

## WEEKLY BULLETIN

# Communicable Disease Threats Report

Week 21, 18 - 24 May 2024

## This week's topics

1. Overview of respiratory virus epidemiology in the EU/EEA - weekly monitoring
2. Highly pathogenic avian influenza A(H5N1) in cattle and a related human cases – United States – 2024
3. Influenza A(H5N1) – Multi-country (World) – Monitoring human cases
4. Avian influenza A(H5N6) – Multi-country – Monitoring human cases
5. Cholera – Comoros and Mayotte – 2024 – Weekly monitoring
6. Cholera – Multi-country (World) – Monitoring global outbreaks - Monthly update

## Executive summary

### Overview of respiratory virus epidemiology in the EU/EEA - weekly monitoring

- Syndromic surveillance in primary and secondary care indicates that respiratory activity continues to decrease and has returned to baseline levels in the majority of EU/EEA countries.
- **Seasonal influenza activity at the EU/EEA level remained stable at low levels in almost all EU/EEA countries.**
- For nine consecutive weeks, the primary care pooled test positivity at the EU/EEA level has remained below 10%. Similarly, the pooled test positivity in secondary care was below 10% and has been so for eleven weeks.
- Most countries report baseline or low levels of influenza intensity and only one country continues to report widespread geographical spread.
- **SARS-CoV-2 activity remained low in all reporting EU/EEA countries, albeit individual countries showed slight increases in detections from very low levels.**
- Respiratory syncytial virus (RSV) activity remained low in all reporting EU/EEA countries.
- Due to a lower number of countries reporting in the reporting week and the overall low testing volumes in primary care sentinel sites, an assessment of the epidemiological situation for the EU/EEA is increasingly challenging and data should be interpreted with some caution.

**Highly pathogenic avian influenza A(H5N1) in cattle and a related human cases – United States – 2024**

- A second human case of avian influenza A(H5) has been reported in Michigan in a worker at a dairy farm with infected cows.
- The case presented with conjunctivitis and the virus was detected in an eye swab. Nasal swabs were negative.
- So far, routine population-based surveillance has not detected any increase in community rates of respiratory infections.
- The risk assessed by the US-CDC following the detection of this additional case remains unchanged.
- The outbreak of highly pathogenic avian influenza (HPAI) A(H5N1) in cattle is still ongoing in several farms (52 as of 23 May 2024) across nine states of the United States.

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

- On 21 May 2024, Australian authorities reported the first human case of avian influenza A(H5N1) infection in a child with travel history to India.
- No human-to-human transmission associated with this event has been reported.
- Worldwide, 891 human cases of avian influenza A(H5N1), including 463 deaths (case-fatality rate (CFR): 52%), have been reported in 24 countries since 2004.
- The risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered low. The risk to occupationally exposed groups, such as farmers and cullers, is considered low-to-medium.

**Avian influenza A(H5N6) – Multi-country – Monitoring human cases**

- A new case of avian influenza A(H5N6) virus infection in a woman in her 50s was reported in Fujian province, China, with date of onset on 13 April 2023. The patient died on 30 April. She had exposure to backyard poultry before the onset of symptoms.
- Since 2014, 91 cases have been reported in China (90) and Laos (1), of which 36 were fatal (CFR: 40%).
- To date, no instances of human-to-human transmission have been documented.
- The risk of zoonotic influenza transmission to the general public in EU/EEA countries remains very low.

**Cholera – Comoros and Mayotte – 2024 – Weekly monitoring**

- Since 18 March and as of 21 May, 94 cholera cases and one death were reported in Mayotte.
- Given the identification of several autochthonous cases in Mayotte and the continued importation of cases from the ongoing outbreak in Comoros, the likelihood of further community transmission and the overall risk of cholera for the population in Mayotte remains high.
- In Comoros, since the last available update on 16 May and as of 23 May, 925 new cholera cases and five new deaths were reported. As of 23 May 2024, 7 076 confirmed cholera cases and 120 deaths have been reported in the country.

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

- In April 2024, 52 526 new cholera cases, including 529 new deaths, were reported worldwide. Since 1 January 2024 and as of 30 April 2024, 150 866 cholera cases, including 1 775 deaths, have been reported worldwide.
- New cases were reported from Afghanistan, Bangladesh, Brazil, Burundi, Comoros, Democratic Republic of the Congo, Ethiopia, Haiti, India, Kenya, Malawi, Mozambique, Nigeria, Pakistan, Somalia, South Africa, Sudan, Syria, Thailand, United Republic of Tanzania, Yemen, Zambia, and Zimbabwe.
- Cholera cases have continued to be reported in western, eastern and southern Africa, some parts of the Middle East, Asia, and the Americas. The risk of cholera infection in travellers visiting these countries remains low, even though sporadic importation of cases to the EU/EEA is possible.

# 1. Overview of respiratory virus epidemiology in the EU/EEA - weekly monitoring

## Overview:

### Virus characterisation

Influenza for week 40, 2023 to week 20, 2024

- In the above period 3 396 A(H1)pdm09, 1 388 A(H3) and 323 B/Victoria viruses from sentinel and non-sentinel sources were genetically characterised. Of the viruses that have been assigned to a clade:
- 3 389 were A(H1)pdm09 - 2 328 (69%) were subclade 5a.2a and 1 061 (31%) were subclade 5a.2a.1.
- 1 385 were A(H3) - 30 (2%) were subclade 2a, 10 (0.7%) were subclade 2a.3a, 1 344 (97%) were subclade 2a.3a.1 and 1 (0.1%) were subclade 2a.3b.
- 323 were B/Vic - all were subclade V1A.3a.2.

SARS-CoV-2 variants for weeks 18–19 (5 May to 12 May 2024)

- The estimated distribution (median and IQR of proportions from three countries submitting at least 10 sequences) of variants of concern (VOCs) or variants of interest (VOIs) was:
- 96% (95–97%) for BA.2.86 (303 detections from three countries)
- 0.6% (0.3–1%) for XBB.1.5-like (two detections from two countries)

These estimates should be interpreted with caution as they are based on data from only three countries, a result of the very low number of sequences deposited in recent weeks during a period of low SARS-CoV-2 transmission.

### Period overview (week 25, 2023 to week 19, 2024)

Following relatively low respiratory illness transmission over the summer period, consultation rates increased in primary care settings from September 2023. Consultation rates were highest at different timepoints in each country during the winter period, with peak rates reached between week 50, 2023 and week 7, 2024. As of week 20, 2024, consultation rates continued to decrease and have returned to baseline levels in the majority of EU/EEA countries. Transmission of SARS-CoV-2 began increasing in late summer 2023, with clear increases observed at the EU/EEA level up to week 49, and decreases in activity thereafter. Activity is currently low in most EU/EEA countries. Similarly, a steady decrease in severe disease has been observed since week 50, 2023. COVID-19 has predominantly affected individuals aged 65 years and above. Week 50, 2023 marked the start of the seasonal influenza epidemic. A decreasing trend in influenza activity has been observed since week 4, 2024, with a mixed picture at the country level. Compared to trends observed in previous influenza epidemics, seasonal influenza activity decreased earlier this season. Severe disease due to influenza has affected all age groups. Since week 6, 2024, a decrease in the severe disease indicators for seasonal influenza has been observed in most EU/EEA countries. Both influenza type A and type B viruses have been detected, with a dominance of A(H1)pdm09 viruses during the first part of the season. As of week 13, B/Victoria lineage was the most detected virus, although the number of detections was low. RSV activity began increasing around week 41, 2023 reaching a peak in week 50, 2023, followed by a decreasing trend. RSV has had the greatest impact among children aged 0–4 years.

### ECDC assessment:

After marking the start of the seasonal influenza epidemic in the EU/EEA in week 50, 2023, seasonal influenza continued to circulate at higher levels than SARS-CoV-2 and RSV in primary care sentinel systems during week 20, 2024. Influenza activity at the EU/EEA level continues to decrease, and pooled positivity in primary care has been below the 10% positivity threshold for nine consecutive weeks. Even if respiratory virus circulation is decreasing, it is still essential to continue closely monitoring the impact of influenza and other respiratory viruses on hospital and ICU admissions.

### Actions:

ECDC monitors rates of respiratory illness presentation and respiratory virus activity in the EU/EEA, presenting findings in the European Respiratory Virus Surveillance Summary ([ERVISS.org](https://www.erviiss.org)). 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 '[Operational considerations for respiratory virus surveillance in Europe](#)'.

**Further information:**

- Short-term forecasts of influenza-like illness (ILI) and acute respiratory infection (ARI) rates in EU/EEA countries are published on ECDC’s [RespiCast](#).
- [EuroMOMO](#) is a weekly European mortality monitoring activity, aiming to detect and measure excess deaths related to seasonal influenza, pandemics and other public health threats.
- WHO [recommends](#) that trivalent vaccines for use during the 2023–2024 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/Darwin/9/2021 or A/Darwin/6/2021 (H3N2)-like virus (clade 2a); and a B/Austria/1359417/2021 (B/Victoria lineage)-like virus (subclade V1A.3a.2).
- Antigenic characterisation data presented in the WHO [2024-2025 northern hemisphere vaccine composition](#) report indicate 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. While components also appear well matched for 2a.3a A(H3) clade viruses, 2a.3a.1 clade viruses are less well matched. Based on human post-vaccination serology studies, haemagglutination inhibition and virus neutralisation against some recent 2a.3a.1 viruses were significantly reduced for some serum panels.
- ECDC has [published](#) interim influenza vaccine effectiveness (VE) estimates for the 2023–2024 season. Analysis of data submitted from multi-country primary care and hospital study sites between September 2023 and January 2024 indicated that up to 53% and 44% of vaccinated individuals in primary care or hospital settings, respectively, were protected against mild and severe influenza.

Sources: [ERVISS](#)

Last time this event was included in the Weekly CDTR: 17 May 2024

**Maps and graphs**

**Figure 1. Overview of key indicators of activity and severity in week 20**

Indicator	Syndrome or pathogen	Reporting countries		EU/EEA summary		Comment
		Week 20	Week 19	Description	Value	
Primary care consultation rates	ARI	8 rates (7 MEM)	11 rates (9 MEM)	Distribution of country MEM categories	6 Baseline 1 Low	
	ILI	14 rates (14 MEM)	18 rates (18 MEM)	MEM categories	13 Baseline 1 Low	
Primary care sentinel positivity	SARS-CoV-2	11	15	Pooled (median; IQR)	3.6% (0; 0–1%)	Stable trends were observed in the majority of countries, with individual countries showing slight increases in sentinel or non-sentinel detections.
	Influenza	10	14		4.5% (2.5; 1.4–4%)	Decreasing or stable trends were reported in the majority EU/EEA countries. Decreasing or stable trends were also observed in non-sentinel detections.
	RSV	9	14		0.8% (0; 0–0%)	Decreasing or stable trends continue to be observed at country level.
SARI consultation rates	SARI	4	7			Stable or decreasing rates continue to be reported at levels comparable to the same time last year.
SARI positivity	SARS-CoV-2	3	6	Pooled (median; IQR)	4.6% (2.8; 1.4–11%)	Stable trends in most reporting countries were observed.
	Influenza	3	6		6.1% (0; 0–3.6%)	Decreasing or stable trend were observed at a country level.
	RSV	3	5		0.8% (0; 0–0.4%)	Stable trends continue to be observed at a country level.
Intensity (country-defined)	Influenza	17	22	Distribution of country qualitative categories	6 Baseline 10 Low 1 Medium	
Geographic spread (country-defined)	Influenza	16	21	Distribution of country qualitative categories	3 No activity 7 Sporadic 1 Local 4 Regional 1 Widespread	

Source: ECDC

**Figure 2. Type and sub-type distribution and positivity, reporting week and period (week 25, 2023 to week 20, 2024)**

Pathogen or (sub-)type	Primary care sentinel						SARI sentinel						Non-sentinel			
	week 20			Period			week 20			Period			week 20		Period	
	n	%	positivity	n	%	positivity	n	%	positivity	n	%	positivity	n	%	n	%
<b>Influenza</b>	22	100	4.5%	15 110	100	15.5%	8	100	6.1%	7 037	100	12.4%	328	100	167 695	100
Influenza A (total)	4	18	0.8%	13 663	91	14%	2	29	1.5%	2 700	97	4.8%	134	41	152 947	95
A(H1)pdm09	3	(75)		9 021	(79)		1	(50)		1 273	(72)		13	(59)	24 913	(72)
A(H3)	1	(25)		2459	(21)		1	(50)		489	(28)		9	(41)	9 759	(28)
A (unknown)				2 183						938			112		118 275	
Influenza B (total)	18	82	3.7%	1 376	9	1.4%	5	71	3.8%	76	3	0.1%	194	59	7 450	5
B/Vic	10	(100)		761	(100)					3	(100)		10	(100)	1 470	(100)
B (unknown)	8			615			5			73			184		5 980	
Influenza untyped				71		0.1%	1		0.8%	4 261		7.5%			7 298	
<b>RSV</b>	3		0.8%	4 058		5%	1		0.8%	5 003		8.9%	36		64 767	
<b>SARS-CoV-2</b>	13		3.6%	10 435		11.3%	6		4.6%	7 373		12.9%	2648		2 051 811	

Source: ECDC

## 2. Highly pathogenic avian influenza A(H5N1) in cattle and a related human cases – United States – 2024

### Overview:

**Update:** on 22 May 2024, the [US CDC](#) reported a second human infection with avian influenza A(H5) in a farm worker in Michigan, associated with an ongoing multistate outbreak of A(H5N1) in dairy cows. The farm worker was being monitored because of their work exposure to A(H5N1) infected cattle. Similar to the previous human case of HPAI A(H5N1) reported on 1 April 2024 in Texas, the individual displayed conjunctivitis as their only symptom. Two specimens were collected from the dairy farm worker after reporting symptoms of conjunctivitis to the local health authorities. The nasal specimen tested negative, whilst a sample from the eye was confirmed positive for A(H5) at the CDC laboratory. The designation of the influenza virus neuraminidase (the N in the subtype) is pending genetic sequencing at CDC. Attempts to sequence the virus in the clinical specimen are underway.

According to the [CDC report](#), there are no signs of unusual influenza activity in people in affected states.

Highly pathogenic avian influenza (HPAI) A(H5N1) virus has been detected in cattle in several states in the United States. As of 23 May 2024, the [USDA](#) reports the detection of HPAI A(H5N1) in nine states, affecting 52 dairy farms/herds: Michigan (15), Texas (14), New Mexico (8), Idaho (6), Kansas (4), Colorado (2), Ohio (1), North Carolina (1), South Dakota (1). The most recently reported detection was on 20 May 2024 in Texas. Markers of influenza A(H5) have also been detected in wastewater in Texas, United States ([Tisza et al., 2024](#); [Wolfe et al., 2024](#)). Furthermore, cats fed unpasteurised milk and colostrum from affected cows developed systemic, fatal infection ([Burrough et al., 2024](#)).

Genetic material of HPAI A(H5N1) has been detected in milk samples. Studies performed by US FDA have shown that pasteurisation inactivates HPAI in milk and dairy products, with no viable virus being detected following pasteurisation. For further information, please refer to the [US FDA](#) update. Samples of ground beef from states with affected dairy herds tested negative for HPAI A(H5N1) ([USDA](#)).

Previously, on 1 April 2024, a human case of HPAI A(H5N1) was reported in an individual who had prior exposure to dairy cattle presumed to be infected with HPAI A(H5N1) in Texas, USA ([US CDC](#)). The virus isolated from this case belonged to the HA clade 2.3.4.4b of HPAI A(H5N1), genotype B3.13, and was closely related to the virus detected in dairy cattle in Texas.



Genetic analysis revealed some changes in the virus sequence from the patient specimen compared to the viral sequences found in the cattle. The human genome displayed the PB2 E627K mutation, which is associated with viral adaptation to mammalian hosts. However, both the cattle and human sequences remain avian-like (i.e. retain their strong preference for avian and not mammalian receptors). Importantly, there were no markers identified that are known to be associated with resistance to influenza antiviral medications.

### ECDC assessment:

Based on available information, [World Health Organization together with the Food and Agriculture Organization of the United Nations and the World Organisation for Animal Health](#) assessed the overall public health risk posed by A(H5N1) to be low, and for those exposed to infected animals or contaminated environments, the risk of infection is considered low-to-moderate. The [US CDC](#) has also stated that the overall threat of HPAI A(H5N1) clade 2.3.4.4b to the general public in the US remains low. However, individuals with close or prolonged exposure to infected animals or contaminated environments are considered at a greater risk of infection. The [USDA](#) and [US FDA](#) highlight that commercially produced milk is safe for consumers and recommend that milk from cattle with clinical signs of infection is removed from the human food chain.

In the [latest joint ECDC/EFSA/EURL monitoring report](#), ECDC assessed the risk of infection 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 animals or a contaminated environment (e.g. occupationally exposed to infected animals). So far, there have been no confirmed cases of A(H5N1) infection in humans in the EU/EEA. To date, there have been no reports of A(H5N1) infection in cattle in the EU/EEA. The genotype B3.13 identified in cattle and the human case in the US has currently not been detected in Europe. At the present time, the current available evidence does not change the overall assessment of the risk for the EU/EEA population. 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 accordingly as new information becomes available.

Active monitoring and testing of exposed persons is recommended for early detection of human cases and to assess the possibility of human-to-human transmission, in addition to enhanced surveillance, according to the relevant ECDC guidance documents ([Testing and detection of zoonotic influenza virus infections in humans](#); [Investigation protocol of human cases of avian influenza virus](#); [Enhanced surveillance of severe avian influenza virus infections in hospital settings](#)). Given the uncertainties related to mammal-to-mammal transmission and according to the epidemiological situation, a low threshold for testing persons exposed to potentially infected mammals can be considered (for example 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 reduce the risk of infection.

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](#)
- [Enhanced surveillance of severe avian influenza virus infections in hospital settings in the EU/EEA](#).
- [Investigation protocol of human cases of avian influenza virus infections in the EU/EEA](#)
- [Joint ECDC-EFSA Drivers for a pandemic due to avian influenza and options for One Health mitigation measures](#)

### Actions:

ECDC is in contact with US Centers for Disease Control and Prevention for further information and closely follows 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 of the [avian influenza situation](#).

**Last time this event was included in the Weekly CDTR:** 03 May 2024

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

### Overview:

**Update:** On 21 May 2024, Australian health authorities reported the first detection of a human infection with avian influenza A(H5N1) in Victoria. The infection occurred in a child with travel history to India who got sick in March 2024. The virus was detected through enhanced surveillance for novel or concerning strains of influenza virus. The identified virus from the patient belongs to clade 2.3.2.1a (GISAID Isolate ID: EPI\_ISL\_19156871). No new cases have been detected through contact tracing. No further details are provided about exposure history and case severity.

Outbreaks of avian influenza have been reported by [the Agriculture authority in Victoria](#) in two poultry farms in Victoria region with confirmed avian influenza A(H7N3) in a farm near Meredith and A(H7N9) in a farm near Terang. The properties are quarantined and poultry will be safely disposed. These poultry outbreaks are not related to the reported human case, based on a joint outbreak investigation and testing results.

India has recently reported outbreaks with HPAI A(H5N1) in poultry in various states ([WAHIS \(woah.org\)\)](#))

### Summary:

Globally, since 2003 and as of 22 May 2024, there have been 891 human cases\*, including 463 deaths (CFR: 52%), with avian influenza A(H5N1) infection reported in 24 countries. To date, no sustained human-to-human transmission has been detected. In 2024, nine cases, including two deaths, have been reported in four countries, Cambodia (five cases, one death), US (one case), Vietnam (two cases, one death) and Australia (one case).

**\*Note:** this includes six detections due to suspected environmental contamination and no evidence of infection that were reported in 2022 by Spain (2 detections) and the United States (1), as well as in 2023 by the United Kingdom (3).

**Sources:** [Department of Health Victoria](#), [Agriculture Victoria](#), [ECDC Avian influenza](#)

### ECDC assessment:

Sporadic human cases of different avian influenza A(H5Nx) subtypes have previously been reported globally. Current epidemiological and virological evidence suggests that A(H5N1) viruses remain avian-like. Transmission to humans remains a rare event and no sustained transmission between humans has been observed.

Overall, the risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered low. The risk to occupationally exposed groups, such as farmers and cullers, is considered low-to-medium.

Direct contact with infected birds or a contaminated environment is the most likely source of infection, and the use of personal protective measures for people exposed to dead birds or their droppings will minimise the remaining risk. The recent severe cases in Asia and South America in children and people exposed to infected, sick or dead backyard poultry underlines the risk of unprotected contact with infected birds in backyard farm settings. This supports the importance of using appropriate personal protective equipment.

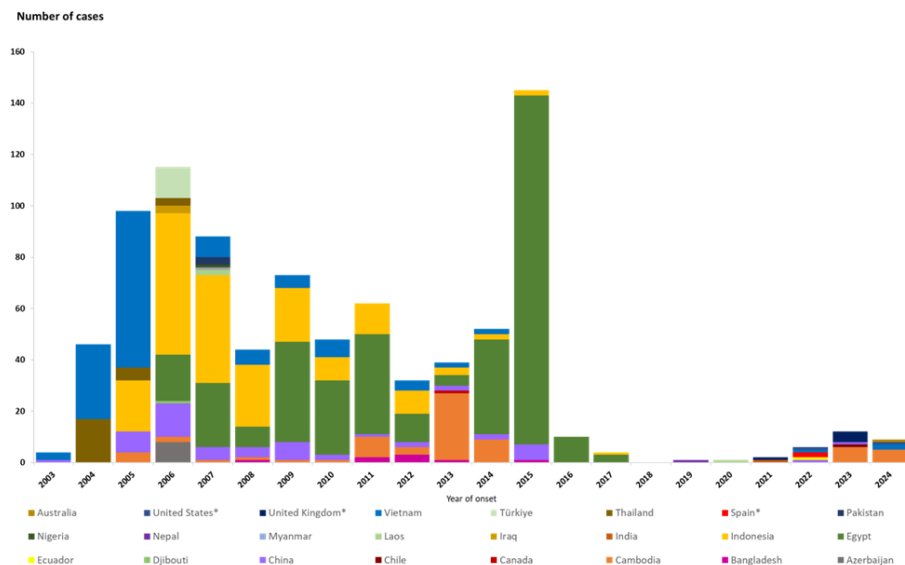
### Actions:

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 of the [avian influenza situation](#).

**Last time this event was included in the Weekly CDTR:** 03 May 2024

## Maps and graphs

**Figure 1. Distribution of confirmed human cases of avian influenza A(H5N1) virus infection by year of onset and country, 2003–22 May 2024 (n=891)**



\*Includes six detections due to suspected environmental contamination and no evidence of infection reported in 2022 from Spain (2) and the United States (1) and in 2023 from the United Kingdom (3).

Source: ECDC

## 4. Avian influenza A(H5N6) – Multi-country – Monitoring human cases

### Overview:

**Update:** A new fatal case of avian influenza A(H5N6) has been reported from Fujian Province in China. The patient was a woman in her 50s who had exposure to backyard poultry before the onset of symptoms on 13 April 2024. On 22 April, she was hospitalised and two days later diagnosed with avian influenza A(H5N6) infection. The patient died on 30 April 2024. No new cases have been detected among close contacts of the case. Samples from close contacts, poultry and environment tested negative.

**Summary:** Since 2014, and as of 21 May 2024, 91 laboratory-confirmed cases, including 36 deaths (CFR: 40%), of human infection with influenza A(H5N6) virus have been reported, including six cases reported in 2023 and one case in 2024 (all from China). The cases were reported from China (90) and Laos (1).

**Sources:** [WHO Avian influenza weekly update Number 947](#)

### ECDC assessment:

Sporadic human cases of avian influenza A(H5N6) have been previously observed. No human-to-human transmission has been reported to date. Sporadic zoonotic transmission cannot be excluded. The implementation of personal protective measures for people directly exposed to poultry and birds potentially infected with avian influenza viruses will minimise the remaining risk. The risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered to be very low.



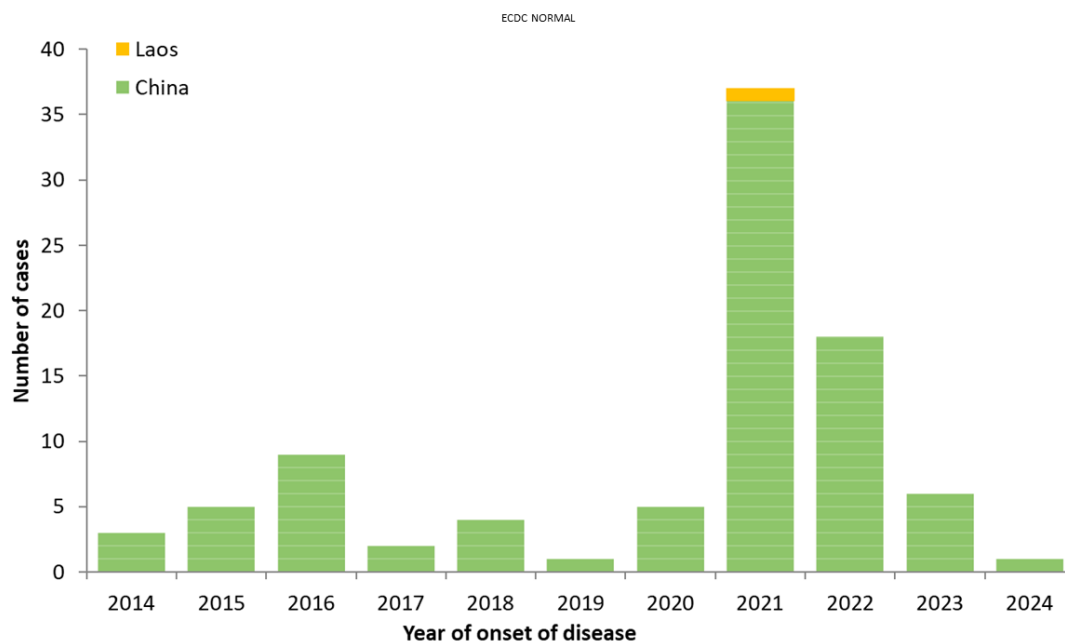
**Actions:**

ECDC monitors avian influenza strains through its epidemic intelligence and disease network activities and collaborates with the European Food Safety Authority (EFSA) and the EU reference laboratory for avian influenza to identify significant changes in the epidemiology of the virus. ECDC works with EFSA and the EU reference laboratory to produce a quarterly [report on the avian influenza situation](#). The most recent report was published in March 2024.

**Last time this event was included in the Weekly CDTR:** 17 May 2024

**Maps and graphs**

**Figure 1. Distribution of confirmed human cases of avian influenza A(H5N6) virus infection by year of onset and country, 2014 - 16 May 2024 (n=91)**



Source: ECDC

## 5. Cholera – Comoros and Mayotte – 2024 – Weekly monitoring

**Overview:****Update**

Since 18 March and as of 21 May, 94 cholera cases have been reported in Mayotte, including one death. According to the ARS Mayotte's [bulletin](#), a total of 591 contacts of the cases have received antibiotic chemoprophylaxis and 4 978 contacts have been vaccinated.

Further information on the case definition and close contacts is available on the [Prefect of Mayotte](#) website.

Since the last update on 16 May and as of 23 May, [Comoros health authorities](#) have reported 925 new cholera cases and five new deaths. Since the outbreak was declared on 2 February in the Union of the Comoros, a total of 7 076 cases and 120 deaths have been reported on the three islands. In all, 6 848 cases have recovered.

### Summary

On 31 January 2024, a boat from Tanzania carrying 25 people [arrived in Moroni](#), the capital of the Comoros archipelago. One person on board died of suspected cholera and several others were symptomatic. The Comoros Ministry of Health [declared](#) a cholera outbreak on 2 February. The first locally transmitted cases in Comoros were reported on 5 February in Moroni. Cholera cases were also detected in Moheli and Anjouan by the end of February and the first week of March.

Following the increase in cholera cases in Comoros during February, the Mayotte Regional Health Agency (ARS Mayotte) [announced](#) that health surveillance capacities would be strengthened on the island, including risk communication for health professionals and passengers. The first [imported cholera](#) case was detected in Mayotte on 18 March.

### Background

There is frequent undocumented population movement between the Comoros archipelago and the French territory of Mayotte. No cholera cases had been reported in Mayotte since 2000.

Cholera is a bacterial disease caused by the bacterium *Vibrio cholerae*. The main risk factors are associated with poor water, sanitation and hygiene practices. Several countries in eastern and southern Africa are currently responding to cholera outbreaks. Response efforts are constrained by global shortages of cholera vaccines.

### ECDC assessment:

Given the detection of several autochthonous cases of cholera in Mayotte, ECDC assesses the likelihood of further community transmission of cholera in Mayotte as high. The impact of the cholera outbreak in Mayotte is considered to be high. The overall risk of cholera for the population in Mayotte is therefore assessed as high.

Early detection and response activities are essential and have been reinforced in the French territory of Mayotte, as well as increasing awareness among healthcare workers and at points of entry.

### Actions:

ECDC is in contact with French authorities and relevant partners and is monitoring the situation through its epidemic intelligence activities.

**Last time this event was included in the Weekly CDTR:** 17 May 2024

## 6. 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. Refer to the original sources for more information regarding the case definitions in use and for details on the epidemiological situation.

### Summary

Since 1 April 2024 and as of 30 April 2024, 52 526 new cholera cases, including 529 new deaths, have been reported worldwide.

The five countries reporting the most cases are Syria (9 820), Afghanistan (8 754), Ethiopia (5 514), Yemen (4 276), and Haiti (4 204).

The five countries reporting the most new deaths are Zimbabwe (140), Haiti (108), Democratic Republic of the Congo (90), Comoros (70), and Ethiopia (43).

New cases have been reported from Afghanistan, Bangladesh, Brazil, Burundi, Comoros, Democratic Republic of the Congo, Ethiopia, Haiti, India, Kenya, Malawi, Mozambique, Nigeria, Pakistan, Somalia, South Africa, Sudan, Syria, Thailand, United Republic of Tanzania, Yemen, Zambia, and Zimbabwe

Since 1 January 2024 and as of 30 April 2024, 150 866 cholera cases, including 1 775 deaths, have been reported worldwide. In comparison, since 1 January 2023 and as of 30 April 2023, 241 560 cholera cases, including 1 880 deaths, were reported worldwide.

**Since the last update, new cases and new deaths have been reported from:**

**Africa**

**Burundi:** Since 29 March 2024 and as of 30 April 2024, 56 new cases have been reported. Since 1 January 2024 and as of 30 April 2024, 163 cases have been reported. In comparison, in 2023 and as of 8 April 2023, 247 cases, including one death was reported.

**Comoros:** Since 29 March 2024 and as of 30 April 2024, 3 531 new cases, including 70 new deaths have been reported. Since 1 January 2024 and as of 30 April 2024, 3 950 cases, including 82 deaths have been reported. In comparison, in 2023 and as of 30 April 2023, no cases were reported.

**Democratic Republic of the Congo:** Since 29 March 2024 and as of 30 April 2024, 3 856 new cases, including 90 new deaths have been reported. Since 1 January 2024 and as of 30 April 2024, 13 555 cases, including 285 deaths have been reported. In comparison, in 2023 and as of 23 April 2023, 16 817 cases, including 93 deaths were reported.

**Ethiopia:** Since 29 March 2024 and as of 30 April 2024, 5 514 new cases, including 43 new deaths have been reported. Since 1 January 2024 and as of 30 April 2024, 12 974 cases, including 97 deaths have been reported. In comparison, in 2023 and as of 3 April 2023, 1 616 cases, including 30 deaths were reported.

**Kenya:** Since 29 February 2024 and as of 29 March 2024, 21 new cases, including one new death has been reported. Since 1 January 2024 and as of 29 March 2024, 186 cases, including one death have been reported. In comparison, in 2023 and as of 4 April 2023, 5 243 cases, including 78 deaths were reported.

**Malawi:** Since 29 March 2024 and as of 30 April 2024, 27 new cases have been reported. Since 1 January 2024 and as of 30 April 2024, 243 cases, including three deaths have been reported. In comparison, in 2023 and as of 20 April 2023, 40 615 cases, including 1 165 deaths were reported.

**Mozambique:** Since 29 March 2024 and as of 30 April 2024, 1 244 new cases, including one new death has been reported. Since 1 January 2024 and as of 30 April 2024, 7 371 cases, including 12 deaths have been reported. In comparison, in 2023 and as of 9 April 2023, 23 105 cases, including 115 deaths were reported.

**Nigeria:** Since 29 March 2024 and as of 30 April 2024, 241 new cases, including three new deaths have been reported. Since 1 January 2024 and as of 30 April 2024, 559 cases, including seven deaths have been reported. In comparison, in 2023 and as of 30 April 2023, 1 629 cases, including 48 deaths were reported.

**Somalia:** Since 29 March 2024 and as of 30 April 2024, 3 725 new cases, including 27 new deaths have been reported. Since 1 January 2024 and as of 30 April 2024, 8 681 cases, including 87 deaths have been reported. In comparison, in 2023 and as of 1 April 2023, 4 032 cases, including 15 deaths were reported.

**South Africa:** Since 20 January 2024 and as of 30 April 2024, 148 new cases, including one new death has been reported. Since 1 January 2024 and as of 30 April 2024, 150 cases, including one death has been reported. In comparison, in 2023 and as of 6 April 2023, eight cases, including one death was reported.

**Sudan:** Since 31 December 2023 and as of 30 April 2024, 2 408 new cases have been reported. Since 1 January 2024 and as of 30 April 2024, 2 408 cases have been reported. In comparison, in 2023 and as of 30 April 2023, no cases were reported.

**United Republic of Tanzania:** Since 24 March 2024 and as of 30 April 2024, 657 new cases have been reported. Since 1 January 2024 and as of 30 April 2024, 2 503 cases, including 32 deaths have been reported. In comparison, in 2023 and as of 13 March 2023, 72 cases, including three deaths were reported.

**Zambia:** Since 29 March 2024 and as of 30 April 2024, 910 new cases, including 20 new deaths have been reported. Since 1 January 2024 and as of 30 April 2024, 19 848 cases, including 611 deaths have been reported. In comparison, in 2023 and as of 9 April 2023, 331 cases, including eight deaths were reported.

**Zimbabwe:** Since 29 March 2024 and as of 30 April 2024, 3 151 new cases, including 140 new deaths have been reported. Since 1 January 2024 and as of 30 April 2024, 18 197 cases, including 371 deaths have been reported. In comparison, in 2023 and as of 30 April 2023, 593 cases, including 14 deaths were reported.

## Asia

**Afghanistan:** Since 30 March 2024 and as of 27 April 2024, 8 754 new cases, including three new deaths have been reported. Since 1 January 2024 and as of 27 April 2024, 33 307 cases, including 16 deaths have been reported. In comparison, in 2023 and as of 20 March 2023, 22 848 cases, including seven deaths were reported.

**Bangladesh:** Since 24 February 2024 and as of 30 April 2024, three new cases have been reported. Since 1 January 2024 and as of 30 April 2024, six cases have been reported. In comparison, in 2023 and as of 8 April 2023, 34 060 cases were reported.

**India:** Since 18 February 2024 and as of 31 March 2024, 563 new cases have been reported. Since 1 January 2024 and as of 31 March 2024, 690 cases have been reported. In comparison, in 2023 and as of 23 April 2023, 545 cases were reported.

**Pakistan:** Since 17 March 2024 and as of 24 March 2024, 437 new cases have been reported. Since 1 January 2024 and as of 24 March 2024, 5 313 cases have been reported. In comparison, in 2023 and as of 23 April 2023, 7 314 cases were reported.

**Syria:** Since 23 December 2023 and as of 30 April 2024, 9 820 new cases have been reported. Since 1 January 2024 and as of 30 April 2024, 9 820 cases have been reported. In comparison, in 2023 and as of 8 April 2023, 58 205 cases, including seven deaths were reported.

**Yemen:** Since 13 August 2023 and as of 30 April 2024, 4 276 new cases, including 23 new deaths have been reported. Since 1 January 2024 and as of 30 April 2024, 4 276 cases, including 23 deaths have been reported. In comparison, in 2023 and as of 9 April 2023, 2 335 cases, including three deaths were reported.

## Americas

**Brazil:** As of 21 April 2024, one new case has been reported. Since 1 January 2024 and as of 21 April 2024, one case have been reported. In comparison, in 2023 and as of 30 April 2023, no cases were reported.

**Haiti:** Since 6 April 2024 and as of 30 April 2024, 995 new cases, including 14 new deaths have been reported. Since 1 January 2024 and as of 30 April 2024, 6 483 cases, including 119 deaths have been reported. In comparison, in 2023 and as of 14 April 2023, 18 426 cases, including 287 deaths were reported.

## ECDC assessment:

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

In this context, the risk of cholera infection in travellers visiting these countries remains low, even though 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 are likely to be directly exposed. Vaccination is generally not recommended for other travellers. Travellers to cholera-endemic areas should seek advice from travel health clinics to assess their personal risk and apply precautionary sanitary and hygiene measures to prevent infection. 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 consumption of raw seafood products.

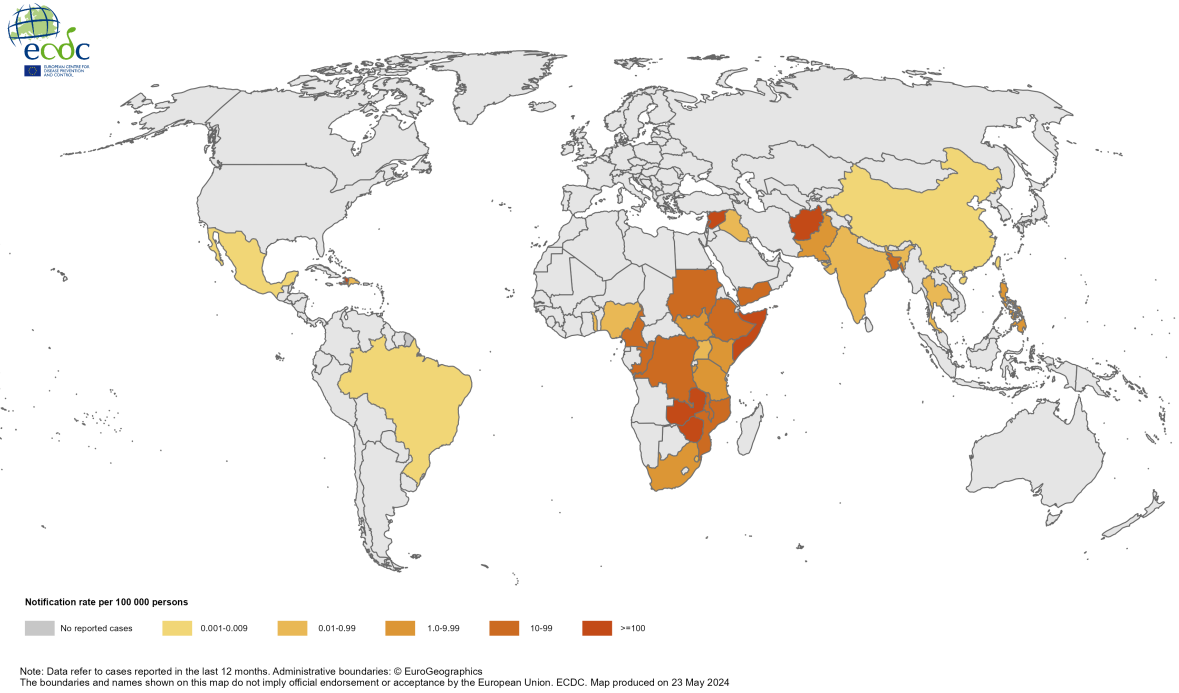
## Actions:

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:** 3 May 2024

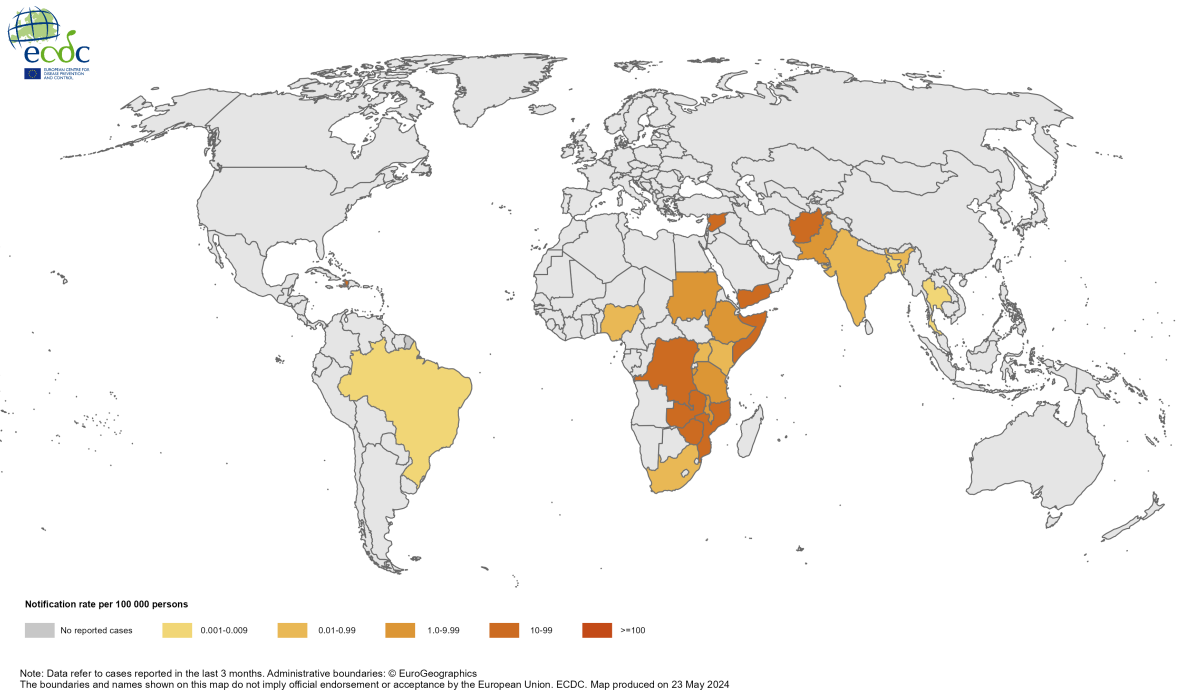
## Maps and graphs

**Figure 1. Geographical distribution of cholera cases reported worldwide from March 2023 to April 2024**



Source: ECDC

**Figure 2. Geographical distribution of cholera cases reported worldwide from February to April 2024**



Source: ECDC

## Events under active monitoring

- SARS-CoV-2 variant classification - last reported on 26 April 2024
- Overview of respiratory virus epidemiology in the EU/EEA - weekly monitoring - last reported on 26 April 2024
- An early human West Nile virus infection case in March in Andalusia, Spain - last reported on 26 April 2024
- Cholera – Comoros and Mayotte – 2024 – Weekly monitoring - last reported on 26 April 2024
- Highly pathogenic avian influenza A(H5N1) in cattle and a related human cases – United States – 2024 - last reported on 24 May 2024
- Avian influenza A(H5N6) – Multi-country – Monitoring human cases - last reported on 24 May 2024
- Influenza A(H5N1) – Multi-country (World) – Monitoring human cases - last reported on 24 May 2024
- Cholera – Multi-country (World) – Monitoring global outbreaks - Monthly update - last reported on 24 May 2024
- Poliomyelitis – Multi-country – Monthly monitoring of global outbreaks - last reported on 19 April 2024
- Chikungunya and dengue – Multi-country (World) – Monitoring global outbreaks - Monthly update - last reported on 19 April 2024
- Imported invasive meningococcal disease in travellers returning from the Kingdom of Saudi Arabia – Multi-country – 2024 - last reported on 17 May 2024
- Measles – Multi-country (World) – Monitoring European outbreaks - monthly monitoring - last reported on 17 May 2024
- Western equine encephalitis – Multi-country – 2023 - last reported on 08 May 2024
- Middle East respiratory syndrome coronavirus (MERS-CoV) – Multi-country – Monthly update - last reported on 03 May 2024
- Crimean-Congo haemorrhagic fever - Spain - 2024 - last reported on 03 May 2024