

## WEEKLY BULLETIN

# Communicable Disease Threats Report

Week 15, 7–13 April 2024

## This week's topics

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## 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 most EU/EEA countries.

### **Seasonal influenza activity at the EU/EEA level continues to decrease albeit at a slower rate that observed in the previous weeks.**

- For the past three weeks, the primary care pooled test positivity at the EU/EEA level has remained below 10%. Country variation continues to be observed for this indicator, with most countries reporting a decrease in test positivity. Similarly, the pooled test positivity in secondary care was below 10% and continued to decrease.
- The decrease in seasonal influenza activity was observed earlier this year compared to the trends in the past five years (excluding the 2020/2021 season with almost no activity).
- Most countries now report low or medium levels of influenza intensity and baseline rates of influenza-like illness (ILI). Countries continue to report a mix of geographical spread, indicating continued heterogeneity of influenza activity at country level.

- In week 14, influenza type B was the predominant circulating influenza virus in the EU/EEA. For two weeks in a row, more Influenza B than Influenza A was detected, although the detections remain low and continue to decrease.

### **RSV activity continued to decrease to low levels at the EU/EEA level and in most reporting countries.**

### **SARS-CoV-2 activity remained low in all EU/EEA countries.**

#### **SARS-CoV-2 variant classification**

Since the last update on 15 March 2024, and as of 12 April, the **following changes** have been made to ECDC variant classifications for variants of concern (VOCs), variants of interest (VOIs), variants under monitoring (VUMs), and de-escalated variants:

- **BA.2.87.1** has been reclassified from variants under monitoring to de-escalated variants due to no new detections since December 2023 globally and that there have been no detections within the EU/EEA.

Due to the low test positivity for SARS-CoV-2, there are a limited number of samples that are available for assessment of the prevalence of circulating variants for week 12 in the EU/EEA. Calculations are based on reported samples from all countries.

The variant landscape in the EU/EEA is dominated by **BA.2.86**. As of 8 April 2024, the median proportion for BA.2.86 in the EU/EEA for week 12 (18–24 March 2024) is 100.0% (range: 33.3–100.0%).

**XBB.1.5-like** lineages are circulating in very low proportions in the EU/EEA, median proportion of 0% (range: 0.0–66.7%).

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

- On 10 April 2024, four new imported cases were detected in Mayotte. As of 10 April 2024, five confirmed cholera cases and no deaths have been reported. One patient recovered.
- In light of the information available, the risk of community transmission in Mayotte remains high.
- Since the last available update on 31 March, and as of 10 April, 413 new cholera cases and 11 new deaths have been reported in Comoros. As of 10 April 2024, 1 068 confirmed cholera cases and 27 deaths have been reported in the country.

#### **Cases of *Shigella* infections in five EU countries related to the Darklands festival in Belgium, with strains resistant to many commonly used antimicrobial agents**

- A total of seven cases of *Shigella* infections have been reported by five EU/EEA countries among gay, bisexual and other men who have sex with men (gbMSM), related to the Darklands festival in Belgium, 27 February to 4 March 2024.
- An extensively drug resistant (XDR) *Shigella sonnei* outbreak strain has previously been reported as a cluster associated with gbMSM identified as spreading across several countries since December 2022.
- Raising awareness of the threat of sexual transmission of XDR *Shigella* and other enteric pathogens and how to reduce the risk is particularly important considering upcoming Pride events and other gbMSM festivals in the spring and summer.
- Clinical services likely to provide care for gbMSM with shigella infection should be aware that gbMSM may be at higher risk of infection with strains resistant to many commonly used antimicrobial agents.

#### **Measles – Multi-country (World) – Monitoring European outbreaks - monthly monitoring**

- In February 2024, 29 countries reported measles data to The European Surveillance System (TESSy), with 623 cases reported by 21 countries.
- Through its epidemic intelligence activities, ECDC has identified 4 694 new measles cases in 20 EU/EEA countries since the last monthly update, including reports on the ongoing outbreaks among others in Austria, Cyprus, France, the Netherlands, Portugal, and Romania.

- Thirteen measles-related deaths have been reported, in Romania (12) and Ireland (1).
- Overall, measles transmission in the EU/EEA has been increasing over the last 12 months, although the situation varies by country, with some countries reporting large outbreaks and others sustaining no or very low transmission.
- Relevant updates for outside the EU/EEA are available for Switzerland, the United Kingdom, and all WHO Regions, except WHO EMRO.

### **Avian influenza A(H9N2) – Multi-country (World) – Monitoring human cases**

- One human infection with avian influenza A(H9N2) virus has been reported in Vietnam. This is the first detection of A(H9N2) in humans in the country.
- Exposure to infected poultry is presumed, given the proximity of the case's residence to a poultry market.
- No secondary cases have been reported, but investigations are still ongoing.
- Since 1998, 136 human cases of A(H9N2) have been confirmed globally, including two deaths.
- Most of the cases reported to date have been in China (122 cases). No human cases have been reported in the EU/EEA.
- The risk to human health in the EU/EEA is currently considered very low.

### **Human cases with avian influenza A(H10N3) – Multi-country (World)**

- A third human infection with avian influenza A(H10N3) in China and globally was reported in April 2024.
- The adult developed severe pneumonia in February 2024 following exposure to poultry and poultry-related environment.
- No human-to-human transmission has been documented. The risk to human health in the EU/EEA is considered very low.

### **Mpox Multi-country 2022–2024**

- Since the beginning of January 2024 (previous update), and as of 8 April 2024, 323 mpox cases have been reported from 17 EU/EEA countries: Spain (150), Italy (50), France (36), Germany (28), Portugal (13), Austria (7), Belgium (7), Czechia (7), Netherlands (7), Sweden (5), Poland (4), Greece (3), Slovakia (2), Hungary (1), Ireland (1), Luxembourg (1), and Norway (1).
- Since the start of the global mpox outbreak in May 2022, 22 298 confirmed mpox cases (including 10 deaths) have been reported in TESSy from 29 EU/EEA countries. A detailed summary and analysis of data reported to TESSy can be found in the [Joint ECDC-WHO Regional Office for Europe Mpox Surveillance Bulletin](#).

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

## Overview

### Respiratory virus activity

- ILI and acute respiratory infection (ARI) consultation rates continue to decrease or remain stable at low levels (17 reporting countries). Moving Epidemic Method (MEM) thresholds were available for 15 countries, four of which observed consultation rates above baseline levels. Short-term forecasts of ILI and ARI rates in EU/EEA countries are published on ECDC's [RespiCast](#).
- In primary care sentinel settings, the median test positivity at the EU/EEA level was highest for influenza, at 11.3% (pooled country data: 8.2%; interquartile range (IQR) of country values: 56–17%), with a mixed picture at the country level. In week 14, seven of 16 countries reported a test positivity below 10%. Qualitative assessments of seasonal influenza activity from 18 countries indicate decreasing intensity in recent weeks (eight baseline, six low, four medium). Of 17 countries reporting geographical spread of seasonal influenza, six reported sporadic spread, one local, five regional and five widespread.

- Among the 120 sentinel primary care detections of seasonal influenza, 85 (71%) were typed as influenza virus type B and 35 (29%) were typed as influenza virus type A. Of the influenza type B detections, 46 were further defined as B/Victoria lineage, while the remaining 39 were of unknown lineage. Of the influenza type A detections that were further subtyped, 16 (76%) were A(H1)pdm09 and five (24%) were A(H3). The remaining 14 influenza type A detections were of unknown subtype. Of note, one country accounted for 60% of the total number of reported influenza B detections.
- The median sentinel primary care RSV positivity was 0% (pooled: 1.6%; IQR: 0–24%). Decreasing or stable trends were observed at the country level in both sentinel positivity and non-sentinel detections.
- The median sentinel primary care positivity for SARS-CoV-2 remained low at 0% (pooled: 1.2%; IQR: 0–1%). Decreasing or stable trends were observed at the country level in both sentinel positivity and non-sentinel detections.

### Severe disease

- Rates of severe acute respiratory infection (SARI) from sentinel secondary sites were stable or decreasing and at levels comparable to the same time last year in all six countries reporting data up to week 14.
- The median SARI test positivity for seasonal influenza was 2% (pooled: 3%; IQR: 0–6%), with decreasing or stable trends observed in most countries reporting this indicator. All countries reporting non-sentinel hospital or ICU data observed decreasing trends.
- The median SARI test positivity for RSV was 1% (pooled: 2%; IQR: 0–2%), with decreasing or stable trends observed in all six countries reporting this indicator. The highest pooled test positivity continued to be in children aged 0–4 years, but a decreasing trend has been observed since week 52, 2023.
- The median SARI test positivity for SARS-CoV-2 was 1% (pooled: 1%; IQR: 0–2%). Both SARI positivity and non-sentinel indicators of severity have shown a gradually decreasing trend since week 50 and low levels in all countries.
- [EuroMOMO](#) pooled estimates of weekly excess all-cause mortality showed mortality is within expected levels for this time of the year for the participating European countries, following a longer period of elevated mortality.

### Virus characterisation

#### Influenza

- The WHO [recommendations](#) for the composition of trivalent vaccines for use during the 2024–2025 influenza season in the northern hemisphere are as follows (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 (subclade 2a.3a.1); and a B/Austria/1359417/2021 (B/Victoria lineage)-like virus (subclade V1A.3a.2).
- From week 40, 2023 to week 14, 2024, 2 933 A(H1)pdm09, 1 122 A(H3) and 157 B/Victoria viruses from sentinel and non-sentinel sources were genetically characterised. Of the A(H1)pdm09 viruses that have been assigned to a clade, 1 957 were reported as clade 5a.2a and 929 were subclade 5a.2a.1. Of the A(H3) viruses that have been assigned to a clade, 10 were reported as clade 2a.3a, 1 078 were subclade 2a.3a.1, one was subclade 2a.3b, and 30 were subclade 2a. All B/Victoria viruses were reported as 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 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.

#### SARS-CoV-2 variants for weeks 11–12 (11 March to 24 March 2024)

- The estimated distribution (median and IQR of proportions from eight countries) of variants of concern (VOCs) or variants of interest (VOIs) was 88% (71–94%) for BA.2.86 (which includes

JN.1 isolates) and 0% (two detections overall) for XBB.1.5-like (which now includes XBB.1.5+F456L). These proportions have been stable since week 5.

### **Period overview (week 25, 2023 to week 14, 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 14, 2024, consultation rates continued to decrease and have returned to baseline levels in most EU/EEA countries. Transmission of SARS-CoV-2 began increasing in late summer, 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. COVID-19 has predominantly affected individuals aged 65 years and above. Week 50 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(H1N1)pdm09 viruses in the first part of the season. As of week 13, B/Victoria lineage was the most detected virus, but with low numbers of detections. RSV activity began increasing around week 41, reaching a peak in week 50, 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 14, 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 three consecutive weeks. Even if the respiratory virus circulation is decreasing, it remains essential to continue to closely monitor 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.erviss.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](#)'.

ECDC published an [epidemiological update](#) that describes the epidemiological situation for acute respiratory infections in EU/EEA countries and provides updated ECDC recommendations to mitigate their impact.

ECDC published guidance on [vaccination rollout for autumn/winter 2023](#) which stresses the importance of influenza and COVID-19 vaccination to protect individuals at increased risk of severe disease – e.g. people aged 60 years and above, and other vulnerable individuals (such as those with underlying comorbidities), irrespective of age.

**Sources:** [ERVISS](#)

**Last time this event was included in the Weekly CDTR:** 5 April 2024



## 2. SARS-CoV-2 variant classification

### Overview

#### Weekly update on SARS-CoV-2 variants:

Since the last update on 15 March 2024, and as of 12 April, the following changes have been made to ECDC variant classifications for variants of concern (VOCs), variants of interest (VOIs), variants under monitoring (VUMs), and de-escalated variants:

- **BA.2.87.1** has been reclassified from variants under monitoring to de-escalated variants due to no new detections since December 2023 globally and that there have been no detections within the EU/EEA.

Due to the low test positivity for SARS-CoV-2, there are a limited number of samples that are available for assessment of the prevalence of circulating variants for week 12 in the EU/EEA. Calculations are based on reported samples from all countries.

The variant landscape in the EU/EEA is dominated by **BA.2.86**. As of 8 April 2024, the median proportion for BA.2.86 in the EU/EEA for week 12 (18–24 March 2024) is 100.0% (range: 33.3–100.0%).

**A large proportion of the BA.2.86 sequences belong to the sublineage JN.1.** As of 19 December 2023, due to its rapid increase in proportion, [WHO classified JN.1](#) as a separate VOI from the parent lineage BA.2.86. The most probable driver of the success of BA.2.86-descendant lineages is immune escape in a population where immunity is increasingly derived from XBB-variants.

**XBB.1.5-like** lineages are circulating in very low proportions in the EU/EEA, median proportion of 0% (range: 0.0–66.7%).

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

### Actions

For the latest update on SARS-CoV-2 variant classifications, please see [ECDC's webpage on variants](#). Variant surveillance data, including the distribution of VOC and VOI variant proportions in the EU/EEA and detailed country-specific COVID-19 updates, are available as part of the [European Respiratory Virus Surveillance Summary \(ERVISS\)](#).

**Last time this event was included in the Weekly CDTR:** 5 April 2024

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

### Overview

#### Update

On 10 April, four new imported cholera cases were detected in Mayotte. [According to the Prefect of Mayotte](#), they were intercepted on a boat by sea patrol services. They are under treatment in the cholera unit of the Mayotte Hospital Centre. Antibiotic treatment was given to all people who have been in contact with them. Mayotte authorities have reassured that the risk of spread is limited in this situation, due to rapid detection and isolation of the cases.

The prefecture and the ARS of Mayotte recall the need to observe basic hygiene measures (consumption of controlled water, hand washing), which should make it possible to avoid any acquisition or transmission of the disease.

In Comoros, since 31 March, and as of 10 April, [Comoros health authorities](#) reported 413 new cholera cases and 11 new deaths. Since the outbreak was declared on 2 February in the Union of the

Comoros\*, a total of 1 068 cases and 27 deaths have been reported in the three islands. Of these, 866 cases have recovered.

*\* Note that the report from other sources is irregular and data on the date of symptom onset are not available.*

### 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 19 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

Following the importation of four confirmed case of cholera to Mayotte, ECDC assesses the likelihood of cholera community transmission in Mayotte as high. The impact of a cholera outbreak in Mayotte is considered to be moderate. The overall risk of cholera for the population in Mayotte is therefore assessed to be high.

The case imported were identified on a boat, although the number of contacts and possible exposed people remain uncertain. 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:** 5 April 2024

## 4. Cases of *Shigella* infections in five EU countries related to the Darklands festival in Belgium, with strains resistant to many commonly used antimicrobial agents

### Overview

On 9 April 2024, Belgium reported to ECDC an increase in extensively drug-resistant (XDR) *Shigella sonnei* infections with a total of 31 cases since January 2024. Of these cases, 27 are male and one of them had participated in a Darklands festival. The festival took place in Antwerp, Belgium, between 27 February to 4 March 2024 and is a gbMSM-oriented event with an international target group (<https://darklands.be>).

Following the alert from Belgium, four other EU countries reported cases of *Shigella* infection among gbMSM related to the Darklands festival in Antwerp: Germany (2), Ireland (2), and the Netherlands (1). In addition, Denmark reported one case with travel history to Belgium before 11 March 2024, but with unclear link to the festival. Sequencing results for the case in Belgium related to the Darklands festival indicate the same XDR *Shigella* strain that has previously been reported among gbMSM in several EU-EEA countries, a cross-country transmission event that started in the end of 2022 (ECDC [CDTR](#) 2023). One of the two cases identified in Ireland, who reported attendance at the Darklands festival in Belgium in the days prior to symptom onset, has a different sequencing profile. However, it shows multidrug resistance to commonly used antimicrobial agents.

### ECDC assessment

Seven cases of *Shigella* infections have been reported with a link to the Darklands festival in Antwerp, Belgium (6) or that travelled to Belgium before onset (1). The event shows the potential for transmission 'hot spots' in mass gathering events attended by gbMSM. As *Shigella* is transmitted faecal-orally and can also spread through sexual contacts, individuals who engage in sexual encounters with multiple anonymous or casual sex partners while attending such events may face an elevated risk of infection. Given the low infectious dose, further spread from infected persons to sexual partners, and household contacts in their home countries is likely upon their return. The incubation period for *Shigella* infection varies from 12 hours to four days; however, it is usually one to seven days.

Some cases appear to be connected to an evolving cluster of XDR shigellosis spreading across several countries in the EU/EEA, that began in December 2022.

The *S. sonnei* strain related to the 2022–2024 outbreak cases shows extensive drug resistance with non-susceptibility to penicillins, third-generation cephalosporins (CTX-M-15), aminoglycosides, tetracycline, sulphonamides, quinolones, and azithromycin, leaving very limited treatment options for severe infections.

Further cases of this strain are very likely to occur, particularly among gbMSM, not only in countries reporting cases but also in other Member States, given the interconnected nature of gbMSM sexual networks in Europe. It is also likely that other cases that have not yet been detected may already be present in other Member States.

### Actions

General actions and prevention messages related to the evolving cluster of XDR *Shigella* predominantly affecting gbMSM have been outlined previously ([ECDC News Item 2023](#), [ECDC 2023 CDTR](#) and [ECDC RRA 2022](#)). These remain valid and are particularly important considering the upcoming Pride events and other gbMSM festivals in the spring and summer.

Specifically to the Darklands festival, it is important that gbMSM with symptoms and a travel history to the event, or who have been in contact with sexual partners or other close contacts that travelled



there, seek care promptly. They should report to their physicians on their travel history and possible exposure and abstain from sexual activity while being evaluated. Public health authorities should consider working with civil society organisations targeting gbMSM to raise awareness in the community about the risk of acquiring XDR *S. sonnei* infection associated with travel to Darklands. It is also important to raise awareness among clinicians including of the need to carry out antimicrobial susceptibility testing and prompt reporting to public health authorities. Sexual partners of cases should be encouraged to see care and testing.

It is also recommended to raise awareness of the threat of sexual transmission of *Shigella* and other enteric pathogens and actions to reduce the risk, ahead of the spring and summer seasons, considering the increased travel and attendance at pride and other festivals during this time. ECDC has received recent reports of cases of hepatitis A virus infection among gbMSM in Portugal and the Netherlands ([ECDC CDTR 2024](#)).

### Further information:

Further details on recommended actions and specific prevention messages can also be found in ECDC's Risk Assessment 'Increase in extensively-drug resistant *Shigella sonnei* infections among men who have sex with men' ([2022](#)), ECDC's news item 'Spread of multidrug-resistant *Shigella* in EU/EEA among gay, bisexual and other men who have sex with men' ([July 2023](#)), and ECDC's CDTR item 'Cluster of extensively drug resistant *Shigella sonnei* among men who have sex with men - multi-country (EU/EEA and the UK) - 2023' ([Week 51, 17–23 December 2023](#)).

## 5. Measles – Multi-country (World) – Monitoring European outbreaks – monthly monitoring

### Overview

In February 2024, 29 countries reported measles data to The European Surveillance System (TESSy), with 623 cases reported by 21 countries. Eight countries reported zero cases.

In the most recent 12-month period, from 1 March 2023 to 29 February 2024, 30 EU/EEA Member States reported a total of 5 770 cases of measles, 4 864 (84.3%) of which were laboratory-confirmed. During this 12-month period, two countries (Bulgaria and Luxembourg) reported zero cases. The highest number of cases were reported by Romania (4 594), Austria (378), France (168), Italy (166), and Germany (159). The highest notification rates were observed among infants under one year of age (172.0 cases per million) and children aged 1–4 years (120.1 cases per million). Five deaths attributable to measles were reported to ECDC during the 12-month period, all by Romania. Detailed data are available in [ECDC's Surveillance Atlas of Infectious Diseases](#).

Complementary epidemic intelligence surveillance data collected on 10 April 2024 from official public and media sources detected 4 694 new suspected and/or confirmed cases of measles, including four new deaths, since the last monthly update. New cases were reported in 20 EU/EEA countries in recent months: Austria (125), Belgium (11), Bulgaria (1), Czechia (3), Estonia (1), France (25), Germany (76), Hungary (5), Ireland (11), Italy (186), Lithuania (10), Malta (3), the Netherlands (33), Poland (25), Portugal (4), Romania (4 154), Spain (7), Sweden (4), and Norway (1).

Overall, 13 measles-related deaths have been reported in the EU/EEA in 2024, in Romania (12) and in Ireland (1).

Relevant updates for outside the EU/EEA are available for Switzerland, the United Kingdom, and all WHO Regions, except WHO EMRO.

**Disclaimer:** The [monthly measles report published in the CDTR](#) provides the most recent data on cases and outbreaks based on information made publicly available by the national public health authorities or the media. This report is a supplement to [ECDC's monthly measles and rubella monitoring report](#), based on data routinely submitted by 30 EU/EEA countries to TESSy. Data presented in the two monthly reports may differ.

**Epidemiological summary for EU/EEA countries with epidemic intelligence updates since last month:**

[Austria](#) reported 374 confirmed measles cases between 1 January 2024 and 9 April, an increase of 125 cases since 8 March 2024. Of the 367 measles patients for which hospitalisation information was available, 69 individuals (18.8%) were hospitalised, including four people being treated in intensive care units. All regions, except Carinthia, reported at least one case of measles in 2024. Most of the cases have been reported in Lower Austria (99), Tyrol (80), Vienna (54) and Styria (50).

[Belgium](#) reported 37 cases in January and February 2024, according to TESSy. In addition, [media](#) reported on 19 March an outbreak in Brussels with 11 confirmed cases.

[Bulgaria](#) reported one case in 2024 in week 14. No cases have been reported in 2023 in Bulgaria.

[Cyprus](#) reported 18 cases in 2024 and, as of March 2024, according to TESSy, an increase of nine cases since the previous monthly report. Between 2019 and 2022, vaccination coverage with a measles-containing vaccine was around 86% for the first dose and in 2022 it was 75% for the second dose ([WHO](#)). According to TESSy, Cyprus reported one case of measles in February 2024.

[Czechia](#) reported 14 cases in January–March 2024, an increase of three cases since the report for February 2024.

[Denmark](#) reported 11 cases of measles so far in 2024 and as of 10 April 2024, increase of six cases since 11 March. Of the reported cases, four were children below 15 years and six were adults aged 25 to 45 years. Two individuals acquired infection abroad.

[Estonia](#) reported one case in 2024 as of 10 April. In 2023, Estonia reported four cases.

[France](#) reported 69 cases of measles in 2024 and as of 9 April 2024 in Auvergne-Rhône-Alpes region, increase of 25 cases since 14 March. Outbreaks in 2024 have been reported in Rhône (58 cases, last case reported on 9 April) and Drôme (11 cases, last case reported on 5 March). According to TESSy, France reported 56 cases in January and February 2024.

[Germany](#) has reported 161 suspected and confirmed measles cases in 2024 for weeks 1 to 15 (data as of 10 April 2024). This represents an increase of 76 cases since 2024 week 10 (data available on 11 March 2024).

[Hungary](#) has reported 12 cases in 2024, as of week 13 (ending 2 April 2024), which is an increase of five cases since 25 February 2024.

[Ireland](#) has reported 13 confirmed measles cases in 2024 and as of 8 April. An increase of 11 cases since week 10, 2024. Two outbreaks have been reported, both in private houses, with four and three confirmed cases, respectively.

[Italy](#) reported 213 measles cases, of which 181 were laboratory confirmed, increase of 186 cases since 8 February. Of the total cases, 34 were reported in January, 93 in February and 86 in March; 18 cases were imported (8.4%). Most of the cases have been reported in Lazio (64), Sicilia (45) and Toscana (37). All age groups are affected, highest incidence is in age group 0-4 years (63.3 cases per million population), followed by 15-39 year-olds (28.3 cases per million population). The vaccination status is known for 187 cases out of 213 (87.8%), of which 165 cases (88.2%) were unvaccinated at the time of infection, 11 cases were vaccinated with one dose, nine cases with two doses and for in two cases the number of doses administered was not known. 48.8% of the cases were hospitalised. Eleven of the cases were among healthcare workers, six of whom were non vaccinated. Fifty-six cases (26.3%) reported at least one complication, hepatitis/transaminase elevation (n=26) and pneumonia (n=23) were the most frequent complications. One case of encephalitis has been reported in a young, unvaccinated adult. Genotyping was performed for samples from 63 confirmed cases, of which genotype D8 was detected in 61 cases and genotype B3 was detected in two cases.

[Lithuania](#) has reported 20 cases as of 3 April 2024, an increase by 10 cases since 20 February. Most of the cases are adults, although all age groups are affected. Cases are reported from five regions: Kaunas (7), Klaipėda (5), Vilnius (3), Telšiai (3), and Šiauliai (2). Of reported cases, 65% were

unvaccinated, 25% were fully vaccinated, and 10% had insufficient vaccination; overall, 40% of the cases were hospitalised.

[Malta](#) reported three cases of measles in February and March 2024. Two of the cases have travel history abroad and the third is epidemiologically related to one of the two travel related cases.

[The Netherlands](#) reported 51 cases as of 31 March 2024, an increase by 33 cases since mid-March 2024. The cases were detected mainly in the southern provinces of the country. Among the cases are several adults with a foreign background and local schoolchildren.

[Poland](#) reported 40 cases of measles from the start of the year and as of 31 March 2024, an increase of 25 cases since 29 February 2024.

[Portugal](#) has reported 18 confirmed cases of measles (of 132 suspected and investigated cases) in 2024 and as of 2 April 2024, an increase of four cases since 8 March 2024. Of these cases 10 (56%) were unvaccinated.

[Romania](#) has reported 11 397 confirmed cases, including 12 deaths from 1 January 2023 to 7 April 2024, an increase of 4 154 cases and four deaths since 5 March 2024. The cases have been reported in 40 counties and the Municipality of Bucharest. Highest incidences are reported in Braşov (326.71 cases per 100 000 population), Covasna (224.04/100 000 pop) and Mureş counties (217.32/100 000 pop). Children from 0 to 9 years of age account for 68.3% (7 787) of all reported cases, including 1 634 children under one year of age (14.3%). The vast majority of the cases are unvaccinated individuals across all age groups (81.7%). The highest number of cases was reported in week 11, 2024 – with over 750 cases that week.

The [Ministry of Health](#) of Romania declared a national measles epidemic on 5 December 2023 to facilitate vaccination of children aged from nine to 11 months and individuals with incomplete vaccination. The Ministry of Health will carry out an information campaign for parents, working with family doctors, to achieve better adherence to the vaccination programme. According to the [Ministry of Health](#), vaccination coverage for the first dose of MMR is 78% at national level, and 62% for the second dose. Vaccination coverage has been decreasing for the past ten years in Romania.

[Spain](#) reported 25 cases of measles from 1 January to 7 April 2024 (weekly bulletin No 15), an increase of seven cases since 3 March. Eight cases were imported and 11 cases were related to the imported cases.

[Sweden](#) has reported nine cases in 2024, as of 10 April 2024, an increase of four cases since 11 March 2024. Of the reported cases, 56% were infected abroad.

[Norway](#) reported one case as of 10 April 2024.

### Relevant epidemiological summary for countries outside the EU/EEA:

[Switzerland](#) has reported 58 cases since the beginning of the year and as of 11 April 2024, representing an increase of 4 cases since the previous report on 4 March 2024.

[The United Kingdom](#) has reported 1 023 confirmed measles cases since 1 October 2023 and as of 11 April 2024. Over a half of the cases have been reported in the West Midlands (51%, 520), in London (23%, 232), and in the East Midlands (9%, 92). The remaining cases were reported in other regions of England. The majority of these cases were in children 10 years of age and under (64%) and 29% were in people aged 15 years and over

Public Health Wales declared an outbreak of measles in the Gwent area, with four confirmed cases, according to the [media](#) quoting the health authority on 9 April 2024.

According to the WHO Regional Office for Europe ([WHO/EUROPE](#)) data for January–February\* 2024 (data access 11 April 2024) overall 13 635 cases were reported in the region. Of these, 13 176 were in the following non-EU/EEA countries: Kazakhstan (9 510), Kyrgyzstan (1 988), Russia (1 401), Uzbekistan (136), Armenia (50), Georgia (36), Albania (18), Switzerland (18)\*\*, Israel (10), and Ukraine (8).

\*data are incomplete

\*\*see the national report

The numbers provided to WHO for EU/EEA countries are from TESSy data, updated monthly and available on [ECDC Surveillance Atlas of Infectious Diseases](#). Due to differences in reporting time the numbers may not correspond to the data from epidemic intelligence screening.

According to a report by the WHO Regional Office for Africa ([WHO AFRO](#)) as of 24 March 2024 (week 12, 18–24 March 2024), cases and outbreaks of measles in 2023 and 2024 were reported in the following countries: Burundi, Burkina Faso, Cameroon, Central African Republic, Chad, Democratic Republic of the Congo (DRC), Ethiopia, Kenya, Liberia, Malawi, Mali, Mauritania, Niger, Senegal, South Africa, South Sudan, Togo, Uganda (declared an outbreak at the beginning of 2024), and Zambia. As reporting periods vary by country, please check the latest available weekly bulletin.

According to WHO Pan American Health Organization ([WHO PAHO](#)) report in 1–12 week 2024 (ending 23 March 2024), 105 confirmed cases were reported by seven countries: Argentina (3), Bolivia (1), Brazil (2), [Canada](#) (39), and [the United States](#) (113)\*. On 29 January 2024, WHO PAHO published an Epidemiological Alert – Measles in the Region of the Americas.

In the WHO World Health Organization South-East Asia (WHO SEARO) countries, overall 5 011 cases of measles have been reported in January–February 2024\*. Cases have been reported in India (4 353), Indonesia (476), Nepal (91), Thailand (51), Timor-Leste (12), Bangladesh (7), Bhutan (11), Myanmar (7), and Sri Lanka (3).

\*data are incomplete. Source: WHO provisional monthly measles and rubella data.

According to a WHO Western Pacific Region ([WHO WPRO](#)) report for 1–31 January 2024 (Vol 18, Issue 2), overall, 351 confirmed and clinically compatible cases (including 316 laboratory confirmed cases), and no deaths have been reported by: Australia (7), Hong Kong SAR (1), Republic of Korea (1), Singapore (1), China (30), Malaysia (310), and Vietnam (1).

## ECDC assessment

The overall number of measles cases in the EU/EEA has been steadily increasing since June 2023. **Measles cases are expected to continue increasing in the EU/EEA in the coming months** due to reported sub-optimal vaccination coverage for measles-containing vaccines (MCV) in a number of EU/EEA countries (<95% in a many of these countries), the high probability of importation from areas experiencing high circulation and the fact that the coming months represent the seasonal peak of the virus. In addition, the recent report of a majority of cases having acquired the disease within the reported country through community/local transmission, indicates a higher probability of being exposed to the virus within the EU/EEA than in previous months.

As the number of cases is expected to rise in the near future, ECDC urges EU/EEA public health authorities to focus on the following areas:

- **Close immunity gaps and achieve and maintain high vaccination coverage for MCV** (>95% with the second dose). It is vital to ensure first and second dose vaccinations are administered on time as per national schedules among infants and children. It is also important to identify and vaccinate eligible individuals (for example, non-immune adolescents and adults) in immunisation catch-up programmes (as recommended by local/national authorities).
- **Strive towards high quality surveillance**, and adequate public health capacity, especially for early detection, diagnosis, response, and control of outbreaks.
- **Increase the clinical awareness of health professionals.**
- **Promote vaccine acceptance and uptake** by employing specific risk communication strategies and identifying drivers of sub-optimal MMR vaccine acceptance and uptake to ensure that tailored interventions are implemented in response.
- **Address barriers and engage with underserved populations.** Systemic barriers that impact vaccine uptake in under-served, isolated and difficult-to-reach populations need to be monitored and addressed with targeted strategies, to reduce inequalities in vaccine uptake.

ECDC's latest advice on measles is available in the Threat Assessment Brief '[Measles on the rise in the EU/EEA: Considerations for a public health response](#)' published in February 2024 and the

conclusions of this Threat Assessment Brief remain valid. Additional information on the risk classification and ECDC recommendations can be found in this report.

## Actions

ECDC is monitoring the measles situation through its epidemic intelligence activities, which supplement monthly outputs with measles surveillance data from TESSy, routinely submitted by 30 EU/EEA countries. ECDC's latest advice on measles is available in the Threat Assessment Brief, '[Measles on the rise in the EU/EEA: Considerations for a public health response](#)', published on 15 February 2024.

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

# 6. Avian influenza A(H9N2) – Multi-country (World) – Monitoring human cases

## Overview:

### Update

On 6 April 2024, Vietnamese [media quoting Viet Nam health authorities](#) reported a human infection with avian influenza A(H9) in a person who resides in Tan Ly Dong commune, Tien Giang Province, later confirmed to be infected with avian influenza A(H9N2) virus ([Ho Chi Minh city CDC](#)). The patient, who is in their thirties, developed symptoms on 10 March 2024 and was hospitalised in severe condition with pneumonia on 16 March. The patient lives in front of the house of a relative who slaughters and sells poultry. The patient has underlying conditions, and influenza A(H9N2) was detected in the Pasteur Institute in Ho Chi Minh City on 1 April.

This is the first time influenza A(H9N2) has been detected in a human in Vietnam. The investigation to identify the source of infection is ongoing. To date, there have been no new cases detected among contacts and family members of the patient. The Ministry of Health has urged to strengthen surveillance in humans and strengthen communication on a local level to prevent further cases.

**Summary:** As of 9 April 2024, and since 1998, a total of 136 laboratory-confirmed cases of human infection with avian influenza A(H9N2) viruses, including two deaths (both in patients with underlying conditions), have been reported in nine countries: China (122), Egypt (4), Bangladesh (3), Cambodia (2), Oman (1), Pakistan (1), India (1), Senegal (1), and Vietnam (1). Most of the cases were children with mild disease.

**Source:** [Ho Chi Minh city CDC](#), [media quoting MoH of Vietnam](#), [media report, quoting Institut Pasteur Ho Chi Minh City](#)

## ECDC assessment:

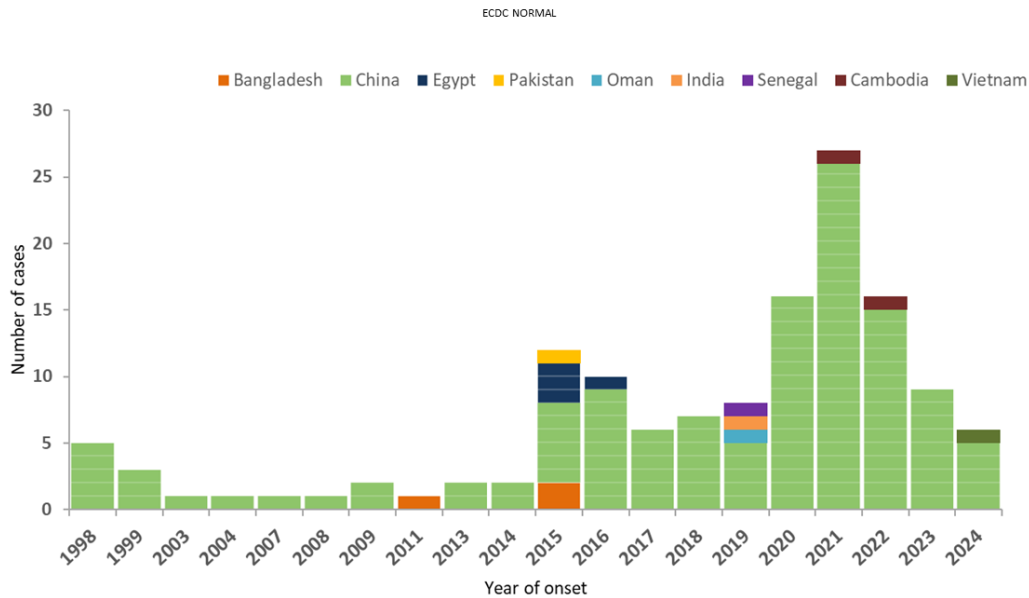
Sporadic human cases of avian influenza A (H9N2) have been observed outside the EU/EEA, mainly in young children. The source of infection of the current case is unknown. Direct contact with infected birds or contaminated environments is the most likely source of human infection with avian influenza viruses. The risk to human health in the EU/EEA is currently considered 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 also 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:** 15 March 2024

**Figure 1. Distribution of confirmed human cases of avian influenza A(H9N2) virus infection by year of onset and country, 1998–2024 (updated on 9 April, n=136)**



Source: ECDC

## 7. Human cases with avian influenza A(H10N3)– Multi-country (World)

### Overview

**Update:** a new human infection with avian influenza A(H10N3) in China has been reported, according to WHO and [pre-print publication](#) on 10 April 2024. A man in his fifties from Kunming City, Yunnan province, had onset of symptoms on 28 February 2024 and was admitted to hospital on 6 March with severe pneumonia. Prior to disease onset, the patient, who is a farmer, had exposure to poultry and poultry-related environment, where dead poultry and ducks were reported. There are no new cases among family members of the patient, samples from close contacts and environmental samples tested negative for influenza A(H10N3) virus. The patient remains in critical condition.

This is the third case of human infection with avian influenza A(H10N3) reported in China and globally; all three cases had severe illness.

**Summary:** To date, three cases of avian influenza A(H10N3) virus have been reported globally, all three in China. The [first case](#) was reported in Jiangsu Province, China, in 2021: a man in his forties developed symptoms on 23 April 2021 and eventually recovered; the [second case](#), a man in his thirties from Zhejiang Province, developed severe symptoms on 11 June 2022 and has recovered since; the third case, a man in his fifties from Yunnan Province, developed severe pneumonia on 28 February 2024, following exposure to poultry and poultry-related environment. No new cases have been reported among close contacts of the three cases.

**Sources:** [pre-print publication](#) (3rd case), [National Health Commission of the People's Republic of China](#) (1st case), [The Government of the Hong Kong Special Administrative Region](#), [WHO Avian Influenza weekly update Number 940](#) (2nd case)

### ECDC assessment

Sporadic human cases of avian influenza A(H10N3) have been observed, but no human-to-human transmission has been documented. The risk to human health in the EU/EEA is considered very low.



Direct contact with infected birds or contaminated environments is the most likely source of human infection with avian influenza. The use of personal protective measures for people exposed to sick or dead birds and their droppings will reduce the associated risk of infection.

## Actions

ECDC monitors avian influenza strains through its epidemic intelligence and influenza surveillance activities in collaboration with the European Food Safety Authority (EFSA) and the EU Reference Laboratory for Avian Influenza to identify significant changes in the epidemiology and characteristics 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: [Avian influenza overview December 2023–March 2024](#).

**Last time this event was included in the Weekly CDTR:** 30 September 2022

# 8. Mpox Multi-country 2022–2024

## Overview

Since the beginning of January 2024 (previous update), and as of 8 April 2024, 323 mpox cases have been reported from 17 EU/EEA countries. Most cases have been reported by Spain (150), Italy (50), France (36) and Germany (28). Cases have also been reported by: Portugal (13), Austria (7), Belgium (7), Czechia (7), Netherlands (7), Sweden (5), Poland (4), Greece (3), Slovakia (2), Hungary (1), Ireland (1), Luxembourg (1), and Norway (1).

Since the start of the mpox outbreak and as of 8 April 2024, 22 298 confirmed cases have been reported from 29 EU/EEA countries: Spain (7 960), France (4 206), Germany (3 821), Netherlands (1 299), Portugal (1 193), Italy (1 042), Belgium (806), Austria (345), Sweden (272), Ireland (245), Poland (221), Denmark (198), Norway (105), Greece (92), Hungary (83), Czechia (78), Luxembourg (61), Romania (47), Slovenia (47), Finland (43), Malta (35), Croatia (33), Iceland (17), Slovakia (16), Estonia (11), Bulgaria (6), Latvia (6), Cyprus (5) and Lithuania (5). Deaths have been reported from: Portugal (3), Spain (3), Belgium (2), Austria (1), and Czechia (1).

The slight increase in cases, observed since the second half of 2023, appears to have stabilised. During the latter half of 2023, there was an average of 117 cases per month, while in 2024, as of April 8, the monthly average has been 108 cases. In 2024, the male sex (98%) and those who reported sexual orientation as men who have sex with men (MSM) (92%) remained the most affected. Sexual transmission (96%) remained the major route of transmission. Similarly, there was no change in the hospitalisation rate (including for isolation, treatment, or other/unknown reasons), with rate remaining at 7%, suggesting no recent change in disease severity. Out of the 10 deaths reported so far, 1 was reported in 2024.

Since the start of the mpox outbreak in 2022, and as of 8 April 2024, the following Western Balkan countries have reported confirmed cases of mpox: Serbia (40), Bosnia and Herzegovina (9), and Montenegro (2). In addition, 12 cases have been reported from Türkiye.

Globally, 94 707 confirmed mpox cases including 181 deaths have been reported by 117 countries until February 2024 according to the [WHO report on Mpox Global Trends](#) produced in March 2024.

In November 2023, WHO [reported](#) that a cluster of sexually transmitted mpox cases and cases among sex workers due to MPXV clade I had been reported in the Democratic Republic of the Congo (DRC). ECDC published a Threat Assessment Brief on the event on 5 December 2023, assessing the risk for the general population and the population of MSM in EU/EEA countries from the epidemic of mpox due to MPXV clade I in DRC as low. An epidemiological update was also [published by ECDC on 5 April 2024](#).

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

## ECDC assessment

As the number of new infections remains relatively low in Europe, the overall risk of mpox infection is assessed as low for MSM and very low for the broader population in the EU/EEA.

Response options for EU/EEA countries include creating awareness among healthcare professionals and supporting sexual health services to continue case detection, contact tracing, and management of cases; continuing to offer testing for orthopoxvirus; vaccination strategies and continuing risk communication and community engagement, despite the decreasing number of cases.

Primary preventive vaccination (PPV) and post-exposure preventive vaccination (PEPV) strategies may be combined to focus on individuals with the highest risk of exposure and close contacts of cases, respectively. PPV strategies should prioritise gay, bisexual and transgender people, and MSM, who are at higher risk of exposure, as well as individuals at risk of occupational exposure, based on epidemiological or behavioural criteria. Health promotion interventions and community engagement are also critical to ensure effective outreach, high vaccine acceptance, and uptake among those most at risk of exposure.

## Actions

ECDC is closely monitoring the mpox epidemiological situation through indicator- and event-based surveillance.

A [rapid risk assessment](#), 'Mpox multi-country outbreak', was published on 23 May 2022. The [first update](#) to the rapid risk assessment was published on 8 July 2022, and a [second update](#) was published on 18 October 2022. ECDC published a [report](#) on public health considerations for mpox in EU/EEA countries on 14 April 2023. ECDC published a [Threat Assessment Brief on MPXV clade I in the Democratic Republic of the Congo \(DRC\) on 5 December 2023](#), and an [epidemiological update on 5 April 2024](#).

A [resource toolkit for event organisers](#) and [social media materials](#) on mpox related to events are also available. Member States can use these materials to work with event organisers ahead of Pride events to ensure that attendees have access to the right information.

☐ Member States can also consider providing those who travel to Pride events abroad with updated information on how to protect themselves and others from mpox.

For the latest updates, visit [ECDC's mpox page](#).

**Last time this event was included in the Weekly CDTR:** 19 January 2024