

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: 10 June 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

Since week 21, 2022 and as of week 22, 2022, 3 362 525 new cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) and 10 518 new deaths have been reported.

Since 31 December 2019 and as of week 22, 2022, 531 470 423 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 6 318 391 deaths.

As of week 22, 2022, 143 154 457 cases and 1 106 534 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 2 June 2022 and as of 9 June 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.

• B.1.617.2 (Delta) has been de-escalated from variants of concern to de-escalated variants. The reason for this de-escalation is that this variant has not been detected or detected in very low proportions in EU/EEA. Worldwide detections of this variant have also significantly reduced since Omicron became the dominant variant.

• BA.2 + L452X has been reclassified from variants under monitoring to variants of interest. The reason for this is due to the increasing proportions of BA.2 lineage with the additional mutation L452X in several EU/EEA countries in the recent weeks.

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

Measles – Multi-country (World) – Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 10 June 2022

A sharp decrease in measles cases was observed globally during the COVID-19 pandemic. A few measles cases are now being reported in the EU/EEA, including in countries that had previously eliminated or interrupted endemic transmission.

→Update of the week

Since the previous monthly measles update in ECDC's Communicable Disease Threats Report (CDTR) on 20 May 2022, 18 new cases have been reported by seven countries in the EU/EEA: Bulgaria (1), Germany (8), Hungary (1), Ireland (1), Poland (3), Romania (3) and Spain (1). No other countries have reported new cases of measles.

So far, in 2022, no deaths have been reported in the EU/EEA.

Relevant updates outside the EU/EEA are available for Republic of the Congo (Congo), Democratic Republic of the Congo (DRC), WHO Regional Office for Europe (EURO), WHO Regional Office for Africa (WHO AFRO), WHO Pan American Health Organization (PAHO), WHO Western Pacific Regional Office (WPRO) and WHO Regional Office for South-East Asia (SEARO). No update was available for the WHO Regional Office for Eastern Mediterranean (EMRO).

Non EU Threats

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

Opening date: 13 April 2022

Latest update: 10 June 2022

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

→Update of the week

As of 9 June 2022, 402 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 (55.7%) of these cases have been reported from the UK. The majority (77.9%) of reported cases are five years old or younger. Around a third (36.4%) of cases were admitted to an intensive care unit and 17 (8.9%) children received a liver transplant. A total of 293 cases were tested for adenovirus, 158 of which (53.9%) tested positive. A total of 273 cases were PCR tested for SARS-CoV-2, 29 of which (10.6%) tested positive.

EU/EEA

As of 9 June 2022, 171 cases of acute hepatitis of unknown aetiology among children aged 16 years and under have been reported to TESSy from 16 EU/EEA countries (Austria [2], Belgium [14], Bulgaria [1], Cyprus [2], Denmark [7], France [7], Greece [6], Ireland [13], Italy [31], Latvia [1], the Netherlands [14], Norway [5], Poland [8], Portugal [15], Spain [36] and Sweden [9]). Among these cases, at least nine 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 found in the [Joint ECDC-WHO regional Office for Europe Surveillance Bulletin](#) published weekly.

Non-EU/EEA

As of 7 June 2022, the [UKHSA](#) had identified a total of 240 children aged under 16 years with acute hepatitis of unknown aetiology. 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 25 May 2022.

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

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

Monkeypox - Multi-country - 2022

Opening date: 3 June 2022

Latest update: 10 June 2022

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

→Update of the week

Since the last [epidemiologic update](#) with data as of 8 June 2022, 122 monkeypox cases have been reported from 7 EU/EEA countries: Germany (51), Portugal (43), Italy (8), Belgium (7), Ireland (6), Netherlands (6) and Greece (1). Greece reported the first case on 9 June 2022.

Outside the EU/EEA, 13 monkeypox cases have been reported from 4 non-EU/EEA countries: Ghana (5), United States (5), Switzerland (2) and Australia (1).

Disclaimer: Data presented in this update are compiled from TESSy, official sources, or if not available, from public sources quoting national authorities, including media reports. Data were collected on 9 June 2022.

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

Opening date: 24 September 2012

Latest update: 10 June 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 to dromedary camels in the Middle East as a reservoir from which humans sporadically become infected through zoonotic transmission. Secondary human-to-human transmission has occurred, particularly within households and in healthcare settings.

→Update of the week

Since the previous update published on 3 May 2022, and as of 8 June 2022, one new MERS-CoV case from Oman has been reported by the World Health Organization (WHO).

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

Opening date: 2 June 2022

Latest update: 10 June 2022

During the transmission season for West Nile Virus (WNV), which usually runs from June to November, ECDC monitors the occurrence of infections in the European Union (EU), the European Economic Area (EEA) and EU neighbouring countries. ECDC publishes weekly epidemiological updates to inform the 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 8 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.

II. Detailed reports

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

Opening date: 7 January 2020

Latest update: 10 June 2022

Epidemiological summary

Since 31 December 2019 and as of week 22, 2022, 531 470 423 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 6 318 391 deaths.

Cases have been reported from:

Africa: 11 904 536 cases; the five countries reporting most cases are South Africa (3 968 931), Morocco (1 170 194), Tunisia (1 043 540), Egypt (513 975) and Libya (502 040).

Asia: 134 398 622 cases; the five countries reporting most cases are India (43 181 335), South Korea (18 168 708), Vietnam (10 726 045), Japan (8 926 335) and Iran (7 232 731).

Americas: 158 823 818 cases; the five countries reporting most cases are United States (84 796 633), Brazil (31 159 335), Argentina (9 274 901), Colombia (6 109 105) and Mexico (5 792 317).

Europe: 217 327 009 cases; the five countries reporting most cases are France (29 704 250), Germany (26 496 611), United Kingdom (22 305 893), Russia (18 355 200) and Italy (17 618 668).

Oceania: 9 015 733 cases; the five countries reporting most cases are Australia (7 425 829), New Zealand (1 206 411), French Polynesia (73 014), Fiji (65 103) and New Caledonia (62 329).

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

Deaths have been reported from:

Africa: 254 216 deaths; the five countries reporting most deaths are South Africa (101 350), Tunisia (28 648), Egypt (24 719), Morocco (16 080) and Ethiopia (7 515).

Asia: 1 303 461 deaths; the five countries reporting most deaths are India (524 701), Indonesia (156 615), Iran (141 331), Philippines (60 456) and Vietnam (43 081).

Americas: 2 753 497 deaths; the five countries reporting most deaths are United States (1 008 639), Brazil (667 005), Mexico (325 023), Peru (213 269) and Colombia (139 867).

Europe: 1 994 126 deaths; the five countries reporting most deaths are Russia (379 584), United Kingdom (178 749), Italy (168 244), France (162 479) and Germany (139 386).

Oceania: 13 085 deaths; the five countries reporting most deaths are Australia (8 755), New Zealand (1 194), Fiji (864), Papua New Guinea (651) and French Polynesia (649).

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

EU/EEA:

As of week 22, 2022, 144 830 208 cases have been reported in the EU/EEA: France (29 704 250), Germany (26 496 611), Italy (17 618 668), Spain (12 470 926), Netherlands (8 092 915), Poland (6 016 836), Portugal (4 844 972), Austria (4 293 339), Belgium (4 152 106), Czechia (3 917 658), Greece (3 472 899), Romania (2 910 022), Denmark (2 822 291), Sweden (2 509 365), Slovakia (2 292 020), Hungary (1 921 567), Ireland (1 543 057), Norway (1 467 687), Lithuania (1 401 124), Bulgaria (1 165 807), Croatia (1 138 039), Finland (1 102 893), Slovenia (1 026 372), Latvia (826 960), Estonia (562 614), Cyprus (481 205), Luxembourg (274 734), Iceland (190 627), Malta (95 207) and Liechtenstein (17 437).

As of week 22, 2022, 1 109 901 deaths have been reported in the EU/EEA: Italy (168 244), France (162 479), Germany (139 386), Poland (116 722), Spain (106 946), Romania (65 687), Hungary (45 354), Czechia (40 232), Bulgaria (37 163), Belgium (31 260), Greece (29 930), Portugal (23 406), Netherlands (22 326), Slovakia (19 469), Sweden (18 981), Austria (16 216), Croatia (15 998), Lithuania (9 191), Slovenia (7 794), Latvia (6 451), Ireland (6 276), Finland (6 064), Denmark (5 329), Norway (3 172), Estonia (2 458), Luxembourg (1 276), Cyprus (1 173), Malta (723), Iceland (114) and Liechtenstein (81).

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

In week 22, 2022, in the EU/EEA overall, the reported weekly cases decreased by – 1.9% compared to the previous week. Weekly increases were observed in Austria, Denmark, France, Germany, Iceland, Ireland, Liechtenstein, Luxembourg, Malta, and Netherlands. The countries with the highest 14-day notification rates per 100 000 population are: Portugal (3 303), Luxembourg (592), Iceland (534), Germany (478) and Greece (472). Overall, 20 countries (Belgium, Bulgaria, Croatia, Cyprus, Czechia, Estonia, Finland, Greece, Hungary, Italy, Latvia, Lithuania, Norway, Poland, Portugal, Romania, 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 26 May 2022 and as of 2 June 2022, no changes have been made to ECDC variant classifications for variants of concern (VOC), variants of interest (VOI), variants under monitoring and de-escalated variants.

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

Public Health Emergency of International Concern (PHEIC):

On 30 January 2020, the World Health Organization (WHO) declared that the outbreak of COVID-19 constitutes a PHEIC. On 11 March 2020, the Director-General of [WHO](#) declared the COVID-19 outbreak a pandemic. The [third](#), [fourth](#), [fifth](#), [sixth](#), [seventh](#), [eighth](#), [ninth](#), [tenth](#) and [eleventh](#) International Health Regulations (IHR) Emergency Committee meetings for COVID-19 were held in Geneva on 30 April 2020, 31 July 2020, 29 October 2020, 14 January 2021, 15 April 2021, 14 July 2021, 22 October 2021, 13 January 2022 and 11 April 2022, respectively. The Committee concluded during these meetings that the COVID-19 pandemic continues to constitute a PHEIC.

ECDC assessment

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

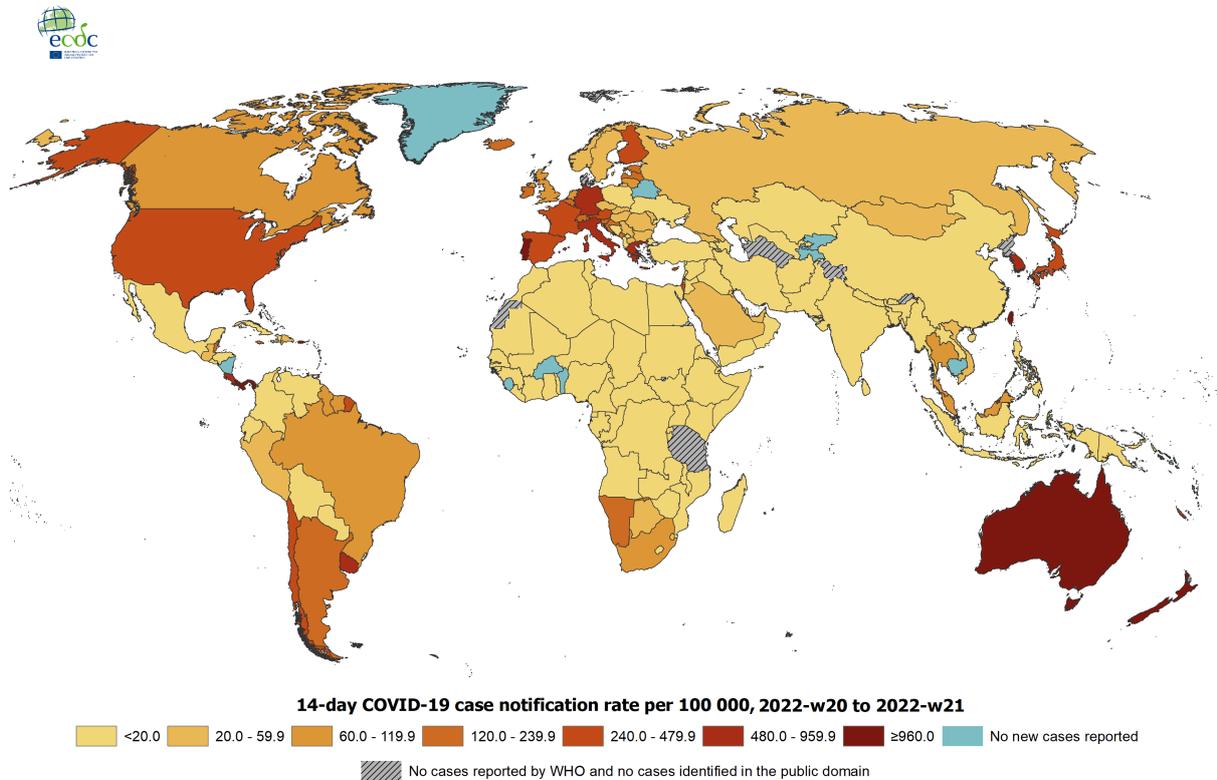
Actions

On 27 January 2022, ECDC published its Rapid Risk Assessment '[Assessment of the further emergence and potential impact of the SARS-CoV-2 Omicron variant of concern in the EU/EEA, 19th update](#)'.

A [dashboard](#) with the latest updates is available on ECDC's [website](#). For the latest update on SARS-CoV-2 variants of concern, please see [ECDC's web page on variants](#).

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

Source: ECDC



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

Measles – Multi-country (World) – Monitoring European outbreaks

Opening date: 9 February 2011

Latest update: 10 June 2022

Epidemiological summary

Since the previous monthly measles update in ECDC's Communicable Disease Threats Report (CDTR) on 20 May 2022, 18 new cases have been reported by seven countries in the EU/EEA: Bulgaria (1), Germany (8), Hungary (1), Ireland (1), Poland (3), Romania (3) and Spain (1). No other countries have reported new cases of measles.

So far, in 2022, no deaths have been reported in the EU/EEA.

Relevant updates outside the EU/EEA are available for Republic of the Congo (Congo), Democratic Republic of the Congo (DRC), WHO Regional Office for Europe (EURO), WHO Regional Office for Africa (WHO AFRO), WHO Pan American Health Organization (PAHO), WHO Western Pacific Regional Office (WPRO) and WHO Regional Office for South-East Asia (SEARO). No update was available for the WHO Regional Office for Eastern Mediterranean (EMRO).

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Disclaimer: the [monthly measles report published in the CDTR](#) provides the most recent data on cases and outbreaks from the publicly available information of national public health authorities or the media. This report is a supplement to [ECDC's monthly measles and rubella monitoring report](#), based on data routinely submitted by 29 EU/EEA countries to The European Surveillance System (TESSy). Data presented in the two monthly reports may differ.

Epidemiological summary for EU/EEA countries with updates since last month

[Bulgaria](#) reported two cases in 2022, an increase of one case since the previous report. One case was reported in week 18 (ending on 8 May 2022) and another case as of week 21 (ending 29 May 2022).

[Germany](#) reported 41 confirmed and suspected cases in weeks 1 to 22 in 2022 (ending 5 June 2022), an increase of eight cases since week 18 (ending 8 May 2022).

[Hungary](#) has reported four cases in 2022 and as of 5 June 2022, an increase of one case since week 15 (ending 17 April 2022). One suspected case was reported in week 18 (ending 8 May 2022) (included in the overall number of cases).

[Ireland](#) has reported four cases of measles in 2022 as of week 21, 2022 (ending 29 May 2022) which is an increase of one case since week 17 (ending 30 April 2022).

[Poland](#) has reported 15 cases in [January–May 2022](#), an increase of three cases since the previous monthly report for January–April 2022.

Romania: according to a [media report](#) dated 5 May 2022 quoting health authorities, three cases have been reported in 2022 and two cases were reported in 2021.

[Spain](#) has reported one confirmed case in 2022, in week 7 (ending 20 February 2022).

Relevant epidemiological summary for countries outside the EU/EEA

A global provisional monthly measles and rubella overview by month and country is available from [WHO's website](#).

According to WHO's Regional Office for Europe ([EURO](#)) data for January–April 2022 (data accessed on 3 June 2022) cases of measles have been reported in the following non-EU/EEA countries: Bosnia and Herzegovina (2), Georgia (2), North Macedonia (8), Russia (6), Tajikistan (87), Turkey (12), Ukraine (3), and United Kingdom (1). According to the same report in the EU/EEA, confirmed cases were reported in Belgium (4), France (1), Germany (6), Ireland (1), Italy (4), Poland (5), and Romania (1). Numbers of measles cases are provided to WHO for EU/EEA countries via ECDC (TESSy data).

According to a report from WHO's Regional Office for Africa ([AFRO](#)), as of 29 May 2022 (week 22), in 2022 cases and outbreaks of measles have been reported in the following countries: Cameroon, Chad, Congo, the Democratic Republic of Congo (DRC), Ethiopia, Guinea, Liberia, Mali, Mozambique, Niger, Nigeria, Sierra Leone, South Sudan, Togo, and Zimbabwe. Due to varying reporting periods by the countries, please visit the latest weekly bulletin available [here](#).

Congo reported 6 381 confirmed measles cases, including 132 deaths (CFR: 2.1%) between 1 January 2022 and 1 May 2022. Confirmed outbreaks have been reported in 19 of 52 districts.

DRC reported 47 514 suspected measles cases, including 684 measles related deaths (CFR: 1.4%) in the period from 1 January 2022 to 1 May 2022. Confirmed outbreaks have been reported in 349 health zones in 26 provinces. Provinces with a large number of reported suspected cases are Tanganyika, Haut Lomami, Sud Ubangi, Maniema, Haut Katanga, Sankuru and Sud-Kivu.

According to WHO's Pan American Health Organization ([PAHO](#)) report (Vol. 28, No. 19), in week 19 of 2022 (ending 14 May 2022) 24 cases were reported in four countries: Brazil (19), the United States of America (2), Argentina (1), and Canada (2).

According to a report from WHO's Western Pacific Region ([WPRO](#)) (Vol 16, Issue 4), as of 20 April 2022, overall there were 209 confirmed and clinically compatible cases, including ten deaths (CFR: 4.8%). The cases were reported by four countries: Cambodia (1), China (117), Malaysia (46) and the Philippines (45).

Between January and April 2022, according to WHO's Regional Office for South-East Asia (SEARO), there were 4 874 cases of measles reported by seven countries: India (4 015), Indonesia (753), Nepal (48), Bangladesh (46), Myanmar (4), Thailand (6) and Timor-Leste (2). The update is provided from the WHO [Provisional monthly measles and rubella data](#) available on 12 April 2022.

ECDC assessment

The substantial decline in measles cases reported by EU/EEA countries after March 2020, and continuing through 2022, contrasts

with the usual annual and seasonal pattern for measles which peaks during the spring in temperate climates. A similar decrease has been observed in other countries worldwide during the same period. Under-reporting, under-diagnosis, or a real decrease due to the direct or indirect effects of COVID-19 pandemic measures could explain the observed decline in cases. Lifting of non-pharmaceutical interventions related to the COVID-19 pandemic could lead to measles outbreaks in the EU/EEA. Active measles surveillance and public health measures, including high vaccination uptake, provide the foundation for a proper response to possible increases in the number of cases/outbreaks.

Actions

ECDC monitors the measles situation through its epidemic intelligence activities, which supplement monthly outputs with measles surveillance data from The European Surveillance System (TESSy) routinely submitted by 29 EU/EEA countries. ECDC published a [risk assessment](#) entitled 'Who is at risk of measles in the EU/EEA?' on 28 May 2019.

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

Opening date: 13 April 2022

Latest update: 10 June 2022

Epidemiological summary

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

A large proportion of the cases reported to TESSy, including cases from the UK, have tested positive for adenovirus, thus association with adenovirus remains one of the leading hypotheses. Testing data related to SARS-CoV-2 indicate that a smaller proportion tested positive by PCR and around 60% of tested cases had a positive serology result. A link to the COVID-19 vaccine is considered unlikely as most cases have been unvaccinated. The cases appear to be unrelated, with very few 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.

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 9 June 2022, 402 cases of acute hepatitis of unknown aetiology among children aged 16 years and under had been reported to TESSy from the World Health Organization European Region. Just over half (55.7%) of these cases have been reported from the UK. The majority (77.9%) of reported cases are five years or younger. Around a third (36.4%) of cases were admitted to an intensive care unit and 17 (8.9%) children received a liver transplant. A total of 293 cases were tested for adenovirus, 158 of which (53.9%) tested positive. A total of 273 cases were PCR tested for SARS-CoV-2, 29 of which (10.6%) tested positive.

EU/EEA

As of 9 June 2022, 171 cases of acute hepatitis of unknown aetiology among children aged 16 years and under had been reported to TESSy from 16 EU/EEA countries (Austria [2], Belgium [14], Bulgaria [1], Cyprus [2], Denmark [7], France [7], Greece [6], Ireland [13], Italy [31], Latvia [1], the Netherlands [14], Norway [5], Poland [8], Portugal [15], Spain [36] and Sweden [9]). Among these cases, at least nine 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 found in the [Joint ECDC-WHO regional](#)

[Office for Europe Surveillance Bulletin](#) published weekly.

Non – EU/EEA

As of 7 June 2022, the UKHSA had identified a total of 240 children aged under 16 years with acute hepatitis of unknown aetiology. 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 25 May 2022.

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

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

ECDC assessment

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

Actions

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

On 25 May 2022, ECDC published a guidance document for [diagnostic testing of 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 be 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

around detection of adenovirus circulation.

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

Monkeypox - Multi-country - 2022

Opening date: 3 June 2022

Latest update: 10 June 2022

Epidemiological summary

A multi-country outbreak of MPX started on 16 May 2022. Since the beginning of the outbreak and as of 9 June 2022 there were 1 269 confirmed cases reported worldwide. 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 9 June 2022, 783 confirmed cases of monkeypox have been reported from 19 EU/EEA Member States: Portugal (209), Spain (198), Germany (131), France (66), Netherlands (60), Italy (50), Belgium (24), Ireland (15), Czechia (6), Slovenia (6), Sweden (5), Denmark (3), Finland (2), Latvia (2), Norway (2), Austria (1), Greece (1), Hungary (1) and Malta (1).

Outside of EU/EEA, 486 confirmed cases of monkeypox have been reported in United Kingdom (321), Canada (81), United States (40), United Arab Emirates (13), Switzerland (12), Australia (7), Ghana (5), Israel (3), Argentina (2), Mexico (1) and Morocco (1).

ECDC assessment

MPX does not easily spread 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) may cause severe disease in certain population groups (young children, pregnant women, immunosuppressed persons). However, the likelihood of cases with severe morbidity cannot be accurately estimated yet. The overall risk is assessed as moderate for persons having multiple sexual partners (including some groups of MSM) and low for the broader population.

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

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

Actions

ECDC will continue to monitor this event through epidemic intelligence activities and report relevant news on an ad-hoc basis. 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. A rapid risk assessment "[Monkeypox Multi-country outbreak](#)" was published on 23 May 2022. For the latest updates, visit [ECDC monkeypox page](#).

In addition, ECDC is offering laboratory support to Member States and collaborating with stakeholders on risk communication activities such as targeted messaging for the general public and for MSM communities and providing guidance to countries hosting events in the summer. ECDC is also providing guidance on clinical sample storage and transport, case and contact management and contact tracing, IPC guidance, cleaning and disinfection in healthcare settings and households, and vaccination approaches.

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

Opening date: 24 September 2012

Latest update: 10 June 2022

Epidemiological summary

Since the beginning of 2022, and as of 8 June 2022, three MERS-CoV cases have been reported in Qatar (2) and Oman (1), including one death. All three cases were primary cases, having reported contact with camels. The last case reported in Qatar prior to this was in February 2020 and the last case previously reported in Oman was in February 2019.

Since April 2012, and as of 8 June 2022, 2 603 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](#) | [Qatar MoPH Case #1](#) | [Qatar MoPH Case #2](#) | [FAO MERS-CoV situation update](#) | [WHO DON Oman](#)

ECDC assessment

Human cases of MERS-CoV continue to be reported in the Arabian Peninsula. 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.

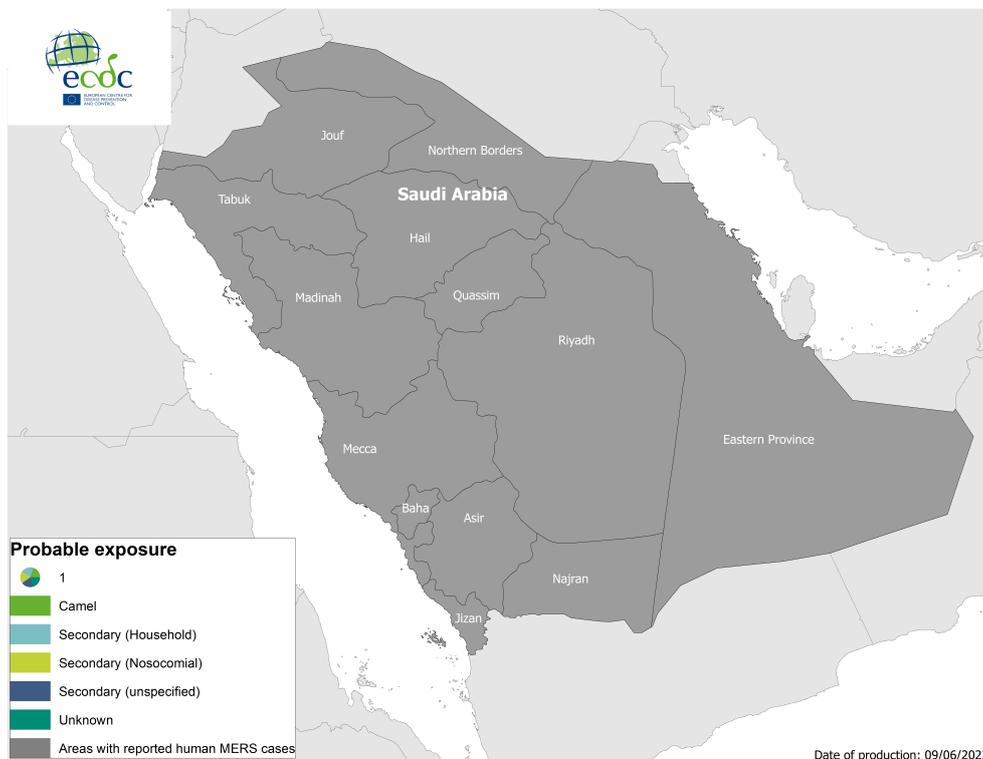
In October 2019, ECDC published a technical report, [Health emergency preparedness for imported cases of high-consequence infectious diseases](#), which will be useful for EU Member States wanting to assess their level of preparedness for a disease such as MERS. ECDC also published [Risk assessment guidelines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

Actions

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

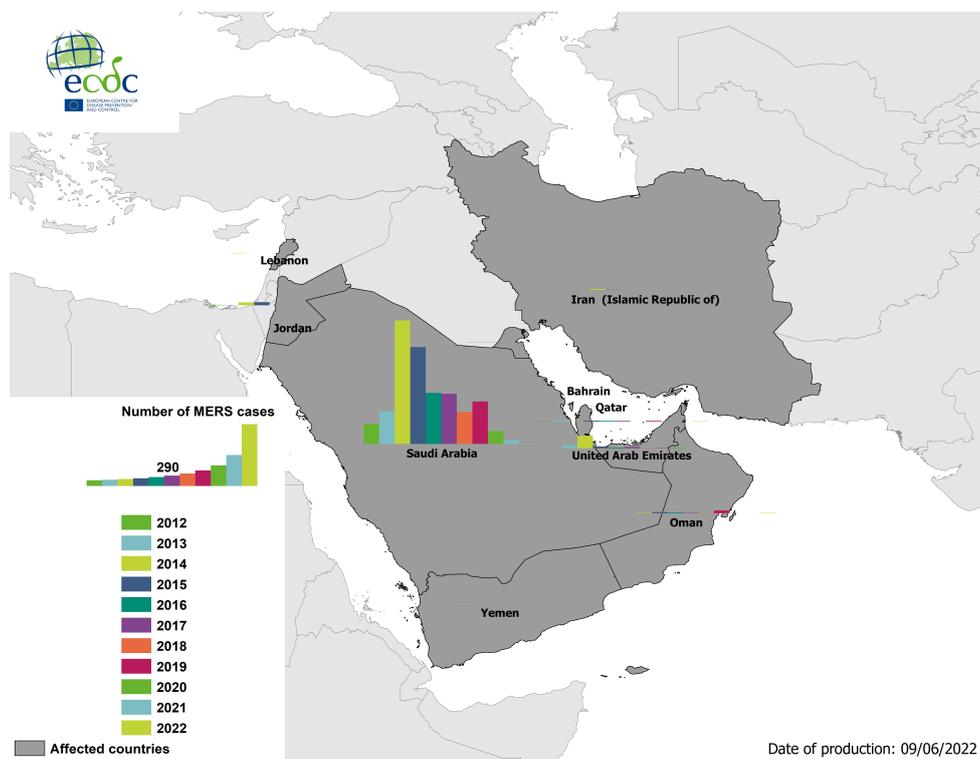
Geographical distribution of confirmed MERS-CoV cases by probable region of infection and exposure, from 1 January to 8 June 2022

Source: ECDC



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

Source: ECDC



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

Opening date: 2 June 2022

Latest update: 10 June 2022

Epidemiological summary

As of 8 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

At this early stage of the transmission season, no human cases or outbreaks among animals have been notified as yet. 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.

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