COMMUNICABLE DISEASE THREATS REPORT

CDTR
Week 24, 12-18 June 2022

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary

EU Threats

New! Mycobacterium chelonae in bioprosthetic heart valves – Multi-country – 2020-2022

Opening date: 17 June 2022 Latest update: 17 June 2022

On 13 April 2022, a manufacturer of bioprosthetic heart valves published a field safety notice to halt the sales and implantations of five products. This followed investigations of *Mycobacterium chelonae* contamination in explanted bioprosthetic heart valves from four cardiac patients in two countries over three years.

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

Opening date: 2 June 2022 Latest update: 17 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 he 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 15 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.

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 169 73 Solna, Sweden
Visiting address: Gustav III:s Boulevard 40, Solna, Sweden
ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
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COVID-19 associated with SARS-CoV-2 – Multi-country (World) – 2019 - 2022

Opening date: 7 January 2020 Latest update: 17 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 2022-22 and as of week 2022-23, 3 380 004 new cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) and 9 567 new deaths have been reported.

Since 31 December 2019 and as of week 2022-23, 535 143 050 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 6 328 694 deaths.

As of week 2022-23, 144 453 879 cases and 1 108 682 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 9 June 2022, and as of 16 June 2022, no changes have been made to ECDC variant classifications for variants of concern (VOC), variants of interest (VOI), variants under monitoring, or de-escalated variants. Several countries in the EU/EEA are experiencing a surge in cases and hospitalisations, likely due to increased circulation of VOCs BA.4 and BA.5 and VOI BA.2 + L452X. However, the numbers are still low and very few deaths associated with these variants have been reported.

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

Monkeypox - Multi-country - 2022

Opening date: 3 June 2022 Latest update: 17 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 across the world.

➔Update of the week

Since the last epidemiologic update, with data as of 14 June 2022, 251 monkeypox cases have been reported from 14 EU/EEA countries: Germany (74), Spain (38), Netherlands (35), France (34), Portugal (32), Italy (12), Belgium (10), Sweden (4), Denmark (3), Ireland (3), Romania (3), Greece (1), Luxembourg (1), and Malta (1).

Outside the EU/EEA, 136 monkeypox cases have been reported from eight non EU/EEA countries: the UK (54), Canada (47), United States (19), Switzerland (9), Mexico (3), Israel (2), Brazil (1), and Georgia (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 16 June 2022.*

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

Opening date: 13 April 2022 Latest update: 17 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

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Postal address: ECDC 169 73 Solna, Sweden
Visiting address: Gustav III:s Boulevard 40, Solna, Sweden
ecdc.europa.eu

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As of 16 June 2022, 449 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 (58.4%) of these cases have been reported from the UK. The majority (76.6%) of reported cases are five years old or younger. Around one third (31.2%) of cases were admitted to an intensive care unit and 19 (8.4%) children have received liver transplants. A total of 313 cases were tested for adenovirus, of which 164 (52.4%) tested positive. A total of 292 cases were PCR-tested for SARS-CoV-2, of which 31 (10.6%) tested positive.

EU/EEA

As of 16 June 2022, 180 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 (3), Belgium (14), Bulgaria (3), Cyprus (2), Denmark (7), France (7), Greece (9), Ireland (14), Italy (33), Latvia (1), the Netherlands (15], Norway (5), Poland (8), Portugal (15), Spain (37), and Sweden (9). Among these cases, at least 12 cases were admitted to an intensive care unit and eight required a liver transplant. There has been one associated death.

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

Non-EU/EEA
As of 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 the 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.

Non EU Threats

Influenza A(H9N2) - Multi-country (World) - Monitoring human cases

Opening date: 30 January 2019 Latest update: 17 June 2022

Avian influenza viruses that infect people are considered novel to humans and have the potential to become pandemic threats.

➔Update of the week
As of 16 June 2022, and since the update on 24 March 2022, two new cases of human infection with avian influenza A(H9N2) have been reported from China. Overall, 112 cases were reported globally, none of them in EU/EEA countries.

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Postal address: ECDC 169 73 Solna, Sweden
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II. Detailed reports

New! Mycobacterium chelonae in bioprosthetic heart valves – Multi-country – 2020-2022

Opening date: 17 June 2022 Latest update: 17 June 2022

Epidemiological summary

On 13 April 2022, a manufacturer of bioprosthetic heart valves (BioIntegral Surgical) published a field safety notice to halt the sales and implantations of five products, whilst investigations by a third-party laboratory are underway regarding *M. chelonae* contamination. *M. chelonae* contamination had been identified on bioprosthetic heart valves in three patients in Germany that were explanted in 2020, 2021 and 2022, respectively; and from a patient in France.

On 9 June 2022, Germany informed ECDC and EU Member States via the EpiPulse platform.

Source: field safety notice

ECDC assessment

It is currently unclear to what extent the *M. chelonae* contaminations identified in the bioprostheses of the four cardiac patients in two countries contributed to their morbidities. It is likely that other patients in Europe had prostheses implanted from batches contaminated with *M. chelonae*. The ERLTB-Net (European Reference Laboratory Network for Tuberculosis) is aware of this event and has the capacity to diagnose *M. chelonae*.

Actions

ECDC is monitoring this situation through its routine epidemic intelligence activities.

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

Opening date: 2 June 2022 Latest update: 17 June 2022

Epidemiological summary

As of 15 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. In accordance with Commission Directive 2014/110/EU, prospective donors should be deferred for 28 days after leaving a risk area for locally acquired WNV infection, unless the result of an individual nucleic acid test is negative.

Actions

During transmission seasons, ECDC publishes an epidemiological summary every Friday. A set of WNV transmission maps and a dashboard will be published on Fridays once the first WNV infections of the 2022 transmission season are reported.

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

Opening date: 7 January 2020 Latest update: 17 June 2022

Epidemiological summary

Since 31 December 2019, and as of week 2022-23, 535 143 050 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 6 328 694 deaths.

Cases have been reported from:
Africa: 11 937 718 cases; the five countries reporting most cases are South Africa (3 979 126), Morocco (1 175 604), Tunisia (1 043 540), Egypt (514 008) and Libya (502 076).
Asia: 135 192 948 cases; the five countries reporting most cases are India (43 230 101), South Korea (18 229 288), Vietnam (10 731 812), Japan (9 032 197) and Iran (7 233 688).
Americas: 160 090 765 cases; the five countries reporting most cases are United States (85 515 980), Brazil (31 456 865), Argentina (9 311 720), Colombia (6 117 847) and Mexico (5 823 844).
Europe: 218 724 508 cases; the five countries reporting most cases are France (29 910 679), Germany (26 854 389), United Kingdom (22 395 790), Russia (18 379 583) and Italy (17 758 795).
Oceania: 9 196 406 cases; the five countries reporting most cases are Australia (7 568 100), New Zealand (1 242 497), French Polynesia (73 106), Fiji (65 217) and New Caledonia (62 623).
Other: 705 cases have been reported from an international conveyance in Japan.

Deaths have been reported from:
Africa: 254 467 deaths; the five countries reporting most deaths are South Africa (101 509), Tunisia (28 648), Egypt (24 720), Morocco (16 082) and Ethiopia (7 516).
Asia: 1 305 453 deaths; the five countries reporting most deaths are India (524 771), Indonesia (156 652), Iran (141 350), Philippines (60 461) and Vietnam (43 083).
Americas: 2 758 090 deaths; the five countries reporting most deaths are United States (1 011 277), Brazil (668 110), Mexico (325 194), Peru (213 338) and Colombia (139 894).
Europe: 1 997 305 deaths; the five countries reporting most deaths are Russia (380 076), United Kingdom (179 272), Italy (168 738), France (162 775) and Germany (139 910).
Oceania: 13 373 deaths; the five countries reporting most deaths are Australia (8 957), New Zealand (1 267), Fiji (865), Papua New Guinea (658) and French Polynesia (649).
Other: 6 deaths have been reported from an international conveyance in Japan.

EU/EEA:
As of week 2022-23, 146 104 811 cases have been reported in the EU/EEA: France (29 910 679), Germany (26 854 389), Italy (17 758 795), Spain (12 551 089), Netherlands (8 106 145), Poland (6 018 262), Portugal (4 962 131), Austria (4 318 626), Belgium (4 170 786), Czechia (3 919 548), Greece (3 503 584), Romania (2 912 041), Denmark (2 827 419), Slovakia (2 544 423), Sweden (2 511 512), Hungary (1 923 203), Ireland (1 549 848), Norway (1 441 387), Lithuania (1 402 060), Bulgaria (1 166 859), Croatia (1 139 816), Finland (1 114 573), Slovenia (1 028 376), Latvia (828 187), Estonia (563 454), Cyprus (493 691), Luxembourg (278 235), Iceland (192 039), Malta (96 148) and Liechtenstein (17 506).

As of week 2022-23, 1 112 088 deaths have been reported in the EU/EEA: Italy (168 738), France (162 775), Germany (139 910), Poland (116 744), Spain (107 272), Romania (65 696), Hungary (45 379), Czechia (40 241), Bulgaria (37 196), Belgium (31 301), Greece (30 028), Portugal (23 664), Netherlands (22 336), Slovakia (20 112), Sweden (19 049), Austria (16 245), Croatia (16 019), Lithuania (9 194), Slovenia (7 805), Latvia (6 461), Ireland (6 290), Denmark (5 864), Finland (4 714), Norway (3 210), Estonia (2 460), Luxembourg (1 277), Cyprus (1 186), Malta (726), Iceland (114) and Liechtenstein (82).

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

In week 23, 2022, in the EU/EEA overall, the reported weekly cases increased by 9.2% compared to the previous week. Overall, 10 countries reported a decrease in the weekly cases (Finland, Norway, Portugal, Liechtenstein, Slovakia, Italy, Bulgaria, Spain, Hungary, and Poland). The countries with the highest 14-day notification rates per 100 000 population are: Portugal (2 751), Luxembourg (923), Iceland (697), Germany (679), and France (536).

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.

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Postal address: ECDC 169 73 Solna, Sweden
Visiting address: Gustav III:s Boulevard 40, Solna, Sweden
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Since the last update on 9 June 2022, and as of 16 June 2022, no changes have been made to ECDC variant classifications for variants of concern (VOC), variants of interest (VOI), variants under monitoring, or de-escalated variants. Several countries in the EU/EEA are experiencing a surge in cases and hospitalisations, likely due to increased circulation of VOCs BA.4 and BA.5 and VOI BA.2 + L452X. However, the numbers are still low and very few deaths associated with these variants have been reported.

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

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

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

ECDC assessment

For the most recent risk assessment, please visit ECDC's dedicated web page.

Actions

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

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

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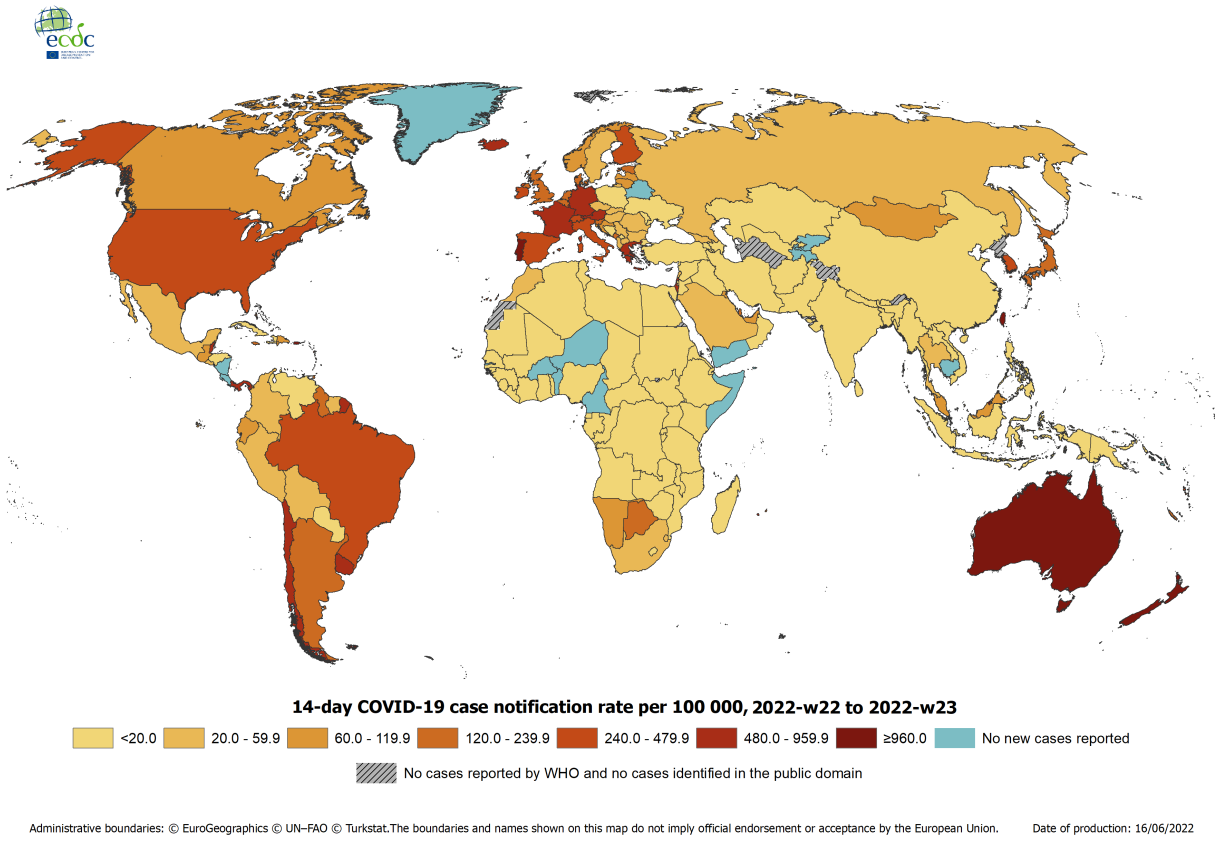
Geographic distribution of 14-day cumulative number of reported COVID-19 cases per 100 000 population, worldwide, 2022-w22 to 2022-w23

'Source: ECDC'



Monkeypox - Multi-country - 2022

Opening date: 3 June 2022 Latest update: 17 June 2022

Epidemiological summary

A multi-country outbreak of MPX started on 16 May 2022. Since the beginning of the outbreak, and as of 16 June 2022, 2 100 confirmed cases have been 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 17 June 2022, 1 244 confirmed cases of monkeypox have been reported from 23 EU/EEA countries: Spain (313), Germany (263), Portugal (241), France (125), Netherlands (95), Italy (71), Belgium (62), Ireland (14), Sweden (10), Denmark (7), Slovenia (7), Czechia (6), Hungary (6), Austria (4), Romania (4), Finland (3), Iceland (3), Greece (2), Latvia (2), Malta (2), Norway (2), Luxembourg (1), and Poland (1).

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Outside the EU/EEA, 856 confirmed cases of monkeypox have been reported from 15 non EU/EEA countries: United Kingdom (524), Canada (159), United States (84), Switzerland (28), Nigeria (15), United Arab Emirates (13), Australia (8), Israel (6), Ghana (5), Mexico (5), Argentina (3), Brazil (3), Georgia (1), Morocco (1), and Venezuela (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) can cause severe disease in certain population groups (young children, pregnant women, immunosuppressed persons). However, the likelihood of cases with severe morbidity cannot yet be accurately estimated. The overall risk is assessed as moderate for persons having multiple sexual partners (including some groups of MSM) and low for the broader population.

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

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

Actions

ECDC will continue to monitor this event through its epidemic intelligence activities and report relevant news on an ad hoc basis. Multi-lateral meetings between affected countries, WHO EURO, and ECDC have taken place to share information and coordinate response. A process in EpiPulse has been created to allow countries to share information with one another, WHO, and ECDC. Case reporting in TESSy has been set up as of 2 June 2022. A rapid risk assessment "Monkeypox Multi-country outbreak" was published on 23 May 2022. For the latest updates, visit ECDC's monkeypox page.

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

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

Opening date: 13 April 2022 Latest update: 17 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 UK reported that in addition to the cases in Scotland, there were approximately 61 further similar cases under investigation in England, Wales, and Northern Ireland. The cases presented with symptoms and signs of severe acute hepatitis, including increased levels of liver enzymes (aspartate aminotransaminase/ aspartate transaminase [AST] or alanine aminotransaminase/ alanine transaminase [ALT] greater than 500 IU/L) and jaundice. Some of the cases also presented with gastrointestinal symptoms such as vomiting, pale stools, diarrhoea, nausea, and abdominal pain. A small number of cases presented with fever.

A large proportion of the cases reported to TESSy, including cases from the UK, have tested positive for adenovirus;

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 169 73 Solna, Sweden
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ecdc.europa.eu

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as a result, association with adenovirus remains one of the leading hypotheses. Testing data related to SARS-CoV-2 indicate that a smaller proportion tested positive by PCR and around 60% of tested cases had a positive serology result. A link to COVID-19 vaccines is considered unlikely as most cases 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 16 June 2022, 449 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 (58.4%) of these cases are reported from the UK. The majority (76.6%) of reported cases are five years old or younger. Around a third (31.2%) of cases were admitted to an intensive care unit and 19 (8.4%) children received a liver transplant. A total of 313 cases were tested for adenovirus, of which 164 (52.4%) tested positive. A total of 292 cases were PCR tested for SARS-CoV-2, of which 31 (10.6%) tested positive.

EU/EEA
As of 16 June 2022, 180 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 (3), Belgium (14), Bulgaria (1), Cyprus [(2), Denmark (7), France (7), Greece (9), Ireland (14), Italy (33), Latvia (1), the Netherlands (15), Norway (5), Poland (8), Portugal (15), Spain (37) and Sweden (9). Among these cases, at least 12 cases were admitted to an intensive care unit and eight required a liver transplant. There has been one associated death.

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

Non – EU/EEA
As of 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 hae 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, and as a result the current leading hypotheses concern adenovirus involvement, possibly with a cofactor that is triggering a more severe infection or immune-mediated liver damage, or that measures during the COVID-19 pandemic have resulted in lack of exposure for the youngest age group and increased susceptibility. Data on pathogens tested for are incomplete, so other aetiologies (e.g. other infectious or toxic agents) are still under investigation and have not been excluded. The disease pathogenesis and routes of transmission remain unknown. The disease is quite rare, and evidence regarding human-to-human transmission remains unclear. Cases in the EU/EEA are sporadic with an unclear trend. While the risk 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

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 169 73 Solna, Sweden
Visiting address: Gustav III:s Boulevard 40, Solna, Sweden
ecdc.europa.eu

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the reporting of case-based data for cases of acute hepatitis of unknown aetiology in TESSy. The surveillance reporting protocol is available here. Results are 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 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.

Influenza A(H9N2) - Multi-country (World) - Monitoring human cases

Opening date: 30 January 2019 Latest update: 17 June 2022

Epidemiological summary

As of 16 June 2022, and since the update on 24 March 2022, two new cases of human infection with avian influenza A(H9N2) have been reported from China. Both cases had mild symptoms and had exposure to poultry market. Neither case was hospitalised.

Epidemiological details of the cases in this reporting period are listed as follows:

- a five-year-old boy from Yueyang City, Hunan province, China, with onset of mild symptoms on 26 April 2022. The boy lives in the proximity of a live poultry market.

- a two-year-old boy from Bijie City, Guizhou province, China, with onset of mild symptoms on 8 May 2022. The boy had exposure to a poultry market prior to onset of symptoms.

Summary: As of 16 June 2022, and since 1998 a total of 112 laboratory-confirmed cases, including two deaths, of human infection with avian influenza A(H9N2) viruses have been reported, from China (99), Egypt (4), Bangladesh (3), Cambodia (2), Oman (1), Pakistan (1), India (1), and Senegal (1). Most of the cases were children with mild disease.

Source: Government of the Macao Special Administrative Region of the People's Republic of China

ECDC assessment

Sporadic human cases of avian influenza A(H9N2) have been observed, but no cases of human-to-human transmission have been documented. The use of personal protective measures for people directly exposed to poultry and birds potentially infected with

European Centre for Disease Prevention and Control (ECDC)
Postal address: ECDC 169 73 Solna, Sweden
Visiting address: Gustav III:s Boulevard 40, Solna, Sweden
ecdc.europa.eu

Epidemic Intelligence duty email: support@ecdc.europa.eu
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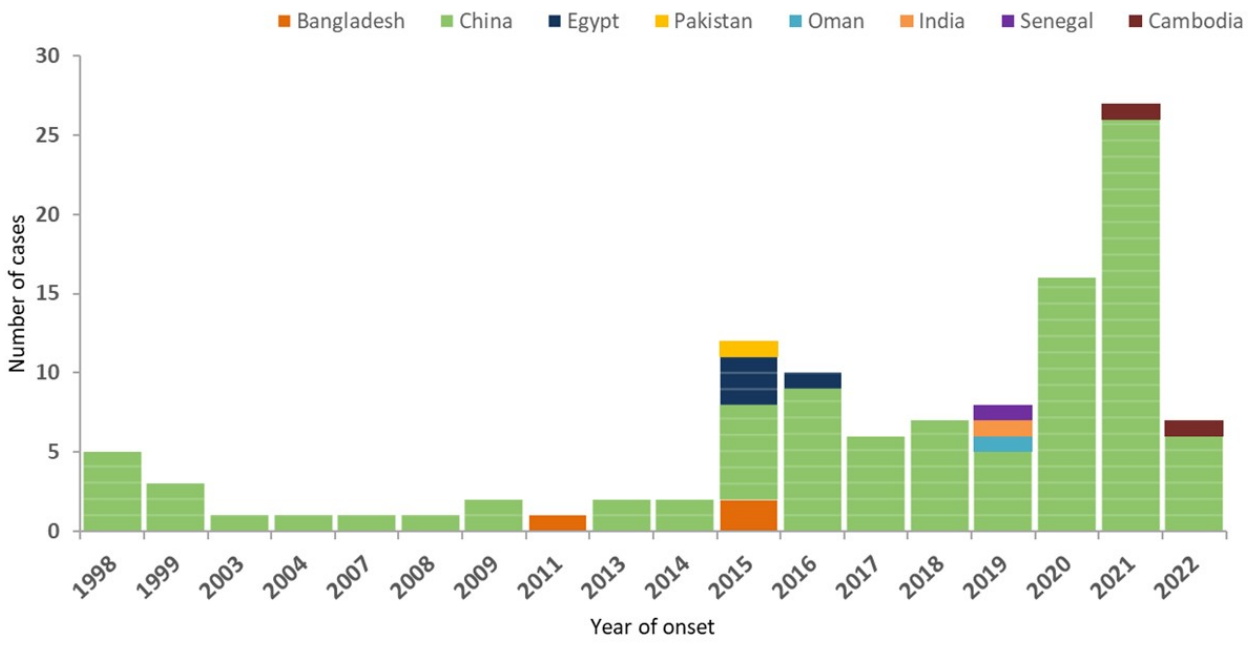
avian influenza viruses will minimise the risk of infection. The risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered to be very low.

Actions

ECDC monitors avian influenza strains through its epidemic intelligence activities in order to identify significant changes in the epidemiology of the virus. ECDC, together with EFSA and the EU reference laboratory for avian influenza, produces a quarterly updated report on the avian influenza situation. The most recent report was published in December 2021.

Distribution of confirmed human cases of avian influenza A(H9N2) virus infection by year of onset and country, 1998-2022

Source: ECDC



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

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