

This weekly bulletin provides updates on threats monitored by ECDC.

## I. Executive summary

### EU Threats

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#### Monkeypox - Multi-country - 2022

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Opening date: 3 June 2022

Latest update: 26 August 2022

Since early May 2022, cases of monkeypox (MPX) have been reported from countries where the disease is not endemic.

→Update of the week

Since the last update on 19 August 2022, 767 monkeypox cases have been reported from 17 EU/EEA countries: Spain (492), Germany (145), Netherlands (49), Austria (29), Italy (19), Sweden (7), Luxembourg (5), Denmark (4), Greece (4), Belgium (3), Croatia (2), Czechia (2), Ireland (2), Estonia (1), Norway (1), Poland (1), and Romania (1). Since 19 August 2022, no new countries have reported confirmed cases.

**Disclaimer:** Data presented in this update are compiled from TESSy and official public sources. The source (either TESSy or other official public source) used for each country is the one reporting the larger number of cases. In this update, countries for which TESSy data were used are: Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czechia, Estonia, France, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Poland, Romania, Slovakia, Slovenia and Sweden. For the rest of the countries, data were included from official public sources.

### Other news

On 24 August 2022, the World Health Organization (WHO) published an update to on its [Interim guidance](#) on vaccines and immunisation for monkeypox. The update confirms and further adds to [previous recommendations](#) including, not recommending mass vaccinations and recommending post-exposure preventive vaccination (PEPV) for close contacts of cases, ideally within four days of exposure. Primary preventive (pre-exposure) vaccination (PPV) is recommended for individuals at high-risk of infection, including men who have sex with men (MSM). The update emphasizes that in managing the response, vaccination should be considered an additional measure to complement primary public health interventions. WHO continues to review the evidence and monitor the situation closely for any changes that need to be reflected in the Interim guidance.

On 22 August 2022, the Ministry of Health of Brazil [published](#) an epidemiological update on the monkeypox situation up to 13 August. The report includes an analysis by age which shows that 77 cases (2.4% from total cumulative incidence) were aged 17 years and below (43 aged 10 to 17 years, and 34 aged zero to nine years). Of these 77 cases, 41 (53%) were females (22 aged 10 to 17 years, and 19 aged zero to nine years). As of 24 August and since the start of the outbreak, Brazil has [reported](#) a total of 4 144 confirmed monkeypox cases.

On 22 August 2022, the United States Food and Drug Administration (FDA) [issued a safety alert](#) regarding the use of faecal microbiota for transplantation (FMT), and issued additional safety protections pertaining to monkeypox virus. According to the safety alert, recent studies have shown evidence of the presence of monkeypox virus DNA in rectal swabs and/or stool samples from infected persons. Additionally, one study reports the detection of monkeypox virus DNA in rectal swabs from three individuals who reported no symptoms of monkeypox disease, including two individuals who had viable monkeypox virus isolated from rectal swabs. Therefore, the FDA has determined additional measures for any investigational use of the FMT such as donor screening with questions to identify high risk-groups of donors, the development of an exclusion criteria, and to include the potential transmission of monkeypox virus in the informed consent.

On 22 August 2022, the Cuban Ministry of Public Health published a [press release](#) reporting the first monkeypox case detected in Cuba. According to the press release, the patient was a 50-year-old male Italian tourist who arrived in Cuba on 15 August. He was found in a critical condition on 18 August, and subsequently diagnosed with monkeypox on 20 August. He passed away on the afternoon of 21 August, it remains unclear whether the death can be attributed solely to monkeypox. The post-mortem report noted signs of sepsis, bronchopneumonia and multiple organ damage as the cause of death. No specific pathogen was identified.

On [19 August 2022](#), the European Medicines Agency (EMA) announced that its Emergency Task Force (ETF) reviewed the available data on the use of the monkeypox vaccine, Imvanex, as an intradermal injection. The ETF reviewed data from a clinical trial showing that people who were given one-fifth of the subcutaneous dose intradermally, produced similar levels of antibodies to those being given the higher subcutaneous dosage. The ETF suggested that national authorities may decide to use Imvanex as an intradermal injection at a lower dosage as a temporary measure to protect at-risk individuals during the current monkeypox outbreak while supply of the vaccine is limited. The Imvanex vaccine is currently only authorised for subcutaneous injections.

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

Opening date: 2 June 2022

Latest update: 26 August 2022

During the transmission season for West Nile virus (WNV), which usually runs from June to November, ECDC monitors the occurrence of infections in the European Union (EU), the European Economic Area (EEA), and EU-neighbouring countries. ECDC publishes weekly epidemiological updates to inform blood safety authorities. Data reported through The European Surveillance System (TESSy) are presented at the NUTS-3 level (nomenclature of territorial units for statistics 3) for EU/EEA countries and at the GAUL-1 level (global administrative unit layers 1) for EU-neighbouring countries.

→ Update of the week

Since last week's update, and as of 24 August 2022, European Union (EU) and European Economic Area (EEA) countries reported 101 human cases of West Nile virus (WNV) infection and four deaths related to WNV infections. Cases were reported by Italy (70), Greece (24), Romania (6), and Germany (1). Deaths were reported by Greece (2), Italy (1), and Romania (1). EU-neighbouring countries reported 28 human cases of WNV infection in Serbia and three deaths related to WNV infections in Serbia.

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

## COVID-19 associated with SARS-CoV-2 – Multi-country EU/EEA – 2019 - 2022

Opening date: 7 January 2020

Latest update: 26 August 2022

On 31 December 2019, the Wuhan Municipal Health Commission reported a cluster of pneumonia cases of unknown aetiology with a common source of exposure at the South China Seafood City market in Wuhan. Further investigations identified a novel coronavirus as the causative agent of respiratory symptoms for these cases. The outbreak rapidly evolved, affecting other parts of China and countries worldwide. On 30 January 2020, the World Health Organization (WHO) declared that the outbreak of coronavirus disease (COVID-19) constituted a Public Health Emergency of International Concern (PHEIC), accepting the Committee's advice and issuing temporary recommendations under the International Health Regulations (IHR). On 11 March 2020, the Director-General of WHO declared the COVID-19 outbreak a pandemic. The third, fourth, fifth, sixth, seventh, eighth, ninth, 10th, 11th and 12th IHR Emergency Committee meetings for COVID-19 were held in Geneva on 30 April 2020, 31 July 2020, 29 October 2020, 14 January 2021, 15 April 2021, 14 July 2021, 22 October 2021, 13 January 2022, 11 April 2022, and 8 July 2022 respectively. The Committee concluded during these meetings that the COVID-19 pandemic continues to constitute a PHEIC.

→ Update of the week

As of week 2022-33, 163 104 433 cases and 1 144 034 deaths have been reported in the EU.

The figures reported worldwide and in the EU/EEA are probably an underestimate of the true number of cases and deaths, due to various degrees of under-ascertainment and under-reporting.

The latest situation update for the EU/EEA is available [here](#).

In week 2022-33, in the EU/EEA overall, the reported weekly cases decreased by 19.2% compared to the previous week. Overall, all countries except Czechia reported a decrease in weekly cases. The countries with the highest 14-day notification rates per 100 000 population are: Greece (957), Latvia (938), Slovenia (887), Austria (854), and Germany (669).

At the end of week 33, 2022 (week ending 21 August), the overall notification rate of COVID-19 cases in the EU/EEA fell by 21% compared to the previous week as part of a five-week decreasing trend, but remained relatively high (393 per 100 000 population, 10% of the pandemic maximum). A similar decreasing trend was observed for case rates among people aged 65 years and above, reaching 36% of the pandemic maximum for this indicator.

Of 28 countries with data on hospital or ICU admissions/occupancy up to week 33, five reported an increasing trend in at least one of these indicators compared with the previous week. Current levels of ICU indicators remain low at between 1 and 19% of maximum values observed during the pandemic.

Among the 10 countries with an adequate volume of sequencing or genotyping for weeks 31–32 (1 August to 14 August 2022), the estimated distribution of variants of concern (VOCs) or of interest (VOIs) was 98.7% (94.4–100.0% from 10 countries) for BA.4/BA.5, 1.1% (0.2–5.6% from nine countries) for BA.2, 0.6% (0.2–0.7%, 44 detections from four countries) for BA.2+L452X, and 0.2% (0.1–0.3%, 35 detections from five countries) for BA.2.75.

No new relevant epidemiological updates regarding SARS-COV-2 VOCs have been detected.

For the latest information on variants, please see [ECDC's webpage on variants](#).

## Non EU Threats

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### **New! Ebola – North Kivu, Democratic Republic of the Congo – 2022**

Opening date: 25 August 2022

Latest update: 26 August 2022

On 22 August 2022, one case of Ebola virus disease (EVD) was confirmed by the Institut National de Recherche Biomédicale (INRB).

### **Monitoring environmental suitability of *Vibrio* growth in the Baltic Sea - Summer 2022**

Opening date: 30 June 2022

Latest update: 26 August 2022

Elevated sea surface temperature (SST) in marine environments with low salt content offer ideal growth conditions for certain *Vibrio* species, thus increasing the risk of transmission to people exposed to contaminated seawater. Most cases present with acute gastrointestinal symptoms, but more severe disease can occur, including septicaemia.

Suitable environmental conditions can occur during the summer months in estuaries and enclosed water bodies with moderate salinity. ECDC has developed a model to map the environmental suitability for *Vibrio* growth in the Baltic Sea ([ECDC Vibrio Map Viewer](#)). Please note that this model has been calibrated to the Baltic Region in northern Europe and might not apply to other worldwide settings prior to validation.

#### →Update of the week

Since the previous update, and as of 26 August 2022, four additional human cases of locally-acquired vibriosis have been reported in [Norway](#) (3) and [Sweden](#) (1).

### **Diphtheria - Switzerland - 2022**

Opening date: 3 August 2022

Latest update: 26 August 2022

During the month of August 2022, cases of diphtheria have been reported in Berne, Switzerland.

#### →Update of the week

According to Swiss regional health authorities, two cutaneous and one respiratory diphtheria cases of diphtheria were reported in Kreuzlingen, in the canton of Thurgau, which shares a border with Konstanz (Germany), on 19 August 2022. According to this source, the two cutaneous diphtheria cases were detected the previous week. In addition, one case of cutaneous diphtheria was reported on 20 August 2022 in Boudry (canton of Neuchâtel). All these cases were reported in refugees or asylum-seekers residing in refugee centres. No additional information on the cases' country of origin, vaccination status, recent travel history, or epidemiological link with other cases is currently available. Epidemiological investigations are ongoing, as well as the administration of chemoprophylaxis and diphtheria vaccine to eligible contacts.

Overall, 12 cases of diphtheria have been reported in Switzerland since 2 August, of which one was the respiratory form.

### **Cholera – Multi-country (World) – Monitoring global outbreaks**

Opening date: 20 April 2006

Latest update: 26 August 2022

Several countries in Africa and Asia have reported [cholera](#) outbreaks in 2021 and 2022. Major ongoing outbreaks are being reported from Afghanistan, Bangladesh, Cameroon, the Democratic Republic of the Congo, Pakistan, and Nigeria.

#### →Update of the week

Since the last update on 27 July 2022, approximately 137 763 suspected cholera cases, including 91 deaths, have been reported worldwide. Countries reporting new cases are Afghanistan, Bangladesh, Burkina Faso, Cameroon, the Democratic Republic of the Congo, India, Iraq, Malawi, Mozambique, Nepal, Pakistan, Philippines, Somalia, South Sudan, and Tanzania.

## Chikungunya and dengue – Multi-country (World) – Monitoring global outbreaks

Opening date: 27 January 2017

Latest update: 26 August 2022

Chikungunya virus disease and dengue are vector-borne diseases transmitted by *Aedes* mosquitoes. Outbreaks of dengue and chikungunya virus disease have been reported in the Americas, Asia, Africa, Oceania, and Europe. Chikungunya virus disease and dengue are not endemic in mainland Europe, despite autochthonous outbreaks having been reported during the summer and autumn months in recent years.

→Update of the week

**Chikungunya virus disease:** In 2022, and as of 24 August, 229 029 cases and 41 deaths have been reported. The majority of cases have been reported from Brazil (200 495). Deaths have been reported from Brazil (40) and Kenya (1). Since the previous CDTR published in week 30 2022, 14 923 new cases and no new deaths have been reported. The five countries reporting most new cases are Brazil (14 325), Paraguay (237), Thailand (170), Guatemala (63), and Peru (45).

**Dengue:** In 2022, and as of 24 August, 2 597 067 cases and 2 065 deaths have been reported. Most cases have been reported from Brazil (1 910 657), Vietnam (145 536), Philippines (82 597), Indonesia (68 903), and Peru (57 469). Most deaths have been reported from Brazil (774), Vietnam (53), Philippines (319), Indonesia (640), and Peru (72). Since the previous CDTR published in week 30 2022, 239 877 new cases and 334 new deaths have been reported. The five countries reporting most new cases are Brazil (83 040), Vietnam (42 103), Philippines (17 800), Indonesia (16 590), and Nicaragua (14 482). The five countries reporting most new deaths are Indonesia (192), Philippines (45), Brazil (37), Vietnam (16), and Bangladesh (14).

In the EU and as of 24 August 2022, three autochthonous cases have been reported in France.

## II. Detailed reports

### Monkeypox - Multi-country - 2022

Opening date: 3 June 2022

Latest update: 26 August 2022

#### Epidemiological summary

##### EU/EEA

Since the start of the monkeypox outbreak, and as of 25 August 2022, 17 202 confirmed cases of monkeypox (MPX) have been reported from 29 EU/EEA countries: Spain (6 284), Germany (3 387), France (2 889), Netherlands (1 136), Portugal (810), Italy (714), Belgium (671), Austria (250), Denmark (169), Sweden (150), Ireland (128), Poland (122), Norway (76), Hungary (64), Greece (54), Luxembourg (50), Slovenia (43), Czechia (41), Romania (35), Malta (31), Croatia (25), Finland (22), Iceland (12), Slovakia (12), Estonia (10), Lithuania (5), Bulgaria (4), Cyprus (4), and Latvia (4).

Deaths have been reported from: Spain (2).

##### Western Balkans and Turkey

Since the start of the MPX outbreak and as of 25 August 2022, the following Western Balkan countries have reported confirmed cases of monkeypox: Serbia (31), Bosnia and Herzegovina (3), and Montenegro (1). In addition, five cases have been reported from Turkey.

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 MPX outbreak a Public Health Emergency of International Concern (PHEIC).

#### ECDC assessment

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

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

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

Although MPX can infect animals, and a recent [Lancet publication](#) might suggest human-to-dog transmission of MPX virus, further confirmatory investigations are being carried out by the French veterinary authorities to confirm this finding, and specifically to confirm infection versus carriage of the virus in the dog.

Early diagnosis, isolation, effective contact tracing, and vaccination strategies are key for the effective control of this outbreak. It is essential to underpin all response measures with strong risk communication and community engagement efforts, as well as awareness and educational activities for health professionals. At this point, mass vaccination for MPX is not required nor recommended. Unless contact tracing can successfully identify a high proportion of infected contacts, mathematical modelling results indicate that targeted pre-exposure vaccination (PrEP) of individuals at high risk of exposure would be the most effective strategy to use vaccines to control the outbreak. PrEP vaccination would also be the most efficient strategy when there is less effective tracing. Therefore, prioritising groups of MSM at higher risk of exposure, as well as front-line staff with a risk for occupational exposure, should be considered in developing vaccination strategies. Targeted national vaccination programmes should be implemented within a framework of collaborative research and clinical trial protocols with standardised data collection

tools for clinical and outcome data.

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

## Actions

ECDC will continue to monitor this event through surveillance and epidemic intelligence activities and report relevant developments on a regular and ad hoc basis as needed. Multi-lateral meetings between affected countries, WHO/Europe, and ECDC have taken place to share information and coordinate the response. A process in [EpiPulse](#) has been created to allow countries to share information with one another, WHO, and ECDC. Case reporting in TESSy was set up on 2 June 2022. ECDC published a rapid [risk assessment](#) on 23 May 2022, and an [update](#) to the assessment on 8 July 2022. For all the latest updates, visit [ECDC's MPX 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 for MSM communities, and providing guidance to countries hosting events in 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.

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

Opening date: 2 June 2022

Latest update: 26 August 2022

### Epidemiological summary

Since last week's update, and as of 24 August 2022, European Union (EU) and European Economic Area (EEA) countries reported 101 human cases of West Nile virus (WNV) infection and four deaths related to WNV infections. Cases were reported by Italy (70), Greece (24), Romania (6), and Germany (1). Deaths were reported by Greece (2), Italy (1), and Romania (1). EU-neighbouring countries reported 28 human cases of WNV infection in Serbia and three deaths related to WNV infections in Serbia.

This week, among the reporting countries, the following NUTS 3 or GAUL1 areas have reported human cases of WNV infection for the first time: Harz in Germany and Lucca in Italy.

Since the beginning of the 2022 transmission season and as of 24 August 2022, EU/EEA countries have reported 394 human cases of WNV infection as follow: Italy (299), Greece (83), Romania (8), Austria (2), Germany (1), and Slovakia (1). There have been 21 deaths in EU/EEA countries reported in the following countries: Italy (15), Greece (5), and Romania (1). From EU-neighbouring countries Serbia reported 81 cases, of which six have died.

During the current transmission season, within the reporting countries, human cases of WNV infection were reported from 58 different NUTS 3 or GAUL 1 areas, of which the following reported human cases of WNV infection for the first time: Harz in Germany, Pistoia and Lucca in Italy, and Moravicki in Serbia.

Since the beginning of the 2022 transmission season, 19 outbreaks among equids and 99 outbreaks among birds have been reported by EU/EEA countries. Outbreaks among equids have been reported by Italy (16), Hungary (2), and France (1). Outbreaks among birds have been reported by Italy (98) and Germany (1).

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

**Sources:** TESSy | Animal Disease Information System

## ECDC assessment

During the current transmission season and as of 24 August 2022, the human cases of WNV were reported from countries that had reported WNV infections in previous years.

There were two regions, Harz in Germany and Lucca in Italy, that reported human cases of WNV infection for the first time. Lucca is adjacent to other regions that reported WNV infections in the current season. In previous years, cases have been reported from districts in Saxony-Anhalt, Germany, where Harz is located.

Two EU/EEA countries and one EU-neighbouring country have reported relatively high numbers of human WNV infection cases so far this year. At this stage in the season, the number of cases in Italy are higher than in the previous three years, and comparable with those observed in the peak epidemic year, 2018. The number of cases in Greece are comparable with those observed in the 2012 and 2019 season and lower than the peak epidemic year, 2018. The number of cases in Serbia are higher than the average of the reported cases per surveillance season in 2012-2021, but lower than in the years 2013 and 2018.

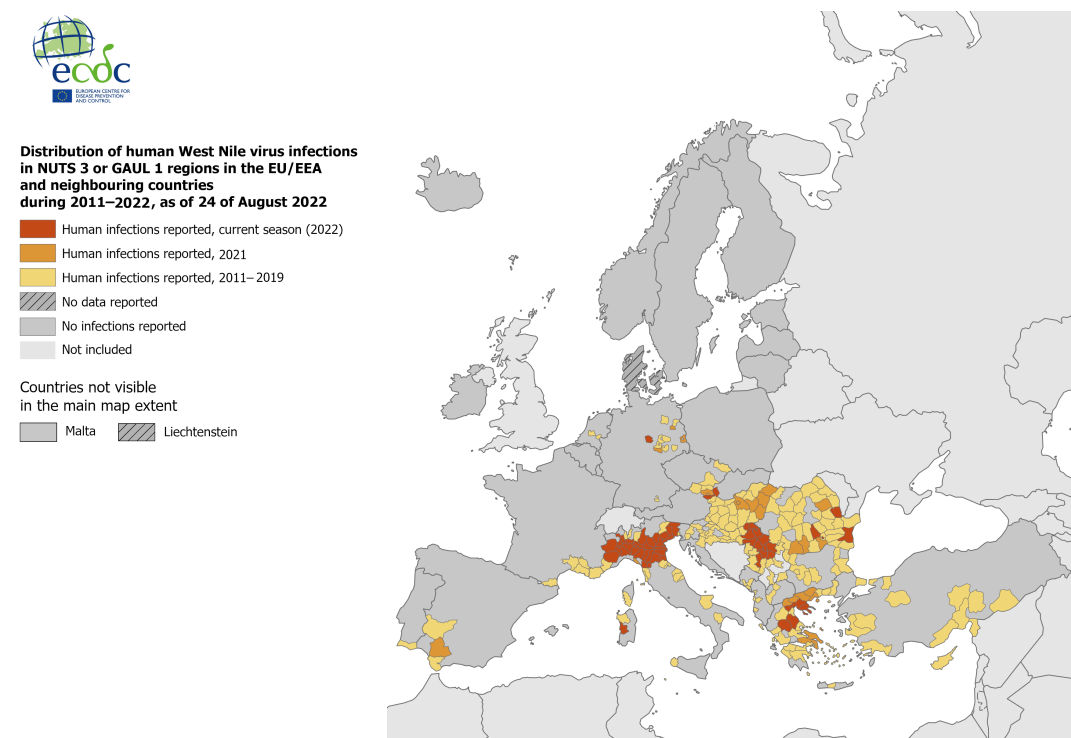
In accordance with [Commission Directive 2014/110/EU](#), prospective blood donors should be deferred for 28 days after leaving a risk area for locally-acquired WNV infection, unless the result of an individual nucleic acid test is negative.

## Actions

During transmission seasons, ECDC publishes a set of WNV transmission maps, a dashboard, and an epidemiological summary every Friday.

## Distribution of human West Nile virus infections by affected areas as of 24.08

ECDC



Administrative boundaries: © EuroGeographics ©  
The boundaries and names shown on this map do not imply official endorsement or acceptance by the European Union. Map produced by ECDC on 25 August 2022

## Distribution of West Nile virus infections among humans and outbreaks among equids and/or birds in the EU as of 24.08

ECDC and ADIS

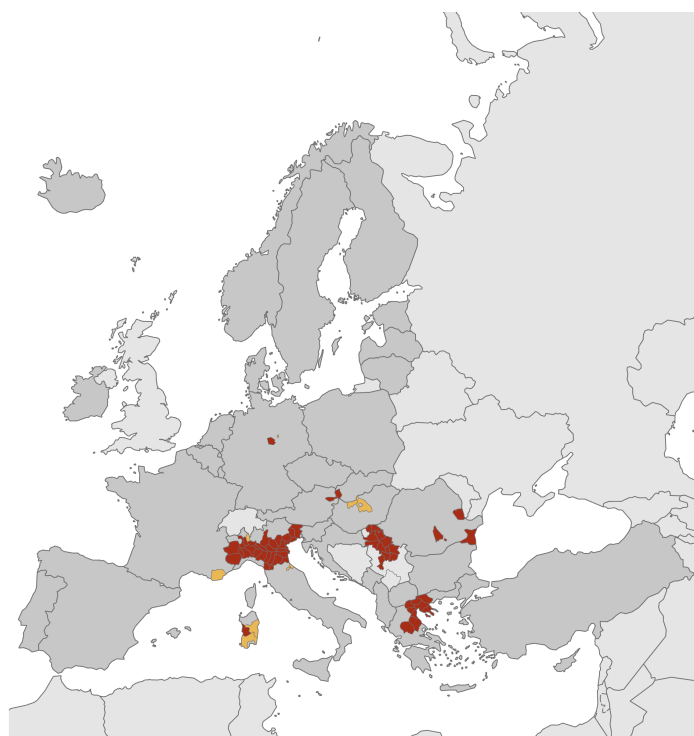


Distribution of human and animal West Nile virus infections in NUTS 3 or GAUL 1 regions of the EU/EEA and neighbouring countries during the 2022 season, as of 24 of August 2022

- Human infections, with or without outbreaks among equids and/or birds
- Outbreaks among equids and/or birds
- No infections reported
- Not included

Countries not visible in the main map extent

- Malta
- Liechtenstein



Administrative boundaries: © EuroGeographics ©  
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## COVID-19 associated with SARS-CoV-2 – Multi-country EU/EEA – 2019 - 2022

Opening date: 7 January 2020

Latest update: 26 August 2022

### Epidemiological summary

#### EU/EEA:

As of week 2022-33, 165 363 282 cases have been reported in the EU/EEA: France (34 429 318), Germany (31 833 494), Italy (21 793 822), Spain (13 383 792), Netherlands (8 375 242), Poland (6 152 613), Portugal (5 395 469), Austria (4 902 039), Belgium (4 464 962), Greece (4 369 540), Czechia (4 023 664), Romania (3 178 693), Denmark (3 153 265), Sweden (2 561 580), Slovakia (2 345 419), Hungary (2 036 471), Norway (2 029 847), Ireland (1 631 096), Lithuania (1 447 387), Finland (1 250 557), Bulgaria (1 233 473), Croatia (1 206 587), Slovenia (1 112 949), Cyprus (932 997), Latvia (889 101), Estonia (578 966), Luxembourg (320 795), Iceland (210 125), Malta (113 803) and Liechtenstein (18 877).

As of week 2022-33, 1 148 186 deaths have been reported in the EU/EEA: Italy (176 592), France (167 674), Germany (146 644), Poland (117 273), Spain (112 334), Romania (66 228), Hungary (45 989), Czechia (40 608), Bulgaria (37 541), Greece (32 335), Belgium (31 923), Portugal (24 788), Netherlands (22 587), Sweden (19 700), Slovakia (19 525), Austria (16 821), Croatia (16 571), Lithuania (9 247), Slovenia (8 072), Denmark (6 834), Latvia (6 596), Ireland (6 555), Finland (5 467), Norway (3 890), Estonia (2 520), Cyprus (1 512), Luxembourg (1 317), Malta (799), Iceland (179) and Liechtenstein (83).

In week 2022-33, in the EU/EEA overall, the reported weekly cases decreased by 19.2% compared to the previous week. Overall, all countries except Czechia reported a decrease in weekly cases. The countries with the highest 14-day notification rates per 100 000 population are: Greece (957), Latvia (938), Slovenia (887), Austria (854), and Germany (669).

At the end of week 33, 2022 (week ending 21 August), the overall notification rate of COVID-19 cases in the EU/EEA fell by 21% compared to the previous week as part of a five-week decreasing trend, but remained relatively high (393 per 100 000 population, 10% of the pandemic maximum). A similar decreasing trend was observed for case rates among people aged 65 years and above, reaching 36% of the pandemic maximum for this indicator.

Of 28 countries with data on hospital or ICU admissions/occupancy up to week 33, five reported an increasing trend in at least

one of these indicators compared with the previous week. Current levels of ICU indicators remain low at between 1 and 19% of maximum values observed during the pandemic.

Among the 10 countries with an adequate volume of sequencing or genotyping for weeks 31–32 (1 August to 14 August 2022), the estimated distribution of variants of concern (VOC) or of interest (VOI) was 98.7% (94.4–100.0% from 10 countries) for BA.4/BA.5, 1.1% (0.2–5.6% from nine countries) for BA.2, 0.6% (0.2–0.7%, 44 detections from four countries) for BA.2+L452X and 0.2% (0.1–0.3%, 35 detections from five countries) for BA.2.75.

The latest situation update for the EU/EEA is available [here](#).

## EU

As of week 2022-33, 163 104 433 cases and 1 144 034 deaths have been reported in the EU.

### Western Balkans and Turkey:

As of week 2022-33, the following Western Balkan countries reported COVID-19 cases: Serbia (2 240 552), Bosnia and Herzegovina (393 483), North Macedonia (337 506), Albania (324 095), Montenegro (272 615), and Kosovo (242 617).

As of week 2022-33, the following Western Balkan countries reported COVID-19 deaths: Serbia (16 525), Bosnia and Herzegovina (15 983), North Macedonia (9 444), Albania (3 575), Montenegro (2 765), and Kosovo (2 666).

Additionally, as of week 2022-33, 16 671 848 cases and 100 400 deaths have been reported from Turkey.

\*This designation is without prejudice to positions on status, and is in line with UN Security Council Resolution 1244/1999 and the International Court of Justice Opinion on the Kosovo Declaration of Independence.

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

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

## Variant update

Since the last update on 11 August 2022 and as of 25 August 2022, the Omicron sub-lineages BA.4 + R346X and BA.5 + R346X were added to ECDC's list of variants under monitoring.

The rationale is that R346X (any amino-acid substitution at Spike RBD gene position 346) may impact the susceptibility of the virus to neutralisation by therapeutic antibodies, and increasing proportions of BA.4 and/or BA.5 carrying R346X have been observed in Belgium, Denmark, Germany, and United Kingdom.

For the latest information on variants, please see [ECDC's webpage on variants](#).

As of 20 June 2022, ECDC is discontinuing the data collection and publication of the number of COVID-19 cases and deaths worldwide. Please refer to the World Health Organization (WHO) data on COVID-19 and the WHO Weekly Epidemiological and Weekly Operational Updates page for information on the non-EU/EEA countries.

## Other news

On 18 August 2022, the Standing Committee on Vaccination (STIKO) of Germany [published](#) its 21st update on COVID-19 vaccination recommendations. According to the update, an additional booster dose is recommended for people aged 60–69 years as well as for people aged five years and older with an increased risk of severe COVID-19 due to underlying conditions. This recommendation is in addition to the previous recommendation that people aged 70 years should receive an additional booster dose.

On 18 August 2022, the World Health Organization (WHO) released a [good practice statement](#) issued by the Strategic Advisory Group of Experts (SAGE) on Immunisation following its meeting on 11 August 2022. Based on increasing evidence of the benefits of a second booster dose of COVID-19 vaccines in terms of restoring waning vaccine effectiveness, WHO recommends that countries consider a second booster doses for all older people, all people with moderate or severe immunocompromising conditions, adults with comorbidities that put them at higher risk of severe disease, pregnant women, and health workers.

On 18 August 2022, the [European Medicines Agency \(EMA\)](#) started a review of the conditional marketing authorisation application for the Skycovion COVID-19 vaccine against the original SARS-CoV-2 strain.

On 19 August 2022, the [United States Food and Drug Administration \(FDA\)](#) extended the Emergency Use Authorisation (EUA) of

the Novavax COVID-19 vaccine. The use of the vaccine is now extended to individuals between 12 and 17 years of age. The initial EUA was issued on 13 July 2022 for individuals who were 18 years or older.

On 22 August 2022, Pfizer and BioNTech submitted an [application](#) to the United States Food and Drug Administration (FDA) for the Emergency Use Authorization (EUA) of an Omicron BA.4/BA.5-adapted bivalent COVID-19 vaccine for individuals aged 12 and above. The vaccine will be available for immediate shipment post-authorization. In the meantime, a conditional marketing authorization application has also been initiated with the European Medicines Agency (EMA), the completion of which is expected in the coming days.

According to the [eleventh interim report](#) on scenarios for the spread of COVID-19 published by the Public Health Agency of Sweden (FOHM) on 22 August 2022, modelling data from both the scenarios indicate an increased spread of COVID-19, which will reach its peak at the end of September. This rise in COVID-19 case numbers, which is not expected to be as high as the beginning of this year, could most probably be due to waning immunity in the population and greater contact between people as they return to schools and workplaces after the summer. While FOHM does not assess that any additional infection-control measures are needed based on the two scenarios, it is strongly recommended that those at risk and above 65 years of age get vaccinated with a booster dose in the autumn to reduce the risk of serious illness and death.

According to an [official communication](#) from Italy's Ministry of Education on 19 August 2022, the COVID-19 vaccination requirement for teachers, in addition to other general preventive measures, including the wearing of masks and inter-personal safety distance in schools, will cease their effect ahead of the new academic year 2022/2023 on 31 August 2022. New prevention and safety measures, however, might be adopted by the national health authorities depending on the evolution of the epidemiological situation.

According to a [press release](#) from Moderna on 23 August 2022, the company has submitted an application for emergency use authorisation for its BA.4/BA.5 Omicron-targeting bivalent COVID-19 booster vaccine, mRNA-1273.222, to the US Food and Drug Administration (FDA). The application is for a 50 µg booster dose for adults 18 years of age and above, and is based on preclinical data as well as clinical trial data available for Moderna's BA.1 Omicron-targeting bivalent booster candidate, mRNA-1273.214. Doses are planned to be delivered in September, pending authorisation.

On 22 August 2022, researchers from the Department of Epidemiology and Biostatistics at Peking University's School of Public Health in Beijing, China, published a [systematic review and meta-analysis](#) in the journal JAMA Network Open on the incubation period of COVID-19 caused by unique SARS-CoV-2 strains. It examined data from 141 articles, including 8 112 patients. According to the results, there was a gradual decrease in the incubation period of COVID-19 from Alpha variant to Omicron variant with the evolution of the virus. In addition, 'the incubation period of COVID-19 caused by the Delta and Omicron variants was significantly shorter than that of the other 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](#), [10th](#), [11th](#) and [12th](#) International Health Regulations (IHR) Emergency Committee meetings for COVID-19 were held in Geneva on 30 April 2020, 31 July 2020, 29 October 2020, 14 January 2021, 15 April 2021, 14 July 2021, 22 October 2021, 13 January 2022, 11 April 2022, and 8 July 2022 respectively. The Committee concluded during these meetings that the COVID-19 pandemic continues to constitute a PHEIC.

### ECDC assessment

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

### 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 web page on variants](#).

## New! Ebola – North Kivu, Democratic Republic of the Congo – 2022

Opening date: 25 August 2022

Latest update: 26 August 2022

## Epidemiological summary

On 20 August 2022, the World Health Organisation (WHO) reported that a suspected case of EVD was being investigated in the North Kivu province of the Democratic Republic of the Congo (DRC). The suspected case was a 46-year-old female who died on 15 August 2022 in Beni, North Kivu province. The patient was hospitalised on 23 July 2022 for other ailments but subsequently showed symptoms consistent with EVD. On [22 August 2022](#), the case was confirmed by the Institut National de Recherche Biomédicale (INRB). According to the report, the case was hospitalised with generalised symptoms of malaise for 23 days. The patient had HIV-TB co-infection and was receiving antiretroviral and anti-tuberculosis treatment. The EVD vaccination status of this case is unknown. The body was collected by the family and buried, without specific precautions. As of [22 August 2022](#), a total of 179 contacts were listed, including 85 hospital workers. Of the identified contacts, 94 have been vaccinated. According to INRB, the genome sequence revealed that the virus was closely related to the virus that caused the cluster of cases that occurred in Beni around November-December 2018. The sample had six additional mutations, indicating that continued human-to-human transmission was unlikely. This case likely represents a new flare-up of the 2018-20 North Kivu/Ituri EVD outbreak, initiated by transmission of the virus from a persistently infected survivor or a survivor who experienced a relapse. Epidemiological investigations are ongoing to determine the source.

## ECDC assessment

The North Kivu province has been facing recurrent outbreaks of EVD. Considering that EVD was detected tardily and that the burial occurred without specific precautionary measures, the occurrence of secondary cases could be expected. The risk of infection for EU/EEA citizens in relation to the event is very low.

## Actions

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

## Monitoring environmental suitability of *Vibrio* growth in the Baltic Sea - Summer 2022

Opening date: 30 June 2022

Latest update: 26 August 2022

## Epidemiological summary

Since May 2022, and as of 26 August 2022, four human cases of locally-acquired vibriosis have been reported in [Sweden](#).

Since May 2022, and as of 26 August 2022, seven human cases of locally-acquired vibriosis have been reported in [Norway](#).

On 18 July 2022, the [Estonian Health Board](#) reported that there have been two or three cases of vibriosis in Estonia during summer. All of the cases were in children under one year old.

On 21 July 2022, the [State Office for Health and Social Affairs of Mecklenburg-Western Pomerania](#) (Germany) reported that there have been three cases of vibriosis in the region in 2022.

Due to some technical problems, the [ECDC Vibrio Map Viewer](#) is currently unavailable.

## ECDC assessment

Elevated sea surface temperatures (SSTs) in marine environments with low salt content offer ideal environmental growth conditions for certain *Vibrio* species. These conditions can be found during the summer months in estuaries and enclosed water bodies with moderate salinity. Open-ocean environments do not offer appropriate growth conditions for these bacteria due to high salt content, low temperatures, and limited nutrient content.

These *Vibrio* species can cause vibriosis (non-cholera), particularly species such as *V. parahaemolyticus*, *V. vulnificus* and non-toxicogenic *V. cholera*. In the past, vibriosis in humans in the Baltic region had occurred during hot summer months, particularly when SSTs were elevated (above 20 degrees Celsius).

The most common clinical manifestations are gastroenteritis with nausea, vomiting, and diarrhoea, wound infections when a cut

or skin abrasions have been exposed to contaminated seawater, primary septicaemia, and otitis externa.

In addition to contracting vibriosis through contact with natural bodies of water, especially marine or estuarine water, other risk factors for illness include the consumption of shellfish, particularly raw oysters.

## Actions

ECDC is monitoring this threat on a weekly basis throughout the summer of 2022 and reports on increased environmental suitability for the growth of the *Vibrio* bacteria.

## Diphtheria - Switzerland - 2022

Opening date: 3 August 2022

Latest update: 26 August 2022

### Epidemiological summary

Eight additional cutaneous diphtheria cases were reported in Bern on 2 August and 3 August 2022 according to the Swiss national health authorities.

On 3 August 2022, [media](#) quoting Swiss authorities reported two additional cases of diphtheria in Bern, Switzerland. According to media, this brings the total number of diphtheria cases in Switzerland to 12.

On 2 August 2022, [media](#) quoting Swiss authorities reported six cases of diphtheria in the Federal Asylum Centre of Bern, Switzerland. According to media, the cases have been isolated and 175 people have been put in quarantine. Current cases have not shown respiratory symptoms, and two of the six cases have tested positive for the diphtheria toxin. These are the [first diphtheria cases](#) reported in Switzerland since 1983.

**Source:** [Neuchatel regional health authorities](#), [Thurgau regional health authorities](#).

### ECDC assessment

Diphtheria is a rare disease in Switzerland. According to [WHO](#), the DTP3 immunisation coverage estimate among one-year-olds in 2021 in Switzerland was 96%. Immunisation is the only effective method of preventing the toxin-mediated disease, and diphtheria is very rare in fully vaccinated individuals. The risk of contracting the disease when travelling to countries where diphtheria cases are reported is also very low, provided that travellers are fully vaccinated in accordance with national recommendations. The recent report of diphtheria cases in Bern, Boudry, and Kreuzlingen in August 2022 is unusual given the occurrence of these cases in multiple cantons within a short interval. Additional details from these cases, such as the vaccination status, travel history, and epidemiological link with other diphtheria cases, among other aspects, is needed in order to further assess this event and the potential risk for further spread nationwide and in EU/EEA member states. ECDC [published a rapid risk assessment \(RRA\)](#) on a fatal case of diphtheria in Belgium in 2016. The RRA stresses that the only effective preventive measure is universal immunisation with a diphtheria toxoid-containing vaccine.

## Actions

ECDC will continue monitoring the ongoing situation through its epidemic intelligence activities and the [related item in EpiPulse](#) and will contact WHO EURO for more information.

## Cholera – Multi-country (World) – Monitoring global outbreaks

Opening date: 20 April 2006

Latest update: 26 August 2022

### Epidemiological summary

Since the last update on 27 July 2022, approximately 137 763 suspected cholera cases, including 91 deaths, have been reported worldwide. Countries reporting new cases are Afghanistan, Bangladesh, Burkina Faso, Cameroon, the Democratic Republic of the Congo, India, Iraq, Malawi, Mozambique, Nepal, Pakistan, Philippines, Somalia, South Sudan, and Tanzania.

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

### Americas

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

### Africa

**Burkina Faso:** On 5 July 2022, one suspected cholera case was reported in Burkina Faso. This was the first suspected cholera case reported by the country in 2022.

**Cameroon:** Since the last update on 27 July 2022, 84 suspected cholera cases, including 19 deaths, have been reported in Cameroon. In 2022, and as of 3 August, a total of 9 821 suspected cases, including 200 deaths, have been reported in the country.

The **Democratic Republic of the Congo (DRC):** Since the last update on 27 July 2022, 894 suspected cholera cases, including nine deaths, have been reported in DRC. In 2022, and as of 10 July, a total of 7 585 suspected cholera cases, including 116 deaths (CFR: 1.5%), have been reported in 58 health zones across 11 provinces of the Democratic Republic of Congo. According to the WHO Regional Office for Africa, the most affected provinces are South Kivu, Haut-Lomami, Tanganyika, and North Kivu.

**Kenya:** Since the last update on 27 July 2022, no new cases have been reported in Kenya. As of 26 July 2022, a total of 319 cases, including two deaths (CFR 0.6%), have been reported. The outbreak is ongoing in three Kenyan counties: Nairobi, Kisumu, and Kiambu.

**Malawi:** Since the last update on 27 July 2022, Malawi has reported 526 confirmed cholera cases, including 18 deaths. In 2022, and as of 18 August, Malawi has reported a total of 1 358 cholera cases and 55 deaths.

**Mozambique:** Since the last update on 27 July 2022, 35 new suspected cases have been reported in Mozambique. In 2022 and as of 17 July, a total of 3 301 suspected cholera cases including 16 confirmed cases and 15 fatalities have been reported in the country.

**Nigeria:** Since the last update on 27 July 2022, no new cases have been reported in Nigeria. In 2022 and as of 3 July, a total of 2 523 cases including 78 deaths (CFR 3.1%) have been reported from the country's 31 states.

**Somalia:** Since the last update on 27 July 2022, 245 suspected cholera cases have been reported in Somalia. In 2022 and as of 31 July, a total of 8 041 suspected cholera cases, including 37 deaths have been reported. According to WHO, the majority of the cases have been reported among children below 2 years of age.

**South Sudan:** Since the last update on 27 July 2022, 104 new suspected cases have been reported from South Sudan. In 2022 and as of 17 August, a total of 316 suspected cholera cases, including 56 confirmed cases and one death have been reported.

**Tanzania:** Since the last update on 27 July 2022, 10 new cholera cases have been reported in Tanzania. In 2022 and as of 7 August, a total of 341 cases and six deaths (CFR: 1.8%) have been reported. The outbreak badly affected country's Katavi Region and 215 cases and all six deaths have been reported from this region.

**Zambia:** Since the last update on 27 July 2022, no new cases have been reported in Zambia. In 2022, and as of 30 June, a total of 159 cholera cases have been reported in the country; of which 11 have been confirmed.

### Asia

**Afghanistan:** Since the last update on 27 July 2022, 108 450 suspected cholera cases including five deaths have been reported in Afghanistan. In 2022 and as of 13 August, a total of 118 837 cases including 37 deaths have been reported. According to WHO, the most affected provinces are Kabul, Helmand, Kandahar, Baghlan, Jawzjan and Nangarhar.

**Bangladesh:** Since the last update on 27 July 2022, 23 784 suspected cholera cases have been reported in Rohingya Refugee Camp in Cox's Bazar, Bangladesh. In 2022 and as of 12 June, a total of 519 217 suspected cholera cases including 29 deaths have been reported from the country. Among these cases, 461 611 cases including 29 deaths have been reported from different parts of the country and 57 606 cases and no deaths have been reported in Rohingya Refugee Camp in Cox's Bazar.

**India:** Since the last update on 27 July 2022, 429 suspected cholera cases and eight deaths have been reported in India. In 2022 and as of 29 July, a total of 549 suspected cholera cases and nine deaths have been reported in the country.

**Iraq:** Since the last update on 27 July 2022, 479 confirmed cholera cases and one death have been reported in Iraq. In 2022, and as of 11 August, 819 confirmed cholera cases and four associated fatalities have been reported in the country. **Media** reported around 4 000 people in Sulaymaniyah province were admitted to hospitals for uncontrolled diarrhoea and vomiting.

**Pakistan:** Since the last update on 27 July 2022, 687 suspected cholera cases and 17 deaths 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.

**Nepal:** Since the last update on 27 July 2022, 18 cholera cases have been reported in Nepal. In 2022, and as of 15 August, 52 cholera cases have been reported in the Kathmandu valley.

**Philippines:** Since the last update on 27 July 2022, 2 017 new cholera cases and 14 deaths have been reported in the Philippines. In 2022, and as of 13 August, 2 508 cholera cases and 20 fatalities have been reported.

No updates were available on previous outbreaks reported in **Benin**, **Ethiopia**, **Togo**, **Uganda**, and **Zimbabwe**.

**Disclaimer:** Data presented in this report originate from several sources, both official public health authorities and non-official, such as the media. Data completeness depends on the availability of reports from surveillance systems and their accuracy, which varies between countries. All data should be interpreted with caution as there may be areas of under-reporting and figures may not reflect the actual epidemiological situation.

## ECDC assessment

Cholera cases continue to be reported in western Africa and south-east Asia in recent months. Cholera outbreaks have also been notified in the eastern and southern part of Africa, as well as in other areas of Asia.

Despite the number of cholera outbreaks reported worldwide, few cases are reported each year among returning EU/EEA travellers. In this context, the risk of cholera infection in travellers visiting these countries remains low, even though sporadic importation of cases in the EU/EEA remains possible.

In 2021, two cases were reported in EU/EEA Member States, while three and 26 cases were reported in 2020 and 2019, respectively. All cases had travel history to cholera-affected areas.

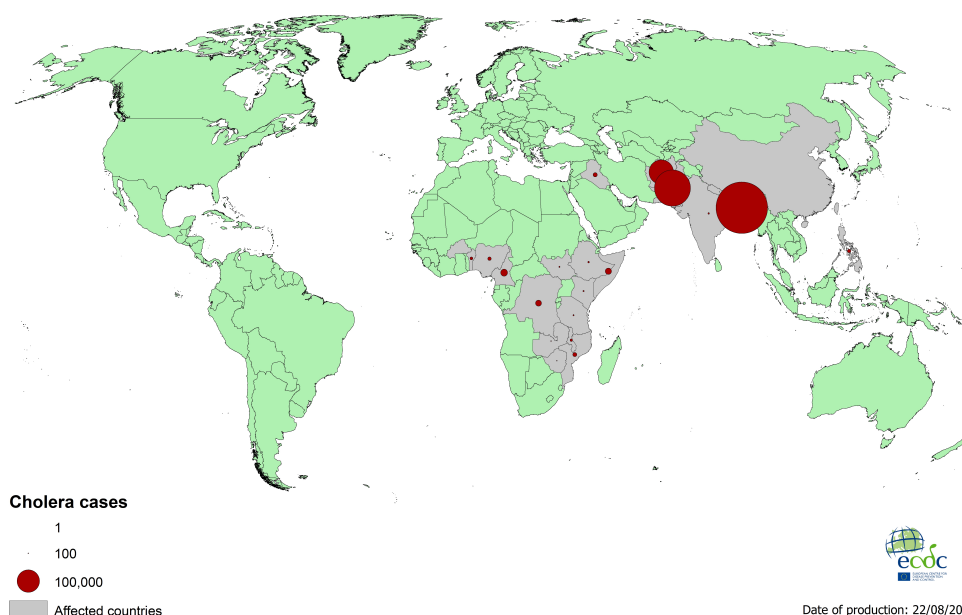
According to WHO, vaccination should be considered for travellers at higher risk, such as emergency and relief workers who are likely to be directly exposed. Vaccination is generally not recommended for other travellers. Travellers to cholera-endemic areas should seek advice from travel health clinics to assess their personal risk and apply precautionary sanitary and hygiene measures to prevent infection. These can include drinking bottled water or water treated with chlorine, carefully washing fruit and vegetables with bottled or chlorinated water before consumption, regularly washing hands with soap, eating thoroughly cooked food, and avoiding the consumption of raw seafood products.

## Actions

ECDC monitors cholera outbreaks globally through its epidemic intelligence activities in order to identify significant changes in epidemiology and to inform public health authorities. Reports are published on a monthly basis. The worldwide overview of cholera outbreaks is available on [ECDC's website](#).

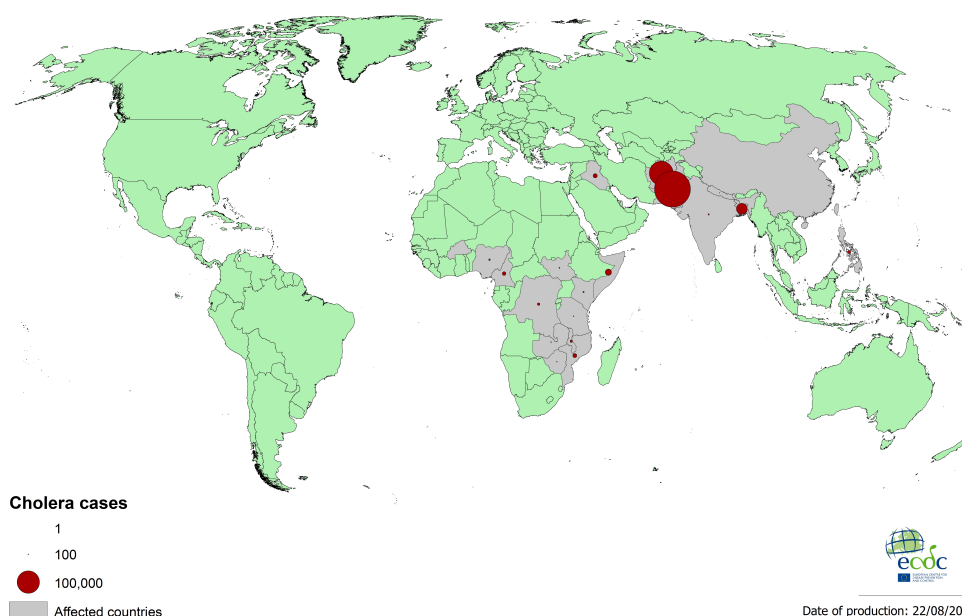
## Geographical distribution of cholera cases reported worldwide as of August 2022

ECDC



## Geographical distribution of cholera cases reported worldwide from June to August 2022

ECDC



## Chikungunya and dengue – Multi-country (World) – Monitoring global outbreaks

Opening date: 27 January 2017

Latest update: 26 August 2022

16/23

## Epidemiological summary

### *Chikungunya virus disease*

#### **Europe**

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

#### **Americas and the Caribbean**

[Bolivia](#): In 2022, and as of 13 August, 155 cases, including 11 confirmed cases and no deaths, have been reported. This is an increase of 28 cases since 9 July 2022.

[Brazil](#): In 2022, and as of 30 July, 200 495 cases, including 84 877 confirmed cases and 40 deaths, have been reported. This is an increase of 14 325 cases since 16 July 2022.

[Colombia](#): In 2022, and as of 6 August, 51 cases and no deaths have been reported. This is an increase of nine cases since 9 July 2022.

[Costa Rica](#): In 2022, and as of 30 July, seven cases and no deaths have been reported.

[El Salvador](#): In 2022, and as of 6 August, 109 cases and no deaths have been reported. This is an increase of 30 cases since 25 June 2022.

[Guatemala](#): In 2022, and as of 30 July, 1 330 cases, including 14 confirmed cases and no deaths, have been reported. This is an increase of 63 cases since 2 July 2022.

[Honduras](#): In 2022, and as of 16 July, 35 cases and no deaths have been reported. This is an increase of 14 cases since 4 June 2022.

[Mexico](#): In 2022, and as of 6 August, one confirmed case and no deaths have been reported.

[Nicaragua](#): In 2022, and as of 13 August, four cases and no deaths have been reported.

[Paraguay](#): In 2022, and as of 6 August, 712 cases, including 134 confirmed cases and no deaths, have been reported. This is an increase of 237 cases since 9 July 2022.

[Peru](#): In 2022, and as of 13 August, 225 cases, including 211 confirmed cases and no deaths, have been reported. This is an increase of 45 cases since 16 July 2022.

[Venezuela](#): In 2022, and as of 30 July, 26 cases and no deaths have been reported. This is an increase of two cases since 9 July 2022.

#### **Asia**

[India](#): In 2022, and as of 31 May, 24 278 cases, including 1 554 confirmed cases and no deaths, have been reported.

[Malaysia](#): In 2022, and as of 9 July, 528 cases and no deaths have been reported.

[Philippines](#): In 2022, and as of 11 June, 149 cases and no deaths have been reported.

[Thailand](#): In 2022, and as of 19 August, 424 cases and no deaths have been reported. This is an increase of 170 cases since 18 July 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 30 July, 189 cases, including five confirmed cases and one death, have been reported.

#### **Australia and the Pacific**

No cases of chikungunya virus disease have been reported in Australia and the Pacific in 2022.

### **Dengue**

**Europe**

**France:** In 2022, and as of 24 August, three autochthonous cases have been reported in France. The [first case](#) was confirmed in Perpignan on 29 July 2022. The [second case](#) was reported in Fayence on 8 August 2022 and the [third case](#) was reported in Andrest on 18 August 2022. All three cases have recovered. According to [Santé publique France](#), there is no epidemiological connection between the cases.

**Americas and the Caribbean**

In 2022, and as of 23 August, the WHO Pan American Health Organization (PAHO) reported 2 141 240 dengue cases, including 1 053 420 confirmed cases and 927 associated deaths, in the Americas. The five countries reporting most cases are: Brazil (1 910 657), Peru (57 469), Colombia (38 844), Nicaragua (37 369), and Ecuador (12 645). This is an increase of 149 504 cases and 66 deaths since 26 July 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 or even zero in the French Antilles (Guadeloupe, Martinique, Saint-Martin, and Saint-Barthélemy).

**Asia**

**Afghanistan:** In 2022, and as of 13 August, 77 cases and no deaths have been reported. This is an increase of 55 cases since 9 July 2022.

**Bangladesh:** In 2022, and as of 14 August, 11 043 cases, including 7 687 confirmed cases and 22 deaths, have been reported. This is an increase of 4 370 cases and 14 deaths since 26 July 2022. There has been a recent upsurge in dengue transmission in Rohingya refugee camps in Cox's Bazar district that significantly exceeds expected seasonal trends. According to [WHO](#), as of 24 July 2022, a total of 7 687 cases and six deaths have been reported, with 93% (7178) of the cumulative number of cases being reported since the start of the surge at the end of May 2022.

**Cambodia:** In 2022, and as of 14 July, 3 322 cases and nine deaths have been reported.

**China:** In 2022, and as of 31 May, five cases and no deaths have been reported.

**India:** In 2022, and as of 31 May, 10 172 cases and three deaths have been reported.

**Indonesia:** In 2022, and as of 22 August, 68 903 cases and 640 deaths have been reported. This is an increase of 16 590 cases and 192 deaths since 9 July 2022.

**Laos:** In 2022, and as of 31 July, 13 621 cases and 14 deaths have been reported. This is an increase of 7 228 cases and four deaths since 14 July 2022.

**Malaysia:** In 2022, and as of 13 August, 33 911 cases and 22 deaths have been reported. This is an increase of 7 491 cases and three deaths since 14 July 2022.

**Maldives:** In 2022, and as of 31 May, 344 cases and no deaths have been reported.

**Nepal:** In 2022, and as of 21 August, 695 cases and no deaths have been reported. This is an increase of 463 cases since 24 July 2022.

**Oman:** According to media quoting health authorities, in 2022, and as of 7 April, 76 cases and no deaths have been reported.

**Pakistan:** In 2022, and as of 20 August, 1 807 cases, including 875 confirmed cases and no deaths, have been reported. This is an increase of 932 cases since 4 July 2022.

The **Philippines:** In 2022, and as of 16 July, 82 597 cases and 319 deaths have been reported. This is an increase of 17 800 cases and 45 deaths since 25 June 2022.

**Singapore:** In 2022, and as of 20 August, 24 939 cases and no deaths have been reported. This is an increase of 3 589 cases since 25 July 2022.

**Sri Lanka:** In 2022, and as of 22 August, 40 791 cases and no deaths have been reported. This is an increase of 8 387 cases since 25 July 2022.

[Thailand](#): In 2022, and as of 19 August, 13 640 cases and no deaths have been reported. This is an increase of 4 980 cases since 19 July 2022.

[Timor-Leste](#): In 2022, and as of 27 May, 4 985 cases and 56 deaths have been reported.

[Vietnam](#): In 2022, and as of 6 August, 145 536 cases and 53 deaths have been reported. This is an increase of 42 103 cases and 16 deaths since 14 July 2022.

### **Africa**

[Côte d'Ivoire](#): In 2022, and as of 19 March, 12 confirmed cases and one death have been reported.

[Kenya](#): In 2022, and as of 28 April, 33 cases, including 32 confirmed cases and no deaths have been reported.

[Réunion](#): In 2022, and as of 18 August, 1 169 cases and no deaths have been reported.

[São Tomé and Príncipe](#): In 2022, and as of 7 August, 931 cases and two deaths have been reported. This is an increase of 263 cases and one death since 21 June 2022.

### **Australia and the Pacific**

[Australia](#): In 2022, and as of 14 July, 66 cases and no deaths have been reported.

[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 4 June, 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 14 July, 22 cases and no deaths have been reported.

[Samoa](#): In 2022, and as of 12 February, five cases and no deaths have been reported.

[Solomon Islands](#): In 2022, and as of 7 May, 34 cases and no deaths have been reported.

[Vanuatu](#): In 2022, and as of 16 June, 39 cases and no deaths have been reported.

[Wallis and Futuna](#): In 2022, and as of 16 June, 21 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.

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. Summaries of the worldwide overview of [dengue](#) and [chikungunya virus disease](#) are available on ECDC's website.

### 3-month chikungunya virus disease case notification rate per 100 000 June–August 2022

Source: ECDC



3-month chikungunya virus disease case notification rate per 100 000, June–August 2022



**Notification rate per 100 000 population**

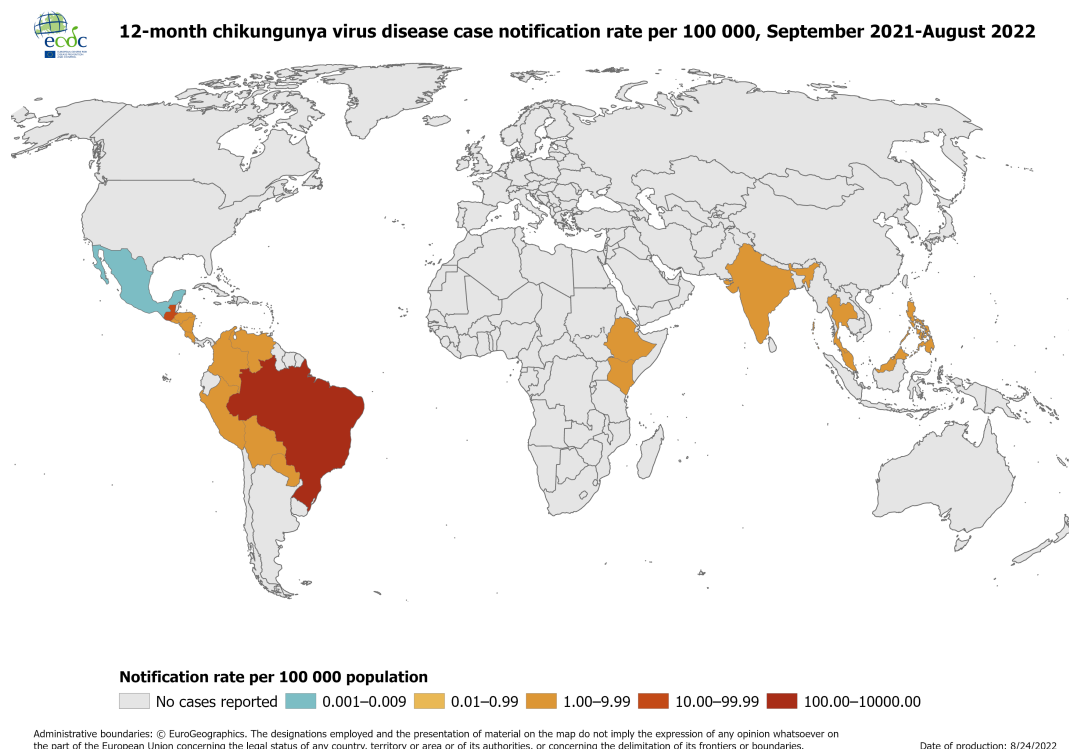
■ No cases reported ■ 0.001–0.009 ■ 0.01–0.99 ■ 1.00–9.99 ■ 10.00–99.99 ■ 100.00–10000.00

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Date of production: 8/24/2022

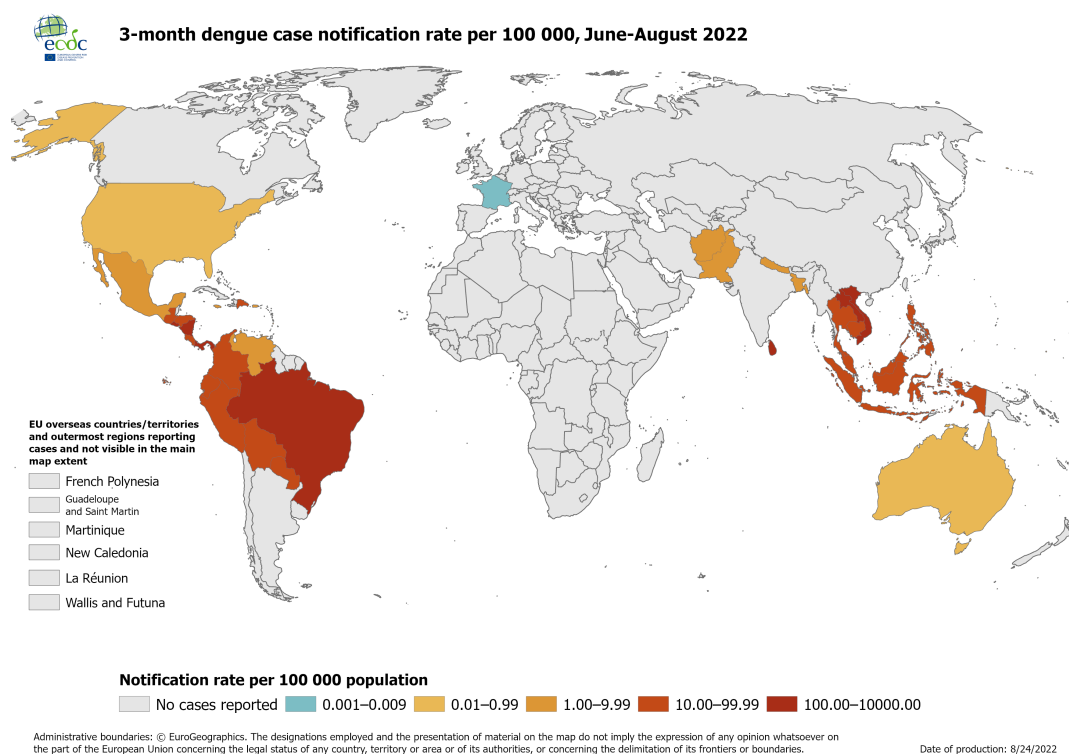
## 12-month chikungunya virus disease case notification rate per 100 000 September 2021–August 2022

Source: ECDC



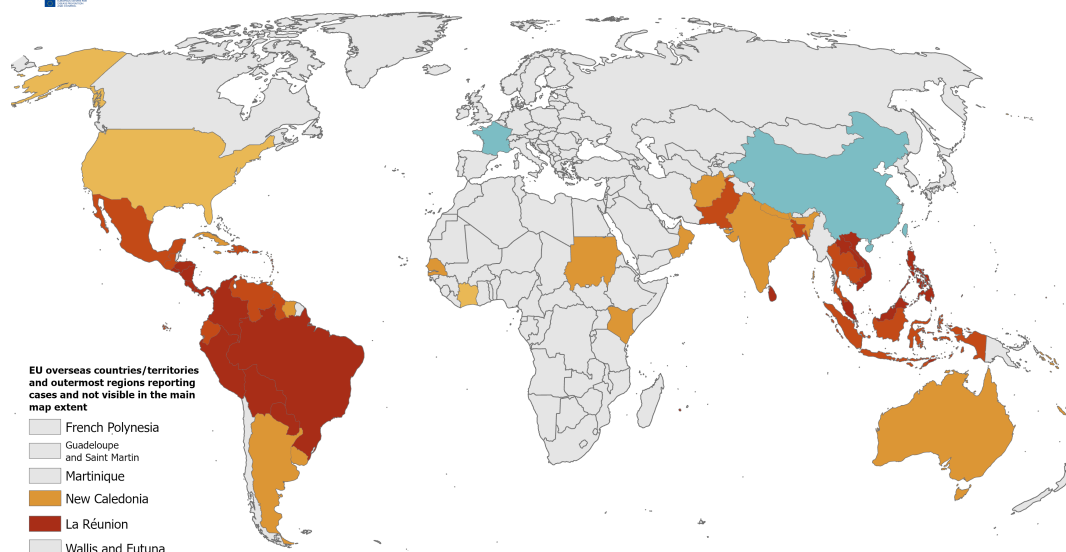
## 3-month dengue case notification rate per 100 000 June–August 2022

Source: ECDC



## 12-month dengue case notification rate per 100 000 September 2021–August 2022

Source: ECDC

**12-month dengue case notification rate per 100 000, September 2021-August 2022****Notification rate per 100 000 population**

No cases reported   0.001–0.009   0.01–0.99   1.00–9.99   10.00–99.99   100.00–10000.00

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

Date of production: 8/24/2022

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The Communicable Disease Threat Report may include unconfirmed information which may later prove to be unsubstantiated.