

WEEKLY BULLETIN

Communicable Disease Threats Report

Week 44, 30 - 5 November 2022

Today's disease topics

1. Chikungunya and dengue - Multi-country (World) - Monitoring global outbreaks
2. COVID-19 associated with SARS-CoV-2 - Multi-country (EU/EEA) - 2019 - 2022
3. Increase in hepatitis cases in children – United Kingdom – 2022
4. Monkeypox - Multi-country - 2022
5. West Nile virus - Multi-country (World) - Monitoring season 2022
6. Ebola virus disease due to Sudan ebolavirus – Uganda – 2022
7. Influenza – Multi-country – Monitoring 2022/2023 season

1. Chikungunya and dengue - Multi-country (World) - Monitoring global outbreaks

Overview:

Chikungunya virus disease: In 2022, and as of 27 October, 338 592 cases and 70 deaths have been reported. The majority of cases have been reported from Brazil (240 344), India (93 113), Guatemala (1 435), Thailand (775) and Malaysia (662). Deaths have been reported from Brazil (68), Kenya (1), and the Philippines (1). Since the previous CDTR published on week 39 2022, 34 937 new cases and 10 new deaths have been reported. The five countries reporting most new cases are India (23 715), Brazil (10 661), Thailand (211), Kenya (102) and Guatemala (75). New deaths have been reported from Brazil (10). For the first time in 2022, Sudan reported cases (8).

Dengue: In 2022, and as of 27 October, 3 333 251 cases and 2 984 deaths have been reported. The majority of cases have been reported from Brazil (2 131 615), Vietnam (224 771), Philippines (173 233), Indonesia (94 355) and Nicaragua (66 162). The majority of deaths have been reported from Brazil (898), Indonesia (853), Philippines (508), Bangladesh (118), and Vietnam (92). Since the previous CDTR published on week 39 2022, 359 555 new cases and 601 new deaths have been reported. The five countries reporting most new cases are Brazil (58 608), Philippines (44 887), Pakistan (37 916), Vietnam (34 766) and India (32 653). The five countries reporting most new deaths are Philippines (86), Pakistan (75), Brazil (34), India (32), and Vietnam (20).

In the EU and as of 27 October 2022, 65 autochthonous dengue cases have been reported in France.

Chikungunya virus disease

Europe

No autochthonous cases of chikungunya virus disease have been reported in Europe in 2022.

Americas and the Caribbean

Bolivia: In 2022 and as of 24 September, 175 cases, including 11 confirmed cases and no deaths have been reported. This is an increase of 20 cases since 13 August 2022.

Brazil: In 2022 and as of 17 September, 240 344 cases, including 118 238 confirmed cases and 68 deaths have been reported. This is an increase of 10 661 cases and 10 deaths since 27 August 2022.

Colombia: In 2022 and as of 8 October, 55 cases and no deaths have been reported. This is an increase of five cases since 10 September 2022.

Costa Rica: In 2022 and as of 8 October, 13 cases and no deaths have been reported. This is an increase of three cases since 3 September 2022.

El Salvador: In 2022 and as of 15 October, 147 cases and no deaths have been reported. This is an increase of 13 cases since 3 September 2022.

Guatemala: In 2022 and as of 1 October, 1 435 cases, including 14 confirmed cases and no deaths have been reported. This is an increase of 75 cases since 3 September 2022.

Honduras: In 2022 and as of 24 September, 43 cases and no deaths have been reported. This is an increase of six cases since 3 September 2022.

Mexico: In 2022 and as of 15 October, one case and no deaths have been reported.

Nicaragua: In 2022 and as of 15 October, four cases and no deaths have been reported.

Panama: In 2022 and as of 8 October, two cases and no deaths have been reported. This is an increase of two cases since 10 September 2022.

Paraguay: In 2022 and as of 15 October, 381 cases, including 168 confirmed cases and no deaths have been reported.

Peru: In 2022 and as of 15 October, 273 cases, including 250 confirmed cases and no deaths have been reported. This is an increase of 27 cases since 10 September 2022.

Venezuela: In 2022 and as of 24 September, 46 cases and no deaths have been reported. This is an increase of 18 cases since 13 August 2022.

Asia

India: In 2022 and as of 30 September, 93 113 cases, including 4 319 confirmed cases and no deaths have been reported. This is an increase of 23 715 cases since 31 August 2022.

Malaysia: In 2022 and as of 15 October, 662 cases and no deaths have been reported. This is an increase of 63 cases since 3 September 2022.

Philippines: In 2022 and as of 8 October, 513 cases and one death have been reported. This is an increase of 35 cases since 3 September 2022.

Thailand: In 2022 and as of 22 October, 775 cases and no deaths have been reported. This is an increase of 211 cases since 16 September 2022.

Africa

Ethiopia: In 2022 and as of 8 May, 311 cases, including three confirmed cases and no deaths have been reported.

Kenya: In 2022 and as of 18 September, 291 cases, including five confirmed cases and one death have been reported. This is an increase of 102 cases since 30 July 2022.

Sudan: In 2022 and as of 6 October, eight cases and no deaths have been reported. This is the first time Sudan reported cases in 2022.

Australia and the Pacific

No autochthonous cases have been reported in 2022.

Dengue

Europe

France: In 2022, France has reported nine outbreaks with a total of 65 locally acquired cases of dengue.

In Occitania region:

- One case in Perpignan, Pyrénées-Orientales with onset of symptoms in mid-June 2022.
- Four cases in Andrest (*situated close to Tarbes*) and Rabastens (*30km from Toulouse*), Hautes-Pyrénées with onset of symptoms in July-August 2022. One case of Andrest visited Rabastens during the viraemic period, hence this event is considered as one cluster.
- Four cases in Salvétat Saint Gilles (*situated close to Toulouse*) among a household with onset of symptoms in the second half of August 2022.
- One case in Montauban (50 km north of Toulouse), Tarn et Garrone.
- Two cases in Toulouse, Haute Garonne among a household with onset of symptoms in the second half of September 2022.

In Provence-Alps-Cote d'Azur region:

- Seven cases in Fayence, Var, with onset of symptoms between end of June and end of July 2022.
- 34 cases in St Jeannet, Gattières, and Gaude (*situated close to Nice*), Alpes-Maritimes with onset of symptoms in August-September 2022.
- 10 cases in Saint Laurent du Var (*situated close to Nice*) with onset of symptoms in August-September 2022.

Corsica

- Two cases with onset of symptoms mid-September.

The outbreaks in Perpignan, Salvétat Saint Gilles, and Fayence are now considered over, following the implementation of control measures. For the other outbreaks, additional cases might be detected.

Americas and the Caribbean

In 2022 and as of 27 October, the WHO Pan American Health Organization (PAHO) reported 2 462 777 dengue cases, including 1 233 007 confirmed cases and 1 112 associated deaths, in the Americas. The five countries reporting most cases are Brazil (2 131 615), Nicaragua (69 901), Peru (62 295), Colombia (51 820), and Mexico (39 593). This is an increase of 115 196 cases and 69 deaths since 23 September 2022.

All four dengue virus serotypes (DENV 1, DENV 2, DENV 3, and DENV 4) are currently circulating in the Americas. The figures for each country of the Americas region can be found on the [PAHO Health Information Platform](#).

Dengue fever [surveillance indicators](#) are at low levels in the French Antilles (Guadeloupe, Martinique, Saint-Martin, and Saint-Barthélemy).

Asia

Afghanistan: In 2022 and as of 15 October, 313 cases and no deaths have been reported. This is an increase of 196 cases since 17 September 2022.

Bangladesh: In 2022 and as of 25 October, 44 700 cases and 118 deaths have been reported. This is an increase of 21 539 cases and 58 deaths since 18 September 2022. Most of the cases have been reported from the capital region Dhaka.

Cambodia: In 2022 and as of 6 October, 7 229 cases and 13 deaths have been reported. This is an increase of 1 088 cases and two deaths since 8 September 2022.

China: In 2022 and as of 31 July, eight cases and no deaths have been reported.

India: In 2022 and as of 30 September, 63 280 cases and 44 deaths have been reported. This is an increase of 32 653 cases and 32 deaths since 31 August 2022. According to [media](#), a sudden increase of dengue cases has been observed in recent days in many Indian states, including Delhi, Uttar Pradesh, and West Bengal.

Indonesia: In 2022 and as of 1 October, 94 355 cases and 853 deaths have been reported. This is an increase of 25 452 cases and 213 deaths since 22 August 2022. According to [media](#), six provinces West Java, Central Java, East Java, Jakarta, North Sumatra, and East Kalimantan are the most affected regions. Dengue serotype DEN-3 is currently dominant in the country.

Laos: In 2022 and as of 15 October, 28 365 cases and 21 deaths have been reported. This is an increase of 3 184 cases and three deaths since 20 September 2022.

Malaysia: In 2022 and as of 15 October, 46 495 cases and 28 deaths have been reported. This is an increase of 12 584 cases and six deaths since 13 August 2022.

Maldives: In 2022 and as of 11 September, 590 cases and no deaths have been reported.

Nepal: In 2022 and as of 21 October, 43 685 cases and 52 deaths have been reported. This is an increase of 30 678 cases and 39 deaths since 15 September 2022. According to the country's [ministry of health](#), dengue is rapidly emerging in the country as cases are increasing dramatically in recent years. Top five districts reporting most cases are Kathmandu (12953), Lalitpur (9122), Makwanpur (4651), Bhaktapur (3107), and Dang (2108).

Oman: In 2022 and as of 7 April, 76 cases and no deaths have been reported.

Pakistan: In 2022 and as of 11 October, 41 746 cases, including 25 932 confirmed cases and 84 deaths have been reported. This is an increase of 37 916 cases and 75 deaths since 15 September 2022. According to [media](#), the dengue outbreak is still ongoing in the country and Sindh, Khyber Pakhtunkhwa and Punjab are the most affected provinces.

The **Philippines:** In 2022 and as of 1 October, 173 233 cases and 508 deaths have been reported. This is an increase of 44 887 cases and 86 deaths since 20 August 2022. According to [media](#), the outbreak is still ongoing in the country, and the cases reported this year is much higher in comparison to 2021.

Singapore: In 2022 and as of 25 October, 29 305 cases and no deaths have been reported. This is an increase of 2 022 cases since 21 September 2022.

Sri Lanka: In 2022 and as of 25 October, 50 592 cases and no deaths have been reported. This is an increase of 3 891 cases since 22 September 2022.

Taiwan: In 2022 and as of 16 October, 20 cases and no deaths have been reported.

Thailand: In 2022 and as of 17 October, 22 858 cases and no deaths have been reported. This is an increase of 3 374 cases since 27 May 2022.

Timor-Leste: In 2022 and as of 21 October, 5 480 cases and 57 deaths have been reported. This is an increase of 495 cases and one death since 4 September 2022.

Vietnam: In 2022 and as of 6 October, 224 771 cases and 92 deaths have been reported. This is an increase of 34 766 cases and 20 deaths since 17 September 2022. According to [media](#) quoting Vietnamese health authority, this year the country is experiencing an increase of dengue cases and it is most likely that cases would increase even further in next two months.

Africa

Côte d'Ivoire: In 2022 and as of 19 March, 12 cases, including 12 confirmed cases and one death have been reported.

Kenya: In 2022 and as of 28 April, 33 cases and no deaths have been reported.

Réunion: In 2022 and as of 13 October, 1 163 cases and two deaths have been reported. This is an increase of 34 cases and one death since 10 September 2022.

São Tomé and Príncipe: In 2022 and as of 10 October, 1 011 cases and three deaths have been reported. This is an increase of 18 cases since 19 March 2022.

Sudan: In 2022 and as of 6 October one case has been reported. This is the first time Sudan reported dengue case in 2022.

Australia and the Pacific

Australia: In 2022 and as of 6 October, 188 cases and no deaths have been reported. This is an increase of 61 cases since 8 September 2022.

Cook Islands: In 2022 and as of 28 May, three cases and no deaths have been reported.

Fiji: In 2022 and as of 16 May, 1 960 cases and no deaths have been reported.

Micronesia (Federated States of): In 2022 and as of 6 October, 16 cases and no deaths have been reported.

New Caledonia: In 2022 and as of 30 June, one confirmed case and no deaths have been reported.

Palau: In 2022 and as of 6 October July, 22 cases and no deaths have been reported.

Samoa: In 2022 and as of 6 October, 104 cases and no deaths have been reported.

Solomon Islands: In 2022 and as of 6 October, 34 cases and no deaths have been reported.

Vanuatu: In 2022 and as of 6 October, 112 cases and no deaths have been reported.

Wallis and Futuna: In 2022 and as of 6 October, 54 cases and no deaths have been reported.

N.B: The data presented in this report originate from several sources, both official public health authorities and non-official sources such as news 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; reported figures may not reflect the actual epidemiological situation. Please note that case definitions may differ between countries and comparisons should be made with caution.

ECDC assessment:

Chikungunya virus disease and dengue affect people in most countries of the tropics and sub-tropics. EU/EEA citizens travelling to the affected areas should apply personal protective measures against mosquito bites.

The likelihood for onward transmission of dengue and chikungunya virus disease in mainland EU/EEA is, among other things, linked to importation of the virus by viraemic travellers into receptive areas with established and active competent vectors (i.e. *Aedes albopictus*). *Aedes albopictus* is **established** in a large part of Europe. The current likelihood of the occurrence of local transmission events of chikungunya virus and dengue virus in mainland EU/EEA is high, as the environmental conditions are favourable to vector activity and virus replication. All autochthonous outbreaks of **chikungunya virus disease** and **dengue** in mainland EU/EEA have so far occurred between June and November.

The occurrence of nine clusters in France, including a cluster of over 30 cases, is unusual. To date, all dengue clusters in Europe were of limited size (up to 10 cases). It is expected that additional cases will be detected in the coming weeks among the ongoing clusters and possibly new clusters.

Given the high number of foreign tourists visiting southern France during the summer and early autumn, detection of cases among returning travellers can be expected. However, to date, no other EU country reported cases associated to any of these clusters. Travellers returning from areas where dengue fever transmission occurs (in France and any other country) should be advised to seek medical care if they develop symptoms consistent with dengue fever, in particular if they return to areas where *Ae. albopictus* is established, in order to reduce the risk of the virus being introduced into the local mosquito population and prevent further local transmission. More information is available on ECDC's webpages on autochthonous transmission of **chikungunya** and **dengue** virus in the EU/EEA, as well as on ECDC's **dengue** and **chikungunya** factsheets.

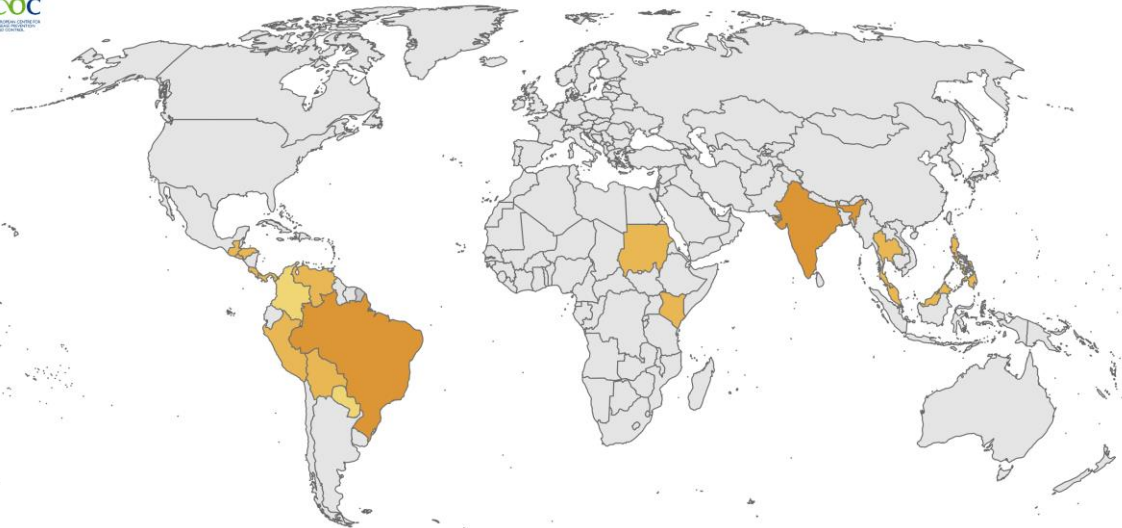
Actions:

ECDC monitors these threats through its epidemic intelligence activities and reports on a monthly basis. A summary of the worldwide overview of **dengue** and **chikungunya virus disease** is available on ECDC's website.

Last time this event was included in the CDTR: [11/4/2022](#)

Maps and graphs

Figure 1. 3-month chikungunya virus disease case notification rate per 100 000 August–October 2022



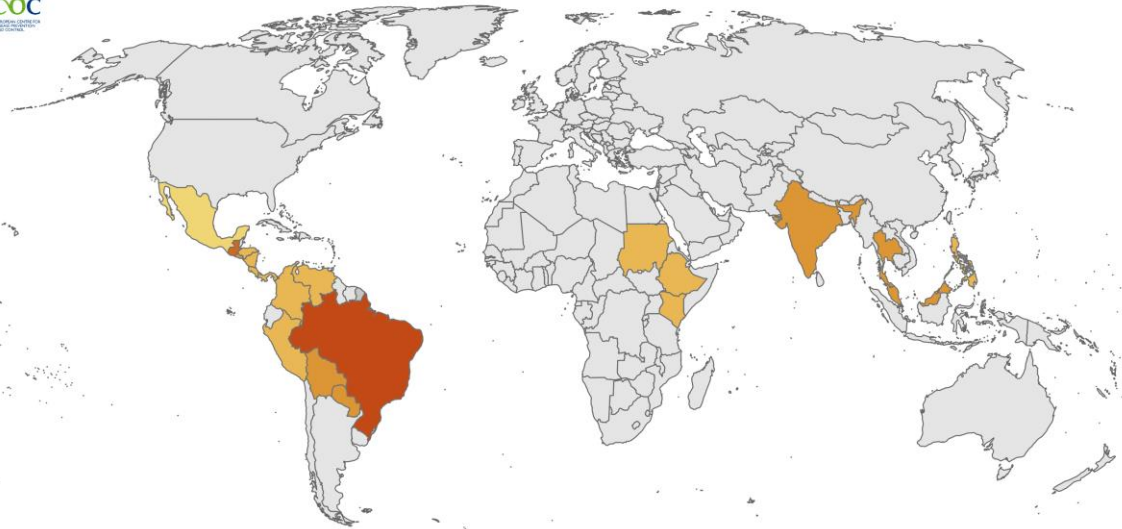
Notification rate per 100 000 persons

No reported cases	0.001-0.009	0.01-0.99	1.0-9.99	10-99	>=100
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Administration boundaries: © Eurographics
The boundaries and names shown on this map do not imply official endorsement or acceptance by the European Union, ECDC. Map produced on 31 October 2022

Source: ECDC

Figure 2. 12-month chikungunya virus disease case notification rate per 100 000 November 2021–October 2022



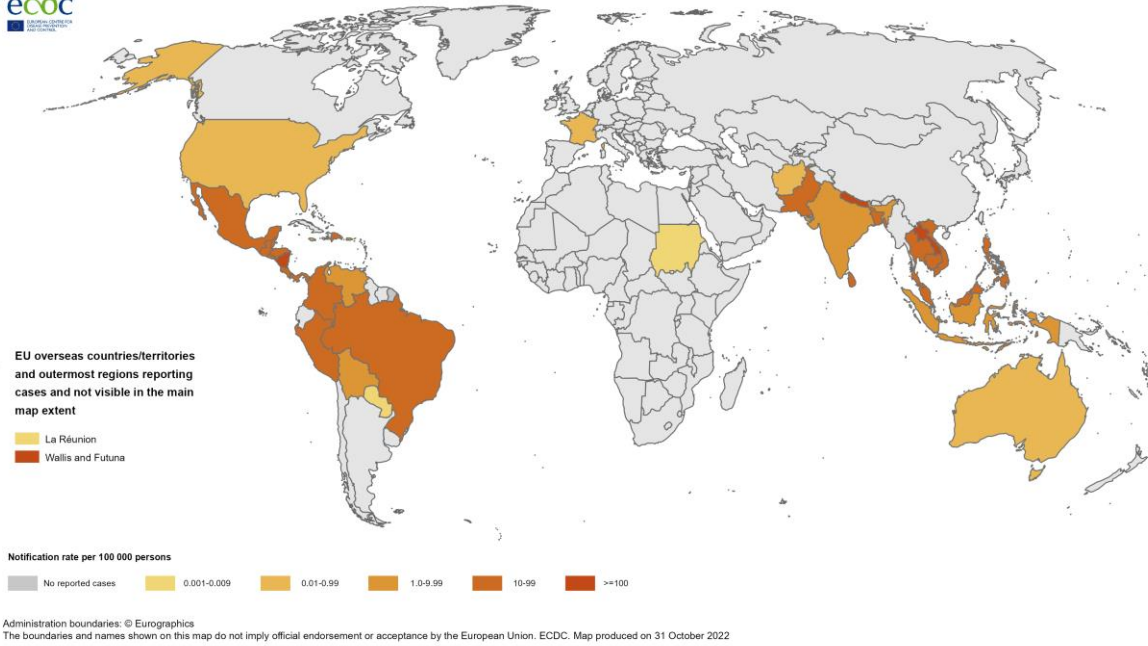
Notification rate per 100 000 persons

No reported cases	0.001-0.009	0.01-0.99	1.0-9.99	10-99	>=100
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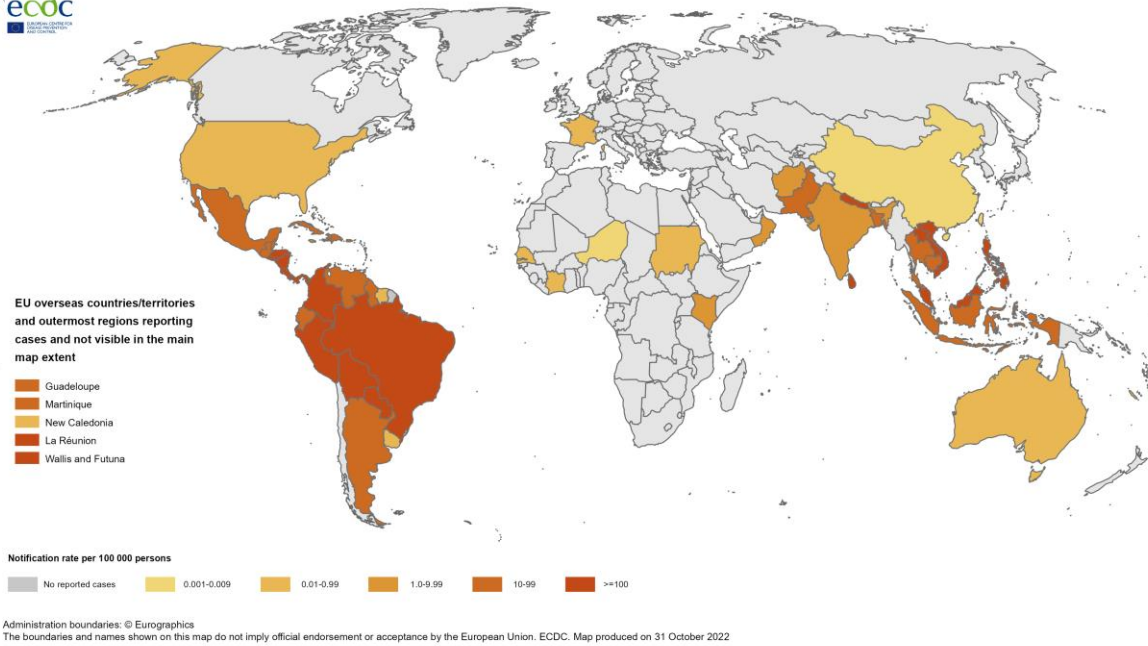
Source: ECDC

Figure 3. 3-month dengue case notification rate per 100 000 August–October 2022



Source: ECDC

Figure 4. 12-month dengue case notification rate per 100 000 November 2021–October 2022



Source: ECDC

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

Overview:**Summary:**

At the end of week 43, 2022 (week ending 30 October), decreasing trends continue to be observed in EU/EEA-level COVID-19 case and death rates. Hospital and ICU indicators have remained stable across the region in comparison to the previous week. Uptake of the second booster dose continues to be relatively low in target groups. It remains important to continue monitoring the epidemiological situation, especially in light of the increasing proportion of BQ.1. variant of interest.

The pooled EU/EEA notification rate of COVID-19 cases among people aged 65 years and older decreased by 13% compared to the previous week, with two of the 22 countries reporting data on this indicator seeing increases over the past one to two weeks. Overall notification rates (all-age) decreased by 23%, albeit two of the 30 reporting countries reporting recent increases.

All pooled EU/EEA hospital and ICU indicators have remained stable in comparison to the previous week albeit seven of 24 countries reporting an increasing trend in one of these indicators within the previous week. A decreasing trend continues to be observed for pooled EU/EEA COVID-19 death rate which remain low at 9% of the pandemic maximum.

The cumulative uptake of a first booster dose was 65.0% (country range: 11.2–86.7%) among people aged 18 years and older, 84.4% (country range: 13.3–100.0%) among people aged 60 years and older, and 53.9% (country range: 9.2–72.0%) in the total population. The cumulative uptake of a second booster was 9.2% (country range: 0.1–33.1%) among people aged 18 years and older, 19.3% (country range: 0.3–70.0%) among people aged 60 years and older, and 7.6% (country range: 0.1–26.5%) in the total population.

Among the 10 countries with an adequate volume of sequencing or genotyping for weeks 41–42 (10 October to 23 October 2022), the estimated distribution of variants of concern (VOC) or of interest (VOI) was 91.8% (58.6–100.0% from 10 countries) for BA.4/BA.5, 11.3% (4.8–28.9% from 5 countries) for BQ.1, 1.6% (0.2–18.4% from 8 countries) for BA.2.75 and 1.0% (0.1–2.3% from 8 countries) for BA.2.

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 02 November 2022, The Public Health Agency of Sweden (Folkhälsomyndigheten) published a [press release](#) recommending the immediate postponement of the use of the protein-based COVID-19 vaccine, Nuvaxovid (Novavax) for people 30 years of age and younger. According to the press release, this recommendation was made as a precautionary measure, based on data from Australia which indicate an increased risk of myocarditis and pericarditis in connection with the Nuvaxovid vaccine, especially in younger people. The agency says it will re-evaluate this recommendation when more data is available from the ongoing studies. It also suggested that younger people who were recently vaccinated with Nuvaxovid need not worry, as the risk of developing these side effects is minimal.

Weekly update on SARS-CoV-2 variants:

Since the last update on 27 October 2022 and as of 03 November 2022, **no changes** have been made to ECDC variant classifications for variants of concern (VOC), variants of interest (VOI), variants under monitoring and de-escalated variants.

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 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](#), [twelfth](#), and [thirteenth](#) 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, and 13 October 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](#).

ECDC invites countries to use the EpiPulse event (**2022-IRV-00008**) on BQ.1 and sub-lineages to discuss and share information on this variant as they become available. Of particular interest are information on virus

characterisation and evidence on changes in disease severity, virus transmissibility, immune evasion and effects on diagnostics and therapeutics. Case reporting should continue through TESSy.

Further information:

Last time this event was included in the CDTR: [11/4/2022](#)

3. Increase in hepatitis cases in children – United Kingdom – 2022

Overview:

Update: Since the last surveillance bulletin on 29 September 2022, 8 new cases have been reported to ECDC via The European Surveillance System (TESSy).

As of 27 October 2022, 563 cases of acute hepatitis of unknown aetiology have been reported by 22 countries: Austria (6), Belgium (14), Bulgaria (1), Cyprus (2), Denmark (8), Finland (1), France (10), Greece (20), Ireland (29), Israel (5), Italy (47), Latvia (1), Luxembourg (1), the Netherlands (16), Norway (6), Poland (22), Portugal (26), Republic of Moldova (1), Serbia (1), Spain (54), Sweden (12), and the United Kingdom (280).

There have been seven deaths associated with the disease in the European Region.

Whilst reporting delay may influence case numbers in recent weeks, there has been a steady decrease in the number of cases reported weekly since week 18.

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 monthly.

Summary: On 5 April 2022, the UK reported an increase in acute hepatitis cases of unknown aetiology for whom laboratory testing had excluded hepatitis types A, B, C, D and E among previously healthy children aged under 10 years from Scotland. On 12 April, the United Kingdom reported that in addition to the cases in Scotland, there were approximately 61 further similar cases under investigation in England, Wales and Northern Ireland. The cases presented with symptoms and signs of severe acute hepatitis, including increased levels of liver enzymes (aspartate aminotransaminase/ aspartate transaminase [AST] or alanine aminotransaminase/ alanine transaminase [ALT] greater than 500 IU/L) and jaundice. Some of the cases also presented with gastrointestinal symptoms such as vomiting, pale stools, diarrhoea, nausea and abdominal pain. A small number of cases presented with fever. According to the preliminary results of two case control studies conducted by the [University of Glasgow Centre for Virus Research](#) and [University College London and Great Ormond Street Hospital](#), cases with hepatitis of unknown origin seemed more likely to have an Adeno-associated virus 2 (AAV2) infection compared to controls, indicating its potential implication in the pathology of the disease. The prevalence of adenovirus and human herpesvirus 6B was higher among the cases but numbers were low and/or association was not always statistically significant. In both studies, analysis of HLA allele positivity showed that class II HLA, particularly HLA DRB 1*04:01, was more prevalent present among cases than controls and general population.

Overall, neither study provide definitive evidence that adenovirus or AAV2 were directly responsible for the liver damage seen in those cases. There was not enough evidence to rule out the implication of SARS-CoV-2 infection in the disease, but it remains an unlikely cause. The main conclusions drawn by both research teams are that pandemic restrictions disrupted normal childhood mixing patterns so children were not exposed to AAV2 or AdV infections and that the AdV outbreaks that followed lifting of restrictions, together with AAV2 infection, triggered an immune mediated hepatitis in genetically susceptible children. However, both studies had limitations and both research teams concluded that further research was needed through larger studies to provide more conclusive evidence.

According to the [latest update from WHO](#), as of 12 July 2022, probable cases and cases pending classification have been reported from the Region of the Americas (435, including 334 in the US), Western Pacific Region (67), the South-East Asia Region (19) and the Eastern Mediterranean Region (2).

According to WHO, at least 46 children worldwide have required liver transplants and 22 deaths have occurred.

ECDC assessment:

AAV2 and adenovirus have been detected in a high number of cases and as a result the current leading hypotheses concern AAV2 and adenovirus involvement, possibly with an immunological cofactor that is triggering a more severe infection or immune-mediated liver damage. The increase in cases that was observed in April and early May, and particularly in the youngest age group, may be affected by the lack of exposure to several pathogens and increased susceptibility to infection due to measures taken to curb the COVID-19 pandemic. Evidence of human-to-human transmission remains unclear. Cases in the EU/EEA are sporadic with a definite decreasing trend. While the risk for further spread cannot be accurately assessed, cases appear to be declining. A case control study is planned and should provide greater information on the aetiological factors underlying the cases.

Actions:

ECDC established reporting of case-based data for cases of acute hepatitis of unknown aetiology in TESSy. Results are published monthly in the [Joint ECDC-WHO Regional Office for Europe Surveillance Bulletin](#). The surveillance reporting protocol is available [here](#).

ECDC has developed a protocol to conduct an exceedance analysis using ICD codes to understand whether or not we have observed an increase of cases of hepatitis of unknown aetiology compared to previous years in EU/EEA countries. Analysis is ongoing with some challenges related to data obtainment and comparability. ECDC is working with countries and clinical networks to conduct a case control study to determine the underlying aetiology. ECDC will continue to work in collaboration with the affected countries, WHO, and other partner organisations. ECDC will continue to monitor the situation through routine epidemic intelligence activities and report significant events monthly.

Further information:

Cases of hepatitis of unknown origin should be reported to TESSy if they meet any of the following criteria:

- **Confirmed:** N/A
- **Probable:** A person presenting with an acute hepatitis (non-hepatitis viruses A, B, C, D and E*) with aspartate transaminase (AST) or alanine transaminase (ALT) over 500 IU/L, who is 16 years old or younger, since 1 October 2021.
- **Epi-linked:** A person presenting with an acute hepatitis (non-hepatitis viruses A, B, C, D and E*) of any age who is a close contact of a probable case since 1 October 2021.

Cases of hepatitis with known aetiology such those due to specific infectious diseases, drug toxicity, and metabolic hereditary, or autoimmune disorders should not be reported under this protocol.

The **signals from media sources** detected via epidemic intelligence activities can be viewed in the file attached to the workspace.

Source: Surveillance Portal: [2605](#)

Additional Sources:

Last time this event was included in the CDTR: [11/4/2022](#)

Additional links: [2605](#)

4. Monkeypox - Multi-country - 2022

Overview:**Other news**

On 1 November 2022, the World Health Organization (WHO) [published](#) revised Temporary Recommendations following the third meeting (on 20 October 2022) of the International Health Regulations (2005) (IHR) Emergency Committee regarding the multi-country outbreak of monkeypox. The Committee advised the WHO Director-General that the multi-country outbreak of monkeypox continues to meet the criteria included in the definition of Public Health Emergency of International Concern (PHEIC) provided by Article 1 of the IHR.

Summary:**EU/EEA**

Since the start of the monkeypox outbreak and as of 25 October 2022, 20 675 confirmed cases of monkeypox (MPX) have been reported from 29 EU/EEA countries: Spain (7 317), France (4 084), Germany (3 662), the Netherlands (1 235), Portugal (932), Italy (890), Belgium (785), Austria (323), Sweden (209), Ireland (206), Poland (206), Denmark (191), Norway (92), Greece (84), Hungary (80), Czechia (70), Luxembourg (55), Slovenia (47), Romania (42), Finland (40), Malta (33), Croatia (29), Iceland (16), Slovakia (14), Estonia (11), Bulgaria (6), Latvia (6), Cyprus (5) and Lithuania (5).

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

Western Balkans and Türkiye:

Since the start of the monkeypox outbreak and as of 25 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 Türkiye.

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). On the 1 November the WHO advised that multi-country outbreak of monkeypox still meet the criteria included in the definition of the PHEIC provide by Article 1 of the IHR.

ECDC assessment:

The weekly number of MPX cases reported in the EU/EEA peaked in July 2022 and a steady declining trend has been observed since then. Multiple factors have probably contributed to the decline of this outbreak, including efforts in risk communication and community engagement resulting in behaviour changes, increasing immunity in the most affected population due to natural immunity and vaccination, and a decrease in the number of large cultural and social events after the summer, frequented by the main risk groups for this outbreak.

MPX continues to primarily affect young men who have sex with men (MSM), between 18 and 50 years of age (87%). Summer mass gatherings and specific sexual practices have facilitated the transmission of MPX among MSM groups until now. Sporadic cases in women and children have also been reported.

Cases in the current outbreak continue to present with a spectrum of symptoms and signs that differs from what has been described in past outbreaks of MPX in endemic countries, with mainly mild 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).

Based on evidence in the current outbreak and the declining number of new infections, the overall risk of MPX infection is assessed as moderate for MSM and low for the broader population.

Response options for the EU/EEA countries include creating awareness among health professionals and supporting sexual health services to continue case detection, contact tracing, and management of cases; continuing to offer testing for orthopoxvirus; vaccination strategy; and continuing risk communication and community engagement, despite the decreasing number of cases.

Given the limitations in vaccine supplies, primary preventive vaccination (PPV) and post exposure preventive vaccination (PEPV), strategies may be combined to focus on individuals at substantially higher risk of exposure and close contacts of cases, respectively. PPV strategies should prioritise gay, bisexual, or other men or transgender people who have sex with men who are at higher risk of exposure and individuals at risk of occupational exposure, based on epidemiological or behavioural criteria. Health promotion interventions and community engagement are also critical to ensure effective outreach and high vaccine acceptance, and uptake among those most at risk of exposure.

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, the WHO Regional Office for Europe, and ECDC have taken place to share information and coordinate responses. 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, the [first update](#) was published on 8 July 2022 and a [second update](#) was published on 18 October 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.

Further information:

Source: Surveillance Portal: [2611](#), [2611](#)

Additional Sources:

Last time this event was included in the CDTR: [11/4/2022](#)

Additional links: [2611](#), [2611](#)

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

Overview:

Since last week's update, and as of 2 November 2022, European Union (EU) and European Economic Area (EEA) countries reported 12 human cases of West Nile virus (WNV) infection and no deaths related to WNV infections. Cases were reported by Italy (12). EU-neighbouring countries reported no human cases of WNV infection. Since the beginning of the 2022 transmission season and as of 2 November 2022, EU/EEA countries have reported 961 human cases of WNV infection in Italy (585), Greece (283), Romania (46), Hungary (14), Germany (9), Croatia (8), Austria (6), Spain (5), France (4) and Slovakia (1). EU/EEA countries have reported 72 deaths in Italy (37), Greece (30) and Romania (5). EU-neighbouring countries have reported 226 human cases of WNV infection in Serbia (226) and 12 deaths in Serbia (12).

During the current transmission season, within the reporting countries, human cases of WNV infection were reported from 107 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, Cagliari and Catania in Italy, Brasov in Romania, Moravicki in Serbia and Tarragona and Córdoba in Spain.

Since the beginning of the 2022 transmission season, 87 outbreaks among equids and 284 outbreaks among birds have been reported by EU/EEA countries. Outbreaks among equids have been reported by Italy (41), Germany (15), Croatia (8), Greece (7), Spain (6), France (5), Hungary (3), Austria (1) and Portugal (1). Outbreaks among birds have been reported by Italy (228), Germany (48), Spain (4), Croatia (2), Austria (1) and Hungary (1). Please note that due to technical reasons no static maps will be published this week. Please 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 are 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 during 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 places 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 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

Additional Sources:

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

Last time this event was included in the CDTR: [11/4/2022](#)

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

Overview:

Overview: According to [health authorities](#), as of 2 November 2022, there have been 131 confirmed cases of Ebola virus disease (EVD), including 48 deaths (CFR: 37%). In addition, 21 deaths among probable cases have been [reported](#) in individuals who died before a sample was taken. As of 2 November 2022, 54 persons have recovered. At least 18 healthcare workers have been infected and six of them died.

[Media](#) report an additional death on 3 November 2022.

As of 2 November 2022, [health authorities](#) identified 3794 contacts of cases from 14 districts in Uganda (51% of identified contacts have completed 21 days of monitoring). The proportion of registered contacts who were followed up in the previous 24 hours was 93% on 2 November 2022. This is an increase compared to previous reports, particularly in Kampala, where the rate has increased from [52% on 30 October](#) to 90% on 2 November. There are currently seven Ugandan districts affected by this outbreak: Bunyangabu, Kagadi, Kampala, Kassanda, Kyegegwa, Mubende and Wakiso. Bunyangabu and Kagadi have not reported any cases since 20 September 2022. Although data are incomplete, the majority of new cases appear to be epidemiologically linked to known cases. There was a large increase in cases in [Kassanda district](#) in week 43, however only one new case was reported during week 44. Since the last ECDC update on 28 October 2022, only one new case has been reported in Kampala, bringing the total to 18 cases.

Other news:

On 2 November 2022, [media](#) reported that a proposal by the Ugandan minister of health to shorten the school term to curb the spread of Ebola disease had been retracted. Parents and teachers disagreed with this proposal, as schools were previously closed for nearly two years due to COVID-19 pandemic.

On 31 October 2022, Belgian authorities issued [travel advice](#) discouraging non-essential travel to the capital city of Kampala and other affected districts in Uganda.

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 the Madudu sub-county in Mubende District. The patient experienced high fever, diarrhoea, abdominal pain, and started vomiting blood since 11 September 2022. Samples were collected on 17 September 2022 and EVD was laboratory-confirmed on 19 September. The patient died on the same day, five days after hospitalisation.

On 15 October 2022, the [President of Uganda](#) imposed a 21-day lockdown on Mubende and Kassanda districts to contain the outbreak of EVD. Measures include an overnight curfew, closing places of worship and entertainment, and restricting movement in and out of the two districts.

On 28 October 2022, the [Ministry of Health](#) in Uganda implemented measures to restrict travelling of contacts of confirmed Ebola cases during the follow-up period (21 days).

The Ugandan government is carrying out community-based surveillance and active case finding. An 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 was reported in Uganda 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

Despite the increase in the number of cases and the transmissions reported in the densely populated 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 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 people or animals; all unlikely exposures for the general EU/EEA tourists or expatriates in Uganda.

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.

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 in the EU/EEA from Uganda. Based on experience from the largest EVD outbreak in West Africa to date (2013 -2016), where thousands of cases were reported, with transmission in large urban centres, and hundreds of EU/EEA humanitarian and military personnel deployed to the affected areas, importation of cases by travellers is considered unlikely. 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.

Healthcare providers in the EU/EEA should be informed of and sensitised to:

- the possibility of EVD among travellers returning from affected areas;
- the clinical presentation of the disease and the need to enquire about travel history and contacts in people returning from EVD-affected countries;
- the availability of protocols for the ascertainment of possible cases and procedures for referral to healthcare facilities;
- the imperative need for strict implementation of barrier management, use of personal protective measures and equipment and disinfection procedures in accordance with specific guidelines and WHO infection control recommendations when providing care to EVD cases.

Actions:

ECDC is monitoring this situation through its epidemic intelligence activities and will report relevant updates twice a week. On 12 October 2022, ECDC published a [news item](#) on the Ebola outbreak in Uganda. ECDC provides a weekly epidemiological update on the outbreak on its [website](#). On 3 November ECDC employed an expert in Uganda to support the DG ECHO country office and the overall outbreak response.

The publication of a rapid risk assessment on the outbreak of Ebola virus disease due to Sudan ebolavirus is planned for 10 November 2022.

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 fruits and vegetables before consumption.
- Wash hands regularly using soap or antiseptics.
- Ensure safe sexual practices.

ECDC considers that screening of travellers returning from Uganda would not be an effective measure to prevent introduction of the disease 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 from affected regions/countries can be an effective measure to support the containment of disease spread.

WHO advises against any restrictions on travel and/or trade to Uganda based on available information for the current outbreak.

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

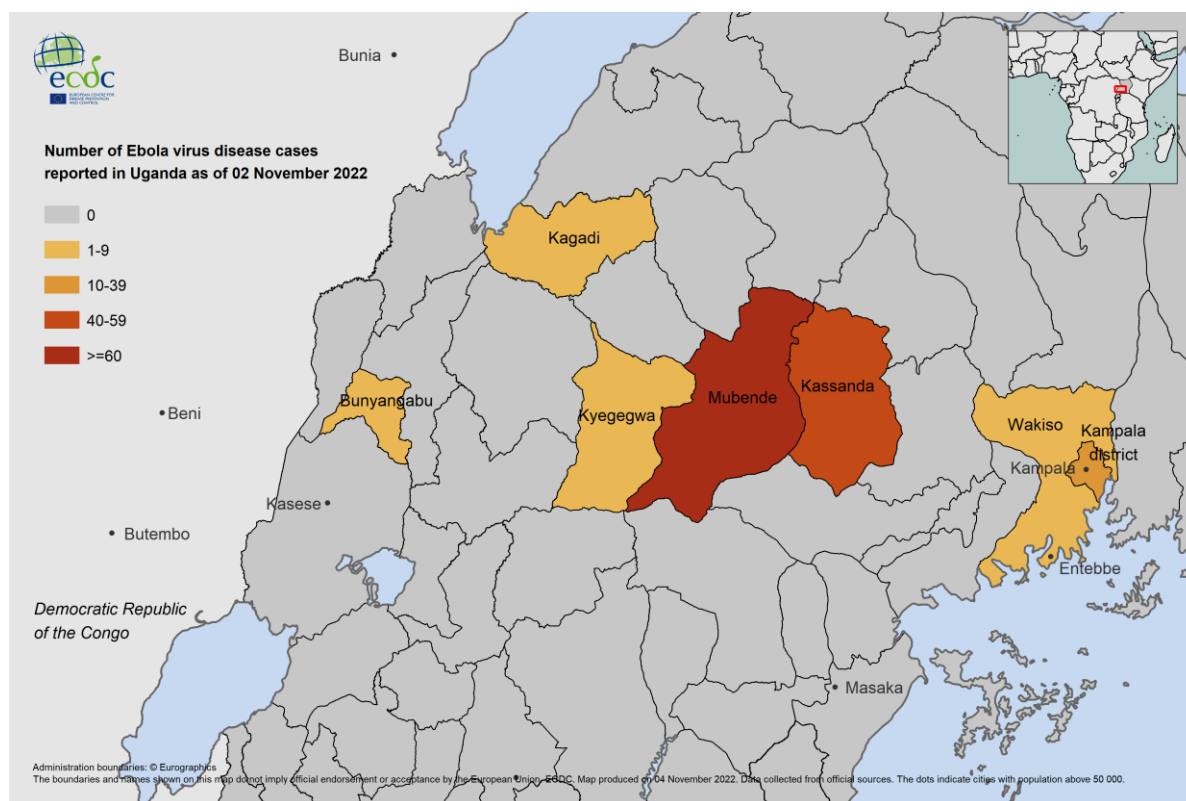
Additional Sources:

Sources: [Ministry of Health Uganda](#) , [Africa CDC](#), [WHO](#).

Last time this event was included in the CDTR: [11/4/2022](#)

Maps and graphs

Figure 1. Geographical distribution of EVD cases in Uganda, 2022.



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

Overview:

Week 43/2022 (24 October-30 October 2022)

Kazakhstan, Malta and Portugal reported widespread influenza activity and/or high intensity.

The percentage of all sentinel primary care specimens from patients presenting with ILI or ARI symptoms that tested positive for an influenza virus increased to 8% from 7% in the previous week, which is below the epidemic threshold set at 10%.

Germany, Kazakhstan, Kyrgyzstan and Spain reported seasonal influenza activity above 10% positivity in sentinel primary care.

Both influenza type A and type B viruses were detected among all monitoring systems, with influenza A(H3) viruses being dominant in sentinel and non-sentinel surveillance.

Hospitalized cases with confirmed influenza virus infection were reported from intensive care units (1 type A virus), other wards (41 type A viruses and 1 type B virus) and SARI surveillance (56 type B viruses and 5 type A viruses). When comparing the different influenza type distributions by system, it is important to consider that different sets of countries are reporting to each system.

Source: [Flu News Europe](#)

ECDC assessment:

For the WHO European Region as a whole, influenza activity remained at inter-seasonal levels with signs of slowly increasing activity.

Overall, influenza A(H3) viruses have dominated across the surveillance systems with the majority of SARI cases tested being type B viruses.

Currently two European countries, Germany and Spain are experiencing seasonal influenza activity above 10% positivity with A(H3) being the dominant virus.

Actions:

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

Further information:

Last time this event was included in the CDTR: [11/4/2022](#)