

**WEEKLY BULLETIN** 

# **Communicable Disease Threats Report**

Week 48, 26 - 2 December 2023

# **Today's disease topics**

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## **Executive summary**

#### Human infection with influenza A(H1N2)v - United Kingdom - 2023

- One human case with swine influenza virus A(H1N2) variant infection has been reported in the UK.
- The infection detected in the UK is a distinct clade 1b.1.1, which is different from recent human cases of influenza A(H1N2) elsewhere in the world but is similar to viruses detected in UK pigs.
- No human-to-human transmission has been detected so far, but further investigations are ongoing.
- Sporadic cases can occur following exposure to pigs due to the high prevalence of swine influenza viruses in the pig population. Specific protocols are applied to ensure a thorough investigation of all cases and rapid risk assessment.

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

- The Cambodian Ministry of Health reported two new human cases of avian influenza A(H5N1) infection, including one death. Both are from the same village in Kampot province and both had contact with dead backyard poultry.
- Clade 2.3.2.1c viruses are circulating in the Region and have caused human cases earlier in 2023. The same clade of viruses was identified in one of the two patients.
- To date, no human-to-human transmission was reported associated with this event.
- The ECDC risk assessment remains unchanged. Clade 2.3.2.1c viruses are not present in Europe.

SURVEILLANCE REPORT

- Worldwide, 882 human cases with avian influenza A(H5N1), including 461 deaths (CFR: 52.2%), have been reported in 23 countries since 2004.
- The risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered to be low. The risk to occupationally exposed groups, such as cullers, has been assessed as low-to-medium.

#### Overview of respiratory virus epidemiology in the EU/EEA

- By the end of week 47 (ending 26 November 2023), rates of respiratory illness (influenza-like illness (ILI) and/or acute respiratory infection (ARI)) in the community were increasing in many EU/EEA countries. Rates of severe acute respiratory infection (SARI) cases presenting to secondary care were comparable to the same time last year.
- SARS-CoV-2 continued to circulate at higher levels than seasonal influenza and respiratory syncytial virus (RSV). Countries reported a mix of increasing and decreasing trends for SARS-CoV-2 activity and severity. Countries in the southern part of the EU/EEA are mostly in a decreasing trend while many countries in the north are in an increasing trend. Severity indicators, hospital admission, intensive care unit (ICU), and death rates continued to show an increase in week 45 or 46, especially in the 65 years and above age group; the decrease in the last 1-2 weeks potentially reflects a reporting delay. RSV activity continued to increase, with the highest impact among children aged 0–4 years reflected both in the sentinel SARI positivity and the non-sentinel hospital admissions. Seasonal influenza activity remained at a low level, although there is evidence of increasing intensity and geographical spread in some countries; two countries have crossed 10% positivity threshold.

# Increase in respiratory infections due to *Mycoplasma pneumoniae* in the EU/EEA during the season 2023/2024

- Six EU/EEA countries have reported recent increases in *Mycoplasma pneumoniae* detections at national level or in specific hospital laboratories.
- Surges of *M. pneumoniae* infections occur periodically, typically every one to three years. The disease is transmitted by close contact with an infected individual.
- The recent increases in observed detections may reflect the typical periodic recurrence of *M. pneumoniae* in the community and is potentially exacerbated by a three-year period of very limited transmission and detection of *M. pneumoniae* in the EU/EEA.
- Although cases of M. pneumoniae infection are not notifiable in most EU/EEA countries, it nevertheless
  remains important to continue monitoring the occurrence of atypical and/or severe forms of disease, or
  evidence of resistance to antibiotics.

#### HIV/AIDS surveillance 2023 - 2022 data

- HIV continues to impact the health and well-being of people in EU/EEA countries, with 22 995 diagnoses reported in 2022. There was a 30.8% increase in the rate of HIV diagnoses reported in 2022 compared to 2021, however the rate was still 3.8% lower than in 2019. The increase in HIV diagnoses in 2022 can be partially attributed to the increased proportion of previous positive cases reported.
- In the last year there was an increase in HIV in some specific groups, namely foreign-born men who have sex with men and heterosexual people, mainly women.
- Late diagnosis remains high; 47.9% of those diagnosed had a CD4 count of <350 cells/mm3.
- Nearly half (48.9%) of the reported diagnoses were made in people born abroad.
- Improved early diagnosis, expanded testing, linkage to care and rapid initiation of antiretroviral therapy, as
  well as high impact combination prevention offered to populations most at-risk of HIV acquisition including
  pre-exposure prophylaxis (PrEP), needle syringe programs and opioid substitution therapy all remain
  essential.

#### West Nile virus One Health seasonal surveillance - 2023

- Since the last update, and as of 29 November 2023, ten human cases of West Nile virus (WNV) infection have been reported by EU/EEA countries, and no cases were reported by any EU-neighbouring country.
- Since the beginning of the 2023 transmission season, 707 human cases of WNV infection have been reported by EU/EEA countries, and 93 by EU-neighbouring countries.
- Since the beginning of the 2023 WNV transmission season, and as of 29 November 2023, EU/EEA countries have reported 147 outbreaks among equids and 246 outbreaks among birds.

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

- Since the last update on 24 November 2023, and as of 1 December 2023, ECDC reclassified XBB.1.16 from variant under monitoring (VUM) to de-escalated variant. This decision was prompted by the consistent decreasing trends in the detections of XBB.1.16 lineages observed both at EU/EEA level and globally, as well as the fact that the major circulating XBB.1.16 lineages (e.g. XBB.1.16.6) are already tracked under other umbrellas of variants (XBB.1.5-like + F456L).
- XBB.1.5-like+F456L variants currently dominate the global and EU/EEA SARS-CoV-2 variant landscape. As of 27 November 2023, for week 45 (6 November 2023 to 12 November 2023), XBB.1.5-like + F456L lineages

are circulating with a median proportion of 60.5% in EU/EEA countries (range: 27–85%). The overall proportion of XBB.1.5-like+F456L variants appears to be stable or slightly declining in the EU/EEA.

• **XBB.1.5-like+L455F+F456L** variants show an increasing trend in all EU/EEA countries with sufficient reporting, with a median proportion of 32% (range: 9–43%). The lineages mainly present in this umbrella are HK.3, JD.1.1 and JG.3 lineages.

#### Poliomyelitis - Multi-country (World) - Monitoring global outbreaks

- In 2023, and as of 28 November 2023, one new case of acute flaccid paralysis (AFP) caused by wild poliovirus type 1 (WPV1) has been reported from Pakistan (1).
- In 2023, and as of 28 November 2023, five new cases caused by circulating vaccine-derived poliovirus type 1 (cVDPV1) have been reported from the Democratic Republic of the Congo (DRC) (5). In 2022, an additional two cases were reported from DRC (2).
- In 2023, and as of 28 November 2023, 44 new cases of AFP caused by circulating vaccine-derived poliovirus type 2 (cVDPV2) have been reported from seven countries. In 2022, additional four cases have been reported from DRC (4).

# Human infection with influenza A(H1N2)v United Kingdom - 2023

#### **Overview:**

On 27 November 2023, the UK Health Security Agency (<u>UKHSA</u>) reported the first human case with swine influenza virus A(H1N2) variant (A(H1N2)v) infection, which is very similar to the viruses circulating among pigs in UK.

The infected person from North Yorkshire, was tested at a general practitioners (GP) due to mild respiratory symptoms. A(H1N2)v was later confirmed by PCR and characterised by genome sequencing by UKHSA. The person fully recovered. Investigation is ongoing to identify the source of infection. Close contacts of the case were followed up by UKHSA and partner organisations and offered testing and advice on further care in case symptoms occur or there is a positive test. UKHSA has increased surveillance among GP surgeries and hospitals in parts of North Yorkshire to assist the detection of cases and assessment of transmission. Health officials are asking pig keepers to immediately report any suspicion of swine influenza in their herds to their local veterinary. According to UKHSA preliminary information, the infection detected in the UK is a distinct clade 1b.1.1, which is different from recent human cases of influenza A(H1N2) elsewhere in the world but is similar to viruses detected in UK pigs.

**Background**: Since 2005, globally, there have been 50 human cases of swine influenza A(H1N2)v reported, none of these genetically related to this strain detected in UK. In 2023, there have been four cases reported from US (2), Taiwan (1) and recent case from UK. In the EU/EEA there have been five cases reported since 2018 from the Netherlands (in 2018 and 2022), Denmark (in 2019), France (in 2021), and Austria (in 2021).

Source: UKHSA

#### **ECDC** assessment:

Sporadic transmission of influenza viruses of swine origin to humans have been reported from several countries globally, including in the EU/EEA. Symptoms in infected individuals have ranged from mild to severe respiratory disease. Infection has been observed in healthy individuals without other underlying conditions. Swine influenza viruses circulate widely in pig populations and exposure to pigs represents the most common risk factor for infection. To date, no human-to-human transmission has been documented. The source of exposure of the current case is still under investigation.

When a human infection is detected, contact tracing should be performed to exclude onward transmission to contacts and to implement control measures to prevent human-to-human spread. Zoonotic influenza viruses isolated from patients should be further sequenced and characterised, as well as shared with the national influenza reference laboratories and WHO Collaborating Centres. ECDC has published a guidance on testing and detection of zoonotic influenza viruses in humans 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 (europa.eu)

#### Actions:

ECDC is monitoring zoonotic influenza events through its epidemic intelligence activities and disease experts in order to identify significant changes in the epidemiology of the virus. Cases should be immediately reported to the Early Warning and Response System (EWRS), EpiPulse and International Health Regulations (IHR).

Last time this event was included in the CDTR: 28 November 2023

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

#### **Overview:**

**Update:** Two new human cases due to avian influenza A(H5N1) infection have been reported in Cambodia by the Ministry of Health on <u>24 November</u> and on <u>26 November 2023</u>. Both cases are from the same Trapeang Russey village, Damnak Sokrom commune, Dong Tong district, with a reported series of deaths of backyard poultry and ducks in the village a week before.

One case is a 21-year-old woman who got ill on 19 November 2023, was hospitalised and admitted to ICU on 23 November 2023 with respiratory symptoms including fever, shortness of breath, and cough. Samples taken from her tested positive to avian influenza A(H5N1) on 23 November 2023. National and local authorities started an investigation to find the source of infection in both humans and animals. Influenza treatment (Tamiflu) was distributed to the affected persons along with a health education campaign in the affected villages. The woman died on 26 November.

The other case is a 4-year-old girl, who is a neighbour of the 21-year-old woman. She was identified through active contact tracing following the detection of the first case. The girl developed respiratory symptoms including fever, cough and rash on 23 November 2023 and was treated with Tamiflu and hospitalised in the ICU on 25 November 2023. She reportedly carried a dead chicken. There isn't a reported direct contact between the two cases.

Contact tracing and laboratory investigation are ongoing. According to a <u>media report</u> at least 100 ducks have been culled and safely buried in the village as a preventive measure.

Limited information confirms the same virus clade 2.3.2.1c in one case that is similar to the previous human cases reported earlier this year in Cambodia (GISAID EPI\_ISL\_18540514).

Overall, six cases, including three deaths due to A(H5N1) have been reported in Cambodia in 2023. The previous four cases were reported in February and the other two in October. Overall, since 2005, Cambodia has reported 62 cases of avian influenza A(H5N1) infection, including 40 deaths (CFR: 64.5%).

#### **Summary:**

Globally, as of 30 November 2023, there have been 882 human cases\*, including 461 deaths (case-fatality rate: 52.2%), of human infection with avian influenza A(H5N1) reported in 23 countries since 2004. To date, no human-to-human transmission has been detected.

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

**Sources**: media quoting MoH of Cambodia on 24 November 2023, report on Facebook account of the MoH of Cambodia, ECDC Avian influenza, ECDC Avian influenza overview: Latest situation update of the avian influenza in the EU/EEA, IHR notification, WHO DON

#### **ECDC** assessment:

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

Overall, the risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered to be low. The risk to occupationally-exposed groups, such as cullers, has been assessed as low-to-medium. Direct contact with infected birds or a contaminated environment is the most likely source of infection, and the use of personal protective measures for people exposed to dead birds or their droppings will minimise the remaining risk.

The recent severe cases in Asia and South America in children and people exposed to infected sick and dead backyard poultry underline the risk associated with unprotected contact with infected birds in backyard farm settings. This would also suggest the expedience of using appropriate personal protective equipment.

#### Actions:

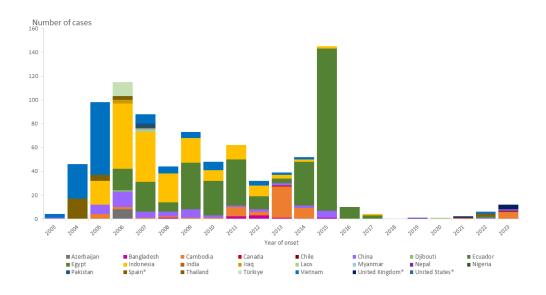
**SURVEILLANCE REPORT** 

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. ECDC, together with EFSA and the EU reference laboratory for avian influenza, produces a quarterly updated report of the avian influenza situation.

Last time this event was included in the CDTR: 27 November 2023

### Maps and graphs

Figure 1. Distribution of confirmed human cases of avian influenza A(H5N1) virus infection by year of onset and country, 2003–2023 (updated on 27 November 2023, n=882)



Source: ECDC

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

#### **Overview:**

#### Respiratory virus activity

- Consultation rates of patients presenting to general practitioners with respiratory illness (ILI and/or ARI) were
  reported by 23 EU/EEA countries up to week 47. Rates were increasing in multiple countries but were at
  levels similar to those observed in the same period last year. Moving epidemic method (MEM) thresholds were
  available for nine countries for ARI and 20 countries for ILI. Among these countries, three reported activity
  above baseline levels for ARI and four countries for ILI.
- Among countries reporting data on testing in primary care sentinel settings for influenza, RSV or SARS-CoV-2, median test positivity at the EU/EEA level remained highest for SARS-CoV-2 at 19% (pooled country data: 20%; IQR of country values: 13–27%). An overall increasing trend in median SARS-CoV-2 positivity data has been observed since week 38, with heterogeneity observed in the countries. Median test positivity for seasonal influenza was 3% (pooled 4%, IQR: 2–6%) and 6% for RSV (pooled 6%, IQR: 1–15%). There was an increasing trend visible for RSV (with RSV detections reported by 17 of 23 countries reporting tests).

- RSV detections in non-sentinel data were reported by 14 countries and continued to increase in recent weeks.
   An increasing trend was observed for seasonal influenza detections over the past four weeks. Influenza
   detections remain at low levels overall. SARS-CoV-2 detections in non-sentinel data were similar to those
   reported for sentinel data, with a mixture of increasing and decreasing trends at the country level.
- Among the 87 sentinel detections of seasonal influenza, 83 were typed as influenza virus type A and four were typed as influenza virus type B. Forty eight of the influenza type A detections were further subtyped as either A(H1)pdm09 (n = 33) or A(H3) (n = 15); the lineage was determined for one of the influenza type B detections and the virus belonged to the B/Victoria lineage.
- Qualitative indicators are currently only reported for seasonal influenza. Of the 24 countries reporting
  influenza intensity, 12 countries reported baseline, seven countries reported low, and five countries reported
  medium levels of activity. Of 24 countries reporting the geographical spread of influenza, four countries
  reported no activity, 12 reported sporadic activity, two reported local, three reported regional, and three
  reported widespread activity. The change from last week suggests increasing intensity and geographical
  spread in some countries.

#### Severe disease

- Increases in pooled SARI SARS-CoV-2 positivity have been observed since week 29 in people aged 15–64 years and 65 years and above, with a mixed picture at the country level. A decreasing trend however can be observed since week 44 in the pooled data. An increasing trend in the 5-14 years age group can be observed since week 45.. Non-sentinel hospital admissions and ICU and death rates have increased over the past weeks, especially in the 65 years and above age group; there is a decreasing trend observed in the last 1-2 weeks in these three indicators but that may be attributed to a reporting delay.
- In recent weeks, increasing trends in RSV positivity were observed in four of five countries reporting RSV data from SARI systems, while three countries reported data for week 47. The highest positivity (62%) was in the 0–4 years age group. However, increases were also observed in other age groups (rising from last week to 16% in 5–14 years and remaining the same 2% in 65 years and above). Non-sentinel RSV hospital admissions also remained high in the 0–4-years age group, based on data from two countries.
- Pooled test positivity for seasonal influenza in sentinel SARI system remained at two percent since last week.
   An increase was observed in week 46 in the people aged 15–64 years and 65 years and above that is not evident in week 47 probably due to a reporting delay. Non-sentinel hospital admissions, ICU admissions, and deaths due to influenza remain low.
- <u>EuroMOMO</u> pooled estimates of weekly excess all-cause mortality showed an elevated level of mortality in the age group 65 years and above.

#### Virus characterisation

SARS-CoV-2 variants for weeks 45-46 (6 November to 19 November 2023)

• The estimated distribution (median and IQR of proportions from 16 countries) of variants of concern (VOCs) or variants of interest (VOIs) was 51% (43–63%) for XBB.1.5+F456L, 19% (11–30%) for BA.2.86, 10% (6–14%) for XBB.1.5, and 1% (0–2%) for BA.2.75. The proportion of BA.2.86 had been growing, XBB.1.5-like+F456L had plateaued, and XBB.1.5 showed a steady decreasing trend.

#### Influenza

• Up to week 47, ten virus characterisations were reported; all of the A(H1)pdm09 viruses (n=6) belonged to clade 5a.2a similar to A/Sydney/5/2021 and all of the A(H3) viruses (n=4) belonged to clade 2a similar to A/Darwin/9/2021 that is the vaccine virus component included in the northern hemisphere 2023/24 influenza vaccine.

## Period overview (week 25, 2023 to week 46, 2023)

• Following relatively low respiratory illness activity over the summer period, consultation rates have been increasing in primary care settings since September. Transmission of SARS-CoV-2 began increasing in the late summer and continue to show an increase based on the sentinel median positivity data as well as severity indicators (hospital admissions, ICU admissions, and death rates). The impact of SARS-CoV-2 on severe disease mainly affects those aged 65 years and above. RSV activity began in around week 36 and has been increasing since, resulting in increasing hospital admissions particularly among the 0–4-years age group. This increase appears to have occurred around four weeks later than last year. Influenza activity remained low but is slowly increasing; all three influenza virus types/subtypes (A(H1)pdm09, A(H3) and B) are co-circulating.

#### **ECDC** assessment:

SARS-CoV-2 continued to circulate at higher levels than seasonal influenza and respiratory syncytial virus (RSV). Countries reported a mix of increasing and decreasing trends for SARS-CoV-2 activity and severity. Countries in the southern part of the EU/EEA are mostly in a decreasing trend while many countries in the north are in an increasing trend. Severity indicators, hospital admission, intensive care unit (ICU), and death rates continued to show an increase in week 45 or 46, especially in the 65 years and above age group; the decrease in the last 1-2 weeks potentially reflects a reporting delay. RSV activity continued to increase, with the highest impact among children aged 0–4 years reflected both in the sentinel SARI positivity and the non-sentinel hospital admissions. Seasonal influenza activity remained at a low level, although there is evidence of increasing intensity and geographical spread in some countries; two countries have crossed 10% positivity threshold.

#### 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 (<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>.

ECDC has published guidance on <u>vaccination roll-out for autumn/winter 2023</u>, which stresses the importance of influenza and COVID-19 vaccination to protect individuals at increased risk of severe disease, e.g. people aged over 60 years and other vulnerable individuals (such as those with underlying comorbidities), irrespective of age.

Sources: **ERVISS** 

Last time this event was included in the CDTR: 27 November 2023

# 4. Increase in respiratory infections due to Mycoplasma pneumoniae in the EU/EEA during the season 2023/2024

#### Overview:

Epidemics of *M. pneumoniae* occur periodically, typically every one to three years [1]. Transmission requires close contact with an infected individual, with slow-onset and often atypical respiratory symptoms once infected. Infections typically present with mild, self-remitting upper respiratory tract symptoms; however, patients presenting with prolonged or atypical, severe lower respiratory tract symptoms require antibiotic treatment.

Six EU/EEA countries have reported recent increases in *M. pneumoniae* infections at the national level or in specific hospitals. Increases have been reported in all age groups but are predominantly observed in children and adolescents. Additionally, one country observed an increase in severe cases admitted to the intensive care unit. There are currently no reports of atypical strains or evidence of resistance to first-line macrolide antibiotics.

#### **ECDC** assessment:

M. pneumoniae is not notifiable in most EU/EEA countries, leading to limited available information regarding diagnosed cases, proportion of detections amongst respiratory laboratory samples, or historical detection data. As a result, making country-level comparisons should be done with caution. M. pneumoniae epidemics occur cyclically in Europe every one to three years [1]. Various factors contribute to this cyclical pattern, such as the decline of population immunity over time or the introduction of new strains into the population. The reported increases are observed following a three-year period of very limited transmission and detection of M. pneumoniae in the EU/EEA, following widespread implementation of non-pharmaceutical measures during the COVID-19 pandemic, resulting in reduced population immunity, particularly amongst those with little or no pre-existing exposures to M. pneumoniae. There are currently no reports of atypical M. pneumoniae strains or resistance to first-line macrolide antibiotics from reporting countries. However, it remains important for countries to monitor and report the occurrence of atypical and/or severe forms of disease, evidence of resistance to antibiotics, and strains on the healthcare system related to M. pneumoniae cases as winter progresses and the combined burden of respiratory pathogens increase.

#### Actions:

ECDC continues to monitor the situation. Countries are encouraged to continue reporting to EpiPulse with additional information: <u>2023-IRV-00008</u>. In particular, countries with laboratory systems that routinely screen respiratory samples for *M. pneumoniae* are encouraged to report current and historic trend data for detections, as well as strain characterisation and antibiotic susceptibility data, if available.

Last time this event was included in the CDTR: 30 November 2023

## 5. HIV/AIDS surveillance 2023 - 2022 data

#### Overview:

In 2022, 22 995 HIV diagnoses were reported in 30 countries of the EU/EEA, a rate of 5.1 per 100 000 population. The highest rates were reported by Cyprus (24.1; 218 cases), and Estonia (18.8; 250 cases), and the lowest by Slovenia (2.0; 42 cases).

In 2022, the HIV diagnosis rate remained higher among men (7.3 per 100,000) than women (2.9 per 100,000).

Beyond the 22 790 cases categorised by male or female gender, an additional 121 cases were reported among transgender individuals in France, the Netherlands, and Ireland. Notably, sex between men constituted a significant proportion of diagnosed cases, representing 33.3% of all cases. Within this group, a 24.9% increase was observed among individuals born abroad compared to 2021. Heterosexual contact was the route of transmission for 33.7% of new diagnoses, injecting drug use for 4.3%, and mother-to-child transmission for 1.2%. Information regarding mode of transmission was not available for 27.3% of the cases diagnosed in 2022.

In the EU/EEA in 2022, 48.9% of those diagnosed were migrants, defined as people originating from outside of the country in which they were diagnosed. 20.1% originated from other countries in Central and Eastern Europe, 13.9% from countries in Sub-Saharan Africa, 11.3% from countries in Latin America and the Caribbean, 2.6% from countries in other countries in Western Europe, and 2.3% from countries in South and Southeast Asia.

The 2022 rate represents a 30.8% increase compared to 2021 but still a 3.8% decrease compared to the 2019 rate. The rise in reported HIV diagnoses in 2022 is partly attributed to an increase in reporting of previous positive diagnoses, constituting 16.6% of all cases reported in the EU/EEA in 2022, an increase from 8.8% in 2021. Previous positive diagnoses are defined as an HIV diagnosis made either abroad or in another setting within the reporting country on any occasion before the current year of reporting. Some countries report previous positive HIV cases as they enter, re-enter or re-engage with the care system in the reporting country. Previous positive diagnosis may be underestimated due to incomplete reporting across countries on the previous positive status of cases. Nevertheless, even after adjusting trends by excluding previous positive cases, an increase in reported cases from 2021 to 2022 is still observed.

In 2022, 27 EU/EEA countries reported CD4 cell count information at the time of HIV diagnosis. Among cases with available data, 8.4% were acute infections, 30.2% more recent infections (CD4  $\geq$  500 cells/mm3), and 47.9% diagnosed several years after infection (CD4 < 350 cells/mm3). Overall, 28.8% had advanced HIV infection (CD4 < 200 cells/mm3) at diagnosis. Late diagnosis was higher among women, older adults over 40, heterosexual transmission cases, injecting drug users and migrants from south and south-east Asia and Sub-Saharan Africa.

In 2022, 2 349 diagnoses of AIDS were reported by 27 EU/EEA countries, giving a rate of 0.6 cases per 100 000 population. Pulmonary and/or extrapulmonary tuberculosis (TB) combined made up 12.1% of AIDS-indicative diseases reported in 2022. In the EU/EEA, the number of AIDS cases has more than halved over the past decade across all transmission routes.

#### **ECDC assessment**:

Several factors contribute to the differences in HIV trends between 2021 and 2022, including restoring surveillance activities, the scale-up and introduction of novel testing strategies in many countries, migration patterns, lifting of COVID-19 restrictions, and the arrival of refugees, especially from Ukraine. Additionally, the rise in previous positive

diagnoses has played a significant role in shaping the epidemiological profile of HIV in Europe, mainly in the EU/EEA and western region.

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

- Expansion of HIV testing. WHO and ECDC recommend innovative approaches to expand the possibilities for HIV testing to key population groups including migrants, both within healthcare settings and in the community using methods such as self-testing and community testing by lay providers (1,2,3).
- Ensure rapid linkage to care and early initiation of antiretroviral therapy (ART) after diagnosis. This will lead to improved health outcomes for individuals receiving treatment and a significant reduction in onward HIV transmission (4,5,6).
- Countries should explore the feasibility of expanding primary HIV prevention services including condom
  provision programmes and pre-exposure prophylaxis (PrEP) implementation in key populations including those
  with a migrant background. To reach a broader population, consider reviewing and expanding the settings
  where PrEP is available. Integrating PrEP provision with regular testing and facilitating prompt linkage to care
  can effectively contribute to reducing HIV incidence among MSM and other key populations.
- Countries should expand or maintain comprehensive harm-reduction services, including needle syringe exchange and opioid substitution programs, while ensuring accessible testing for blood-transmitted infections like hepatitis B and C among individuals who inject drugs. This integrated preventive approach is crucial for meeting the Sustainable Development Goal (SDG) for this population by 2030.
- The rise in previously diagnosed HIV cases significantly influences the 2022 epidemiological profile when
  combined with new diagnoses. Distinguishing between those previously diagnosed and newly diagnosed
  individuals is crucial for a comprehensive understanding of HIV epidemiology in EU/EEA countries due to their
  distinct profiles and specific healthcare needs.
- Improved monitoring and surveillance, particularly of previous positive cases and country of birth, is needed to adequately capture and report HIV cases in the context of changing epidemiology.

#### Actions:

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

#### Further information:

For the latest update on HIV surveillance 2023 -data 2022-, please see <u>ECDC's webpage</u>. For more information regarding the continuum of HIV care in the European region and the special issue on migrants, please visit the following websites. <u>Continuum of HIV care</u> and <u>continuum of HIV care</u> in <u>migrants</u>.

Last time this event was included in the CDTR: 30 November 2023

# 6. West Nile virus One Health seasonal surveillance — 2023

#### **Overview:**

This is the 27th weekly update of the 2023 West Nile virus (WNV) monitoring season.

Since last week's update, and as of 29 November 2023, European Union (EU) and European Economic Area (EEA) countries reported 10 human cases of West Nile virus (WNV) infection. Cases were reported by Italy (9) and France (1). EU-neighbouring countries reported no human cases of WNV infection.

This week, among the reporting countries, the NUTS 3 or GAUL1 region; Pisa in Italy; has reported autochthonous human cases of WNV infection for the first time since the start of this season.

Since the beginning of the 2023 transmission season and as of 29 November 2023, EU/EEA countries have reported 707 human cases of WNV infection in Italy (336), Greece (162, of which one was with unknown place of infection), Romania (103), France (43), Hungary (29), Spain (17), Germany (6), Croatia (6) and Cyprus (5). EU/EEA countries have reported 67 deaths in Italy (29), Greece (23), Romania (12) and Spain (3). EU-neighbouring countries have reported 93 human cases of WNV infection in Serbia (91) and North Macedonia (2) and two deaths in Serbia.

During the current transmission season, within the reporting countries, autochthonous human cases of WNV infection were reported from 141 different NUTS 3 or GAUL 1 regions, of which the following regions reported autochthonous human cases of WNV infection for the first time ever: Gironde, Charente-Maritime, Alpes-Maritimes, Charente and Haute-Corse in France, Sömmerda in Germany, Kastoria and Ioannina in Greece, Imperia, Taranto,

Lecce, Cosenza, Bari, Salerno and Verbano-Cusio-Ossola in Italy, Gorj and Timiş in Romania, Cáceres, Huelva, Valencia/València, Barcelona and Toledo in Spain.

Since the beginning of the 2023 transmission season, 147 outbreaks among equids and 246 outbreaks among birds have been reported by EU/EEA countries. Outbreaks among equids have been reported by France (44), Spain (36), Hungary (26), Italy (24), Germany (14), Portugal (2) and Austria (1). Outbreaks among birds have been reported by Italy (195), Germany (19), Spain (19), Bulgaria (6), Hungary (3), France (2), Austria (1) and Greece (1).

Please refer to the **West Nile virus infection webpage** for maps and a dashboard.

Sources: The European Surveillance System (TESSy), Animal Disease Information System (ADIS)

#### **ECDC** assessment:

As the weather conditions have become less favourable for vector-borne transmission in most of the affected areas, the intensity of WNV circulation has decreased.

As of 29 November 2023, the most recent onset date reported was 5 November 2023.

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

#### Actions:

During the WNV transmission season, ECDC publishes a dashboard and an epidemiological summary every Friday.

#### **Further information:**

Data on human cases of WNV are collected via The European Surveillance System (TESSy), managed by ECDC. Imported cases are not included in this report. The following EU-neighbouring countries reported human cases of WNV infection to ECDC: Albania, Kosovo\*, Montenegro, North Macedonia, Serbia and Türkiye.

Animal data (i.e. outbreaks among equids and birds) are collected through the Animal Disease Information System (ADIS) of the European Commission. Reporting of WNV in equids and birds is mandatory at the EU/EEA level.

The distribution of human infections covers EU/EEA and EU-neighbouring countries, whereas the distribution of outbreaks among equids and birds only relates to EU/EEA countries.

\*This designation is without prejudice to positions on status and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo Declaration of Independence.

Last time this event was included in the CDTR: 24 November 2023

## 7. SARS-CoV-2 variant classification

#### **Overview:**

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

Since the last update on 24 November 2023, and as of 1 December 2023, ECDC reclassified XBB.1.16 from variant under monitoring (VUM) to de-escalated variant. This decision was prompted by the consistent decreasing trends in the detections of XBB.1.16 lineages observed both at EU/EEA level and globally, as well as the fact that the major circulating XBB.1.16 lineages (e.g. XBB.1.16.6) are already tracked under other umbrellas of variants (XBB.1.5-like + F456L).

**BA.2.86.** Among the 13 EU/EEA countries reporting at least 20 sequences to GISAID EpiCoV for week 45 (6 November 2023 to 12 November 2023), the proportions of BA.2.86 lineages were as follows: Austria (9%), Belgium (24%), Denmark (11%), Finland (3.6%), France (30%), Germany (17%), Iceland (65%), Ireland (17%), Italy (6.5%), Netherlands (20%), Poland (2.7%), Spain (27%) and Sweden (15%). The overall increasing trend has been observed for BA.2.86 in recent weeks (Figure 2).

Outside EU/EEA countries, an increasing trend was detected in Australia (9.5%), Canada (3.2%), Japan (9.5%), Switzerland (20%), the United Kingdom (14%) and the United States (7.6%).

The variant proportions listed below are reported for week 45, 2023 (6 November 2023 to 12 November 2023).

**XBB.1.5-like+F456L** lineages currently dominate the global and EU/EEA SARS-CoV-2 variant landscape. As of 27 November 2023, XBB.1.5-like lineages are circulating with a median proportion of 60.5% in EU/EEA countries (range: 27–85%). The overall proportion of XBB.1.5-like+F456L variants appears to be slightly declining in the EU/EEA.

**XBB.1.5-like+L455F+F456L** variants show increasing trends in many EU/EEA countries and reached with an overall median proportion of 32% (range: 9–43%). The lineages mainly present in this umbrella are the HK.3, JD.1.1 and JG.3 lineages. Preliminary studies indicate that XBB.1.5-like+L455F+F456L variants may bind more efficiently to human ACE-2 and have similar immune evasive properties compared to XBB.1.5-like+F456L variants and XBB.1.5-like+L455F variants. Virtually all of the lineages are already included in the existing VOIs XBB.1.5-like+F456L but are being monitored specifically as VUMs.

The combination of these mutations (L455F and F456L) has also been increasing in BA.2.75 lineages. The **DV.7.1** variants that carry these mutations have been detected more frequently and are circulating at a median proportion of 0.8% in the EU/EEA (range: 0–6.5%).

For the latest information on variants, please see ECDC's webpage on variants.

#### Actions:

ECDC has created the following EpiPulse item to facilitate sharing of epidemiological and microbiological information from countries for BA.2.86: <a href="https://doi.org/10.2023-IRV-00009">2023-IRV-00009</a>. In particular, countries are encouraged to share emerging evidence on BA.2.86 transmissibility, severity, immunological escape and vaccine effectiveness to support ongoing variant assessment.

For the latest update on SARS-CoV-2 variant classifications, please see <u>ECDC's webpage on variants</u>. 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 <u>European Respiratory Virus Surveillance Summary (ERVISS)</u>.

Last time this event was included in the CDTR: 27 November 2023

# 8. Poliomyelitis – Multi-country (World) – Monitoring global outbreaks

#### Overview:

Global public health efforts to eradicate polio are continuing through the immunisation of every child until transmission of the virus stops and the world becomes polio free. On 5 May 2014, polio was declared a public health emergency of international concern (PHEIC) by the World Health Organization (WHO) due to concerns over the increased circulation and international spread of wild poliovirus in 2014.

On 25 August 2023, the <u>36th meeting</u> of the Polio Emergency Committee under the International Health Regulations (IHR) (2005) was held to discuss the international spread of poliovirus and it was agreed that it remains a PHEIC. It was recommended that the Temporary Recommendations be extended for a further three months.

In June 2002, the WHO European Region was officially declared polio free.

On 21 September 2023, WHO released a <u>statement</u> declaring the end of the poliovirus outbreak in Ukraine that began in October 2021. This decision was supported by the European Regional Commission for the Certification of Poliomyelitis Eradication during its annual meeting on 8 September 2023.

#### Wild poliovirus type 1 (WPV1):

Since 24 October 2023, and as of 28 November 2023, one new case of acute flaccid paralysis (AFP) caused by WPV1 with symptom onset in 2023 was reported from Pakistan (1).

#### Circulating vaccine-derived poliovirus (cVDPV):

Since the previous update, new cases of poliomyelitis were reported with date of onset in 2022: two new cases of polio due to circulating vaccine-derived poliovirus type 1 (cVDPV1) was reported in the Democratic Republic of the Congo (DRC), and four new cases of polio due to circulating vaccine-derived poliovirus type 2 (cVDPV2) in DRC.

Since the previous update, the following cases of polio due to cVDPV have been reported with the date of onset of symptoms in 2023:

- There have been five new cases of AFP caused by cVDPV1, reported from the DRC (5).
- There have been 44 new cases of AFP caused by cVDPV2, reported from seven countries: Central African Republic (2), the DRC (8), Nigeria (17), Guinea (6), Somalia (2), Kenya (2), Chad (7).
- No cases of AFP due to cVDPV3 have been reported.

#### **Summary:**

#### Wild poliovirus (WPV):

In 2022, and as of 28 November 2023, 30 cases of AFP caused by WPV1 have been reported. These have been reported from the two endemic countries, Pakistan (20) and Afghanistan (2), and one non-endemic country: Mozambique (8). One associated death has been reported in Pakistan.

In 2023, and as of 28 November 2023, 11 cases of AFP caused by WPV1 have been reported from Afghanistan (6) and Pakistan (5), with symptom onset in 2023.

#### Circulating vaccine-derived poliovirus (cVDPV):

With the date of onset of symptoms in 2022:

In 2022, and as of 28 November 2023, 191 cases of AFP caused by cVDPV1 have been reported from five countries: Congo (1), the DRC (148), Mozambique (22), Madagascar (16) and Malawi (4).

Overall in 2022, 685 cases of AFP caused by cVDPV2 have been reported from 20 countries: Algeria (3), Benin (13), Burundi (1), Cameroon (3), Central African Republic (6), Chad (44), the DRC (372), Eritrea (1), Ethiopia (1), Ghana (3), Indonesia (1), Mali (2), Mozambique (4), Niger (16), Nigeria (48), Somalia (5), Sudan (1), Togo (2), the United States (1) and Yemen (162).

In 2022, one case of AFP caused by cVDPV3 was reported from Israel.

With the date of onset of symptoms in 2023:

In 2023, and as of 28 November 2023, 109 cases of AFP caused by cVDPV1 have been reported from three countries: the DRC (83), Madagascar (23) and Mozambique (3).

In 2023, 265 cases of AFP caused by cVDPV2 have been reported from 17 countries: Benin (3), Burkina Faso (2), Burundi (1), Central African Republic (14), Chad (44), Côte d'Ivoire (5), the DRC (108), Guinea (13), Indonesia (3), Israel (1), Kenya (8), Mali (9), Nigeria (43), Somalia (5), Tanzania (2), Yemen (3) and Zambia (1).

In 2023, no cases of AFP caused by cVDPV3 have been reported.

Sources: Global Polio Eradication Initiative | ECDC | ECDC dashboard | WPV3 eradication certificate

#### **ECDC** assessment:

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

As long as there are non-vaccinated or under-vaccinated population groups in European countries and poliomyelitis is not eradicated globally, the risk of the virus being reintroduced in Europe remains. One EU/EEA country (Romania) and three neighbouring countries (Bosnia and Herzegovina, Montenegro, and Ukraine) remain at high risk of a sustained polio outbreak following wild poliovirus importation or the emergence of circulating vaccine-derived poliovirus (cVDPV), due to suboptimal programme performance and low population immunity, according to the **European Regional Certification Commission for Poliomyelitis Eradication (RCC)** report published in February 2023, referring to data from 2021. According to the same report, eight EU/EEA countries are at intermediate risk of sustained polio outbreaks. The continuing circulation of wild poliovirus type 1 (WPV1) in Pakistan and Afghanistan and the detection of WPV1 cases in Mozambique in 2022, which are genetically linked to a strain from Pakistan, shows that there is still a risk of the disease being imported into the EU/EEA. Furthermore,

the worrying outbreaks of cVDPV, which emerges and circulates due to lack of polio immunity in the population, illustrate the potential risk for further international spread.

To limit the risk of reintroduction and sustained transmission of WPV and cVDPV in the EU/EEA, it is crucial to maintain high vaccine coverage in the general population and increase vaccination uptake in pockets of underimmunised populations. EU/EEA countries should review their polio vaccination coverage data and ensure that there are no immunity gaps in the population and that there is capacity to identify virus circulation through well-performing surveillance systems.

ECDC endorses WHO's temporary recommendations for EU/EEA citizens who are residents of or long-term visitors to (>4 weeks) countries categorised by WHO as having the potential risk of causing international spread of polio: an additional dose of poliovirus vaccine should be administered between 4 weeks and 12 months prior to international travel. Travellers to areas with active transmission of a wild or vaccine-derived poliovirus should be vaccinated according to their national schedules.

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

#### Actions:

ECDC provides updates on the polio situation on a monthly basis. ECDC also monitors polio cases worldwide through its epidemic intelligence activities in order to highlight polio eradication efforts and identify events that increase the risk of wild poliovirus being reintroduced into the EU/EEA.

ECDC maintains a <u>dashboard</u> showing countries that are still endemic for polio and have ongoing outbreaks of cVDPV.

#### Further information:

Last time this event was included in the CDTR: 27 October 2023