

WEEKLY BULLETIN

Communicable Disease Threats Report

Week 51, 18 - 24 December 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 50 (week ending 18 December 2022), the pooled EU/EEA notification rate of COVID-19 cases among people aged 65 years and older increased by 7% compared with the previous week, reaching 43% of the maximum value reported during the pandemic. This trend is driven by 15 of the 24 countries that reported data on this indicator, many of which have observed sharp increases (median 27%, range 6–43%) compared with the previous week. The [European COVID-19 Forecast Hub](#) forecasts increases in reported cases in more than half of the reporting countries in the period to week 52, 2022.

The impact of this increased transmission is being seen in hospitals: 11 of the 21 countries with data on hospital or ICU admissions/occupancy up to week 50 reported an increasing trend in at least one of these indicators compared to the previous week. Four countries reported increases in deaths, although the pooled EU/EEA death rate decreased by 11% compared to the previous week, with 2 009 deaths reported in the past week.

Increased inter-generational mixing during the year-end holiday season is likely to increase the exposure of vulnerable groups to respiratory viruses. The holidays will also bring about changes in reporting, testing, and healthcare-seeking behaviour, which will complicate the interpretation of epidemiological data submitted in the coming weeks. ECDC is planning to update this report by 13 January 2023 (data reported up to week 1, 2023).

The cumulative uptake of a first booster was 65.3% (country range: 11.3–86.9%) among adults aged 18 years and older, 84.8% (country range: 13.3–100.0%) among people aged 60 years and older, and 54.6% (country range: 9.2–75.7%) in the total population. The cumulative uptake of a second booster was 15.5% (country range: 0.1–41.4%) among adults aged 18 years and older, 33.1% (country range: 0.3–85.7%) among people aged 60 years and older, and 12.7% (country range: 0.1–33.2%) in the total population.

Among the seven countries with an adequate volume of sequencing or genotyping for weeks 48–49 (28 November to 11 December 2022), the estimated distribution of variants of concern (VOC) or of interest (VOI) was 52.0% (37.9–72.5% from five countries) for BQ.1, 31.1% (19.2–94.3% from seven countries) for BA.5, 8.2% (3.7–18.9% from seven countries) for BA.2.75, 6.5% (2.2–10.5% from five countries) for XBB, 1.0% (0.3–1.9% from seven countries) for BA.4, and 0.6% (0.3–8.0%, 688 detections from seven 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 Updates and Monthly Operational Updates](#) page for non-EU/EEA countries.

For the latest COVID-19 country overviews, please see the [dedicated web page](#).

Weekly update on SARS-CoV-2 variants:

Since the last update on 15 December 2022 and as of 21 December 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:

The BA.2.75 descendant lineages BN.1 and CH.1.1 were added as variants under monitoring. Both lineages were introduced in the EU/EEA in early autumn 2022 and are currently circulating at low proportions. BN.1 and CH.1.1 have acquired several of the immune escape mutations present in the current complex variant landscape and have showed an increase in growth rate in the recent weeks.

Currently the GISAID EpiCoV pango-lineage assignments of BA.2.75 sub-lineages are unreliable. Many of the BA.2.75 sub-lineages get misclassified to parent lineage BA.2.75 in GISAID EpiCoV, including CH.1.1 and BN.1. ECDC is therefore currently monitoring CH.1.1 by the mutational proxy NSP16:Q28R, Spike:K444T and Spike:L452R, and BN.1 by the proxy Spike:K356T, Spike:F490S and Spike:R346T.

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 spread and potential impact of the SARS-CoV-2 Omicron variant of concern in the EU/EEA, 19th update](#)'.

Detailed country-specific COVID-19 updates are 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 it becomes available. Of particular interest is information on virus characterisation and evidence regarding changes in disease severity, virus transmissibility, immune evasion, and effects on diagnostics and therapeutics. Case reporting should continue through TESSy.

Further information:**Summary:**

- At the end of week 50 (week ending 18 December 2022), the pooled EU/EEA notification rate of COVID-19 cases among people aged 65 years and older increased by 7% compared with the previous week, reaching 43% of the maximum value reported during the pandemic.
- Since the last update on 15 December 2022 and as of 21 December 2022, the BA.2.75 descendant lineages BN.1 and CH.1.1 were added as variants under monitoring. ECDC is currently monitoring CH.1.1 by the mutational proxy NSP16:Q28R, Spike:K444T and Spike:L452R and BN.1 by the proxy Spike:K356T, Spike:F490S and Spike:R346T.

COVID-19 surges expected in China**Situation**

High levels of SARS-CoV-2 infections and increased pressure on healthcare services in China are anticipated due to low population immunity and the relaxation of non-pharmaceutical intervention measures.

The chief epidemiologist of the Chinese Centre for Disease Control and Prevention, Wu Zunyou, spoke at a conference in Beijing on December 17, hypothesising that the current COVID-19 outbreak in China would peak this winter and run in three waves in the coming three months. The first wave would run from the present time until mid-January; the second wave would be triggered by the Lunar New Year celebrations on 21 January 2023; and a third wave in February as people return to work following the holiday period.

Meanwhile, analysts continue to monitor the situation in China closely. Projection models published by the Institute for Health Metrics and Evaluation at the University of Washington anticipate steep increases in infections, hospitalisations and deaths through April 2023. They estimate that approximately one-third of China's population will be infected by April 2023, leading to COVID-related deaths of around 300 000 people by that time, and over 1 million total COVID-related deaths in China by the end of 2023. One preprint study forecasts 1 million deaths in China over the next few months. However, researchers have suggested that some mortality could be averted by rapid implementation of measures, including expanded rollout of a fourth vaccine dose, the provision of antiviral medications, and widespread mask usage.

It is not possible to validate which SARS-CoV-2 variants are currently circulating in China and in which proportions, due to a sharp drop in sequence depositions to GISAID from China since August 2022 (there are only 17 sequences from samples collected and deposited between 1 September and 20 December 2022). However, two of the variants believed to be circulating in China, BF.7 and BA.5, have already circulated widely in the EU/EEA and have been replaced by other variants.

ECDC Assessment

Given higher population immunity in the EU/EEA, as well as the prior emergence and subsequent replacement of variants currently circulating in China by other Omicron sub-lineages in the EU/EEA, a surge in cases in China is not expected to impact the COVID-19 epidemiological situation in the EU/EEA.

ECDC Actions

ECDC closely monitors the situation in China through epidemic intelligence and is in contact with the China CDC. ECDC continues to routinely monitor and report on emerging SARS-CoV-2 variant threats via its Strategic Analysis of Variants in Europe (SAVE) Working Group, where variants and epidemiological trends in countries neighbouring China as well as in the EU/EEA will continue to be evaluated.

Last time this event was included in the CDTR: [12/22/2022](#)

2. *C. diphtheriae* among migrants – Europe – 2022

Overview:

Summary: As of 21 December 2022, and since the last update on 13 December 2022, four countries have reported new cases of diphtheria: Austria (2), Belgium (5), Germany (52), and the United Kingdom (9).

Background: Since the beginning of 2022, and as of 21 December 2022, there have been 231 cases of diphtheria among migrants reported by eight EU/EEA countries: Austria (61), Belgium (25), France (14), Germany (116), Italy (2), the Netherlands (5), Norway (7) and Spain (1). Cases have also been reported in Switzerland (25) and the United Kingdom (62), bringing the overall number for Europe to 318.

Among these cases, the majority presented with the cutaneous form of the disease (n=221), 46 cases had respiratory diphtheria, four cases had both respiratory and cutaneous presentations, 28 cases were asymptomatic, and information was missing for 19 cases. All cases were caused by toxigenic *C. diphtheriae*, and the majority were detected in male migrants aged 8–49 years.

ECDC has no data indicating further transmission and outbreaks of *C. diphtheriae* in the broader EU/EEA population resulting from the increased number of diphtheria cases observed.

On 11 November 2022, the United Kingdom Health Security Agency (UKHSA) published updated guidelines on the [public health control and management of diphtheria in England](#) as well as a [supplementary guidance](#) document for cases and outbreaks in asylum seeker accommodation settings.

On 3 November 2022, [a rapid communication](#) published in *Eurosurveillance* reported two *C. diphtheriae* isolates in Switzerland possibly linked to the increase observed in the EU/EEA, and an unusually broad predicted resistance to common oral and parenteral antibiotics. According to the authors, these findings challenged the treatment options for bacterial co-infections in the wounds of the cases.

On 17 November 2022, [another rapid communication](#) was published in *Eurosurveillance*, in which phenotypic and predicted resistance data from cases in Germany confirmed the predicted resistance profile observations from the two isolates in Switzerland.

On 1 December 2022, the UKHSA released '[Supplementary guidance for cases and outbreaks in asylum seeker accommodation settings](#)', in which antimicrobial susceptibility testing of all *C. diphtheriae* isolates is recommended.

ECDC assessment:

Diphtheria is a rare disease in EU/EEA countries. According to [WHO/UNICEF](#), immunisation coverage estimates for DTP3 in 2021 in the EU/EEA varied across Member States, ranging from 85% (Austria) to 99% (Greece, Hungary, Luxembourg, Malta and Portugal). Universal immunisation is the only effective method for preventing the toxin-mediated disease. This includes the administration of a booster dose of diphtheria toxoid if more than 10 years have passed since the last dose. The occurrence of the disease in fully vaccinated individuals is very rare. The increase in cases reported among this group and the occurrence of similar outbreaks in several EU/EEA countries recently is unusual and needs to be carefully monitored, alongside the implementation of necessary public health measures to avoid the occurrence of more cases and further spread.

In this context, the probability of developing the disease is very low for individuals residing in the community, provided they have completed a full diphtheria vaccination series and have an up-to-date immunisation status. Nevertheless, the possibility of secondary infections in the community cannot be excluded and severe clinical diphtheria is possible in unvaccinated or immunosuppressed individuals.

In exposed unvaccinated or immunosuppressed individuals in migrant centres, a severe outcome following a diphtheria infection is possible. Nevertheless, the impact of the disease for individuals with a completed course of diphtheria vaccination is considered to be low. Given the moderate probability of exposure and the potential individual impact as described above, the risk is considered to be moderate for unvaccinated or immunosuppressed individuals in migrant reception centres or other similar crowded settings in the EU/EEA, but low for fully vaccinated individuals in those settings.

The occurrence of isolates (in other European countries) showing a genomic profile suggestive of antimicrobial resistance similar to that observed in Switzerland and Germany cannot be ruled out. However, [these findings](#) are preliminary and more evidence would be needed before assessing the potential implications of these observations, including the adaptation of the currently recommended antibiotic treatment regimes. In view of these ongoing developments, ECDC recommends, as a precautionary measure, that antimicrobial susceptibility testing is performed on all *C. diphtheriae* isolates.

On 6 October 2022, ECDC published a [Rapid Risk Assessment \(RRA\)](#) on the increase of reported diphtheria cases among migrants in Europe due to *Corynebacterium diphtheriae*, stressing the importance of universal immunisation with diphtheria toxoid-containing vaccines. Options for responses recommended in this RRA included:

- Identification and vaccination of individuals residing in migrant centres who have incomplete vaccination status.
- Provision of information to migrant centres' health service providers for the rapid identification and isolation of possible cases pending diagnostic confirmation.
- Respiratory droplet isolation of all confirmed or suspected cases with respiratory diphtheria.
- Contact precautions, such as avoiding contact with wounds and the dressing of wounds, for confirmed and suspected cases of cutaneous diphtheria.
- Isolation of all confirmed cases (respiratory and cutaneous presentation) until the elimination of the organism is demonstrated by two negative cultures obtained at least 24 hours apart after the completion of antimicrobial treatment.
- Identification of close contacts, including the personnel providing assistance, especially if they have performed procedures without appropriate personal protective equipment (PPE).
- Antimicrobial post-exposure prophylaxis and vaccination of incompletely vaccinated or unvaccinated close contacts.
- Alerting clinicians to the possibility of cutaneous and/or respiratory diphtheria among migrants and travellers returning from endemic areas.

- Collection of data on the country of origin and migratory route from all suspected diphtheria cases.
- Up-to-date vaccination status for all personnel working in reception centres for migrants.
- Limiting situations of overcrowding in migrant centres, verification of the availability of laboratory diagnostics in each country.
- Timely reporting to authorities of cases confirmed according to the EU case definition for diphtheria.
- Enhanced surveillance, including molecular typing and whole genome sequencing of patient isolates to improve the understanding and monitoring of transmission patterns.

Additional ECDC tools may be of relevance during outbreak investigation activities, such as, the [Expert Opinion on the public health needs of irregular migrants, refugees or asylum seekers across the EU's southern and south-eastern borders](#), the [Handbook on implementing syndromic surveillance in migrant reception/detention centres and other refugee settings](#) and the [Handbook on using the ECDC preparedness checklist tool to strengthen preparedness against communicable disease outbreaks at migrant reception/detention centres](#).

Actions:

ECDC continues to monitor this event through its epidemic intelligence activities and will provide weekly updates. The latest information available can be found on EpiPulse.

On 6 October 2022, ECDC published a [Rapid Risk Assessment \(RRA\)](#) on the increase of reported diphtheria cases among migrants in Europe due to *Corynebacterium diphtheriae*. The conclusions and options for response proposed in this RRA remain valid for this event. Additionally, on 5 December 2022, ECDC published an epidemiological update on the [Increase of reported diphtheria cases among migrants in Europe due to *Corynebacterium diphtheriae*, 2022](#).

Last time this event was included in the CDTR: [12/22/2022](#)

Additional links: [3672](#)

3. Mpox - Multi-country - 2022

Overview:

Update:

Since the last update on 6 December 2022, and as of 20 December 2022, 25 mpox cases have been reported from three EU/EEA countries: Sweden (13), Italy (8) and Spain (4).

Summary:

EU/EEA

Since the start of the mpox outbreak and as of 20 December 2022, 21 055 confirmed cases of mpox have been reported from 29 EU/EEA countries: Spain (7 496), France (4 110), Germany (3 675), the Netherlands (1 255), Portugal (943), Italy (932), Belgium (790), Austria (327), Sweden (250), Ireland (225), Poland (214), Denmark (192), Norway (93), Greece (85), Hungary (80), Czechia (71), Luxembourg (57), Slovenia (47), Romania (46), Finland (42), 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 (3), Belgium (1) and Czechia (1).

Western Balkans and Türkiye:

Since the start of the mpox outbreak and as of 20 December 2022, the following Western Balkan countries have reported confirmed cases of mpox: 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.

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

Public Health Emergency of International Concern (PHEIC): On 23 July 2022, the Director-General of the World Health Organization (WHO) [declared](#) the global mpox outbreak a Public Health Emergency of International Concern (PHEIC). On 1 November 2022, [WHO](#) advised that the multi-country outbreak of mpox still met the criteria included in the definition of a PHEIC set out in Article 1 of the International Health Regulations (2005) (IHR).

ECDC assessment:

The weekly number of mpox 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 behavioural changes, increasing immunity in the most affected population groups 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.

Mpox continues to primarily affect young men who have sex with men (MSM), between 18 and 50 years (87%). Mass gatherings in summer and specific sexual practices facilitated the transmission of mpox among MSM groups. 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 differ from what has been described in past outbreaks of mpox in endemic countries, where symptoms were mainly mild. Only a few severe cases (including encephalitis) leading to hospitalisations and five deaths have been reported by Spain (3), Belgium (1), and Czechia (1).

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

Response options for 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 as well as 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](#), 'Mpox 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 mpox page](#).

ECDC offers laboratory support to Member States and collaborates with stakeholders on risk communication activities, such as targeted messaging for the general public and MSM communities. ECDC provided guidance to countries hosting events during the summer as well. ECDC also provides 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.

Last time this event was included in the CDTR: [12/22/2022](#)

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

4. Mass gathering monitoring - the FIFA World Cup 2022 Qatar

Overview:

The 2022 FIFA World Cup took place between 20 November and 18 December 2022 in Qatar. Thirty-two countries participated in this event, including nine EU Member States: Belgium, Croatia, Denmark, France, Germany, the Netherlands, Poland, Portugal, and Spain. A total of 64 matches took place in eight stadiums spread across five Qatari cities. It was expected that approximately **1.5 million** football fans from around the world would travel to Qatar during this event, some of them staying outside of the country. The **FIFA Fan Festival** took place at the Al Bidda Park in Doha, and was open every day of the tournament from 19 November to 18 December.

Since the last update and as of 21 December 2022, ECDC and networking partners have detected one local event in Qatar related to the World Cup through epidemic intelligence activities.

On 16 December 2022, the [media](#) reported that five French football players developed respiratory symptoms (fever, sore throat, feeling unwell) during the 2022 FIFA World Cup in Qatar.

Overall, in the monitoring period, the following national teams reported one or several team members having respiratory or other symptoms during the 2022 FIFA World Cup in Qatar: [Brazil](#), [England](#), [France](#), the [Netherlands](#), [Senegal](#) and [Switzerland](#).

Three journalists died while at work in the 2022 FIFA World Cup. The cause of death for all three reportedly was not related to communicable diseases.

In addition, the [Ministry of Health in Argentina](#) issued a recommendation on 19 December 2022, for returning travellers from Qatar and/or other Middle Eastern countries. The travellers should immediately contact healthcare providers if they develop fever and rash, or fever and cough, or respiratory distress within three weeks upon return. The recommendation aims at detecting imported cases of measles, rubella, poliomyelitis and MERS-CoV.

Below, we provide a short epidemiological summary related to global or regional public health threats from infectious diseases:

COVID-19: Since the beginning of the pandemic, and as of 21 December 2022, the [Qatar Ministry of Public Health](#) has reported 487 321 SARS-CoV-2 positive cases including 685 deaths. Qatar has a relatively high vaccination rate for COVID-19, with 98.86% of eligible individuals fully vaccinated with the primary series ([Qatar MoPH, WHO](#)). Since 1 November 2022, visitors have no longer been required to present a negative [COVID-19](#) PCR or rapid antigen test result before travelling to Qatar.

MERS-CoV: No new cases of MERS-CoV have been reported during the current week of reporting. In 2022, there have been two cases of MERS-CoV reported in Qatar (one in March and one in October), and since 2012 there have been 28 cases. Globally, 2 600 cases of MERS-CoV have been reported since 2012, with most of the cases reported in Saudi Arabia.

Mpox: No new cases have been reported in Qatar since September 2022. In 2022, five cases of [mpox](#) have been reported in Qatar, with the first case being imported.

This is the final weekly monitoring report for the 2022 FIFA World Cup in Qatar. Overall, no major events related to communicable diseases have been detected during this large mass gathering event.

ECDC assessment:

As is often the case with mass gathering events, during the 2022 FIFA World Cup in Qatar, visitors were most at risk of gastrointestinal illnesses and vaccine-preventable infections. Therefore travellers from the EU/EEA going to the event were advised to be vaccinated in accordance with their national immunisation programme, and to ensure that they were vaccinated against seasonal influenza and had taken updated boosters for COVID-19, as recommended by their respective national authorities. The following measures were recommended: employing standard hygiene measures, including regular handwashing with soap; drinking safe water (bottled, chlorinated or boiled before consumption); eating thoroughly cooked food and carefully washing fruits and vegetables with safe drinking water before consumption; and staying at home or in a hotel room when sick. The risk for EU/EEA citizens of becoming infected with communicable diseases during the 2022 FIFA World Cup in Qatar is considered low if travellers observed the suggested measures before, during, and after the event.

Actions:

ECDC's epidemic intelligence team monitored this event in collaboration with global partners between 14 November and 22 December 2022.

Last time this event was included in the CDTR: [12/22/2022](#)

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

Overview:

Overview: Since the last update on 15 December and as of 22 December 2022, no new cases of Sudan virus disease (SVD) have been reported.

According to the World Health Organization ([WHO](#)), as of 19 December 2022, there have been 142 confirmed cases of SVD, of which 55 died (CFR: 39%), and 87 recovered. In addition, 22 deaths among probable cases have been [reported](#) in individuals who died before a sample was taken. At least 19 healthcare workers have been infected and seven of them have died.

As of 19 December 2022, there are no active contacts under follow up, and 4 525 contacts have completed the 21-days follow-up period.

The last reported case was a stillborn 32-week-old male delivered on 27 November 2022 to a woman who survived SVD late in her pregnancy. This case was confirmed after a period of 13 days with no confirmed cases.

Overall, there have been nine Ugandan districts affected by this outbreak: Bunyangabu, Jinja, Kagadi, Kampala, Kassanda, Kyegegwa, Masaka, Mubende, and Wakiso. Bunyangabu, Kagadi, Kyegegwa and Masaka have completed two incubation cycles of the virus without reporting any cases.

On 17 December 2022, all the preventative measures and restrictions that were applied on [15 October](#) in the Kassanda and Mubende districts to curb the spread of SVD were lifted, as [announced](#) by the Ugandan Vice President.

Background: On 20 September 2022, the Ministry of Health in Uganda, together with the World Health Organization Regional Office for Africa, confirmed an outbreak of SVD in Mubende District, Uganda, after one fatal case was confirmed.

The index case was a 24-year-old man, a resident of Ngabano village in the Madudu sub-county in Mubende District. The patient experienced high fever, diarrhoea, abdominal pain, and began vomiting blood on 11 September 2022. Samples were collected on 17 September 2022 and SVD was laboratory-confirmed on 19 September. The patient died on the same day, five days after hospitalisation.

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. As of **16 November 2022**, all travellers departing from or arriving at the Entebbe International Airport in Uganda are required to complete a health declaration form.

On 8 December 2020, the **Ministry of Health of Uganda** announced that 1 200 doses of vaccine had arrived in the country which would be used in the Tokomeza Ebola vaccine trial. This was the first batch of one of three vaccine candidates. According to the **Sabin Vaccine Institute**, the doses were made by them, and they would make another 8 500 doses available to WHO on a rolling basis through January. SVD outbreaks have previously occurred in Uganda (four outbreaks) and Sudan (three outbreaks). The last SVD outbreak in Uganda was in 2012.

ECDC assessment:

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

The current probability that EU/EEA citizens living in or travelling to SVD-affected areas of Uganda will be exposed to the virus is very low, provided that they adhere to the recommended precautionary measures. Transmission requires direct contact with blood, secretions, organs or other bodily fluids of dead or living infected people or animals; all of which are unlikely for EU/EEA tourists or expatriates in Uganda.

Given that infection with Sudan ebolavirus leads to severe disease but that the probability of exposure for EU/EEA citizens is very low, the impact for EU/EEA citizens living and travelling in affected areas of Uganda is considered low. Overall, the current risk for EU/EEA citizens living in 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 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 Transport Association (IATA), in 2019, there were about 126 000 travellers arriving in the EU/EEA from Uganda. However, importation of cases by travellers is considered unlikely, based on previous experience from the largest Ebola disease outbreak in West Africa to date (2013–2016, due to Zaire ebolavirus), where thousands of cases were reported, with transmission in large urban centres, and the deployment of hundreds of EU/EEA humanitarian and military personnel to the affected areas.

The likelihood of secondary transmission of Sudan ebolavirus within the EU/EEA and the implementation of sustained chains of transmission within the EU/EEA is very low, as cases will be promptly identified and isolated, with follow-up control measures implemented. During the large Ebola disease 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 cared for an evacuated patient. The impact of SVD for EU/EEA citizens living in the EU/EEA is considered low, and overall the current risk of SVD for the citizens in the EU/EEA is considered very low.

Actions:

ECDC is monitoring this situation through its epidemic intelligence activities, and will report relevant updates weekly. 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 2022, ECDC deployed an expert to Uganda to support the Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO) country office and the overall outbreak response.

On 9 November 2022, ECDC published a rapid risk assessment, '**Risk of Sudan virus to EU/EEA citizens considered very low**'.

Further information:

EU/EEA visitors and residents in affected areas of Uganda should observe 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 the screening of travellers returning from Uganda would not be an effective measure to prevent introduction of the disease into Europe. Screening incoming travellers is time- and resource-consuming and will not effectively identify 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/with Uganda, based on available information for the current outbreak.

The licensed vaccines available protect against Ebola disease resulting from Zaire ebolavirus. There are no licensed vaccines against SVD, and there are no data available 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 is an additional challenge in the control of this outbreak.

Summary:

- Since the last update on 15 December and as of 22 December 2022, no new cases of Sudan virus disease (SVD) have been reported.
- As of 17 December 2022, all remaining lockdown measures in Kassanda and Mubende have been lifted.

Additional Sources:

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

Last time this event was included in the CDTR: [12/22/2022](#)

Additional links: [3660](#)

Maps and graphs

Figure 1. Ebola disease cases reported in Uganda in 2022, by week of reporting.

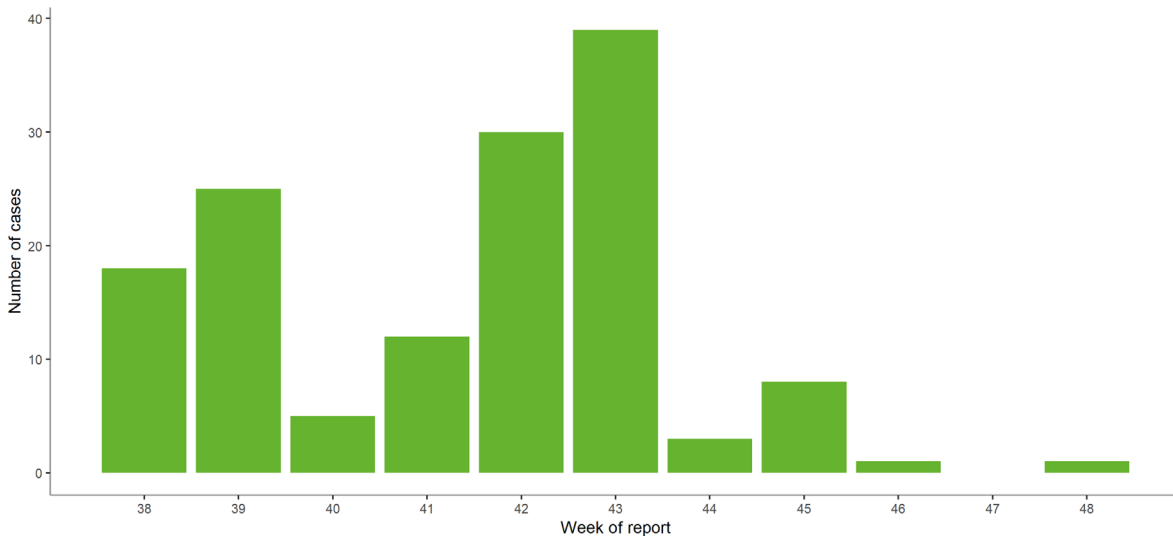
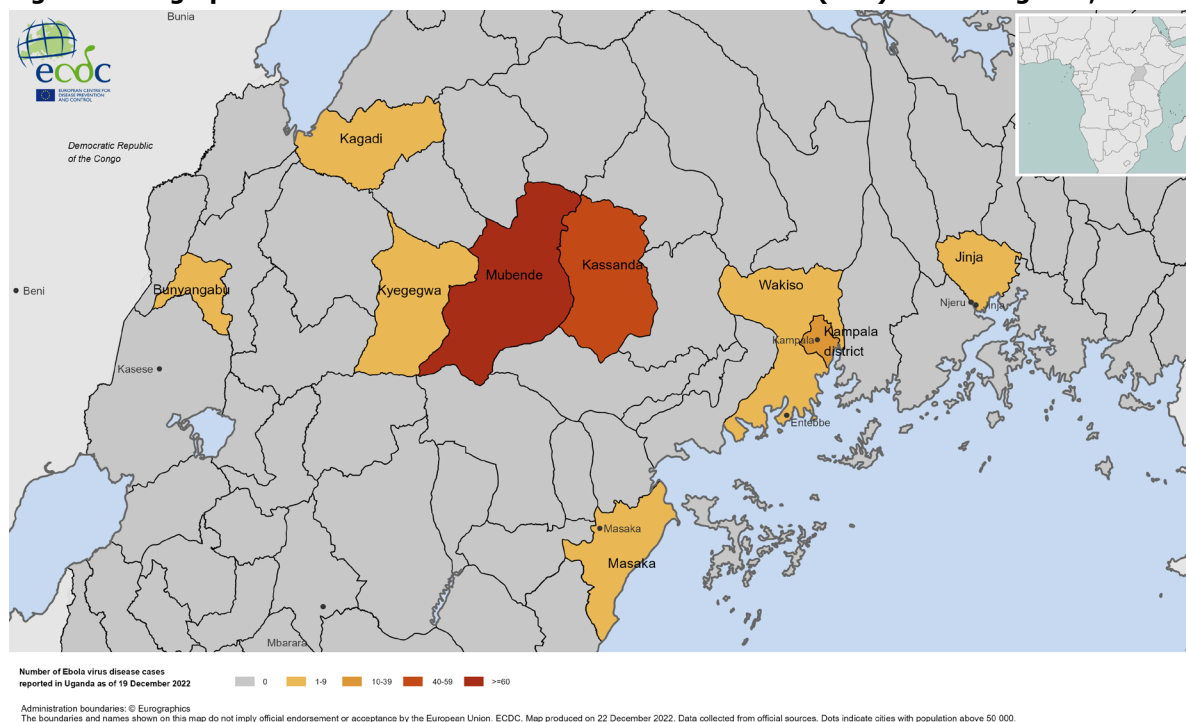


Figure 2. Geographical distribution of cases of Sudan virus disease (SVD) cases in Uganda, 2022.

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

Overview:

Summary

Since the last update on 21 November 2022, 70 535 new suspected cholera cases including 478 deaths have been reported worldwide.

Countries and territories reporting new cases since the previous update are: Afghanistan, Bangladesh, Cameroon, Democratic Republic of the Congo, Haiti, Kenya, Lebanon, Malawi, Mozambique, Nigeria, Philippines, South Sudan, and Syria.

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

Americas

Haiti: Since the last update, 9 502 suspected cholera cases including 56 deaths have been reported in Haiti. In 2022 and as of 18 December, a total of 17 140 suspected cholera cases including 207 deaths have been reported in the country.

No additional cholera cases have been reported in other regions of the Americas in 2022.

Africa

Cameroon: Since the last update, 1 538 suspected cholera cases including 50 deaths have been reported in Cameroon. In 2022 and as of 24 November, a total of 13 796 suspected cases including 295 deaths have been reported in the country.

Democratic Republic of the Congo (DRC): Since the last update, 2 257 suspected cholera cases including 31 deaths have been reported in the DRC. In 2022, and as of 4 December, a total of 13 713 suspected cholera cases including 242 deaths (CFR: 1.8%) have been reported in 96 health zones across 17 provinces of the DRC. According to the World Health Organization Regional Office for Africa (WHO/AFRO), the most affected provinces are South Kivu, Haut-Lomami, Tanganyika, and North Kivu.

Kenya: Since the last update, 1 139 suspected cases including 26 deaths have been reported in Kenya. In 2022, and as of 5 December, a total of 1 552 cases including 30 deaths (CFR: 1.9%) have been reported in the country.

Malawi: Since the last update, Malawi has reported 2 278 confirmed cholera cases, including 58 deaths. In 2022, and as of 29 November, a total of 10 652 cholera cases including 310 deaths (CRF: 2.9%) have been reported in the country. According to the Malawian Ministry of Health, 29 districts have reported cholera cases since March

2022. So far, the outbreak has been controlled in four health districts but is still ongoing in 25 districts. The most affected districts are Mangochi, Nkhata Bay, Salima, Nkhotakota, and Rumphu.

Mozambique: Since the last update, 173 suspected cholera cases have been reported in Mozambique. In 2022 and as of 13 November, a total of 3 858 suspected cholera cases including 19 fatalities (CFR: 0.5%) have been reported in the country.

Niger: Since the last update, no new cholera cases have been reported in Niger. In 2022 and as of 14 November, a total of 72 suspected cases including one death have been reported in the country.

Nigeria: Since the last update, 8 474 suspected cases including 210 deaths have been reported in Nigeria. In 2022 and as of 30 October, a total of 19 228 cases including 466 deaths (CFR: 2.4%) have been reported from 31 Nigerian states. Nine states – Borno (11 218 cases), Yobe (1 888 cases), Taraba (1 156 cases), Katsina (768 cases), Cross River (650 cases), Gombe (649 cases), Jigawa (537 cases) and Kano (522 cases) – account for 94% of all cumulative cases.

Somalia: Since the last update, no new cholera cases 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 in the country.

South Sudan: Since the last update, 87 suspected cholera cases have been reported from South Sudan. In 2022 and as of 20 November, a total of 424 suspected cholera cases, including one death have been reported in the country.

Tanzania: Since the last update, 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 in the country.

Asia

Afghanistan: Since the last update, 19 294 suspected cholera cases, including eight deaths have been reported in Afghanistan. In 2022 and as of 10 December, a total of 233 449 suspected cholera cases including 85 deaths have been reported. According to [WHO](#), approximately 55% of all reported cases were children below five years of age. The most affected provinces are Kabul (53 158 cases, 22.8%), Helmand (40 198 cases, 17.2%), Baghlan (16 664 cases, 7.1%), Nangarhar (12 673 cases, 5.4%) and Kandahar (12 414 cases, 5.3%),

Bangladesh: Since the last update, 11 430 suspected cholera cases have been reported in Rohingya Refugee Camp in Bangladesh. In 2022 and as of 3 December, a total of 601 638 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 between January and April this year. The remaining 140 027 cases have been reported in the Rohingya Refugee Camp in Cox's Bazar between January and November 2022.

Iraq: Since the last update, no new cholera cases have been reported in Iraq. In 2022 and as of 23 August, a total of 1 008 confirmed cholera cases and five associated fatalities have been reported in the country.

Lebanon: Since the last update, 1 765 confirmed cholera cases including four deaths have been reported from Lebanon. So far, cases have been reported from all eight governorates (Akkar, Baalbek-Hermel, Beirut, Beqaa, Mount Lebanon, North Lebanon, Nabatieh, and South Lebanon). This is the first cholera outbreak in the country since 1993. In 2022, and as of 19 December, a total of 5 328 confirmed cholera cases and 23 associated fatalities have been reported in the country.

Nepal: Since the last update, no 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, no new 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, 1 758 suspected cholera cases and 30 associated fatalities have been reported in the Philippines. In 2022 and as of 26 November, 5 860 cholera cases and 67 associate fatalities have been reported in the country.

Syria: Since the last update, 10 840 suspected cholera cases including five deaths have been reported in Syria. Between 25 August and 13 December 2022, a total of 46 409 suspected cholera cases including 97 fatalities have been reported in the country.

Taiwan: Since the last update, no new cholera cases have been reported in Taiwan. On 4 November 2022, Taiwan reported its first domestic cholera case in 2022. The case most likely contracted the disease from seafood, which was prepared and eaten at home. According to [media](#), the case was hospitalised with symptoms and fully recovered after a few days.

No updates were available on previous outbreaks reported in [Benin](#), [Burkina Faso](#), [Ethiopia](#), [India](#), [Togo](#), [Uganda](#), [Zambia](#), 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 south-east Asia over the past months. Cholera outbreaks have also been notified in the eastern and southern parts of Africa as well as in some parts of the Middle East. 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 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 the WHO, vaccination should be considered for travellers at higher risk, such as emergency and relief workers who are likely to be directly exposed to cholera. 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 fruits 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.

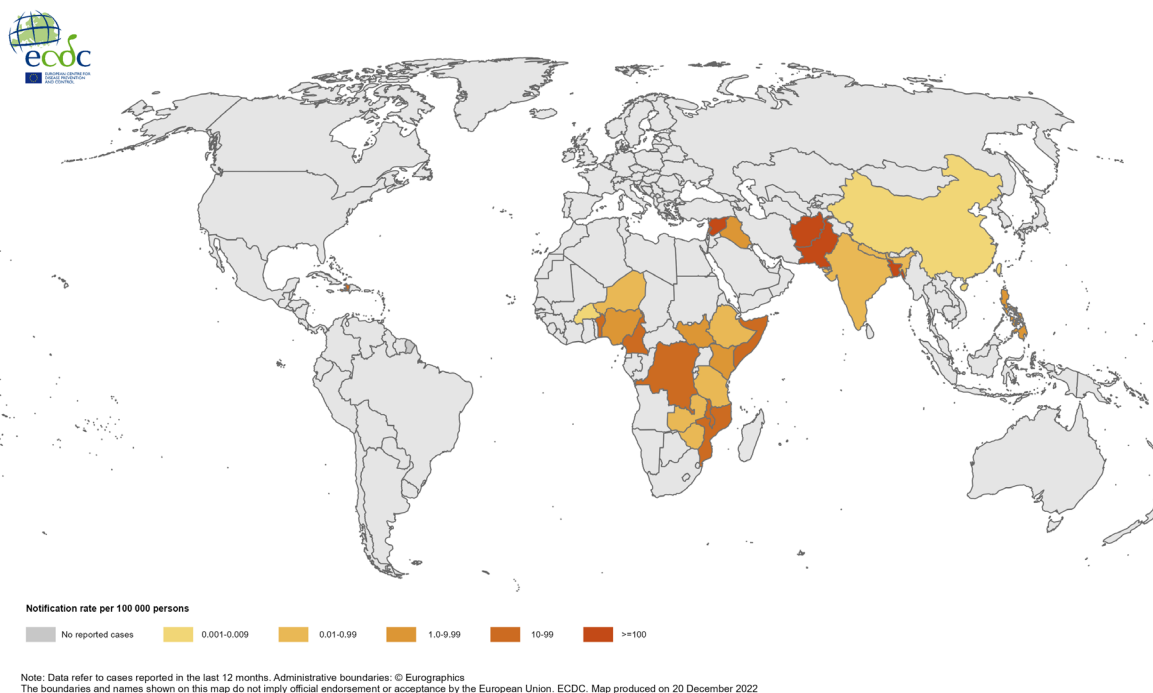
Actions:

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](#).

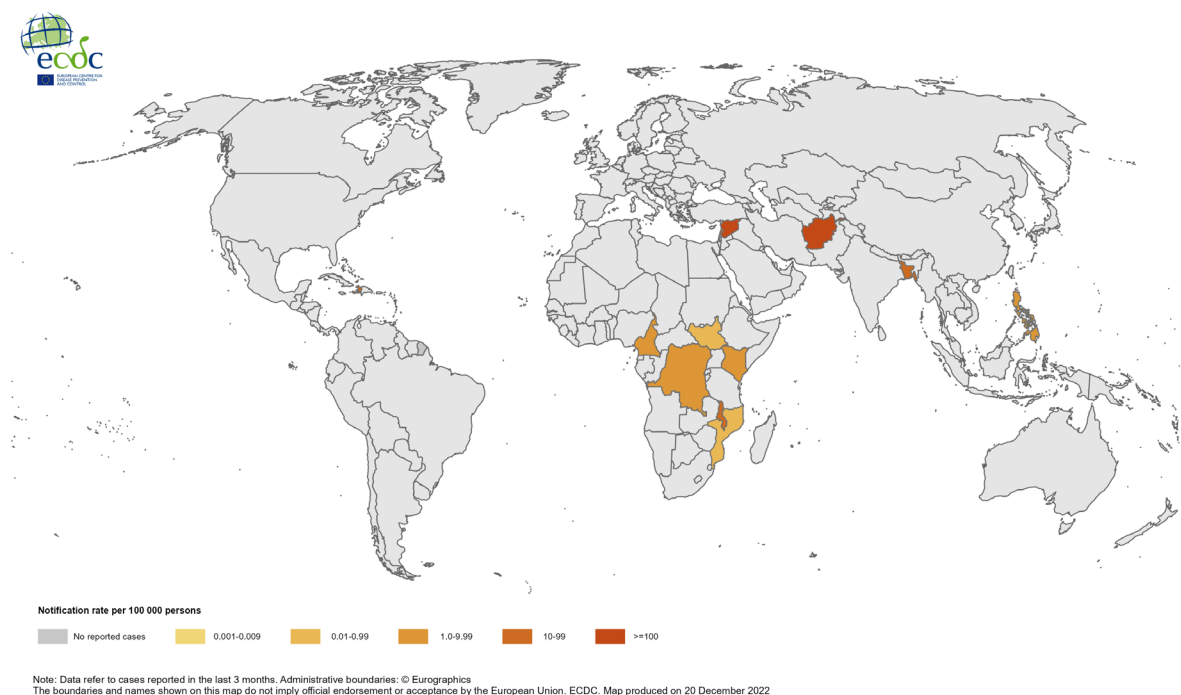
Last time this event was included in the CDTR: [12/22/2022](#)

Maps and graphs

Figure 3. Geographical distribution of cholera cases reported worldwide from January 2022 – December 2022



Source: ECDC

Figure 4. Geographical distribution of cholera cases reported worldwide from October 2022 – December 2022

Source: ECDC

7. Influenza A(H5N1) - Multi-country (World) - Monitoring human cases

Overview:

As of 20 December 2022, one new fatality of avian influenza A(H5N1) has been reported in Qinzhou, Guangxi province, China. The 38-year-old woman developed symptoms on 22 September 2022, was hospitalised on 25 September with severe pneumonia and died on 18 October. Before the onset of symptoms, contact with poultry was reported. No human-to-human transmission has been detected.

As of 20 December 2022, overall, there have been 868 cases, including 457 deaths (CFR: 52.6%), of human infection with avian influenza A(H5N1) reported in 21 countries, including two recent positive laboratory detections in two asymptomatic poultry farm workers in Spain in October and September 2022.

Sources: [ECDC Avian influenza](#) | [ECDC Avian influenza overview: Latest situation update of the avian influenza in EU/EEA](#) | [OIE](#) | [EFSA](#) | [WHO](#) | [Press release of the Hong Kong Special Administrative Region](#)

ECDC assessment:

Avian influenza H5N1 viruses of clade 2.3.4.4b have been causing the largest outbreak in Europe in the 2021–2022 epidemic season and are continuously circulating among wild birds transmitting to poultry farms. In autumn 2021, these viruses have been introduced to Northern America via wild birds and have since then spread within Canada and the United States. Similar viruses have also been introduced into African countries through migratory birds as well as in Asian countries and the Middle East. Human cases related to the avian influenza of clade 2.3.4.4b have been reported from different countries over the last couple of years. One mild human infection related to the H5N1 viruses circulating in 2021 and 2022 has been reported in the United Kingdom, one case with mild symptoms in the United States in 2022, and two positive samples detected in asymptomatic poultry farm workers in Spain in autumn 2022, as well as several transmission events to other mammalian species such as foxes, seals, minks, etc. However, current epidemiological and virological evidence suggests that A(H5N1) viruses retain to be avian-like viruses and have not acquired the ability to transmit to humans or even between humans. Therefore, the likelihood of sustained human-to-human transmission is low.

The risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered to be low. The risk to occupationally exposed groups such as cullers has been assessed as low to medium. Direct contact with infected birds or a contaminated environment is the most likely source of infection and the use of personal protective measures for people exposed to dead birds or their droppings will minimise the remaining risk.

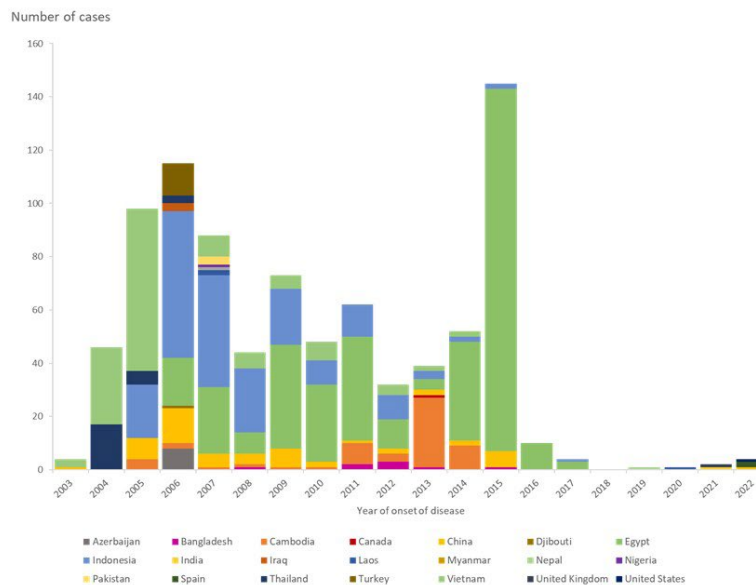
Actions:

ECDC monitors avian influenza strains through its influenza surveillance programme and epidemic intelligence activities, and in collaboration with EFSA and the EU reference laboratory for avian influenza, in order to identify significant changes in the virological characteristics and epidemiology of the virus. ECDC, together with EFSA and the EU reference laboratory for avian influenza, produces a quarterly updated report of the [avian influenza situation](#). The most recent report was published on 20 December 2022.

Last time this event was included in the CDTR: [12/22/2022](#)

Maps and graphs

Figure 5. Distribution of confirmed human cases of avian influenza A(H5N1) virus infection by year of onset and country, 2003–2022 (updated on 20 December 2022, n=868)



Source: ECDC

8. Influenza A(H9N2) - Multi-country (World) - Monitoring human cases

Overview:

Update: As of 20 December 2022 and since the previous case reported on 26 September 2022, one new case of human infection with avian influenza A(H9N2) was reported from China. The case is a [three-year-old boy](#) from Dingxi, Gansu province with onset of symptoms on 20 September 2022.

Summary: To date, and since 1998, a total of 115 laboratory-confirmed cases, including two deaths, of human infection with avian influenza A(H9N2) viruses have been reported, from China (102), Egypt (4), Bangladesh (3), Cambodia (2), Oman (1), Pakistan (1), India (1), and Senegal (1). Most of the cases were children with mild disease.

Source: [Hong Kong Centre for Health Protection, Avian Influenza Report](#)

ECDC assessment:

Sporadic human cases of avian influenza A(H9N2) have been observed, but no cases of human-to-human transmission have been documented. The use of personal protective measures for people directly exposed to poultry and birds potentially infected with avian influenza viruses will minimise the risk of infection. The risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered to be very low as relevant A(H9N2) viruses are not circulating in the poultry population or present in wild birds in Europe.

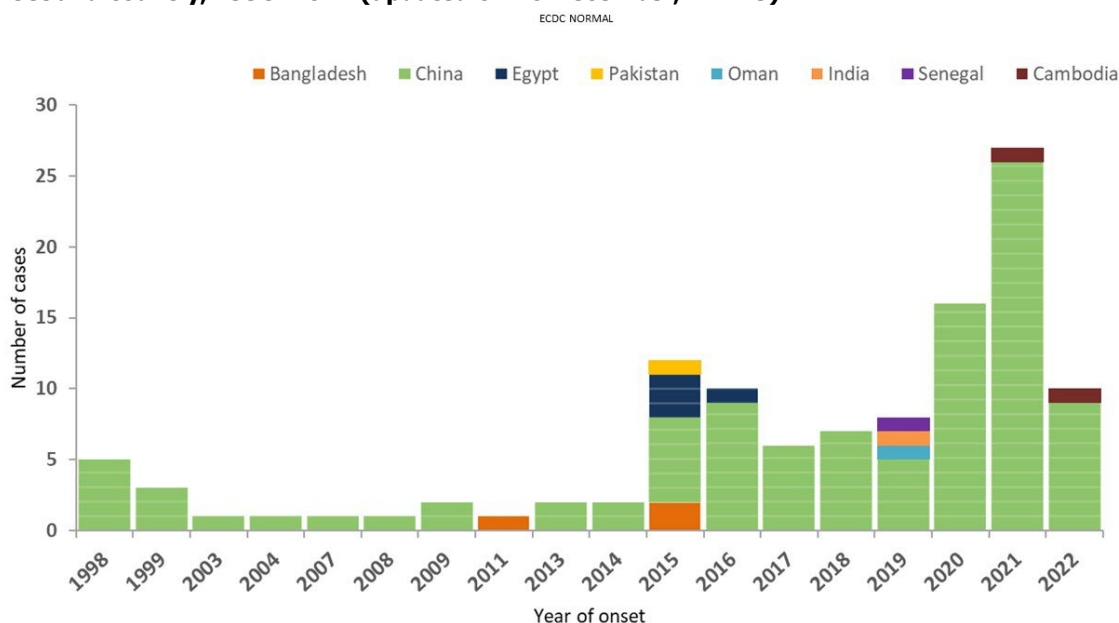
Actions:

ECDC monitors avian influenza strains through its epidemic intelligence activities, the disease experts and in collaboration with EFSA and the EU reference laboratory for avian influenza, in order to identify significant changes in the epidemiology of the virus. ECDC, together with EFSA and the EU reference laboratory for avian influenza, produces a quarterly updated [report on the avian influenza situation](#). The most recent report was published on 20 December 2022.

Last time this event was included in the CDTR: [12/22/2022](#)

Maps and graphs

Figure 6. Distribution of confirmed human cases of avian influenza A(H9N2) virus infection by year of onset and country, 1998–2022 (updated on 20 December, n=115)



Source: ECDC

9. Human cases with swine influenza A(H1N2) variant virus - Multi country - 2022

Overview:

As of 20 December 2022, one new case of influenza variant A(H1N2)v virus human infection has been reported in Taiwan since the previous cases reported on 26 September 2022. A(H1N2)v was detected in a [seven-year-old girl](#) from central Taiwan. She developed mild symptoms in October 2022 and recovered afterwards. Exposure history is unknown; and among six family members, two developed respiratory symptoms, but tested negative to influenza. No human-to-human transmission has been detected.

Summary: Overall globally, in 2022 and as of 20 December 2022, six influenza variant A(H1N2)v virus human infections have been reported in the United States (4), the Netherlands (1), and China (1). In 2021, 12 cases were reported with influenza variant A(H1N2)v virus human infection in the United States (5), Austria (2), Canada (2), France (2), and China (1).

Source: [outbreak news today](#)

ECDC assessment:

Sporadic human cases infected with an influenza virus of swine origin have been reported from several countries globally and in the EU/EEA and are not unexpected. Exposure to pigs or pig products have been reported in the past and represent the most common risk factor. Transmission events have also been observed in healthy people without underlying conditions. The cases need to be followed-up to identify human-to-human transmission and implement control measures. Viruses from patients with severe conditions and an influenza-positive test should be further characterised, as well as shared with the national influenza reference laboratories and WHO Collaborating Centres.

Actions:

ECDC is monitoring zoonotic influenza events through its epidemic intelligence activities and disease experts, in order to identify significant changes in the epidemiology of the virus. Cases should be reported immediately to EWRS and IHR.

Last time this event was included in the CDTR: [12/22/2022](#)

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

Overview:

Chikungunya virus disease: In 2022, and as of 19 December, 363 206 cases and 76 deaths have been reported. The majority of cases have been reported from Brazil (247 537), India (108 957), Guatemala (1 800), Thailand (1 109), and Paraguay (936). Deaths have been reported from Brazil (75) and Kenya (1). Since the previous CDTR published on week 48, 2022, 1 185 new cases have been reported, with no new deaths. The five countries reporting most new cases are: Paraguay (552), Thailand (267), Guatemala (185), Malaysia (75), and Peru (47).

Dengue: In 2022, and as of 19 December, 3 766 153 cases and 3 582 deaths have been reported. The majority of cases have been reported from Brazil (2 182 229), Vietnam (325 604), Philippines (201 509), India (110 473) and Indonesia (94 355). The majority of deaths have been reported from Brazil (929), Vietnam (112), Philippines (656), India (86) and Indonesia (853). Since the previous CDTR published on week 48, 2022, 122 384 new cases and 200 new deaths have been reported. The five countries reporting most new cases are: Vietnam (21 967), Bangladesh (15 010), Philippines (13 949), Pakistan (11 443) and Nicaragua (8 444). The countries reporting most new deaths are Pakistan (52), Philippines (43), and Bangladesh (34).

In the EU and as of 12 December 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

In 2022, and up to 10 December, the [WHO Pan American Health Organization](#) (PAHO) reported 251 216 chikungunya cases and 75 associated deaths, in the Americas. The five countries reporting most cases are: Brazil (247 537), Guatemala (1 800), Paraguay (936), Peru (351), and Bolivia (198). This is an increase of 838 cases since the last update. There have been no deaths since the last update.

Asia

India: In 2022 and as of 31 October, 108 957 cases, including 5 320 confirmed cases and no deaths, have been reported.

Malaysia: In 2022 and as of 10 December, 763 confirmed cases and no deaths have been reported. This is an increase of 75 confirmed cases since 12 November 2022.

Philippines: In 2022 and as of 12 November, 551 confirmed cases and no deaths have been officially reported by the Department of Health's periodic Surveillance Report. This is an increase of four confirmed cases since 29 October 2022.

Thailand: In 2022 and as of 27 November, 1 109 cases and no deaths have been reported. This is an increase of 267 cases since 10 November 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 6 November, 291 cases, including five confirmed cases and one death, have been reported.

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

Australia and the Pacific

No autochthonous cases have been reported in 2022.

Dengue

Europe

France: In 2022, and as of 12 December, France has reported nine outbreaks with a total of 65 locally acquired cases of dengue. According to **French authorities**, all nine outbreaks are now considered as over.

Americas and the Caribbean

In 2022, and up to 10 December, PAHO reported 2 586 453 cases of dengue and 1 182 associated deaths, in the Americas. The five countries reporting most cases are: Brazil (2 182 229), Nicaragua (91 305), Peru (70 296), Colombia (62 987), and Mexico (56 301). This is an increase of 35 360 cases and 13 deaths since the last update. 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**.

In the **French Antilles** up to 30 November, confirmed cases were reported from Guadeloupe (23), and Martinique (1). In Guadeloupe, the number of suspected and confirmed cases has increased sharply since October, with a total of 440 suspected cases and 23 confirmed cases.

Asia

Afghanistan: In 2022 and as of 26 November, 1 056 cases and two deaths have been reported. This is an increase of 309 cases and one death since 5 November 2022.

Bangladesh: In 2022 and up to 17 December, a total of 81 064 cases and 292 deaths have been reported by the country's **Ministry of Health** and the **WHO**. This is an increase of 15 010 cases and 34 deaths since 22 November 2022.

Cambodia: In 2022 and as of 29 October, 10 189 cases and 16 deaths have been reported.

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

India: In 2022 and as of 31 October, 110 473 cases and 86 deaths have been reported.

Indonesia: In 2022 and as of 1 October, 94 355 cases and 853 deaths have been reported.

Laos: In 2022 and up to 26 November, 30 085 cases and 28 deaths have been reported.

Malaysia: In 2022 and as of 3 December, 58 239 cases and 39 deaths have been reported. This is an increase of 6 977 cases and four deaths since 5 November 2022.

Maldives: In 2022 and as of 30 November, 2 368 cases and no deaths have been reported. This is an increase of 1 778 cases since 11 September 2022.

Nepal: In 2022 and as of 11 December, 54 232 cases and 67 deaths have been reported. This is an increase of 1 675 cases and seven deaths since 20 November 2022.

Oman: In 2022 and as of 22 May, 127 cases and no deaths have been reported. This is an increase of 51 cases since 7 April 2022.

Pakistan: In 2022 and as of 5 December, 76 210 cases and 136 deaths have been reported. This is an increase of 11 443 cases and 52 deaths since 8 November 2022.

Philippines: In 2022 and as of 12 November, 201 509 cases and 656 deaths have been reported. This is an increase of 13 949 cases and 43 deaths since 22 October 2022.

Singapore: In 2022 and up to 16 December, 31 330 cases and 13 deaths have been reported by the country's National Environment Agency.

Sri Lanka: In 2022 and as of 16 December, 59 977 cases and no deaths have been reported. This is an increase of 4 477 cases since 22 November 2022.

Taiwan: In 2022 and as of 10 December, 20 cases and no deaths have been reported.

Thailand: In 2022 and as of 29 November, 29 225 cases and no deaths have been reported. This is an increase of 2 413 cases since 12 November 2022.

Timor-Leste: In 2022 and as of 21 October, 5 480 cases and 57 deaths have been reported.

Vietnam: In 2022 and as of 26 November, 325 604 cases and 112 deaths have been reported. This is an increase of 21 967 cases since 15 November 2022.

Africa

Côte d'Ivoire: In 2022 and as of 30 September, 380 cases and three deaths 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 3 December (end of week 48), public health authorities reported 1 189 cases and three deaths.

São Tomé and Príncipe: In 2022 and as of 27 November, 1 137 confirmed cases and 8 deaths have been reported. This is an increase of 18 confirmed cases and two deaths since 31 October 2022.

Senegal: In 2022 and as of 4 December, 156 confirmed cases and no deaths have been reported. This is an increase of 57 confirmed cases since 10 November 2022.

Sudan: In 2022 and as of 1 December, 4 101 cases, including 516 confirmed cases and 29 deaths have been reported. This is an increase of 3 025 cases and 21 deaths since 20 November 2022.

Australia and the Pacific

Australia: In 2022 and as of 17 December, 381 cases and no deaths have been reported. This is an increase of 176 cases since 16 October 2022.

Cook Islands: In 2022 and as of 19 November, 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 19 November, 22 cases and no deaths have been reported.

New Caledonia: In 2022 and as of 30 November, one confirmed case has been reported.

Palau: In 2022 and as of 19 November, 38 cases and no deaths have been reported.

Samoa: In 2022 and as of 19 November, 107 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 17 November, 134 cases and no deaths have been reported. This is an increase of 22 cases since 6 October 2022.

Wallis and Futuna: In 2022 and as of 12 November, 72 cases 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 the chikungunya and dengue viruses in mainland EU/EEA is very low, as the environmental conditions are not 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 the nine clusters in France, including a cluster of over 30 cases, has been unusual. Previously, all dengue clusters in Europe were of limited size (up to 10 cases). According to French authorities, all nine outbreaks are now considered to be over.

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.

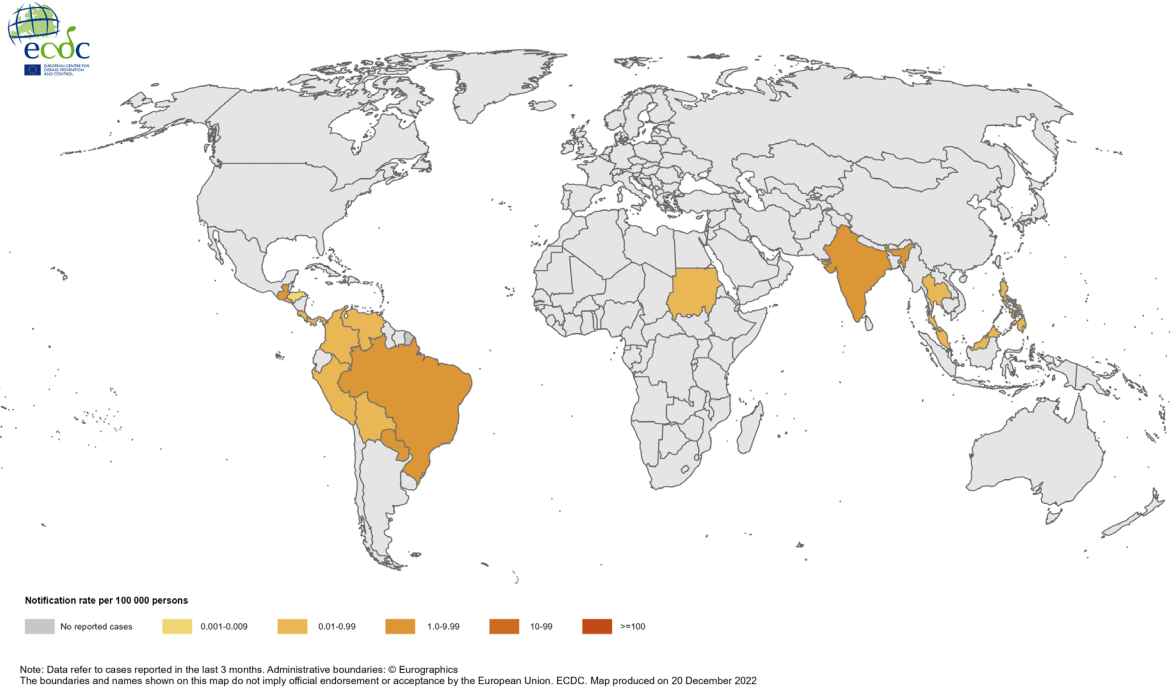
Actions:

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: [12/22/2022](#)

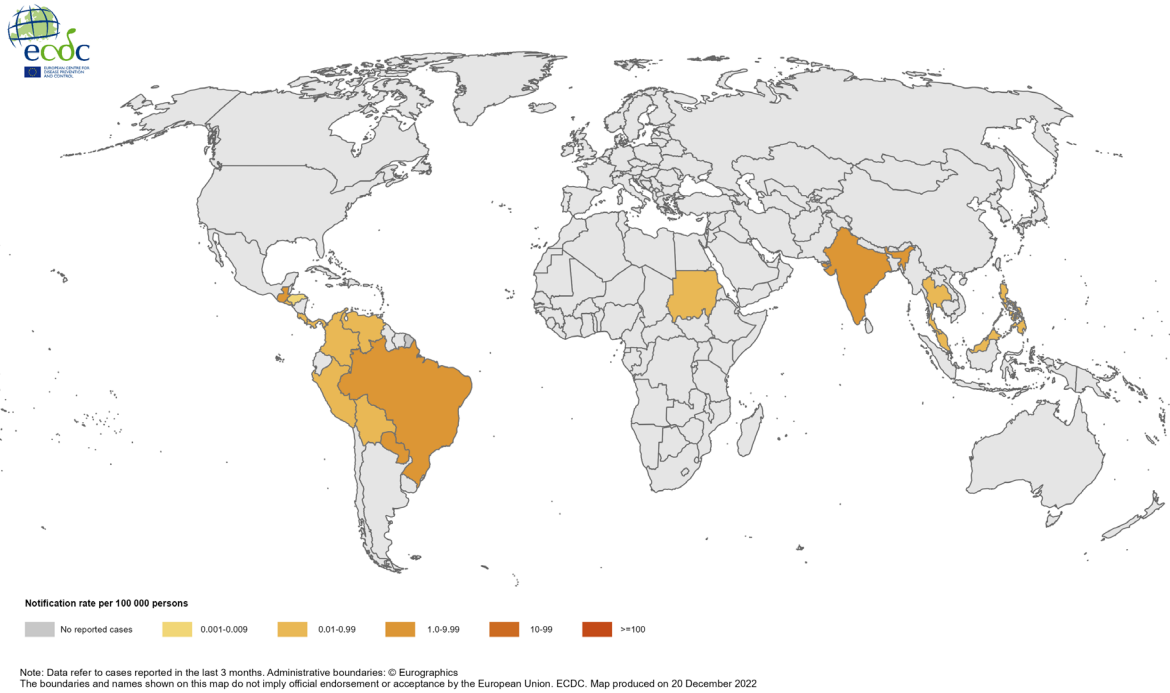
Maps and graphs

Figure 7. Three-month chikungunya virus disease case notification rate per 100 000 persons, October 2022 – December 2022



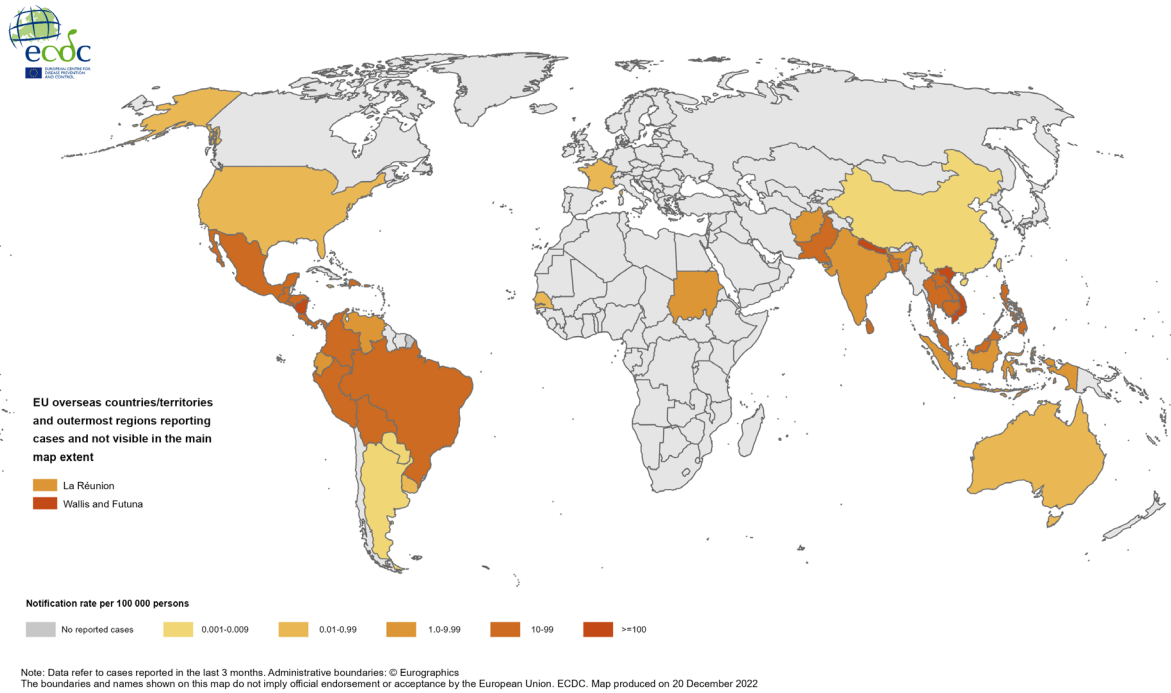
Source: ECDC

Figure 8. Twelve-month chikungunya virus disease case notification rate per 100 000 persons, January 2022 – December 2022



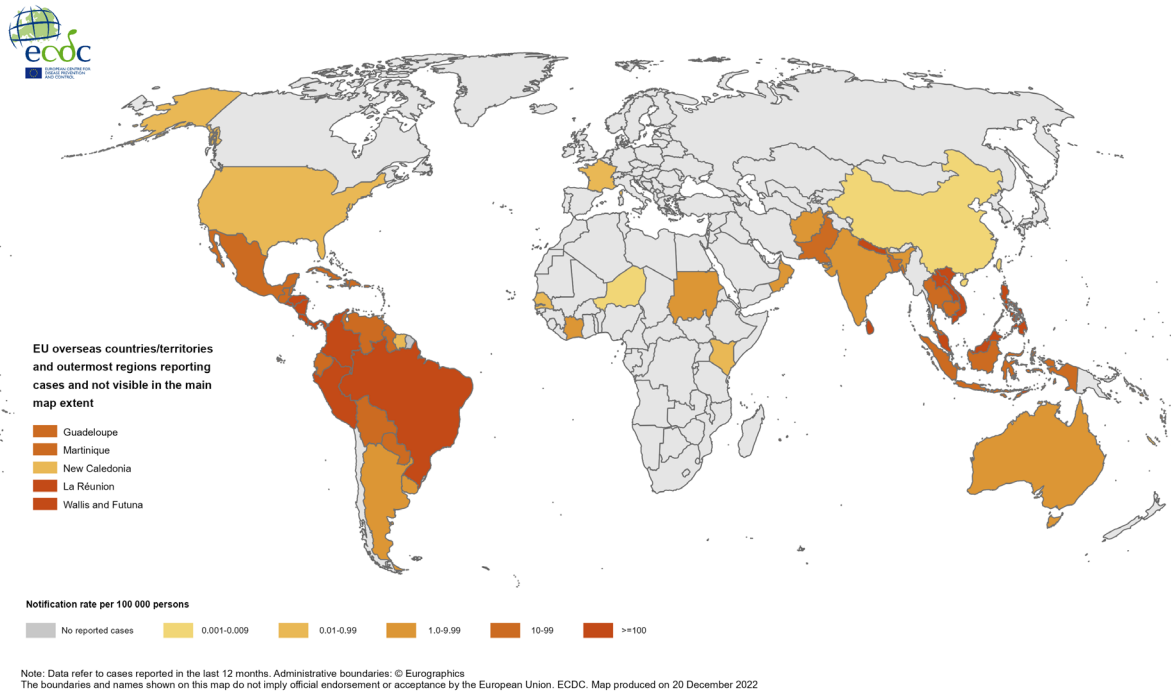
Source: ECDC

Figure 9. Three-month dengue case notification rate per 100 000 persons, October 2022 – December 2022



Source: ECDC

Figure 10. Twelve-month dengue case notification rate per 100 000 persons, January 2022 – December 2022



Source: ECDC