):

On 30 January 2020, the World Health Organization (WHO) declared that the outbreak of COVID-19 constituted a PHEIC. On 11 March 2020, the Director-General of WHO declared the COVID-19 outbreak a pandemic. The third, fourth, fifth, sixth, seventh, eighth, ninth, tenth, eleventh, twelfth, thirteenth and fourteenth International Health Regulations (IHR) Emergency Committee meetings for COVID-19 were held in Geneva on 30 April 2020, 31 July 2020, 29 October 2020, 14 January 2021, 15 April 2021, 14 July 2021, 22 October 2021, 13 January 2022, 11 April 2022, 8 July 2022, 13 October 2022 and 27 January 2023, respectively. The Committee concluded during these meetings that the COVID-19 pandemic continues to constitute a PHEIC.

In the fifteenth IHR Emergency Committee meeting held in Geneva on 4 May 2023, the Director-General of WHO agreed with the advice offered by the Committee and determined that COVID-19 is no longer a public health emergency of international concern (PHEIC).

For the latest COVID-19 country overviews, please see the dedicated web page.

Please refer to the data reported by the World Health Organization (WHO) on COVID-19 and WHO's Weekly Epidemiological Updates and Monthly Operational Updates page for non-EU/EEA countries.

**ECDC assessment:**

SARS-CoV-2 continues to circulate in the EU/EEA with varying intensity. The epidemiological picture in the EU/EEA over the past 12 months has been characterised by periodic waves of infection, approximately every two to three months, with an overall downward trend in the height of the associated peaks in reported cases, hospitalisations, ICU admissions and deaths during this period. The emergence of new variants of concern or population immunity waning over time may have an impact on the epidemiological situation in the future.

For the most recent risk assessment, please visit ECDC's dedicated webpage.
**Actions:**

Detailed country-specific COVID-19 updates are available on ECDC’s [website](http://www.ecdc.europa.eu). For the latest update on SARS-CoV-2 variants of concern, please see [ECDC's webpage on variants](http://www.ecdc.europa.eu).

For EU/EEA- and country-specific epidemiological trends and forecasts, visit ECDC's [Country Overview Report](http://www.ecdc.europa.eu) (updated on Fridays). In addition to the actions described in the latest COVID-19 risk assessments, ECDC published guidance entitled *Interim public health considerations for COVID-19 vaccination roll-out during 2023* on 5 April 2023 to support countries with vaccination strategy decision-making. This guidance aims to offer advice on the optimal timing and targeting of vaccination campaigns in order to limit the continuing burden of disease experienced by older population groups (those aged 60 years and above), individuals with underlying medical conditions and other selected groups. It complements the previous guidance, *Long-term qualitative scenarios and considerations of their implications for preparedness and response to the COVID-19 pandemic in the EU/EEA*, published in August 2022 to support country preparedness activities in the post-acute phase of the COVID-19 pandemic.

**Last time this event was included in the CDTR:** 22 September 2023

### 6. West Nile virus One Health seasonal surveillance – 2023

#### Overview:

This is the 18th weekly update of the 2023 West Nile virus (WNV) monitoring season.

Since last week’s update, and as of 27 September 2023, EU/EEA countries reported 85 human cases of West Nile virus (WNV) infection and 6 deaths related to WNV infections. Cases were reported by Italy (50), Greece (12), Romania (10), France (8), Spain (3) and Hungary (2). Deaths were reported by Italy (4), Greece (1) and Romania (1). EU-neighbouring countries reported nine human cases of WNV infection. Cases were reported by Serbia (9). No deaths related to WNV infections were reported by EU-neighbouring countries.

This week, among the reporting countries, the following NUTS 3 or GAUL1 regions have reported autochthonous human cases of WNV infection for the first time: Ioannina in Greece; Cáceres in Spain; Charente, Gard and Vaucluse in France; and Taranto and Lecce in Italy.

This week, among the reporting countries, the following NUTS 3 or GAUL1 regions have reported autochthonous human cases of WNV infection for the first time since the start of this season: Evros and Ioannina in Greece; Cáceres in Spain; Charente, Gard and Vaucluse in France; Como, Taranto, Lecce and Udine in Italy; and Braničevo in Serbia.

Since the beginning of the 2023 transmission season and as of 27 September 2023, EU/EEA countries have reported 566 human cases of WNV infection in Italy (280), Greece (143, of which 1 with unknown place of infection), Romania (63), France (34), Hungary (27), Spain (8, of which 1 with unknown place of infection), Croatia (6), Germany (4) and Cyprus (1). EU/EEA countries have reported 46 deaths in Greece (19), Italy (17), Romania (9) and Spain (1). EU-neighbouring countries have reported 83 human cases of WNV infection in Serbia (82) and North Macedonia (1). No deaths related to WNV infections were reported by EU-neighbouring countries.

During the current transmission season, within the reporting countries, autochthonous human cases of WNV infection were reported from 120 different NUTS 3 or GAUL 1 regions, of which the following regions reported autochthonous human cases of WNV infection for the first time ever: Gironde, Charente-Maritime, Alpes-Maritimes, Charente, Gard and Vaucluse in France; Sömmerda in Germany; Ioannina and Kastoria in Greece; Imperia, Taranto and Lecce in Italy; and Barcelona, Cáceres, Huelva and Valencia/València in Spain.

Since the beginning of the 2023 transmission season, 61 outbreaks among equids and 177 outbreaks among birds have been reported by EU/EEA countries. Outbreaks among equids have been reported by Spain (24), Hungary (22), Italy (10), Germany (2), France (2) and Portugal (1). Outbreaks among birds have been reported by Italy (139), Germany (17), Spain (13), Bulgaria (4), Hungary (2), Greece (1) and France (1).

Please refer to the [West Nile virus infection webpage](http://www.ecdc.europa.eu) for maps and a dashboard.

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

With the exception of Taranto and Lecce in Italy, all regions that reported new cases this week have neighbouring regions with reported cases in the current year or previous years. Taranto has a neighbouring region with equid cases, which suggests a potential spread within the immediate vicinity. Lecce does not have any immediately neighbouring regions that have reported cases. These observations indicate that Taranto and Lecce may be emerging as new areas of infection.

Although the intensity of WNV circulation is expected to decrease in October, the weather conditions in most of the affected areas are still favourable for vector-borne transmission. Therefore, further human cases are expected in the coming weeks.

The combined totals from Italy and Greece accounted for 75% of all reported autochthonous cases. This follows the trend from the previous year: Italy and Greece reported the highest number of cases in 2022.

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 WNV transmission seasons, 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: 22 September 2023

7. Cholera – Multi-country (World) – Monitoring global outbreaks

Overview:

Data presented in this report originate from several sources, both official public health authorities and non-official sources, such as the media. Case definitions, testing strategies and surveillance systems vary between countries. In addition, data completeness and levels of under-reporting vary between countries. All data should therefore be interpreted with caution. Refer to the original sources for more information regarding the case definitions in use and for details on the epidemiological situation.

Summary

Since 30 August 2023 and as of 25 September 2023, 69,357 new cholera cases, including 506 new deaths, have been reported worldwide. The five countries reporting most cases are Afghanistan (36,504), Cameroon (15,929), Democratic Republic of the Congo (7,221), Haiti (4,434) and Ethiopia (3,850). The five countries reporting most new deaths are Cameroon (332), Haiti (76), Ethiopia (55), Afghanistan (13) and Democratic Republic of the Congo (8). In addition, 100,251 new cases from before 30 August 2023 were reported or collected retrospectively.

New cases have been reported from Afghanistan, Burundi, Cameroon, Congo, Democratic Republic of the Congo, Ethiopia, Haiti, India, Iraq, Kenya, Mozambique, Pakistan, Philippines, Syria, Uganda, Yemen, Zambia and
Zimbabwe. New deaths have been reported from Afghanistan, Cameroon, Congo, Democratic Republic of the Congo, Ethiopia, Haiti, Iraq, Kenya, Mozambique, Philippines, Syria, Uganda, Yemen and Zambia.

Since 1 January 2023 and as of 25 September 2023, 723,067 cholera cases, including 4,301 deaths, have been reported worldwide. In comparison, since 1 January 2022 and as of 25 September 2022, 1,044,028 cholera cases, including 914 deaths, were reported worldwide.

Since the last update, new cases and new deaths have been reported from:

**Asia:**
- **Afghanistan:** Since 12 August 2023 and as of 16 September 2023, 36,504 new cases, including 13 new deaths, have been reported. Since 1 January 2023 and as of 16 September 2023, 165,384 cases, including 76 deaths, have been reported. In comparison, in 2022 and as of 24 September 2022, 178,012 cases, including 63 deaths, were reported.

- **India:** Since 18 June 2023 and as of 16 July 2023, 429 new cases have been reported. Since 1 January 2023 and as of 16 July 2023, 1,045 cases have been reported. In comparison, in 2022 and as of 29 July 2022, 617 cases, including 19 deaths, were reported.

- **Iraq:** Since 8 January 2023 and as of 31 August 2023, 79 new cases, including 1 new death, have been reported. Since 1 January 2023 and as of 31 August 2023, 92 cases, including 1 death have been reported. In comparison, in 2022 and as of 23 August 2022, 1,008 cases, including 5 deaths, were reported.

- **Pakistan:** Since 15 July 2023 and as of 20 August 2023, 1,462 new cases have been reported. Since 1 January 2023 and as of 20 August 2023, 12,460 cases have been reported. In comparison, in 2022 and as of 18 August 2022, 258,139 cases, including 30 deaths, were reported.

- **Philippines:** Since 15 July 2023 and as of 19 August 2023, 455 new cases, including 3 new deaths, have been reported. Since 1 January 2023 and as of 19 August 2023, 2,732 cases, including 16 deaths, have been reported. In comparison, in 2022 and as of 12 September 2022, 3,030 cases, including 20 deaths, were reported.

- **Syria:** Since 15 July 2023 and as of 12 August 2023, 96,613 new cases, including 194 new deaths, have been reported. Since 1 January 2023 and as of 12 August 2023, 228,032 cases, including 952 deaths, have been reported. In comparison, in 2022 and as of 14 September 2022, 936 cases, including 8 deaths, were reported.

- **Yemen:** Since 11 June 2023 and as of 13 August 2023, 1,279 new cases, including 3 new deaths, have been reported. Since 1 January 2023 and as of 13 August 2023, 5,157 cases, including 7 deaths, have been reported. In comparison, in 2022 and as of 25 September 2022, no cases were reported.

In 2023, since the last report, no updates have been reported by: Bangladesh, Lebanon, Taiwan or Thailand.

**Africa:**
- **Burundi:** Since 13 August 2023 and as of 10 September 2023, 116 new cases have been reported. Since 1 January 2023 and as of 10 September 2023, 725 cases, including 9 deaths, have been reported. In comparison, in 2022 and as of 25 September 2022, no cases were reported.

- **Cameroon:** Since 6 August 2023 and as of 10 September 2023, 15,929 new cases, including 332 new deaths, have been reported. Since 1 January 2023 and as of 10 September 2023, 20,025 cases, including 481 deaths, have been reported. In comparison, in 2022 and as of 22 September 2022, 11,608 cases, including 227 deaths, were reported.

- **Congo:** Since 24 August 2023 and as of 10 September 2023, 24 new cases, including 4 new deaths, have been reported. Since 1 January 2023 and as of 10 September 2023, 93 cases, including 9 deaths, have been reported. In comparison, in 2022 and as of 25 September 2022, no cases were reported.

- **Democratic Republic of the Congo:** Since 5 August 2023 and as of 10 September 2023, 7,221 new cases, including 8 new deaths, have been reported. Since 1 January 2023 and as of 10 September 2023, 31,342 cases, including 230 deaths, have been reported. In comparison, in 2022 and as of 18 September 2022, 9,705 cases, including 183 deaths, were reported.

- **Ethiopia:** Since 23 August 2023 and as of 10 September 2023, 3,850 new cases, including 55 new deaths, have been reported. Since 1 January 2023 and as of 10 September 2023, 21,646 cases, including 275 deaths, have been reported. In comparison, in 2022 and as of 31 January 2022, 674 cases, including 7 deaths, were reported.
Kenya: Since 20 August 2023 and as of 10 September 2023, 54 new cases, including 4 new deaths, have been reported. Since 1 January 2023 and as of 10 September 2023, 9,120 cases, including 146 deaths, have been reported. In comparison, in 2022 and as of 31 May 2022, 319 cases, including 2 deaths, were reported.

Mozambique: Since 6 August 2023 and as of 10 September 2023, 989 new cases, including 7 new deaths, have been reported. Since 1 January 2023 and as of 10 September 2023, 34,288 cases, including 144 deaths, have been reported. In comparison, in 2022 and as of 23 August 2022, 3,470 cases, including 15 deaths, were reported.

Uganda: Since 16 August 2023 and as of 27 August 2023, 13 new cases, including 1 new death, have been reported. Since 1 January 2023 and as of 27 August 2023, 78 cases, including 10 deaths, have been reported. In comparison, in 2022 and as of 25 September 2022, no cases were reported.

Zambia: Since 22 June 2023 and as of 10 September 2023, 125 new cases, including 6 new deaths, have been reported. Since 1 January 2023 and as of 10 September 2023, 882 cases, including 20 deaths, have been reported. In comparison, in 2022 and as of 31 July 2022, 160 cases were reported.

Zimbabwe: Since 27 August 2023 and as of 10 September 2023, 32 new cases have been reported. Since 1 January 2023 and as of 10 September 2023, 3,926 cases, including 96 deaths, have been reported. In comparison, in 2022 and as of 25 September 2022, no cases were reported.

In 2023, since the last report, no updates have been reported by: Eswatini, Malawi, Nigeria, Somalia, South Africa, South Sudan or the United Republic of Tanzania.

America:
Haiti: Since 10 August 2023 and as of 19 September 2023, 4,434 new cases, including 76 new deaths, have been reported. Since 1 January 2023 and as of 19 September 2023, 42,470 cases, including 497 deaths, have been reported. In comparison, in 2022 and as of 18 July 2022, 135 cases were reported.

In 2023, since the last report, no updates have been reported by: Dominican Republic or Mexico.

ECDC assessment:
Cholera cases have continued to be reported in western Africa and South East Asia in recent months. Cholera outbreaks have also been reported in the eastern and southern parts of Africa, parts of the Middle East and in two countries in the Americas. Despite the number of cholera outbreaks reported worldwide, few cases are reported each year among travellers returning to the EU/EEA.

In this context, the risk of cholera infection in travellers visiting these countries remains low, even though sporadic importation of cases to the EU/EEA remains possible.

In 2021, two cases were reported in EU/EEA countries, while three and twenty-six cases were reported in 2020 and 2019, respectively. All cases had a travel history to cholera-affected areas. According to the World Health Organization (WHO), vaccination should be considered for travellers at higher risk, such as emergency and relief workers who are likely to be directly exposed. Vaccination is generally not recommended for other travellers. Travellers to cholera-endemic areas should seek advice from travel health clinics to assess their personal risk and apply precautionary sanitary and hygiene measures to prevent infection. Such measures can include drinking bottled water or water treated with chlorine, carefully washing fruit and vegetables with bottled or chlorinated water before consumption, regularly washing hands with soap, eating thoroughly cooked food and avoiding consumption of raw seafood products.

Actions:
ECDC continues to monitor cholera outbreaks globally through its epidemic intelligence activities in order to identify significant changes in epidemiology and provide timely updates to public health authorities. Reports are published on a monthly basis. The worldwide overview of cholera outbreaks is available on ECDC's website.

Last time this event was included in the CDTR: 27 September 2023
Maps and graphs

Figure 1. Geographical distribution of cholera cases reported worldwide, October 2022–September 2023

Source: ECDC

Figure 2. Geographical distribution of cholera cases reported worldwide, July–September 2023

Source: ECDC
8. 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 9 venues across 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-Saint-Étienne and Toulouse. The capacity of the stadiums ranges 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 of 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 may 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

As of 27 September 2023, the Auvergne-Rhône-Alpes Regional Health Agency reported 14 persons diagnosed with measles, including one hospitalisation. All reported cases were students in the same middle school in Guilherand-Granges (Ardèche). The first case was reported on 19 September 2023. Outbreak investigation is ongoing, including active contact tracing. Health authorities are encouraging the public to monitor for symptoms, check their vaccination status and consult a healthcare provider for those not vaccinated or with incomplete vaccination.

No new cross-border public health events related to the RWC have been detected during the period 23–29 September 2023.

Other events of interest

No other events of interest have been detected this week.

ECDC assessment:

The risk for 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: 22 September 2023