



## **I. Executive summary**

## EU Threats

### COVID-19 associated with SARS-CoV-2 – Multi-country EU/EEA – 2019 - 2022

Opening date: 7 January 2020

Latest update: 2 September 2022

On 31 December 2019, the Wuhan Municipal Health Commission reported a cluster of pneumonia cases of unknown aetiology with a common source of exposure at the South China Seafood City market in Wuhan. 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 countries worldwide. On 30 January 2020, the World Health Organization (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, eleventh and twelfth 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, 11 April 2022, and 8 July 2022 respectively. The Committee concluded during these meetings, that the COVID-19 pandemic continues to constitute a PHEIC.

[→Update of the week](#)

As of week 34, 2022, 163 492 388 cases and 1 148 763 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](#).

In week 34, 2022, in the EU/EEA overall, the reported weekly cases decreased by 15.0% compared to the previous week. Overall, all countries except Cyprus, Liechtenstein, Luxembourg, and Portugal reported a decrease in weekly cases. The countries with the highest 14-day notification rates per 100 000 population are: Slovenia (893), Austria (799), Greece (777), Latvia (721), and Germany (586).

At the end of week 34, 2022 (week ending 28 August), the overall notification rate of COVID-19 cases in the EU/EEA decreased by 14% compared to the previous week as part of a six-week decreasing trend, but remained relatively high (339 cases per 100 000 population, corresponding to 9% of the pandemic maximum). A similar decreasing trend was observed for case rates among people aged 65 years and above, reaching 29% of the pandemic maximum for this indicator.

Out of 28 countries with data on hospital or ICU admissions/occupancy up to week 34, three reported an increasing trend in at least one of these indicators compared with the previous week. Current levels of ICU indicators remain low at between 1–23% of the maximum values observed during the pandemic, apart from Iceland reporting over 25% of their maximum value.

Among the 11 countries with an adequate volume of sequencing or genotyping for weeks 32–33 (8 August to 21 August 2022), the estimated distribution of variants of concern (VOC) or variants of interest (VOI) was 99.1% (98.3–100.0% from 11 countries) for BA.4/BA.5; 0.7% (0.2–0.9%, 299 detections from 10 countries) for BA.2; 0.6% (0.2–0.8%, 27 detections from four countries) for BA.2+L452X; and 0.3% (0.0–0.9%, 38 detections from five countries) for BA.2.75.

Since the last report at the round table, no relevant epidemiological updates regarding SARS-CoV-2 VOC have been detected.

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

### Monkeypox - Multi-country - 2022

Opening date: 3 June 2022

Latest update: 2 September 2022

Since early May 2022, cases of monkeypox (MPX) have been reported from countries where the disease is not endemic.

[→Update of the week](#)

Since the last update on 26 August 2022, 218 monkeypox cases have been reported from 16 EU/EEA countries: Germany (93), Netherlands (30), France (20), Spain (17), Austria (15), Italy (12), Sweden (7), Norway (6), Denmark (4), Ireland (4), Belgium (2), Czechia (2), Greece (2), Hungary (2), Cyprus (1) and Luxembourg (1). One death has been reported from Belgium.

**Disclaimer:** Data presented in this update are compiled from TESSy and official public sources. The source (either TESSy or other official public source) used for each country is the one reporting the larger number of cases. In this update, countries for which data from TESSy were used are: Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czechia, Estonia, Finland, France, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Poland, Romania, Slovakia, Slovenia and Spain. For the rest of the countries, data were included from official public sources.

## Other news

According to a [press release](#) by the Public Health Agency of Sweden (Folkhälsomyndigheten) on 25 August 2022, following the European Medicines Agency's (EMA) review of the monkeypox vaccine, Imvanex 1/Jynneos injected intradermally at a lower dosage, the vaccine can now also be offered as a pre-exposure prophylaxis (PrEP) measure to people at high risk of exposure to the monkeypox virus. The risk groups are mostly men who have sex with men (MSM) and those with multiple sexual contacts. However, given the limited vaccine supply, vaccination will be offered based on the physicians' decision and regional availability.

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

Opening date: 2 June 2022

Latest update: 2 September 2022

During the transmission season for West Nile virus (WNV), which usually runs from June to November, ECDC monitors the occurrence of infections in the European Union (EU), the European Economic Area (EEA), and EU-neighbouring countries. ECDC publishes weekly epidemiological updates to inform blood safety authorities. Data reported through The European Surveillance System (TESSy) are presented at the NUTS-3 level (nomenclature of territorial units for statistics 3) for EU/EEA countries and at the GAUL-1 level (global administrative unit layers 1) for EU-neighbouring countries.

### →Update of the week

Since last week's update, and as of 31 August 2022, EU/EEA countries reported 45 human cases of West Nile virus (WNV) infection and five deaths related to WNV infections. Cases were reported by Greece (34), Romania (10) and Hungary (1). Deaths were reported by Greece (4). EU-neighbouring countries reported 24 human cases of WNV infection in Serbia (24) and one death related to WNV infections in Serbia (1).

Please note that for this week, there are no updates for Italy due to technical difficulties.

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

Opening date: 13 April 2022

Latest update: 2 September 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, over 1 000 cases have been reported from the EU/EEA and globally.

### →Update of the week

As of 25 August 2022, 513 cases of acute hepatitis of unknown aetiology among children aged 16 years and under have been reported to TESSy from the World Health Organization European Region, an increase of seven since the last update on 29 July 2022. Just over half (53.2%) of these cases are reported from the UK. The majority (76.2%) of reported cases are five years old or younger. Around a third (27.7%) of cases were admitted to an intensive care unit and 22 (8%) children received a liver transplant. A total of 404 cases were tested for adenovirus, of which 218 (54%) tested positive. A total of 353 cases were PCR-tested for SARS-CoV-2, of which 39 (11%) tested positive.

Whilst there is a reporting delay, as severe hepatitis can take some time to develop following the initial symptoms and be fully investigated, which means case numbers in recent weeks may be subject to further changes over time, there has been a steady decrease in the number of cases reported weekly since week 18.

## EU/EEA

As of 25 August 2022, 233 cases of acute hepatitis of unknown aetiology among children aged 16 years and under have been reported to TESSy from 17 EU/EEA countries: Austria (6), Belgium (14), Bulgaria (1), Cyprus (2), Denmark (8), France (9), Greece (12), Ireland (26), Italy (36), Latvia (1), Luxembourg (1), Netherlands (15), Norway (6), Poland (18), Portugal (20), Spain (46) and Sweden (12). Among these cases, at least 19 cases were admitted to an intensive care unit and nine required a liver transplant. There have been three associated deaths.

A detailed summary and analysis of data reported to TESSy can be found in the [Joint ECDC-WHO Regional Office for Europe Surveillance Bulletin](#) published monthly.

## Non-EU/EEA

As of 28 July 2022, the UK reported to TESSy a total of 273 children aged under 16 years with acute hepatitis of unknown aetiology. According to the United Kingdom Health Security Agency ([UKHSA](#)), the cases are predominantly under five years and many showed initial symptoms of gastroenteritis followed by the onset of jaundice. The most recent [technical briefing](#) on investigations into the cases in the UK was published on 26 July 2022.

Outside of the EU/EEA and the UK, as of 25 August 2022, cases were reported to TESSy from Israel (5), Republic of Moldova (1) and Serbia (1).

According to the [latest update from WHO](#), as of 12 July 2022, probable cases and cases pending classification have been reported from the Region of the Americas (435, including 334 in the United States), Western Pacific Region (67), the South-East Asia Region (19) and the Eastern Mediterranean Region (2).

According to WHO, at least 46 children worldwide have required liver transplants and 22 deaths have occurred.

## Non EU Threats

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### Monitoring environmental suitability of *Vibrio* growth in the Baltic Sea - Summer 2022

Opening date: 30 June 2022

Latest update: 2 September 2022

Elevated sea surface temperature (SST) in marine environments with low salt content offer ideal growth conditions for certain *Vibrio* species, thus increasing the risk of transmission to people exposed to contaminated seawater. Most cases present with acute gastrointestinal symptoms, but more severe disease can occur, including septicæmia.

Suitable environmental conditions can occur during the summer months in estuaries and enclosed water bodies with moderate salinity. ECDC has developed a model to map the environmental suitability for *Vibrio* growth in the Baltic Sea ([ECDC Vibrio Map Viewer](#)). Please note that this model has been calibrated to the Baltic Region in northern Europe and might not apply to other worldwide settings prior to validation.

#### →Update of the week

Since the previous update, and as of 1 September 2022, one additional human case of locally-acquired vibriosis has been reported in [Norway](#).

As of 30 August 2022, the environmental suitability for *Vibrio* growth in the Baltic Sea was identified as generally very-low-to-low. However, it was medium-to-high in the Gulf of Riga (Latvia and Estonia), Gdansk Basin (Poland), Szczecin (Poland) and Mecklenburg-Western Pomerania (Germany).

For the next five days, the environmental suitability for *Vibrio* growth in the Baltic Sea is considered to be very-low-to-low.

Outside of EU/EEA countries, the environmental suitability for *Vibrio* growth in the Baltic Sea was identified as medium-to-high and is expected to be very-low-to-low for the next five days.

### Poliovirus - United States of America -2022

Opening date: 22 July 2022

Latest update: 2 September 2022

On 21 July 2022, the New York State Department of Health confirmed a case of paralytic polio in Rockland County.

#### →Update of the week

On 26 August 2022, the New York State Department of Health (NYSDOH) reported the findings of the environmental surveillance of poliovirus in wastewater. As of 26 August, 43 samples were positive for poliovirus of which 36 were genetically linked with the case recently found in Rockland County. The remaining seven cases were collected between April and July from Orange County and New York City. So far, these have not been genetically linked to the individual case in Rockland County.

### Wild Poliovirus Type 1 (WPV1) – Mozambique – 2022

Opening date: 19 May 2022

Latest update: 2 September 2022

On 18 May 2022, the World Health Organization Regional Office for Africa reported that health authorities in Mozambique had 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 25 August 2022, one additional case of wild poliovirus type 1 (WPV1) has been reported in the Tete province of Mozambique, the same province where the previous AFP cases due to WPV1 were reported. This additional case brings the total cases of acute flaccid paralysis (AFP) in the country due to WPV1 to five.

## II. Detailed reports

### COVID-19 associated with SARS-CoV-2 – Multi-country EU/EEA – 2019 - 2022

Opening date: 7 January 2020

Latest update: 2 September 2022

#### Epidemiological summary

##### EU/EEA:

As of week 34, 2022, 165 811 631 cases have been reported in the EU/EEA: France (34 554 339), Germany (32 064 006), Italy (21 923 746), Spain (13 402 616), Netherlands (8 383 043), Poland (6 175 979), Portugal (5 412 603), Austria (4 935 591), Belgium (4 471 115), Greece (4 409 048), Czechia (4 034 417), Romania (3 200 488), Denmark (3 160 374), Sweden (2 566 227), Slovakia (2 349 397), Norway (2 089 589), Hungary (2 048 628), Ireland (1 632 925), Lithuania (1 452 363), Finland (1 255 935), Bulgaria (1 239 870), Croatia (1 211 920), Slovenia (1 122 961), Latvia (894 580), Estonia (580 073), Cyprus (576 278), Luxembourg (321 688), Iceland (210 672), Malta (113 992) and Liechtenstein (18 982).

As of week 34, 2022, 1 152 978 deaths have been reported in the EU/EEA: Italy (177 194), France (168 026), Germany (147 219), Poland (117 422), Spain (112 664), Romania (66 313), Hungary (46 091), Czechia (40 663), Bulgaria (37 578), Greece (32 561), Belgium (31 951), Portugal (24 834), Netherlands (22 600), Sweden (19 845), Slovakia (19 528), Austria (16 860), Croatia (16 658), Lithuania (9 256), Slovenia (8 121), Finland (7 517), Denmark (6 881), Latvia (6 613), Ireland (6 573), Norway (3 953), Estonia (2 524), Luxembourg (1 310), Cyprus (1 168), Malta (801), Iceland (179) and Liechtenstein (83).

In week 34, 2022, in the EU/EEA overall, the reported weekly cases decreased by 15.0% compared to the previous week. Overall, all countries except Cyprus, Liechtenstein, Luxembourg, and Portugal reported a decrease in weekly cases. The countries with the highest 14-day notification rates per 100 000 population are: Slovenia (893), Austria (799), Greece (777), Latvia (721), and Germany (586).

At the end of week 34, 2022 (week ending 28 August), the overall notification rate of COVID-19 cases in the EU/EEA decreased by 14% compared to the previous week as part of a six-week decreasing trend, but remained relatively high (339 cases per 100 000 population, corresponding to 9% of the pandemic maximum). A similar decreasing trend was observed for case rates among people aged 65 years and above, reaching 29% of the pandemic maximum for this indicator.

Out of 28 countries with data on hospital or ICU admissions/occupancy up to week 34, three reported an increasing trend in at least one of these indicators compared with the previous week. Current levels of ICU indicators remain low at between 1–23% of the maximum values observed during the pandemic, apart from Iceland reporting over 25% of their maximum value.

Among the 11 countries with an adequate volume of sequencing or genotyping for weeks 32–33 (8 August to 21 August 2022), the estimated distribution of variants of concern (VOC) or variants of interest (VOI) was 99.1% (98.3–100.0% from 11 countries) for BA.4/BA.5; 0.7% (0.2–0.9%, 299 detections from 10 countries) for BA.2; 0.6% (0.2–0.8%, 27 detections from four countries) for BA.2+L452X; and 0.3% (0.0–0.9%, 38 detections from five countries) for BA.2.75.

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

##### EU:

As of week 34, 2022, 163 492 388 cases and 1 148 763 deaths have been reported in the EU.

##### Western Balkans and Turkey:

As of week 34, 2022, the following Western Balkan countries reported COVID-19 cases: Serbia (2 269 421), Bosnia and Herzegovina (395 316), North Macedonia (339 492), Albania (327 153), Montenegro (274 739) and Kosovo\* (271 020).

As of week 34, 2022, the following Western Balkan countries reported COVID-19 deaths: Serbia (16 631), Bosnia and Herzegovina (16 028), North Macedonia (9 473), Albania (3 581), Kosovo\* (3 182) and Montenegro (2 770).

Additionally, as of week 34, 2022, 16 671 848 cases and 100 400 deaths have been reported from Turkey.

\*This designation is without prejudice to positions on status, and is in line with UN Security Council Resolution 1244/1999 and the International Court of Justice Opinion on the Kosovo Declaration of Independence.



As of week 13, 2022, ECDC discontinued the assessment of each country's epidemiological situation using its composite score, mainly due to changes in testing strategies which affected 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](#).

#### **Variant update:**

Since the last report at the round table, no relevant epidemiological updates regarding SARS-CoV-2 VOC have been detected.

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

As of 20 June 2022, ECDC is discontinuing the data collection and publication of the number of COVID-19 cases and deaths worldwide. Please refer to the World Health Organization (WHO) data on COVID-19 and the WHO Weekly Epidemiological and Weekly Operational Updates page for information on the non-EU/EEA countries.

#### **Other news:**

On 31 August 2022, the United States Food and Drug Administration (U.S. FDA) [amended](#) the emergency use authorizations (EUA) of the Moderna and the Pfizer-BioNTech COVID-19 vaccines. The amendment authorises the use of the bivalent vaccines as single booster doses after an interval of at least two months following primary or booster vaccination. The bivalent vaccines, which are referred to as 'updated boosters', contain two messenger RNA (mRNA) components of SARS-CoV-2 virus, one of the original strain of SARS-CoV-2 and the other one in common between the BA.4 and BA.5 lineages of the Omicron variant of SARS-CoV-2. The Moderna vaccine is authorised for use as a single booster dose for individuals aged 18 years and above, while the Pfizer-BioNTech vaccine is authorised for use as a single booster dose for individuals aged 12 years and above.

On 31 August 2022, the Ministry of Health of the Republic of Latvia [announced](#) that from 1 September 2022, educational institutes will resume their operations in person. Extensive testing of all students is not planned, as was the case in the first half of the last school year. Antigen self-test kits will be available in schools, which can be used in cases where a student shows symptoms of COVID-19. In addition, schools have completed the installation of carbon dioxide (CO<sub>2</sub>) monitors which will ensure ventilation in the classrooms, thus reducing the risks of COVID-19 infection and other respiratory diseases.

On 30 August 2022, the Greek Ministry of Education and Religious Affairs [announced](#) that the opening of schools on 12 September 2022 will start with the optional use of protective masks. As a general guideline, a child showing symptoms compatible with COVID-19 should stay home, and a self-test should be performed. For positive cases, the isolation measures applicable to the general population are applicable.

On 25 August 2022, the United States Food and Drug Administration (U.S. FDA) [approved](#) a single-dose vial presentation of the COMIRNATY COVID-19 vaccine developed by BioNTech and Pfizer for individuals aged 12 years or above. According to FDA, the single-dose vials contain one dose of 0.3 mL and must not be diluted before use.

On 29 August 2022, Swissmedic, the Swiss drug regulator, [announced](#) that it has approved the first bivalent COVID-19 booster vaccine in Switzerland. Spikevax Bivalent Original/Omicron (mRNA-1273.214) is the first COVID-19 vaccine containing messenger ribonucleic acid (mRNA) against two coronavirus variants. In trials, a booster dose with this bivalent vaccine demonstrated higher antibody concentrations against the Omicron variants, than a booster dose with Spikevax, the original COVID-19 vaccine from Moderna, with comparable side effects. The booster vaccine will be used in accordance with the official vaccination recommendations by the Federal Commission for Vaccination (FCV) and the Federal Office of Public Health (FOPH).

On 24 August 2022, the Federal Cabinet of Germany approved a [new infection-protection law](#) which will be applicable from 1 October 2022 to 7 April 2023. Under this law, wearing FFP2 masks will be compulsory on long-distance public transport and air travel (medical masks for the 6–14 age group and staff). Wearing masks and testing requirements will be implemented to access hospitals and care facilities. This law also allows the federal states to introduce further measures based on the infection situation in their specific states.

On 26 August 2022, the Public Health Agency of Sweden (Folkhälsomyndigheten) published a [press release](#) recommending that as of 1 September 2022, people aged 65 years and above, and people aged 18 years and above with risk factors for severe COVID-19 illness, will be eligible to receive an additional COVID-19 vaccine dose if more than four months have elapsed since the last dose.

On 25 August 2022, Portugal's Minister of Health declared in a [press conference](#) that the use of face masks is no longer mandatory in pharmacies or on public transport, including in taxis and aeroplanes, but remains so in healthcare facilities and nursing homes.

#### **Public Health Emergency of International Concern (PHEIC):**

On 30 January 2020, the World Health Organization (WHO) declared that the outbreak of COVID-19 constitutes a PHEIC. On 11

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March 2020, the Director-General of [WHO](#) declared the COVID-19 outbreak a pandemic. The [third](#), [fourth](#), [fifth](#), [sixth](#), [seventh](#), [eighth](#), [ninth](#), [tenth](#), [eleventh](#) and [twelfth](#) 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, 11 April 2022, and 8 July 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](#).

## Monkeypox - Multi-country - 2022

Opening date: 3 June 2022

Latest update: 2 September 2022

## Epidemiological summary

### EU/EEA

Since the start of the monkeypox outbreak and as of 1 September 2022, 18 463 confirmed cases of monkeypox (MPX) have been reported from 29 EU/EEA countries: Spain (6 543), France (3 558), Germany (3 480), Netherlands (1 166), Portugal (846), Italy (760), Belgium (706), Austria (271), Denmark (175), Sweden (161), Ireland (144), Poland (130), Norway (82), Hungary (70), Greece (58), Luxembourg (53), Czechia (48), Slovenia (43), Romania (36), Malta (31), Croatia (26), Finland (24), Iceland (12), Slovakia (12), Estonia (10), Cyprus (5), Lithuania (5), Bulgaria (4) and Latvia (4).

Two deaths have been reported from Spain in July 2022, and one death from Belgium in August 2022.

### Western Balkans and Turkey

Since the start of the monkeypox outbreak and as of 1 September 2022, the following Western Balkan countries have reported confirmed cases of monkeypox: Serbia (31), Bosnia and Herzegovina (3) and Montenegro (1). In addition, 11 cases have been reported from Turkey.

A detailed summary and analysis of data reported to TESSy can be found in the [Joint ECDC-WHO Regional Office for Europe Surveillance Bulletin](#), published weekly.

**Public Health Emergency of International Concern (PHEIC):** On 23 July 2022, the Director-General of World Health Organization [declared](#) the global MPX outbreak a Public Health Emergency of International Concern (PHEIC).

## ECDC assessment

Monkeypox (MPX) does not easily spread between people. Human-to-human transmission of MPX occurs through close contact with infectious material from the skin lesions of an infected person, through respiratory droplets in prolonged face-to-face contact, and through fomites.

In the current outbreak in non-endemic countries, cases of MPX are still primarily being identified among groups of men who have sex with men (MSM) aged 18–50 years. Particular sexual practices are very likely to have facilitated – and could further facilitate – the transmission of MPX among MSM groups. Despite the current focus of circulation of the MPX virus (MPXV) among groups of MSM with multiple partners, transmission may occur in other population groups. In the current outbreak, cases have mainly presented with mild to-moderate symptoms. Only a few severe cases (including encephalitis) leading to hospitalisations and two deaths have been reported. The severity of MPX may be higher among young children, pregnant women, and immunocompromised individuals.

Based on ECDC's epidemiological assessment, the likelihood of MPX spreading further in networks of people with multiple sexual partners in the EU/EEA is considered high, and the likelihood of MPX spreading among the broader population is assessed as very low. Although a few severe cases have been reported (including encephalitis), the impact of the disease remains low for most



cases. The overall risk is therefore assessed as moderate for people having multiple sexual partners (including some groups of MSM) and low for the broader population. The risk of establishment of an enzootic cycle in the EU/EEA and spillover events to humans is considered to be low.

Early diagnosis, isolation, effective contact tracing, and vaccination strategies are key to the effective control of this outbreak. It is essential to underpin all response measures with strong risk communication and community engagement efforts, as well as awareness raising and educational activities for health professionals. At this point, mass vaccination for MPX is not required or recommended. Unless contact tracing can successfully identify a high proportion of infected contacts, mathematical modelling results indicate that targeted pre-exposure vaccination (PrEP) of individuals at high risk of exposure would be the most effective strategy to use vaccines to control the outbreak. PrEP vaccination would also be the most efficient strategy when there is less effective tracing. Therefore, prioritising groups of MSM at higher risk of exposure, as well as front-line staff with a risk for occupational exposure, should be considered in developing vaccination strategies. Targeted national vaccination programmes should be implemented within a framework of collaborative research and clinical trial protocols with standardised data collection tools for clinical and outcome data.

To date, the recommendations regarding contact with animals remain unchanged. People infected with MPX should apply common precautionary measures such as avoiding contact with animals during the isolation period. Front-line veterinary care (veterinary clinics and hospitals) should be cautious when dealing with pets that live in a household with people who are infected and should remain alert. People affected by MPX who suspect that their pet shows compatible clinical signs should inform their veterinary practitioner/clinic. If needed, they will alert the relevant national authorities, which will provide advice on the measures to take. More information about MPX in animals is available on [EFSA's website](#).

## Actions

ECDC will continue to monitor this event through surveillance and epidemic intelligence activities and report relevant developments on a regular and ad hoc basis as needed. Multi-lateral meetings between affected countries, the WHO Regional Office for Europe, and ECDC have taken place to share information and coordinate the response. A process in [EpiPulse](#) has been created to allow countries to share information with one another, WHO, and ECDC. Case reporting in TESSy was set up on 2 June 2022. ECDC published a [rapid risk assessment](#) on 23 May 2022, and an [update](#) to the assessment on 8 July 2022. For all the latest updates, visit [ECDC's MPX page](#).

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

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

Opening date: 2 June 2022

Latest update: 2 September 2022

### Epidemiological summary

Since last week's update, and as of 31 August 2022, EU/EEA countries reported 45 human cases of West Nile virus (WNV) infection and five deaths related to WNV infections. Cases were reported by Greece (34), Romania (10) and Hungary (1). Deaths were reported by Greece (4). EU-neighbouring countries reported 24 human cases of WNV infection in Serbia (24) and one death related to WNV infections in Serbia (1).

Since the beginning of the 2022 transmission season and as of 31 August 2022, EU/EEA countries reported 442 human cases of WNV infection in Italy (301), Greece (118), Romania (18), Austria (2), Germany (1), Hungary (1) and Slovakia (1). There were 32 deaths in EU/EEA countries in Italy (20), Greece (11) and Romania (1). EU-neighbouring countries have reported 105 human cases of WNV infection in Serbia (105), as well as seven deaths in Serbia (7).

During the current transmission season, within the reporting countries, human cases of WNV infection were reported from 64 different NUTS-3 or GAUL-1 regions, of which the following regions reported human cases of WNV infection for the first time: Harz in Germany, Pistoia and Lucca in Italy, and Moravicki in Serbia.

Since the beginning of the 2022 transmission season, 27 outbreaks among equids and 117 outbreaks among birds have been reported by EU/EEA countries. Outbreaks among equids have been reported by Italy (22), Hungary (2), Germany (1), Greece (1) and France (1). Outbreaks among birds have been reported by Italy (115), Austria (1) and Germany (1).

**ECDC links:** [West Nile virus infection webpage](#)

**Sources:** TESSy | Animal Disease Information System

## ECDC assessment

During the current transmission season and as of 31 August 2022, the human cases of WNV were reported from countries that had reported WNV infections in previous years.

Two EU/EEA countries and one EU-neighbouring country have reported relatively high numbers of human WNV infection cases so far this year. At this stage in the season, the number of cases in Italy are higher than in the previous three years, and comparable with those observed in the peak epidemic year, 2018. The number of cases and the geographical distribution of cases in Greece are comparable with those observed in the 2010 season and lower than the peak epidemic year, 2018. The number of cases in Serbia are higher than the average of the reported cases per surveillance season in 2012–2021, but lower than the years 2013 and 2018.

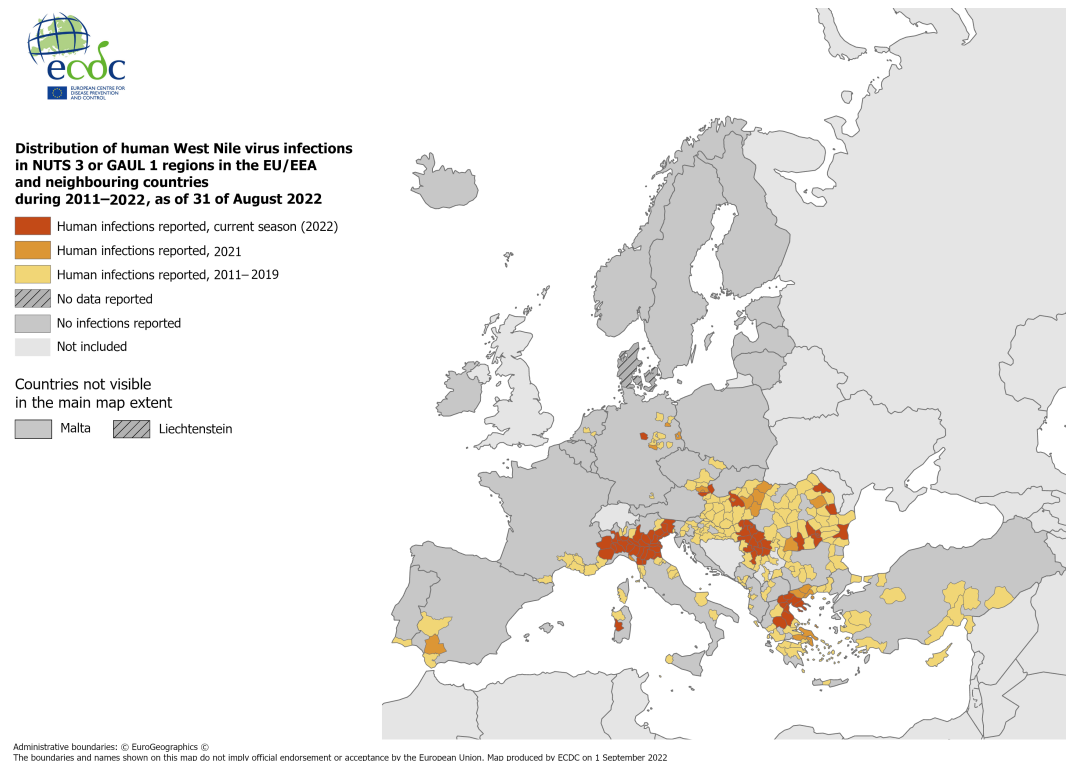
In accordance with [Commission Directive 2014/110/EU](#), prospective blood donors should be deferred for 28 days after leaving a risk area for locally-acquired WNV infection, unless the result of an individual nucleic acid test is negative.

## Actions

During transmission seasons, ECDC publishes a set of WNV transmission maps, a dashboard, and an epidemiological summary every Friday.

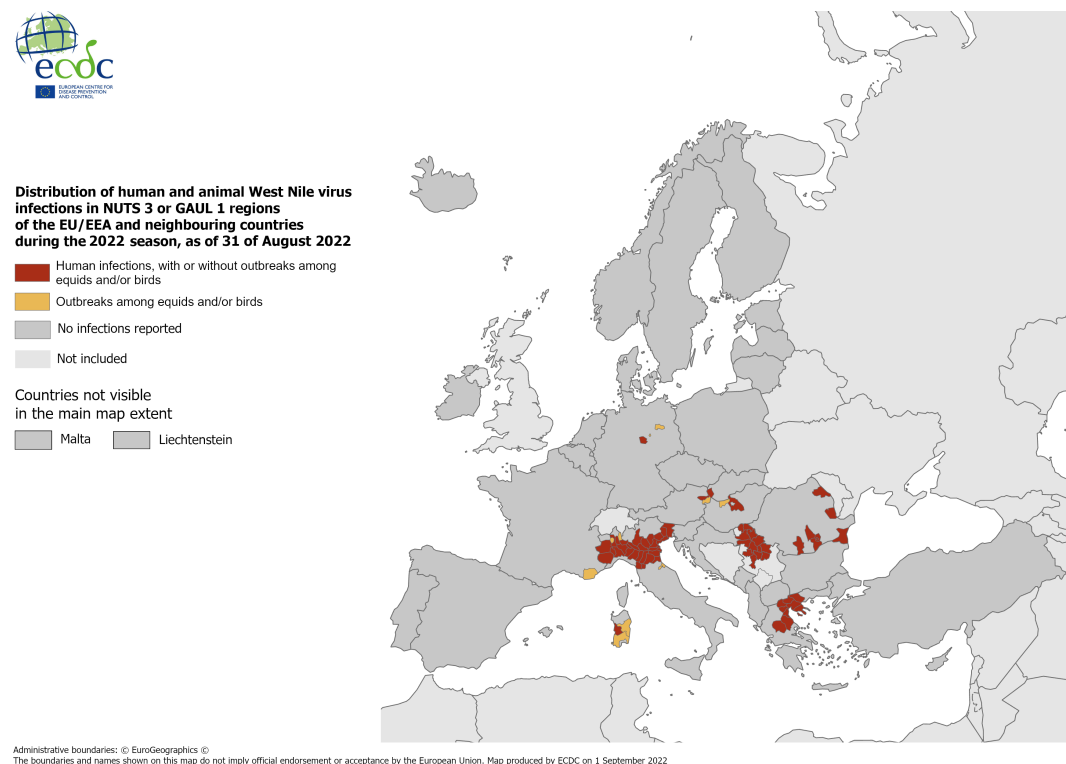
## Distribution of human West Nile virus infections by affected areas as of 31.08.

ECDC



## Distribution of West Nile virus infections among humans and outbreaks among equids and/or birds in the EU as of 31.08.

ECDC and ADIS



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

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Opening date: 13 April 2022

Latest update: 2 September 2022

## Epidemiological summary

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

According to the preliminary results of two case control studies conducted by the [University of Glasgow Centre for Virus Research](#) and [University College London and Great Ormond Street Hospital](#), cases with hepatitis of unknown origin seemed more likely to have an Adeno-associated virus 2 (AAV2) infection compared to controls, indicating its potential implication in the pathology of the disease. The prevalence of adenovirus and human herpesvirus 6B was higher among the cases but numbers were low and/or association was not always statistically significant.

In both studies, analysis of HLA allele positivity showed that class II HLA, particularly HLA DRB 1\*04:01, was more prevalent present among cases than controls and general population.

Overall, neither study provide definitive evidence that adenovirus or AAV2 were directly responsible for the liver damage seen in those cases. There was not enough evidence to rule out the implication of SARS-CoV-2 infection in the disease, but it remains an unlikely cause. The main conclusions drawn by both the research teams are that pandemic restrictions disrupted normal childhood mixing patterns so children were not exposed to AAV2 or AdV infections and that the AdV outbreaks that followed lifting of restrictions, together with AAV2 infection, triggered an immune-mediated hepatitis in genetically susceptible children. However, both studies had limitations and both research teams concluded that further research was needed through larger studies to provide more conclusive evidence.

## ECDC assessment

AAV2 and adenovirus have been detected in a high number of cases and as a result, the current leading hypotheses concern AAV2 and adenovirus involvement, possibly with an immunological cofactor that is triggering a more severe infection or immune-mediated liver damage. The increase in cases that was observed in April and early May, and particularly in the youngest age group, may be affected by the lack of exposure to several pathogens and increased susceptibility to infection due to measures taken to curb the COVID-19 pandemic. Evidence of human-to-human transmission remains unclear. Cases in the EU/EEA are sporadic with a decreasing trend. While the risk for further spread cannot be accurately assessed, cases appear to be declining and since some children have required liver transplantation, the potential impact for the affected paediatric population is considered high. Studies are continuing and should provide greater information on the aetiological factors underlying the cases.

## Actions

ECDC established reporting of case-based data for cases of acute hepatitis of unknown aetiology in TESSy. Results are published monthly in the [Joint ECDC-WHO Regional Office for Europe Surveillance Bulletin](#). The surveillance reporting protocol is available [here](#).

On 25 May 2022, ECDC published a guidance document for [diagnostic testing of hepatitis cases of unknown aetiology in children](#). ECDC has developed a protocol to conduct an exceedance analysis using ICD codes to understand whether or not we have observed an increase in cases of hepatitis of unknown aetiology compared to previous years in EU/EEA countries. Analysis is ongoing with some challenges related to data obtention and comparability. ECDC is working with countries and clinical networks to develop a case control study protocol to determine the underlying aetiology. When finalised, it will be shared with countries to allow them to adapt it to the national context and conduct a study at national or hospital level. ECDC continues to monitor the situation through its routine epidemic intelligence activities.

It is also essential to review available data sources to determine whether the number of cases reported are above what would be expected. ECDC is requesting countries to review ICD codes from hospital discharge data and has shared draft guidance with countries for feedback. The final guidance will be published in the near future.

An [EpiPulse item](#) is available to EU Member States to inform and facilitate communication between Member States and ECDC. Member States should report cases in TESSy and updates on their investigations in EpiPulse, for example, as regards detection of adenovirus circulation.

On 28 April 2022, ECDC published a [rapid risk assessment](#). On 19 May 2022, ECDC published an epidemiological update on hepatitis of unknown aetiology in children, available on ECDC's [website](#).

ECDC will continue to work in collaboration with the affected countries, WHO, and other partner organisations. ECDC will also continue to monitor the situation through routine epidemic intelligence activities and report significant events in the weekly Communicable Disease Threat Report.

## Monitoring environmental suitability of *Vibrio* growth in the Baltic Sea - Summer 2022

Opening date: 30 June 2022

Latest update: 2 September 2022

### Epidemiological summary

As of 30 August 2022, the environmental suitability for *Vibrio* growth in the Baltic Sea was identified as generally very-low-to-low. However, it was medium-to-high in Gulf of Riga (Latvia and Estonia), Gdansk Basin (Poland), Szczecin (Poland) and Mecklenburg-Western Pomerania (Germany).

For the next five days, the environmental suitability for *Vibrio* growth in the Baltic Sea is considered to be very-low-to-low.

Outside of EU/EEA countries, the environmental suitability for *Vibrio* growth in the Baltic Sea was identified as medium-to-high and is expected to be very-low-to-low for the next five days.

Since May 2022, and as of 1 September 2022, four human cases of locally-acquired vibriosis have been reported in [Sweden](#).

Since May 2022, and as of 1 September 2022, eight human cases of locally-acquired vibriosis have been reported in [Norway](#).

On 18 July 2022, the [Estonian Health Board](#) reported that there have been two or three cases of vibriosis in Estonia during summer. All of the cases were children under one year old.

On 21 July 2022, the [State Office for Health and Social Affairs of Mecklenburg-Western Pomerania](#) (Germany) reported that there have been three cases of vibriosis in the region in 2022.

**Source:** [ECDC Vibrio Map Viewer](#)

### ECDC assessment

Elevated sea surface temperature (SST) in marine environments with low salt content offer ideal environmental growth conditions for certain *Vibrio* species. These conditions can be found during the summer months in estuaries and enclosed water bodies with moderate salinity. Open-ocean environments do not offer appropriate growth conditions for these bacteria due to high salt content, low temperatures, and limited nutrient content.

These *Vibrio* species can cause vibriosis (non-cholera), particularly species such as *V. parahaemolyticus*, *V. vulnificus* and non-toxicogenic *V. cholera*. In the past, vibriosis in humans in the Baltic Region had occurred during hot summer months, particularly when SSTs were elevated (above 20 degrees Celsius).

The most common clinical manifestations are gastroenteritis with nausea, vomiting, and diarrhoea, wound infections when cuts or skin abrasions have been exposed to contaminated seawater, primary septicaemia, and otitis externa.

In addition to contracting vibriosis through contact with natural bodies of water, especially marine or estuarine water, other risk factors for illness include the consumption of shellfish, particularly raw oysters.

### Actions

ECDC is monitoring this threat on a weekly basis throughout the summer of 2022 and reports on increased environmental

suitability for the growth of the *Vibrio* bacteria.

## Poliovirus - United States of America -2022

Opening date: 22 July 2022

Latest update: 2 September 2022

### Epidemiological summary

On 21 July 2022, the New York State Department of Health and the Rockland County Department of Health alerted the public to a case of poliomyelitis in a resident of Rockland County. According to the Global Polio Eradication Initiative (GPEI), this is a case of paralytic polio in an unvaccinated individual. Initial sequencing confirmed by the United States Centers for Disease Control and Prevention (US CDC) indicates that the case is type 2 VDPV. This is indicative of a transmission chain from an individual who received the oral polio vaccine (OPV), which is no longer authorised or administered in the US. The US has only been using the inactivated polio vaccine (IPV) since 2000. This suggests that the virus may have originated in a location outside of the US where OPV is administered, since revertant strains cannot emerge from inactivated vaccines.

On 29 July 2022, the [Global Polio Eradication Initiative](#) reported that the Global Polio Laboratory Network confirmed that the isolate from the US case is genetically linked to two Sabin-like type 2 (SL2) isolates from environmental samples collected in early June 2022 in New York, USA, and greater Jerusalem, Israel. These isolates are also genetically linked to the recently detected VDPV2 environmental samples from London, United Kingdom (UK). [According to the Rockland County Department of Health](#), polio was detectable in wastewater samples collected in June 2022 from the Rockland County Sewer District #1 which may have been from the confirmed case.

On 2 August 2022, the Orange County Government posted a [news item](#) reporting that poliovirus was detected in wastewater samples taken in June and July 2022 from two different locations in Orange County. According to the news item, there have been no confirmed cases of polio infection identified to date in Orange County, but the wastewater analysis reports indicate that the virus is circulating in the community. State and local public health officials have advised medical practitioners to be vigilant about identifying potential cases and increasing vaccination efforts.

Rockland County is recommending vaccination for all non-vaccinated individuals with support from the US CDC. Further investigations are ongoing.

The [vaccine coverage](#) of three doses of poliovirus vaccine in children 2 years of age per county in New York State ranges between 54% and 92%. In Rockland it is estimated at 60%, and 59% in Orange County.

On 12 August 2022, the NYSDOH [announced](#) the presence of polioviruses in sewage, after the analysis of additional environmental samples carried out in New York City recently. According to the press release, the risk of community transmission in the area persists.

**Sources:** [New York State Health Department](#) | [Rockland County Health Department](#) | [GPEI](#) | [CNN](#) | [GPEI map](#)

### ECDC assessment

The risk of additional cases related to this event persists, especially in the areas with low polio vaccine coverage and in population groups with low polio vaccine uptake.

As long as there are non-vaccinated or under-vaccinated population groups in European countries and poliomyelitis is not eradicated globally, the risk of the virus being reintroduced in Europe remains. 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 circulating vaccine-derived poliovirus (cVDPV), due to sub-optimal programme performance and low population immunity, according to the European Regional Certification Commission for Poliomyelitis Eradication (RCC) report from September 2021 assessment, referring to the data of 2020. According to the same report, 11 EU/EEA countries are at an intermediate risk of sustained polio outbreaks.

The continuing circulation of wild poliovirus type 1 (WPV1) in Pakistan and Afghanistan and detection of five WPV1 cases in Mozambique in 2022 genetically linked to a strain from Pakistan show 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 emerges and circulates 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. The EU/EEA countries should review their polio vaccination coverage data and ensure there are no immunity gaps in the population

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and there is capacity to identify virus circulation through well-performing surveillance systems.

ECDC endorses WHO's temporary recommendations for EU/EEA citizens who are residents or long-term visitors (>4 weeks) to countries categorised by WHO as having the potential risk of international spread of polio: an additional dose of poliovirus vaccine should be administered between 4 weeks and 12 months prior to international travel.

For further information on poliomyelitis please see ECDC's [factsheet](#). For information on diagnosing and addressing behavioural barriers to vaccine acceptance, please see ECDC's [publication](#) on increasing vaccine uptake. For communication resources relating to poliomyelitis please see ECDC's [communication toolkit on immunization](#), including polio.

## 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.

## Wild Poliovirus Type 1 (WPV1) – Mozambique – 2022

Opening date: 19 May 2022

Latest update: 2 September 2022

### Epidemiological summary

As of 25 August 2022, five cases of AFP caused by WPV1 have been reported in Mozambique in 2022.

On 18 May 2022, the WHO Regional Office for Africa reported that health authorities in Mozambique had declared an outbreak of WPV1 after the first case of AFP was reported in a child in the Changara district of the north-eastern Tete province. The child experienced the onset of symptoms on 25 March 2022. Genomic sequencing analysis indicated that the case is linked to the imported WPV1 case confirmed in Malawi in February.

Three additional cases were reported in week 30 of 2022 in the same province. Two of these three WPV1 viruses are more closely linked with the WPV1 isolated from the first case, indicating local circulation of WPV1. However, the third WPV1 virus, found in Magoé district (bordering Zimbabwe and Zambia), is an orphan virus which is more closely related to the virus found in Malawi in February 2022. Genetic analysis indicates that there are at least two transmission chains that have co-evolved after the initial introduction of the virus.

On 25 August 2022, one additional case of wild poliovirus type 1 (WPV1) has been reported in the Tete province of Mozambique, the same province where the previous AFP cases due to WPV1 were reported.

These are the first cases of WPV1 reported in Mozambique since 1992. The first case in this outbreak was the second imported case of WPV1 in southern Africa this year, following a case reported in Malawi on 17 February 2022. In response to the detection of the first case in March, Mozambique has implemented three immunisation rounds using bivalent oral polio vaccine (bOPV), and a [fourth](#) campaign is being planned. Nevertheless, vaccine coverage remains suboptimal in Tete province.

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

### ECDC assessment

As long as there are non-vaccinated or under-vaccinated population groups in European countries and poliomyelitis is not eradicated globally, the risk of the virus being reintroduced in Europe remains. 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 circulating vaccine-derived poliovirus (cVDPV), due to sub-optimal programme performance and low population immunity, according to the [European Regional Certification Commission for Poliomyelitis Eradication \(RCC\)](#) report from September 2021 assessment, referring to the data of 2020. According to the same report, 11 EU/EEA countries are at an intermediate risk of sustained polio outbreaks.

The continuing circulation of wild poliovirus type 1 (WPV1) in Pakistan and Afghanistan and detection of five WPV1 cases in Mozambique in 2022 genetically linked to a strain from Pakistan show 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 emerges and circulates 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. The

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EU/EEA countries should review their polio vaccination coverage data and ensure there are no immunity gaps in the population and there is capacity to identify virus circulation through well-performing surveillance systems.

ECDC endorses WHO's temporary recommendations for EU/EEA citizens who are residents or long-term visitors (>4 weeks) to countries categorised by WHO as having the potential risk of international spread of polio: an additional dose of poliovirus vaccine should be administered between 4 weeks and 12 months prior to international travel.

**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.

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