

WEEKLY BULLETIN

Communicable Disease Threats Report

Week 41, 9 - 15 October 2022

Today's disease topics

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

Overview:

Summary:

At the end of week 40, 2022 (week ending 9 October), widespread increases were being observed in all indicators, with one third of EU/EEA countries reporting increases in COVID-19 deaths. Forecasts suggest that these trends will continue over the coming two weeks. Increased COVID-19 transmission and mortality have also been observed among residents of long-term care facilities. No significant changes in the variant distribution have been reported. The vaccination uptake for the second booster dose remains at suboptimal levels in the target groups in many EU/EEA countries.

Increasing trends in cases are forecast by the European COVID-19 Forecast Hub in 17 countries, and in deaths in nine countries in the two weeks to week 42. These translate to forecast increases in the pooled rate of cases and deaths at the EU/EEA level in this period.

The pooled EU/EEA notification rate of COVID-19 cases among people aged 65 years and older increased by 33% compared with the previous week, as part of a three-week increasing trend. Increases of 1–6 weeks' duration were observed in 16 of the 25 countries reporting data on this indicator. Increases in overall (all-age) notification rates were reported by 13 countries.

Pooled EU/EEA rates of hospital occupancy, ICU occupancy and ICU admissions for COVID-19 have been increasing for the last 2–3 weeks. Of 26 countries reporting data, 14 observed increasing trends of 1–5 weeks' duration in at least one hospital or ICU indicator. The pooled EU/EEA COVID-19 death rate remained at a low level, similar to the previous week, but increasing trends of 1–4 weeks' duration were observed in 11 countries.

Among the 10 countries with an adequate volume of sequencing or genotyping for weeks 38–39 (19 September to 2 October 2022), the estimated distribution of variants of concern (VOC) or of interest (VOI) was 98.8% (97.1–100.0% from 10 countries) for BA.4/BA.5, 0.9% (0.1–1.8%, 172 detections from seven countries) for BA.2.75, and 0.7% (0.3–1.7%, 801 detections from eight countries) for BA.2.

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.

As of 20 June 2022, ECDC discontinued the data collection and publication of the number of COVID-19 cases and deaths worldwide. 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 12 October 2022, the United States Food and Drug Administration (FDA) published a [press release](#) stating the amendment of the emergency use authorization (EUA) of the Moderna COVID-19 Vaccine, Bivalent, and the Pfizer-BioNTech COVID-19 Vaccine, Bivalent. Based on this amendment, the Moderna COVID-19 Vaccine, Bivalent is authorised as a booster vaccination in children aged six years or older, and the Pfizer-BioNTech COVID-19 Vaccine, Bivalent is authorised as a booster vaccination in children aged five years or older. The monovalent Pfizer-BioNTech COVID-19 Vaccine will no longer be authorised as a booster dose for children in the 5–11 age group. Both the Moderna COVID-19 Vaccine and Pfizer-BioNTech COVID-19 Vaccine continue to be authorised for primary vaccination for individuals who are six months of age and older.

On 11 October 2022, the University of Oxford published a [press release](#) reporting that their nasal COVID-19 vaccine which was jointly developed with the pharmaceutical company, AstraZeneca did not perform as expected in its Phase 1 clinical trial. The result showed that a minority of the participants in the trial produced detectable levels of mucosal antibodies a month following the administration of the vaccine, and in those who did, the level of SARS-CoV-2 antibodies was lower than intramuscular vaccination. According to the press release, one possible explanation for this poor outcome is that most of the vaccine (given as nasal spray) ended up being swallowed and destroyed in the stomach. No serious adverse events or safety concerns were reported during the trial.

Weekly update on SARS-CoV-2 variants:

Since the last update on 6 October 2022 and as of 13 October 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:

As of October 13 2022, ECDC has designated B.1.1.529 (Omicron) with N460X and F490X as a variant under monitoring (VUM). Among others, lineages XBB, BN.1 and BN.2 fall under this designation. Data from GISAID EpiCoV shows a rapid increase of this VUM in Bangladesh, India, and Singapore, and it is present at low levels in the EU/EEA. The N460X and F490X substitutions are located near important antigenic sites, and there are some indications of a significant effect on neutralising activity. In a recent [preprint](#) from China, the in vitro neutralising performance of serum collected from individuals who had completed vaccination (CoronaVac x 3) and experienced a BA.5 breakthrough infection was assessed, and a significant reduction in neutralising activity was found for XBB compared to BA.5. It is unlikely that the variant is associated with any significant change in intrinsic transmissibility or infection severity compared to previously circulating variants, but there is currently not enough data available to evaluate these properties.

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](#).

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

Overview:

Update: According to World Health Organisation ([WHO](#)) and the [Ugandan officials](#), as of 12 October 2022, there have been 54 confirmed cases of Ebola virus disease (EVD), including 19 deaths (CFR: 35%, CFR including probable deaths: 53%). Among these, 11 healthcare workers were infected and four died. There have been 20 probable deaths among individuals who died before a sample was taken. All cases reported out of Mubende have an epidemiological linkage to the cases initially reported in Mubende. There have been 20 recoveries from EVD.

There has been one death [reported](#) in Kampala, however, the victim is a man infected in Mubende who travelled to the capital city to seek help. According to [officials](#), he is a close contact of a previously reported case from Mubende. The body of the deceased patient was transferred back to Mubende without precautions, but a safe and dignified burial was performed by trained personnel in Mubende. The wife of the deceased man has tested positive for EVD and remains in an isolation centre in Kampala. The couple became infected in Mubende. No transmission of EVD has occurred in Kampala district to date.

As of 9 October 2022, [health officials](#) have identified at least 1049 contacts of cases. Cases are reported mainly from Mubende. However, districts Bunyangabu, Kyegegwa, Kassanda and Kagadi are also affected.

On 12 October 2022, the [media](#) reported that the two vaccines identified for trials will arrive in Uganda next week. Both vaccines are pending regulatory and ethics approval from the Ugandan government.

Background: 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 was 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 since 11 September 2022. 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.

The Ugandan government is carrying out community-based surveillance and active case finding. On-site mobile laboratory has been established in Mubende and risk communication activities are ongoing in all affected districts. Africa CDC, WHO, GOARN and other partners have teams in Uganda to support the coordination of the response.

Previously, EVD in Uganda was reported in 2019 due to *Zaire ebolavirus*, which was imported from the Democratic Republic of the 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:

Risk to EU/EEA citizens living in or travelling to affected areas in Uganda

Considering the limited size of the outbreak and the absence of chains of transmission in densely populated areas (e.g. the capital city of Kampala), the current probability that EU/EEA citizens living in or travelling to EVD-affected areas of Uganda will be exposed to the virus is very low, provided that they adhere to the recommended precautionary measures (see further information below). Transmission requires direct contact with blood, secretions, organs or other bodily fluids of dead or living infected persons or animals; all unlikely exposures for the general EU/EEA tourists or expatriates in Uganda.

An increase in cases and, most importantly, the occurrence of chains of transmissions in populated areas and cities such as Kampala would increase the likelihood of exposure of EU/EEA citizens to Ebola virus. Considering that infection with *Sudan ebolavirus* leads to severe disease but that the probability of exposure of EU/EEA citizens is very low, the impact for the EU/EEA citizens living and travelling in affected areas in Uganda is considered low. Overall, the current risk for EU/EEA citizens living or travelling to affected areas in Uganda is considered low.

Staff members of humanitarian, religious and other organisations, particularly healthcare workers who are in direct contact with patients and/or local communities in the affected areas, are more likely to be exposed to the virus. The likelihood of infection for this group is currently low, provided that they adhere to the appropriate infection prevention and control measures. As in the previous scenario, the impact is considered low. Therefore, the overall risk for EU/EEA citizens deployed in response to the outbreak is considered low.

Risk of introduction and spread within the EU/EEA

The most likely route by which the Ebola virus could be introduced to the EU/EEA is through infected people from affected areas travelling to the EU/EEA or medical evacuation of cases to the EU/EEA. According to the International Air Travel Association, in 2019, there were about 126,000 travellers arriving from Uganda to the EU/EEA. The likelihood of secondary transmission of Ebola virus within the EU/EEA and the implementation of sustained chains of transmission within the EU/EEA is very low as cases are likely to be promptly identified and isolated and follow up control measures are likely to be implemented. During the large EVD outbreak in West Africa in 2013–2016, there was only one local transmission in the EU/EEA (in Spain) in a healthcare worker who had attended to an evacuated EVD patient. The impact for the EU/EEA citizens living in the EU/EEA is considered low and overall, the current risk for the citizens in the EU/EEA is considered very low.

Vaccines

The licenced vaccines are protecting against EVD due to *Zaire ebolavirus*. There are no licenced vaccines protecting against EVD due to *Sudan ebolavirus* and there is no available data on the level of cross-protections. The availability of a vaccine was proven to be very helpful in the control of recent outbreaks in the Democratic Republic of the Congo and the unavailability of vaccine will be an additional challenge in the control of this outbreak.

Actions:

ECDC monitors this situation through its epidemic intelligence activities and will report relevant updates on a weekly basis and when relevant updates are available. On 12 October 2022, ECDC published a [News item](#) on the Ebola outbreak in Uganda.

Further information:

EU/EEA visitors and residents in affected areas in Uganda should apply the following precautionary measures:

- Avoid contact with symptomatic patients/their bodily fluids, bodies and/or bodily fluids from deceased patients.
- Avoid consumption of bush meat and contact with wild animals, both alive and dead.
- Wash and peel fruit and vegetables before consumption.
- Wash hands regularly using soap or antiseptics.
- Ensure safe sexual practices.

WHO advises against any restrictions on travel and/or trade to Uganda based on available information for the current outbreak. Considering the lessons/results of the large EVD outbreak in West Africa (2013-2016), where thousands of cases were reported, transmission was ongoing in large urban centres, and in addition hundreds of EU/EEA humanitarian and military personnel were deployed to the affected areas, ECDC considers that screening of travellers returning from Uganda would not be an effective measure to prevent introduction in Europe. Screening incoming travellers is time and resource consuming and will not identify effectively infected cases. Both experience and evidence show that exit screening can be an effective measure to support the containment of the disease spread.

Source: [Ministry of Health Uganda](#) , [OCHA](#), [Africa CDC](#), [Ministry of Health Kenya](#), [NCDC](#), [WHO](#), media ([1](#), [2](#), [3](#), [4](#))

3. Monkeypox - Multi-country - 2022

Overview:

Update:

Since the last update on 4 October 2022, and as of 11 October 2022, 69 monkeypox cases have been reported from 13 EU/EEA countries: Spain (19), Germany (18), Austria (6), Belgium (5), Czechia (4), Ireland (4), Portugal (4), Sweden (3), Italy (2), Denmark (1), Iceland (1), Netherlands (1) and Romania (1).

Since 4 October 2022, and as of 11 October 2022, monkeypox cases have been reported by the following Western Balkan countries: Bosnia and Herzegovina (4).

Since week 30-2022, the number of reported cases has constantly declined, likely due to a combination of factors described in the assessment below.

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 11 October 2022, 20 455 confirmed cases of monkeypox (MPX) have been reported from 29 EU/EEA countries: Spain (7 239), France (4 042), Germany (3 651), Netherlands (1 223), Portugal (929), Italy (856), Belgium (779), Austria (320), Sweden (202), Ireland (198), Poland (196), Denmark (189), Norway (92), Greece (82), Hungary (78), Czechia (72), Luxembourg (55), Slovenia (47), Romania (41), Finland (40), Malta (33), Croatia (29), Iceland (16), Slovakia (14), Estonia (11), Bulgaria (6), Cyprus (5), Latvia (5) and Lithuania (5).

Deaths have been reported from: Spain (2), Belgium (1) and Czechia (1).

Western Balkans and Turkey:

Since the start of the monkeypox outbreak and as of 11 October 2022, the following Western Balkan countries have reported confirmed cases of monkeypox: Serbia (40), Bosnia and Herzegovina (9) and Montenegro (2). In addition, 12 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 four deaths have been reported by Spain (2), 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.

MPX case numbers have been decreasing since the end of July. Efforts in risk communication and community engagement, resulting in behavioural changes, together with the end of the summer events season, vaccination, and increased immunity levels have been reported as key contributors to this effect.

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](#). A new update of the rapid risk assessment will be published on 18 October.

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.

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

Overview:

Since last week's update, and as of 12 October 2022, European Union (EU) and European Economic Area (EEA) countries reported 21 human cases of West Nile virus (WNV) infection and 2 deaths related to WNV infections. Cases were reported by Italy (14), Greece (6) and Germany (1). Deaths were reported by Italy (2). EU-neighbouring countries reported no human cases of WNV infection.

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

This week, among the reporting countries, the following NUTS 3 or GAUL1 regions have reported human cases of WNV infection for the first time since the start of this season: Salzlandkreis in Germany and Evvoia in Greece.

Since the beginning of the 2022 transmission season and as of 12 October 2022, EU/EEA countries have reported 925 human cases of WNV infection in Italy (564), Greece (270), Romania (47), Hungary (14), Germany (9), Croatia (8), Austria (6), Spain (4), France (2) and Slovakia (1). EU/EEA countries have reported 66 deaths in Italy (35), Greece (26) and Romania (5). EU-neighbouring countries have reported 202 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 102 different NUTS 3 or GAUL 1 regions, of which the following regions reported human cases of WNV infection for the first time ever: Bouches-du-Rhône in France, Harz, Vogtlandkreis and Salzlandkreis in Germany, Pistoia, Lucca, Monza e della Brianza, Biella and Cagliari in Italy, Brasov in Romania, Moravicki in Serbia and Tarragona in Spain.

Since the beginning of the 2022 transmission season, 74 outbreaks among equids and 259 outbreaks among birds have been reported by EU/EEA countries. Outbreaks among equids have been reported by Italy (37), Germany (13), Croatia (8), Greece (5), Spain (4), Hungary (3), France (2), Austria (1) and Portugal (1). Outbreaks among birds have been reported by Italy (206), Germany (45), Spain (4), Croatia (2), Austria (1) and Hungary (1).

Please note that due to technical reasons no static maps will be published this week. Kindly refer to the [WNV dashboard](#) instead.

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

Sources: TESSy | Animal Disease Information System

ECDC assessment:

During the current transmission season, human cases of WNV infection have been reported from countries that had reported WNV infections in previous years.

Two EU 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 at this stage in the 2018 season, but higher than 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 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

5. Influenza – Multi-country – Monitoring 2022/2023 season

Overview:**Week 40/2022 (03-09 October 2022)**

This is the first weekly analysis of the season 2022-2023.

One country (UK – Scotland) reported regional influenza activity.

The percentage of all sentinel primary care specimens from patients presenting with ILI or ARI symptoms that tested positive for an influenza virus was 3%, which is below the threshold for epidemic activity of 10%.

Both influenza type A and B viruses were detected with A(H3) viruses being dominant.

Both type A and type B viruses were detected among hospitalized patients with laboratory confirmed influenza.

Source: [Flu News Europe](#)

ECDC assessment:

For the Region as a whole, influenza activity was at inter-seasonal levels.

Actions:

ECDC and WHO monitor influenza activity in the WHO European Region. Data are available on the [Flu News Europe](#) website.