**COMMUNICABLE DISEASE THREATS** REPORT

# CDTR
# Week 18, 1-7 May 2022

**All users**

This weekly bulletin provides updates on threats monitored by ECDC.

# I. Executive summary

## EU Threats

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

Opening date: 7 January 2020 Latest update: 6 May 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 meeting 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



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Since week 2022-16 and as of week 2022-17, 3 903 828 new cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) and 16 010 new deaths have been reported.

Since 31 December 2019 and as of week 2022-17, 512 690 034 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 6 252 316 deaths.

As of week 2022-17, 137 212 329 cases and 1 084 038 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 28 April 2022 and as of 4 May 2022, the following changes have been made to ECDC variant classifications for variants of concern (VOC), variants of interest (VOI), variants under monitoring and de-escalated variants:

• The recombinant lineage XD was de-escalated from variants under monitoring and added to the list of de-escalated variants. Such lineage has not been detected since week 14 of 2022.

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: 6 May 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 17 2022 (25 April – 1 May 2022)**

Eleven of 40 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 17% from 19% in the previous week.

Countries, mostly in the western-central part of the Region, reported seasonal influenza activity above 30% positivity in sentinel primary care: Finland (80%), Netherlands (60%), Poland (50%), Serbia (38%) and France (33%).

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 infections were infected with both type A and 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: 6 May 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 and as of 4 May, the total number of people who fled Ukraine reached 5 707 967. In total, 3 119 196 have crossed the Polish border; 854 292 the Romanian; 545 311 the Hungarian; and 388 282 the Slovakian. In addition, Czechia's Ministry of the Interior reported 326 754 special visa concessions to Ukrainian applicants as of 4 May 2022. Outside of the EU/EAA, 450 797 people have sought safety in the Republic of Moldova United Nations.

Reports from the field have highlighted that the number of Ukrainians returning to Ukraine has increased in recent weeks. According to United Nations, up to 1 436 500 people have returned to Ukraine since 28 February.

The World Health Organization published on 5 May 2022 the tenth situation report on the emergency in Ukraine according to which approximately 7.7 million persons are internally displaced within Ukraine.

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



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# Non EU Threats

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

Opening date: 13 April 2022 Latest update: 6 May 2022

On 5 April 2022, an increase in acute hepatitis cases 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 additional cases have been reported from the EU/EEA and globally.

➔Update of the week

**EU/EEA:**

As of 5 May 2022, approximately 95 cases of acute hepatitis among children aged 16 and under have been reported from 15 EU/EEA countries (Austria [2], Belgium [3], Cyprus [2], Denmark [6], France [2], Germany [1], Ireland [<5], Italy [35], the Netherlands [6], Norway [2], Poland [1], Portugal [4], Romania [4], Slovenia [1] and Spain [22]). Among these cases, at least 13 have tested positive for adenovirus, at least three tested positive for SARS-CoV-2 and five cases have required a liver transplant.

On 1 May 2022, according to the Romanian media and a Ministry of Health statement, the five-year-old child initially reported as having symptoms of acute hepatitis of unknown aetiology has been diagnosed with Wilson's disease.

On 4 May 2022, Belgium reported two additional possible cases of acute hepatitis of unknown aetiology. However, the cases were detected retrospectively and may not qualify under the reporting criteria as laboratory investigations are no longer possible.

**Non-EU/EEA:**

As of 29 April 2022, the UKHSA has identified a total of 145 children, aged 10 and under, with acute hepatitis of unknown aetiology. Of these cases, 10 children have received a liver transplant. The cases are predominantly children under 5 years old who initially presented with gastrointestinal symptoms (such as diarrhoea and nausea) followed by the onset of jaundice and acute hepatitis.

A detailed technical briefing on the investigations among the UK cases was published by the UKHSA on 25 April 2022.

Outside of the EU/EEA and the UK, as of 6 May 2022, there are at least 60 cases of acute hepatitis among children. Cases have been reported by Argentina [2], Costa Rica [1], Indonesia [3], Israel [12], Japan [3], Panama [1], Palestine [1], Serbia [1], Singapore [1] and the United States [at least 35].

On 3 May 2022, the media quoting public health authorities reported a death of an eight-years-old child with acute hepatitis of unknown aetiology in Palestine*. It is unclear at present whether this is the same child that was diagnosed in the previous week. Confirmation of this case is pending.

**This designation shall not be construed as recognition of a State of Palestine and is without prejudice to the individual positions of the Member States on this issue.*

The total number of cases reported worldwide is approximately 300.

## Ebola virus disease - Democratic Republic of the Congo - 2022

Opening date: 25 April 2022 Latest update: 6 May 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



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On 23 April 2022, an Ebola virus disease (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. According to a WHO Twitter statement, health authorities in the Democratic Republic of the Congo (DRC), have reported a third case of Ebola virus disease (EVD) in Mbandaka on 4 May 2022. The third case is a 48-year-old man who was a high-risk contact to the index patient. To date, three cases have been confirmed, including two deaths. Authorities have identified 444 contacts to the confirmed cases and at least 281 persons have been vaccinated.

## Middle East respiratory syndrome coronavirus (MERS-CoV) – Multi-country

Opening date: 24 September 2012 Latest update: 6 May 2022

Since the disease was first identified in Saudi Arabia in April 2012, over 2 600 cases of Middle East respiratory syndrome coronavirus (MERS-CoV) have been detected in 27 countries. In Europe, eight countries have reported confirmed cases, all with direct or indirect connections to the Middle East. The majority of MERS-CoV cases continue to be reported from the Middle East. The source of the virus remains unknown, but the pattern of transmission and virological studies point towards dromedary camels in the Middle East as a reservoir from which humans sporadically become infected through zoonotic transmission. Secondary human-to-human transmission occurred particularly within households and in healthcare settings.

➔Update of the week

Since the previous update published on 7 April 2022, and as of 3 May 2022, no new MERS-CoV cases have been reported worldwide. One case reported in the last update by the Qatari Ministry of Public Health has died.

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

Opening date: 27 January 2017 Latest update: 6 May 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 5 May, 50 459 cases and seven deaths have been reported. The majority of cases have been reported from Brazil (48 665) and all deaths have been reported from Brazil (7). Since the previous CDTR published on week 14 2022, 38 219 new cases and six new deaths have been reported. The five countries reporting most new cases are Brazil (37 708), India (203), Guatemala (83), Malaysia (73) and Paraguay (33).

**Dengue:** In 2022, and as of 5 May, 785 736 cases and 588 deaths have been reported. The majority of cases have been reported from Brazil (607 546) and the majority of deaths are from Indonesia (229). Since the previous CDTR published on week 14, 492 404 new cases and 181 new deaths have been reported. The five countries reporting most new cases are Brazil (439 944), Peru (11 495), Colombia (5 136), Philippines (4 524) and Vietnam (4 424) and the five countries reporting most new deaths are Brazil (100), Philippines (33), Peru (21), Colombia (6), and Timor Leste (8).



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# II. Detailed reports

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

Opening date: 7 January 2020 Latest update: 6 May 2022

### Epidemiological summary

Since 31 December 2019 and as of week 2022-17, 512 690 034 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 6 252 316 deaths.

**Cases have been reported from:**
**Africa:** 11 682 207 cases; the five countries reporting most cases are South Africa (3 795 763), Morocco (1 164 973), Tunisia (1 040 193), Egypt (515 645) and Libya (501 916).
**Asia:** 129 436 605 cases; the five countries reporting most cases are India (43 082 345), South Korea (17 295 733), Vietnam (10 653 526), Japan (7 885 409) and Iran (7 221 653).
**America**: 153 644 865 cases; the five countries reporting most cases are United States (81 377 661), Brazil (30 454 499), Argentina (9 083 492), Colombia (6 092 667) and Mexico (5 740 080).
**Europe:** 210 861 802 cases; the five countries reporting most cases are France (28 686 045), Germany (24 861 823), United Kingdom (22 073 858), Russia (18 195 608) and Italy (16 504 791).
**Oceania:** 7 063 850 cases; the five countries reporting most cases are Australia (5 758 854), New Zealand (943 428), French Polynesia (72 720), Fiji (64 634) and New Caledonia (60 517).
**Other:** 705 cases have been reported from an international conveyance in Japan.

**Deaths have been reported from:**
**Africa:** 252 868 deaths; the five countries reporting most deaths are South Africa (100 363), Tunisia (28 550), Egypt (24 613), Morocco (16 069) and Ethiopia (7 510).
**Asia:** 1 295 097 deaths; the five countries reporting most deaths are India (523 869), Indonesia (156 273), Iran (141 083), Philippines (60 397) and Vietnam (43 042).
**America:** 2 729 595 deaths; the five countries reporting most deaths are United States (993 744), Brazil (663 513), Mexico (324 350), Peru (212 865) and Colombia (139 797).
**Europe:** 1 963 712 deaths; the five countries reporting most deaths are Russia (376 167), United Kingdom (175 319), Italy (163 612), France (159 912) and Germany (135 648).
**Oceania:** 11 038 deaths; the five countries reporting most deaths are Australia (7 231), Fiji (862), New Zealand (713), Papua New Guinea (650) and French Polynesia (648).
**Other:** six deaths have been reported from an international conveyance in Japan.

EU/EEA:
As of week 2022-17, 138 908 108 cases have been reported in the EU/EEA: France (28 686 045), Germany (24 861 823), Italy (16 504 791), Spain (11 956 951), Netherlands (8 050 009), Poland (6 005 098), Austria (4 172 854), Belgium (4 064 657), Czechia (3 902 699), Portugal (3 878 776), Greece (3 331 644), Romania (2 825 658), Denmark (2 802 185), Sweden (2 501 604), Slovakia (2 273 367), Hungary (1 903 281), Ireland (1 519 827), Norway (1 492 910), Lithuania (1 396 719), Bulgaria (1 156 729), Croatia (1 122 975), Finland (1 020 952), Slovenia (1 010 785), Latvia (820 220), Estonia (557 397), Cyprus (511 329), Luxembourg (281 994), Iceland (186 567), Malta (91 960) and Liechtenstein (16 302).

As of week 2022-17, 1 087 139 deaths have been reported in the EU/EEA: Italy (163 612), France (159 912), Germany (135 648), Poland (116 433), Spain (104 624), Romania (61 458), Hungary (45 069), Czechia (40 120), Bulgaria (36 913), Belgium (30 968), Greece (29 221), Portugal (22 336), Netherlands (22 261), Slovakia (19 434), Sweden (18 789), Austria (16 026), Croatia (15 835), Lithuania (9 183), Slovenia (7 646), Ireland (7 087), Latvia (6 386), Denmark (5 186), Finland (4 533), Norway (2 932), Estonia (2 424), Cyprus (1 171), Luxembourg (1 106), Malta (657), Iceland (113) and Liechtenstein (56).

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

In week 2022-17, in the EU/EEA overall, the reported weekly cases decreased by – 20.4% compared to the previous week. Weekly increases in descending order were observed in Croatia, Portugal, Bulgaria, Romania, and Greece. The countries with the highest 14-day notification rates per 100 000 population are: Luxembourg (2 064), Germany (1 569), France (1 402), Cyprus (1



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342) and Italy (1 338). Overall, 25 of the 30 EU/EEA countries (Austria, Belgium, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Slovakia, Slovenia, Spain, and Sweden) 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 28 April 2022 and as of 04 May 2022, the following changes have been made to ECDC variant classifications for variants of concern (VOC), variants of interest (VOI), variants under monitoring and De-escalated variants:

• The recombinant lineage XD was de-escalated from variants under monitoring and added to the list of de-escalated variants. Such lineage has not been detected since week 14 of 2022.

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, eight, ninth, tenth and eleventh International Health Regulations (IHR) Emergency Committee meeting 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.



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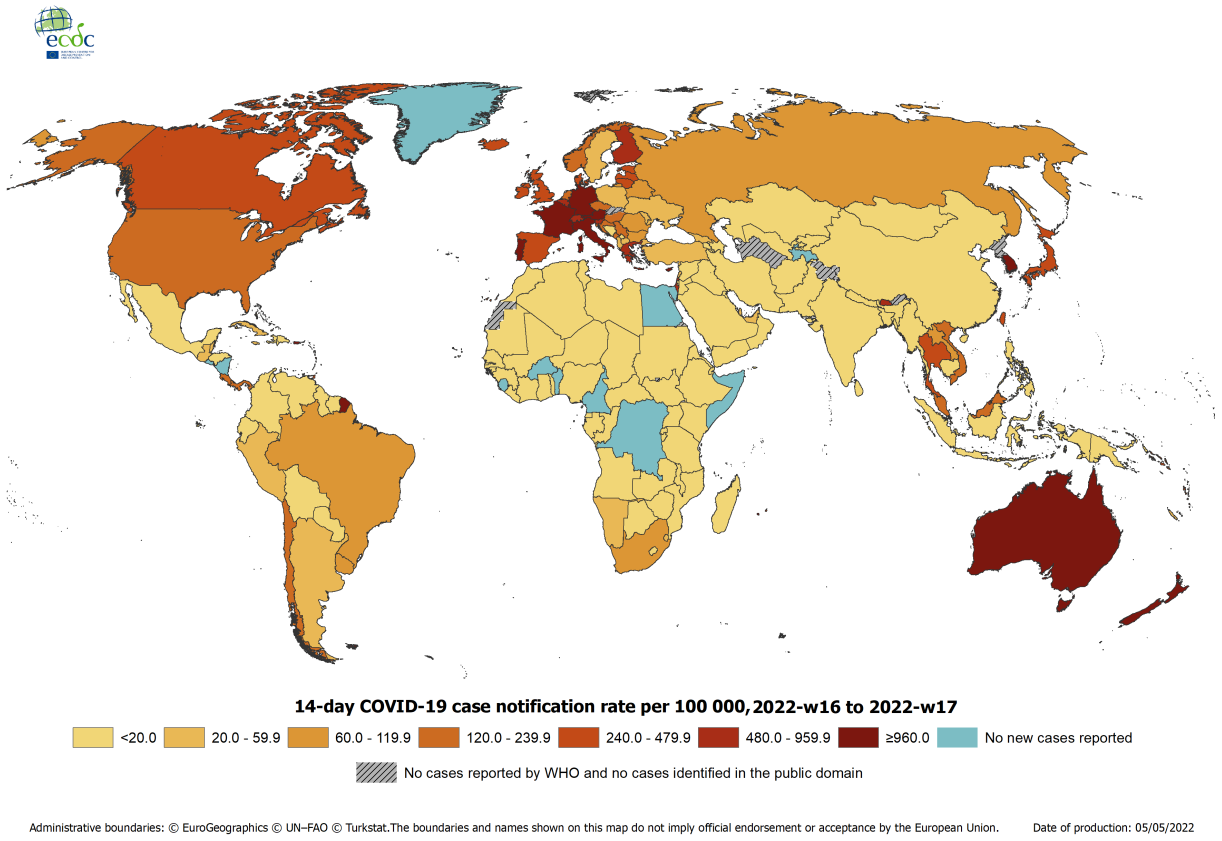
## Geographic distribution of 14-day cumulative number of reported COVID-19 cases per 100 000 population, worldwide, 2022-w16 to 2022-w17

'Source: ECDC'




# Influenza – Multi-country – Monitoring 2021/2022 season

Opening date: 15 October 2021 Latest update: 6 May 2022

## Epidemiological summary

**Week 17 2022 (25 April – 1 May 2022)**
Eleven of 40 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 17% from 19% in the previous week.

Countries, mostly in the western-central part of the Region, reported seasonal influenza activity above 30% positivity in sentinel primary care: Finland (80%), Netherlands (60%), Poland (50%), Serbia (38%) and France (33%).

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



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Hospitalised patients with laboratory-confirmed influenza infections were infected with both type A and B viruses.

**2021/22 season overview**
For the Region as a whole, influenza activity reached levels well above that 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 (when it reached 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) and a subsequent two week decline.

Different levels of activity have been observed between the countries and areas of the Region, with a dominance of A(H3) viruses in most countries.

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

Preliminary results of 2021-2022 seasonal influenza vaccine effectiveness (VE) estimates from the United States showed that VE against medically attended outpatient acute respiratory infection associated with A(H3N2), the dominant influenza virus in circulation, was 16% (95% CI = −16% to 39%).

The European I-MOVE network estimated influenza VE using a multicentre test-negative design among symptomatic patients presenting at primary care between October 2021 and March 2022. Preliminary influenza VE 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 VE 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 VE 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 VE 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 VE 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 non-hospitalised.

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 to date 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 will be updated on a weekly basis and are available on the Flu News Europe website.

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

Opening date: 24 February 2022 Latest update: 6 May 2022



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## Epidemiological summary

According to the United Nations, between 24 February and as of 4 May, the total number of people who fled Ukraine reached 5 707 967. In total, 3 119 196 have crossed the Polish border; 854 292 the Romanian; 545 311 the Hungarian; and 388 282 the Slovakian. In addition, Czechia's Ministry of the Interior reported 326 754 special visa concessions to Ukrainian applicants as of 4 May 2022. Outside of the EU/EAA, 450 797 people have sought safety in the Republic of Moldova United Nations.

Reports from the field have highlighted that the number of Ukrainians returning to Ukraine has increased in recent weeks. According to United Nations, as of 4 May up to 1 436 500 people have returned to Ukraine since 28 February 2022.

On 5 May 2022, the World Health Organization published the tenth situation report on the emergency in Ukraine according to which approximately 7.7 million persons 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 are resulting 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 the displaced people in accessing healthcare, meaning that they may be at greater risk of complications from acute or chronic conditions. Furthermore, 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 suboptimal 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*".

Additionally, 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.

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



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Opening date: 13 April 2022 Latest update: 6 May 2022

## Epidemiological summary

On 5 April 2022, the UK reported an increase in acute hepatitis cases of unknown aetiology 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 cases under investigation in England, Wales and Northern Ireland, with most of these cases aged between two and five years.

The cases in the UK presented clinically 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 reported gastrointestinal symptoms such as abdominal pain, diarrhoea and vomiting in the preceding weeks. Only rare cases presented with fever. Most children were hospitalised and some of them even required admission to specialist paediatric liver units.

Laboratory testing excluded hepatitis types A, B, C, D and E in all cases. The UKHSA has ruled out a link to the COVID-19 vaccine as none of the currently confirmed cases in the UK have been vaccinated. A large proportion of the cases from the UK have tested positive for adenovirus. UKHSA have published testing guidelines for clinicians that can be found here.

**Sources**: UK Government | UK Health Security Agency | Public Health Scotland | Public Health Wales | Public Health Agency Northern Ireland | US CDC |Israeli Ministry of Health | Japan Ministry of Health | Wisconsin Department of Health | Indonesian Ministry of Health | Eurosurveillance | Palestinian Ministry of Health | Sciensano Belgian Institute for Health | Romanian Ministry of Health | media 1, 2, 3, 4, 5, 6 | direct reports to ECDC

## ECDC assessment

The current leading hypothesis is that a cofactor affecting young children having an adenovirus infection, which would be mild in normal circumstances, triggers a more severe infection or immune-mediated liver damage. Other aetiologies (e.g. other infectious or toxic agents) are still under investigation and have not been excluded but are considered less plausible. The disease pathogenesis and routes of transmission are also still unknown. The disease is quite rare and evidence around human-to-human transmission remains unclear; cases in the EU/EEA are sporadic with an unclear trend. As a result, the risk for the European paediatric population cannot be accurately assessed. However, considering the reported cases with acute liver failure, with some cases requiring 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. Considering the unknown aetiology, the affected paediatric population, and the potential severe outcome, this currently constitutes a public health event of concern.

## Actions

ECDC continues to work in collaboration with countries where cases have been reported, WHO and partner organisations to support the ongoing investigations and to facilitate the sharing of information and tools for investigations.
It is essential to establish surveillance at the national level for EU/EEA countries as soon as possible to collect detailed epidemiological, clinical, virological, and other information, including toxicological analyses, on cases. Additional information for hypothesis testing should be collected in the context of analytical studies looking at other factors and potential co-factors such as recent infections, personal and environmental determinants. Specific studies should be designed to identify risk factors for infection and for 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. ECDC will provide guidance and coordination to EU/EEA countries planning to set up such studies.
Further 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 for Member States to review available data sources to determine whether the number of cases reported are above what would be expected.

On 28 April 2022, ECDC published a rapid risk assessment. EU/EEA Member States were alerted by ECDC via EpiPulse on 8 of April 2022. ECDC has established reporting of case-based data for cases of acute hepatitis of unknown aetiology in the European Surveillance System (TESSy). The reporting protocol is available here. Reporting should be based on the case definition described in the RRA and reproduced below. An EpiPulse item is available to Member States to inform and facilitate the communication between them and ECDC. Member States are encouraged to report updates on their investigations in EpiPulse.

ECDC will continue to monitor this event through its epidemic intelligence activities.

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



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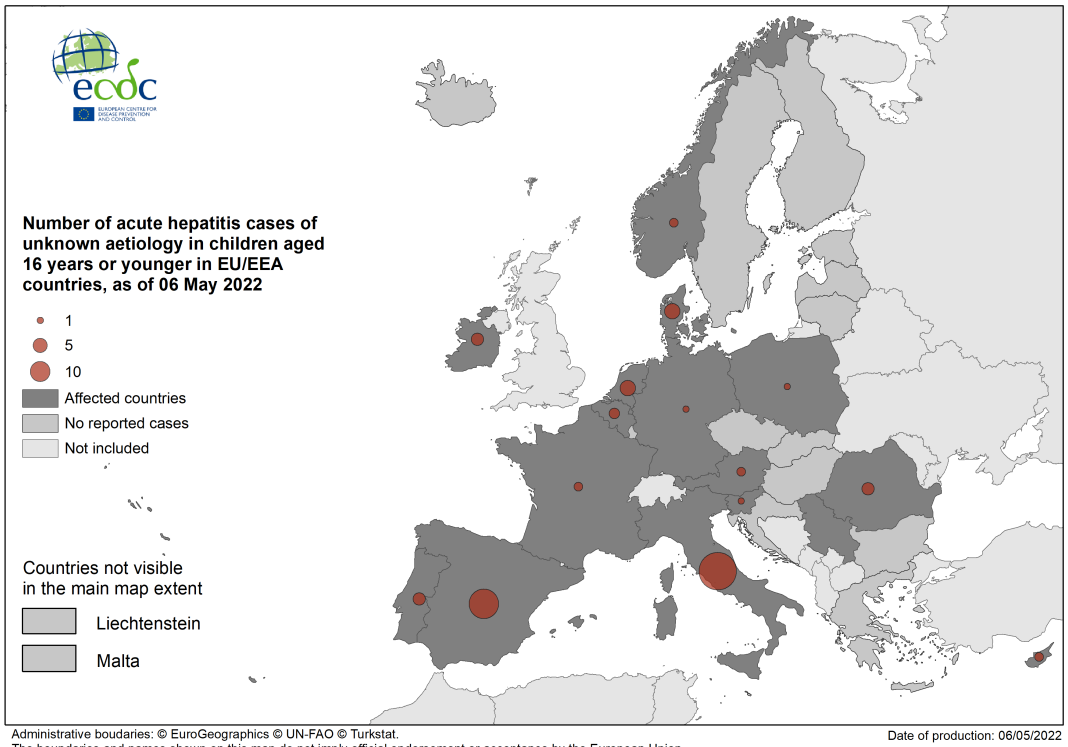
- **Confirmed:** N/A
- **Probable:** A person presenting with an acute hepatitis (non-hepatitis viruses A, B, C, D and E*) with aspartate transaminase (AST) or alanine transaminase (ALT) over 500 IU/L, who is 16 years old or younger, since 1 October 2021.
- **Epi-linked:** A person presenting with an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

## Number of acute hepatitis cases of unknown aetiology in children aged 16 and younger in EU/EAA countries, as of 6 May 2022

Source: ECDC




# Ebola virus disease - Democratic Republic of the Congo - 2022

Opening date: 25 April 2022 Latest update: 6 May 2022

## Epidemiological summary

On 23 April 2022, an Ebola virus disease (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 the 25 April and 4 May 2022 respectively, in Mbandaka. So far, three cases have been confirmed, including three deaths.

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 they sought treatment at a local health facility. The patient was admitted to an Ebola treatment centre 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.

Samples to test for EVD were submitted and investigations to determine the source of the outbreak were initiated. In a tweet citing 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 April 21, this can be considered a new spillover event, not a resurgence of activity from earlier outbreaks in this part of the DRC.

WHO experts are currently supporting the government in contact tracing, testing, and implementing community



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public health measures to break the chain of transmission. Vaccination is expected to start in the coming days, as the DRC has stocks of the rVSV-ZEBOV Ebola vaccine available in the cities of Goma and Kinshasa.

**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 affected 54 and 130 cases, and resulted in 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.

# Middle East respiratory syndrome coronavirus (MERS-CoV) – Multi-country

Opening date: 24 September 2012 Latest update: 6 May 2022

## Epidemiological summary

Since the beginning of 2022, and as of 3 May 2022, two MERS-CoV cases have been reported in Qatar, including one death. Both cases were primary cases, having reported contact with camels. The last case reported in Qatar prior to these cases was in February 2020.

Since April 2012, and as of 3 May 2022, 2 602 cases of MERS-CoV, including 944 deaths, have been reported by health authorities worldwide.

**Sources**: ECDC MERS-CoV page | WHO MERS-CoV | ECDC factsheet for professionals | Saudi Arabia Ministry of Health | Qatar MoPH Case #1 | Qatar MoPH Case #2 | FAO MERS-CoV situation update

## ECDC assessment

Human cases of MERS-CoV continue to be reported in the Arabian Peninsula, particularly in Saudi Arabia. However, the number of new cases detected and reported through surveillance has dropped to the lowest levels since 2014. The risk of sustained human-to-human transmission in Europe remains very low. The current MERS-CoV situation poses a low risk to the EU, as stated in ECDC's rapid risk assessment published on 29 August 2018, which also provides details on the last case reported in Europe.

ECDC published a technical report, Health emergency preparedness for imported cases of high-consequence infectious diseases, in October 2019, which will be useful for EU Member States wanting to assess their level of preparedness for a disease such as MERS. ECDC also published Risk assessment guidelines for infectious diseases transmitted on aircraft (RAGIDA) – Middle East Respiratory Syndrome Coronavirus (MERS-CoV) on 22 January 2020.



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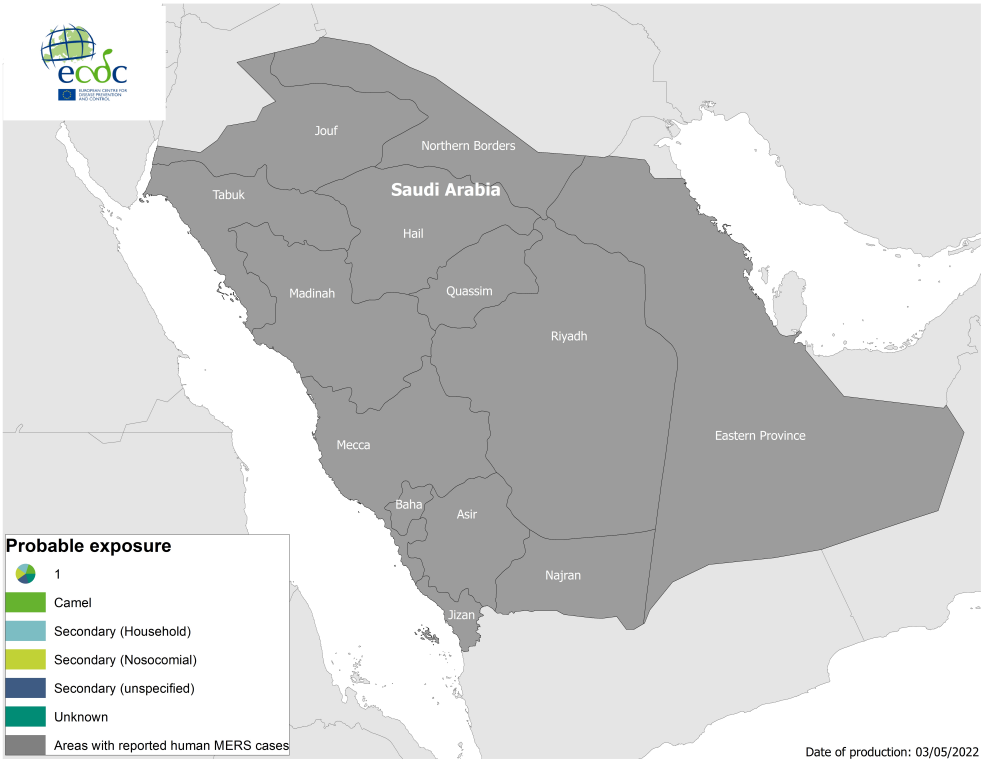
## Actions

ECDC is monitoring this threat through its epidemic intelligence activities and reports on a monthly basis.

## Geographical distribution of confirmed MERS-CoV cases by probable region of infection and exposure, from 1 January to 3 May 2022

Source: ECDC



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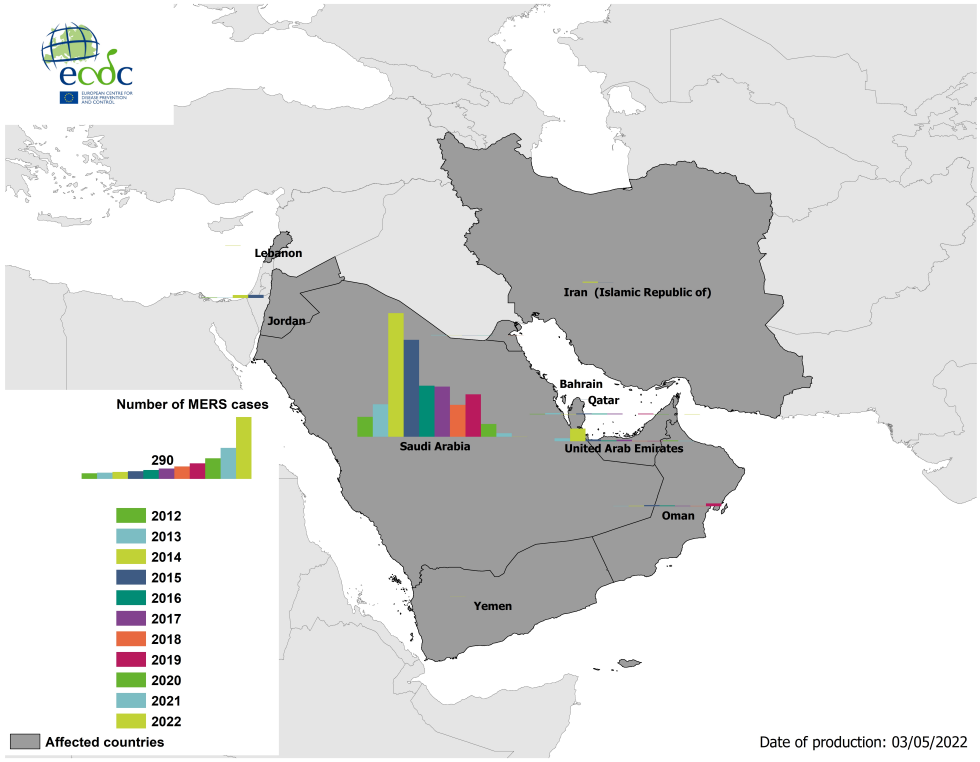
## Geographical distribution of confirmed MERS-CoV cases by country of infection and year, from April 2012 to May 2022

Source: ECDC




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

Opening date: 27 January 2017 Latest update: 6 May 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 2 April, 56 cases, including seven confirmed cases and no deaths have been reported. This is an increase of 23 cases since 26 February 2022.

Brazil: In 2022 and as of 16 April, 48 665 cases, including 14 154 confirmed cases and seven deaths have been reported. This is an increase of 37 708 cases and six deaths since 26 February 2022.

Colombia: In 2022 and as of 23 April, 33 cases and no deaths have been reported. This is an increase of 13 cases since 26 March 2022.

Costa Rica: In 2022 and as of 16 April, three cases and no deaths have been reported. This is an increase of one case 19 March 2022.

El Salvador: In 2022 and as of 23 April, 29 cases and no deaths have been reported. This is an increase of 15 cases since 19 March 2022.



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Guatemala: In 2022 and as of 26 March, 434 cases and no deaths have been reported. This is an increase of 83 cases since 5 March 2022.

Honduras: In 2022 and as of 23 April, 18 cases and no deaths have been reported.

Nicaragua: In 2022 and as of 2 April, two cases and no deaths have been reported.

Paraguay: In 2022 and as of 23 April, 68 cases, including seven confirmed cases and no deaths have been reported. This is an increase of 33 cases since 26 March 2022.

Peru: In 2022 and as of 23 April, 58 cases, including 48 confirmed cases and no deaths have been reported. This is an increase of 24 cases since 26 March 2022.

Venezuela: In 2022 and as of 9 April, 11 cases and no deaths have been reported. This is an increase of six cases since 5 March 2022.

**Dengue:**
In 2022 and as of 4 May, the Pan American Health Organization (PAHO) reported 695 028 dengue cases, including 285 432 confirmed cases and 209 associated deaths, in the Americas. The five countries reporting most cases are: Brazil (607 546), Peru (31 986), Colombia (16 179), Nicaragua (9 803) and Ecuador (4 963). This is an increase of 470 538 cases and 168 deaths since 6 April 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: According to media quoting health authorities, in 2022 and as of 25 April, 337 cases and no deaths have been reported. This is an increase of 203 cases since 21 March 2022.

Malaysia: In 2022 and as of 9 April, 311 cases and no deaths have been reported. This is an increase of 73 cases since 12 March 2022.

Thailand: In 2022 and as of 18 April, 79 cases and no deaths have been reported. This is an increase of 19 cases since 22 March 2022.

**Dengue:**

Afghanistan: In 2022 and as of 5 March, 775 cases including one death have been reported. This is an increase of 761 cases and one death since 8 January 2022.

Bangladesh: In 2022 and as of 12 February, 138 confirmed cases and no deaths have been reported.

Cambodia: In 2022 and as of 16 April, 608 cases, including one death have been reported. This is an increase of 245 cases since 24 March 2022.

China: In 2022 and as of 27 January, three cases and no deaths have been reported.

India: According to media quoting health authorities, in 2022 and as of 21 March, 400 cases and no deaths have been reported.

Indonesia: According to media quoting health authorities, in 2022 and as of 31 March, 22 331 cases, including 229 deaths have been reported.

Laos: In 2022 and as of 16 April, 131 cases and no deaths have been reported. This is an increase of 63 cases since 24 March 2022.



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Malaysia: In 2022 and as of 9 April, 9 957 cases, including five deaths have been reported. This is an increase of 2 593 cases and two deaths since 24 March 2022.

Maldives: In 2022 and as of 31 March, 66 cases and no deaths have been reported. This is an increase of 27 cases since 1 March 2022.

Nepal: In 2022 and as of 23 April, 38 cases and no deaths have been reported. This is an increase of 24 cases since 27 March 2022.

Oman: According to media quoting health authorities, in 2022 and as of 7 April, 76 cases and no deaths have been reported. This is an increase of 50 cases since 30 March 2022.

Pakistan: According to media quoting health authorities, in 2022 and as of 6 April, 38 cases, including 25 confirmed cases and no deaths have been reported.

Philippines: In 2022 and as of 26 March, 12 634 cases including 84 deaths have been reported. This is an increase of 4 524 cases and 33 deaths since 5 March 2022.

Singapore: In 2022 and as of 30 April, 6 642 cases and no deaths have been reported. This is an increase of 3 298 cases since 4 April 2022.

Sri Lanka: In 2022 and as of 29 April, 13 254 cases and no deaths have been reported. This is an increase of 3 798 cases since 5 April 2022.

Thailand: In 2022 and as of 25 April, 889 cases and no deaths have been reported. This is an increase of 276 cases and no deaths since 5 April 2022.

Timor-Leste: In 2022 and as of 4 May, 4 627 cases and 52 deaths have been reported. This is an increase of 914 cases and eight deaths since 29 March 2022.

Vietnam: In 2022 and as of 10 April, 14 704 cases and six deaths have been reported. This is an increase of 4 424 cases and two deaths since 13 March 2022.

***Africa***

**Chikungunya virus disease:**

Ethiopia: In 2022 and as of 24 April, 311 cases, including three confirmed cases and no deaths have been reported.

Kenya: In 2022 and as of 24 April, 44 cases, including two confirmed cases and no deaths have been reported.

**Dengue:**
Cote d'Ivoire: According to media quoting health authorities, in 2022 and as of 6 February, 11 confirmed cases and one death have been reported.

Réunion: In 2022 and as of 23 April, 1 027 cases, including 1 027 confirmed cases and no deaths have been reported. This is an increase of 427 cases since 30 March 2022. According to Sante Publique France, the number of dengue cases was increasing at the start of the year, but has stabilised since week 5-2022, and cases remain lower than the same period in previous years. The situation is still considered as 'inter-epidemic'.

Sao Tome and Principe: According to media quoting health authorities, in 2022 and as of 3 May, 41 cases, including 30 confirmed cases and no deaths have been reported.

***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 27 March, eight cases and no deaths have been reported. This is an increase of five cases since 13



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February 2022.

Cook Islands: In 2022 and as of 26 March, two cases and no deaths have been reported.

Fiji: In 2022 and as of 18 April, 1 555 cases and no deaths have been reported. This is an increase of 246 cases since 5 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 19 March, 10 cases and no deaths have been reported. This is an increase of two cases since 5 March 2022.

New Caledonia: In 2022 and as of 15 January, one case and no deaths have been reported.

Palau: In 2022 and as of 9 April, nine cases and no deaths have been reported. This is an increase of five cases since 5 March 2022.

Samoa: In 2022 and as of 12 February, five cases and no deaths have been reported.

Solomon Islands: In 2022 and as of 9 April, 27 cases and no deaths have been reported. This is an increase of four cases since 12 March 2022.

Vanuatu: In 2022 and as of 2 April, 10 cases and no deaths have been reported. This is an increase of eight cases since 19 February 2022.

Wallis and Futuna: In 2022 and as of 2 April, 19 cases and no deaths have been reported. This is an increase of 11 cases since 29 January 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 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 mainland Europe. The current likelihood of the occurrence of vector-borne events of chikungunya and dengue viruses in mainland EU/EEA is negligible, as the environmental conditions are not favourable to the growth of mosquito populations and virus replication in the vector. 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 dedicated webpage 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.



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## Geographical distribution of chikungunya virus disease cases reported worldwide in 2022, February to April 2022

Source: ECDC


## Geographical distribution of chikungunya virus disease cases reported worldwide in 2022, as of 5 May 2022

Source: ECDC


## Geographical distribution of dengue cases reported worldwide in 2022, February to April



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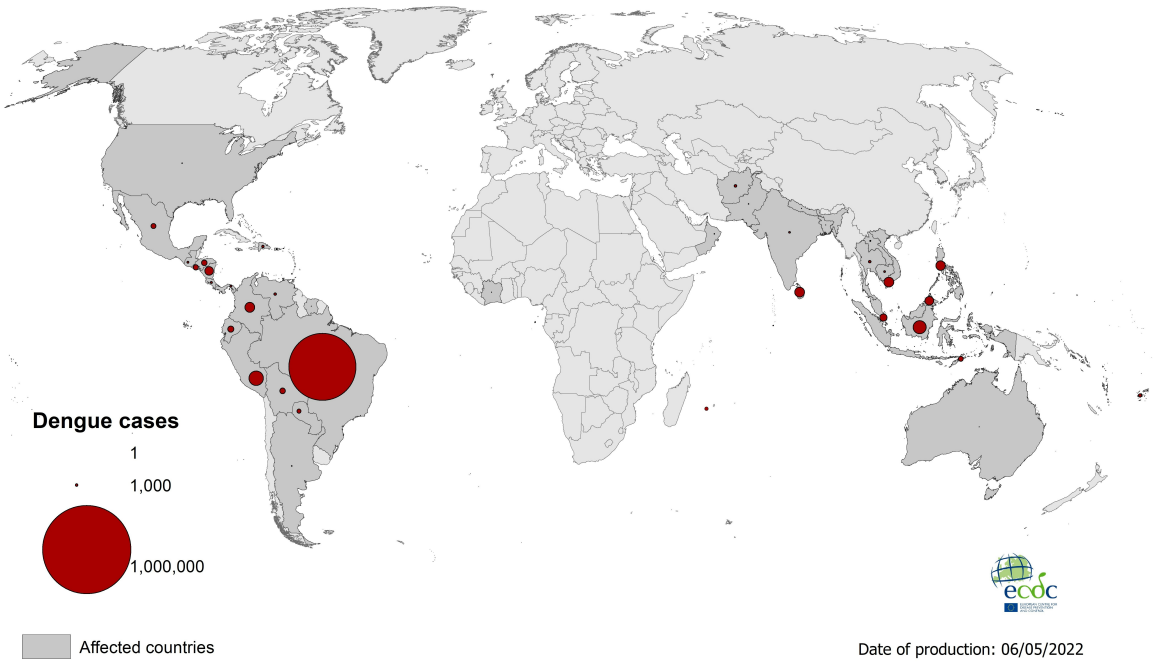
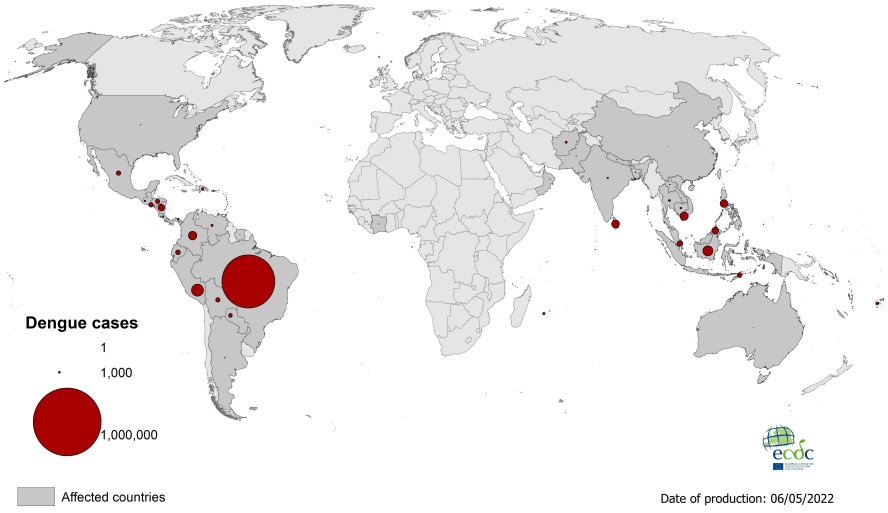
Source: ECDC




## Geographical distribution of dengue cases reported worldwide in 2022, as of 5 May 2022

Source: ECDC



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