COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 26, 26 June-2 July 2022

All users

This weekly bulletin provides updates on threats monitored by ECDC.

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NEWS

Mass gathering – epidemic intelligence activities during Hajj 2022

The annual pilgrimage to the city of Mecca in Saudi Arabia, known as Hajj, will take place this year from 7 to 12 July 2022. One million Muslims from across the world are expected to attend. A list of requirements for arriving pilgrims is set by the Ministry of Health of Saudi Arabia (MoH) and includes: a mandatory proof of COVID-19 vaccination with vaccines approved in the Kingdom of Saudi Arabia, a negative SARS-CoV-2 PCR test taken 72 hours before arrival, a proof of vaccination with Meningococcal ACWY vaccine no less than 10 days before arrival for adults and children from one year of age, a vaccination against poliomyelitis if coming from countries with wild poliovirus circulation, and a yellow fever vaccination (from nine months of age) if coming from countries with prevalent yellow fever disease. In addition, the pilgrims should not be older than 65 years (MoH). It is recommended to be vaccinated against seasonal influenza with the southern hemisphere vaccine no less than 10 days before arrival in Saudi Arabia.

Epidemiological situation with some infectious diseases in Saudi Arabia

From the beginning of the pandemic, and as of 29 June 2022, Saudi Arabia reported 793 729 confirmed **COVID-19** cases, including 9 205 deaths (WHO). Since the first report of **MERS-CoV** cases in 2012, over 2 100 human cases have been reported in Saudi Arabia, of which 17 were reported in 2021; no cases, so far, have been reported by Saudi Arabia in 2022. The risk of **malaria** in urban areas of Jeddah, Mecca, Riyadh, Medina, and Taif is considered low. An infestation of ***Schistosoma haematobium*** is limited to areas north of Mecca and Medina, Jizan and the Red Sea Coast, but the risk of contracting Schistosomiasis in urban areas is low. **Leishmaniasis** (*Leishmania major*) (cutaneous type) is endemic in the Middle East. Approximately 1 000 cases are detected annually, with a peak between October and December.

No cases of **monkeypox** have been reported in Saudi Arabia as of 30 June 2022 (joint ECDC-WHO surveillance bulletin). The risk of monkeypox spread is considered low for the broader population, but moderate for people having multiple sexual partners.

Assessment: ECDC published a rapid risk assessment on Hajj on 2 July 2019; the risks and advice to pilgrims attending Hajj remain valid for this year.

The risk for EU/EEA citizens to become infected with communicable diseases during the 2022 Hajj is considered low, thanks to the vaccination requirements for travelling to Makkah (Mecca) and the Saudi Arabian preparedness plans that addresses the management of health hazards during and after Hajj. As with other mass gathering events, the risk of communicable disease outbreaks is greatest for respiratory and food- and waterborne diseases. Outbreaks of MERS-CoV continue to be reported from the Arabian Peninsula, which implies that there is a risk of importation of cases to Europe after the Hajj. The risk of vaccine-preventable and vector-borne diseases is considered low if preventive measures are applied.

The most recent updates and guidance on monkeypox are available on ECDC's website.

Actions: ECDC will monitor this event through its regular epidemic intelligence monitoring for mass gatherings from 4 July to 19 July 2022, and will report weekly in the CDTR.

I. Executive summary

EU Threats

Monkeypox - Multi-country - 2022

Opening date: 3 June 2022 Latest update: 1 July 2022

On 16 May 2022, a multi-country outbreak of monkeypox (MPX) began, which has been affecting the United Kingdom (UK), the EU/EEA, Asia, Africa (non-endemic countries), the Americas, and Australia. Cases have been identified across the world.

➔Update of the week

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Since the last epidemiological update, with data as of 28 June 2022, 217 monkeypox cases have been reported from eight EU/EEA countries: France (110), Germany (89), Portugal (11), Luxembourg (2), Romania (2), Austria (1), Estonia (1) and Iceland (1).

Outside the EU/EEA, 333 monkeypox cases have been reported from 10 non EU/EEA countries: United Kingdom (166), United States (107), Canada (43), Israel (7), Switzerland (4), Peru (2), Brazil (1), Puerto Rico (1), South Africa (1) and Turkey (1).

Disclaimer: *Data presented in this update are compiled from TESSy, official sources, or if unavailable, from public sources quoting national authorities, including media reports. Data were collected on 16 June 2022.*

Other news

On 25 June 2022, the Regional Health Agency of Ile-de-France reported a confirmed monkeypox case in a child, and one probable case identified among the siblings of the same child. Measures have been taken with the Ministry of National Education and a message has been sent to the parents of children at the school attended by the child as they may be at-risk contacts.

On the 25 June 2022, WHO published a report on the Meeting of the International Health Regulations (2005) (IHR) Emergency Committee regarding the current multi-country monkeypox outbreak that was held on 23 June, which concluded that the Committee noted that many aspects of the outbreak are unusual, such as the occurrence of cases in countries where monkeypox virus circulation had not been previously documented. However, the committee resolved by consensus to advise the WHO Director-General that at this stage the outbreak should not be determined to constitute a PHEIC. The Committee unanimously acknowledged the emergency nature of the event and that controlling the further spread of the outbreak requires intense response efforts and advised that the event should be closely monitored and reviewed after a few weeks, once more information about the current unknowns becomes available, to determine if significant changes have occurred that may warrant a reconsideration of their advice.

On 28 June 2022, the European Commission published a press release informing of the delivery of the first vaccine doses purchased in response to the current monkeypox outbreak by the European Commission's Health Emergency Preparedness and Response Authority (HERA). According to the press release, 109 090 doses have been procured and the deliveries will take place regularly in the weeks and months to come, prioritising the most affected Member States. Spain will receive an initial delivery of 5 300 doses, and Portugal, Germany, and Belgium will receive doses soon after.

In a press release on 28 June, EMA's human medicines committee (CHMP) announced it had started a review of data to extend the use of the smallpox vaccine Imvanex to include protecting people from monkeypox disease. The decision to start this review is based on results from laboratory studies (non-clinical data) suggesting that the vaccine triggers the production of antibodies that target the monkeypox virus and may help protect against the disease. Imvanex is marketed as Jynneos in the US, where it is authorised for the prevention of both monkeypox and smallpox. Considering the limited availability of Imvanex in the EU, EMA's Emergency Task Force (ETF) has recommended that Jynneos can be temporarily used to provide protection against monkeypox disease in the EU. The efficacy of Jynneos in the prevention of monkeypox disease can be inferred from both animal and clinical studies.

On 27 June 2022, the Africa Centres for Disease Control and Prevention (Africa CDC) published a press release stating that since the beginning of 2022, 1 715 cases (1 636 suspected; 79 confirmed) and 73 deaths (CFR: 4.3%) of monkeypox have been reported from eight endemic and two non-endemic African Union (AU) Member States (MS). Through the period of the COVID-19 pandemic (February 2020 to date), Africa documented 12 141 cases and 363 deaths (CFR: 3%) of monkeypox. The number of cases continues to rise in the continent.

On 30 June 2022, the media reported about further findings that Italian researchers at Rome's Spallanzani Hospital published on 2 June 2022, on the presence of monkeypox virus in semen. According to media, researchers have expanded their investigations after the publication, indicating that monkeypox virus was found in semen from 14 cases out of the 16 studied.

On 30 June 2022, a recent publication in Eurosurveillance suggested the possibility of surface contamination in hospital rooms with monkeypox patients. Monkeypox virus was found on different surfaces within the patients' rooms. The study indicates that disinfecting shared skin and hand-contact surfaces might be useful to prevent transmission within households and hospitals. Despite high contamination with up to 105?cp/cm2 as well as the successful recovery of monkeypox virus from samples with a total of?>?106?copies, study's findings do not prove that infection can occur from contact with these surfaces. Regular disinfection of frequent hand and skin contact points during the care processes additional to regular room cleaning and surface disinfection using products with at least virucidal activity against enveloped viruses can reduce infectious virus on surfaces and thereby risk of nosocomial transmission.

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

Opening date: 7 January 2020 Latest update: 1 July 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 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 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

As of week 2022-25, 147 300 565 cases and 1 108 551 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 23 June 2022 and as of 30 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.

Among the 10 countries with an adequate sequencing volume for weeks 23–24 (6 June to 19 June 2022), the estimated distribution of variants of concern (VOC) or of interest (VOI) was 58.2% (36.3–99.9% from 10 countries) for BA.4/BA.5, 35.5% (0.1–59.7% from 10 countries) for BA.2, 11.1% (3.1–23.0% from five countries) for BA.2+L452X, 0.1% (0.0–0.5%, 118 detections from seven countries) for BA.1 and 0.0% (0.0–0.0%, three detections from two countries) for B.1.617.2.

As of week 25 2022, Omicron sub-lineage BA.4 and BA.5 jointly are dominant in 12 EU/EEA countries: Belgium (52.7%), Denmark (64.1%), Finland (99.9%), France (53%), Germany (64.8%), Greece (54.9%), Ireland (67.6%), Liechtenstein (50%), Luxembourg (68.3%), Netherlands (63.3%), Portugal (92.9%), and Spain (53.7%).

For the latest information on variants, please see ECDC's webpage on variants.

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

Opening date: 13 April 2022 Latest update: 1 July 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

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As of 30 June 2022, 473 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 (56.7%) of these cases have been reported from the UK. The majority (76.1%) of reported cases are five years old or younger. Around a third (29.5%) of cases were admitted to an intensive care unit and 20 (8.3%) children received a liver transplant. A total of 364 cases were tested for adenovirus, 192 of which (52.7%) tested positive. A total of 322 cases were PCR tested for SARS-CoV-2, 35 (10.9%) of them testing positive.

EU/EEA

As of 30 June 2022, 198 cases of acute hepatitis of unknown aetiology among children aged 16 years and under have been reported to TESSy from 17 EU/EEA countries: Austria (3), Belgium (14), Bulgaria (1) Cyprus (2), Denmark (7), France (7), Greece (11), Ireland (16), Italy (35), Latvia (1), Luxembourg (1), the Netherlands (15), Norway (5), Poland (10), Portugal (19), Spain (40) and Sweden (11). Among these cases, at least nine cases were admitted to an intensive care unit and eight required a liver transplant. There has been one associated death.

A detailed summary and analysis of data reported to TESSy can be can be found in the Joint ECDC-WHO regional Office for Europe Surveillance Bulletin published weekly.

Non-EU/EEA

As of 30 June 2022, the UK reported to TESSy a total of 268 children aged under 16 years with acute hepatitis of unknown aetiology. According to the UKHSA, the cases are predominantly under five years, 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 19 May 2022.

Outside of EU/EEA and the UK, as of 30 June 2022, cases have been reported to TESSy from Israel (5), Republic of Moldova (1) and Serbia (1).

According to the latest update from WHO, as of 24 June 2022, probable cases and cases pending classification have been reported from the Region of the Americas (383, including 305 in the US), Western Pacific Region (61), the South-East Asia Region (14) and the Eastern Mediterranean Region (2).

According to WHO, at least 45 children worldwide have required liver transplants and 18 deaths have occurred.

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

Opening date: 2 June 2022 Latest update: 1 July 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 29 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 have been reported by EU/EEA countries among equids and or birds.

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Non EU Threats

New! Monitoring environmental suitability of Vibrio growth in the Baltic Sea - Summer 2022

Opening date: 30 June 2022 Latest update: 1 July 2022

Elevated sea surface temperature (SST) in marine environments with low salt content offer ideal growth conditions for certain *Vibrio* species. These conditions 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

As of 30 June 2022, the environmental suitability for *Vibrio* growth in the Baltic Sea was identified overall as very low to low.

For the next five days, the environmental suitability for *Vibrio* growth in the Baltic Sea is considered to be very low to low in Denmark, Germany and the majority of the Polish, Swedish and Estonian coast; medium-to-high in Szczecin lagoon (Poland), north of Sweden, Finland and majority of the Latvian coast; and very high in the majority of Lithuanian coast, south-west of the Estonian coast and north-west of the Latvian coast.

Outside of EU/EEA countries, the environmental suitability for *Vibrio* growth in the Baltic Sea was identified as medium-to-high and it will remain the same for the next five days.

Since May 2022 and as of 1 July 2022, one human case of locally-acquired vibriosis has been reported in Norway.

New! Plague – DRC – 2022

Opening date: 27 June 2022 Latest update: 1 July 2022

On 3 June 2022, pneumonic plague was reported in the Democratic Republic of the Congo, Ituri province.

➔Update of the week

Since the previous update, 134 new suspected plague cases have been reported in the health zone of Rethy, Ituri province. No new fatalities have been reported. This brings the total to 351 suspected plague cases since March 2022. The bubonic form is dominant (99.7%), with 0.3% of cases being the pulmonary form. Most of those who have contracted plague are above five years of age (302 cases, 86%); with an average age of 16 years.

New! Detection of vaccine-derived poliovirus type 2 (VDPV2) in environmental samples – United Kingdom

Opening date: 27 June 2022 Latest update: 1 July 2022

On June 2022, vaccine-derived poliovirus type 2(VDPV2) was detected in environmental samples in the United Kingdom, London.

➔Update of the week

Vaccine-derived poliovirus type 2 (VDPV2) has been detected in environmental samples in London, United Kingdom. The samples were collected from London Beckton Sewage Treatment works as part of routine surveillance. Vaccine-like type 2 poliovirus (SL2) was initially isolated from samples taken between February and May 2022. The virus isolated in the most recent samples contained six and seven VP1 nucleotide changes from the Sabin 2 vaccine strain respectively and is therefore now classified as VDPV2. According to the United Kingdom Health Security Agency (UKHSA), the most likely scenario is that a recently vaccinated individual entered the UK before February 2022 from a country where oral polio vaccine (OPV) has been used for supplementary immunisation campaigns. Genetic analysis suggests that the new VDPV2 and previous SL2 isolates have a common origin but the technical definition and criteria for 'circulation' of VDPV2 are not met at this time. No associated cases of paralysis have been reported.

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

Opening date: 27 January 2017 Latest update: 1 July 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.

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➔Update of the week

Chikungunya virus disease: In 2022, and as of 29 June, 160 182 cases and 18 deaths have been reported. The majority of cases have been reported from Brazil (133 150). Deaths have been reported from Brazil (17) and Kenya (1). Since the previous CDTR published in week 22 of 2022, 47 249 new cases and four new deaths have been reported. The five countries reporting most new cases are Brazil (40 801), India (5 422), Guatemala (657), Kenya (106) and Paraguay (102). The countries reporting new deaths are Brazil (3) and Kenya (1).

Dengue: In 2022, and as of 29 June, 1 852 581 cases and 1 309 deaths have been reported. The majority of cases have been reported from Brazil (1 476 486), Vietnam (62 966), Peru (51 671), Indonesia (45 387) and Philippines (27 686). The majority of deaths have been reported from Brazil (502), Vietnam (29), Peru (64), Indonesia (432) and the Philippines (150). Since the previous CDTR published on week 18 2022, 481 383 new cases and 460 new deaths have been reported. The five countries reporting most new cases are Brazil (361 728), Vietnam (37 272), Indonesia (23 056), Malaysia (8 038) and Philippines (7 629). The five countries reporting most new deaths are Brazil (180), Vietnam (16), Indonesia (203), Malaysia (8) and Philippines (35).

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

Opening date: 20 April 2006 Latest update: 1 July 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 31 May 2022, approximately 262 955 suspected cholera cases, including 63 deaths, have been reported worldwide. Countries reporting new cases since the previous update are Afghanistan, Benin, Cameroon, Democratic Republic of Congo, Ethiopia, Iraq, Kenya, Malawi, Nepal, South Sudan, Pakistan, Tanzania, and Zambia.

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

Opening date: 9 December 2019 Latest update: 1 July 2022

Global public health efforts to eradicate polio are continuing by immunising every child until transmission of the virus has stopped and the world becomes polio-free. On 5 May 2014, polio was declared a Public Health Emergency of International Concern (PHEIC) by the World Health Organization (WHO) due to concerns over the increased circulation and international spread of wild poliovirus in 2014. The Emergency Committee under the International Health Regulations (2005) stated that the risk of the international spread of poliovirus remains a Public Health Emergency of International Concern (PHEIC). On 15 June 2022, the 32nd meeting of the Emergency Committee was held under the International Health Regulations (2005) (IHR) on the international spread of poliovirus.

In June 2002, the WHO European Region was officially declared polio-free.

➔Update of the week

Since the previous update on 20 May 2022 and as of 28 June 2022, 97 new cases (88 in 2022 and 9 in 2021) of AFP caused by poliovirus, including one associated death, have been reported.

Wild poliovirus (WPV1):

- Eight new cases of AFP caused by WPV1, including one associated death, have been reported from Pakistan.

Circulating vaccine-derived poliovirus (cVDPV):

- Four new cases of AFP caused by cVDPV1 have been reported from Madagascar.

- 76 new cases of AFP caused by cVDPV2 have been reported in 2022 from five countries: Yemen (40), Democratic Republic of the Congo (26), Nigeria (3), Chad (4) and Niger (3). Nine new cases of AFP caused by cVDPV2 have been reported in 2021 from three countries: Yemen (5), Tajikistan (3) and Eritrea (1).

- No new cases of AFP caused by cVDPV3 have been reported.

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II. Detailed reports

Monkeypox - Multi-country - 2022

Opening date: 3 June 2022 Latest update: 1 July 2022

Epidemiological summary

A multi-country outbreak of MPX started on 16 May 2022. Since the beginning of the outbreak, and as of 30 June 2022, 5 240 confirmed cases have been reported from 51 countries. Most cases are found in young men, self-identifying as men who have sex with men (MSM). There have been no deaths. The clinical presentation is generally described to be mild, with most cases presenting with lesions on the genitalia or peri-genital area, indicating that transmission probably occurred through close physical contact during sexual activities.

As of 30 June 2022, 3313 confirmed cases of monkeypox have been reported from 26 EU/EEA countries: Germany (943), Spain (802), France (440), Portugal (402), Netherlands (257), Italy (159), Belgium (116), Ireland (31), Austria (25), Sweden (19), Denmark (18), Hungary (18), Norway (15), Poland (10), Romania (9), Slovenia (9), Czechia (8), Greece (6), Malta (6), Luxembourg (5), Finland (4), Iceland (4), Bulgaria (3), Latvia (2), Croatia (1) and Estonia (1).

As of 30 June 2022, 1 927 confirmed cases of monkeypox have been reported from 25 non EU/EEA countries: United Kingdom (1076), United States (351), Canada (278), Switzerland (81), Israel (38), Brazil (21), Ghana (18), United Arab Emirates (13), Mexico (11), Australia (10), Argentina (6), Chile (6), Colombia (3), Peru (3), South Africa (2), Georgia (1), Lebanon (1), Morocco (1), Puerto_Rico (1), Serbia (1), Singapore (1), South Korea (1), Taiwan (1), Turkey (1)and Venezuela (1).

ECDC assessment

Monkeypox (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 through close physical contact during sexual activities.

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 the current outbreaks have presented with mild disease symptoms, Monkeypox virus (MPXV) can cause severe disease in certain population groups (young children, pregnant women, immunosuppressed persons). However, the likelihood of cases with severe morbidity cannot yet be accurately estimated. 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, for example, in the same household, and during sexual activities. A balance should be kept between informing those most at risk and communicating that the virus does not spread easily between people, indicating that the risk to the broader population is therefore low.

Actions

ECDC will continue to monitor this event through its epidemic intelligence activities and report relevant news on an ad hoc basis. 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. Case reporting in TESSy has been set up as of 2 June 2022.
The rapid risk assessment will be updated on 11 July 2022. For the latest updates, visit ECDC's monkeypox page.

ECDC is also offering laboratory support to Member States and collaborating with stakeholders on risk communication activities, such as targeted messaging for the general public and 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.

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

Opening date: 7 January 2020 Latest update: 1 July 2022

Epidemiological summary

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 the non-EU/EEA countries.

EU/EEA:
As of week 2022-25, 149 008 143 cases have been reported in the EU/EEA: France (30 687 992), Germany (27 828 929), Italy (18 234 242), Spain (12 774 381), Netherlands (8 162 103), Poland (6 021 336), Portugal (5 134 508), Austria (4 420 226), Belgium (4 204 862), Czechia (3 925 629), Greece (3 624 248), Romania (2 918 302), Denmark (2 843 430), Sweden (2 516 729), Slovakia (2 297 196), Hungary (1 928 206), Ireland (1 573 002), Norway (1 493 877), Lithuania (1 404 546), Bulgaria (1 169 971), Croatia (1 145 490), Finland (1 133 597), Slovenia (1 035 420), Latvia (831 208), Estonia (565 074), Cyprus (535 811), Luxembourg (288 562), Iceland (195 983), Malta (101 100) and Liechtenstein (17 718).

As of week 2022-25, 1 112 031 deaths have been reported in the EU/EEA: Italy (168 102), France (163 366), Germany (140 839), Poland (116 787), Spain (107 940), Romania (65 716), Hungary (45 431), Czechia (40 251), Bulgaria (37 246), Belgium (31 365), Greece (30 192), Portugal (24 076), Netherlands (22 361), Slovakia (19 475), Sweden (19 093), Austria (16 297), Croatia (16 050), Lithuania (9 199), Slovenia (7 822), Latvia (6 486), Ireland (6 330), Finland (4 832), Denmark (3 623), Norway (3 280), Estonia (2 465), Luxembourg (1 289), Cyprus (1 230), Malta (694), Iceland (118) and Liechtenstein (82).

The latest situation update for the EU/EEA is available here.

In week 2022-25, in the EU/EEA overall, the reported weekly cases increased by 35.2% compared to the previous week. Overall, six countries reported a decrease in the weekly cases (Finland, Belgium, Norway, Portugal, Cyprus and Estonia). The countries with the highest 14-day notification rates per 100 000 population are: Cyprus (1 912), Portugal (1 702), Luxembourg (1 625), Germany (1 153), and France (1 146).

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 9 June 2022, and as of 16 June 2022, no changes have been made to ECDC variant classifications for variants of concern (VOC), variants of interest (VOI), variants under monitoring, or de-escalated variants. Several countries in the EU/EEA are experiencing a surge in cases and hospitalisations, likely due to increased circulation of VOCs BA.4 and BA.5 and VOI BA.2 + L452X. However, the numbers are still low and very few deaths associated with these variants have been reported.

For the latest information on variants, please see ECDC's webpage on variants.

As of 16 June 2022, ECDC is discontinuing the publication of regular global COVID-19 updates and will refer to WHO's website and data instead. ECDC will continue providing weekly updates for EU/EEA Member States and ad hoc reporting on significant events related to COVID-19 globally.

Other news

On 22 June 2022, the Danish Health and Medicines Authority announced that the autumn COVID-19 vaccination programme will be aimed at those over 50 years and those under 50 years who are particularly at risk, for example immunocompromised individuals. The autumn vaccination programme is planned to begin on 1 October 2022.

On 23 June 2022, the Austrian federal government abolished the mandatory COVID-19 vaccination requirement. Previously, on 5 February 2022, Austria had introduced a mandatory COVID-19 vaccination requirement for all citizens over 18 years of age. However, this requirement was temporarily suspended on 12 March 2022.

On 23 June 2022, the European Medicines Agency (EMA) recommended granting a marketing authorisation for the COVID-19 vaccine Valneva for people aged 18 to 50 years. Valneva contains inactivated whole particles of the original strain of SARS-CoV-2, and it is the sixth vaccine recommended in the European Union (EU).

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In another press release on 23 June 2022, EMA's human medicines committee (CHMP) recommended the COVID-19 vaccine Nuvaxovid for adolescents between 12 and 17 years of age. The vaccine is already approved in the EU for adults aged 18 and over. The use of the vaccine for this age group is the same as in adults, with two injections given in a muscle, three weeks apart.

On 28 June 2022, media reported that the French Health Minister recommended that people begin wearing face masks again on public transport. France has been experiencing an increase in COVID-19 cases in recent days and the use of face masks in crowded spaces and public transport is only recommended, since the legal requirement to wear them was lifted in May 2022.

Media quoting health authorities report that South Korea approved the use of the first domestically manufactured COVID-19 vaccine on 29 June 2022. Media also report that the candidate vaccine was approved after an expert review of safety and efficacy data from clinical trials performed by the country's Ministry of Food and Drug Safety.

The vaccine, named SKYCovione, is based on recombinant proteins. The route of administration is intramuscular, with two doses four weeks apart. The manufacturer, SK Bioscience, said it would seek authorisations for distribution of SKYCovione in other countries, through the global vaccine-sharing facility COVAX, and for emergency use listing with the World Health Organization.

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, eight, 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.

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

Opening date: 13 April 2022 Latest update: 1 July 2022

Epidemiological summary

On 5 April 2022, the UK reported an increase in acute hepatitis cases of unknown aetiology for which laboratory testing had excluded hepatitis types A, B, C, D, and E. The cases were among previously healthy children aged under 10 years from Scotland. On 12 April, the UK 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; as a result, 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 60% of tested cases had a positive serology result. A link to COVID-19 vaccines is considered unlikely as most cases were unvaccinated. The cases appear to be unrelated, with very few of them being epidemiologically linked. Extensive epidemiological investigations are being carried out by several national authorities to identify common exposures and risk factors to determine whether individual susceptibility or coinfections could be contributing factors.

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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 June 2022, 473 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 (56.7%) of these cases have been reported from the UK. The majority (76.1%) of reported cases are five years old or younger. Around a third (29.5%) of cases were admitted to an intensive care unit and 20 (8.3%) children received a liver transplant. A total of 364 cases were tested for adenovirus, 192 of which (52.7%) tested positive. A total of 322 cases were PCR tested for SARS-CoV-2, 35 (10.9%) of them testing positive.

EU/EEA
As of 30 June 2022, 198 cases of acute hepatitis of unknown aetiology among children aged 16 years and under have been reported to TESSy from 17 EU/EEA countries: Austria (3), Belgium (14), Bulgaria (1) Cyprus (2), Denmark (7), France (7), Greece (11), Ireland (16), Italy (35), Latvia (1), Luxembourg (1), the Netherlands (15), Norway (5), Poland [10], Portugal [19], Spain [40] and Sweden (11). Among these cases, at least nine cases were admitted to an intensive care unit and eight required a liver transplant. There has been one associated death.

A detailed summary and analysis of data reported to TESSy can be can be found in the Joint ECDC-WHO egional Office for Europe Surveillance Bulletin published weekly.

Non – EU/EEA
As of 30 June 2022, the UK reported to TESSy a total of 268 children aged under 16 years with acute hepatitis of unknown aetiology. According to the UKHSA, 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 19 May 2022.

Outside of EU/EEA and the UK, as of 30 June 2022, cases have been reported to TESSy from Israel (5), Republic of Moldova (1) and Serbia (1).

According to the latest update from WHO, as of 24 June 2022, probable cases and cases pending classification have been reported from the Region of the Americas (383, including 305 in the US), Western Pacific Region (61), the South-East Asia Region (14) and the Eastern Mediterranean Region (2).

According to WHO, at least 45 children worldwide have required liver transplants and 18 deaths have occurred.

ECDC assessment

Adenovirus has been detected in the majority of the cases in the UK, and as a result 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 are incomplete on the pathogens tested for, so 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 regarding human-to-human transmission remains unclear. Cases in the EU/EEA are sporadic with an unclear trend. While the risk of 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 have a further impact on outcomes if the number of cases continues to rise. Given 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 the reporting of case-based data for cases of acute hepatitis of unknown aetiology in TESSy. The surveillance reporting protocol is available here. Results are being published weekly in the Joint ECDC-WHO Regional Office for Europe Surveillance Bulletin.

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On 25 May 2022, ECDC published a guidance document for diagnostic testing of hepatitis cases 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 published in the near future.

An EpiPulse item is available to Member States to inform and facilitate communication between Member States and ECDC. Member States should report cases in TESSy and updates on their investigations in EpiPulse, for example as regards 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.

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

Opening date: 2 June 2022 Latest update: 1 July 2022

Epidemiological summary

As of 29 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 have been reported by EU/EEA countries among equids or birds.

ECDC links: West Nile virus infection webpage

Sources: TESSy | Animal Disease Information System

ECDC assessment

During the current transmission season, no human cases or outbreaks among animals have been notified so far. 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.

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New! Monitoring environmental suitability of Vibrio growth in the Baltic Sea - Summer 2022

Opening date: 30 June 2022 Latest update: 1 July 2022

Epidemiological summary

As of 30 June 2022, the environmental suitability for *Vibrio* growth in the Baltic Sea was identified overall as very low to low.

For the next five days, the environmental suitability for *Vibrio* growth in the Baltic Sea is considered to be very low to low in Denmark, Germany and the majority of the Polish, Swedish and Estonian coast; medium-to-high in Szczecin lagoon (Poland), north of Sweden, Finland and majority of the Latvian coast; and very high in the majority of Lithuanian coast, south-west of the Estonian coast and north-west of the Latvian coast.

Outside of EU/EEA countries, the environmental suitability for *Vibrio* growth in the Baltic Sea was identified as medium-to-high and it will remain the same for the next five days.

Since May 2022 and as of 1 July 2022, one human case of locally-acquired vibriosis has been reported in Norway.

Source: ECDC Vibrio Map Viewer

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-toxigenic *V. cholera*. In the past, vibriosis in humans in the Baltic region has 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 during the summer of 2022 and reports on increased environmental suitability for the growth of *Vibrio* bacteria.

New! Plague – DRC – 2022

Opening date: 27 June 2022 Latest update: 1 July 2022

Epidemiological summary

On 3 June 2022, media reported a first suspected case of pneumonic plague in Rethy health zone of the Djugu territory, Ituri Province in the Democratic Republic of the Congo (DRC). The patient is a 40-year-old resident of Belenju village who was hospitalised in Rethy General Hospital for isolation and treatment of pneumonic plague diagnosed by rapid test. He presented with symptoms of headache and fever.

Plague is endemic in the Rethy health zone since March 2022, with 351 suspected cases and five deaths. There are no signs of a progression of trends for pneumonic plague.

The Rethy health zone faces shortages of medicines and protective equipment and challenging logistics for the organisation of field visits. The IFRC has published a plague response plan for the Rethy health zone and the local health authorities are asking people to clean their homes to eradicate rats.

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Sources: media, Twitter, Pro-MED

ECDC assessment

The Ituri province is endemic for plague and recurrent outbreaks are expected to occur. The risk for EU/EEA citizens travelling to or living in the Ituri province is considered very low. More information on plague is available on the ECDC website.

Actions

ECDC monitors this event through routine epidemic intelligence activities and is in contact with Africa CDC and WHO for further information.

New! Detection of vaccine-derived poliovirus type 2 (VDPV2) in environmental samples – United Kingdom

Opening date: 27 June 2022 Latest update: 1 July 2022

Epidemiological summary

Vaccine-derived poliovirus type 2 (VDPV2) has been detected in environmental samples in London, United Kingdom. The samples were collected from London Beckton Sewage Treatment works as part of routine surveillance. Vaccine-like type 2 poliovirus (SL2) was initially isolated from samples taken between February and May 2022. The virus isolated in the most recent samples contained six and seven VP1 nucleotide changes from the Sabin 2 vaccine strain respectively and is therefore now classified as VDPV2. According to the United Kingdom Health Security Agency (UKHSA), the most likely scenario is that a recently vaccinated individual entered the UK before February 2022 from a country where oral polio vaccine (OPV) has been used for supplementary immunisation campaigns. Genetic analysis suggests that the new VDPV2 and previous SL2 isolates have a common origin but the technical definition and criteria for 'circulation' of VDPV2 are not met at this time. No associated cases of paralysis have been reported.

A national standard incident has been declared by the UKHSA and an incident management team has been established. Additional samples are being analysed. Further investigations and response are ongoing. These include the assessment of the origin and the risk of circulation; the strengthening of poliovirus surveillance; the following up of immunisation status and the enhancement of communications.

Vaccine coverage for childhood vaccines has decreased over the past few years across the UK and especially in parts of London. Recent immunisation coverage for the primary course of IPV vaccination is suggested to be 86.6% in London.

Sources: GPEI, UKHSA [1] [2]

ECDC assessment

The WHO European Region, including the EU/EEA has remained polio-free since 2002. Inactivated polio vaccines are used in all EU/EEA countries. However, while there are non-or under-vaccinated, population groups in European countries and poliomyelitis is not eradicated, the risk of the virus being reintroduced into Europe remains. According to the European Regional Certification Commission for Poliomyelitis Eradication (RCC) report from September 2021 assessment, referring to data of 2020, two EU/EEA countries (Poland and Romania) and one neighbouring country (Ukraine) remain at high risk of a sustained polio outbreak following wild poliovirus importation or the emergence of cVDPV, due to sub-optimal programme performance and low population immunity. According to the same report, an additional 11 EU/EEA countries are at intermediate risk of sustained polio outbreaks. The continuing circulation of wild poliovirus type 1 (WPV1) in two countries shows that there is still a risk of the disease being imported into the EU/EEA. Furthermore, the worrying occurrence of outbreaks of circulating vaccine-derived poliovirus (cVDPV), which only emerge and circulate due to lack of polio immunity in the population, shows the potential risk for further international spread.

To limit the risk of reintroduction and sustained transmission of WPV and cVDPV in the EU/EEA, it is crucial to maintain high vaccine coverage in the general population and increase vaccination uptake in pockets of underimmunised populations. Despite the current COVID-19 challenges, Member States should review their polio vaccination coverage data and ensure there are no vaccination gaps.

ECDC endorses WHO's temporary recommendations with regard to EU/EEA citizens who are resident in or long-term visitors (>4 weeks) to countries with the potential risk of international spread.

ECDC links: ECDC comment on risk of polio in Europe | ECDC risk assessment | ECDC factsheet

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Actions

ECDC is monitoring this event through epidemic intelligence activities.

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

Opening date: 27 January 2017 Latest update: 1 July 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.

Brazil: In 2022 and as of 4 June, 133 150 cases, including 49 278 confirmed cases and 17 deaths have been reported. This is an increase of 40 801 cases and three deaths since 14 May 2022.

Colombia: In 2022 and as of 18 June, 42 cases and no deaths have been reported. This is an increase of seven cases since 21 May 2022.

Costa Rica: In 2022 and as of 4 June, five cases and no deaths have been reported. This is an increase of one case since 14 May 2022.

El Salvador: In 2022 and as of 4 June, 68 cases and no deaths have been reported. This is an increase of 29 cases since 14 May 2022.

Guatemala: In 2022 and as of 28 May, 941 cases and no deaths have been reported. This is an increase of 657 cases since 14 May 2022.

Honduras: In 2022 and as of 4 June, 21 cases and no deaths have been reported. This is an increase of three cases since 14 May 2022.

Mexico: In 2022 and as of 11 June, one confirmed case and no deaths have been reported.

Nicaragua: In 2022 and as of 11 June, three cases and no deaths have been reported. This is an increase of one case since 30 April 2022.

Paraguay: In 2022 and as of 18 June, 329 cases, including 94 confirmed cases and no deaths have been reported.

Peru: In 2022 and as of 11 June, 148 cases, including 135 confirmed cases and no deaths, have been reported. This is an increase of 24 cases since 21 May 2022 .

Venezuela: In 2022 and as of 11 June, 21 cases and no deaths have been reported. This is an increase of two cases since 7 May 2022.

Dengue:
In 2022 and as of 29 June, the WHO Pan American Health Organization (PAHO) reported 1 625 986 dengue cases, including 755 624 confirmed cases and 617 associated deaths, in the Americas. The five countries reporting most cases are: Brazil (1 476 486), Peru (51 671), Colombia (26 657), Nicaragua (17 452) and Ecuador (9 531). This is an increase of 387 458 cases and 191 deaths since 2 June 2022.

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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 31 May, 24 278 cases, including 1 554 confirmed cases and no deaths, have been reported. This is an increase of 5 422 cases since 30 April 2022.

Malaysia: In 2022 and as of 7 May, 396 cases and no deaths have been reported.

Philippines: In 2022 and as of 21 May, 43 cases and no deaths have been reported.

Thailand: In 2022 and as of 17 June, 148 cases and no deaths have been reported. This is an increase of 50 cases since 26 May 2022.

Dengue:

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

Bangladesh: In 2022 and as of 27 June, 969 cases, including 969 confirmed cases and one death, have been reported. This is an increase of 807 cases and three deaths since 31 May 2022.

Cambodia: In 2022 and as of 4 June, 1 624 cases and four deaths have been reported. This is an increase of 807 cases and three deaths since 2 May 2022.

China: In 2022 and as of 31 March, 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. This is an increase of 1 894 cases and two deaths since 30 April 2022.

Indonesia: In 2022 and as of 15 June, 45 387 cases and 432 deaths have been reported. This is an increase of 23 056 cases and 203 deaths since 7 April 2022.

Laos: In 2022 and as of 11 June, 1 559 cases and no deaths have been reported. This is an increase of 1217 cases since 14 May 2022.

Malaysia: In 2022 and as of 18 June, 21 689 cases and 15 deaths have been reported. This is an increase of 8 038 cases and eight deaths since 7 May 2022.

Maldives: In 2022 and as of 31 May, 344 cases and no deaths have been reported. This is an increase of 185 cases since 30 April 2022.

Nepal: In 2022 and as of 21 May, 55 cases and no deaths have been reported.

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 24 June, 209 cases, including 35 confirmed cases and no deaths have been reported. This is an increase of 10 cases since 30 May 2022.

The Philippines: In 2022 and as of 14 May, 27 686 cases and 150 deaths have been reported. This is an increase of 7 629 cases and 35 deaths since 17 April 2022.

Singapore: In 2022 and as of 28 June, 17 027 cases and no deaths have been reported. This is an increase of 5 353 cases since 2 June 2022.

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Sri Lanka: In 2022 and as of 24 June, 23 121 cases and no deaths have been reported. This is an increase of 4 823 cases 31 May 2022.

Thailand: In 2022 and as of 20 June, 3 915 cases and no deaths have been reported. This is an increase of 2 331 cases since 23 May 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 12 June, 62 966 cases and 29 deaths have been reported. This is an increase of 37 272 cases and 16 deaths since 8 May 2022.

Africa

Chikungunya virus disease:

Ethiopia: In 2022 and as of 15 May, 311 cases, including three confirmed cases and no deaths have been reported.

Kenya: In 2022 and as of 5 June, 189 cases, including five confirmed cases and one death have been reported. This is an increase of 106 cases and one death since 22 May 2022.

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

Kenya: In 2022 and as of 28 April, 33 cases, including 32 confirmed cases have been reported.

Réunion: In 2022 and as of 22 June, 1 470 cases, including 1 470 confirmed cases and no deaths have been reported. This is an increase of 227 cases since 7 May 2022.

São Tomé and Príncipe: In 2022 and as of 8 June, 403 cases, including 403 confirmed cases and one death have been reported. This is an increase of 300 cases and one death since 17 May 2022.

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 29 May, 42 cases and no deaths have been reported. This is an increase of 23 cases since 26 March 2022.

Cook Islands: In 2022 and as of 28 May, three cases have been reported. This is an increase of one case since 26 March 2022.

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 a8 April 2022.

French Polynesia: In 2022 and as of 26 March, 745 cases and no deaths have been reported. This is an increase of 191 cases since 24 March 2022.

Micronesia (Federated States of): In 2022 and as of 4 June, 16 cases and no deaths have been reported. This is an increase of five cases since 23 April 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.

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.

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Vanuatu: In 2022 and as of 16 June, 39 cases and no deaths have been reported. This is an increase of 21 cases since 7 May 2022.

Wallis and Futuna: In 2022 and as of 16 June, 21 cases have been reported. This is an increase of two cases since 7 May 2022.

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. To date, all autochthonous outbreaks of chikungunya virus disease and dengue in mainland EU/EEA have occurred between July and November.

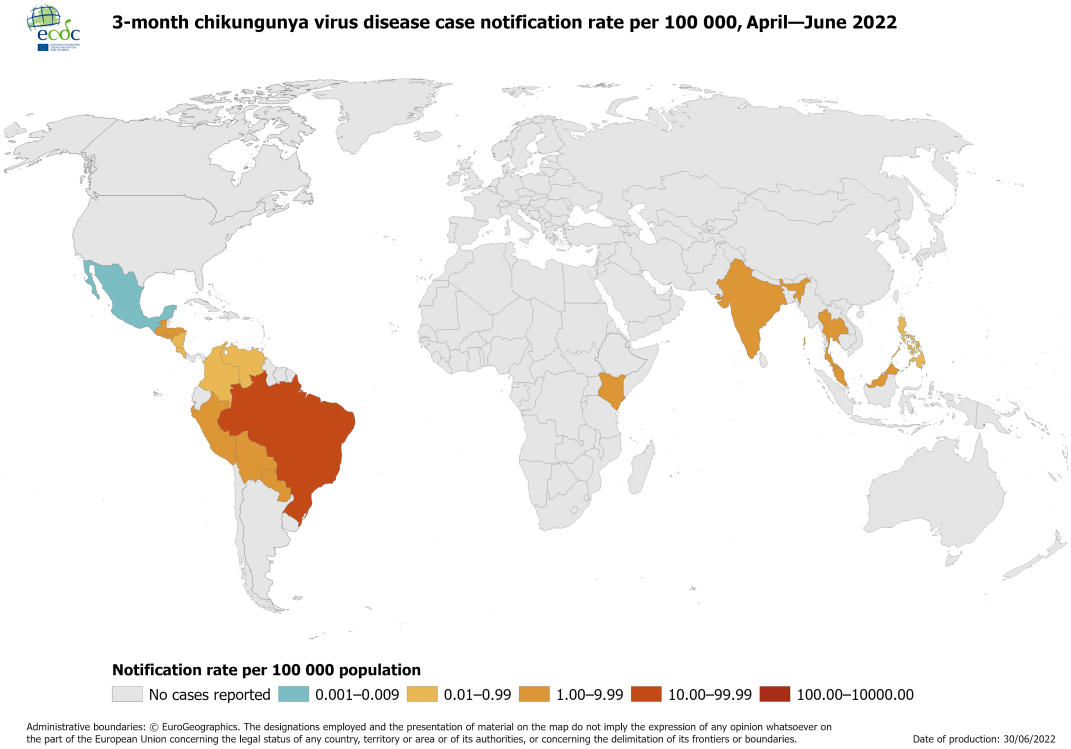
More information is available on ECDC's webpages on autochthonous transmission of chikungunya and dengue virus in the EU/EEA, as well as on ECDC's dengue and chikungunya factsheets.

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 April–June 2022

ECDC



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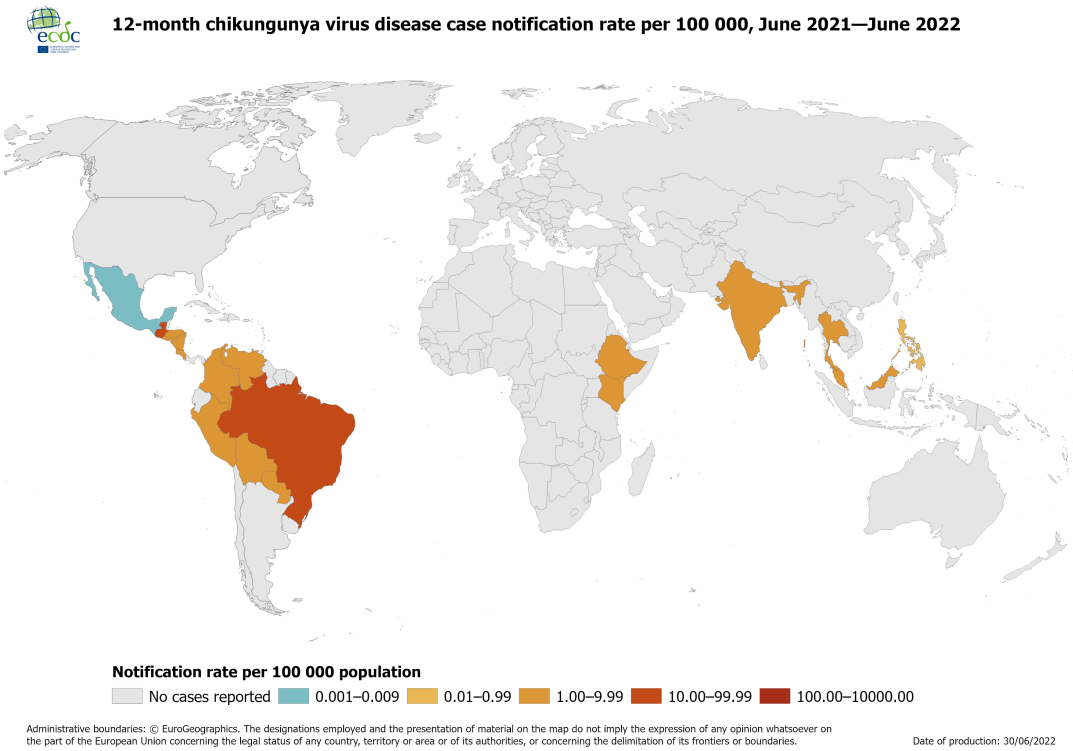
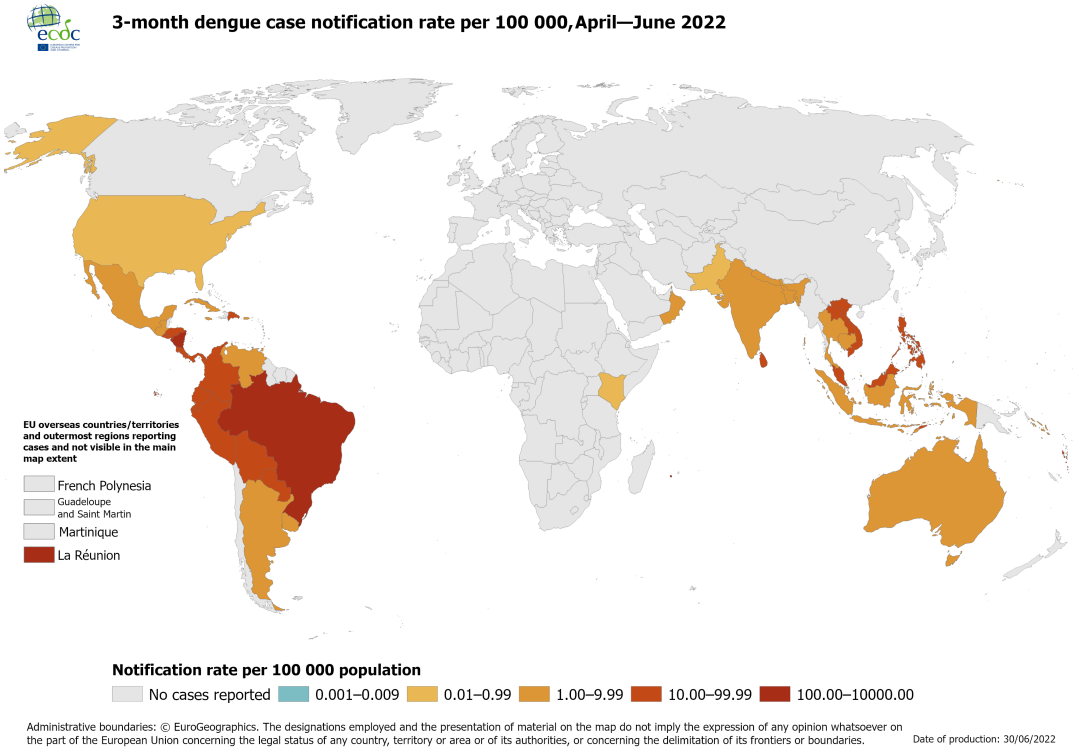
12-month chikungunya virus disease case notification rate per 100 000 June 2021–June 2022

ECDC



3-month dengue case notification rate per 100 000 April–June2022

ECDC



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

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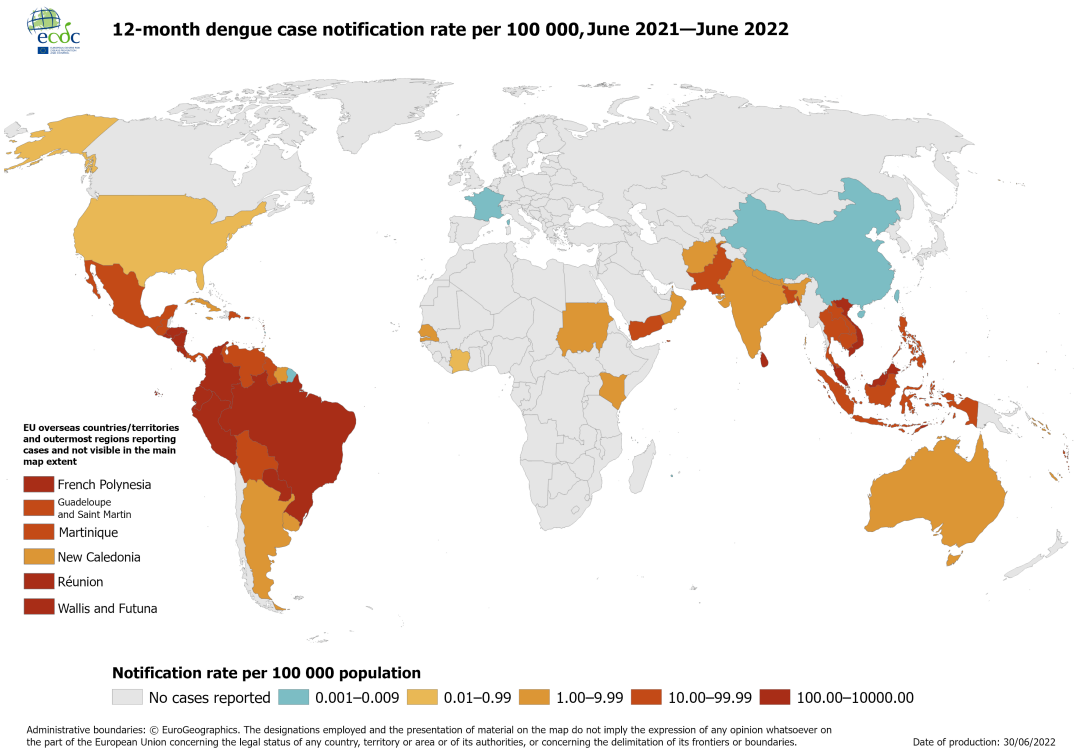

Cholera – Multi-country (World) – Monitoring global outbreaks

Opening date: 20 April 2006 Latest update: 1 July 2022

Epidemiological summary

Since the last update on 31 May 2022, approximately 262 955 suspected cholera cases, including 63 deaths, have been reported worldwide. Countries reporting new cases since the previous update are Afghanistan, Benin, Cameroon, Democratic Republic of Congo, Ethiopia, Iraq, Kenya, Malawi, Nepal, South Sudan, Pakistan, Tanzania, and Zambia.

Americas

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

Africa

Benin: Since the last update on 31 May 2022, Benin has reported 26 new cases. Since 10 October 2021 and as of 24 April 2022, a total of 1 705 suspected cholera cases including 20 deaths (CFR 1.2%) have been reported in the country.

Cameroon: Since the last update, 961 suspected cholera cases including 13 deaths have been reported in Cameroon. In 2022 and as of 2 May, a total of 7 199 suspected cases including 130 deaths have been reported in the country. According to WHO's Regional Office for Africa, the outbreak is currently active in four regions (Centre, Littoral, South-West, and West) and 15 districts.

Democratic Republic of Congo (DRC): Since last update, 1 035 suspected cholera cases including 16 deaths have been reported in DRC. In 2022, and as of 17 April, a total of 6 166 suspected cholera cases, including 89 deaths (CFR:1.4%), have been reported in 54 health zones across 11 provinces of the Democratic Republic of Congo. According to WHO's Regional Office for Africa, various response measures are being implemented in the main effected areas, including vaccination campaign.

Ethiopia: A cholera outbreak has been ongoing in Oromia and Somali regions of Ethiopia. The first case was reported on 31 August 2021 and as of 23 May 2022, a total of 674 cases with seven associated deaths (CFR 1.0%) have been reported. According to WHO's Regional Office for Africa, a declining trend has been reported in past few weeks, with no cases reported since 15 January 2022.

Kenya: A cholera outbreak has been reported in Kenya, which is currently ongoing in three Kenyan counties: Nairobi, Kisumu and Kiambu. As of 31 May 2022, a total of 319 cases with two confirmed cases and two deaths (CFR 0.6%) have been reported.

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Malawi: Since last update, Malawi has reported 467 suspected cholera cases including 22 deaths. In 2022, and as of 12 June 2022, Malawi has reported a total of 600 cholera cases, including 28 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: No update is available since last update. 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: Since the last update, a total of 118 cases have been reported from the Bentiu Internally Displaced People (IDP) camp in Rubkona County of Warrap State. 29 cases have been confirmed positive by lab test.

Tanzania: Since the last update, 31 new cholera cases have been reported in Tanzania. In 2022 and as of 12 May, a total of 214 cases and one death have been reported from the Tanganyika and Uvinza districts. A total of 24 cases have been confirmed positive for *Vibrio cholerae*.

Zambia: A cholera outbreak is ongoing in Zambia since 3 May 2022 affecting three districts Lusaka, Chilanga, and Nsama. As of 12 May 2022, a total of 21 cholera cases have been reported in the country.

Asia

Afghanistan: Since the last update, 924 suspected cholera cases have been reported in Afghanistan. In 2022 and as of 11 June, a total of 6 229 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.

Iraq: On 19 June 2022, the Iraqi Ministry of Health reported 13 laboratory confirmed cholera cases in the country. Of these cases, 10 were reported in Sulaymaniyah province, one in neighbouring Kirkuk province, and two in the southern province of al-Muthanna. Media reported that around 4 000 people in Sulaymaniyah province had been admitted to hospitals over the past week for uncontrolled diarrhoea and vomiting.

Pakistan: Since the last update, 254 375 suspected cholera cases, including three deaths, have been reported in Pakistan. Suspected cases have mostly been reported from Sindh province during the last three months. In 2022 and as of 3 June, a total of 256 952 cholera cases, including three deaths, have been reported in the country.

Nepal: Media quoting Nepali health authorities reported that as of 21 June 2022, the county has detected four lab confirmed cholera cases in the Kathmandu region and the authorities fear a possible outbreak in the country. This is the first time the country has reported cholera cases in 2022.

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

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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 April to June 2022

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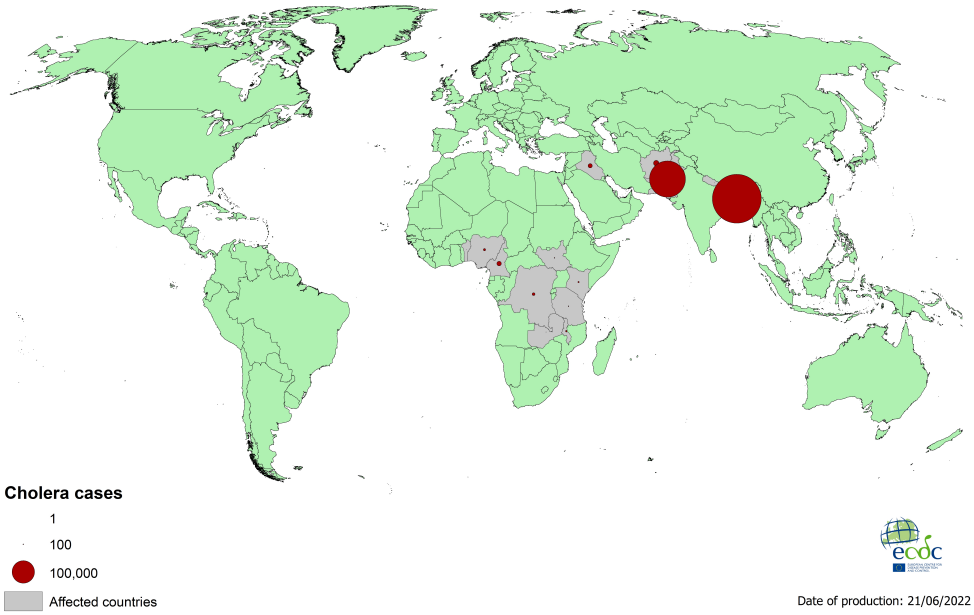

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Geographical distribution of cholera cases reported worldwide as of June 2022

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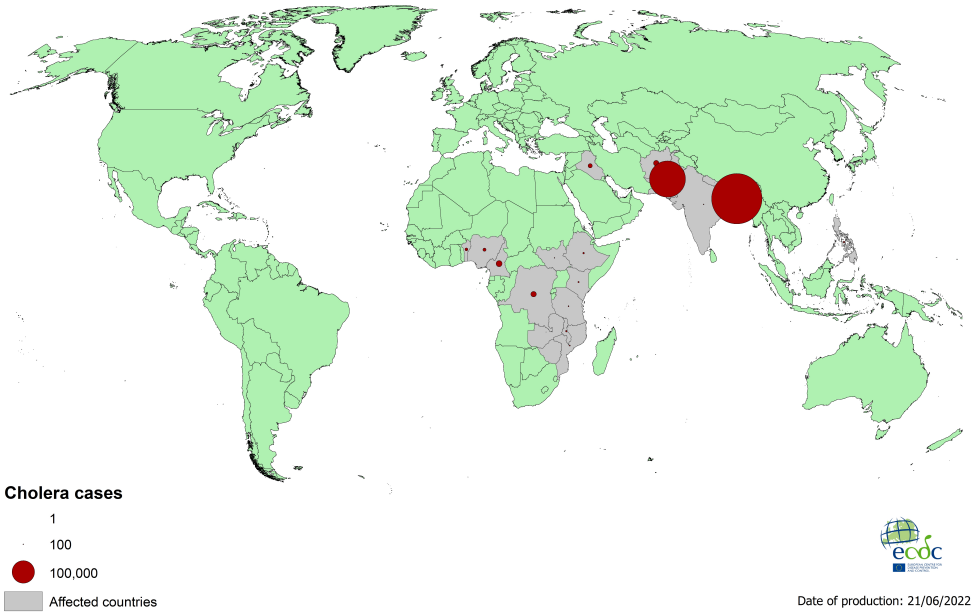

Poliomyelitis – Multi-country (World) – Monitoring global outbreaks

Opening date: 9 December 2019 Latest update: 1 July 2022

Epidemiological summary

Wild poliovirus:
In 2022, and as of 28 June 2022, 13 cases of AFP caused by WPV1 have been reported from the two endemic countries, Pakistan (11) and Afghanistan (1), and from the non-endemic country, Mozambique (1). One associated death has been reported in Pakistan.

In 2021, and as of 28 June 2022, six cases of AFP caused by WPV1 were reported from the two endemic countries, Afghanistan (4) and Pakistan (1), and from the non-endemic country, Malawi (1).

Circulating vaccine-derived poliovirus (cVDPV):
In 2022, and as of 28 June 2022, five cases of AFP caused by cVDPV1 have been reported from Madagascar. 151 cases of AFP caused by cVDPV2 have been reported from eight countries: Democratic Republic of the Congo (63), Yemen (45), Nigeria (27), Chad (5), Mozambique (4), Niger (4), Somalia (2) and Togo (1). One case of AFP caused by cVDPV3 has been reported from Israel, which is part of an outbreak involving an additional six samples from asymptomatic children that tested positive for cVDPV3.

In 2021, and as of 28 June 2022, 16 cases of AFP caused by cVDPV1 were reported from Madagascar (13) and Yemen (3). There were 681 cases of AFP caused by cVDPV2 reported from 22 countries: Nigeria (415), Yemen (66), Afghanistan (43), Tajikistan (35), Democratic Republic of the Congo (28), Niger (17), Senegal (17), Ethiopia (10), South Sudan (9), Pakistan (8), Guinea (6), Sierra Leone (5), Benin (3), Cameroon (3), Guinea-Bissau (3) Liberia (3), Burkina Faso (2), Congo (2), Mozambique (2), Ukraine (2), Eritrea (1) and Somalia (1). No cases of AFP caused by cVDPV3 were reported.

Other news:
On 15 June 2022, the 32nd meeting of the Emergency Committee under the International Health Regulations (2005) (IHR) on the international spread of poliovirus concluded that the risk of international spread of poliovirus remains a Public Health Emergency of International Concern (PHEIC) and recommended the extension of Temporary Recommendations for a further three months. The factors considered in reaching this conclusion were: ongoing risk of WPV1 international spread, ongoing risk of cVDPV2 international spread, weak routine immunisation and lack of access.

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Sources: Global Polio Eradication Initiative | ECDC | ECDC Polio interactive map | WPV3 eradication certificate | Pakistan Polio Eradication Programme

ECDC assessment

The WHO European Region, including the EU/EEA, has remained polio-free since 2002. Inactivated polio vaccines are used in all EU/EEA countries. However, as long as there are non- or under-vaccinated population groups in European countries and poliomyelitis is not eradicated, the risk of the virus being reintroduced into Europe remains. According to the European Regional Certification Commission for Poliomyelitis Eradication (RCC) report from the September 2021 assessment, referring to data from 2020, two EU/EEA countries (Poland and Romania) and one neighbouring country (Ukraine) remain at high risk of a sustained polio outbreak following wild poliovirus importation or the emergence of cVDPV, due to sub-optimal programme performance and low population immunity. According to the same report, an additional 11 EU/EEA countries are at intermediate risk of sustained polio outbreaks. The continuing circulation of wild poliovirus type 1 (WPV1) in two countries shows that there is still a risk of the disease being imported into the EU/EEA. Furthermore, the concerning occurrence of outbreaks of circulating vaccine-derived poliovirus (cVDPV), which only emerge and circulate due to lack of polio immunity in the population, shows the potential risk for further international spread.

To limit the risk of reintroduction and sustained transmission of WPV and cVDPV in the EU/EEA, it is crucial to maintain high vaccine coverage in the general population and increase vaccination uptake in pockets of underimmunised populations. Despite the current challenges relating to the COVID-19 pandemic, Member States should review their polio vaccination coverage data and ensure there are no vaccination gaps.

ECDC endorses WHO's temporary recommendations with regard to EU/EEA citizens who are resident in or long-term visitors (>4 weeks) to countries with the potential risk of international spread.

ECDC links: ECDC comment on risk of polio in Europe | ECDC risk assessment

Actions

ECDC provides updates on the polio situation on a monthly basis. The Agency also monitors polio cases worldwide through its epidemic intelligence activities in order to highlight polio eradication efforts and identify events that increase the risk of wild poliovirus being reintroduced into the EU/EEA.

ECDC maintains an interactive map showing countries that are still endemic for polio and have ongoing outbreaks of cVDPV.

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