

WEEKLY BULLETIN

Communicable Disease Threats Report

Week 48, 23-29 November 2024

This week's topics

- 1. Severe flood in Eastern Spain 2024
- 2. HIV/AIDS surveillance 2024 2023 data
- 3. Overview of respiratory virus epidemiology in the EU/EEA
- 4. Avian influenza A(H5N1) human case Canada 2024
- 5. Avian influenza A(H5N1) human cases United States 2024
- 6. Detection of avian influenza virus fragments in retail milk United States 2024
- 7. Cholera Multi-country (World) Monitoring global outbreaks Monthly update
- 8. Mpox due to monkeypox virus clade I and II Global outbreak 2024
- 9. Circulating vaccine-derived poliovirus type 2 (cVDPV2) multi-country 2024

Executive summary

Severe flood in Eastern Spain - 2024

- Between 20 and 22 November 2024, public health authorities in the Autonomous Community of Valencia reported one confirmed case of leptospirosis and three confirmed cases of legionellosis associated with the flash flooding in Valencia.
- As of 14 November 2024, the Government of Spain reported 224 confirmed fatalities associated with the flash flooding in the Autonomous Community of Valencia (216), Castilla-La Mancha (7) and Andalusia (1).
- Following flooding, the risk of infectious diseases is not the most serious risk to the health and well-being of
 the flood-affected communities. Several other risks, including disruption to healthcare, environmental hazards
 (e.g. carbon monoxide poisoning, exposure to dangerous chemicals), and psychological stress may have
 acute and long-lasting health effects, resulting in an increase in all-cause mortality in these areas.

HIV/AIDS surveillance 2024 - 2023 data

- HIV continues to impact health and well-being in the EU/EEA countries; 24 731 diagnoses were reported in 2023. This represents a 15.9% decrease since 2014. However, when excluding previously diagnosed cases, the analysis of new HIV diagnoses shows an 11.8% increase compared to 2022, indicating an upward trend in new cases over the past year.
- The HIV epidemic is mainly driven by sexual transmission (92.7%), with 46.7% from sex between men and 46.0% from heterosexual contact. Diagnoses due to heterosexual contact have increased in 2023.
- When excluding cases with an unknown region of origin, the proportion of migrants among all reported HIV diagnoses in EU/EEA countries reporting consistently rose from 47.3% in 2014 to 55.8% in 2023, reflecting a 17.9% increase over this period.
- Late diagnosis (CD4 < 350 cells/mm³) remains too high. In 2023, 52.7% of those newly diagnosed were diagnosed late, the highest proportion ever recorded in the EU/EEA.

High-impact combination prevention remains essential for populations at highest risk of HIV acquisition. This
includes sexual health education, pre-exposure prophylaxis (PrEP), needle and syringe programs (NSP), and
opioid substitution therapy (OST). Equally critical are improved early diagnosis, expanded testing, seamless
linkage to care, and rapid initiation of ART.

Overview of respiratory virus epidemiology in the EU/EEA

- The number of patients presenting to primary care and hospitals for respiratory illness remains at expected levels for this time of year.
- Following a peak in July, the downward trend for SARS-CoV-2 activity in the EU/EEA is gradually continuing in most of the countries that experienced an epidemic wave during the summer. People aged 65 years and above continue to represent the main age group at risk of hospitalisation and severe outcomes due to COVID-19.
- While influenza viruses continue to circulate at low levels overall in the EU/EEA, there is evidence of increased activity in some countries.
- The respiratory syncytial virus (RSV) epidemic has begun in the EU/EEA, with an increase in test positivity observed in some countries and at the EU/EEA level.
- Vaccination is the most effective measure to protect against more severe forms of respiratory viral diseases.
 Vaccination campaigns have started in many EU/EEA countries. People who are eligible for vaccination, particularly those at higher risk of severe outcomes, are encouraged to get vaccinated.

Avian influenza A(H5N1) human case - Canada - 2024

- On 9 November, public health authorities in British Columbia, Canada, issued a press release about a patient who tested positive for avian influenza A(H5N1) virus.
- The source of infection is unknown.
- So far, no additional human cases have been identified.
- To date, there have been no confirmed cases of A(H5N1) infection in humans in the EU/EEA. The risk of
 zoonotic influenza transmission to the general public in EU/EEA is considered low. The risk to those
 occupationally or otherwise exposed to infected animals and their environments is considered low-tomoderate.

Avian influenza A(H5N1) human cases - United States - 2024

- Three new cases of zoonotic avian influenza A(H5) have been reported in California, United States (US). Of these, two adults were exposed to cattle and one child did not report any exposure to possible infected animals.
- As of 22 November 2024, a total of 55 human cases of avian influenza A(H5) have been reported from seven states in the US during 2024, including the three most recent cases. Of these, 32 were individuals exposed to dairy cattle known or presumed to be infected with A(H5N1) and 21 were workers exposed to outbreaks of HPAI A(H5) at poultry farms. Two people had no known animal exposure.
- According to the United States Centers for Disease Control and Prevention (US CDC), the risk to the general
 population remains low, while people with exposure to infected poultry, cattle or other potentially infected
 domestic or wild animals have a higher risk of infection.

Detection of avian influenza virus fragments in retail milk - United States - 2024

- On 24 November 2024, the California Department of Public Health (CDPH) issued a warning against drinking a specific batch of raw milk following detection of avian influenza A(H5) virus in a retail sample.
- No disease associated with consumption of affected milk has been reported so far.
- CDPH reiterates that pasteurised milk is safe to drink.

Cholera – Multi-country (World) – Monitoring global outbreaks - Monthly update

- Since 23 October 2024 and as of 25 November 2024, 28 953 new cholera cases, including 257 new deaths, have been reported worldwide. Since 01 January 2024 and as of 25 November 2024, 490 700 cholera cases, including 3 693 deaths, have been reported worldwide.
- New cases have been reported from Afghanistan, Bangladesh, Burundi, Democratic Republic of the Congo, Ethiopia, Ghana, India, Iraq, Malawi, Myanmar, Nigeria, Pakistan, South Sudan, Sudan, Togo, United Republic of Tanzania and Zimbabwe.
- Cholera cases continue to be reported in Africa, Asia, the Americas, and the Middle East. The risk of cholera
 infection in travellers visiting these countries remains low, even though sporadic importation of cases to the
 EU/EEA is possible.

Mpox due to monkeypox virus clade I and II - Global outbreak - 2024

- There have been no significant changes in the epidemiological situation related to the global circulation of monkeypox virus (MPXV) clade I and clade II during the past week.
- Among the countries that had previously reported clade Ib cases in Africa, new cases have been reported this week by the Democratic Republic of Congo (DRC), Burundi, and Uganda.

- Outside Africa, in the last week one MPXV clade I case has been reported from Canada and one from the United Kingdom (UK). Among the countries outside Africa that have reported MPXV clade Ib, secondary transmission has only been reported in the UK in October, among the household contacts of the first case.
- ECDC is closely monitoring and assessing the epidemiological situation and additional related information can
 be found in ECDC's rapid risk assessment published on 16 August 2024 (<u>Risk assessment for the EU/EEA of
 the mpox epidemic caused by monkeypox virus clade I in affected African countries</u>) and its <u>Rapid scientific</u>
 advice on public health measures.

Circulating vaccine-derived poliovirus type 2 (cVDPV2) - multi-country - 2024

- Germany, Spain and Poland have reported detections of circulating vaccine derived polioviruses type 2 (cVDPV2) in wastewater samples.
- No cases of AFP have been reported.
- Public health authorities in these countries have intensified surveillance and efforts to provide recommended vaccinations against poliovirus in accordance with national schedules.
- While there are non-vaccinated or under-vaccinated population groups in European countries and poliomyelitis has not been eradicated globally, the risk of the virus being reintroduced into Europe remains.

1. Severe flood in Eastern Spain - 2024

Overview

Update

Between 20 and 22 November 2024, public health authorities of the Autonomous Community of Valencia <u>reported</u> one confirmed cases of leptospirosis and three <u>confirmed cases</u> of legionellosis associated with the flash flooding in Valencia.

Summary

Between 29 and 30 October 2024, flash flooding after heavy rainfall caused substantial damage across eastern Spain. Floods resulted in casualties and major disruptions in the most affected areas - the Autonomous Community of Valencia and Castilla La-Mancha. Other provinces in the Autonomous Communities of Murcia and Andalusia were also affected. Disruptions to infrastructure were also reported.

Since the flash flooding took place on 29 and 30 October 2024, five cases of leptospirosis have been <u>reported</u>. Of these, two are probable cases detected among volunteers, awaiting confirmatory results. In addition, three cases of legionellosis have also been <u>reported</u>.

Media has also <u>reported</u> cases of carbon monoxide intoxication among volunteers participating in recovery activities. In addition, cases of gastroenteritis have also been reported by the media in Paiporta and Benetússer.

As of 14 November 2024, the Government of Spain has <u>reported</u> 224 confirmed fatalities associated with the flash flooding in the Autonomous Community of Valencia (216), Castilla-La Mancha (7) and Andalusia (1).

Spanish health authorities have <u>issued</u> public health recommendations for the population affected by the flash flooding, as well as for volunteers participating in response activities. In addition, the health authorities have established a <u>surveillance protocol</u> for the timely identification of any outbreaks as a consequence of the flash flooding event.

ECDC assessment

Floods are the most common type of natural disaster in Europe. Flash floods are significant emergencies that are challenging to predict, and result in considerable destruction. Such events have become more common in recent years and are expected to occur more frequently in the future due to climate change. The immediate needs of affected areas in Spain are for rescue operations, evacuations, and the resolution of disruptions to services.

Affected regions may consider setting up syndromic and event-based surveillance systems to rapidly detect and respond to possible outbreaks. Mechanisms to achieve early detection and awareness of disease clusters should be enhanced. Literature suggests that gastrointestinal infections (campylobacteriosis, cryptosporidiosis, *E. coli* infection), leptospirosis, legionellosis and hantavirus infection occurrences have been connected to flooding events.

Measures to prevent outbreaks in the flood-affected communities may include the following:

- Hand and respiratory hygiene and the wearing of face masks, particularly for displaced people housed in shelters.
- Use of appropriate protective equipment for cleaning flooded buildings and other areas.
- Water management plans to minimise the risk of *Legionella* growth.
- Flooded areas in some of the affected regions may need to be monitored and potentially treated to prevent increases in mosquito populations, depending on the average temperatures, (although temperatures are lower in Spain as it enters the colder months).
- Risk communication to the affected communities is a critical part of the response to the flood crisis. Key
 communication areas include hygiene measures, access to safe drinking water, food safety, guidance for safe
 cleaning of flooded areas and prevention of zoonotic and other diseases. Key principles of successful risk
 communication include the identification of a trusted spokesperson and the delivery of clear and actionable
 advice, with messaging tailored to the needs of the affected communities.

Following flooding, the risk of infectious diseases is not the most serious risk to the health and well-being of the flood-affected communities. Several other health risks, including disruption to healthcare, environmental hazards (e.g. carbon monoxide poisoning, exposure to dangerous chemicals), and psychological stress may have acute and long-lasting health effects, resulting in an increase in all-cause mortality in these areas.

The assessment and options for response included in ECDC's 'Rapid Risk Assessment: Extreme rainfall and catastrophic floods in western Europe' from July 2021 remain valid.

Actions

ECDC is following this event through its epidemic intelligence activities and will report when relevant communicable disease events occur. ECDC has reached out to national health authorities in Spain to better understand the situation, including surveillance and response activities, and to offer assistance.

Last time this event was included in the Weekly CDTR: 22 November 2024

2. HIV/AIDS surveillance 2024 - 2023 data

Overview

In 2023, a total of 24 731 HIV diagnoses were reported across 30 EU/EEA countries, resulting in a rate of 5.3 per 100 000 population. Since 2014, this rate has decreased by 15.9%, down from 6.3 per 100 000. When focusing only on new HIV diagnoses —excluding previously positive cases to capture only newly reported ones — the 2023 rate was 3.8 per 100 000, reflecting an 11.8% increase from the 2022 rate of 3.4 per 100 000.

Sex between men was the most reported mode of transmission in the EU/EEA in 2023, accounting for 33.8% (8 367) of all reported diagnoses and 46.7% of cases where the mode of transmission was known. Between 2014 and 2023, the proportion of HIV diagnoses attributed to sex between men declined from 52.1% to 46.9% of all diagnoses in countries reporting consistently. Heterosexual contact remains one of the most common modes of HIV transmission in the EU/EEA, accounting for 33.4% (8254) of all HIV diagnoses and 46.1% of diagnoses with a known mode of transmission. Of these diagnoses, 33.7% (2779) were among people born in the reporting country, while most (62.4%; 5153) were among migrants. Injecting drug use accounts for 4.1% of all reported diagnoses, while mother-to-child transmission accounts for 0.9%. Information regarding mode of transmission was not available for 27.6% of the cases diagnosed in 2023.

In 2023, migrants (defined as people born outside the reporting country) comprised 47.9% of all HIV diagnoses in the EU/EEA. Among the migrant population, 31.6% were from Sub-Saharan Africa, 30.1% from Central and Eastern Europe, 22.8% from Latin America and the Caribbean, 5.1% from Western Europe, 5.1% from South and South-east Asia, and 5.3% from other regions. When excluding cases with an unknown region of origin, the proportion of migrants among all reported HIV diagnoses in EU/EEA countries reporting consistently rose from 47.3% in 2014 to 55.8% in 2023, reflecting a 17.9% increase over this period.

In 2023, 27 EU/EEA countries reported CD4 cell count data at the time of HIV diagnosis (14,795 cases). Among these, 52.7% were classified as late diagnoses (CD4 < 350 cells/mm³) at the time of diagnosis, representing the highest recorded proportion of late diagnoses in the EU/EEA to date. Late diagnosis was higher among women, adults over 40, people who acquired HIV through heterosexual transmission, people who inject drugs and migrants from south and south-east Asia and Sub-Saharan Africa.

In 2023, 2 690 AIDS diagnoses were reported across 26 EU/EEA countries, resulting in a crude rate of 0.7 cases per 100 000 people. Over the past decade, the rate of reported AIDS cases decreased by 36.4%. Pulmonary and/or extrapulmonary tuberculosis (TB) combined made up 13.6% of AIDS-indicative diseases reported in 2023.

ECDC assessment

The rising trend in new HIV diagnoses may be explained by increased migration into and within EU/EEA countries, often from regions with higher HIV prevalence, coupled with expanded HIV testing services.

Interventions to control the epidemic should be based on evidence and adapted to national and local epidemiology, including:

- Expansion of HIV testing. WHO and ECDC recommend innovative approaches to expand the possibilities for HIV testing to key population groups including migrants, both within healthcare settings and in the community using methods such as self-testing and community testing by lay providers (1,2,3).
- 2. Ensure rapid linkage to care and early initiation of antiretroviral therapy (ART) after diagnosis. This will lead to improved health outcomes for individuals receiving treatment and a significant reduction in onward HIV transmission (4,5,6).
- To enhance HIV prevention among migrants, countries should expand access to primary services like condom distribution, sexuality education, and PrEP. Ensuring testing and treatment are available regardless of residency or migration status is crucial, alongside addressing barriers to care and improving health-care access.
- 4. Countries should explore the feasibility of expanding primary HIV prevention services including condom provision programmes and pre-exposure prophylaxis (PrEP) implementation in key populations. To reach a broader population, consider reviewing and expanding the settings where PrEP is available. Integrating PrEP provision with regular testing and facilitating prompt linkage to care can effectively contribute to reducing HIV incidence among MSM and other key populations.
- 5. Heterosexual transmission is increasing in the EU/EEA countries, becoming a significant mode of transmission, with a notable prevalence of late diagnoses in this group. Expanding targeted testing including indicator condition-quided testing, emergency department testing and raising awareness among

- health-care workers to carry out risk-based targeted screening can all improve early HIV detection in this population.
- 6. Countries should expand or maintain comprehensive harm-reduction services, including needle syringe exchange and opioid substitution programs, while ensuring accessible testing for blood-transmitted infections like hepatitis B and C among individuals who inject drugs. This integrated preventive approach is crucial for meeting the Sustainable Development Goal (SDG) for this population by 2030.
- 7. Improved monitoring and surveillance, particularly of previous positive cases and country of birth, is needed to adequately capture and report HIV cases in the context of changing epidemiology.

Actions

ECDC together with partners, will continue to support Member States in their efforts to accelerate progress towards achieving the Sustainable Development Goal 3.3 and UNAIDS targets for HIV through dedicated guidance, workshops, training, webinars, and other technical support focused on high-impact surveillance, monitoring, treatment, and prevention activities.

Further information

For the latest update on HIV surveillance 2024 (2023 data) please see ECDC's webpage.

Last time this event was included in the Weekly CDTR: 01 December 2023

3. Overview of respiratory virus epidemiology in the EU/EEA

Overview

Key indicators

All data presented in this summary are provisional. Interpretation of trends, particularly for the most recent weeks, should consider the impact of possible reporting delays, non-reporting by individual countries or overall low testing volumes at primary care sentinel sites.

- With regard to primary care consultation rates, acute respiratory illness (ARI) activity has been increasing in several countries in recent weeks, with four countries currently reporting low activity and one reporting medium activity. Consultation rates for influenza-like illness (ILI) in primary care have also increased in the past week, with three countries currently reporting low activity and one reporting medium activity. Severe acute respiratory illness (SARI) consultation rates in hospitals remained at baseline levels in most EU/EEA countries. Overall, all syndromic indicators remained at levels comparable to the same time period in previous years.
- SARS-CoV-2 activity in primary care and hospitals continued to decrease at the EU/EEA level, with positivity
 rates lower than, or similar to those observed in 2023 at this time of year. However, the picture remained
 varied at the country level. People aged 65 years and above continued to be those most affected by severe
 COVID-19 disease.
- Seasonal influenza activity remained stable at a low level in most reporting EU/EEA countries.
- As expected, RSV activity has increased compared with the previous week and children aged 0–4 years are those most affected. The seasonal RSV epidemic seems to have begun in the EU/EEA and all countries should be prepared for a continued increase in RSV activity during the coming weeks.

ECDC assessment

RSV activity has increased significantly, marking the start of the seasonal epidemic wave. Although very young children are usually the age group most affected, individuals aged 65 years and above are also at risk and can develop severe disease. Influenza activity in the EU/EEA remains at relatively low levels, but an increase is anticipated in the coming weeks, as is typical for this time of year. SARS-CoV-2 activity continues to decrease but remains elevated in some reporting countries, with individuals aged 65 years and above at greatest risk of severe disease.

Actions

Despite the observed decrease in activity, it remains important to continue monitoring the impact of SARS-CoV-2 at national and regional level. To continue assessing the impact of emerging SARS-CoV-2 sub-lineages, countries should continue to sequence SARS-CoV-2-positive clinical specimens and report to GISAID and/or TESSy.

As the RSV epidemic has begun in the EU/EEA and influenza usually follows shortly afterwards, countries should anticipate increases in activity during the coming weeks, and take into consideration <u>infection prevention and</u> control practices in healthcare settings.

Vaccination is the most effective measure to protect against more severe forms of respiratory viral diseases. Vaccination campaigns have started in many EU/EEA countries and vaccinations efforts should continue. While COVID-19 vaccination continues to protect against severe disease, its effect wanes over time and individuals at higher risk should stay up to date with COVID-19 vaccination, following national recommendations.

Similarly, vaccination against influenza viruses contributes to limiting severe disease outcomes for people at high risk. Healthcare workers and individuals at higher risk should stay up-to-date with influenza vaccination, following national recommendations.

Several countries are now also making vaccination against RSV available for pregnant women and older adults, as well as immunisation with monoclonal antibodies for newborns. For more information, consult the national vaccination and immunisation recommendations made by each country's competent authorities.

ECDC monitors rates of respiratory illness presentation and respiratory virus activity in the EU/EEA, presenting findings in the European Respiratory Virus Surveillance Summary (<u>ERVISS.org</u>). Updated weekly, ERVISS describes the epidemiological and virological situation for respiratory virus infections across the EU/EEA and follows the principles of integrated respiratory virus surveillance outlined in <u>Operational considerations for respiratory virus</u> surveillance in Europe'.

Further information

- Short-term forecasts of ILI and ARI rates in EU/EEA countries are published on ECDC's RespiCast.
- <u>EuroMOMO</u> is a weekly European all-cause mortality monitoring activity, aiming to detect and measure excess deaths related to seasonal influenza, pandemics and other public health threats, based on weekly national mortality statistics from up to 27 reporting European countries or subnational regions.
- WHO <u>recommends</u> that trivalent vaccines for use during the 2024–2025 influenza season in the northern hemisphere contain the following (egg-based and cell culture or recombinant-based vaccines respectively): an A/Victoria/4897/2022 or A/Wisconsin/67/2022 (H1N1)pdm09-like virus (subclade 5a.2a.1); an A/Thailand/8/2022 or A/Massachusetts/18/2022 (H3N2)-like virus (clade 2a.3a.1 (J)); and a B/Austria/1359417/2021 (B/Victoria lineage)-like virus (subclade V1A.3a.2).
- Antigenic characterisation data presented in the WHO 2025 southern hemisphere vaccine composition meeting report indicate that current northern hemisphere vaccine components are well matched to circulating 5a.2a and 5a.2a.1 A(H1N1)pdm09 subclades and V1A.3a.2 B/Victoria subclades. The components also appear well matched for the A(H3N2) 2a.3a.1 (J) clade viruses, but less well matched for some of the more recent subclade 2a.3a.1 (J2) viruses characterised by S145N, N158K or K189R HA substitutions (alone or in combination). The majority of the A(H3N2) viruses identified worldwide since February 2024 belong to the subclade 2a.3a.1 (J2).

Sources: ERVISS

Last time this event was included in the Weekly CDTR: 22 November 2024

Maps and graphs

Figure 1. Overview of key indicators of activity and severity in week 47, 2024

Indicator	Syndrome or	Reporting countries		EU/EEA summary		Comment		
and care	pathogen	Week Week 46 45		Description	Value			
ILI/ARI consultation rates in primary care	ARI	(10	15 rates (11 MEM)	Distribution of country	5 Baseline 4 Low 1 Medium	Overall, ARI activity remained at levels comparable to the same time period in previous years. Five countries have reported ARI activity above the baseline level this week: Bulgaria, Czechia, Estonia, Germany and Lithuania.		
	ILI	(17	21 rates (19 MEM)	MEM categories	13 Baseline 3 Low 1 Medium	Overall, ILI activity remained at levels comparable to the same time period in previous years. Four countries have reported ILI activity above the baseline level this week: Denmark, France, Italy and Poland.		
ILI/ARI test positivity in primary care	Influenza	20	21		2.7% (2.2; 0.7–3.5%)	Influenza activity remains low in most EU/EEA countries. Four countries have reported a test positivity rate of ≥ 5%: France 6%, Portugal 9%, Slovakia 11% and Ireland 18%.		
	RSV	18	19	Pooled (median; IQR)	4.5% (1.1; 0-6.4%)	The pooled EU/EEA test positivity rate increased from 3% in W46 to 5% in W47. Five countries reported a test positivity rate of \geq 5%: Spain 5%, Belgium 10%, Netherlands 13%, France 14% and Luxembourg 22%.		
	SARS-CoV-	19	21		5.7% (7.6; 2.3–9.1%)	Following a peak in July 2024, the pooled EU/EEA test positivity rate for SARS-CoV-2 continued to decrease slowly. At national level, the decreasing trend continued in most countries. Four countries reported a test positivity rate above 10%, while eight others reported test positivity rates between 5% and 10%.		
SARI rates in hospitals	SARI	8	9			SARI consultation rates continued to be reported at levels comparable to the same time period in previous years.		
SARI test positivity in hospitals	Influenza	7	7		1.8% (2.7; 1.6–5.3%)	A stable trend of low influenza test positivity continued to be observed at the EU/EEA level. Two countries reported a test positivity rate of ≥ 5%: Romania 6% and Malta 9%.		
	RSV	7	7	Pooled (median; IQR)	4.8% (9.8; 2.4–12%)	As observed in primary care, RSV test positivity increased at the EU/EEA level, with children aged 0–4 years being the most affected. Four countries reported a test positivity rate of ≥5%: Malta 8%, Spain 11%, Romania 12% and Ireland 18%.		
	SARS-CoV-	7	7		11% (4.6; 0.2–11%)	The pooled EU/EEA test positivity rate for SARS-CoV-2 remained stable compared to last week. Non-sentinel indicators of severe disease (hospital admissions, ICU admissions and deaths) remained low at the EU/EEA level, however, two countries (Greece and Lithuania) have reported increased hospitalisations in recent weeks.		
Intensity (country- defined)	Influenza	22	24	Distribution of country qualitative categories	16 Baseline 6 Low			
Geographic spread (country- defined)	Influenza	21	23	Distribution of country qualitative categories	3 No activity 17 Sporadic 1 Local			

Figure 2. ILI/ARI virological surveillance in primary care - pathogen type and subtype distribution

ILI/ARI virological surveillance in primary care – pathogen type and subtype distribution —

O Figure ® Table

Week 47, 2024 Week 40, 2024 – week 47, 2024

	Week 4	Week 40, 2024 - week 47, 2024		
Pathogen	N N	96 ⁸ .	N	76 ^a
Influenza	63	-	377	-
Influenza A	34	54	206	62
A(H1)pdm09	17	59	106	64
A(H3)	12	41	59	36
A (unknown)	5	-	41	-
Influenza B	29	46	125	38
B/Vic	10	100	20	95
B/Yam	0.	0.0	1	5
B (unknown)	19	-	104	-
Influenza untyped	0	0.7	46	0.75
RSV	83	-	234	_
RSV-A	15	44	41	45
RSV-B	19	56	50	55
RSV untyped	49	-	143	-
SARS-CoV-2	106	-	1552	-

OPERCENTAGES Show either the relative proportion of influenza and RSV types (A and B) or influenza A subtypes and influenza B lineages.

Source: ECDC

Figure 3. SARI virological surveillance in hospitals - pathogen type and subtype distribution

 ${\sf SARI\ virological\ surveillance\ in\ hospitals-pathogen\ type\ and\ subtype\ distribution}$

	Week 4	17, 2024	Week 40, 2024 – week 47, 2024	
Pathogen	N	96ª	N	%ª
Influenza	18	-	152	-
Influenza A	8	100	74	87
A(H1)pdm09	2	100	19	76
A(H3)	0	0.0	6	24
A (unknown)	6	-	49	-
Influenza B	0	0.0	11	13
B/Vic	0	-	2	100
B (unknown)	0	-	9	-
Influenza untyped	10	-	67	-
RSV	47	-	218	-
RSV-A	5	83	56	62
RSV-B	1	17	35	38
RSV untyped	41	-	127	-
SARS-CoV-2	108	-	1546	-

^o Percentages show either the relative proportion of influenza and RSV types (A and B) or influenza A subtypes and influenza B lineages.

Figure 4. Genetically characterised influenza virus distribution, weeks 40-47, 2024

Genetically characterised influenza virus distribution, weeks 40-47, 2024

	Subtype distribution		Subclade distribution		
Subtype	N	%	Subclade	N	%
A(H1)pdm09	55	59	5a.2a	51	93
			5a.2a.1	4	7
A(H3)	30	32	2a.3a.1	30	100
B/Vic	8	9	V1A.3a.2	8	100

Source: ECDC

Figure 5. SARS-CoV-2 variant distribution, weeks 45-46, 2024

SARS-CoV-2 variant distribution, weeks 45-46, 2024

Variant	Classificationa	Reporting countries	Detections	Distribution (median and IQR)
KP.3	VOI	7	249	52% (49-61%)
BA.2.86	VOI	6	42	9% (6-10%)

^o For information on SARS-CoV-2 variants classification, including information on variants under monitoring (VUMs), visit <u>ECDC's variant page</u>.

Source: ECDC

Figure 6. ILI/ARI virological surveillance in hospitals - weekly test positivity

ILI/ARI virological surveillance in primary care - weekly test positivity

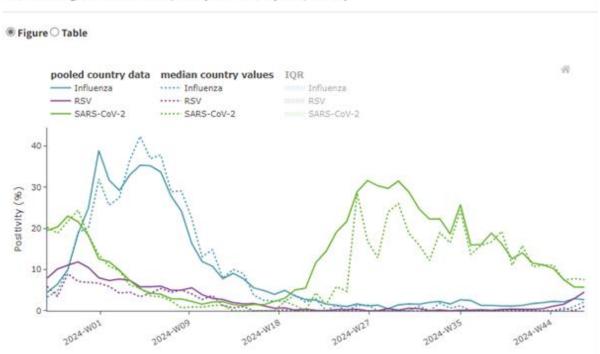


Figure 7. SARI virological surveillance in hospitals - weekly test positivity

SARI virological surveillance in hospitals - weekly test positivity ® Figure ○ Table 삵 pooled country data median country values IQR - Influenza ····· Influenza Influenza ----- RSV - RSV man RSV SARS-CoV-2 - SARS-CoV-2 ····· SARS-CoV-2 40-30 Positivity (%) 10 2024-1109 2024-W35 2024-W4A 2024-W01 2024-W18 2024-W27

4. Avian influenza A(H5N1) human case — Canada — 2024

Overview

Update: On the 16 November the British Columbia Centre for Disease Control (BCCDC) uploaded to GISAID the viral genome collected from the infected individual. The genome contains an E627K mutation in the PB2 gene, which is associated with mammalian adaptation and enhanced replication. This mutation has previously been observed in other human and mammal infections. Notably, the E627K is absent in sequences provided by the Canadian Food Inspection Agency (CFIA) from the H5N1 viruses linked to the ongoing outbreaks in birds in B.C. Additionally to the mutation in the PB2 gene, two amino acid substitutions have been noted as minority variants in the gene encoding the haemagglutinin (HA) glycoprotein in the positions 190 and 226.

No mutations associated with resistance to oseltamivir, zanamivir, balaxovir, or amantadine were identified in the viral sequence. The NML is also conducting an analysis of the virus relatedness to existing A(H5N1) candidate vaccine viruses. Further genomics testing and analyses are underway between the BCCDC and the NML teams.

Background: On November 9, public health authorities in British Columbia (BC) issued a <u>press release</u> reporting on an individual in BC who had tested presumptive positive for avian influenza A(H5) virus, the first locally acquired case of avian influenza due to the A(H5N1) virus in a person in Canada. The individual is a teenager from the Fraser Health region receiving care at BC Children's Hospital.

The only other occasion of human infection due to A(H5) virus was in 2014, when a Canadian resident died of avian influenza A(H5N1) after returning from a trip to China. Recently, outbreaks of highly pathogenic avian influenza subtype A(H5N1) have been <u>notified</u> in poultry in BC by the animal health authorities. There have been increasing detections of A(H5N1) in poultry and wild birds in the province since early October.

On 13 November 2024, the Public Health Agency of Canada (PHAC) published a <u>risk assessment</u> providing additional information on the recently reported case of H5. The PHAC confirmed that the teenager is the first locally acquired human case of avian influenza A(H5N1). PHAC's National Microbiology Laboratory confirmed via genomic sequencing that the virus is related to the avian influenza H5N1 viruses from the ongoing outbreak in poultry in British Columbia (Influenza A (H5N1), clade 2.3.4.4b, genotype D.1.1). The clade of H5N1 avian influenza in dairy cattle in the United States is not the same as the clade confirmed in the domestically acquired human case in British Columbia. The individual's exposure to the virus is yet to be determined. To date, there is no evidence of infection with A(H5N1) in dairy cattle or viral detection in milk in Canada.

The case was detected via hospital-based influenza surveillance. According to media quoting public health authorities the patient, a teen with no underlying conditions, presented to the emergency room on 2 November with conjunctivitis, fever, and cough. On 8 November, the patient's status deteriorated and was admitted due to acute respiratory distress. Intravenous antivirals were administered. Local public health authorities are undertaking contact tracing activities and so far no further cases have been identified. Thirty-six contacts were identified but tested negative, prophylaxis with oseltamivir was offered to the contacts.

ECDC assessment

To date, there have been no confirmed cases of A(H5N1) infection in humans in the EU/EEA. ECDC assesses the risk from the circulating HPAI A(H5N1) clade 2.3.4.4b viruses in the EU/EEA as low for the general population and low-to-moderate for those with activities that expose them to infected or dead animals or a contaminated environment (e.g. occupational exposure to infected animals).

According to the Public Health Agency of Canada, the risk of avian influenza for the general public remains low at this time. The risk of avian influenza is higher for those who have unprotected exposure to infected animals.

Actions

ECDC is monitoring the situation together with partner organisations in Europe and public health authorities in Canada and through epidemic intelligence activities. ECDC will continue to update its assessment of the risk for humans in the EU/EEA as new information becomes available.

Further information:

In addition to enhanced surveillance, active monitoring and testing of exposed individuals is recommended for early detection of human cases and to assess the possibility of human-to-human transmission, according to the relevant ECDC guidance documents (<u>Testing and detection of zoonotic influenza virus infections in humans;</u> <u>Investigation protocol of human cases of avian influenza virus;</u> <u>Surveillance and targeted testing for the early detection of zoonotic influenza in humans during the winter period in the EU/EEA).</u>

Raising awareness – including about the need to enquire about animal exposure and symptoms compatible with avian influenza infections and testing of symptomatic people with a history of exposure following a risk-based approach – among healthcare workers and communicating on the epidemiological situation is important in order to not miss or delay diagnosis of potential human cases. Given the uncertainties related to mammal-to-mammal transmission and depending on the epidemiological situation, a low threshold can be considered for testing individuals exposed to potentially infected mammals (e.g. symptomatic individuals with conjunctivitis or respiratory symptoms). Due to the higher risk of infection for individuals exposed to infected animals and contaminated environments, appropriate personal protective measures and other precautionary measures should always be taken to mitigate the risk.

Sources: Relevant ECDC publications: | Testing and detection of zoonotic influenza virus infections in humans in the EU/EEA, and occupational safety and health measures for those exposed at work | Investigation protocol of human cases of avian influenza virus infections in the EU/EEA | Surveillance and targeted testing for the early detection of zoonotic influenza in humans during the winter period in the EU/EEA | Joint ECDC-EFSA Drivers for a pandemic due to avian influenza and options for One Health mitigation measures | Avian influenza overview June—September 2024 | Other sources: | Detections of highly pathogenic avian influenza in Canada - inspection.canada.ca | Canadian teen with suspected avian flu in critical condition | CIDRAP | Event Information Site for IHR National Focal Points

Last time this event was included in the Weekly CDTR: 15 November 2024

5. Avian influenza A(H5N1) human cases — United States — 2024

Overview

Update: On 22 November 2024, the US CDC reported three new human cases of avian influenza A(H5) (CDC, Bird Flu Response Update). All newly reported cases occurred in California, and for two of them exposure to infected dairy cattle was reported, while for one case, a child, there was no exposure to possibly infected animals reported. This is the <u>first reported</u> avian influenza A(H5) virus infection in a child in the United States. The child reportedly experienced mild symptoms and received antiviral treatment for influenza. There were low levels of viral material detected in the initial specimen collected, and follow-up testing of the child several days later was negative for avian influenza A(H5), but positive for other common respiratory viruses. The child is now recovering. An investigation by the California Department of Public Health (CDPH) into the child's possible A(H5N1) exposure source is ongoing.

During CDPH's investigation, all household members reported having symptoms and specimens were collected from them. All test results from members of the household were negative for avian influenza A(H5) virus, and some family members were positive for the same common respiratory viruses as the child. Contact tracing continues, but there is currently no evidence of person-to-person spread of A(H5N1) virus from this child to others. To date, there has been no person-to-person spread identified in connection with any of the zoonotic avian influenza A(H5N1) cases reported in the United States.

Background: In 2024 and as of 15 November 2024, 55 human cases of avian influenza A(H5N1) have been confirmed by the US CDC from seven states. Thirty-two of the cases reported exposure to cattle in the following states: California (28), Colorado (1), Michigan (2) and Texas (1). Twenty-one cases reported exposure to poultry in the following states: Colorado (9), Oregon (1) and Washington (11). In addition, two cases have been identified with unknown exposure: one in Missouri and one in California.

The US CDC's current assessment of the human health risk of A(H5N1) to the general public in the US has not changed and continues to be considered low.

ECDC assessment

To date, there have been no confirmed human cases of influenza A(H5N1) infection and no reports of A(H5N1) infection in cattle in the EU/EEA. The genotype B3.13, identified in cattle and several of the human cases in the US, has not been detected in Europe.

ECDC has assessed the risk from the circulating HPAI A(H5N1) clade 2.3.4.4b viruses as low for the general population and low-to-moderate for those with activities that expose them to infected or dead animals or contaminated environments (e.g. occupational exposure to infected animals).

Actions

ECDC is monitoring the situation together with partner organisations in Europe and will continue to update its assessment of the risk for humans in the EU/EEA as new information becomes available.

In addition to enhanced surveillance, active monitoring and testing of exposed individuals is recommended for early detection of human cases and to assess the possibility of human-to-human transmission, according to the relevant ECDC guidance documents (<u>Testing and detection of zoonotic influenza virus infections in humans</u>; <u>Investigation protocol of human cases of avian influenza virus</u>; <u>Enhanced surveillance of severe avian influenza virus infections in hospital settings</u>).

Raising awareness – including awareness among all primary care workers of the need to enquire about animal exposure and symptoms compatible with avian influenza infections and testing of symptomatic people with a history of exposure, following a risk-based approach. It is also important to communicate on the epidemiological situation in order to not miss or delay diagnosis of potential human cases.

Given the uncertainties related to mammal-to-mammal transmission and depending on the epidemiological situation, a low threshold can be considered for testing individuals exposed to potentially infected mammals (e.g. symptomatic individuals with conjunctivitis or respiratory symptoms). Due to the higher risk of infection for individuals exposed to infected animals and contaminated environments, appropriate personal protective measures and other precautionary measures should always be taken to mitigate the risk.

ECDC relevant publications:

- Testing and detection of zoonotic influenza virus infections in humans in the EU/EEA, and occupational safety and health measures for those exposed at work
- Investigation protocol of human cases of avian influenza virus infections in the EU/EEA
- <u>Surveillance and targeted testing for the early detection of zoonotic influenza in humans during the winter</u> period in the EU/EEA
- Joint ECDC-EFSA Drivers for a pandemic due to avian influenza and options for One Health mitigation measures

ECDC is in contact with the US CDC for further information and is closely following any updates on the event. ECDC monitors avian influenza strains through its influenza surveillance programme and epidemic intelligence activities in collaboration with the European Food Safety Authority (EFSA) and the EU Reference Laboratory for Avian Influenza in order to identify significant changes in the virological characteristics and epidemiology of the virus. Together with EFSA and the EU Reference Laboratory for Avian Influenza, ECDC produces a quarterly updated report on the avian influenza situation.

Sources: FAO | 2024-e000168 | Event Information Site for IHR National Focal Points

Last time this event was included in the Weekly CDTR: 22 November 2024

6. Detection of avian influenza virus fragments in retail milk - United States - 2024

Overview

On 24 November 2024, the CDPH reported the detection of avian influenza A(H5) virus in a single batch of cream top whole raw milk, produced in Fresno County in California, US (<u>CDPH Warns Against Drinking Single Lot of Raw Milk Following Bird Flu Detection</u>; <u>H5N1 bird flu | Public Health | County of Santa Clara</u>). No additional details on diagnostic tests performed are available at the moment. The farm which produced the affected milk has issued a voluntary recall of the product.

No illness associated with consumption of affected milk has been reported. CDPH has warned against consuming the affected batch of raw milk and is notifying retailers to remove the affected batch from shelves. CDPH has also reiterated that pasteurised milk and milk products are safe to consume as the heating process kills avian influenza.

ECDC assessment

The detection of viral material and/or avian influenza virus in unpasteurised milk is not unexpected in the context of the ongoing outbreaks in multiple cattle herds in California, USA. It is currently unclear if consumption of contaminated raw milk can cause the disease in humans. Standard temperatures used for pasteurisation of milk are expected to inactivate viruses, including the avian influenza virus.

Actions

ECDC is monitoring this event through epidemic intelligence activities and is in contact with its partners.

7. Cholera – Multi-country (World) – Monitoring global outbreaks - Monthly update

Overview:

Data presented in this report originate from several sources, both official public health authorities and non-official sources, such as the media. Case definitions, testing strategies, and surveillance systems vary between countries. In addition, data completeness and levels of under-reporting vary between countries. All data should therefore be interpreted with caution. For details on the epidemiological situation and more information regarding the case definitions in use, refer to the original sources.

Summary

Since 23 October 2024 and as of 25 November 2024, 28 953 new cholera cases, including 257 new deaths, have been reported worldwide.

New cases have been reported from Afghanistan, Burundi, Democratic Republic of the Congo, Ethiopia, Ghana, Iraq, Malawi, South Sudan, Sudan, Togo, United Republic of Tanzania and Zimbabwe.

The five countries reporting most cases are Afghanistan (11 172), Sudan (9 282), Democratic Republic of the Congo (3 418), United Republic of Tanzania (1 450) and Burundi (1 438).

New deaths have been reported from Afghanistan, Burundi, Democratic Republic of the Congo, Ethiopia, Ghana, Malawi, South Sudan, Sudan, United Republic of Tanzania and Zimbabwe.

The five countries reporting most new deaths are Sudan (159), Democratic Republic of the Congo (41), United Republic of Tanzania (17), Burundi (9) and Ghana (9).

In addition, 9 302 new cases were reported or collected retrospectively from before 23 October 2024 from Bangladesh, India, Myanmar, Nigeria and Pakistan. New deaths have been reported from India and Nigeria.

Since 1 January 2024 and as of 25 November 2024, 490 700 cholera cases, including 3 693 deaths, have been reported worldwide. In comparison, between 1 January 2023 and 25 November 2023, 822 344 cholera cases, including 4 776 deaths, were reported worldwide.

New cases and new deaths have been reported from:

Africa

<u>Burundi</u>: Since 18 October 2024 and as of 10 November 2024, 1 438 new cases, including nine new deaths have been reported. Since 1 January 2024 and as of 10 November 2024, 2 200 cases, including 12 deaths have been reported. In comparison, in 2023, up to 28 October 2023, 1 227 cases, including nine deaths had been reported.

<u>Democratic Republic of the Congo</u>: Since 6 October 2024 and as of 18 November 2024, 3 418 new cases, including 41 new deaths have been reported. Since 1 January 2024 and as of 18 November 2024, 28 618 cases, including 385 deaths have been reported. In comparison, in 2023, up to 28 October 2023, 36 084 cases, including 230 deaths had been reported.

Ethiopia: Since 12 October 2024 and as of 26 October 2024, 143 new cases, including five new deaths have been reported. Since 1 January 2024 and as of 26 October 2024, 25 383 cases, including 245 deaths have been reported. In comparison, in 2023 up to 28 October 2023, 24 559 cases, including 321 deaths, had been reported.

<u>Ghana</u>: Since 18 October 2024 and as of 18 November 2024, 1 240 new cases, including nine new deaths have been reported. Since 1 January 2024 and as of 18 November 2024, 1 342 cases, including 10 deaths have been reported. In comparison, in 2023, up to 25 November 2023, no cases had been reported.

<u>Malawi</u>: Since 16 June 2024 and as of 18 November 2024, 94 new cases, including six new deaths have been reported. Since 1 January 2024 and as of 18 November 2024, 355 cases, including nine deaths have been reported. In comparison, in 2023, up to 28 October 2023, 42 971 cases, including 1 261 deaths had been reported.

Nigeria: Since 23 August 2024 and as of 6 October 2024, 4 886 new cases, including 183 new deaths have been reported. Since 1 January 2024 and as of 6 October 2024, 10 837 cases, including 359 deaths have been reported. In comparison, in 2023, up to 28 October 2023, 2 860 cases, including 84 deaths had been reported.

<u>South Sudan</u>: Since 16 May 2023 and as of 18 November 2024, 114 new cases, including two new deaths have been reported. Since 1 January 2024 and as of 18 November 2024, 114 cases, including two deaths have been reported. In comparison, in 2023, up to 16 May 2023, 1 471 cases, including two deaths had been reported.

<u>Sudan</u>: Since 18 October 2024 and as of 18 November 2024, 9 282 new cases, including 159 new deaths have been reported. Since 1 January 2024 and as of 18 November 2024, 35 675 cases, including 794 deaths have been reported. In comparison, in 2023, up to 28 October 2023, 1 535 cases, including 64 deaths, had been reported.

<u>Togo</u>: Since 18 October 2024 and as of 26 October 2024, three new cases have been reported. Since 1 January 2024 and as of 26 October 2024, 32 cases, including three deaths have been reported. In comparison, in 2023, up to 25 November 2023, no cases had been reported.

<u>United Republic of Tanzania</u>: Since 30 September 2024 and as of 3 November 2024, 1 450 new cases, including 17 new deaths have been reported. Since 1 January 2024 and as of 3 November 2024, 7 248 cases, including 114 deaths have been reported. In comparison, in 2023, up to 30 July 2023, 87 cases, including three deaths had been reported.

<u>Zimbabwe</u>: Since 6 July 2024 and as of 18 November 2024, 51 new cases, including one new death has been reported. Since 1 January 2024 and as of 18 November 2024, 19 463 cases, including 387 deaths have been reported. In comparison, in 2023, up to 28 October 2023, 5 495 cases, including 151 deaths, had been reported.

Asia

Afghanistan: Since 12 October 2024 and as of 9 November 2024, 11 172 new cases, including eight new deaths have been reported. Since 1 January 2024 and as of 9 November 2024, 160 794 cases, including 80 deaths have been reported. In comparison, in 2023, up to 25 November 2023, 209 805 cases, including 93 deaths, had been reported.

<u>Bangladesh</u>: Since 7 October 2024 and as of 21 October 2024, 23 new cases have been reported. Since 1 January 2024 and as of 21 October 2024, 278 cases have been reported. In comparison, in 2023, up to 28 October 2023, 111 510 cases had been reported.

<u>India</u>: Since 22 July 2024 and as of 29 July 2024, 816 new cases, including three new deaths have been reported. Since 1 January 2024 and as of 29 July 2024, 8 519 cases, including 43 deaths, have been reported. In comparison, in 2023, up to 19 November 2023, 11 253 cases had been reported.

<u>Iraq</u>: Since 19 August 2024 and as of 28 October 2024, 548 new cases have been reported. Since 1 January 2024 and as of 28 October 2024, 556 cases have been reported. In comparison, in 2023, up to 31 August 2023, 92 cases, including one death, had been reported.

Myanmar: Since 7 October 2024 and as of 21 October 2024, 155 new cases have been reported. Since 1 January 2024 and as of 21 October 2024, 6 052 cases have been reported. In comparison, in 2023, up to 25 November 2023, no cases had been reported.

<u>Pakistan</u>: Since 23 September 2024 and as of 7 October 2024, 3 422 new cases have been reported. Since 1 January 2024 and as of 7 October 2024, 65 995 cases have been reported. In comparison, in 2023, up to 20 August 2023, 12 460 cases had been reported.

ECDC assessment

Cholera cases have continued to be reported in Africa and Asia in recent months. Cholera outbreaks have also been reported in parts of the Middle East and the Americas.

In this context, although the risk of cholera infection for travellers visiting these countries remains low, sporadic importation of cases to the EU/EEA is possible.

In 2022, 29 cases were reported by nine EU/EEA countries, while two were reported in 2021 and none in 2020. In 2019, 25 cases were reported in EU/EEA countries. All cases had a travel history to cholera-affected areas.

According to the World Health Organization (WHO), vaccination should be considered for travellers at higher risk, such as emergency and relief workers who may 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. Such measures 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 continues to monitor cholera outbreaks globally through its epidemic intelligence activities in order to identify significant changes in epidemiology and provide timely updates to public health authorities. Reports are published on a monthly basis. The worldwide overview of cholera outbreaks is available on ECDC's website.

Last time this event was included in the Weekly CDTR: 25 October 2024

Maps and graphs

Figure 1. Geographical distribution of cholera cases reported worldwide from September to November 2024

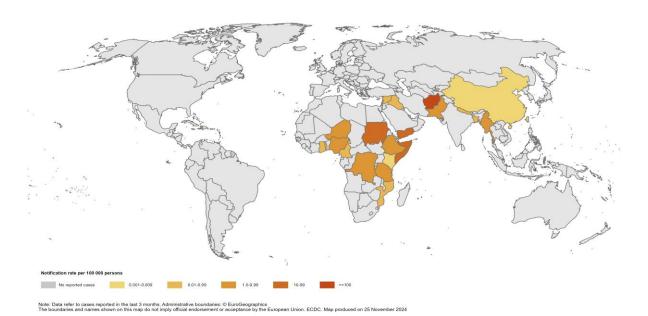
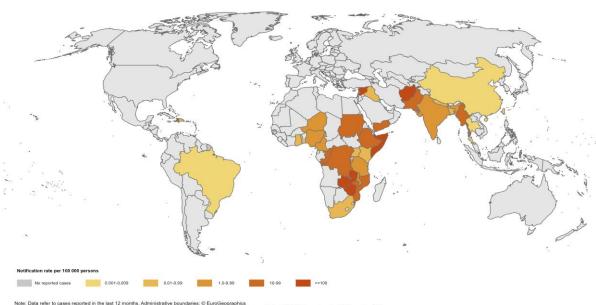


Figure 2. Geographical distribution of cholera cases reported worldwide from December 2023 to November 2024



No. Death field to classes reported in the least 2: International Administratory Doctoraries. The boundaries and names shown on this map do not imply official endorsement or acceptance by the European Union, ECDC. Map produced on 25 November 2024

8. Mpox due to monkeypox virus clade I and II - Global outbreak - 2024

Overview

Global update

There have been no major changes to the global epidemiological trends in mpox during the past week. Globally, MPXV clade I and clade II are circulating in different countries. Global epidemiological data are updated weekly by the World Health Organization (WHO), with the most recent updates from Africa highlighting the recent expansion of clade I cases (2022–24 Mpox (Monkeypox) Outbreak: Global Trends).

On 22 November 2024, the Public Health Agency of Canada (PHAC) reported the first mpox case due to monkeypox virus clade Ib in the country. According to the PHAC statement, the case is travel-associated with the outbreak in central and eastern Africa. The case was reported from Manitoba, sought treatment upon return from travel and is isolating. Investigations and contact tracing are ongoing (Public Health Agency of Canada confirms the first case of clade I mpox in Canada, 22 November 2024).

On 29 November 2024, the UK Health Security Agency (UKSHA) reported one new mpox clade Ib case in Leeds. The case had recently returned from Uganda. This is the fifth mpox clade Ib case reported in the UK in recent weeks. This case has no epidemiological links with previously reported cases, and is the fourth case reported from the same household (<u>Latest update on cases of Clade Ib mpox - GOV.UK</u>).

Mpox due to MPXV clade I outside Africa has been reported by Sweden and Thailand (August 2024), India (September 2024), Germany and the UK (October 2024), and more recently the United States and Canada (November 2024). The travel-associated cases reported by Sweden, Thailand, Germany, the UK, the US and Canada have had a travel history to Africa. The case reported by India had a travel history to the United Arab Emirates. Outside Africa, secondary transmission of mpox due to MPXV clade Ib has only been reported by the UK (in October).

Overall, since monitoring began in 2022 and as of 31 October 2024, 115 101 confirmed mpox cases (MPXV clade I and clade II), including 255 deaths, have been reported from 126 countries (2022–24 Mpox (Monkeypox) Outbreak: Global Trends).

Epidemiological situation in Africa

In 2024, over 59 000 confirmed and suspected mpox cases due to MPXV clade I and clade II, including over 1 160 deaths, have been reported from Africa. This includes over 12 900 confirmed cases, according to the Africa CDC (Special Briefing on Mpox & other Health Emergencies || Nov. 28, 2024). As of 28 November, the number of notified cases in Angola is nine, two of which have been confirmed, although the clade is unknown as yet (Special Briefing on Mpox & other Health Emergencies || Nov. 28, 2024). In addition, mpox has been reported by Burundi, Cameroon, the Central African Republic, the Republic of the Congo (Congo), Cote d'Ivoire, the DRC, Gabon, Ghana, Guinea, Kenya, Liberia, Mauritius, Morocco, Nigeria, Rwanda, South Africa, Uganda, Zambia and Zimbabwe.

The epidemiological situation regarding mpox due to MPXV clade Ib and clade Ia remains similar to the previous week.

With regard to MPX V clade Ib, DRC, Burundi, and Uganda have reported cases in the past week, while there are no updates from Kenya (17 cases and one death in 2024), Rwanda (37 cases in 2024), Zambia (one case in 2024) and Zimbabwe (two cases in 2024).

The DRC continues to report the highest number of mpox cases in Africa and clade Ia and Ib are co-circulating. Overall, according to the data presented by WHO, the decreasing trend in the total number of cases reported by DRC over the last few weeks is continuing (WHO Global report on mpox (data as of 17 November)). The cumulative number of cases notified in 2024 is over 45 800 (9 905 confirmed), including over 1 153 deaths (Special Briefing on Mpox & other Health Emergencies | Nov. 28, 2024).

In Burundi, as of week 46, the cumulative number of cases notified is over 4 900 (2 050 confirmed cases) and one death has also been reported, according to the <u>Special Briefing on Mpox & other Health Emergencies</u> || <u>Nov. 28,</u> 2024. According to the WHO Mpox Multi-country external situation report n. 42, published on 9 November 2024,

mpox cases in Burundi were reported from 43 of 49 districts and the positivity rate among suspected cases is approximately 45%.

In Uganda, where clade Ib has been detected, 101 cases have been reported since 19 November and as of 24 November 2024 (Mpox Daily Situation Report, Uganda, 24 November 2024). Overall, 683 cases and two deaths have been reported in the country from 48 districts since July 2024. Most cases have been reported in the age group 19–30 years and from Kampala (307 cases in total).

Based on an analysis of the patterns of MPXV transmission observed at national level, and given the limitations and uncertainties, ECDC has used official epidemiological information to classify countries according to whether MPXV clade I is endemic or has been reported for the first time in 2024. The categories are as follows:

- Countries reporting only travel-associated cases or cases with a clear link to travel-associated cases: Canada, Germany, India, Sweden, Thailand, the UK, the US, Zambia, Zimbabwe;
- Countries reporting clusters of cases: Congo, Kenya;
- Countries reporting community transmission: Burundi, Central African Republic, the DRC, Rwanda and Uganda.

The classification was last updated on 28 November 2024.

On 13 August 2024, Africa CDC <u>declared</u> mpox a Public Health Emergency of Continental Security. On 14 August 2024, WHO <u>convened</u> a meeting of the IHR Emergency Committee to discuss the mpox upsurge and <u>declared</u> the current outbreak of mpox due to MPXV clade I a public health emergency of international concern.

Epidemiological situation in the EU/EEA for MPXV clade I

Two MPXV clade Ib cases have been reported in the EU/EEA. One case was reported by Sweden in August 2024 and one by Germany in October 2024. Both cases reported having travel history to affected countries. No secondary transmission of clade Ib has been reported in the EU/EEA.

ECDC assessment

The epidemiological situation regarding mpox due to MPXV clade Ib remains similar to the previous week. Canada, Germany, Sweden, Thailand, the UK and the US have detected cases of mpox due to MPXV clade Ib in people with a history of travel to Africa and India has detected MPXV in a person with a history of travel to the United Arab Emirates.

The risk for EU/EEA citizens travelling to or living in the affected areas and having close contact with affected communities is considered moderate, and low if contact with affected communities is avoided. The overall risk for the EU/EEA general population is currently assessed as low. However, more imported mpox cases due to MPXV clade I are likely to be reported by the EU/EEA and other countries. Please see the latest ECDC <u>Risk assessment for the EU/EEA</u> of the mpox epidemic caused by monkeypox virus clade I in affected African countries.

Actions

ECDC is closely monitoring and assessing the evolving epidemiological situation of mpox on a global basis. The Centre's recommendations are available <u>here</u>. ECDC has been supporting the mpox outbreak response in DRC through the deployment of experts since 29 July 2024.

Sources: ECDC rapid risk assessment

Last time this event was included in the Weekly CDTR: 22 November 2024

9. Circulating vaccine-derived poliovirus type 2 (cVDPV2) - multi-country - 2024

Overview

Update:

<u>Germany:</u> On 28 November 2024, the public health authorities in Germany published a <u>press release</u> about several detections of vaccine-derived polioviruses type 2 in wastewater samples from four different cities.

Background

<u>Poland:</u> On 18 November 2024, the public health authorities in Poland published a <u>press release</u> reporting on the presence of poliovirus type 2 in a municipal wastewater sample, taken in Warsaw.

<u>Spain:</u> On 22 September 2024, preliminary results from a regional laboratory in <u>Catalonia</u> identified the presence of cVDPV2 in a wastewater sample collected on mid-September from the Barcelona Metropolitan area. Wastewater monitoring is conducted every two weeks, and the most recent samples analysed in September were negative. The affected wastewater treatment plant receives 36% of the total wastewater from the city metropolitan area and 56% from the city of Barcelona. The sample was sent to the National Poliovirus Reference Laboratory for further analysis and typing, in accordance with the Spanish Polio Eradication Plan.

Additional analysis of the affected wastewater treatment plant and samples has been carried out by the regional laboratory in Catalonia and so far all results have been negative.

ECDC assessment

No cases of paralysis have been reported in any of the countries with environmental cVDPV2 detections.

The WHO European Region, including the EU/EEA, has remained polio-free since 2002. Inactivated polio vaccines are used in all EU/EEA countries.

While there are non-vaccinated or under-vaccinated population groups in European countries and poliomyelitis has not been eradicated globally, the risk of the virus being reintroduced into Europe remains. Two EU/EEA neighbouring countries (Bosnia and Herzegovina and Ukraine) remain at high risk of a sustained polio outbreak following wild poliovirus importation or the emergence of circulating vaccine-derived poliovirus (cVDPV). This is due to suboptimal vaccination programme performance and low population immunity, according to the **European Regional Certification Commission for Poliomyelitis Eradication (RCC)** report published in November 2023, referring to data from 2022. According to the same report, six EU/EEA countries are at intermediate risk of sustained polio outbreaks. The continuing circulation of wild poliovirus type 1 (WPV1) in Pakistan and Afghanistan shows that there is still a risk of the disease being imported into the EU/EEA. The outbreaks of cVDPV that emerge and circulate due to lack of polio immunity in the population also illustrate 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. EU/EEA countries should review their polio vaccination coverage data and ensure that there are no immunity gaps in the population and that 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 of or long-term visitors (>4 weeks) to countries categorised by WHO as having the potential risk of causing international spread of polio: an additional dose of poliovirus vaccine should be administered between four weeks and 12 months prior to international travel. Travellers to areas with active transmission of a wild or vaccine-derived poliovirus should be vaccinated according to their national schedules.

ECDC links: ECDC comment on risk of polio in Europe | ECDC risk assessment

Actions

ECDC is in contact with the affected Member States and WHO. ECDC has posted a <u>news item</u> regarding the recent wastewater detections

Events under active monitoring

- SARS-CoV-2 variant classification last reported on 31 October 2024
- Oropouche virus disease Multi-country (Americas) 2024 last reported on 31 October 2024
- Seasonal surveillance of West Nile virus infections 2024 last reported on 31 October 2024
- Locally-acquired dengue in 2024 in mainland France last reported on 31 October 2024
- Mpox due to monkeypox virus clade I and II Global outbreak 2024 last reported on 31 October 2024
- Marburg virus disease (MVD) Rwanda 2024 last reported on 31 October 2024
- Severe flood in Eastern Spain 2024 last reported on 31 October 2024
- Avian influenza A(H5N1) human cases United States 2024 last reported on 31 October 2024
- Detection of avian influenza virus fragments in retail milk United States 2024 last reported on 29 November 2024
- Avian influenza A(H5N1) human case Canada 2024 last reported on 29 November 2024
- Circulating vaccine-derived poliovirus type 2 (cVDPV2) multi-country 2024 last reported on 29 November 2024
- Cholera Multi-country (World) Monitoring global outbreaks Monthly update last reported on 29 November 2024
- Overview of respiratory virus epidemiology in the EU/EEA last reported on 29 November 2024
- HIV/AIDS surveillance 2024 2023 data last reported on 29 November 2024
- Chikungunya and dengue Multi-country (World) Monitoring global outbreaks Monthly update last reported on 22 November 2024
- Identification of cVDPV2 in a sewage sample Poland 2024 last reported on 22 November 2024
- Locally-acquired dengue infection in Italy 2024 last reported on 15 November 2024
- Multistate outbreak with Salmonella Strathcona in Germany last reported on 15 November 2024
- Measles Multi-country (World) Monitoring European outbreaks monthly monitoring last reported on 15 November 2024
- Mpox in the EU/EEA, Western Balkan countries and Türkiye 2022–2024 last reported on 15 November 2024
- Middle East respiratory syndrome coronavirus (MERS-CoV) Multi-country Monthly update last reported on 08 November 2024
- Mpox due to monkeypox virus clade Ib United Kingdom 2024 last reported on 08 November 2024.