

WEEKLY BULLETIN

Communicable Disease Threats Report

Week 38, 14-20 September 2024

This week's topics

- Severe floods in Central and Eastern Europe Multi-country 2024
 Mpox due to monkeypox virus clade I and II Global outbreak 2024
- 3. Seasonal surveillance of West Nile virus infections 2024
- 4. Avian influenza A(H5N1) human cases United States 2024
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Executive summary

Severe floods in Central and Eastern Europe - Multi-country - 2024

- Storm Boris has caused devastating floods across Central and Eastern Europe, causing substantial damage and harm.
- The most affected areas are in Austria, Czechia, Poland, Romania, and Slovakia.
- Heavy rainfall and flooding due to Storm Boris have also affected Hungary and northern Italy.
- At least 24 fatalities have been reported, from Romania (7), Poland (7), Austria (5) and Czechia (5).

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

- A total of 11 095 laboratory-confirmed cases due to monkeypox virus (MPXV) clade I and clade II and 50 deaths were reported by 70 countries in August 2024, according to WHO (2022-24 Mpox (Monkeypox) Outbreak: Global Trends).
- This week, the epidemiological situation regarding MPXV clade I and clade II circulation globally has not significantly evolved. Similarly to previous weeks, there is an increasing trend in cases of mpox due to MPXV clade I reported by the Democratic Republic of the Congo and Burundi. Uganda has also reported 22 cases of mpox.
- No new countries have reported confirmed mpox cases due to MPXV clade I.
- Additional information can be found in ECDC's Rapid Risk Assessment published on 16 August (Risk assessment for the EU/EEA of the mpox epidemic caused by monkeypox virus clade I in affected African countries), and its Rapid scientific advice on public health measures.
- ECDC is closely monitoring and assessing the epidemiological situation.

European Centre for Disease Prevention and Control, Solna, Sweden www.ecdc.europa.eu

Seasonal surveillance of West Nile virus infections – 2024

- Since the beginning of 2024, and as of 18 September 2024, West Nile virus (WNV) infection cases have been reported to The European Surveillance System (TESSy) by 11 EU/EEA countries (Austria, Bulgaria, Croatia, France, Germany, Greece, Hungary, Italy, Romania, Slovenia, and Spain) and five EU neighbouring countries (Albania, Kosovo*, North Macedonia, Serbia, and Türkiye).
- More information, including maps and a dashboard, are available in ECDC's weekly surveillance report on West Nile virus infections: <u>Weekly updates: 2024 West Nile virus transmission season</u> (europa.eu) and <u>West Nile virus Dashboard (europa.eu)</u>. Monthly epidemiological updates are available at: <u>Monthly updates: 2024 West Nile virus transmission season (europa.eu)</u>.

* This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.

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

- On 13 September 2024, the <u>US CDC</u> published additional information on the recent human case of avian influenza A(H5) in the state of Missouri.
- Analysis of the HA gene sequence shows that the virus belongs to clade 2.3.4.4b, and the NA sequence was confirmed as N1. Compared to previous human cases, the HA has two amino acid differences not observed before. Neither of the two mutations is known to modify virus ability to infect and spread among people.
- Two close contacts of the case developed similar symptoms, but epidemiological evidence does not support person-to-person transmission of the virus.
- No additional cases have been identified within a 10-day follow-up period.
- In 2024, and as of 20 September 2024, a total of 14 human cases of avian influenza A(H5) have been reported in the United States. From these, four cases have been reported in workers exposed to dairy cattle infected or presumed to be infected with A(H5N1) and nine cases have been reported in workers exposed to commercial egg layer farms with outbreaks of HPAI A(H5). One (the most recent case) had no known animal exposure identified.
- To date, there have been no confirmed cases of A(H5N1) infection in humans and no reports of A(H5N1) infection in cattle in the EU/EEA.
- 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-moderate.

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

- Since late spring and during summer 2024, increased SARS-CoV-2 activity in primary and secondary care has been observed in several EU/EEA countries. The timing of the epidemic varies between EU/EEA countries, with most countries now observing a stable or declining trend. However, some countries are now experiencing an increasing trend in test positivity.
- SARS-CoV-2 test positivity in secondary care remains the highest among individuals aged 65 years and above, indicating that vulnerable populations remain at risk of severe disease.
- The SARS-CoV-2 variant BA.2.86 and its subvariants, including KP.3, continue to dominate in EU/EEA countries.
- Vaccination is the most effective measure to protect against more severe forms of COVID-19 and seasonal influenza. Since the protective effect wanes over time, promoting vaccination against respiratory viral diseases according to national recommendations before the beginning of the winter season remains important for all EU/EEA countries, particularly to protect individuals at higher risk of severe outcomes.

1. Severe floods in Central and Eastern Europe - Multi-country - 2024

Overview:

Storm Boris has caused devastating floods across Central and Eastern Europe following heavy rainfall between 11 and 15 September 2024. The storm brought up to five times the average monthly rainfall for September.

Floods, river overflows and landslides resulted in the evacuation of several areas, casualties and major disruptions in the most affected countries, Austria, Czechia, Poland, Romania, and Slovakia. Heavy rainfall and flooding due to Storm Boris have also affected Hungary and northern Italy.

According to <u>media reports</u> reports, at least 24 fatalities have been reported, from Romania (7), Poland (7), Austria (5) and Czechia (5).

<u>Austria</u>

The eastern regions were hit by severe flooding and Lower Austria declared a disaster zone.

Austria provided more information in EpiPulse, including the following:

Major healthcare facilities have not been severely affected and Austria's existing surveillance systems are currently deemed sufficient to detect potential increases in case numbers or outbreaks of notifiable communicable diseases associated with flooding events. Drinking water supplies are closely monitored by the local authorities, and several affected communities have been informed not to use their water supplies or boil drinking water. Austria's civil protection organization has published recommendations on appropriate use of PPE for cleanup work as well as behaviour in case of chemical spillages in the aftermath of flooding events: https://www.zivilschutz.at/thema/hochwasser/.

<u>Czechia</u>

The most affected were the north-eastern regions of the country. <u>According to the Copernicus service</u>, 38 areas were on high alert as of 16 September, with more than <u>50,000 homes</u> without power due to widespread blackouts. Thousands of residents have been evacuated and Prague imposed emergency measures to prevent flooding in the city.

<u>Hungary</u>

Rising water levels in areas along the Danube river caused <u>flooding</u>. According to <u>media reports</u>, flood waters from the overflowing Danube river continue to rise in Budapest and are expected to peak in the city on 21 September.

<u>Italy</u>

<u>Media</u> report that heavy rainfall in northern Italy is causing floods and rivers overflows. The Emilia Romagna region is particularly affected: several people there have been displaced and widespread damage is reported.

<u>Poland</u>

According to the <u>State Fire Service</u>, the most flood-affected areas are in the South, in the Lower Silesian, Opolskie, and Silesian Voivodeships. Towns near the border with Czechia have been partially evacuated and communication networks are down. Poland declared a month-long state of natural disaster, during which the residents of the affected regions are required to follow the government and rescue service's recommendations.

General <u>recommendations</u> regarding flooding are published on the Ministry of the Interior and Administration website. The <u>Ministry of Public Health</u>, in close collaboration with local health authorities, is monitoring the health situation in the flooded areas and has provided advice to the public regarding steps to take to reduce the risk of infections, especially regarding drinking water and food hygiene.

<u>Romania</u>

<u>According to the Copernicus service</u>, more than 5 000 homes have been evacuated due to severe flooding, with roads in eight provinces blocked or severely affected. The most affected was the

south-western county Galați. The Ministry of Health issued <u>recommendations</u> regarding food and water safety following floods.

<u>Slovakia</u>

The areas in the western and north-western part of Slovakia and bordering Czech, Austria and Poland, were the most affected, with several households evacuated. The public health authorities issued <u>recommendations for the public</u> on how to reduce the risk of infectious diseases, especially food-and waterborne diseases, after flooding.

ECDC assessment:

Floods are the most common type of natural disaster in Europe. Flash floods are significant emergencies that are challenging to predict and result in considerable destruction. Such events have become more common in recent years and are expected to occur more frequently due to climate change. Affected regions and countries are facing the immediate response needs of rescue operations, evacuations and disruption of services. Collaboration between public health authorities and other local authorities (e.g. civil protection agencies, municipal governments) is needed to ensure access to clean water as soon as possible in the affected communities.

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

As regards measures to prevent outbreaks in the flood-affected communities, these may include the following:

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

Infectious disease risks following floods do not represent the greatest risks to the health and wellbeing of the flood-affected communities. Several other health risks, including disruption to healthcare, environmental hazards (e.g. carbon monoxide poisoning, exposure to dangerous chemicals), and psychological stress may cause acute and long-lasting health effects and an increase in all-cause mortality in these areas.

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

Actions:

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

2. Mpox due to monkeypox virus clade I and II – Global outbreak – 2024

Overview:

Global background

A total of 11 095 laboratory-confirmed cases due to monkeypox virus (MPXV) clade I and clade II and 50 deaths were reported by 70 countries in August 2024, according to WHO (<u>2022-24 Mpox</u> (<u>Monkeypox</u>) <u>Outbreak: Global Trends</u>). All cases of mpox due to MPXV clade I were reported by African countries, except for one case reported by Sweden and one by Thailand. No secondary transmission of MPXV clade I has been reported outside of the affected African countries.

Overall, since the beginning of monitoring in 2022, 106 310 confirmed mpox cases (MPXV clade I and clade II), including 234 deaths, have been reported from 123 countries (<u>2022-24 Mpox</u> (<u>Monkeypox</u>) <u>Outbreak: Global Trends</u>).

Epidemiological situation in Africa

In 2024, over 27 000 confirmed or suspected mpox cases due to MPXV clade I and clade II, including over 700 deaths, have been reported from Africa Union Member States, including over 6 000 confirmed cases, according to the <u>Africa CDC Epidemic Intelligence Report issued on 16 September 2024</u> and the <u>WHO AFRO weekly report of 13 September</u>. The reporting countries are Burundi, Cameroon, the Central African Republic, the Republic of the Congo (Congo), Cote d'Ivoire, the Democratic Republic of the Congo (DRC), Gabon, Guinea, Kenya, Liberia, Morocco, Nigeria, Rwanda, South Africa, and Uganda.

The epidemiological situation remains similar to the previous week.

The two countries reporting the largest numbers of cases in recent weeks are still the DRC and Burundi. In addition, cases have been reported by Uganda. Updates on the three countries are summarised below:

- The DRC has reported 794 confirmed cases in the past four weeks and Burundi 411, according to the <u>WHO Global report on mpox (data as of 15 September</u>). Deaths have only been reported in DRC among confirmed and suspected cases (over 100 according to WHO in the past four weeks). Clade Ib has been detected in both countries, while clade Ia is co-circulating in the DRC.
- The DRC continues to report the highest number of mpox cases in Africa. The cumulative number of cases in 2024 is over 25 000 (over 5 000 confirmed), including over 700 deaths, while testing rates increased reaching over 40% (<u>Africa CDC Epidemic Intelligence Report issued on 16</u> <u>September 2024</u> and <u>WHO AFRO weekly report of 13 September</u>).
- In Burundi, as of 15 September 2024, 564 confirmed cases have been reported according to the <u>WHO Global report on mpox (data as of 15 September)</u> from several areas of the country. According to the <u>WHO AFRO weekly report of 13 September</u>, cases were reported from 29 of 49 districts. Over one third of cases (37.5%) were reported among children under 10 years. There is a slightly higher percentage of males among cases (56%).
- Uganda has <u>reported</u> 22 cases in total, of which three had links with other cases. Six of the cases have been reported from Kampala.

No new cases have been reported in the past week from Rwanda or Kenya, countries that had previously reported the detection of MPXV clade Ib and mpox circulation for the first time in 2024. Overall, four cases have been reported in Rwanda and five in Kenya. In Gabon (two cases), Guinea (one case) and Liberia (11 cases in total, five after mid-August), where cases were also reported recently, information on the clade is not yet available. Cameroon and Morocco have also reported mpox cases the last four weeks. Both countries had reported cases prior to the PHEIC (Cameroon: Clade Ia and II, and Morocco: Clade II; <u>WHO Global report on mpox (data as of 15 September)</u>).

Based on an analysis of the patterns of MPXV transmission observed at national level, and considering limitations and uncertainties, ECDC has classified countries where MPXV clade I is endemic or has been reported for the first time in 2024 using official epidemiological information in the following categories:

- Countries reporting only travel-associated cases or cases with a clear link to travel-associated cases (Kenya, Sweden, Thailand)
- Countries reporting clusters of cases (Congo, Rwanda)
- Community transmission (Burundi, Central African Republic, DRC, Uganda)

This classification takes into consideration several limitations of the available data as well as uncertainties. It will be adapted based on additional epidemiological information and feedback.

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

Epidemiological situation in the EU/EEA for MPXV clade I

On 15 August 2024, Sweden <u>reported</u> the first imported case of mpox due to MPXV clade Ib in the EU/EEA. As of 5 September, no secondary cases have been detected.

ECDC assessment:

In recent weeks, the number of people with MPXV clade I infection has increased and there has been geographical expansion to newly affected African countries. In August 2024, Sweden and Thailand detected cases of mpox due to MPXV clade Ib in people with a history of travel to areas where the virus is circulating in Africa. More imported mpox cases due to MPXV clade I are likely to be reported by EU/EEA and other countries. Please see the latest ECDC <u>Risk assessment for the EU/EEA of the mpox</u> epidemic caused by monkeypox virus clade I in affected African countries.

Actions:

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

Sources: ECDC rapid risk assessment

Last time this event was included in the Weekly CDTR: 13 September 2024

3. Seasonal surveillance of West Nile virus infections – 2024

Overview:

Epidemiological summary

Since the start of 2024, and as of 18 September 2024, human cases of WNV infection have been reported to TESSy by 11 EU/EEA countries and five EU-neighbouring countries. In the EU/EEA, Austria, Bulgaria, Croatia, Hungary, Romania, France, Germany, Italy, Greece, Slovenia, and Spain have reported WNV infections. From EU-neighbouring countries, Albania, Kosovo*, North Macedonia, Serbia, and Türkiye have reported WNV infections. In total, 152 NUTS3/GAUL1 regions across 16 countries have reported locally acquired WNV cases. For detailed information on places of infection, please refer to ECDC's weekly update and dashboard.

More background information on the Commission Directives on blood safety and EU/EEA notifications of WNV infections can be found in ECDC's weekly surveillance report on WNV infections, which is available online (Weekly updates: 2024 West Nile virus transmission season (europa.eu) and West Nile virus Dashboard (europa.eu)). Monthly epidemiological updates are available at: Monthly updates: 2024 West Nile virus transmission season (europa.eu).

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Actions:

ECDC is monitoring West Nile virus through indicator- and event-based surveillance activities.

Last time this event was included in the Weekly CDTR: 13 September 2024

4. Avian influenza A(H5N1) human cases – United States – 2024

Overview:

On 13 September 2024, the <u>US CDC</u> published additional information on the recent human case of avian influenza A(H5) in the state of Missouri. The case was in an adult person with serious comorbidities, who on 20 August developed symptoms of chest pain, nausea, vomiting, diarrhoea, and weakness. The case was hospitalised on 22 August and received antiviral treatment. The patient was not severely ill and has subsequently recovered. One household contact became ill on the same day and reported similar symptoms as the case, but was not tested and has since recovered. As the symptoms developed at the same time, the two people were likely exposed to the same source and were not part of a person-to-person transmission chain. A healthcare worker, who was a close contact of the case, developed mild symptoms but tested negative for influenza. No additional cases have been identified within a 10-day follow-up period.

The clinical specimen contained low amounts of genetic material (viral RNA) and only partial sequencing data was generated. Full-length gene sequences were Because of low amounts of genetic material (viral RNA) in the clinical specimen, sequencing produced limited data for analyses. Full-length gene sequences were produced for matrix (M) and non-structural (NS) genes only. Analysis of partial sequences of the haemagglutinin (HA) and neuraminidase (NA) genes (GISAID: EPI_ISL_19413343) showed a close match to A(H5N1) viruses from US dairy cattle. Similar HA and NA genes sequences have been found in birds and other animals around dairy farms, as well as in raw milk, and poultry.

Analysis of the HA gene sequence shows that the virus belongs to clade 2.3.4.4b, and the NA sequence was confirmed as N1. Compared to previous human cases, the HA has two amino acid differences not observed before. The two amino acid changes are not known to modify virus ability to infect and spread among people. However, the location of the two amino acid changes may impact the cross-reactivity of clade 2.3.4.4b candidate vaccine viruses (CVVs). Further antigenic testing is planned. Additional antigenic testing is planned. The first amino acid change, HA A156T, has been found in fewer than 1% of viruses identified in dairy cows, while the second mutation, HA P136S, has been observed in one virus sequence from dairy cows.

Outbreaks of avian influenza A(H5) have been reported in both commercial and backyard poultry in Missouri in 2024 but not in cattle. Avian influenza A(H5N1) has also been previously detected in the state in wild birds.

In relation to previously reported cases associated with poultry exposure in Colorado, US CDC informed that all virus specimens were determined to be susceptible to antivirals (oseltamivir, zanamivir, peramivir, and baloxavir) following antiviral susceptibility testing.

In 2024, and as of 20 September 2024, a total of 14 human cases of avian influenza A(H5) have been reported in the United States. From these, four cases have been reported in workers exposed to dairy cattle infected or presumed to be infected with A(H5N1) and nine cases have been reported in workers exposed to commercial egg layer farms with outbreaks of HPAI A(H5). One (the most recent case) had no known animal exposure identified.

Where genetic analysis has been available, the virus has been characterised as genotype B3.13 clade 2.3.4.4b of highly pathogenic avian influenza (HPAI) A(H5N1) and been closely related to viruses identified in recent poultry outbreaks and infected dairy cattle herds in the US. The virus maintains avian genetic characteristics. However, mutations associated with mammalian adaptation have been observed in viruses from some cases. No markers of antiviral resistance were found in viruses from human cases and they remain antigenically similar to the two existing HPAI A(H5) candidate vaccine viruses.

The US CDC's current assessment of the human health risk of A(H5N1) to the general public in the US does not change and continues to be considered low. Nevertheless, findings from the ongoing investigation will inform whether the assessment needs to be updated.

ECDC assessment:

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

ECDC 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 or dead animals or a contaminated environment (e.g. occupational exposure to infected animals). ECDC will revisit the risk assessment once more information becomes available from the ongoing sequencing and investigations of the most recent human case in the US.

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

In addition to enhanced surveillance, active monitoring and testing of exposed individuals is recommended for early detection of human cases and to assess the possibility of human-to-human transmission, according to the relevant ECDC guidance documents (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; Enhanced influenza surveillance to detect avian influenza virus infections in the EU/EEA during the inter-seasonal period). Raising awareness (including enquiring about animal exposure and symptoms compatible with avian influenza infections and testing of symptomatic people with a history of exposure following a risk-based approach) among all primary care workers and communicating the epidemiological situation is important in order to not miss or delay diagnosis of potential human cases. Given the uncertainties related to mammal-tomammal transmission and depending on the epidemiological situation, a low threshold can be considered for testing individuals exposed to potentially infected mammals (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 mitigate the risk.

ECDC relevant publications:

- Testing and detection of zoonotic influenza virus infections in humans in the EU/EEA, and occupational safety and health measures for those exposed at work
- Enhanced influenza surveillance to detect avian influenza virus infections in the EU/EEA during the interseasonal period
- 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 the US CDC for further information and is closely following any updates on the event. ECDC monitors avian influenza strains through its influenza surveillance programme and epidemic intelligence activities in collaboration with the European Food Safety Authority (EFSA) and the EU Reference Laboratory for Avian Influenza in order to identify significant changes in the virological characteristics and epidemiology of the virus. Together with EFSA and the EU Reference Laboratory for Avian Influenza, ECDC produces a quarterly updated report of the <u>avian influenza</u> <u>situation</u>.

Sources: FAO | 2024-e000168

Last time this event was included in the Weekly CDTR: 13 September 2024

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

Overview:

Key indicators

All data are provisional. Interpretation of trends, particularly for the most recent weeks, should consider the impact of possible reporting delays, non-reporting by individual countries or overall low testing volumes at primary care sentinel sites. 'Country notes' in the footer explain known issues with reported data.

- Syndromic surveillance in primary and secondary care indicates that respiratory activity remains at baseline levels in most EU/EEA countries, similar to the levels observed during previous seasons at this time of year. However, ARI rates in six countries (Belgium, Czechia, Germany, Lithuania, Luxembourg, and Slovenia) show an increasing trend even if their intensity is still at baseline or low.
- SARS-CoV-2 activity is variable in both primary and secondary care in EU/EEA countries.
 - In summer 2024, SARS-CoV-2 activity started about six weeks earlier than in 2023. However, the trends are comparable in terms of the number of tested samples and positivity rates in both primary and secondary sentinel systems.
 - In primary care sentinel systems (general practitioners), pooled test positivity stayed stable at 16%. At the country level, most reporting countries observed a stable or decreasing trend in test positivity. However, some countries (Belgium, the Netherlands, and Slovakia) are now reporting an increasing trend in test positivity.
 - In SARI sentinel systems (hospitals), the pooled test positivity stayed stable at 13%, with test positivity ranging from 5–25% in the five reporting countries (Germany, Greece, Ireland, Malta, and Spain). The age group 65 years and above remained the most affected (18% test positivity).
 - Non-sentinel secondary care notifications were at low levels overall, with most EU/EEA countries that report these indicators reporting stable or decreasing trends in the number of positive test results among hospitalised, ICU-admitted patients, and deaths. However, Czechia and Slovakia showed an increasing number of SARS-CoV-2 positive hospitalised patients. In addition, increasing trends in ICU-inpatients and ICU-admitted cases have been observed for Romania and Sweden, respectively.
 - Increasing numbers of deaths related to SARS-CoV-2 were observed in Bulgaria, Czechia, Hungary, Malta, Poland, Romania, and Sweden over the past few weeks, while other countries reported decreasing or stable numbers.
 - Despite test positivity in primary and secondary care sentinel systems remaining elevated, sentinel syndromic rates (ILI/ARI/SARI) showed no clear elevation above baseline or low levels.
- Seasonal influenza activity at the EU/EEA level remained stable at low levels in almost all reporting EU/EEA countries. Only one country (Malta) reported test positivity rates above 15% since week 31, with type A influenza viruses detected (A(H1N1)pdm09 and subtype unknown).
- Respiratory syncytial virus (RSV) activity remained low in the reporting EU/EEA countries.

Virus characterisation

Influenza for week 40, 2023 to week 37, 2024

- In the above period 5 159 A(H1)pdm09, 1 929 A(H3) and 853 B/Victoria viruses from sentinel and non-sentinel sources were genetically characterised. Of the viruses that have been assigned to a clade:
- 5 152 were A(H1)pdm09 3 794 (74%) were subclade 5a.2a and 1 358 (26%) were subclade 5a.2a.1.
- 1 926 were A(H3) 30 (2%) were subclade 2a, 11 (0.6%) were subclade 2a.3a, 1 884 (98%) were subclade 2a.3a.1 and 1 (0.1%) were subclade 2a.3b.
- 849 were B/Vic –all were subclade V1A.3a.2.

SARS-CoV-2 variants for weeks 35–36 (26 August to 8 September 2024)

- The estimated distribution (median and IQR of proportions from 11 countries submitting at least 10 sequences) of variants of concern (VOCs) or variants of interest (VOIs) was:
- 79% (71–82%) for KP.3 (614 detections from 11 countries)
- 21% (17–29%) for BA.2.86 (227 detections from 11 countries)
- For information on SARS-CoV-2 variants classified as variants under monitoring (VUM), visit ECDC's variant page.

ECDC assessment:

Influenza and RSV activity in the EU/EEA remain at low levels. Following a period of very low activity, there is evidence of increased SARS-CoV-2 activity for some reporting countries in both primary and secondary care, with those aged 65 years and above at greatest risk of severe disease. Although COVID-19 hospital admissions, ICU admissions and deaths remain low at the EU/EEA level, some countries are experiencing increased activity in all these indicators. Increases in SARS-CoV-2 activity highlight the continued need to monitor the impact of SARS-CoV-2 at national and regional level.

Actions:

In order to assess the impact of emerging SARS-CoV-2 sub-lineages, and their possible correlation with increases in COVID-19 epidemiological indicators, it is important that countries continue to sequence SARS-CoV-2-positive clinical specimens and report to GISAID and/or TESSy. It is therefore important that testing of symptomatic individuals for SARS-CoV-2 continues during the autumn period.

Vaccination remains critically important to protect individuals at high risk of severe outcomes, such as older adults. While COVID-19 vaccination continues to protect against severe disease, its effect wanes over time and individuals at higher risk should stay up-to-date with COVID-19 vaccination, in accordance with national recommendations.

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

Further information:

- Short-term forecasts of ILI and ARI rates in EU/EEA countries are published on ECDC's <u>RespiCast</u>.
- <u>EuroMOMO</u> 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 <u>2024-2025 northern hemisphere vaccine</u> <u>composition</u> 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 <u>published</u> 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: 13 September 2024

Events under active monitoring

- Middle East respiratory syndrome coronavirus (MERS-CoV) Multi-country Monthly update last reported on 30 August 2024
- Chikungunya and dengue Multi-country (World) Monitoring global outbreaks Monthly update last reported on 30 August 2024
- Cholera Multi-country (World) Monitoring global outbreaks Monthly update last reported on 30 August 2024
- Human cases of swine influenza A(H1N1) virus variant Multi-country 2024 last reported on 30 August 2024
- Overview of respiratory virus epidemiology in the EU/EEA weekly monitoring last reported on 30 August 2024
- Legionnaires' disease outbreak Italy 2024 last reported on 30 August 2024
- Mpox due to monkeypox virus clade I and II Global outbreak 2024 last reported on 30 August 2024
- Autochthonous chikungunya virus disease Department of La Réunion, France, 2024 last reported on 30 August 2024
- Seasonal surveillance of West Nile virus infections 2024 last reported on 30 August 2024
- Locally acquired dengue in 2024 in mainland France last reported on 23 August 2024
- Influenza A(H5N1) Multi-country (World) Monitoring human cases last reported on 23 August 2024
- Circulating vaccine-derived poliovirus type 2 (cVDPV2) Palestine* 2024 last reported on 23 August 2024
- Poliomyelitis Multi-country Monthly monitoring of global outbreaks last reported on 23 August 2024
- Avian influenza A(H5N1) human cases United States 2024 last reported on 20 September 2024
- Severe floods in Central and Eastern Europe Multi-country 2024 last reported on 20 September 2024
- Measles Multi-country (World) Monitoring European outbreaks monthly monitoring last reported on 16 August 2024
- Human cases of swine influenza A(H3N2) variant virus Multi-country last reported on 16 August 2024
- Chandipura virus disease India 2024 last reported on 16 August 2024
- Mpox in the EU/EEA, Western Balkan countries and Türkiye 2022–2024 last reported on 13 September 2024
- Oropouche virus disease Multi-country (Americas) 2024 last reported on 13 September 2024
- SARS-CoV-2 variant classification last reported on 06 September 2024