

Communicable Disease Threats Report

Week 38, 18 - 24 September 2022

Disease topics

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1. Cholera - Multi-country (World) - Monitoring global outbreaks

Overview

Since the last update on 24 August 2022, approximately 39 857 suspected cholera cases, including 114 deaths, have been reported worldwide.

Countries reporting new cases since the previous update are Afghanistan, the Democratic Republic of the Congo, Iraq, Malawi, Mozambique, Nepal, Philippines, Somalia, South Sudan, Syria, and Zambia.

A list of all countries reporting new cases since our previous update can be found below.

Americas

No cholera cases have been reported in the Americas in 2022.

Africa

Burkina Faso: Since the last update on 24 August, no new cases have been reported in Burkina Faso. In 2022, and as of 5 July, one suspected cholera case has been reported in the country.

Cameroon: Since the last update on 24 August, no new cases have been reported in Cameroon. In 2022, and as of 3 August, a total of 9 821 suspected cases, including 200 deaths, have been reported in the country.

The [Democratic Republic of the Congo \(DRC\)](#): Since the last update on 24 August, 1 082 suspected cholera cases, including 34 deaths, have been reported in DRC. In 2022, and as of 11 September, a total of 8 667 suspected cholera cases, including 150 deaths (CFR: 1.7%), have been reported in 65 health zones across 12 provinces of the Democratic Republic of Congo. According to WHO's Regional Office for Africa, the most affected provinces are South Kivu, Haut-Lomami, Tanganyika, and North Kivu.

[Kenya](#): Since the last update on 24 August, no new cases have been reported in Kenya. As of 31 May 2022, a total of 319 cases, including two deaths (CFR 0.6%), have been reported from the country.

[Malawi](#): Since the last update on 24 August, Malawi has reported 1 121 confirmed cholera cases, including 31 deaths. In 2022, and as of 18 August, a total of 2 479 cholera cases and 85 deaths have been reported in 19 districts.

[Mozambique](#): Since the last update on 24 August, 169 new suspected cases have been reported in Mozambique. In 2022, and as of 11 September, a total of 3 470 suspected cholera cases, including 16 confirmed cases and 15 fatalities, have been reported in the country.

[Niger](#): On 1 September 2022, Niger reported 10 suspected cholera cases in the Maradi region. This is the first time Niger reported cholera cases in 2022 and, as of 4 September, a total of 14 suspected cases have been reported, of whom seven tested positive for cholera.

[Nigeria](#): Since the last update on 24 August, 1 087 suspected cases, including 13 deaths, have been reported in Nigeria. In 2022, and as of 31 July, a total of 3 610 cases, including 91 deaths (CFR 2.5%), have been reported from the country's 31 states. According to the [Nigerian Centre for Disease Control](#), 10 states – Taraba, Cross River, Katsina, Borno, Kano, Ondo, Zamfara, Bayelsa, Bauchi and Adamawa account for 87% of all cumulative cases.

[Somalia](#): Since the last update on 24 August, 3 259 suspected cholera cases, including nine deaths, have been reported in Somalia. In 2022, and as of 18 September, a total of 11 300 suspected cholera cases, including 44 deaths, have been reported.

[South Sudan](#): Since the last update on 24 August, 16 new suspected cases have been reported from South Sudan. In 2022, and as of 7 September, a total of 332 suspected cholera cases, including 60 confirmed cases and one death, have been reported.

[Tanzania](#): Since the last update on 24 August, no new cholera cases have been reported in Tanzania. In 2022, and as of 7 August, a total of 341 cases and six deaths (CFR: 1.8%) have been reported. The outbreak badly affected the country's Katavi Region and 215 cases, and all six deaths have been reported from this region.

[Zambia](#): Since the last update on 24 August, one confirmed cholera case has been reported in Zambia. In 2022, and as of 31 July, a total of 160 cholera cases have been reported in the country, of which 12 have been confirmed.

[Asia](#)

[Afghanistan](#): Since the last update on 24 August, 31 441 suspected cholera cases, including 18 deaths have been reported in Afghanistan. In 2022, and as of 12 September, a total of 150 278 cases, including 55 deaths, have been reported. According to WHO, the most affected provinces are Kabul, Helmand, Kandahar, Baghlan, Jawzjan, and Nangarhar.

[Bangladesh](#): Since the last update on 24 August, no new suspected cholera cases have been reported in Bangladesh. In 2022, and as of 19 September, a total of 519 217 suspected cholera cases, including 29 deaths, have been reported from the country. Among these cases, 461 611 cases, including 29 deaths, have been reported from different parts of the country, and 57 606 cases and no deaths have been reported in Rohingya Refugee Camp in Cox's Bazar.

[India](#): Since the last update on 24 August, no new suspected cholera cases have been reported in India. In 2022, and as of 29 July, a total of 549 suspected cholera cases and nine deaths have been reported in the country.

[Iraq](#): Since the last update on 24 August, 189 confirmed cholera cases and one death have been reported in Iraq. In 2022, and as of 23 August, 1 008 confirmed cholera cases and five associated fatalities have been reported in the country.

[Nepal](#): Since the last update on 24 August, 24 cholera cases have been reported in Nepal. In 2022, and as of 5 September, 76 cholera cases have been reported in the Kathmandu valley.

[Pakistan](#): Since the last update on 24 August, no new suspected cholera cases have been reported in Pakistan. In 2022, and as of 18 August, a total of 258 139 cholera cases, including 30 deaths, have been reported in the country.

[Philippines](#): Since the last update, 522 new cholera cases have been reported in the Philippines. In 2022, and as of 12 September, 3 030 cholera cases and 20 fatalities have been reported.

[Syria](#): Since the 25 August 2022, several cases of acute watery diarrhoea (AWD) have been reported in different districts of Syria. As of 13 September 2022, a total of 936 AWD cases have been reported, including 53 [confirmed](#) cases (Aleppo (22), al-Hasaka (13), Deir Ezzor (10), Lattakia (6), and Damascus (2)), and at least eight fatalities. No updates were available on previous outbreaks reported in [Benin](#), [Ethiopia](#), [Togo](#), [Uganda](#), and [Zimbabwe](#).

Disclaimer: Data presented in this report originate from several sources, both official public health authorities and non-official, such as the media. 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 as there may be areas of under-reporting and figures may not reflect the actual epidemiological situation.

ECDC assessment:

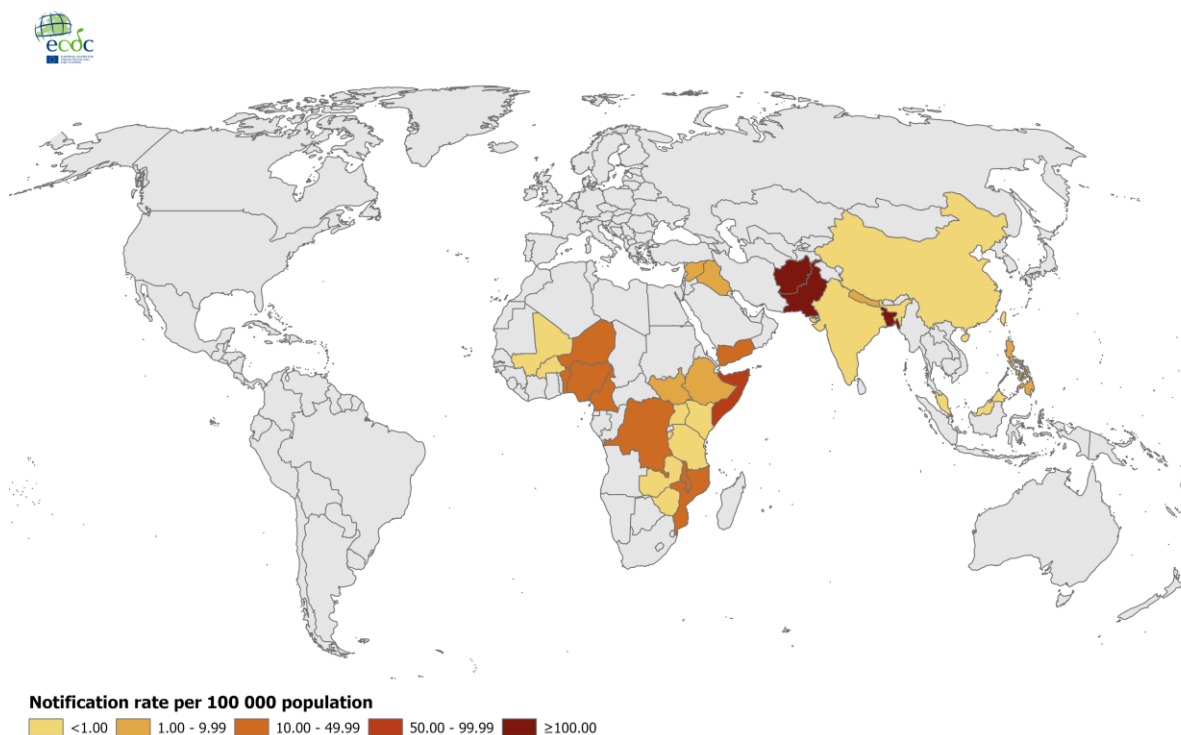
Cholera cases continue to be reported in western Africa and southeast Asia over the past months. Cholera outbreaks have also been notified in the eastern and southern part of Africa, as well as in some areas of Asia. Despite the number of cholera outbreaks reported worldwide, few cases are reported each year among returning EU/EEA travellers. In this context, the risk of cholera infection in travellers visiting these countries remains low, even though sporadic importation of cases in the EU/EEA remains possible. In 2021, two cases were reported in the EU/EEA Member States, while three and 26 cases were reported in 2020 and 2019 respectively. All cases had travel history to cholera-affected areas. According to 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. These 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 the 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 to facilitate updates to public health authorities. Reports are published on a monthly basis. The worldwide overview of cholera outbreaks is available on [ECDC's website](#).

Maps and graphs

Figure 1. Geographical distribution of 12-month cholera case notification rate per 100 000 population reported worldwide

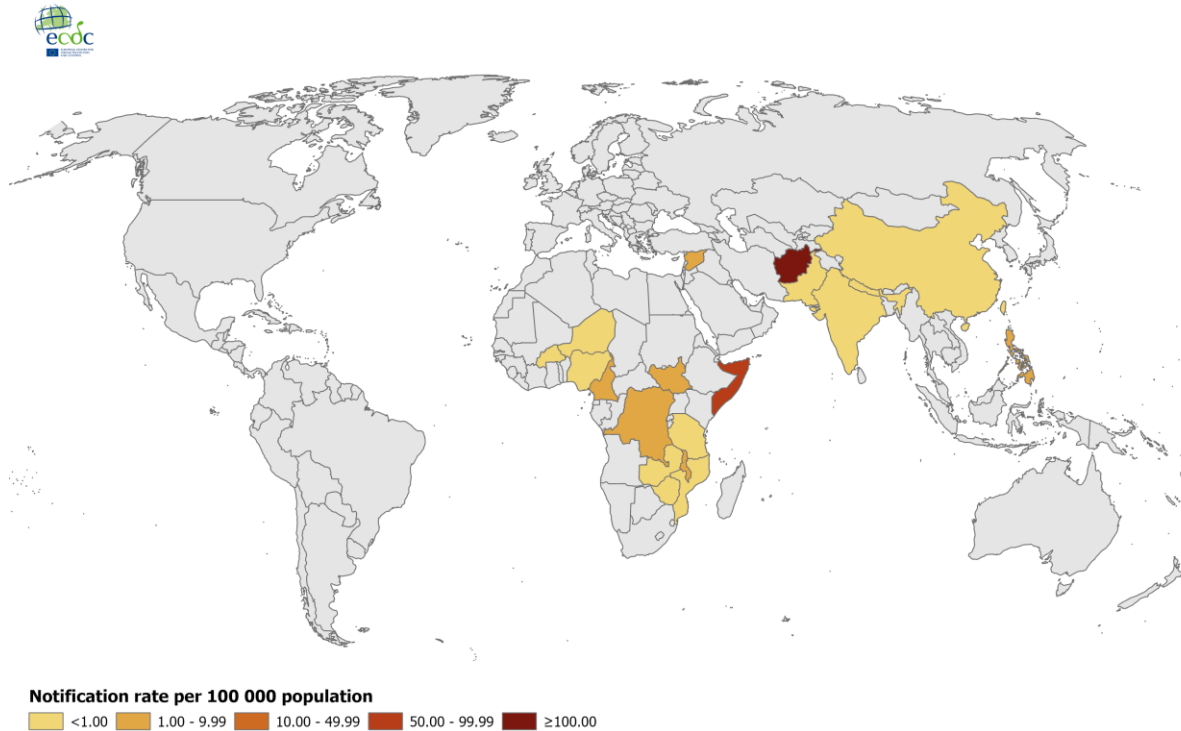


Administrative boundaries: © EuroGeographics. The designations employed and the presentation of material on the map do not imply the expression of any opinion whatsoever on the part of the European Union concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Date of production: 9/21/2022

Source: ECDC

Figure 2. Geographical distribution of 3-month cholera case notification rate per 100 000 population reported worldwide



Administrative boundaries: © EuroGeographics. The designations employed and the presentation of material on the map do not imply the expression of any opinion whatsoever on the part of the European Union concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Date of production: 9/21/2022

Source: ECDC

2. Poliomyelitis - Multi-country (World) - Monitoring global outbreaks

Overview:

Global public health efforts to eradicate polio are continuing through immunising every child until transmission of the virus has stopped 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. The Emergency Committee under the International Health Regulations (2005) stated that the risk of the international spread of poliovirus remains a Public Health Emergency of International Concern (PHEIC). On 15 June 2022, the [32nd meeting](#) of the Emergency Committee was held under the International Health Regulations (2005) (IHR) on the international spread of poliovirus.

In June 2002, WHO's European Region was officially declared polio-free.

Update:

Since the previous update on 16 August 2022, and as of 23 September 2022, 115 new cases of AFP caused by WPV1 or cVDPVs have been reported.

Wild poliovirus (WPV1):

- Five new cases of AFP caused by WPV1 have been reported from Pakistan.
- One new case of AFP caused by WPV1 has been reported from Afghanistan.
- Two new cases of AFP caused by WPV1 have been reported from Mozambique.

Circulating vaccine-derived poliovirus (cVDPV):

- Eight new cases of AFP caused by cVDPV1 have been reported from Democratic Republic of the Congo (4), Malawi (2), and Mozambique (2).
- Ninety-nine new cases of AFP caused by cVDPV2 have been reported in 2022 from seven countries: Yemen (45), DRC (38), Chad (9), Benin (4), Ghana (1), Somalia (1), and the United States (US) (1).
- No new cases of AFP caused by cVDPV3 have been reported.

Summary:***Wild poliovirus:***

In 2022, and as of 23 September 2022, 27 cases of AFP caused by WPV1 have been reported. These have been reported from the two endemic countries, Pakistan (19) and Afghanistan (2), and one non-endemic country, Mozambique (5). One associated death has been reported in Pakistan.

In 2021, six cases of AFP caused by WPV1 were reported from the two endemic countries, Afghanistan (4) and Pakistan (1), and from one non-endemic country, Malawi (1).

Circulating vaccine-derived poliovirus (cVDPV):

In 2022, and as of 23 September 2022, 18 cases of AFP caused by cVDPV1 have been reported from Madagascar (8), DRC (4), Mozambique (4), and Malawi (2).

Overall, 318 cases of AFP caused by cVDPV2 have been reported from 13 countries: Yemen (127), DRC (111), Nigeria (33), Chad (18), Niger (10), Benin (6), Mozambique (4), Somalia (3), Ghana (2), Algeria (1), Eritrea (1), USA (1), and Togo (1). One case of AFP caused by cVDPV3 has been reported from Israel.

In 2021, 16 cases of AFP caused by cVDPV1 were reported from Madagascar (13) and Yemen (3). There were 682 cases of AFP caused by cVDPV2 reported from 22 countries: Nigeria (415), Yemen (66), Afghanistan (43), Tajikistan (35), Democratic Republic of the Congo (28), Niger (18), Senegal (17), Ethiopia (10), South Sudan (9), Pakistan (8), Guinea (6), Sierra Leone (5), Benin (3), Cameroon (3), Guinea-Bissau (3), Liberia (3), Burkina Faso (2), Congo (2), Mozambique (2), Ukraine (2), Eritrea (1), and Somalia (1). No cases of AFP caused by cVDPV3 were reported.

Vaccine-derived poliovirus (VDPV):

According to the Global Polio Eradication Initiative on 29 July 2022, one case of paralytic polio in an unvaccinated individual caused by vaccine-derived polio virus type 2 (VDPV2) was reported in New York State in the US. On 16 August 2022, the US CDC published an early release about this case in the Morbidity and Mortality Weekly Report (MMWR).

Additional information regarding the situation with VDPV in the US can be found in the designated threat included in this weekly CDTR report.

Sources: [Global Polio Eradication Initiative](#) | [ECDC](#) | [ECDC Polio interactive map](#) | [WHO DON](#) | [WPV3 eradication certificate](#) | [Morbidity and Mortality Weekly Report \(MMWR\)](#)

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. Two EU/EEA countries (Poland and Romania) and one neighbouring country (Ukraine) remain at high risk of a sustained polio outbreak following wild poliovirus importation or the emergence of cVDPV, due to sub-optimal programme performance and low population immunity, according to the [European Regional Certification Commission for Poliomyelitis Eradication \(RCC\) report](#) from September 2021 assessment, referring to data from 2020. According to the same report, 11 EU/EEA countries are at an intermediate risk of sustained polio outbreaks. The continuing circulation of wild poliovirus type 1 (WPV1) in Pakistan and Afghanistan and detection of four WPV1 cases in Mozambique in 2022 genetically linked to a strain from Pakistan show that there is still a risk of the disease being imported into the EU/EEA. Furthermore, the worrying occurrence of outbreaks of circulating vaccine-derived poliovirus (cVDPV), which emerges and circulates due to lack of polio immunity in the population, shows 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 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 or long-term visitors (>4 weeks) in countries categorised by [WHO](#) as having the potential risk of the international spread of polio: an additional dose of poliovirus vaccine should be administered between four weeks and 12 months prior to international travel.

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. The Agency 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 an [interactive map](#) showing countries that are still endemic for polio and that have ongoing outbreaks of cVDPV.

3. COVID-19 associated with SARS-CoV-2 - Multi-country (EU/EEA) - 2019 - 2022

Overview:

At the end of week 37, 2022 (week ending 18 September), the pooled EU/EEA notification rate of COVID-19 cases among people aged 65+ years fell by 3% compared with the previous week, indicating that the sustained decreasing trend observed in recent weeks is slowing down. This is driven by recent increases in 13 of the 26 countries reporting data on this indicator: up from five countries reporting increases the previous week. Increases in overall (all-age) notification rates were also reported by 13 countries, compared to five the previous week.

Pooled EU/EEA rates of hospital or ICU indicators decreased or remained stable, but nine of the 27 countries reporting data on these indicators observed an increasing trend in at least one indicator compared with the previous week. Five countries reported increases last week.

The pooled EU/EEA COVID-19 death rate fell by 30% to 4.2% of the pandemic maximum for this indicator, as part of a seven-week decreasing trend. A total of 917 deaths were reported in week 37 and two countries reported increasing trends compared to the previous week.

Among the 14 countries with an adequate volume of sequencing or genotyping for weeks 35–36 (29 August to 11 September 2022), the estimated distribution of variants of concern (VOC) or variants of interest (VOI) was 99.0% (97.5–100.0% from 14 countries) for BA.4/BA.5, 0.8% (0.0–1.8%, 294 detections from 13 countries) for BA.2 and 0.8% (0.4–1.6%, 208 detections from six countries) for BA.2.75.

As of week 37, 2022, ECDC is discontinuing the collection and publication of the number of subnational COVID-19 cases reported by EU/EEA countries, as well as publication of the weekly numbers of COVID-19 cases and deaths for the EU/EEA, Western Balkans, and Turkey.

As of week 13, 2022, ECDC discontinued the assessment of each country's epidemiological situation using its composite score, mainly due to changes in testing strategies which affected the reliability of the indicators for all age case rates and test positivity.

ECDC discontinued the data collection and publication of the number of COVID-19 cases and deaths worldwide as of 20 June 2022. Please refer to [World Health Organization \(WHO\) data](#) on COVID-19 and [WHO's Weekly Epidemiological and Weekly Operational Updates](#) page for non-EU/EEA countries. For the latest COVID-19 country overviews, please see the [dedicated web page](#).

Other news:

On 20 September 2022, the French National Authority for Health (HAS) published a [press release](#) recommending the use of the bivalent COVID-19 vaccines adapted to the Omicron variant as an additional dose. According to the press release, the additional dose is recommended for people over 60 years, adults under 60 years at risk of severe COVID-19 and healthcare professionals.

On 16 September 2022, the European Medicines Agency (EMA) [published](#) a news item recommending the standard marketing authorisation for the Comirnaty and Spikevax COVID-19 vaccines, including the recently approved bivalent COVID-19 vaccines (Comirnaty Original/Omicron BA.1 and Spikevax bivalent Original/Omicron BA.1).

Both [Comirnaty and Spikevax](#) bivalent COVID-19 vaccines are for use in people aged 12 years and above having received primary vaccination against COVID-19.

Weekly update on SARS-CoV-2 variants

Since the last update on 8 September 2022, and as of 22 September 2022, the following changes have been made to ECDC variant classifications for variants of concern (VOC), variants of interest (VOI), variants under monitoring and de-escalated variants :

BA.2 + L452X is de-escalated from variants of interest to de-escalated variants and the recombinant XAK is de-escalated from variants under monitoring to de-escalated variants due to the low proportions of these variants detected circulating in EU/EEA countries during the recent weeks.

For the latest information about 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 constitutes 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](#) and [twelfth](#) 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 and 8 July 2022, respectively. The Committee concluded during these meetings that the COVID-19 pandemic continues to constitute a PHEIC.

ECDC assessment:

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

Actions:

On 27 January 2022, ECDC published its Rapid Risk Assessment '[Assessment of the further emergence and potential impact of the SARS-CoV-2 Omicron variant of concern in the EU/EEA, 19th update](#)'. A [dashboard](#) with the latest updates is available on ECDC's [website](#). For the latest update on SARS-CoV-2 variants of concern, please see [ECDC's webpage on variants](#).

4. Monkeypox - Multi-country - 2022

Overview

Weekly update:

Since the last update on 6 September 2022, and as of 20 September 2022, 611 monkeypox cases have been reported from 23 EU/EEA countries: Spain (184), France (143), Germany (67), Italy (46), Austria (26), Belgium (26), Sweden (21), the Netherlands (20), Ireland (17), Poland (15), Czechia (8), Portugal (7), Hungary (6), Norway (6), Denmark (4), Greece (4), Romania (3), Croatia (2), Luxembourg (2), Bulgaria (1), Estonia (1), Latvia (1), and Slovenia (1). Two additional deaths have been reported, one from Czechia and one from Spain.

Since early May 2022, cases of monkeypox have been reported from countries where the disease is not endemic. Most cases are in men, self-identifying as men who have sex with men (MSM). The clinical presentation is generally described to be mild, with most cases presenting with lesions on the genitalia or peri-genital area, indicating that transmission probably occurred through close physical contact during sexual activities.

Summary:

EU/EEA

Since the start of the monkeypox outbreak and as of 20 September 2022, 19 832 confirmed cases of monkeypox (MPX) have been reported from 29 EU/EEA countries: Spain (7 083), France (3 897), Germany (3 570), the Netherlands (1 221), Portugal (845), Italy (837), Belgium (757), Austria (304), Sweden (186), Denmark (183), Ireland (178), Poland (173), Norway (89), Hungary (77), Greece (69), Czechia (66), Luxembourg (55), Slovenia (46), Romania (39), Finland (33), Malta (33), Croatia (29), Slovakia (14), Iceland (12), Estonia (11), Bulgaria (6), Cyprus (5), Lithuania (5), and Latvia (4).

Deaths have been reported from: Spain (3), Belgium (1), and Czechia (1).

Western Balkans and Turkey:

Since the start of the monkeypox outbreak, and as of 20 September 2022, the following Western Balkan countries have reported confirmed cases of monkeypox: Serbia (31), Bosnia and Herzegovina (3), and Montenegro (2). In addition, 11 cases have been reported from Turkey.

Disclaimer: Data presented in this update are compiled from TESSy and official public sources.

A detailed summary and analysis of data reported to TESSy can be found in the Joint ECDC-WHO Regional Office for Europe Surveillance Bulletin published weekly.

Public Health Emergency of International Concern (PHEIC): On 23 July 2022, the Director-General of World Health Organization [declared](#) the global monkeypox outbreak a Public Health Emergency of International Concern (PHEIC).

ECDC assessment:

Monkeypox (MPX) does not easily spread between people. Human-to-human transmission of MPX occurs through close contact with infectious material from the skin lesions of an infected person, through respiratory droplets in prolonged face-to-face contact, and through fomites.

In the current outbreak in non-endemic countries, cases of MPX continue to be primarily identified among groups of men who have sex with men (MSM) aged 18–50 years. Particular sexual practices are very likely to have facilitated – and could further facilitate – the transmission of MPX among MSM groups. Despite the current focus of circulation of the MPX virus (MPXV) among groups of MSM with multiple partners, transmission may occur in other population groups. During the current outbreak, cases have mainly presented with mild to-moderate symptoms. Only a few severe cases (including encephalitis) leading to hospitalisations and five deaths have been reported by Spain (3), Belgium (1), and Czechia (1). The severity of MPX may be higher among young children, pregnant women, and immunocompromised individuals.

Based on ECDC's epidemiological assessment, the likelihood of MPX spreading further in networks of people with multiple sexual partners in the EU/EEA is considered high, and the likelihood of MPX spreading among the broader population is assessed as very low. Although a few severe cases have been reported (including encephalitis), for most cases the impact of the disease remains low. The overall risk is therefore assessed as moderate for people having multiple sexual partners (including some groups of MSM) and low for the broader population. The risk of the establishment of an enzootic cycle in the EU/EEA and spill-over events to humans is considered to be low.

Early diagnosis, isolation, effective contact tracing, and vaccination strategies are key for the effective control of this outbreak. It is essential to underpin all response measures with strong risk communication and community engagement efforts, as well as awareness and educational activities for health professionals. At this point, mass vaccination for MPX is not required or recommended. Unless contact tracing can successfully identify a high proportion of infected contacts, mathematical modelling results indicate that targeted primary preventive (pre-exposure) vaccination (PPV) of individuals at high risk of exposure would be the most effective strategy for controlling the outbreak. PPV would also be the most efficient strategy when there is less effective tracing. Therefore, prioritising groups of MSM at higher risk of exposure, as well as front-line staff with a risk of occupational exposure, should be considered in developing vaccination strategies. Targeted national vaccination programmes should be implemented within a framework of collaborative research and clinical trial protocols with standardised data collection tools for clinical and outcome data.

To date, the recommendations regarding contact with animals remain unchanged. People infected with monkeypox should apply common precautionary measures such as avoiding contact with animals during the isolation period. Front-line veterinarians (at veterinary clinics and hospitals) should be cautious when dealing with pets that live in a household with people who are infected and should remain alert. People affected by monkeypox who suspect that their pet shows compatible clinical signs should inform their veterinary practitioner/clinic. If necessary, they in turn will alert the relevant national authorities, who will provide advice on the measures to take. More information on monkeypox in animals is available on [EFSA's website](#).

Actions:

ECDC continues to monitor this event through its epidemic intelligence activities and reports relevant news on an ad-hoc basis. Multilateral meetings between affected countries, WHO's Regional Office for Europe, and ECDC have taken place to share information and coordinate response. A process in [EpiPulse](#) has been created to allow countries to share information with one another, WHO, and ECDC.

A [rapid risk assessment](#), 'Monkeypox Multi-country outbreak', was published on 23 May 2022, and an [update of the rapid risk assessment](#) was published on 8 July 2022. For the latest updates, visit [ECDC's monkeypox page](#).

ECDC is also offering laboratory support to Member States and collaborating with stakeholders on risk communication activities, such as targeted messaging for the general public and MSM communities. It has also provided guidance to countries hosting events during the summer. ECDC is also providing guidance on clinical sample storage and transport, case and contact management and contact tracing, IPC guidance, cleaning and disinfection in healthcare settings and households, and vaccination approaches.

5. West Nile virus - Multi-country (World) - Monitoring season 2022

Overview:

Since last week's update, and as of 21 September 2022, European Union (EU) and European Economic Area (EEA) countries reported 47 human cases of West Nile virus (WNV) infection and 3 deaths related to WNV infections. Cases were reported by Greece (39), Romania (4), Austria (2), and Spain (2). Deaths were reported by Greece (3). EU-neighbouring countries reported 15 human cases of WNV infection in Serbia (15) and no deaths related to WNV infections.

This week, among the reporting countries, the following NUTS 3 or GAUL1 regions have reported human cases of WNV infection for the first time: Tarragona in Spain.

Since the beginning of the 2022 transmission season, and as of 21 September 2022, EU/EEA countries have reported 774 human cases of WNV infection in Italy (474), Greece (231), Romania (38), Hungary (12), Austria (6), Croatia (6), Germany (3), Spain (3), and Slovakia (1). EU/EEA countries have reported 51 deaths in Italy (28), Greece (20), and Romania (3). EU-neighbouring countries have reported 169 human cases of WNV infection in Serbia and 8 deaths in Serbia.

During the current transmission season, within the reporting countries, human cases of WNV infection were reported from 90 different NUTS 3 or GAUL 1 regions, of which the following regions reported human cases of WNV infection for the first time: Harz and Vogtlandkreis in Germany, Pistoia, Lucca and Monza e della Brianza in Italy, Brasov in Romania, Moravicki in Serbia, and Tarragona in Spain.

Since the beginning of the 2022 transmission season, 54 outbreaks among equids and 224 outbreaks among birds have been reported by EU/EEA countries. Outbreaks among equids have been reported by Italy (34), Germany (7), Greece (4), Spain (2), France (2), Croatia (2), Hungary (2), and Austria (1). Outbreaks among birds have been reported by Italy (182), Germany (38), Spain (3), and Austria (1).

ECDC links: [West Nile virus infection webpage](#)

Sources: TESSy | Animal Disease Information System

ECDC assessment:

During the current transmission season and as of 21 September 2022, human cases of WNV were reported from countries that had reported WNV infections in previous years.

There was one region, Tarragona in Spain, that reported human cases of WNV infection for the first time this week.

Two EU/EEA countries and one EU-neighbouring country have reported relatively high numbers of human WNV infection cases so far this year. At this stage in the season, the number of cases in Italy and Greece is comparable with those observed in the peak epidemic year, 2018. The number of cases in Serbia is lower than reported at this stage in the season in 2018, but higher than reported in other years in the past decade at this stage in the season. In accordance with [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 transmission seasons, ECDC publishes a set of WNV transmission maps, a dashboard, and an epidemiological summary every Friday.

Further information:

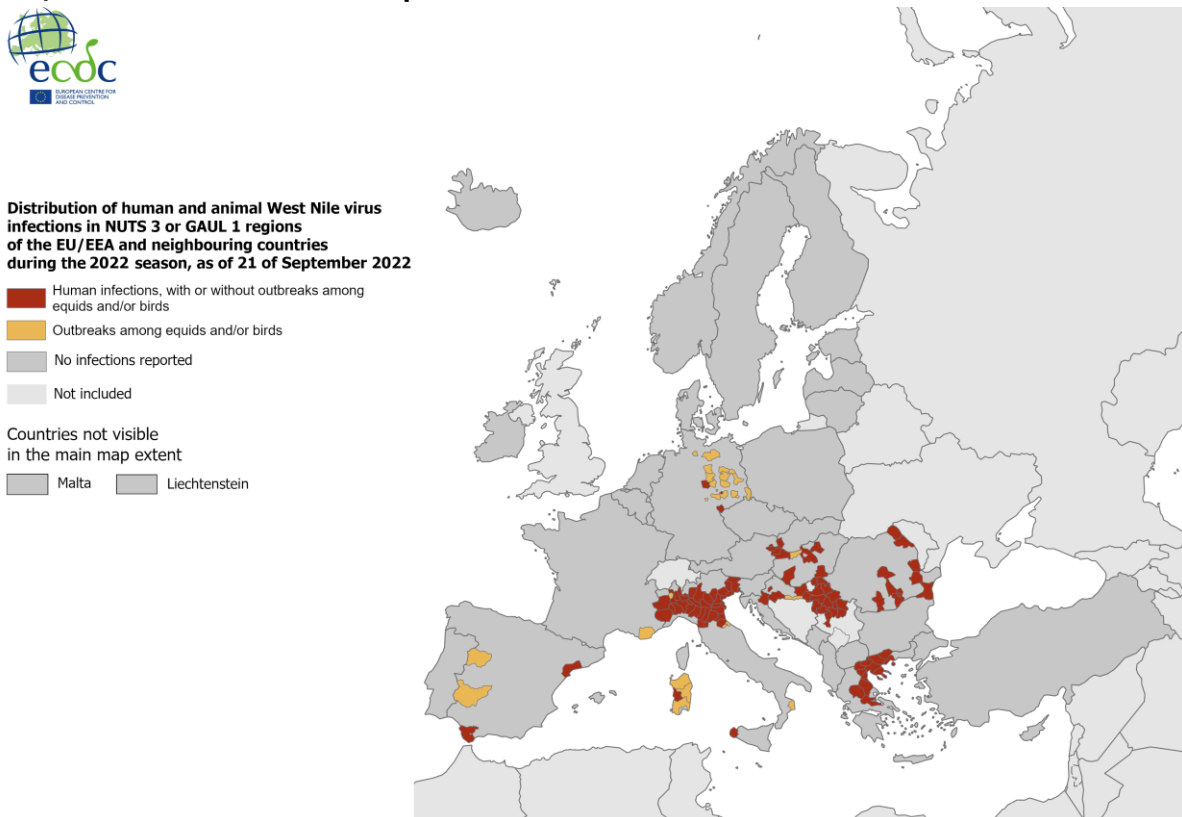
Data on human cases are collected via The European Surveillance System (TESSy) managed by ECDC. Only locally-acquired cases with known place of infection are included in this report. The following EU-neighbouring countries report human cases of WNV infection to ECDC: Albania, Kosovo*, Montenegro, North Macedonia, Serbia, and Turkey.

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

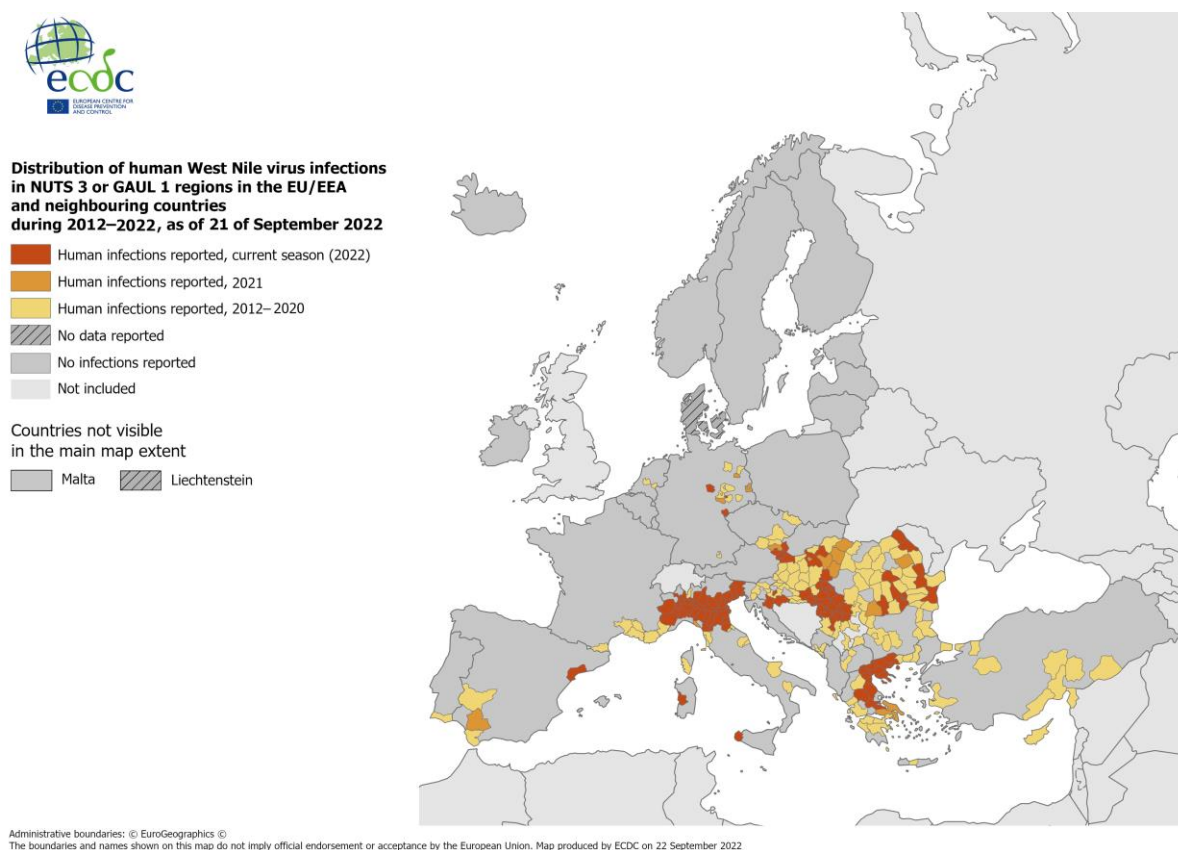
Maps and graphs

Figure 1. Distribution of West Nile virus infections among humans and outbreaks among equids and/or birds in the EU as of 21 September 2022



Administrative boundaries: © EuroGeographics ©
The boundaries and names shown on this map do not imply official endorsement or acceptance by the European Union. Map produced by ECDC on 22 September 2022

Source: ECDC and ADIS

Figure 2. Distribution of human West Nile virus infections by affected areas as of 21 September 2022

Source: ECDC

6. Poliovirus - US - 2022

Overview:

Update: On 13 September 2022, the [United States Centers for Disease Control and Prevention \(US CDC\)](#) announced that poliovirus detected in wastewater samples collected on 3 and 11 August 2022 meet the criteria to be classified as circulating VDPV2 (cVDPV2). The environmental viral sequences contain more than five nucleotides changes and were both linked to the case reported in Rockland County.

The Pan American Health Organization is working together with the US CDC to follow up on this event.

Summary: As of 9 September 2022, 57 wastewater samples have been positive for poliovirus, 50 of which were genetically linked to the case found in Rockland County. These 50 samples were collected in the following counties: Rockland (31), Orange (12), Sullivan (6), and Nassau (1).

On 12 August 2022, the New York State Department of Health (NYSDOH) and the New York City Department of Health and Mental Hygiene (NYCDOHMH) [announced](#) the presence of polioviruses in sewage, after an analysis of additional environmental samples recently carried out in New York City. According to the press release from these authorities, the risk of community transmission in the area persists.

On 21 July 2022, the New York State Department of Health (NYSDOH) and the Rockland County Department of Health alerted the public to a case of poliomyelitis in a Rockland County resident. According to the Global Polio Eradication Initiative (GPEI), this is a case of paralytic polio in an unvaccinated individual. Initial sequencing confirmed by CDC indicates that the case is type 2 VDPV. This is indicative of a transmission chain from an individual who received the oral polio vaccine (OPV), a vaccine no longer authorised or administered in the US, which has only been using the inactivated polio vaccine (IPV) since 2000. This suggests that the virus may have originated in a location outside of the US where OPV is administered, since revertant strains cannot emerge from inactivated vaccines.

On 29 July 2022, the [Global Polio Eradication Initiative](#) reported that the Global Polio Laboratory Network confirmed the isolate from the US case is genetically linked to two Sabin-like type 2 (SL2) isolates from environmental samples collected in early June 2022 in New York, US, and greater Jerusalem, Israel. These isolates are also genetically linked to the recently detected VDPV2 environmental samples from London, UK. [According to the Rockland County Department of Health](#), polio was detectable in wastewater samples collected in June 2022 from the Rockland County Sewer District #1 which may have been from the confirmed case.

On 2 August 2022, the Orange County Government posted a [news item](#) reporting that poliovirus was detected in wastewater samples taken in June and July 2022 from two different locations in Orange County. According to the news item, there have been no confirmed cases of polio infection identified to date in Orange County, but the wastewater analysis reports indicate that the virus is circulating in the community. State and local public health officials have advised medical practitioners to be vigilant about identifying potential cases and increasing vaccination efforts.

On 9 September 2022, the Governor of New York State [declared](#) a state of emergency for the entire State as regards poliomyelitis until 9 October 2022, to boost vaccination rates.

Rockland County is recommending vaccination for all non-vaccinated individuals with support from the US CDC. Further investigations are ongoing.

The [vaccine coverage](#) of three doses of poliovirus vaccine in children aged 2 years for each county in New York state ranges between 54% and 92%. In Rockland it is estimated to be 60% and in Orange County 59%.

Sources: New York State Health Department [[1](#), [2](#)] | [Rockland County Health Department](#) | [GPEI](#) | [CNN](#) | [GPEI map](#) | [PAHO](#)

ECDC assessment:

The risk of additional cases related to this event persists, especially in areas with low polio vaccine coverage and in population groups with low polio vaccine uptake.

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. Two EU/EEA countries (Poland and Romania) and one neighbouring country (Ukraine) remain at high risk of a sustained polio outbreak following wild poliovirus importation or the emergence of cVDPV, due to sub-optimal programme performance and low population immunity, according to the European Regional Certification Commission for Poliomyelitis Eradication (RCC) report from September 2021 assessment, referring to data of 2020. According to the same report, 11 EU/EEA countries are at an intermediate risk of sustained polio outbreaks.

The continuing circulation of wild poliovirus type 1 (WPV1) in Pakistan and Afghanistan and detection of five WPV1 cases in Mozambique in 2022 genetically linked to a strain from Pakistan show that there is still a risk of the disease being imported into the EU/EEA. Furthermore, the worrying occurrence of outbreaks of circulating vaccine-derived poliovirus (cVDPV), which emerges and circulates due to lack of polio immunity in the population, shows 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. The 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 or long-term visitors (>4 weeks) in countries categorised by WHO as having the potential risk of international spread of polio: an additional dose of poliovirus vaccine should be administered between four weeks and 12 months prior to international travel.

For further information on poliomyelitis please see ECDC's [factsheet](#). For information on diagnosing and addressing behavioural barriers to vaccine acceptance, please see ECDC's [publication](#) on increasing vaccine uptake. For communication resources relating to poliomyelitis, please see ECDC's [communication toolkit on immunisation](#), including polio.

Actions:

ECDC is monitoring the event through epidemic intelligence activities. ECDC monitors any report of polio cases worldwide in order to highlight polio eradication efforts and identify events that may increase the risk of reintroducing poliovirus into the EU.

Sources: [New York State Department of Health](#), [WHO DON](#)

7. Ebola virus disease due to Sudan ebolavirus – Uganda – 2022

Overview:

Summary: On 20 September 2022, the Ministry of Health in Uganda, together with WHO AFRO, confirmed an outbreak of EVD due to *Sudan ebolavirus* in Mubende District, Uganda, after one fatal case was confirmed.

The index case is a 24-year-old man, a resident of Ngabano village of Madudu sub-county in Mubende District. The patient experienced high fever, diarrhoea, abdominal pain, and was vomiting blood from 11 September 2022, and was initially treated for malaria. Samples were collected on 18 September 2022 and EVD was laboratory-confirmed on 19 September. The patient passed away on the same day, five days after hospitalisation.

On 21 September 2022, an additional death was reported in a suspected Ebola virus disease (EVD) case in Mubende District, Uganda.

The case was a child who presented at Mubende Regional Referral Hospital with symptoms of EVD on 20 September 2022 and died on the same day. She had been in contact with the index EVD case. According to the media, as of 21 September 2022, 14 people presented at the hospital with symptoms compatible with EVD. A total of 14 contacts have been identified for the first case, including 10 people from Madudu sub-county, four from the neighbouring Kyegegwa district and the deceased child; it is currently unclear if these 14 people are the ones who presented at the hospital.

Preliminary investigation reports have revealed several unexplained community and health facility deaths in the same district, and investigations are ongoing to establish if these cases are epidemiologically linked.

The Ugandan government has activated a national task force and dispatched a Rapid Response Team to Mubende, Kiboga and Mityana districts and is exercising vigilance in border areas to curb the spread of the disease.

Previously, EVD in Uganda was reported in 2019 due to *Zaire ebolavirus*, which was imported from the Democratic Republic of Congo. EVD outbreaks caused by *Sudan ebolavirus* have previously occurred in Uganda (four outbreaks) and Sudan (three outbreaks). The last outbreak of EVD due to *Sudan ebolavirus* in Uganda was reported in 2012.

ECDC assessment:

Uganda has previously experienced outbreaks of EVD. The occurrence of additional cases can be expected. As there is no approved vaccine against EVD due *Sudan ebolavirus*, the control of the outbreak should focus on the early detection and isolation of cases. It is unclear if and how much cross-protection the vaccine against EVD due to *Zaire ebolavirus* would provide against EVD due *Sudan ebolavirus*.

Despite uncertainties about the extent of the outbreak, the risk of infection for EU/EEA citizens in relation to this event is considered to be very low.

Actions:

ECDC monitors this situation through its epidemic intelligence activities and will report when relevant updates are available.

Further information:

Additional sources: [Ministry of Health Uganda](#), [OCHA](#), [Africa CDC](#), media ([1](#), [2](#), [3](#))