

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: 20 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 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 18 2022 and as of week 19 2022, 4 044 061 new cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) and 11 428 new deaths have been reported.

Since 31 December 2019 and as of week 19 2022, 519 467 357 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 6 277 833 deaths.

As of week 19 2022, 139 048 540 cases and 1 090 737 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 5 April 2022 and as of 12 May 2022, ECDC has reclassified Omicron sub-lineages BA.4 and BA.5 from variants of interest (VOIs) to variants of concern (VOCs).

Since the last update on 12 May 2022 and as of 19 May 2022, no changes have been made to ECDC variant classifications for VOCs, VOIs, variants under monitoring or de-escalated variants.

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

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

Opening date: 24 February 2022

Latest update: 20 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 19 May, the total number of people who fled Ukraine reached 6 404 679. In total, 3 439 857 have crossed the Polish border; 937 082 the Romanian; 626 548 the Hungarian; and 432 502 the Slovakian. In addition, Czechia's [Ministry of the Interior](#) reported 348 177 special visa concessions to Ukrainian applicants as of 18 May. Outside of the EU/EAA, 467 636 people have sought safety in the Republic of Moldova ([United Nations](#)). In addition, according to the [United Nations](#), up to 1 887 500 people have returned to Ukraine since 28 February.

On 19 May, the World Health Organization published the [twelfth situation report](#) on the emergency in Ukraine, which reported that approximately 8 million people are internally displaced within Ukraine.

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

Influenza – Multi-country – Monitoring 2021/2022 season

Opening date: 15 October 2021

Latest update: 20 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 19 2022 (9–15 May 2022)

Eight of 41 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 10% from 14% in the previous week.

Three countries reported seasonal influenza activity above 30% positivity in sentinel primary care: Finland (50%), Slovakia (38%) and the Netherlands (31%).

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

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

Non EU Threats

New! Wild Poliovirus Type 1 (WPV1) – Mozambique – 2022

Opening date: 19 May 2022

Latest update: 20 May 2022

On 18 May 2022, the WHO Regional Office for Africa reported that health authorities in Mozambique declared an outbreak of wild poliovirus type 1 (WPV1) after one case of acute flaccid paralysis (AFP) caused by WPV1 was reported in a child in the Changara district of the north-eastern Tete province.

→Update of the week

On 18 May 2022, the WHO Regional Office for Africa reported that health authorities in Mozambique declared an outbreak of wild poliovirus type 1 (WPV1) after one case of acute flaccid paralysis (AFP) caused by WPV1 was reported in a child in the Changara district of the north-eastern Tete province. The child experienced onset of symptoms on 25 March. Genomic sequencing analysis indicates that the case is genetically linked to the imported WPV1 case confirmed in Malawi in February. Samples from three contacts of the case have been preliminarily analysed and were all negative for WPV1. Further investigations are ongoing to determine the risk posed and the responses needed in the country.

This is the first case of WPV1 reported in Mozambique since 1992. This is the second imported case of WPV1 in southern Africa this year, following a case reported in Malawi on 17 February. These cases are genetically linked to a WPV1 strain detected in Pakistan in 2019. In response to the Malawi outbreak, Mozambique recently carried out two mass vaccination campaigns. Mozambique, Malawi, Tanzania, Zambia and Zimbabwe will continue vaccination campaigns, aiming to reach 23 million children aged under 5 years in the coming weeks, and efforts have been made to strengthen disease surveillance.

Monkeypox – Multi-country – 2022

Opening date: 10 May 2022

Latest update: 20 May 2022

As of 16 May 2022, there is a multi-country outbreak of monkeypox affecting the United Kingdom (UK), EU/EEA and North America. As of 20 May, there have been a total of 38 confirmed cases reported worldwide, 37 of which have no history of travel to endemic countries.

→Update of the week

On 14 May 2022, a [familial cluster](#) of two cases of monkeypox was reported in the United Kingdom (UK) by the UK Health Security Agency (UKHSA). These cases had no epidemiological link to the UK [travel-related case](#) from Nigeria that was previously reported on 7 May. Following the detections in the UK, several other European countries have identified cases of monkeypox.

As of 19 May 2022, 38 cases have been confirmed worldwide. Of these, 26 cases have been confirmed in the following EU/EEA countries: Belgium (2), France (1), Italy (1), Portugal (14), Spain (7) and Sweden (1). In the UK, nine cases have been confirmed. In North America, three cases have been confirmed in Canada (2) and the United States (1). The majority of cases are young men, many self-identifying as men who have sex with men (MSM), and none with recent travel history to areas where the disease is endemic. No deaths have been reported so far and only two cases have been admitted to hospital for reasons other than isolation.

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

Opening date: 13 April 2022

Latest update: 20 May 2022

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

→Update of the week

EU/EEA:

As of 19 May 2022, 125 cases of acute hepatitis among children aged 16 years and under have been reported from 14 EU/EEA countries ([Austria](#) (2), [Belgium](#) (9), [Cyprus](#) (2), [Denmark](#) (6), [France](#) (2), [Greece](#) (3), [Ireland](#) (6), Italy (35), the [Netherlands](#) (6), [Norway](#) (4), [Poland](#) (3), [Portugal](#) (12), [Spain](#) (26) and [Sweden](#) (9)). Among these cases, six required a liver transplant.

Outside of the EU/EEA:

As of 12 May 2022, the UK Health Security Agency (UKHSA) has identified a total of 176 children aged under 10 years with acute hepatitis of unknown aetiology. Of these, 11 have received a liver transplant. The most recent technical briefing on investigations into the cases in the UK presents data as of 6 May 2022.

Outside of EU/EEA and the UK, as of 19 May 2022, there are at least 313 cases of acute hepatitis among children. Cases have been reported by 16 countries: Argentina (9), Brazil (44), Canada (11), Costa Rica (2), Indonesia (14), Israel (12), Japan (12), Malaysia (1), Mexico (21), Moldova (1), Palestine* (1), Panama (2), Serbia (1), Singapore (1), South Korea (1) and the United States (180).

The total number of cases reported worldwide is 614, including 14 deaths reported from Ireland (1), Indonesia (6), Mexico (1), Palestine* (1) and the United States (5).

**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.*

Disclaimer: Data presented in this update are compiled from official national reports or, if not available, from public sources quoting national authorities. Where possible, cases are classified according to the EU/EEA case definition. Media reports might not include complete information on testing, so classification of cases is not always possible. These are presented as 'cases under investigation'. Data include both probable cases, according to the case definition used in the EU/EEA, and cases under investigation. In some cases, the testing strategy has not been officially confirmed.

Influenza A(H5N6) – Multi-country – Monitoring human cases

Opening date: 17 January 2018

Latest update: 20 May 2022

Animal influenza viruses that cross the animal-human divide to infect people are considered novel to humans and have the potential to become pandemic threats. Highly pathogenic avian influenza viruses A(H5) of Asian origin are extremely infectious for several bird species, including poultry. In 2014, a novel avian influenza A(H5N6) reassortant causing a human infection was detected in China. To date, only sporadic human cases of avian influenza A(H5N6) virus infection have been reported, mainly from China.

→Update of the week

As of 19 May 2022 and since the previous monthly report on 22 April, one new human case with avian influenza A(H5N6) was reported in China.

Human cases with swine influenza A(H1N1) variant virus – Multi-country – 2022

Opening date: 11 June 2021

Latest update: 20 May 2022

Animal influenza viruses that cross the animal-human divide to infect people are considered novel to humans and have the potential to become pandemic threats.

→Update of the week

Since the previous monthly update for avian and swine influenza virus infections in humans on 29 April 2022, one confirmed human case of swine-origin influenza A(H1N1) virus variant (A(H1N1)v) infection was reported in Germany.

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

Opening date: 9 December 2019

Latest update: 20 May 2022

Global public health efforts to eradicate polio are continuing by immunising every child until transmission of the virus has stopped and the world becomes polio-free. On 5 May 2014, polio was declared a Public Health Emergency of International Concern (PHEIC) by the World Health Organization (WHO) due to concerns over the increased circulation and international spread of wild poliovirus in 2014. The Emergency Committee under the International Health Regulations (2005) stated that the risk of the international spread of poliovirus remains a Public Health Emergency of International Concern (PHEIC). On 28 February 2022, the [31st meeting](#) of the Emergency Committee was held under the International Health Regulations (2005) (IHR) on the international spread of poliovirus.

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

→Update of the week

Since the previous update on 22 April 2022 and as of 17 May 2022, 35 new cases of AFP caused by poliovirus have been reported.

Wild poliovirus (WPV1):

- Four new cases of AFP caused by WPV1 have been reported from two countries: Pakistan (3) and Mozambique (1).

Circulating vaccine-derived poliovirus (cVDPV):

- No new cases of AFP caused by cVDPV1 have been reported.

- 31 new cases of AFP caused by cVDPV2 have been reported from seven countries: Democratic Republic of the Congo (15), Nigeria (8), Mozambique (4), Chad (1), Niger (1), Somalia (1) and Togo (1).

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

II. Detailed reports

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

Opening date: 7 January 2020

Latest update: 20 May 2022

Epidemiological summary

Since 31 December 2019 and as of week 19 2022, 519 467 357 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 6 277 833 deaths.

Cases have been reported from:

Africa: 11 780 000 cases; the five countries reporting most cases are South Africa (3 879 434), Morocco (1 165 795), Tunisia (1 041 789), Egypt (515 645) and Libya (501 954).

Asia: 131 385 054 cases; the five countries reporting most cases are India (43 123 801), South Korea (17 795 357), Vietnam (10 696 630), Japan (8 355 303) and Iran (7 228 051).

America: 155 483 297 cases; the five countries reporting most cases are United States (82 613 620), Brazil (30 688 390), Argentina (9 134 182), Colombia (6 095 316) and Mexico (5 752 441).

Europe: 212 902 190 cases; the five countries reporting most cases are France (29 245 171), Germany (24 535 087), United Kingdom (22 203 799), Russia (18 264 836) and Italy (17 057 873).

Oceania: 7 916 111 cases; the five countries reporting most cases are Australia (6 497 556), New Zealand (1 046 670), French Polynesia (72 836), Fiji (64 812) and New Caledonia (61 185).

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

Deaths have been reported from:

Africa: 253 457 deaths; the five countries reporting most deaths are South Africa (100 744), Tunisia (28 628), Egypt (24 690), Morocco (16 071) and Ethiopia (7 510).

Asia: 1 298 593 deaths; the five countries reporting most deaths are India (524 241), Indonesia (156 458), Iran (141 224), Philippines (60 455) and Vietnam (43 065).

America: 2 739 410 deaths; the five countries reporting most deaths are United States (999 842), Brazil (664 918), Mexico (324 617), Peru (213 040) and Colombia (139 821).

Europe: 1 974 597 deaths; the five countries reporting most deaths are Russia (377 759), United Kingdom (177 410), Italy (165 244), France (161 336) and Germany (134 578).

Oceania: 11 770 deaths; the five countries reporting most deaths are Australia (7 721), New Zealand (929), Fiji (862), Papua New Guinea (651) and French Polynesia (649).

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

EU/EEA:

As of week 19 2022, 140 682 686 cases have been reported in the EU/EEA: France (29 245 171), Germany (24 535 087), Italy (17 057 873), Spain (12 204 270), Netherlands (8 069 444), Poland (6 011 697), Austria (4 239 410), Belgium (4 120 487), Portugal (4 114 140), Czechia (3 912 478), Greece (3 395 196), Romania (2 833 786), Denmark (2 812 025), Sweden (2 505 239), Slovakia (2 288 063), Hungary (1 914 778), Ireland (1 589 128), Norway (1 429 902), Lithuania (1 398 670), Bulgaria (1 161 504), Croatia (1 131 443), Finland (1 069 789), Slovenia (1 019 834), Latvia (823 559), Cyprus (673 087), Estonia (560 059), Luxembourg (268 721), Iceland (187 796), Malta (93 602) and Liechtenstein (16 448).

As of week 19 2022, 1 093 968 deaths have been reported in the EU/EEA: Italy (165 244), France (161 336), Germany (134 578), Poland (116 582), Spain (105 667), Romania (61 518), Hungary (45 229), Czechia (40 197), Bulgaria (37 045), Belgium (31 128), Greece (29 576), Portugal (22 660), Netherlands (22 297), Slovakia (19 453), Sweden (18 926), Austria (16 125), Croatia (15 930), Lithuania (9 185), Slovenia (7 734), Ireland (7 203), Latvia (6 416), Finland (5 689), Denmark (5 303), Norway (3 061), Estonia (2 435), Cyprus (1 348), Luxembourg (1 261), Malta (672), Iceland (114) and Liechtenstein (56).

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

In week 19 2022, in the EU/EEA overall, the reported weekly number of cases decreased by 11% compared to the previous week. Weekly increases were observed in Iceland and Portugal. The countries with the highest 14-day notification rates per 100 000 population were: Portugal (2 286), Luxembourg (1 113), Germany (1 048), Italy (934) and France (755). Overall, all countries except for Iceland and Portugal reported a decrease in the weekly number of 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 12 May 2022 and as of 19 May 2022, no changes have been made to ECDC variant classifications for variants of concern (VOCs), variants of interest (VOIs), variants under monitoring and de-escalated variants.

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

Public Health Emergency of International Concern (PHEIC):

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

ECDC assessment

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

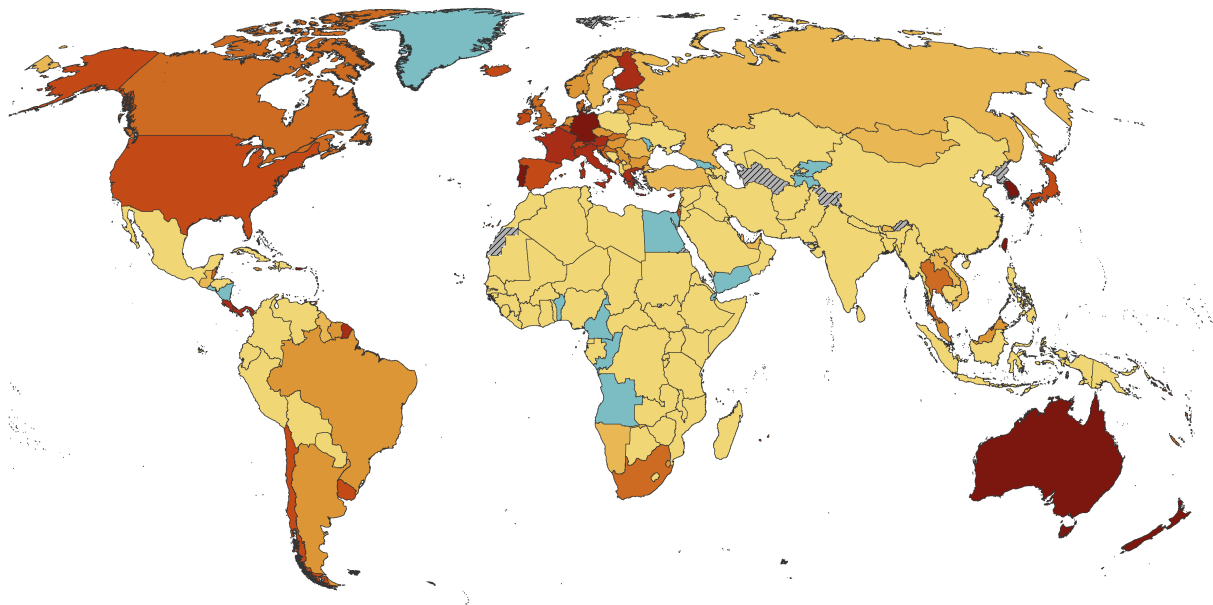
Actions

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

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

Geographic distribution of 14-day cumulative number of reported COVID-19 cases per 100 000 population, worldwide, 2022-w18 to 2022-w19

Source: ECDC



14-day COVID-19 case notification rate per 100 000, 2022-w18 to 2022-w19



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: 19/05/2022

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

Opening date: 24 February 2022

Latest update: 20 May 2022

Epidemiological summary

According to the [United Nations](#), between 24 February and as of 19 May, the total number of people who fled Ukraine reached 6 404 679. In total, 3 439 857 have crossed the Polish border; 937 082 the Romanian; 626 548 the Hungarian; and 432 502 the Slovakian. In addition, Czechia's [Ministry of the Interior](#) reported 348 177 special visa concessions to Ukrainian applicants as of 18 May. Outside of the EU/EAA, 467 636 people have sought safety in the Republic of Moldova ([United Nations](#)). As of 5 May, overall, 2.4 million people have moved beyond the neighbouring countries ([UNCHR](#)). In addition, according to the [United Nations](#), up to 1 887 500 people have returned to Ukraine since 28 February.

On 19 May, the World Health Organization published the [twelfth situation report](#) on the emergency in Ukraine, which reported that approximately 8 million people are internally displaced within Ukraine.

7/17

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

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

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

ECDC assessment

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

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

Actions

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

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

Influenza – Multi-country – Monitoring 2021/2022 season

Opening date: 15 October 2021

Latest update: 20 May 2022

Epidemiological summary

Week 19 2022 (9–15 May 2022)

Eight of 41 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 10% from 14% in the previous week.

Three countries reported seasonal influenza activity above 30% positivity in sentinel primary care: Finland (50%), Slovakia (38%) and the Netherlands (31%).

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

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

2021/22 season overview

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

Influenza activity, based on sentinel primary care specimens from patients presenting with ILI or ARI symptoms, first peaked in week 52 2021 (reaching 19% positivity). It declined thereafter until week 4 2022, when it increased again before reaching a plateau phase (25-30% positivity) between weeks 10 and 15 2022 (this represents late activity compared to most previous seasons), followed by a subsequent 4-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 of the A(H3N2) and the B/Victoria-lineage components. The full report can be found [here](#).

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

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

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

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

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

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

Source: [Flu News Europe](#)

ECDC assessment

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

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

Actions

ECDC and WHO monitor influenza activity in the WHO European Region. Data will be updated on a weekly basis and are available on the [Flu News Europe](#) website.

New! Wild Poliovirus Type 1 (WPV1) – Mozambique – 2022

Opening date: 19 May 2022

Latest update: 20 May 2022

Epidemiological summary

On 18 May 2022, the WHO Regional Office for Africa reported that health authorities in Mozambique declared an outbreak of wild poliovirus type 1 (WPV1) after one case of acute flaccid paralysis (AFP) caused by WPV1 was reported in a child in the Changara district of the north-eastern Tete province. The child experienced onset of symptoms on 25 March. Genomic sequencing analysis indicates that the case is genetically linked to the imported WPV1 case confirmed in Malawi in February. Samples from three contacts of the case have been preliminarily analysed and were all negative for WPV1. Further investigations are ongoing to determine the risk posed and the responses needed in the country.

This is the first case of WPV1 reported in Mozambique since 1992. This is the second imported case of WPV1 in southern Africa this year, following a case reported in Malawi on 17 February. These cases are genetically linked to a WPV1 strain detected in Pakistan in 2019. In response to the Malawi outbreak, Mozambique recently carried out two mass vaccination campaigns. Mozambique, Malawi, Tanzania, Zambia and Zimbabwe will continue vaccination campaigns, aiming to reach 23 million children aged under 5 years in the coming weeks, and efforts have been made to strengthen disease surveillance.

Sources: [WHO](#) | [GPEI](#)

ECDC assessment

Detection of WPV1 outside Pakistan and Afghanistan is unusual. However, the risk of importation of WPV1 to third countries exists, as long as there are endemic areas with poliovirus circulation. Africa was declared free of indigenous wild polio in 2020 after eliminating all forms of wild polio from the region. The case in Mozambique and the earlier one in Malawi do not affect Africa's wild poliovirus-free certification because the virus strain is not indigenous. In 2020, Mozambique has reached a vaccination coverage with Pol3 of 73% among one-year-old children.

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

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

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

ECDC links: [ECDC comment on risk of polio in Europe](#) | [ECDC risk](#)

Actions

ECDC is monitoring the event through epidemic intelligence activities. ECDC monitors any report of polio cases worldwide in order to highlight polio eradication efforts and to identify events that may increase the risk of reintroducing poliovirus into the EU.

Monkeypox – Multi-country – 2022

Opening date: 10 May 2022

Latest update: 20 May 2022

Epidemiological summary

Since the disease was first detected on 7 May 2022 in the United Kingdom (UK), a total of nine cases have been confirmed in the UK. Eight of the nine cases have no travel history and have no relation to the travel-related case confirmed on 7 May.

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In the EU/EEA, 26 cases have been confirmed since 18 May in Belgium (2), France (1), Italy (1), Portugal (14), Spain (7) and Sweden (1). Portugal has reported another 20 suspected cases and Spain has reported another 23 suspected cases, which are awaiting laboratory confirmation.

In total, since 14 May, there have been 37 non-travel-related cases of monkeypox worldwide, of which 26 have been detected in EU/EEA countries. There have been two hospitalisations and no deaths reported worldwide. The majority of cases are young men, self-identifying as men who have sex with men (MSM). Health authorities across countries have stated that further cases are expected. Below is a breakdown of the reporting countries:

- [Two cases](#) have been confirmed in Belgium.
- [One case](#) has been confirmed in France .
- [One case](#) has been confirmed in Italy, with [suspected cases identified](#) .
- [Fourteen cases](#) have been confirmed in Portugal, with an additional [20 suspected cases](#) identified in the Lisbon & Tagus River region.
- [Seven cases](#) have been confirmed in Spain, with 23 suspected cases identified.
- [One case](#) has been confirmed in Sweden.
- [Nine cases](#) have been confirmed in the United Kingdom.
- [Two cases](#) have been confirmed in Canada, with an additional [17 suspected cases](#) identified.
- [One confirmed](#) and [one probable](#) case have been identified in the United States.
- [One probable](#) case has been identified in Australia.

Most cases presented with lesions on the genitalia or peri-genital area. However, it remains unclear if transmission occurred through skin/mucosal inoculation that later led to the systemic disease or if it occurred through droplets during close contact. This is the first time that chains of transmission have been reported in Europe without known epidemiological links to West or Central Africa, where this disease is endemic. These are also the first cases worldwide reported among MSM.

ECDC assessment

This is the first time that chains of transmission have been reported in Europe without known epidemiological links to West or Central Africa. These are also the first cases worldwide reported among men who have sex with men (MSM). The monkeypox virus is considered to have moderate transmissibility among humans and can be transmitted through droplets and/or contact with infected lesions. Transmission between sexual partners, due to intimate contact during sex with infectious skin lesions, seems the likely mode of transmission among MSM.

Given the unusually high frequency of human-to-human transmission observed in this event, and the probable community transmission without history of travel to endemic areas, the likelihood of further spread of the virus through close contact (e.g. during sexual activities) is considered to be high. The likelihood of transmission between individuals without close contact is considered to be low.

The clinical manifestation of monkeypox is usually mild. The West African clade, which has so far been detected in the cases reported in Europe, has been observed to have a [case fatality rate of about 3.3%](#) in Nigeria. Mortality is higher among children and young adults, and immunocompromised individuals are especially at risk of severe disease. Most people recover within weeks.

Public health institutions/authorities and community-based organisations should take steps to raise awareness on the potential spread of monkeypox in the community, especially among men who have sex with other men (MSM) and have multiple sexual partners. Similar awareness should be raised for individuals that have multiple sexual partners, regardless of their sexual orientation. Any person presenting with symptoms compatible with monkeypox infection should seek specialist care and should abstain from sexual activities or any other type of activities involving close contact until monkeypox is either excluded or the infection is resolved.

In the current epidemiological situation, all suspected cases should be isolated and tested, and the case notified promptly to public health authorities. Backwards and forwards contact tracing should be initiated immediately for positive cases. Possibly exposed mammalian pets should be quarantined. If smallpox vaccines are available in the country, vaccination of high-risk close contacts should be considered after a risk-benefit assessment. For severe cases, treatment with a registered antiviral can be considered, if available in the country.

Actions

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

ECDC published a [news item](#) on 19 May, with initial recommendations. An epidemiological update will be posted on 20 May. Multi-lateral meetings between affected countries, WHO IHR 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. The production of a Rapid Risk Assessment has been launched with prospective publication on Monday, 23 May.

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

Opening date: 13 April 2022

Latest update: 20 May 2022

Epidemiological summary

On 5 April 2022, the United Kingdom (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 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 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 also presented with gastrointestinal symptoms such as vomiting, pale stools, diarrhoea, nausea and abdominal pain. Less than a third of cases presented with fever.

Laboratory testing excluded hepatitis types A, B, C, D and E in all cases. The UK Health Security Agency (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, thus association with adenovirus remains the leading hypothesis. The UKHSA is also carrying out immunological studies 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.

Sources: [UK Health Security Agency](#) | [Eurosurveillance](#) | Media: [Austria](#), [Cyprus](#), [the Netherlands](#), [Poland](#), [Portugal](#) | [SSI Denmark](#) | [Sante Publique France](#) | [Sciensano Belgian Institute for Health](#) | [US CDC 1](#) | [US CDC 2](#) | [Israeli Ministry of Health](#) | [Japan Ministry of Health](#) | [Wisconsin Department of Health](#) | [Indonesian Ministry of Health](#) | [Palestinian 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 on 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

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. Therefore, ECDC has established reporting of case-based data for cases of acute hepatitis of unknown aetiology in TESSy. The reporting protocol and case definition are available [here](#). The summary and analysis of data reported to TESSy can be found in the [Joint ECDC-WHO regional Office for Europe Surveillance Bulletin](#).

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 and personal and environmental determinants. 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

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other conditions. 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 to review available data to determine whether the number of cases reported are above what would be expected. ECDC will provide guidance and coordination to EU/EEA countries planning to set up such studies.

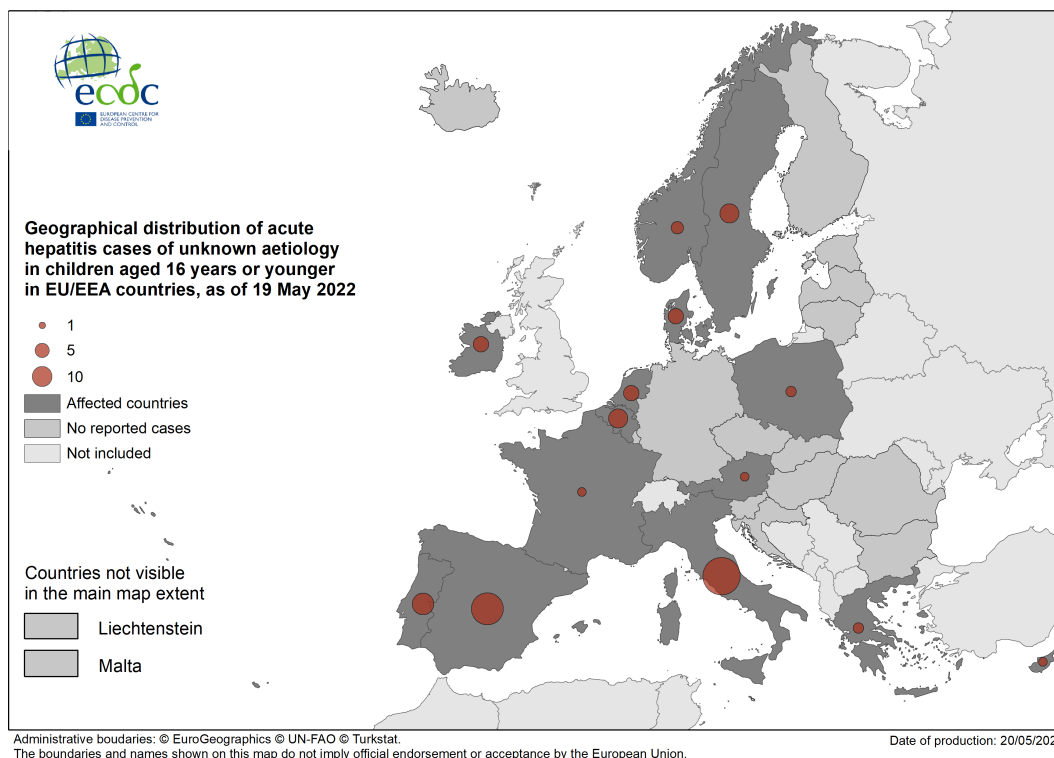
An EpiPulse item remains available for Member States to report updates on their investigations in order to inform and facilitate communication between themselves and ECDC. This can include information on common exposures identified, analyses on adenovirus circulation, and any analyses of hospital data to provide information on whether the number of observed cases of hepatitis of unknown origin are in excess of what would normally be expected.

On 28 April 2022, ECDC published a [rapid risk assessment](#). ECDC publishes regular epidemiological updates on hepatitis of unknown aetiology in children, available on the [ECDC website](#).

ECDC will continue to work in collaboration with the affected countries, WHO and other partner organisations. ECDC will continue to monitor this event through its epidemic intelligence activities.

Geographical distribution of acute hepatitis cases of unknown aetiology in children aged 16 and younger in EU/EEA countries, as of 19 May 2022

Source: ECDC



Influenza A(H5N6) – Multi-country – Monitoring human cases

Opening date: 17 January 2018

Latest update: 20 May 2022

Epidemiological summary

As of 19 May 2022, and since the previous monthly report on 22 April, one new human case with avian influenza A(H5N6) virus infection was reported in China. The patient was a 49-year-old man from Baise city, Guangxi in China. He developed symptoms on 16 April, was admitted for treatment on 18 April and died on 24 April. The case had exposure to a live poultry market prior to the onset of symptoms.

Summary: To date, overall, 79 laboratory-confirmed cases, including 32 deaths, of human infection with influenza A(H5N6) virus, have been reported since 2014. Most of these cases were reported from China (78) and one from Laos.

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Sources: the [Government of Hong Kong Special Administrative Region](#)

ECDC assessment

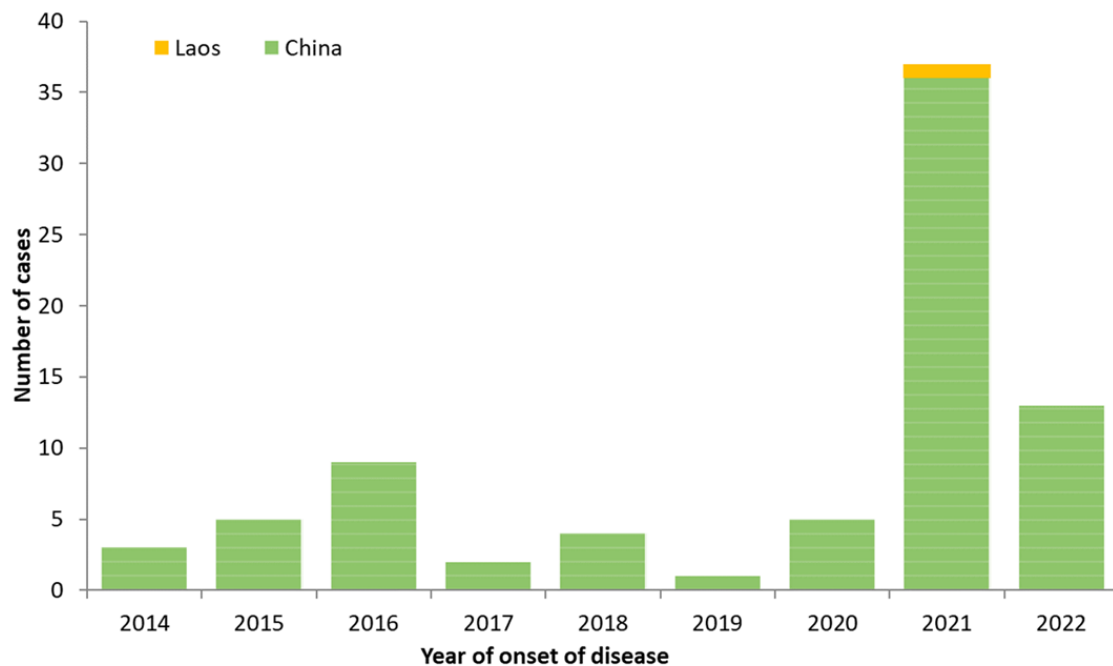
Sporadic human cases of avian influenza A(H5N6) have been previously observed. No human-to-human transmission has been reported to date. Sporadic zoonotic transmission cannot be excluded; the use of personal protective measures for people directly exposed to potentially infected poultry and birds with avian influenza viruses will minimise the remaining risk. 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 and in collaboration with EFSA and the EU reference laboratory 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 of the avian influenza situation](#). The most recent report was published in March 2022.

Distribution of confirmed human cases of avian influenza A(H5N6) virus infection by year of onset and country, 2014–2022

Source: ECDC



Human cases with swine influenza A(H1N1) variant virus – Multi-country – 2022

Opening date: 11 June 2021

Latest update: 20 May 2022

Epidemiological summary

One human case with swine influenza A(H1N1)v was detected in Germany. The patient was a 34-year-old resident of the federal state of North Rhine-Westphalia. He developed symptoms (fever, cough, sore throat, rhinorrhoea, headache and myalgia) on 21 March 2022, was not hospitalised and fully recovered. A nasal swab sample was collected on 24 March 2022 and tested positive for influenza A on 29 March. The sample underwent whole genome sequencing with complete sequence established on 5 May 2022. Sequencing results pointed to a Eurasian avian-like (EA) swine A(H1N1)v virus.

The patient did not have direct exposure to pigs, but lives in a region with a lot of swine farms and has contact with swine

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farmers. Further investigation is ongoing, including voluntary serological testing for close contacts of the case.

Summary: Overall, in 2021 there were 22 cases and in 2022 there was 1 case of swine influenza A(H1N1) variant virus infections reported in five countries: China (11), the United States (6), Canada (1), Denmark (2) and Germany (1 case in 2021 and 1 in 2022).

Sources: [WHO Influenza at the human-animal interface Summary and assessment, from 8 April to 13 May 2022](#)

ECDC assessment

Sporadic human cases infected with an influenza virus of swine origin have been reported from several countries in the EU/EEA and are not unexpected. Exposure to pigs or pig products have been reported in the past and represent the most common risk factor. Transmission events have also been observed in healthy people without underlying conditions. The cases need to be followed-up to identify human-to-human transmission and implement control measures. Viruses from patients with severe conditions and an influenza-positive test should be further characterised, as well as shared with the national influenza reference laboratories and WHO Collaborating Centres.

ECDC published a [Threat Assessment Brief on Eurasian avian-like A\(H1N1\) swine influenza viruses](#) in July 2020.

Actions

ECDC is monitoring zoonotic influenza events through its epidemic intelligence activities in order to identify significant changes in the epidemiology of the virus. Cases should be reported immediately to EWRS and IHR.

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

Opening date: 9 December 2019

Latest update: 20 May 2022

Epidemiological summary

Wild poliovirus:

In 2022, and as of 17 May 2022, five cases of AFP caused by WPV1 have been reported from the two endemic countries, Pakistan (3) and Afghanistan (1), and from the non-endemic country, Mozambique (1). Please see the separate threat 'Wild Poliovirus Type 1 (WPV1) - Mozambique - 2022' for further information on the case in Mozambique.

In 2021, and as of 17 May 2022, six cases of AFP caused by WPV1 were reported from the two endemic countries, Afghanistan (4) and Pakistan (1), and from the non-endemic country, Malawi (1).

Circulating vaccine-derived poliovirus (cVDPV):

In 2022, and as of 17 May 2022, one case of AFP caused by cVDPV1 has been reported from Madagascar. 75 cases of AFP caused by cVDPV2 have been reported from eight countries: Democratic Republic of the Congo (37), Nigeria (24), Yemen (5), Mozambique (4), Somalia (2), Chad (1), Niger (1) and Togo (1). One case of AFP caused by cVDPV3 has been reported from Israel, which is part of an [outbreak](#) involving an additional six samples of asymptomatic children that tested positive for cVDPV3.

In 2021, and as of 17 May 2022, 16 cases of AFP caused by cVDPV1 were reported from Madagascar (13) and Yemen (3). There were 672 cases of AFP caused by cVDPV2 reported from 21 countries: Nigeria (415), Yemen (61), Afghanistan (43), Tajikistan (32), Democratic Republic of the Congo (28), Niger (17), Senegal (17), Ethiopia (10), South Sudan (9), Pakistan (8), Guinea (6), Sierra Leone (5), Benin (3), Cameroon (3), Guinea-Bissau (3), Liberia (3), Burkina Faso (2), Congo (2), Mozambique (2), Ukraine (2) and Somalia (1). No cases of AFP caused by cVDPV3 were reported.

Other News: On 28 April 2022, the [Global Polio Eradication Initiative \(GPEI\)](#) reported that an outbreak response assessment led by WHO from 11 to 15 April 2022 concluded that poliovirus is no longer circulating in Tajikistan, and official closure of the cVDPV2 outbreak that started in January 2021 was recommended. No human or environmental sample in Tajikistan has tested positive since August 2021. This is the first cVDPV2 outbreak in the world to be declared officially closed following supplemental immunisation using the novel oral polio vaccine type 2 (nOPV2).

Sources: [Global Polio Eradication Initiative](#) | [ECDC](#) | [ECDC Polio interactive map](#) | [WPV3 eradication certificate](#) | [Pakistan Polio Eradication Programme](#)

ECDC assessment

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

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

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

ECDC links: [ECDC comment on risk of polio in Europe](#) | [ECDC risk assessment](#)

Actions

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

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

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