EU Threats

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.

Influenza ± Multi-country ± Monitoring 2021/2022 season
Opening date: 15 October 2021 Latest update: 29 April 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 16 2022 (18–24 April 2022)
Eleven of 40 countries across the Region reported widespread influenza activity.

The percentage of all sentinel primary care specimens from patients presenting with ILI or ARI symptoms that tested positive for an influenza virus decreased to 20% following a period between 25% and 30% for the prior six weeks.

The following countries, mostly in the western-central part of the Region, reported seasonal influenza activity at or above 30% positivity in sentinel primary care: Poland (67%), Netherlands (63%), France (45%), Estonia (44%), Luxembourg (33%), and Denmark (30%).

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

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

Opening date: 7 January 2020  Latest update: 29 April 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, eight, ninth, tenth and eleventh International Health Regulations (IHR) Emergency Committee meeting for COVID-19 were held in Geneva on 30 April 2020, 31 July 2020, 29 October 2020, 14 January 2021, 15 April 2021, 14 July 2021, 22 October 2021, 13 January 2022 and 11 April 2022 respectively. The Committee concluded during these meetings that the COVID-19 pandemic continues to constitute a PHEIC.

➡️ Update of the week

Since week 2022-15 and as of week 2022-16, 4 710 357 new cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) and 16 770 new deaths have been reported.

Since 31 December 2019 and as of week 2022-16, 508 498 877 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 6 235 962 deaths.

As of week 2022-16, 135 325 256 cases and 1 080 084 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 21 April 2022 and as of 28 April 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.

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

Opening date: 24 February 2022  Latest update: 29 April 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 27 April 2022, the total number of people who fled Ukraine reached 5 372 854. In total, 2 968 716 have crossed the Polish border; 801 453 the Romanian; 507 849 the Hungarian; and 363 940 the Slovakian. In addition, Czechia’s Ministry of the Interior reported 314 583 special visa concessions to Ukrainian applicants as of 27 April 2022. Outside of the EU/EEA, 439 290 people have sought safety in the Republic of Moldova (United Nations).

On 28 April 2022, the World Health Organization published the ninth situation report on the emergency in Ukraine, according to which approximately 7.7 million people are internally displaced within Ukraine.

According to the European Union Asylum Agency, some 124 100 registrations for temporary protection of Ukrainians were reported in 23 countries during week 16. In total, 2.3 million people are estimated to have applied for temporary protection in the EU, Norway, and Switzerland since the 24 February 2022.

Reports from the field have highlighted that the number of Ukrainians returning to Ukraine has increased in recent weeks. According to the United Nations, up to 1 233 500 people have returned to Ukraine since 28 February.

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

**New! Influenza A(H3N8) – China – 2022**
Opening date: 29 April 2022  
Latest update: 29 April 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. In 2022, a novel avian influenza A(H3N8) reassortant causing a human infection was detected in China.

➡️ Update of the week

As of 22 April 2022, one new human case with avian influenza A(H3N8) virus infection was reported from China.

**New! Wild Poliovirus Type 1 (WPV1) - Pakistan - 2022**
Opening date: 25 April 2022  
Latest update: 29 April 2022

Pakistani authorities reported acute flaccid paralysis (AFP) caused by wild poliovirus type 1 (WPV1) in North Waziristan.

➡️ Update of the week

One case of acute flaccid paralysis (AFP) caused by wild poliovirus type 1 (WPV1) has been reported in a 15-month-old boy in North Waziristan, Pakistan. The case had symptom onset on 9 April 2022 and was confirmed by the Pakistan National polio laboratory at the NIH, Islamabad on 22 April 2022. In addition, the laboratory confirmed the detection of a closely related positive environmental sample, collected on 5 April 2022, from the Bannu district of the same province (Khyber Pakhtunkhwa). Teams have been deployed by the National and Provincial Polio Emergency Operations Centres to conduct further investigations, and emergency immunisation campaigns are underway.

**New! Ebola virus disease - Democratic Republic of the Congo - 2022**
Opening date: 25 April 2022  
Latest update: 29 April 2022

On 23 April 2022, the Democratic Republic of the Congo (DRC) declared a new Ebola virus disease (EVD) outbreak in the Equateur province. This outbreak marks the 14th EVD outbreak in the DRC since records began in 1976 and the 6th outbreak since 2018.

➡️ Update of the week

On 23 April 2022, an Ebola virus disease (EVD) outbreak was declared by the health authorities in the DRC, after a case was confirmed in Mbandaka, in the Equateur province of the DRC. A second case and high-risk contact to the first case was confirmed on the 25 April 2022 in Mbandaka. To date, two cases have been confirmed, including two deaths. Authorities have identified 145 contacts to the confirmed cases.

In a tweet citing the Institut National de Recherche Biomédicale (INRB) in Kinshasa, it was reported that based on the genetic sequencing of the Ebola virus collected from the case who died on April 21, this can be considered a new spillover event, not a resurgence of activity from earlier outbreaks in this part of the DRC.

**Increase in hepatitis cases of unknown aetiology in children – Multicountry – 2022**
Opening date: 13 April 2022  
Latest update: 29 April 2022

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

➡️ Update of the week
An increase of acute severe hepatitis paediatric referrals continues to be reported by the UKHSA. As of 25 April 2022, the UK has identified a total of 114 children, aged 10 years and under, with acute hepatitis of unknown aetiology. Of these cases, 10 children have received a liver transplant. The UKHSA informats that 53 cases were tested for adenovirus, of which 40 had a positive result. Typing data were available for 11 cases with adenovirus in blood samples, all of which had serotype 41F. Additionally, 16% of tested cases were positive for SARS-CoV-2 at admission. A detailed technical briefing on the investigations among the UK cases was published by the UKHSA on 25 April 2022.

EU/EEA Member States were alerted by ECDC via EpiPulse on 8 of April 2022. As of 29 April 2022, approximately 57 cases of acute hepatitis among children aged 16 and under have been reported from 14 EU/EEA countries (Austria, Belgium, Denmark, Cyprus, France, Germany, Ireland, Italy, the Netherlands, Norway, Poland, Romania, Slovenia and Spain). Among these cases, 12 have tested positive for adenovirus, three tested positive for SARS-CoV-2 and five cases required a liver transplant.

Furthermore, outside of EU/EEA, as of 28 April 2022, public health authorities reported investigations of four cases of acute hepatitis among children in the state of Wisconsin, United States. Of the four cases, one child required a liver transplant and one child died. Across the US, public health authorities are investigating seven cases in the state of California, nine cases in Alabama and three in Illinois, two in North Carolina and one in Delaware, some of which have tested positive for adenovirus serotype 41. Investigations are ongoing by the US Centre for Disease Prevention and Control (CDC).

On 19 April 2022, the Israeli Ministry of Health reported 12 cases of acute hepatitis among young children, two of which received transplants.

On 26 April 2022, the media, quoting the Palestinian Ministry of Health, reported that a case of acute severe hepatitis had been reported in an eight-year-old child in the Gaza Strip. According to the report, the affected boy suffered severe symptoms of acute hepatitis and was admitted to the intensive care unit. Investigations are ongoing.

On 28 April 2022, the Japanese Ministry of Health reported three cases of acute hepatitis in children under 16 years. According to the press release, none of the children tested positive for adenovirus nor SARS-CoV-2. Investigations are ongoing.

Cholera – Multi-country (World) – Monitoring global outbreaks
Opening date: 20 April 2006 Latest update: 29 April 2022
Several countries in Africa and Asia have reported cholera outbreaks in 2021 and 2022. Major ongoing outbreaks are being reported from Afghanistan, Bangladesh, Cameroon, Democratic Republic of Congo, and Nigeria.

Influenza A(H5N6) – Multi-country – Monitoring human cases
Opening date: 17 January 2018 Latest update: 29 April 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.

Influenza A(H5N1) – Multi-country (World) – Monitoring human cases
Opening date: 15 June 2005 Latest update: 29 April 2022
Highly pathogenic avian influenza viruses A(H5) of Asian origin are extremely infectious for several bird species, including poultry. To date, human infections with influenza A(H5N1) virus have occurred only sporadically.
On 27 April 2022, a human case of avian influenza A(H5) has been confirmed by CDC in Colorado, the United States. The case is described as an adult man younger than 40 years old, largely asymptomatic, reporting only fatigue.

As a result of the monitoring and testing of people exposed to poultry and wild birds infected with avian flu by the Colorado Department of Public Health and Environment, a test revealed the presence of the influenza A (H5) virus in a single nasal specimen from the case who was working on a farm with infected poultry. Repeat testing on the person was negative for influenza. Because the person was in close contact with infected poultry, the virus may have been present in the person’s nose without causing infection. However, as per CDC guidance, the case has been put in isolation and is being treated with oseltamivir. There are currently no known human cases of this H5 flu virus in Colorado or the United States at this time.
II. Detailed reports

Influenza – Multi-country – Monitoring 2021/2022 season

Opening date: 15 October 2021  Latest update: 29 April 2022

Epidemiological summary

Week 16 2022 (18–24 April 2022)

Eleven of 40 countries across the Region reported widespread influenza activity.

The percentage of all sentinel primary care specimens from patients presenting with ILI or ARI symptoms that tested positive for an influenza virus decreased to 20% following a period between 25% and 30% for the prior six weeks.

The following countries, mostly in the western-central part of the Region, reported seasonal influenza activity at or above 30% positivity in sentinel primary care: Poland (67%), Netherlands (63%), France (45%), Estonia (44%), Luxembourg (33%), and Denmark (30%).

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

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

2021/22 season overview

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

Influenza activity, based on sentinel primary care specimens from patients presenting with ILI or ARI symptoms, first peaked in week 52/2021 (when it reached 19% positivity), declining thereafter until week 4/2022, when it increased again reaching a plateau phase (25-30% positivity) between weeks 10 and 15/2022 (this represents late activity compared to most prior seasons).

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

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

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

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

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

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

For children aged two to six years in Denmark, the estimated VE against influenza A viruses was estimated at 63% (95% CI: 10.9–84.4) in those hospitalised, and 64% (95% CI: 50.5–74.1) in those non-hospitalised.

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

Source: Flu News Europe

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

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

**Actions**

ECDC and WHO monitor influenza activity in the WHO European Region. Data will be updated on a weekly basis and are available on the [Flu News Europe](https://www.flu-news.org) website.

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

**Opening date:** 7 January 2020  
**Latest update:** 29 April 2022

**Epidemiological summary**

Since 31 December 2019 and as of week 2022-16, 508 498 877 cases of COVID-19 (in accordance with the applied case definitions and testing strategies in the affected countries) have been reported, including 6 235 962 deaths.

### Cases have been reported from:

**Africa:** 11 643 479 cases; the five countries reporting most cases are South Africa (3 762 911), Morocco (1 164 700), Tunisia (1 040 193), Egypt (515 645) and Libya (501 904).

**Asia:** 128 413 371 cases; the five countries reporting most cases are India (43 060 086), South Korea (16 929 564), Vietnam (10 563 502), Japan (7 643 924) and Iran (7 212 395).

**America:** 153 065 923 cases; the five countries reporting most cases are United States (81 043 315), Brazil (30 355 919), Argentina (9 072 062), Colombia (6 091 551) and Mexico (5 733 925).

**Europe:** 208 644 539 cases; the five countries reporting most cases are France (28 289 232), Germany (24 251 569), United Kingdom (21 979 732), Russia (18 137 137) and Italy (16 096 413).

**Oceania:** 6 730 860 cases; the five countries reporting most cases are Australia (5 489 341), New Zealand (887 205), French Polynesia (72 648), Fiji (64 524) and New Caledonia (60 457).

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

### Deaths have been reported from:

**Africa:** 252 791 deaths; the five countries reporting most deaths are South Africa (100 303), Tunisia (28 550), Egypt (24 613), Morocco (16 065) and Ethiopia (7 510).

**Asia:** 1 290 235 deaths; the five countries reporting most deaths are India (522 223), Indonesia (156 133), Iran (140 896), Philippines (60 182) and Vietnam (43 013).

**America:** 2 725 276 deaths; the five countries reporting most deaths are United States (991 609), Brazil (662 722), Mexico (324 134), Peru (212 761) and Colombia (139 780).

**Europe:** 1 956 945 deaths; the five countries reporting most deaths are Russia (374 902), United Kingdom (174 143), Italy (163 890), France (158 996) and Germany (134 446).

**Oceania:** 10 797 deaths; the five countries reporting most deaths are Australia (6 989), Fiji (862), Papua New Guinea (649), French Polynesia (648) and New Zealand (644).

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

**EU/EEA:**

As of week 2022-16, 136 894 261 cases have been reported in the EU/EEA: France (28 289 232), Germany (24 251 569), Italy (16 096 413), Spain (11 854 814), Netherlands (8 039 186), Poland (5 999 626), Austria (4 132 692), Belgium (4 029 468), Czechia (3 892 759), Portugal (3 810 441), Greece (3 286 381), Romania (2 819 715), Denmark (2 795 729), Sweden (2 499 281), Slovakia (2 273 339), Hungary (1 894 359), Ireland (1 513 748), Lithuania (1 392 403), Norway (1 366 783), Bulgaria (1 152 892), Croatia (1 117 728), Slovenia (1 004 798), Finland (1 002 600), Latvia (817 313), Estonia (555 358), Cyprus (469 216), Luxembourg (243 486), Iceland (186 016), Malta (90 710) and Liechtenstein (16 206).

As of week 2022-16, 1 083 124 deaths have been reported in the EU/EEA: Italy (163 890), France (158 996), Germany (134 446), Poland (116 322), Spain (104 281), Romania (61 413), Hungary (44 907), Czechia (40 047), Bulgaria (36 849), Belgium (30 815), Greece (28 935), Netherlands (22 230), Portugal (22 207), Slovakia (19 400), Sweden (18 745), Austria (15 839), Croatia (15 839).
782), Lithuania (9 174), Slovenia (7 593), Ireland (6 996), Latvia (6 359), Denmark (5 100), Finland (4 510), Norway (2 871), Estonia (2 415), Cyprus (1 117), Luxembourg (1 069), Malta (647), Iceland (113) and Liechtenstein (56).

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

In week 2022-16, in the EU/EEA overall, the reported weekly cases decreased by 18.0% compared to the previous week. Weekly increases in descending order were observed in Portugal and Spain. The countries with the highest 14-day notification rates per 100 000 population are: France (2 057), Germany (1 777), Luxembourg (1 566), Cyprus (1 400), and Italy (1 304). Overall, 28 of the 30 EU/EEA countries (Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Romania, Slovakia, Slovenia, 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 21 April 2022 and as of 28 April 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 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 meeting for COVID-19 were held in Geneva on 30 April 2020, 31 July 2020, 29 October 2020, 14 January 2021, 15 April 2021, 14 July 2021, 22 October 2021, 13 January 2022 and 11 April 2022 respectively. The Committee concluded during these meetings that the COVID-19 pandemic continues to constitute a PHEIC.

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

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

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

Arrival of people displaced from Ukraine to the EU following Russia’s aggression in Ukraine - Multistate – 2022
Opening date: 24 February 2022 Latest update: 29 April 2022

Epidemiological summary
According to the United Nations, between 24 February and 27 April 2022, the total number of people who fled Ukraine reached 5 372 854. In total, 2 968 716 have crossed the Polish border; 801 453 the Romanian; 507 849 the Hungarian; and 363 940 the Slovakian. In addition, Czechia’s Ministry of the Interior reported 314 583 special visa concessions to Ukrainian applicants as of 27 April 2022. Outside of the EU/EEA, 439 290 people have sought safety in the Republic of Moldova (United Nations).

The World Health Organization published on 28 April 2022 the ninth situation report on the emergency in Ukraine according to which approximately 7.7 million people are internally displaced within Ukraine.

According to the European Union Asylum Agency, some 124 100 registrations for temporary protection of Ukrainians were reported in 23 countries during week 16. In total, 2.3 million people are estimated to have applied for temporary protection in the EU, Norway, and Switzerland since the 24 February 2022.
Reports from the field have highlighted that the number of Ukrainians returning to Ukraine has increased in recent weeks. According to the United Nations, up to 1 233 500 people have returned to Ukraine since 28 February.

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

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

Sources: Relief Web | United Nations | WHO | European Union Asylum Agency

**ECDC assessment**

The displacement of large numbers of people into neighbouring countries, irrespective of the type of accommodation, will result in difficulties for the displaced people in accessing healthcare, meaning that they may be at greater risk of complications from acute or chronic conditions. Furthermore, situations of overcrowding could favour outbreaks of infectious diseases, in particular respiratory infections. This includes influenza and COVID-19, which are currently circulating in some of the reception countries, as well as tuberculosis (TB). Detection of cases of influenza, COVID-19 or TB among the displaced population is not unexpected.

**Vaccination coverage in Ukraine** is suboptimal for several vaccine-preventable diseases, including COVID-19. Vaccination against poliomyelitis and measles should be considered as a priority, especially among the paediatric population, as well as DTP (DTaP-IPV combination vaccine for children, with Hib-component only for children <6 years; Td for adults). In addition, COVID-19 vaccination should be offered, and the elderly and other risk groups should be prioritised. Public health authorities should increase awareness among healthcare providers in order to detect priority infectious diseases that could present among displaced Ukrainian people.

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

**Actions**

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

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

**New! Influenza A(H3N8) — China — 2022**

Opening date: 29 April 2022
Latest update: 29 April 2022

**Epidemiological summary**

According to an announcement from the National Health Commission (NHC) of China on 26 April 2022, a case of human infection with A(H3N8) avian influenza was found in Henan Province. The patient is a four-year-old boy who had exposure to poultry before the onset of disease, with onset of symptoms on 5 April 2022. The case was hospitalised on the 10 April 2022 due to aggravation of his condition. On the 24 April, the patient specimen was tested positive for A(H3N8) avian influenza virus by the Chinese Centre for Disease Control and Prevention. Medical observation and sampling tests were performed on close family contacts, who were all negative.

**ECDC assessment**

9/20
This is the first human case of influenza A(H3N8) virus infection. No human-to-human transmission has been reported so far. NHC experts' preliminary assessment believes that the A(H3N8) avian influenza virus is of avian origin and has not yet had the ability to effectively infect humans. A(H3N8) virus has been detected in horses, dogs, birds and seals worldwide, but no human cases of A(H3N8) have been reported. This event is an occasional bird-to-human cross-species transmission, and the risk of large-scale transmission is assessed as low.

Sporadic human cases of unusual avian influenza viruses have been detected (e.g. H10N3, H10N8, H7N4, H6N1). Although these cases are not unexpected, it is important to conduct investigations on the source and mode of transmission in the animal-health interface. Research studies show various subtypes of different avian influenza virus are currently circulating among the wild bird population, which, while being of low pathogenicity to birds, are not under routine surveillance. These viruses, however, are not of relevance for human or animal health as such.

The use of personal protective measures for people directly exposed to 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.

**New! Wild Poliovirus Type 1 (WPV1) - Pakistan - 2022**

**Epidemiological summary**

One case of acute flaccid paralysis (AFP) caused by wild poliovirus type 1 (WPV1) has been reported in a 15-month-old boy in North Waziristan, Pakistan. The case had symptom onset on 9 April 2022 and was confirmed by the Pakistan National polio laboratory at the NIH, Islamabad on 22 April 2022. In addition, the laboratory confirmed the detection of a closely related positive environmental sample, collected on 5 April 2022, from the Bannu district of the same province (Khyber Pakhtunkhwa). Teams have been deployed by the National and Provincial Polio Emergency Operations Centres to conduct further investigations and emergency immunisation campaigns are underway.

Wild poliovirus had been detected in environmental samples in South Khyber Pakhtunkhwa at the end of 2021, and the area was identified as most at risk for wild poliovirus. An emergency action plan had been initiated to address the challenge in this part of the province. The next sub-national polio vaccination campaign is planned to be conducted from 23 – 27 May 2022.

**Background:** Pakistan is one of the only two countries in the world endemic for wild poliovirus, the other being Afghanistan. This is the first case of WPV1 reported in Pakistan in 15 months (last case reported on 27 January 2021), and the second case to be reported globally in 2022. As of 25 April 2022, a total of two cases of AFP caused by WPV1 have been reported from the two endemic countries, Afghanistan (1) and Pakistan (1).

**Source:** [Pakistan Polio Eradication Programme](https://polio.pgep.gov.pk/)

**ECDC assessment**

The WHO European Region 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 May 2019 report of the European Regional Commission for Certification of Poliomyelitis Eradication, one EU/EEA country (Romania) and two neighbouring countries (Bosnia and Herzegovina, and Ukraine) remain at high risk of a sustained polio outbreak. According to the same report, an additional 15 EU/EEA countries are at intermediate risk of sustained
polio outbreaks, following wild poliovirus importation or the emergence of cVDPV due to sub-optimal programme performance and low population immunity. The continued circulation of wild poliovirus type 1 (WPV1) in two countries shows that there is still a risk of the disease being imported into the EU/EEA. Furthermore, the worrying occurrence of outbreaks of circulating vaccine-derived poliovirus (cVDPV), which only emerge and circulate due to lack of polio immunity in the population, shows the potential risk for further international spread.

To limit the risk of reintroduction and sustained transmission of WPV and cVDPV in the EU/EEA, it is crucial to maintain high vaccine coverage in the general population and increase vaccination uptake in pockets of under-immunised populations. Despite the current COVID-19 challenges, Member States should review their polio vaccination coverage data and ensure that vaccination gaps are bridged as soon as possible.

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 monitors the global polio situation through its epidemic intelligence activities and provides a multi-country update on a monthly basis. ECDC maintains an interactive map showing countries that are still endemic for polio and/or have ongoing outbreaks of cVDPV.

**New! Ebola virus disease - Democratic Republic of the Congo - 2022**

Opening date: 25 April 2022  
Latest update: 29 April 2022

**Epidemiological summary**

On 23 April 2022, an Ebola virus disease (EVD) outbreak was declared by the health authorities in the DRC, after a case was confirmed in Mbandaka, in the Equateur province of the DRC. A second case and high-risk contact to the first case was confirmed on the 25 April 2022 in Mbandaka. To date, two cases have been confirmed, including two deaths.

The index case is a 31-year-old man, who had started experiencing symptoms on 5 April 2022 and was cared for at home for over a week, after which they sought treatment at a local health facility. The patient was admitted to an Ebola treatment centre on 21 April for intensive care, however died later that same day. According to the Africa CDC, the patient had received an EVD vaccine in 2020.

Samples to test for EVD were submitted and investigations to determine the source of the outbreak were initiated. In a tweet citing the Institut National de Recherche Biomédicale (INRB) in Kinshasa, it was reported that based on the genetic sequencing of the Ebola virus collected from the case who died on April 21, this can be considered a new spillover event, not a resurgence of activity from earlier outbreaks in this part of the DRC.

WHO experts are currently supporting the government in contact tracing, testing, and implementing community public health measures to break the chain of transmission. Vaccination is expected to start in the coming days, as the DRC has stocks of the rVSV-ZEBOV Ebola vaccine available in the cities of Goma and Kinshasa.

**Source:** WHO News Item, WHO Director Tweet, Africa CDC statement

**ECDC assessment**

Ebola outbreaks in the DRC are recurrent, as the virus is present in an animal reservoir in many parts of the country. This is the 14th outbreak ever recorded since 1976 in the DRC and the 6th since 2018. In the Equateur province, it is the third outbreak; the previous outbreaks in this province occurred in 2018 and in 2020 and affected 54 and 130 cases, and resulted in 33 and 55 deaths, respectively. The DRC has gained much experience over the years given the frequency of outbreaks in the country.
A high level of surveillance and follow-up of survivors is essential to detect and interrupt transmission early on. Vaccination is expected to help reduce transmission and fatal outcomes. However, the immunity due to previous rVSV-Zebov vaccination in the region of Mbandaka is probably negligible as the duration of protection is estimated to last six months.

Although disease in unvaccinated people is severe and most EU/EEA citizens are not commonly vaccinated against the disease, there is a very low likelihood of infection of EU/EEA citizens in the DRC. The current risk for EU/EEA citizens living in or travelling to Equateur province in the DRC is estimated to be low. The current risk for citizens in the EU/EEA is considered very low, as the likelihood of introduction and secondary transmission within the EU/EEA is very low.

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

Increase in hepatitis cases of unknown aetiology in children – Multicountry – 2022
Opening date: 13 April 2022  Latest update: 29 April 2022

Epidemiological summary
On 5 April 2022, the UK reported an increase in acute hepatitis cases of unknown aetiology among previously healthy children aged under 10 years from Scotland. On 12 April, the United Kingdom reported that in addition to the cases in Scotland there were approximately 61 further cases under investigation in England, Wales and Northern Ireland, with most of these cases aged between two and five years.

The cases in the UK presented clinically with symptoms and signs of severe acute hepatitis, including increased levels of liver enzymes (aspartate aminotransaminase/ aspartate transaminase (AST) or alanine aminotransaminase/ alanine transaminase (ALT) greater than 500 IU/L) and jaundice. Some of the cases reported gastrointestinal symptoms such as abdominal pain, diarrhoea and vomiting in the preceding weeks. Only rare cases presented with fever. Most children were hospitalised and some of them even required admission to specialist paediatric liver units.

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

Sources: UK Government | UK Health Security Agency | Public Health Scotland | Public Health Wales | Public Health Agency Northern Ireland | US CDC | Israeli Ministry of Health | Japan Ministry of Health | Wisconsin Department of Health | Eurosurveillance | media 1, 2, 3, 4, 5 | direct reports to ECDC

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

Actions
ECDC continues to work in collaboration with countries where cases have been reported, WHO and partner organisations to support the ongoing investigations and to facilitate the sharing of information and tools for investigations. It is essential to establish surveillance at the national level for EU/EEA countries as soon as possible to collect detailed epidemiological, clinical, virological, and other information, including toxicological analyses, on cases. Additional information for hypothesis testing should be collected in the context of analytical studies looking at other factors and potential co-factors such as recent infections, personal and environmental determinants. Specific studies should be designed to identify risk factors for infection and for severe illness, to investigate routes of potential transmission, to describe the full clinical spectrum, and to ascertain whether the same aetiological agent causes different clinical presentations depending on age and other conditions. ECDC will provide guidance and coordination to EU/EEA countries planning to set up such studies.

Further investigations include an assessment of the underlying level of acute viral infections circulating in the community, in particular adenoviruses, by age, and whether this is above what would normally be expected.

On 28 April 2022, ECDC published a rapid risk assessment. An EpiPulse item is available to Member States (MS) to inform and facilitate the communication between MS and ECDC. MS are encouraged to report cases in TESSy and updates on their investigations in EpiPulse. ECDC recommends that countries view this item as it contains additional information around the case definition, testing algorithm and questionnaire for cases.

ECDC has established reporting of case-based data for cases of acute hepatitis of unknown aetiology in TESSy. The reporting protocol is available here. Reporting should be based on the case definition described in the RRA and reproduced below. ECDC will continue to monitor this event through its epidemic intelligence activities.

Cases of hepatitis of unknown origin should be reported to TESSy if they meet any of the following criteria:
- Confirmed: N/A
- Probable: A person presenting with an acute hepatitis (non-hepatitis viruses A, B, C, D and E*) with aspartate transaminase (AST) or alanine transaminase (ALT) over 500 IU/L, who is 16 years old or younger, since 1 October 2021.
- Epi-linked: A person presenting with an acute hepatitis (non-hepatitis viruses A, B, C, D and E*) of any age who is a close contact of a probable case since 1 October 2021.

Number of acute hepatitis cases of unknown aetiology in children aged 16 and younger in EU/EAA countries, as of 29 April 2022
Cholera – Multi-country (World) – Monitoring global outbreaks

Epidemiological summary

Since the last update on 25 March 2022, approximately 479,202 suspected cholera cases, including 129 deaths, have been reported worldwide. Countries reporting new cases since the previous update are Afghanistan, Bangladesh, Benin, Cameroon, Democratic Republic of Congo, Malawi, Mozambique, Nigeria, Pakistan, Tanzania, and Zambia. A list of all countries reporting new cases since our previous update can be found below.

Americas

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

Africa

Benin: Since the last update, 57 cholera cases have been reported in Benin. Since 10 October 2021 and as of 13 March 2022, a total of 1,679 suspected cholera cases, including 20 deaths (CFR 1.2%), have been reported in the country.

Cameroon: Since the last update, 2,115 suspected cholera cases including 46 deaths have been reported in Cameroon. In 2022 and as of 27 March, a total of 2,886 suspected cases, including 65 deaths, have been reported in the country. According to WHO Regional Office for Africa, there are 22 districts from five regions with active cholera outbreaks (Centre, Littoral, South, South-West, and North regions).

Democratic Republic of Congo (DRC): Since the last update, 2,397 suspected cholera cases, including 33 deaths, have been reported in DRC. In 2022, and as of 27 March, a total of 4,565 suspected cholera cases, including 60 deaths (CFR: 1.2%), have been reported in 43 health zones across 10 provinces of the Democratic Republic of the Congo.

Malawi: Since the last update on 25 March 2022, Malawi has reported 63 suspected Cholera cases, including three deaths. In 2022, and as of 17 April 2022, Malawi has reported a total of 64 cholera cases, including three deaths.

Mozambique: On 13 January 2022, a Cholera outbreak was reported in Sofala province, central region of Mozambique. Since 13 January, and as of 18 March 2022, a total of 265 cases have been reported in the country.

Nigeria: Since the last update, 657 suspected cholera cases, including 12 deaths, have been reported in Nigeria. In 2022, and as of 8 April, a total of 1,358 cases, including 31 deaths (CFR 2.3%), have been reported from 15 states and 60 Local Government Areas (LGAs). In 2021, Nigeria reported 111,062 cases, including 3,604 deaths (CFR 3.2%), from 33 states.

Tanzania: Since the last update, 70 new cholera cases have been reported in Tanzania. Since December 2021, and as of 26 March 2022, 94 cases and one death (CFR: 1.1%) have been reported in the country. According to WHO Africa region, the outbreak has so far affected only one district, namely Nkasi district in Rukwa region.

Zambia: According to WHO, a cholera outbreak was declared in Zambia on 11 April 2022. As of 13 March 2022, four cholera cases have been reported in the country.

Zimbabwe: Since the last update, no new cholera cases have been reported in Zimbabwe. On 27 January 2022, Zimbabwe reported one cholera case.

Asia

Afghanistan: Since the last update, 5,133 new acute watery diarrhoea (AWD) cases have been reported in Afghanistan. In 2022, and as of 31 March, a total of 5,207 cases of AWD have been reported.

Bangladesh: Since the last update, and as of 12 April 2022, 467,611 AWD cases, including 29 deaths, have been reported from Bangladesh. In 2022, a total of 495,433 suspected cholera cases, including 29 deaths, have been reported from the country. Among these cases, 461,611 cases, including 29 deaths, have been reported from various part of the country, and 33,822 cases and no deaths have been reported in Rohingya Refugee Camp in Cox’s Bazar, Bangladesh. According to media reports, a suspected cholera outbreak is ongoing in the country since the beginning of this year, mostly affecting the capital city Dhaka. However, cases also been reported from other large cities like Barisal, Chittagong, Khulna, Mymensingh, Rajshahi, Rangpur, and Sylhet.
**India:** Since the last update, no new cholera cases have been reported in India. In 2022, and as of 9 March, a total of 100 suspected cholera cases have been reported in Gujarat.

**Nepal:** Since the last update, and as of 24 April, no new cholera cases have been reported in Nepal. In 2021, a total of 899 suspected cholera cases, including seven deaths, have been reported.

**Pakistan:** In 2022, and as of 27 April, a total of 129 laboratory-confirmed cholera cases have been reported in Karachi Pakistan.

**Philippines:** Since the last update, no new cholera cases have been reported in the Philippines. In 2022 and as of 7 February, 491 cholera cases and six fatalities have been reported.

No updates were available on the outbreaks reported in Togo, Uganda, and Ethiopia in early 2022.

**Disclaimer:** Data presented in this report originate from several sources, both official public health authorities and non-official, such as the media. Data completeness depends on the availability of reports from surveillance systems and their accuracy, which varies between countries. All data should be interpreted with caution as there may be areas of under-reporting and figures may not reflect the actual epidemiological situation.

**ECDC assessment**
Cholera cases continue to be reported in western Africa, and southeast Asia over the past months. Cholera outbreaks have also been notified in the eastern and southern part of Africa as well as in some areas of Asia.

Despite the number of cholera outbreaks reported worldwide, few cases are reported each year among returning EU/EEA travellers. In this context, the risk of cholera infection in travellers visiting these countries remains low, even though sporadic importation of cases in the EU/EEA remains possible.

In 2019, 26 cases were reported in the EU/EEA Member States, while 26, 17, and 23 cases were reported in 2018, 2017, and 2016 respectively. All cases had travel history to cholera-affected areas.

According to WHO, vaccination should be considered for travellers at higher risk, such as emergency and relief workers who are likely to be directly exposed. Vaccination is generally not recommended for other travellers. Travellers to cholera-endemic areas should seek advice from travel health clinics to assess their personal risk and apply precautionary sanitary and hygiene measures to prevent infection. These can include drinking bottled water or water treated with chlorine, carefully washing fruit and vegetables with bottled or chlorinated water before consumption, regularly washing hands with soap, eating thoroughly cooked food, and avoiding the consumption of raw seafood products.

**Actions**
ECDC monitors cholera outbreaks globally through its epidemic intelligence activities in order to identify significant changes in epidemiology and to inform public health authorities. Reports are published on a monthly basis. The worldwide overview of cholera outbreaks is available on ECDC's website.
Geographical distribution of cholera cases reported worldwide from February to April 2022

Source: ECDC

Geographical distribution of cholera cases reported worldwide as of April 2022

Source: ECDC

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

Opening date: 17 January 2018
Latest update: 29 April 2022
Epidemiological summary

As of 22 April 2022, and since the previous monthly report on 24 March 2022, three new human cases with avian influenza A (H5N6) virus infection were reported from China. The cases were reported from Henan (1), Jiangsu (1), and Sichuan (1) provinces. The three cases were adults with onset of symptoms on March 2022. All cases had exposure to poultry. Only one case, from Sichuan, had information available on contact tracing, for whom no additional cases were detected among close contacts.

Epidemiological details of the new cases are listed as follows:

1. 28-year-old man from Puyang, Henan province, with onset of symptoms on 18 March 2022. The case was hospitalised on 19 March 2022 in critical condition. The case had exposure to poultry prior to the onset of symptoms.
2. 53-year-old woman from Zhenjiang, Jiangsu province, with onset of symptoms on 24 March 2022. The case was hospitalised on 26 March 2022 in critical condition. The case had exposure to a poultry market prior to the onset of symptoms.
3. 56-year-old man from Deyang, Sichuan province, with onset of symptoms on 31 March 2022. The case was hospitalised on 4 April 2022 in critical condition. The case had exposure to poultry prior to the onset of symptoms.

Summary: To date, overall, 78 laboratory confirmed cases, including 32 deaths of human infection with influenza A(H5N6) virus, have been reported since 2014, according to WHO.

Sources: WHO Avian Influenza Weekly Update Number 841.

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.
**Influenza A(H5N1) – Multi-country (World) – Monitoring human cases**

**Opening date:** 15 June 2005  
**Latest update:** 29 April 2022

**Epidemiological summary**

As of 29 April 2022, overall, there were 865 cases, including 456 deaths (CFR: 52.7%), of human infection with avian influenza A (H5N1) reported in 20 countries. The previous case was reported in the United Kingdom in 2021.

**Sources:** ECDC Avian influenza | ECDC Avian influenza overview: Latest situation update of the avian influenza in EU/EEA | OIE | EFSA | WHO

**ECDC assessment**

Avian influenza H5N1 viruses of clade 2.3.4.4b have been causing large outbreaks in Europe during the 2021/22 winter season and are continuously circulating among wild birds transmitting to poultry farms. In autumn 2021, these viruses were introduced to Northern America via wild birds and have since then spread within Canada and the US. Similar viruses have also been introduced into African countries through migratory birds and have also been identified in Asian countries and the Middle East. Human cases related to the avian influenza of clade 2.3.4.4b have been reported from different countries over the last couple of years. One mild human infection related to the H5N1 viruses circulating this winter has been reported in the United Kingdom in 2021, as well as several transmission events to other mammal species such as foxes, seals, minks, etc. However, current epidemiological and virological evidence suggests that A(H5N1) viruses retain to be avian-like viruses and have not acquired the ability to transmit to humans or even between humans. The likelihood of sustained human-to-human transmission is therefore low.

The risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered to be low. The risk to occupationally exposed groups such as cullers has been assessed as low to medium. Direct contact with infected birds or a contaminated environment is the most likely source of infection, and the use of personal protective measures for people exposed to dead birds or their droppings will minimise the remaining risk.
Actions

ECDC monitors avian influenza strains through its influenza surveillance programme and epidemic intelligence activities, and in collaboration with EFSA and the EU reference laboratory, in order to identify significant changes in the virological characteristics and 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.
The Communicable Disease Threat Report may include unconfirmed information which may later prove to be unsubstantiated.