

This weekly bulletin provides updates on threats monitored by ECDC.

NEWS

Start of West Nile virus infection seasonal surveillance, 2022

As of this week (week 22, 2022), ECDC will begin reporting on the seasonal surveillance of human West Nile virus (WNV) infections in the EU/EEA and EU-neighbouring countries combined with information on outbreaks among equids and birds in the EU/EEA.

Every Friday during the WNV transmission season (expected to be from June to November), ECDC will provide a [summary of the epidemiological situation](#), including (i) a dashboard; (ii) maps showing human WNV infections, WNV disease outbreaks among equids and/or birds, and human infections and outbreaks among animals combined; and (iii) a downloadable data file detailing the number of human infections, as well as outbreaks among equids and birds, by country and administrative levels (Nomenclature of territorial units for statistics (NUTS 3) and Global Administrative Unit Layers (GAUL 1)). The weekly updates will also be provided in the Communicable Disease Threats Report (CDTR).

[Deferral or testing of prospective donors](#) applies to blood donors leaving areas with at least one autochthonous human case of WNV infection. The aim of the information provided is to support EU/EEA countries in implementing preventive measures.

I. Executive summary

EU Threats

COVID-19 associated with SARS-CoV-2 – Multi-country (World) – 2019 - 2022

Opening date: 7 January 2020

Latest update: 3 June 2022

On 31 December 2019, the Wuhan Municipal Health and Health Commission reported a cluster of pneumonia cases of unknown aetiology with a common source of exposure at Wuhan's South China Seafood City market. 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 other countries worldwide. On 30 January 2020, 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, tenth and eleventh 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 and 11 April 2022, respectively. The Committee concluded during these meetings that the COVID-19 pandemic continues to constitute a PHEIC.

→Update of the week

Since week 2022-20 and as of week 2022-21, 3 273 975 new cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) and 9 484 new deaths have been reported.

Since 31 December 2019 and as of week 2022-21, 527 878 071 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 6 302 819 deaths.

As of week 2022-21, 142 179 714 cases and 1 100 104 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](#).

Since the last update on 26 May 2022 and as of 2 June 2022, no changes have been made to ECDC variant classifications for variants of concern (VOC), variants of interest (VOI), variants under monitoring and de-escalated variants.

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

Influenza – Multi-country – Monitoring 2021/2022 season

Opening date: 15 October 2021

Latest update: 3 June 2022

The current circulation of influenza viruses across the WHO European Region is slightly higher than in the 2020/21 season, but still substantially lower than before the COVID-19 pandemic.

→Update of the week

Week 20 2022 (16 May-22 May 2022)

Eight of 39 countries across the Region reported widespread influenza activity.

The percentage of all sentinel primary care specimens from patients presenting with influenza-like illness (ILI) or acute respiratory infection (ARI) symptoms that tested positive for an influenza virus decreased to 7% from 10% in the previous week, which is below the epidemic threshold set at 10%.

Finland reported seasonal influenza activity above 30% positivity in sentinel primary care (50%).

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

Hospitalised patients with laboratory confirmed influenza were infected with type A or B viruses.

Arrival of people displaced from Ukraine to the EU following Russia's aggression in Ukraine - Multistate – 2022

Opening date: 24 February 2022

Latest update: 3 June 2022

On 24 February 2022, Ukraine declared martial law following Russia's invasion. As the invasion escalates, large numbers of displaced people are seeking shelter in neighbouring countries.

→Update of the week

According to the [United Nations](#), between 24 February 2022 and as of 1 June, the total number of people who have fled Ukraine reached 6 983 041. In total, 3 690 089 have crossed the Polish border; 1 020 560 the Romanian; 698 420 the Hungarian; and 466 264 the Slovakian. In addition, Czechia's [Ministry of the Interior](#) reported 362 402 special visa concessions to Ukrainian applicants as of 1 June. Outside of the EU/EEA, 483 306 people have sought safety in the Republic of Moldova ([United Nations](#)). In addition, according to the [United Nations](#), up to 2 388 941 people have returned to Ukraine since 28 February.

On 2 June 2022, the World Health Organization published the [fourteenth situation report](#) on the emergency in Ukraine, which reported that approximately eight million people are internally displaced within Ukraine.

No major outbreaks or other events related to communicable diseases have been detected since the previous update.

Non EU Threats

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

Opening date: 2 June 2022

Latest update: 3 June 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 (nomenclature of territorial units for statistics 3) level for EU/EEA countries and at the GAUL 1 (global administrative unit layers 1) level for EU-neighbouring countries.

→Update of the week

As of 1 June 2022, European Union (EU), European Economic Area (EEA) and EU-neighbouring countries reported no human cases of West Nile virus (WNV) infection during the 2022 transmission season.

Since the beginning of the 2022 transmission season, no outbreaks among equids and no outbreaks among birds have been reported by EU/EEA countries.

Monkeypox - Multi-country - 2022

Opening date: 3 June 2022

Latest update: 8 June 2022

On 16 May 2022, a multi-country outbreak of monkeypox (MPX) started, affecting the United Kingdom (UK), the EU/EEA, Asia, the Americas, and Australia. Cases have been identified all across the world.

→Update of the week

Since 20 May 2022, 456 confirmed cases of monkeypox were reported in EU/EEA countries. Cases have been reported from [Spain](#) (149), [Portugal](#) (124), [France](#) (32), [Germany](#) (57), the [Netherlands](#) (40), [Italy](#) (19), [Czech Republic](#) (6), [Belgium](#) (12), [Ireland](#) (4), [Slovenia](#) (3), [Sweden](#) (3), [Denmark](#) (2), [Austria](#) (1), [Finland](#) (1), [Hungary](#) (1), [Malta](#) (1), and [Norway](#) (1).

Outside of the EU/EEA, in the same period, 295 additional confirmed cases have been reported in the [United Kingdom](#) (200), [Canada](#) (51), the [United States of America](#) (20), [United Arab Emirates](#) (8), [Switzerland](#) (6), [Australia](#) (4), [Argentina](#) (2), [Israel](#) (2), [Mexico](#) (1), and [Thailand](#) (1).

Disclaimer: Data presented in this update are compiled from official sources or, if not available, from public sources quoting national authorities, including media reports.

Increase in hepatitis cases of unknown aetiology in children – Multicountry – 2022

Opening date: 13 April 2022

Latest update: 3 June 2022

On 5 April 2022, an increase in cases of acute hepatitis of unknown aetiology among previously healthy children aged under 10 years was reported by the United Kingdom (UK). Most cases identified by the UK presented with symptoms from March 2022 onwards. Since then, additional cases have been reported from the EU/EEA and globally.

→Update of the week

As of 30 May 2022, 304 cases of acute hepatitis of unknown aetiology among children aged 16 years and under have been reported to TESSy from the World Health Organization European region. Just over half (50.8%) of these cases are reported from the UK. The majority of reported cases are five years old or younger. At least 23 cases were admitted to an intensive care unit and 14 children received a liver transplant. A total of 199 cases were tested for adenovirus, of which 118 (59.3%) tested positive. A total of 203 cases were tested for SARS-CoV-2, of which 23 (11.8%) tested positive with 23 (67.6%) of the 34 cases with a serology result having a positive finding.

EU/EEA

As of 30 May 2022, 146 cases of acute hepatitis of unknown aetiology among children aged 16 years and under have been reported to TESSy from 13 EU/EEA countries (Austria [2], Belgium [14], Cyprus [2], Denmark [7], Greece [5], Ireland [8], Italy [29], the Netherlands [14], Norway [5], Poland [3], Portugal [15], Spain [33] and Sweden [9]). Among these cases, six required a liver transplant. There has been one associated death.

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.

Disclaimer: As of 3 June 2022, three cases have been discarded from Spain as the dates of onset were outside of the case definition.

Non-EU/EEA:

As of 25 May 2022, the [UKHSA](#) has identified a total of 222 children aged under 16 years with acute hepatitis of unknown aetiology. The cases are predominantly under five years old and many showed initial symptoms of gastroenteritis followed by the onset of jaundice. The most recent [technical briefing](#) on investigations into the cases in the UK was published on 25 May 2022.

Outside of EU/EEA and the UK, according to the [latest update from WHO](#), as of 26 May 2022, probable cases and cases pending classification have been reported from the Region of the Americas (240, including 216 in the [US](#)), Western Pacific Region (34), the South-East Asia Region (14) and the Eastern Mediterranean Region (5).

According to the WHO, at least 38 children worldwide have required liver transplants and nine deaths have occurred.

Ebola virus disease - Democratic Republic of the Congo - 2022

Opening date: 25 April 2022

Latest update: 3 June 2022

On 23 April 2022, the Democratic Republic of the Congo (DRC) declared a new Ebola virus disease (EVD) outbreak in the Equateur province. This outbreak marks the 14th EVD outbreak in the DRC since records began in 1976 and the sixth outbreak since 2018.

→Update of the week

On 22 May 2022, a [fifth case](#) of Ebola virus disease (EVD) was reported in the Equateur Province; the case was retrospectively identified and categorised as probable, and is in a nine-year-old-boy from the Wangata Health Zone who died on 6 May 2022. In the retrospective investigation, it was revealed that the boy had presented symptoms concurrent with EVD and that he resided in the same vicinity as the 12-year-old boy, most recently reported from Wangata Health Zone on 19 May 2022. In addition, it was established that the nine-year-old-boy had a link to the third confirmed case reported on 4 May 2022.

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

Opening date: 20 April 2006

Latest update: 3 June 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 and Nigeria.

→Update of the week

Since the last update on 29 April 2022, approximately 7 177 suspected cholera cases, including 102 deaths, have been reported worldwide. Countries reporting new cases since the previous update are Afghanistan, Cameroon, the Democratic Republic of the Congo, Malawi, Nigeria, South Sudan, Pakistan, Tanzania and Zambia.

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

Opening date: 27 January 2017

Latest update: 3 June 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 2 June, 113 052 cases and 14 deaths have been reported. The majority of cases have been reported by Brazil (92 349) and all deaths have been reported from Brazil (14). Since the previous CDTR published in week 18 2022, 62 826 new cases and seven new deaths have been reported. The five countries reporting most new cases are Brazil (43 684), India (18 519), Paraguay (278), Malaysia (85) and Guatemala (83). The only country reporting new deaths is Brazil (7).

Dengue: In 2022, and as of 2 June, 1 371 248 cases and 849 deaths have been reported. The majority of cases have been reported by Brazil (1 114 758), Peru (45 816), Vietnam (25 694), Indonesia (22 331) and Colombia (21 576). The majority of deaths have been reported by Brazil (322), Indonesia (229), the Philippines (115), Peru (61), and Timor-Leste (56). Since the previous CDTR published in week 18 2022, 586 273 new cases and 262 new deaths have been reported. The five countries reporting most new cases are Brazil (507 212), Peru (13 830), Vietnam (10 990), India (7 878) and the Philippines (7 423). The five countries reporting most new deaths are Brazil (192), the Philippines (31), Peru (15), Vietnam (7) and Timor-Leste and Ecuador (4).

II. Detailed reports

COVID-19 associated with SARS-CoV-2 – Multi-country (World) – 2019 - 2022

Opening date: 7 January 2020

Latest update: 3 June 2022

Epidemiological summary

Since 31 December 2019 and as of week 2022-21, 527 878 071 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 6 302 819 deaths.

Cases have been reported from:

Africa: 11 865 463 cases; the five countries reporting most cases are South Africa (3 944 845), Morocco (1 167 894), Tunisia (1 042 872), Egypt (513 944) and Libya (502 016).

Asia: 133 490 807 cases; the five countries reporting most cases are India (43 155 740), South Korea (18 086 462), Vietnam (10 718 369), Japan (8 792 569) and Iran (7 231 562).

America: 157 529 010 cases; the five countries reporting most cases are United States (84 012 408), Brazil (30 880 512), Argentina (9 228 910), Colombia (6 103 455) and Mexico (5 772 996).

Europe: 216 220 308 cases; the five countries reporting most cases are France (29 475 176), Germany (26 273 768), United Kingdom (22 277 696), Russia (18 327 837) and Italy (17 514 617).

Oceania: 8 771 778 cases; the five countries reporting most cases are Australia (7 240 295), New Zealand (1 153 946), French Polynesia (72 922), Fiji (65 007) and New Caledonia (62 016).

Other: 705 cases have been reported from an international conveyance in Japan.

Deaths have been reported from:

Africa: 253 913 deaths; the five countries reporting most deaths are South Africa (101 092), Tunisia (28 641), Egypt (24 718), Morocco (16 076) and Ethiopia (7 512).

Asia: 1 301 807 deaths; the five countries reporting most deaths are India (524 611), Indonesia (156 574), Iran (141 308), Philippines (60 455) and Vietnam (43 078).

America: 2 747 773 deaths; the five countries reporting most deaths are United States (1 004 760), Brazil (666 180), Mexico (324 895), Peru (213 186) and Colombia (139 854).

Europe: 1 986 610 deaths; the five countries reporting most deaths are Russia (379 029), United Kingdom (178 465), Italy (167 880), France (162 153) and Germany (138 996).

Oceania: 12 710 deaths; the five countries reporting most deaths are Australia (8 469), New Zealand (1 112), Fiji (864), Papua New Guinea (651) and French Polynesia (649).

Other: 6 deaths have been reported from an international conveyance in Japan.

EU/EEA:

As of week 2022-21, 143 818 602 cases have been reported in the EU/EEA: France (29 475 176), Germany (26 273 768), Italy (17 514 617), Spain (12 392 498), Netherlands (8 083 616), Poland (6 015 409), Portugal (4 681 854), Austria (4 274 243), Belgium (4 140 919), Czechia (3 916 238), Greece (3 447 838), Romania (2 838 845), Denmark (2 815 812), Sweden (2 508 379), Slovakia (2 291 011), Hungary (1 919 921), Ireland (1 537 903), Norway (1 432 888), Lithuania (1 400 367), Bulgaria (1 164 659), Croatia (1 136 410), Finland (1 089 673), Slovenia (1 024 643), Latvia (825 934), Estonia (561 833), Cyprus (481 205), Luxembourg (272 367), Iceland (188 659), Malta (94 576) and Liechtenstein (17 341).

As of week 2022-21, 1 103 440 deaths have been reported in the EU/EEA: Italy (167 880), France (162 153), Germany (138 996), Poland (116 686), Spain (106 510), Romania (61 552), Hungary (45 330), Czechia (40 222), Bulgaria (37 133), Belgium (31 220), Greece (29 823), Portugal (23 112), Netherlands (22 322), Slovakia (19 461), Sweden (18 982), Austria (16 171), Croatia (15 983), Lithuania (9 190), Slovenia (7 778), Latvia (6 440), Ireland (6 254), Finland (5 989), Denmark (5 303), Norway (3 141), Estonia (2 448), Luxembourg (1 272), Cyprus (1 173), Malta (721), Iceland (114) and Liechtenstein (81).

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

In week 2022-21, in the EU/EEA overall, the reported weekly cases decreased by – 30.9% compared to the previous week. Weekly increases were observed in Latvia. The countries with the highest 14-day notification rates per 100 000 population are: Portugal (3 559), Luxembourg (573), Germany (571), Italy (515) and Greece (490). Overall, all countries except for Latvia reported a decrease in the weekly cases.

As of week 13 2022, ECDC has discontinued the assessment of each country's epidemiological situation using its composite score, mainly due to changes in testing strategies affecting 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](#).

Since the last update on 26 May 2022 and as of 2 June 2022, no changes have been made to ECDC variant classifications for variants of concern (VOC), variants of interest (VOI), variants under monitoring and de-escalated variants.

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

Public Health Emergency of International Concern (PHEIC):

On 30 January 2020, the World Health Organization 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](#) and [eleventh](#) 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 and 11 April 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](#).

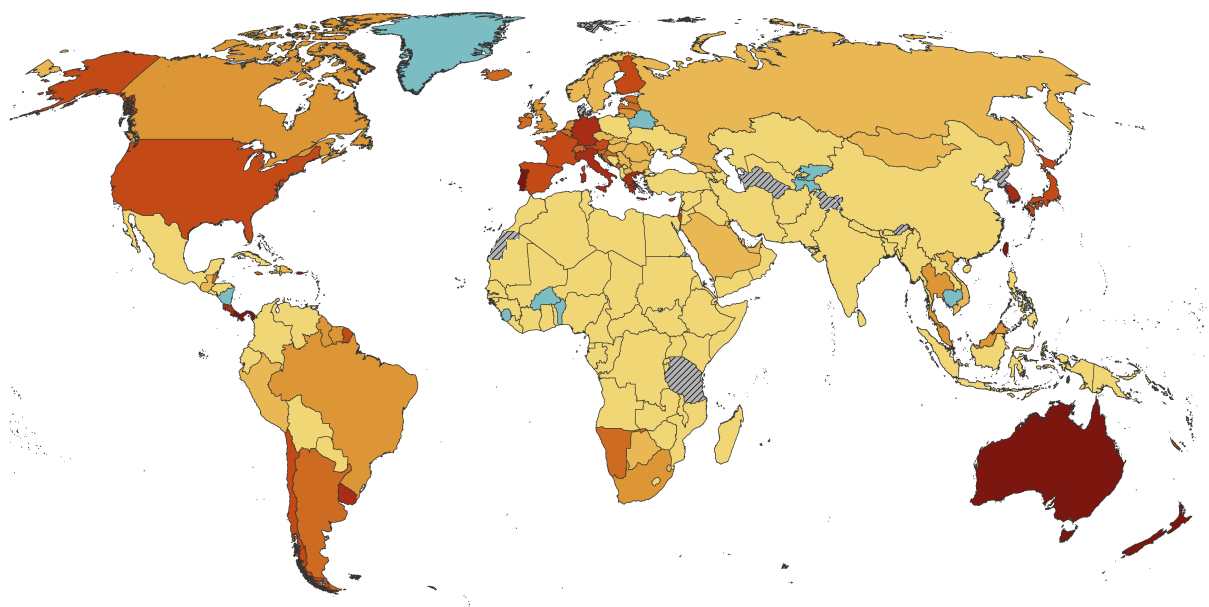
Actions

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](#).

Geographic distribution of 14-day cumulative number of reported COVID-19 cases per 100 000 population, worldwide, 2022-w20 to 2022-w21

Source: ECDC



14-day COVID-19 case notification rate per 100 000, 2022-w20 to 2022-w21



Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat. The boundaries and names shown on this map do not imply official endorsement or acceptance by the European Union. Date of production: 01/06/2022

Influenza – Multi-country – Monitoring 2021/2022 season

Opening date: 15 October 2021

Latest update: 3 June 2022

Epidemiological summary

Week 20 2022 (16 May-22 May 2022)

Eight of 39 countries across the Region reported widespread influenza activity.

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

Finland reported seasonal influenza activity above 30% positivity in sentinel primary care (50%).

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

Hospitalised patients with laboratory confirmed influenza were infected with type A or B viruses.

8/24

2021-2022 season overview

This is the last weekly update of the influenza season and updates during the interseason period (weeks 21-39) will be on a monthly basis.

For the Region as a whole, influenza activity reached levels well above those observed in the 2020/21 season.

Influenza activity, based on sentinel primary care specimens from patients presenting with ILI or ARI symptoms, first peaked in week 52/2021 (reaching 19% positivity), declining thereafter until week 4/2022, when it increased again reaching a plateau phase (25-30% positivity) between weeks 10 and 15/2022 (this represents late activity compared to most previous seasons) followed by a subsequent week decline.

Different timing, epidemiological situations and level of influenza activity in the countries across the Region have been observed over the season.

Different levels of activity have been observed between the countries and areas of the Region, with a dominance of A(H3N2) viruses in most countries.

During the influenza Vaccine Composition Meeting for the northern hemisphere 2022/23 season, held in February 2022, WHO recommended updating of the A(H3N2) and the B/Victoria-lineage components. The full report can be found [here](#).

The European I-MOVE network estimated influenza vaccine effectiveness using a multicentre, test-negative design among symptomatic patients presenting at primary care between October 2021 and March 2022. Preliminary influenza vaccine effectiveness against influenza A among seven study sites and among all ages was 36% (95% CI: 13-53) and 41% (95% CI: 15-59) among those aged 18-64 years. All-age vaccine effectiveness against influenza A(H3N2) was 35% (95% CI: 6-54) and 37% (95% CI: 3-59) among those aged 18-64 years. There were too few influenza-positive cases among other age groups to allow for vaccine effectiveness estimations.

In [Sweden](#), the vaccine effectiveness against laboratory-confirmed influenza was estimated to be 47% for individuals over 65 years of age.

According to preliminary data in mainland [France](#), the vaccine effectiveness was estimated to be 50% (95% CI: 14-71) against all circulating influenza viruses, 77% (95% CI: 36-92) for A(H1N1)pdm09 and 31% (95% CI: -29-64) for A(H3N2).

For children aged two to six years in [Denmark](#), the estimated vaccine effectiveness against influenza A viruses was estimated at 63% (95% CI: 10.9-84.4) in those hospitalised and 64% (95% CI: 50.5-74.1) in those not hospitalised.

Preliminary results of 2021/22 seasonal influenza vaccine effectiveness estimates from the United States showed that vaccine effectiveness against medically attended outpatient acute respiratory infection associated with A(H3N2), the dominant influenza virus in circulation, was 16% (95% CI: -16% to 39%).

With increased circulation of influenza viruses, clinicians should consider early antiviral treatment of patients in at-risk groups with influenza virus infection, according to local guidance, to prevent severe outcomes. The majority of viruses analysed so far have remained susceptible to neuraminidase inhibitors and baloxavir marboxil.

Source: [Flu News Europe](#)

ECDC assessment

For the Region as a whole, influenza activity has increased and remains well above what was seen in 2020/21, but is still at lower levels compared with seasons prior to the COVID-19 pandemic.

With increased circulation of influenza virus, clinicians should consider early antiviral treatment of patients in at-risk groups with influenza virus infection, according to local guidance, to prevent severe outcomes. Viruses analysed so far have remained susceptible to neuraminidase inhibitors and baloxavir marboxil.

Actions

ECDC and WHO monitor influenza activity in the WHO European Region. Data are available on the [Flu News Europe](#) website. This is the last weekly update of the influenza season and updates during the interseason period (weeks 21-39) will be on a monthly basis.

Arrival of people displaced from Ukraine to the EU following Russia's aggression in Ukraine - Multistate – 2022

Opening date: 24 February 2022

Latest update: 3 June 2022

Epidemiological summary

According to the [United Nations](#), between 24 February 2022 and as of 1 June, the total number of people who fled Ukraine reached 6 983 041. In total, 3 690 089 have crossed the Polish border; 1 020 560 the Romanian; 698 420 the Hungarian; and 466 264 the Slovakian. In addition, Czechia's Ministry of the Interior reported 362 402 special visa concessions to Ukrainian applicants as of 1 June. Outside of the EU/EAA, 483 306 people have sought safety in the Republic of Moldova ([United Nations](#)). In addition, according to the [United Nations](#), up to 2 388 941 people have returned to Ukraine since 28 February.

On 2 June 2022, the World Health Organization published the [fourteenth situation report](#) on the emergency in Ukraine, which reported that approximately 8 million people are internally displaced within Ukraine.

No major outbreaks or other events related to communicable diseases have been detected since the previous update.

Summary: On 24 February 2022, Ukraine declared martial law following Russia's invasion. Shortages of food and water supplies; lack of sanitation, electrical power, transportation and healthcare provision; and the overall lack of security have resulted in large numbers of people fleeing Ukraine. The majority of these are women, children and elderly people. They are finding temporary shelter in neighbouring countries and are currently reported to be mostly dispersing into the community. A number of dedicated reception centres have been set up.

Sources: [Relief Web](#) | [United Nations](#) | [WHO](#) | [European Union Asylum Agency](#)

ECDC assessment

The displacement of large numbers of people into neighbouring countries, irrespective of the type of accommodation, will result in difficulties for displaced people in accessing healthcare, potentially putting them at greater risk of complications from acute or chronic conditions. Situations of overcrowding could favour outbreaks of infectious diseases, in particular respiratory infections. This includes influenza and COVID-19, which are currently circulating in some of the reception countries, as well as tuberculosis (TB). Detection of cases of influenza, COVID-19 or TB among the displaced population is not unexpected. [Vaccination coverage in Ukraine](#) is sub-optimal for several vaccine-preventable diseases, including [COVID-19](#). Vaccination against poliomyelitis and measles should be considered as a priority, especially among the paediatric population, as well as DTP (DTaP-IPV combination vaccine for children, with Hib-component only for children <6 years; Td for adults). In addition, COVID-19 vaccination should be offered, and the elderly and other risk groups should be prioritised. Public health authorities should increase awareness among healthcare providers in order to detect priority infectious diseases that could present among displaced Ukrainian people.

In recent weeks, the number of displaced people entering EU/EEA countries from Ukraine has stabilised. The situation is dynamic and current trends may evolve further in the upcoming weeks. Secondary population movements are expected once displaced populations enter into EU/EEA countries. The number of Ukrainian people seeking asylum and temporary protection in EU/EEA countries could serve as a reference to estimate secondary population movements.

Actions

ECDC is working closely with the countries that are receiving displaced persons from Ukraine, in collaboration with the European Commission, other Member States, WHO and other international partners. ECDC will continue to closely monitor the situation through epidemic intelligence activities, regular meetings with the public health authorities of the involved countries and field activities. To date, the following documents have been published by ECDC to provide guidance to healthcare and frontline workers: '[Operational public health considerations for the prevention and control of infectious diseases in the context of the military aggression in Ukraine](#)', '[Testing for tuberculosis infection and screening for tuberculosis disease among refugees arriving in EU from Ukraine](#)', '[Information to guide individual health assessment of refugees fleeing the war in Ukraine - Considerations for healthcare workers](#)', '[Guidance for the prevention and control of COVID-19 in temporary reception centres in the context of the large numbers of people fleeing Ukraine](#)' and '[Ensuring high-quality of HIV care for displaced people from Ukraine](#)'.

In addition, ECDC has opened an item in EpiPulse and encourages Member States to report public health events related to the crisis in EpiPulse and to share documents relevant to the response that could be of interest to other Member States.

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

Opening date: 2 June 2022

Latest update: 3 June 2022

Epidemiological summary

As of 1 June 2022, European Union (EU), European Economic Area (EEA) and EU-neighbouring countries reported no human cases of West Nile virus (WNV) infection during the 2022 transmission season.

Since the beginning of the 2022 transmission season, no outbreaks among equids and no outbreaks among birds have been reported by EU/EEA countries.

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

Sources: TESSy | Animal Disease Information System

ECDC assessment

No human cases or outbreaks among animals have been notified at this early stage of the transmission season. In accordance with [Commission Directive 2014/110/EU](#), prospective 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 an epidemiological summary every Friday. A set of WNV transmission maps and a dashboard will be published on Fridays once the first WNV infections of the 2022 transmission season are reported.

Monkeypox - Multi-country - 2022

Opening date: 3 June 2022

Latest update: 8 June 2022

Epidemiological summary

A multi-country outbreak of MPX started on 16 May 2022. Since the beginning of the outbreak and as of 3 June 2022 there were 789 confirmed cases reported worldwide that are not related to travel to MPX endemic areas. The majority of cases are in young men, self-identifying as men having sex with men (MSM). There have been no deaths. Two hospitalisations, for reasons other than isolation, were reported worldwide. Health authorities across countries have stated that further cases are expected.

As of 3 June, 482 cases have been confirmed in the EU/EEA, cases have been reported in [Austria](#) (1), [Belgium](#) (14), [Czech Republic](#) (6), [Denmark](#) (2), [Finland](#) (1), [France](#) (33), [Germany](#) (57), [Hungary](#) (1), [Ireland](#) (4), [Italy](#) (20), [Malta](#) (1), the [Netherlands](#) (40), [Norway](#) (1), [Portugal](#) (138), [Slovenia](#) (3), [Spain](#) (156), and [Sweden](#) (4).

Outside of the EU/EEA, 307 cases have been reported in [Argentina](#) (2), [Australia](#) (4), [Canada](#) (53), [Israel](#) (2), [Mexico](#) (1), [Morocco](#) (1), [Switzerland](#) (6), [Thailand](#) (1), [United Arab Emirates](#) (8), the [United Kingdom](#) (208), and the [United States of America](#) (21).

Most cases presented with lesions on the genitalia or peri-genital area, indicating that transmission likely occurs during close physical contact during sexual activities. This is the first time that chains of transmission are reported in Europe without known epidemiological links to West or Central Africa, where this disease is endemic. These are also the first cases worldwide reported among MSM.

ECDC assessment

MPX does not spread easily between people. Human-to-human transmission occurs through close contact with infectious material from skin lesions of an infected person, through respiratory droplets in prolonged face-to-face contact, and through fomites. The predominance, in the current outbreak, of diagnosed human MPX cases among MSM, and the nature of the presenting lesions in some cases, suggest transmission occurred during sexual intercourse.

Based on ECDC's epidemiological assessment, the likelihood of MPX spreading in persons having multiple sexual partners in the EU/EEA is considered high. Although most cases in current outbreaks have presented with mild disease symptoms, monkeypox virus (MPXV) may cause severe disease in certain population groups (young children, pregnant women, immunosuppressed

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persons). However, the likelihood of cases with severe morbidity cannot be accurately estimated yet. The overall risk is assessed as moderate for persons having multiple sexual partners (including some groups of MSM) and low for the broader population.

EU/EEA countries should focus on prompt identification, management, contact tracing and reporting of new MPX cases. Countries should update their contact tracing mechanisms, their diagnostic capacity for orthopoxviruses and review the availability of smallpox vaccines, antivirals, and personal protective equipment (PPE) for health professionals.

Risk communication messages should stress that MPXV is spread through close contact between people, especially in the same household, potentially including the sexual route. A balance should be kept between informing those most at risk but also communicating that the virus does not spread easily between people the risk to the broader population is low.

Actions

ECDC will continue to monitor this event through epidemic intelligence activities and report relevant news on an ad-hoc basis. A [news item](#) was published on 19 May and the [latest epidemiological](#) update was published on 31 May. Previous epidemiological updates were posted on [20 May](#), [25 May](#). Multi-lateral meetings between affected countries, WHO EURO and ECDC have taken place to share information and coordinate response. A [process in EpiPulse](#) has been created to allow countries to share information with one another, WHO, and ECDC. A rapid risk assessment "[Monkeypox Multi-country outbreak](#)" was published on 23 May.

In addition, ECDC is 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.

Increase in hepatitis cases of unknown aetiology in children – Multicountry – 2022

Opening date: 13 April 2022

Latest update: 3 June 2022

Epidemiological summary

On 5 April 2022, the UK reported an increase in acute hepatitis cases of unknown aetiology for whom laboratory testing had excluded hepatitis types A, B, C, D and E among previously healthy children aged under 10 years from Scotland. On 12 April, the United Kingdom reported that in addition to the cases in Scotland, there were approximately 61 further similar cases under investigation in England, Wales and Northern Ireland. The cases presented with symptoms and signs of severe acute hepatitis, including increased levels of liver enzymes (aspartate aminotransaminase/ aspartate transaminase [AST] or alanine aminotransaminase/ alanine transaminase [ALT] greater than 500 IU/L) and jaundice. Some of the cases also presented with gastrointestinal symptoms such as vomiting, pale stools, diarrhoea, nausea and abdominal pain. A small number of cases presented with fever.

A large proportion of the cases reported to TESSy, including cases from the UK, have tested positive for adenovirus, thus association with adenovirus remains one of the leading hypotheses. Testing data related to SARS-CoV-2 indicate that a smaller proportion tested positive by PCR and around two thirds of the 34 cases tested had a positive serology result. A link to the COVID-19 vaccine is considered unlikely as most cases have been unvaccinated. The cases appear to be unrelated with very few epidemiologically linked cases. Extensive epidemiological investigations are carried out by several national authorities to identify common exposures and risk factors to determine whether individual susceptibility or coinfections could be contributing factors.

On 12 May 2022, public health authorities in [Ireland](#) announced one death associated with hepatitis of unknown aetiology in a child under 12 years of age.

As of 30 May 2022, 304 cases of acute hepatitis of unknown aetiology among children aged 16 years and under have been reported to TESSy from the World Health Organization European region. Just over half (50.8%) of these cases are reported from the UK. The majority of reported cases are five years old or younger. At least 23 cases were admitted to an intensive care unit and 14 children received a liver transplant. A total of 199 cases were tested for

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adenovirus, of which 118 (59.3%) tested positive. A total of 203 cases were tested for SARS-CoV-2, of which 23 (11.8%) tested positive with 23 (67.6%) of the 34 cases with a serology result having a positive finding.

EU/EEA:

As of 30 May 2022, 146 cases of acute hepatitis of unknown aetiology among children aged 16 years and under have been reported to TESSy from 13 EU/EEA countries (Austria [2], Belgium [14], Cyprus [2], Denmark [7], Greece [5], Ireland [8], Italy [29], the Netherlands [14], Norway [5], Poland [3], Portugal [15], Spain [33] and Sweden [9]). Among these cases, six required a liver transplant. There has been one associated death.

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.

Non – EU/EEA:

As of 25 May 2022, the [UKHSA](#) has identified a total of 222 children aged under 16 years with acute hepatitis of unknown aetiology. The cases are predominantly under five years of age and many showed initial symptoms of gastroenteritis followed by the onset of jaundice. The most recent [technical briefing](#) on investigations into the cases in the UK was published on 25 May 2022.

Outside of EU/EEA and the UK, according to the [latest update from WHO](#), as of 26 May 2022, probable cases and cases pending classification have been reported from the Region of the Americas (240, including 216 in the [US](#)), Western Pacific Region (34), the South-East Asia Region (14) and the Eastern Mediterranean Region (5).

According to the WHO, at least 38 children worldwide have required liver transplants and nine deaths have occurred.

ECDC assessment

Adenovirus has been detected in the majority of the cases in the UK, therefore the current leading hypotheses concern adenovirus involvement, possibly with a cofactor that is triggering a more severe infection or immune-mediated liver damage, or that measures during the COVID-19 pandemic have resulted in lack of exposure for the youngest age group and increased susceptibility. Data on pathogens tested for in cases are incomplete and thus, other aetiologies (e.g., other infectious or toxic agents) are still under investigation and have not been excluded. The disease pathogenesis and routes of transmission remain unknown. The disease is quite rare and evidence on human-to-human transmission remains unclear. Cases in the EU/EEA are sporadic with an unclear trend. Whilst the risk for further spread cannot be accurately assessed, as some cases have required liver transplantation, the potential impact for the affected paediatric population is considered high. Access to highly specialised paediatric intensive care and transplantation services may further impact outcomes if the number of cases continues to rise. Considering the unknown aetiology, the affected paediatric population, and the potential severe outcome, this currently constitutes a public health event of concern.

Actions

Multiple alerts and public health responses have been activated across the affected regions. ECDC has established reporting of case-based data for cases of acute hepatitis of unknown aetiology in TESSy. The surveillance reporting protocol is available [here](#). Results are published weekly in the [Joint ECDC-WHO regional Office for Europe Surveillance Bulletin](#).

On 25 May 2022, ECDC published a guidance document for [diagnostic testing of cases of hepatitis of unknown aetiology in children](#).

Additional information for hypothesis testing should be collected in the context of analytical studies looking at other factors and potential co-factors including recent infections. Specific studies should be designed to identify risk factors for infection and severe illness, to investigate routes of potential transmission, to describe the full clinical spectrum, and to ascertain whether the same aetiological agent causes different clinical presentations depending on age and other conditions. Ongoing investigations include an assessment of the underlying level of acute viral infections

circulating in the community, in particular adenoviruses, by age, and whether this is above what would normally be expected.

It is also essential to review available data sources to determine whether the number of cases reported are above what would be expected. ECDC is requesting countries to review ICD codes from hospital discharge data and has shared draft guidance with countries for feedback. The final guidance will be published in the near future.

An [EpiPulse item](#) is available to Member States to inform and facilitate the communication between Member States and ECDC. Member States should report cases in TESSy and updates on their investigations in EpiPulse, for example around detection of adenovirus circulation.

On 28 April 2022, ECDC published a [rapid risk assessment](#). On 19 May 2022, ECDC published an epidemiological update on hepatitis of unknown aetiology in children, available on ECDC [website](#). ECDC will continue to work in collaboration with the affected countries, WHO and other partner organisations. ECDC will continue to monitor the situation through routine epidemic intelligence activities and report significant events in the weekly Communicable Disease Threat Report.

Ebola virus disease - Democratic Republic of the Congo - 2022

Opening date: 25 April 2022

Latest update: 3 June 2022

Epidemiological summary

On 23 April 2022, an EVD outbreak was declared by the health authorities in the DRC, after a case was confirmed in Mbandaka, in the Equateur province of the DRC. Two further cases considered high-risk contacts to the first case were confirmed on 25 April and 4 May 2022 respectively, in Mbandaka. On 19 May and 22 May, a fourth confirmed and fifth probable case were reported in the neighbouring Health Zone of Wangata, where the index case was treated in an Ebola treatment centre. So far, four confirmed cases and one probable case have been reported, all fatal, with two health zones affected (Mbandaka and Wangata). All these cases are epidemiologically linked.

The index case is a 31-year-old man, who had started experiencing symptoms on 5 April 2022 and was cared for at home for over a week, after which he sought treatment at a local health facility. The patient was admitted to an Ebola treatment centre in Wangata on 21 April for intensive care, however died later that same day. According to the Africa CDC, the patient had received an EVD vaccine in 2020.

According to the Institut National de Recherche Biomédicale (INRB) in Kinshasa, it was reported that based on the genetic sequencing of the Ebola virus collected from the case who died on 21 April, this outbreak can be considered a new spillover event, not a resurgence of activity from earlier outbreaks in this part of the DRC. Further epidemiologic investigations are ongoing.

WHO experts are currently supporting the government in contact tracing, testing, and implementing community public health measures to break the chain of transmission. The ring vaccination scheme has commenced, and so far [1 073](#) persons have been vaccinated.

Source: [WHO News Item](#), [WHO Director Tweet](#), [Africa CDC statement](#)

ECDC assessment

Ebola outbreaks in the DRC are recurrent as the virus is present in an animal reservoir in many parts of the country. This is the 14th outbreak ever recorded since 1976 in the DRC and the 6th since 2018. In the Equateur province, it is the third outbreak; the previous outbreaks in this province occurred in 2018 and in 2020 and resulted in 54 and 130 cases, and 33 and 55 deaths, respectively. The DRC has gained much experience over the years given the frequency of outbreaks in the country.

A high level of surveillance and follow-up of survivors is essential to detect and interrupt transmission early on.

Vaccination is expected to help reduce transmission and fatal outcomes. However, the immunity due to previous rVSV-Zebov vaccination in the region of Mbandaka is probably negligible as the duration of protection is estimated to last six months.

Although disease in unvaccinated people is severe and most EU/EEA citizens are not commonly vaccinated against the disease, there is a very low likelihood of infection of EU/EEA citizens in the DRC. The current risk for EU/EEA citizens living in or travelling to Equateur province in the DRC is estimated to be low. The current risk for citizens in the EU/EEA is considered very low, as the likelihood of introduction and secondary transmission within the EU/EEA is very low.

Actions

ECDC will continue monitoring this event through its epidemic intelligence activities and report relevant news on an ad-hoc basis.

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

Opening date: 20 April 2006

Latest update: 3 June 2022

Epidemiological summary

Since the last update on 29 April 2022, approximately 7 177 suspected cholera cases, including 102 deaths, have been reported worldwide. Countries reporting new cases since the previous update are Afghanistan, Cameroon, the Democratic Republic of the Congo, Malawi, Nigeria, South Sudan, Pakistan, Tanzania and Zambia.

Americas

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

Africa

Benin: No update is available since the last update. Since 10 October 2021 and as of 13 March 2022, a total of 1 679 suspected cholera cases including 20 deaths (CFR 1.2%) have been reported in the country.

Cameroon: Since the last update, 3 352 suspected cholera cases including 52 deaths have been reported in Cameroon. In 2022 and as of 2 May, a total of 6 238 suspected cases including 117 deaths have been reported in the country. According to WHO Regional Office for Africa, currently there are 22 districts from five regions (Centre, Littoral, South, South-West, and North regions) with active cholera outbreaks.

Democratic Republic of the Congo (DRC): Since last update, 566 suspected cholera cases including 13 deaths have been reported in DRC. In 2022, and as of 17 April, a total of 5 131 suspected cholera cases including 73 deaths (CFR:1.4%) have been reported in 51 health zones across 11 provinces of the Democratic Republic of the Congo.

Malawi: Since last update on 29 April 2022, Malawi has reported 69 suspected cholera cases including four deaths. In 2022, and as of 8 May 2022, Malawi has reported a total of 133 cholera cases including six deaths.

Mozambique: No update is available since the last update. In 2022 and as of 18 March, a total of 265 suspected cholera cases have been reported in the country.

Nigeria: Since the last update, 503 suspected cholera cases including 23 deaths have been reported in Nigeria. In 2022 and as of 1 May, a total of 1 861 cases including 54 deaths (CFR 2.9%) have been reported from 16 states and 60 Local Government Areas (LGAs). Three states - Taraba (615 cases), Cross River (593) and Katsina (134 cases) account for 72% of all reported cases.

South Sudan: As of 7 May 2022, 31 cases and one death (CFR 3.2%) have been reported from the Bentiu IDP camp in Rubkona County of Warrap State. Twelve cases have been confirmed positive by RDT for cholera and eight tested positive by culture at the National Public Health Laboratory in Juba. This is the first time South Sudan is reporting cholera cases since last outbreak in 2012.

Tanzania: Since the last update, 89 new cholera cases including one death have been reported in Tanzania. In 2022 and as of 7 May, a total of 183 cases and one death (CFR 0.5%) have been reported from the Districts of Tanganyika in Katavi Regions (63, 34.4%) and Uvinza in Kigoma Region (120, 65.5%).

Zambia: According to WHO Regional Office for Africa, a cholera outbreak was declared in Zambia on 3 May 2022 affecting three districts Lusaka, Chilanga, and Nsama. In 2022 and as of 3 May, 21 cholera cases have been reported in the country.

Zimbabwe: Since the last update, no new cholera cases have been reported in Zimbabwe. On 27 January 2022, Zimbabwe reported one cholera case.

Asia

Afghanistan: Since the last update, 98 suspected cholera cases including eight deaths have been reported in Afghanistan. In 2022 and as of 14 May, a total of 5 305 cases including eight deaths have been reported.

Bangladesh: Since the last update no new cholera cases have been reported in Bangladesh. In 2022 and as of 12 April, a total of 495 433 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 33 822 cases and no deaths have been reported in Rohingya Refugee Camp in Cox's Bazar.

India: Since the last update no new cholera cases have been reported in India. In 2022 and as of 9 March, a total of 100 suspected cholera cases have been reported in Gujarat.

Pakistan: Since the last update, 2 448 suspected cholera cases have been reported in Pakistan. In 2022 and as of 15 May, a total of 2 577 cholera cases have been reported in the country.

Philippines: Since the last update, no new cholera cases have been reported in the Philippines. In 2022 and as of 7 February, 491 cholera cases and six fatalities have been reported.

No updates were available on the outbreaks reported in [Togo](#), [Uganda](#), and [Ethiopia](#) in early 2022.

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

ECDC assessment

Cholera cases continue to be reported in western Africa, and southeast Asia over the past months. Cholera outbreaks have also been notified in the eastern and southern part of Africa as well as in some areas of Asia.

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

In 2019, 26 cases were reported in the EU/EEA Member States, while 26, 17, and 23 cases were reported in 2018, 2017, and 2016 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.

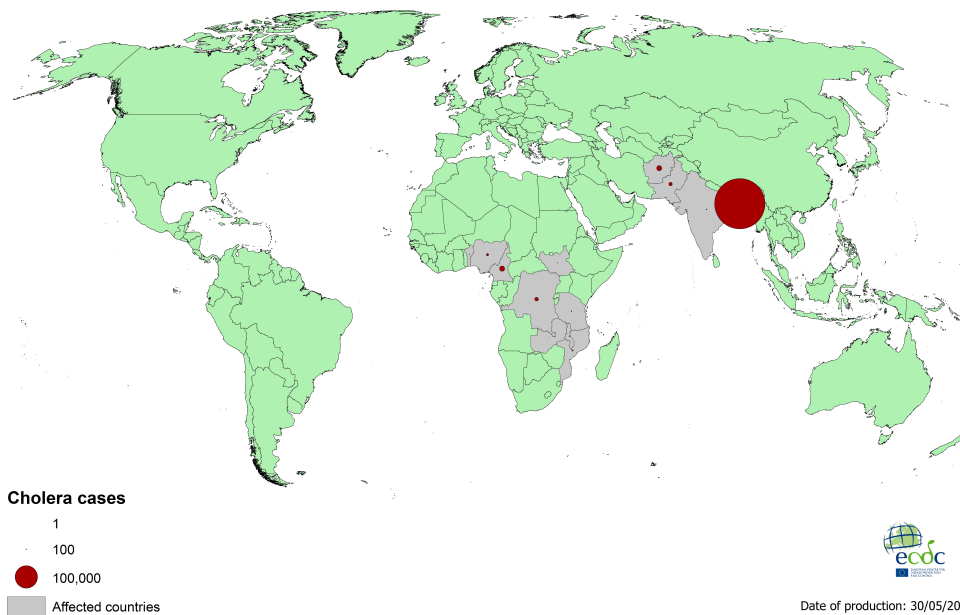
Actions

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](#).

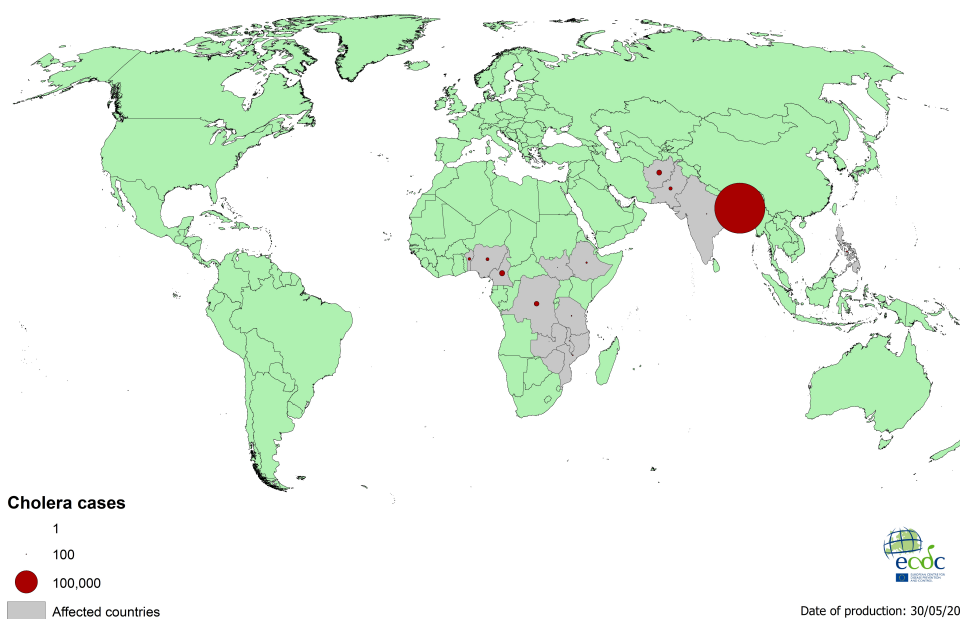
Geographical distribution of cholera cases reported worldwide from March to May 2022

ECDC



Geographical distribution of cholera cases reported worldwide as of May 2022

ECDC



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

Opening date: 27 January 2017

Latest update: 3 June 2022

Epidemiological summary

Europe

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

Dengue: No autochthonous cases of dengue have been reported in Europe in 2022.

Americas and the Caribbean

Chikungunya virus disease:

Bolivia: In 2022 and as of 14 May, 88 cases, including nine confirmed cases and no deaths have been reported. This is an increase of 32 cases since 2 April 2022.

Brazil: In 2022 and as of 14 May, 92 349 cases, including 31 954 confirmed cases and 14 deaths have been reported. This is an increase of 43 684 cases and seven deaths since 16 April 2022.

Colombia: In 2022 and as of 21 May, 35 cases and no deaths have been reported. This is an increase of two cases since 23 April 2022.

Costa Rica: In 2022 and as of 14 May, four cases and no deaths have been reported. This is an increase of one case since 16 April 2022.

El Salvador: In 2022 and as of 14 May, 39 cases and no deaths have been reported. This is an increase of 10 cases since 23 April 2022.

Guatemala: In 2022 and as of 14 May, 284 cases and no deaths have been reported. This is an increase of 83 cases since 26 March 2022.

Honduras: In 2022 and as of 14 May, 18 cases and no deaths have been reported.

Nicaragua: In 2022 and as of 30 April, two cases and no deaths have been reported.

Paraguay: In 2022 and as of 21 May, 346 cases, including 67 confirmed cases and no deaths have been reported. This is an increase of 278 cases since 23 April 2022.

Peru: In 2022 and as of 21 May, 124 cases, including 111 confirmed cases and no deaths have been reported. This is an increase of 66 cases since 23 April 2022.

Venezuela: In 2022 and as of 7 May, 19 cases and no deaths have been reported. This is an increase of eight cases since 9 April 2022.

Dengue:

In 2022 and as of 1 June, the WHO Pan American Health Organization (PAHO) reported 1 238 528 dengue cases, including 544 125 confirmed cases and 426 associated deaths, in the Americas. The five countries reporting most cases are: Brazil (1 114 758), Peru (45 816), Colombia (21 576), Nicaragua (12 171) and Ecuador (8 449). This is an increase of 543 500 cases and 217 deaths since 4 May 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

Chikungunya virus disease:

India: In 2022 and as of 30 April, 18 856 cases, including 1 261 confirmed cases and no deaths have been reported. This is an increase of 18 519 cases since 25 April 2022.

Malaysia: In 2022 and as of 7 May, 396 cases and no deaths have been reported. This is an increase of 85 cases since 9 April 2022.

Thailand: In 2022 and as of 26 May, 98 cases and no deaths have been reported. This is an increase of 19 cases since 18 April 2022.

Dengue:

Afghanistan: In 2022 and as of 5 March, 14 cases and no deaths have been reported.

Bangladesh: According to media quoting health authorities, in 2022 and as of 31 May, 352 cases, including 352 confirmed cases and no deaths have been reported. This is an increase of 214 cases since 12 February 2022.

Cambodia: In 2022 and as of 7 May, 817 cases and one death have been reported. This is an increase of 209 cases since 16 April 2022.

China: In 2022 and as of 31 March, five cases and no deaths have been reported. This is an increase of two cases since 27 January 2022.

India: According to media quoting health authorities, in 2022 and as of 30 April, 8 278 cases and one death have been reported. This is an increase of 7 878 cases and one death since 21 March 2022.

Indonesia: According to media quoting health authorities, in 2022 and as of 31 March, 22 331 cases and 229 deaths have been reported. This is an increase of 7 062 cases and 65 deaths since 4 March 2022.

Laos: In 2022 and as of 14 May, 342 cases and no deaths have been reported. This is an increase of 211 cases since 16 April 2022.

Malaysia: In 2022 and as of 7 May, 13 651 cases and seven deaths have been reported. This is an increase of 3 694 cases and two deaths since 9 April 2022.

Maldives: In 2022 and as of 30 April, 159 cases and no deaths have been reported. This is an increase of 93 cases since 31 March 2022.

Nepal: In 2022 and as of 21 May, 55 cases and no deaths have been reported. This is an increase of 17 cases since 23 April 2022.

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

Pakistan: According to media quoting health authorities, in 2022 and as of 30 May, 199 cases, including 25 confirmed cases and no deaths have been reported. This is an increase of 161 cases since 6 April 2022.

The **Philippines:** In 2022 and as of 17 April, 20 057 cases and 115 deaths have been reported. This is an increase of 7 423 cases and 31 deaths since 26 March 2022.

Singapore: In 2022 and as of 28 May, 11 674 cases and no deaths have been reported. This is an increase of 5 032 cases since 30 April 2022.

Sri Lanka: In 2022 and as of 31 May, 18 298 cases and no deaths have been reported. This is an increase of 5 044 cases and since 29 April 2022.

Thailand: In 2022 and as of 23 May, 1 584 cases and no deaths have been reported. This is an increase of 695 cases since 25 April 2022.

Timor-Leste: In 2022 and as of 27 May, 4 985 cases and 56 deaths have been reported. This is an increase of 358 cases and four deaths since 4 May 2022. The incidence of cases has been steadily decreasing since February 2022.

[Vietnam](#): In 2022 and as of 8 May, 25 694 cases and 13 deaths have been reported. This is an increase of 10 990 cases and seven deaths since 10 April 2022.

Africa

Chikungunya virus disease:

[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 22 May, 83 cases, including five confirmed cases and no deaths have been reported. This is an increase of 39 cases since 24 April 2022.

Dengue:

[Côte d'Ivoire](#): In 2022 and as of 19 March, 12 confirmed cases and one death have been reported. This is an increase of one case since 6 February 2022.

[Réunion](#): In 2022 and as of 7 May, 1 243 confirmed cases and no deaths have been reported. This is an increase of 216 cases since 23 April 2022. According to Santé Publique France, the weekly number of dengue cases was increasing at the start of the year but has stabilised since week 5, 2022 and slightly decreased in weeks 17, 2022 and 18, 2022. Cases remain 11.5 times lower than during the same period in previous years. The situation is still considered as 'inter-epidemic'.

[São Tomé and Príncipe](#): In 2022 and as of 17 May, 103 confirmed cases and no deaths have been reported. This is an increase of 62 cases since 3 May 2022. The Minister of Health of São Tomé and Príncipe officially declared an outbreak of dengue fever on 4 May 2022, it being the first reported dengue fever outbreak in the country. Samples were sent to an international reference laboratory in Lisbon, Portugal, where further laboratory testing confirmed that the samples were positive for dengue infection, and that the predominant serotype was dengue virus serotype 3 (DENV 3). Preliminary results suggest the possibility of other serotypes present within the batch of samples. The magnitude of the dengue outbreak in the country may be largely underestimated considering the limitations of diagnostic capacity, high asymptomatic rates, limited healthcare resources, and an untested surveillance system for dengue outbreaks. The ongoing rainy season and recent flooding in the past few months have led to favourable environmental conditions for disease transmission the disease and has also weakened the country's sanitation, hygiene, and infrastructural systems which may contribute to more infectious disease and malnutrition due to the loss of agricultural crops caused by floods. Rains are expected to continue until June this year.

Australia and the Pacific

Chikungunya virus disease:

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

Dengue:

[Australia](#): In 2022 and as of 17 April, 19 cases and no deaths have been reported. This is an increase of 11 cases since 27 March 2022.

[Cook Islands](#): In 2022 and as of 26 March, two cases and no deaths have been reported.

[Fiji](#): In 2022 and as of 16 May, 1 960 cases and no deaths have been reported. This is an increase of 405 cases since 18 April 2022.

[French Polynesia](#): In 2022 and as of 24 March, 554 cases and no deaths have been reported.

[Micronesia \(Federated States of\)](#): In 2022 and as of 23 April, 11 cases and no deaths have been reported. This is an increase of one case since 19 March 2022.

[New Caledonia](#): In 2022 and as of 31 March, one case and no deaths have been reported.

[Palau](#): In 2022 and as of 7 May, 17 cases and no deaths have been reported. This is an increase of eight cases since 9 April 2022.

[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. This is an increase of seven cases since 9

April 2022.

[Vanuatu](#): In 2022 and as of 7 May, 18 cases and no deaths have been reported. This is an increase of eight cases since 2 April 2022.

[Wallis and Futuna](#): In 2022 and as of 7 May, 19 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 in 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 very low, as the environmental conditions are not yet favourable to vector activity and virus replication. To date, all autochthonous outbreaks of [chikungunya virus disease](#) and [dengue](#) in mainland EU/EEA have occurred between July 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

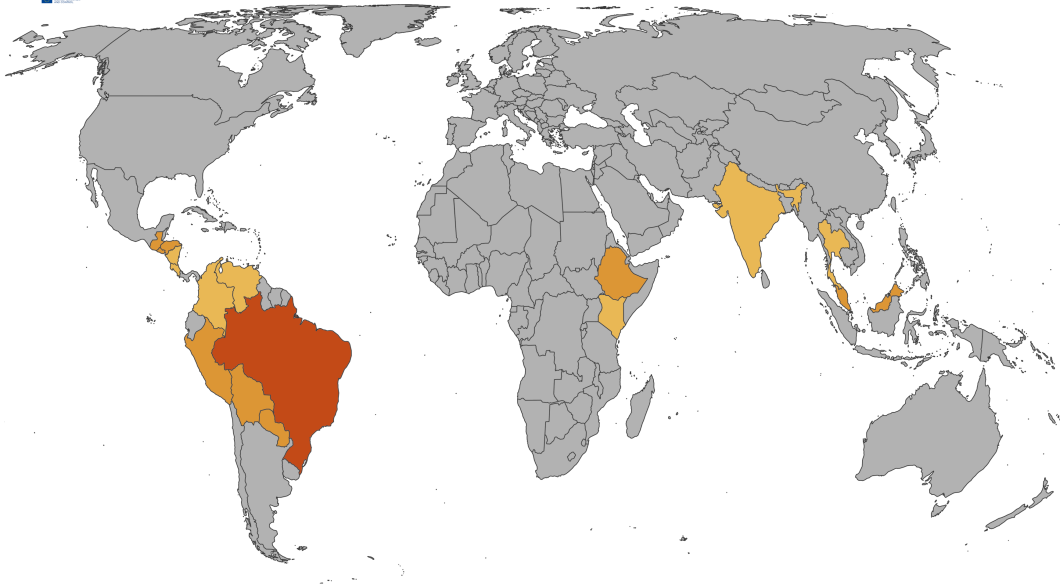
ECDC monitors these threats through its epidemic intelligence activities and reports on a monthly basis. A summary of the worldwide overview of [dengue](#) and [chikungunya virus disease](#) is available on ECDC's website.

3-month chikungunya virus disease case notification rate per 100 000 March–May 2022

ECDC



3-month chikungunya virus disease case notification rate per 100 000, March–May 2022



Notification rate per 100 000 population
 No cases reported 0.00–0.009 0.01–0.99 1.00–9.99 10.00–99.99 100.00–10000.00

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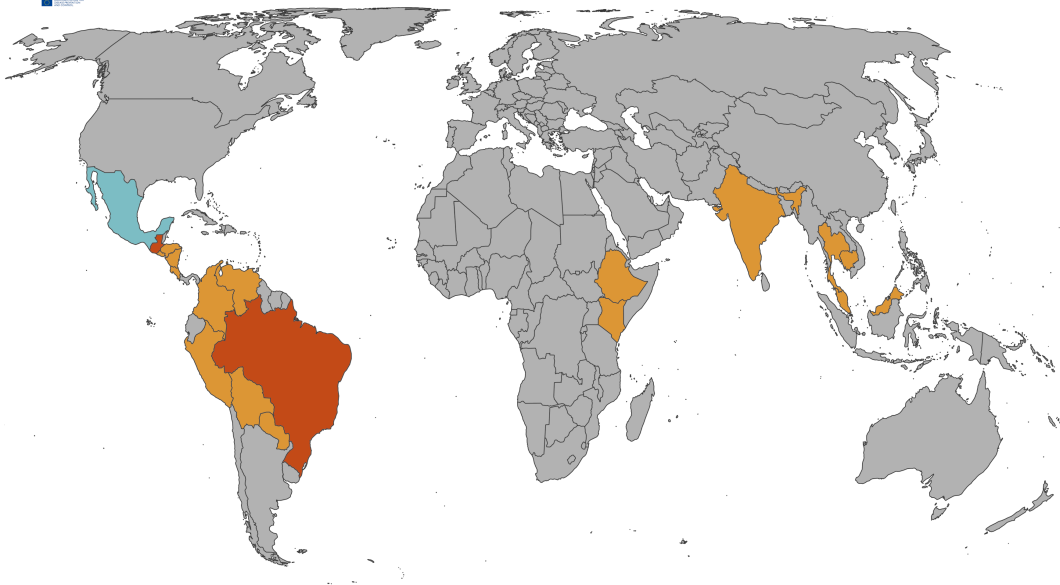
Date of production: 03/06/2022

12-month chikungunya virus disease case notification rate per 100 000 June 2021–May 2022

ECDC



12-month chikungunya virus disease case notification rate per 100 000, June 2021–May 2022



Notification rate per 100 000 population
 No cases reported 0.00–0.009 0.01–0.99 1.00–9.99 10.00–99.99 100.00–10000.00

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Date of production: 03/06/2022

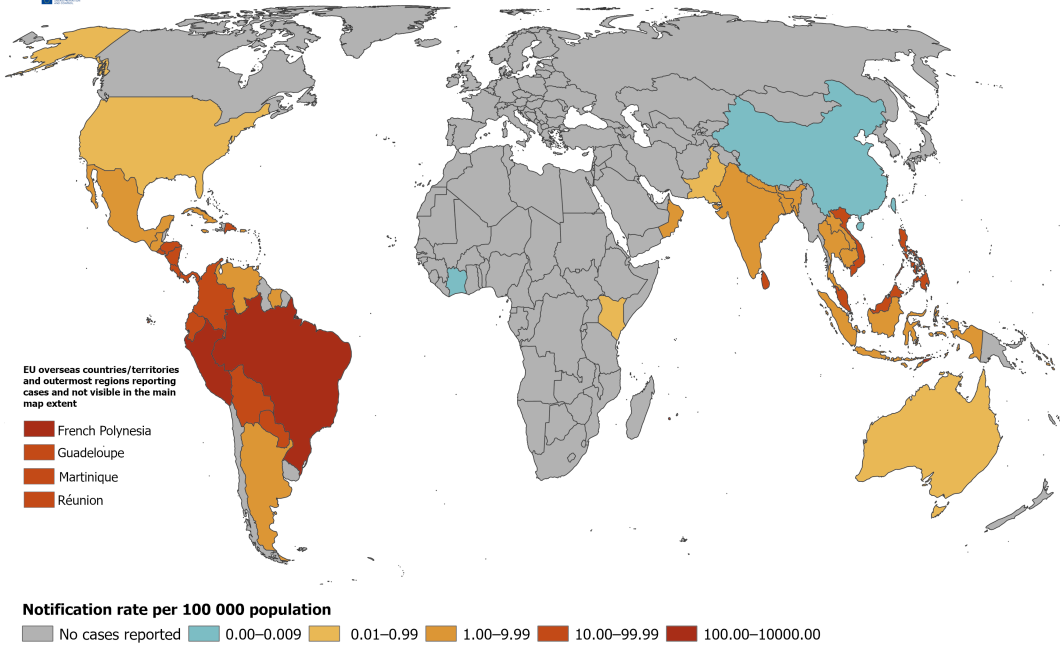
3-month dengue case notification rate per 100 000 March–May 2022

ECDC

22/24



3-month dengue case notification rate per 100 000, March–May 2022



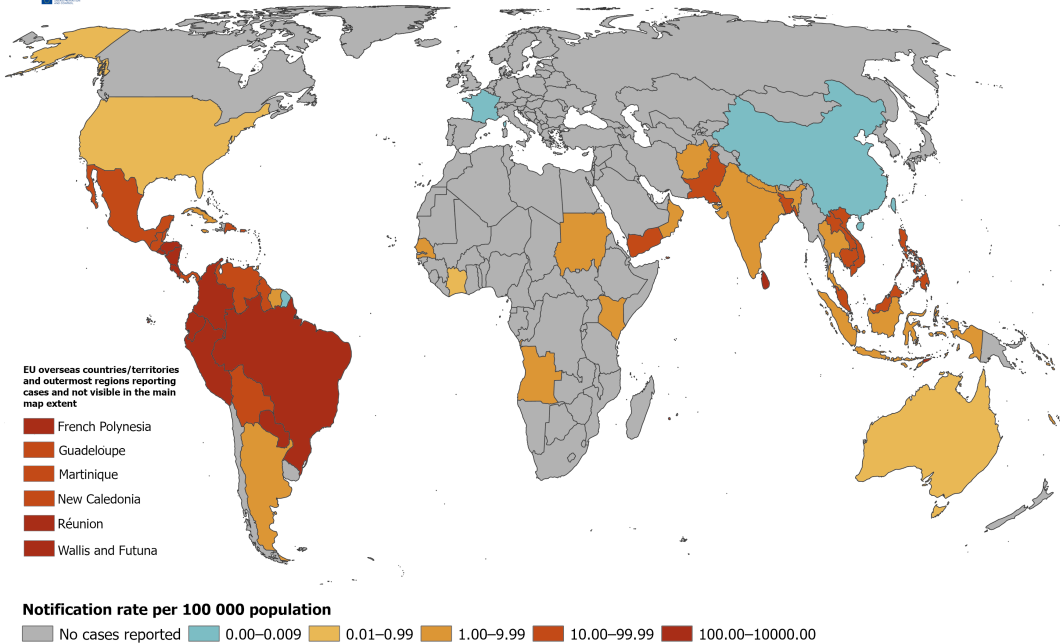
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12-month dengue case notification rate per 100 000 June 2021–May 2022

ECDC



12-month dengue case notification rate per 100 000, June 2021–May 2022



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