Today’s disease topics

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Executive summary

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

- By the end of week 48 (ending 3 December 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, COVID-19 hospitalisations, ICU admissions and deaths, with those aged 65 years and above predominantly experiencing severe outcomes. RSV activity continued to increase, with the highest impact among children aged 0–4 years. This was reflected both in sentinel SARI test positivity and 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. Three countries have exceeded 10% test positivity in sentinel primary care.
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 a variant under monitoring (VUM) to a 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**, reclassified as a variant of interest (VOI) on 24 November 2023, continues to rapidly increase in EU/EEA with a median proportion for week 46 (13 November 2023 to 19 November 2023) of 21.2% (range:2.2-52.3%).
- **XBB.1.5-like+F456L** variants currently dominate the global and EU/EEA SARS-CoV-2 variant landscape. As of 4 December 2023, for week 46, XBB.1.5-like + F456L lineages are circulating with a median proportion of 56% in EU/EEA countries (range: 38.4–75.5%). 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 have been increasing but now display an unclear trend in EU/EEA, with a median proportion of 24.6% (range: 6.8–42%). The lineages mainly present in this umbrella are HK.3, JD.1.1 and 3G.3 lineages.

Measles outbreak – Romania – 2023

- On 5 December 2023, Romania's Ministry of Health declared a national measles epidemic, paving the way for the first MMR vaccine dose to be given to children from nine months of age.
- This outbreak poses a risk of potential repeated exportation to other EU/EEA countries and consequently continuous transmission in some of them, where vaccination coverage is sub-optimal.
- Response efforts are continuing in Romania to ensure that the large pockets of susceptible individuals are rapidly vaccinated.

Detection of an mpox case on a special cruise vacation in South-East Asia catering to men who have sex with men (MSM)

- On 1 December 2023, Germany notified ECDC about an mpox case detected in Germany who had participated in a special cruise vacation in South-East Asia catering to men who have sex with men (MSM). The cruise took place between 11 and 21 November 2023, with approximately 2 300 passengers from all over the world.
- The risk of exposure to the passengers on the cruise ship is likely high given that the reported case was symptomatic during the cruise and he is aware of other potential cases.
- ECDC is in contact with WHO/EURO, US CDC, and other relevant EU partners to gather more information about this event. ECDC encourages countries to share information related to this event in the EpiPulse's item.

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

- As of week 48, *Mycoplasma pneumoniae* detection trends continue to increase in the Netherlands.
- 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.

West Nile virus One Health seasonal surveillance – 2023

- Since the last update, and as of 6 December 2023, no 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 6 December 2023, EU/EEA countries have reported 152 outbreaks among equids and 247 outbreaks among birds.

Middle East respiratory syndrome coronavirus (MERS-CoV) – Multi-country

- Since the previous update on 10 November 2023, no new MERS-CoV cases have been reported by WHO or national health authorities.
- Since the beginning of 2023, and as of 5 December 2023, two MERS-CoV cases have been reported with the date of onset in 2023 by the United Arab Emirates (1) and Saudi Arabia (1).
1. 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 18 EU/EEA countries up to week 48. 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 eight countries for ARI and 16 countries for ILI. Among these countries, three reported activity above baseline levels for ARI and five 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: 24%; IQR of country values: 14–24%). An overall increasing trend in median SARS-CoV-2 positivity data has been observed since week 38, with heterogeneity observed at the national level. Median test positivity for seasonal influenza was 3% (pooled: 4%; IQR: 2–6%) and 3% for RSV (pooled: 11%; IQR: 0–16%). An increasing trend has been observed for RSV test positivity since week 43, with influenza test positivity showing a slowly increasing trend since week 45.
- 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 in non-sentinel data over the past five weeks, although they 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 56 sentinel primary care detections of seasonal influenza, 54 were typed as influenza virus type A and two were typed as influenza virus type B. Forty-seven of the influenza type A detections were further subtyped as either A(H1)pdm09 (n = 28) or A(H3) (n = 19). The lineages were not determined for the influenza type B detections.
- Qualitative indicators are currently only reported for seasonal influenza. Of the 19 countries reporting influenza intensity, seven countries reported baseline, six countries reported low, and six countries reported medium levels of activity. Of 19 countries reporting on the geographical spread of influenza, two countries reported no activity, nine reported sporadic activity, two reported local activity, three reported regional activity 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 test positivity have been observed between week 29 and week 44 in people aged 15–64 years and 65 years and above, with a mixed picture at the country level. However, a decreasing trend has been observed for these age groups since week 44. Overall, non-sentinel hospital admissions, ICU rates and death rates have gradually increased since week 36, especially in the 65 years and above age group. Although a decreasing trend has been observed over the last one to two weeks in these three indicators, this may be attributable to a reporting delay.
- In recent weeks, increasing trends in RSV test positivity were observed in four of five countries reporting RSV data from SARI systems. Four countries reported data for week 48, with test positivity plateauing when compared to the previous week. It remains highest for the 0–4 years age group (60%), followed by the 5–14 years age group (12%) and the 65 years and above age group (2%). 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 systems has increased from 2% to 3% since last week, with increases observed in people aged 5–14 years and 15–64 years. Non-sentinel hospital admissions, ICU admissions and deaths due to influenza remain low.
- EuroMOMO 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 46–47 (13 to 26 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% (43–59%) for XBB.1.5+F456L, 26% (14–42%) for BA.2.86, 6% (4–11%) for XBB.1.5, and 0% (0–1%) for BA.2.75. The proportion of BA.2.86 has been growing, with XBB.1.5-like+F456L and XBB.1.5 showing a decreasing trend.

Influenza
WHO recommends that trivalent vaccines for use in 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/6/2021 (H3N2)-like virus (clade 2a); and a B/Austria/1359417/2021 (B/Victoria lineage)-like virus (subclade V1A.3a.2).

During weeks 40–48, 2023, 83 A(H1)pdm09, 34 A(H3) and six B/Victoria viruses from sentinel and non-sentinel sources were genetically characterised. Of the A(H1)pdm09 viruses, 38 were reported as clade 5a.2a and 45 were subclade 5a.2a.1. Of the A(H3) viruses, one was reported as clade 2a.3a and 33 were subclade 2a.3a.1. All of the B/Victoria viruses were reported as subclade V1A.3a.2.

**Period overview (weeks 25–48, 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 late summer and continues to show an increase based on sentinel median test 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 has been 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. Severity indicators, hospital admissions, ICU rates and death rates have gradually increased since week 36, 2023 especially in the 65 years and above age group. Although a decreasing trend has been observed over the last one to two weeks in these three indicators, this may be attributable to 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; three 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 (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 has published guidance on vaccination roll-out 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 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:** 4 December 2023

### 2. 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 a variant under monitoring (VUM) to a 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).

As of 24 November 2023, **BA.2.86** was reclassified from a variant under monitoring (VUM) to a variant of interest (VOI) due to increasing proportions in the EU/EEA. In addition, the genetic distance between BA.2.86 and other currently circulating variants may have potential impacts on immunity and transmissibility. Among the 14 EU/EEA countries reporting at least 20 sequences to GISAID EpiCoV for week 46 (13 November 2023 to 19 November 2023), the proportions of BA.2.86 lineages were as follows:
Austria (18.1%), Belgium (40.4%), Denmark (18.8%), France (32.8%), Germany (27.0%), Iceland (52.3%),
Ireland (19.7%), Italy (11.2%), the Netherlands (28.0%), Norway (41.7%), Poland (12.9%), Slovenia (2.2%),
Spain (48.6%), and Sweden (21.2%). The overall increasing trend has been observed for BA.2.86 in recent weeks
(Figure 1).

The variant proportions listed below are reported for week 46 (13 November 2023 to 19 November 2023).

**XBB.1.5-like+F456L** lineages currently dominate the global and EU/EEA SARS-CoV-2 variant landscape. As of 4
December 2023, XBB.1.5-like lineages are circulating with a median proportion of 56% in EU/EEA countries (range:
38.4–75.6%). 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 some EU/EEA countries (France, Ireland, Italy,
the Netherlands, Spain, and Sweden) and reached an overall median proportion of 24.6% (range: 6.8–42%). 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 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 0.0% in the EU/EEA (range: 0–2.9%).


**Actions:**

ECDC has created the following EpiPulse item to facilitate sharing of epidemiological and microbiological
information from countries for BA.2.86: 2023-IRV-00009. 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 ECDC’s webpage on variants. Variant
surveillance data, including the distribution of VOC and VOI variant proportions in the EU/EEA, and detailed

**Last time this event was included in the CDTR:** 4 December 2023
Figure 1. Proportion of sequences belonging to BA.2.86 lineages per sample collection week, reported by EU/EEA countries to GISAID EpiCoV as of 4 December 2023
3. Measles outbreak – Romania – 2023

Overview:

Romania’s Ministry of Health declared a national measles epidemic on 5 December 2023 due to an ongoing outbreak of measles in the country, with an increased number of hospitalisations in paediatric and infectious disease wards. The declaration of an epidemic allows for the vaccination of children from nine to 11 months old and active catch-up of individuals with incomplete vaccination. The Ministry of Health has started an information campaign for parents, together with family doctors, for a better adherence to the vaccination program. Between 1 January and 1 December 2023, 1 855 confirmed measles cases and no deaths have been reported in 29 counties, including the municipality of Bucharest. Most cases have been reported in Mureş county (n=628), Braşov (n=339), and Bucharest (n=213). The vast majority of the cases are in unvaccinated children from 0 to 9 years (69.7%, n=1 293), including 224 children under one year old (12%). Overall, 102 cases had received one dose and 51 two doses of vaccination. Vaccination status was unknown for 41 cases. The peak of the current outbreak, with around 170 cases, was reported in week 44, but delays in reporting cannot be excluded.

In the pre-pandemic era, from 2016 to mid-2020, Romania experienced a large measles outbreak that affected over 20 000 people, including 64 deaths (CDTR). ECDC has previously published a Rapid Risk Assessment on the outbreak in Romania. The reported numbers of measles cases dropped significantly during the pandemic, but the situation seems to be moving back to pre-pandemic levels, possibly due to the progressive decreasing of MMR vaccination coverage year by year, and accumulation of susceptible individuals.

The vaccination coverage for measles-containing vaccines (MCV) MCV1 is 83% and for MCV2 71% (source WHO) for 2022, which is significantly lower compared to 2019 (MCV1 90% and MCV2 76%). According to the Ministry of Health, vaccination coverages for 2023 are even lower, with the first dose of MCV is 78% at national level, and 62% for the second dose. Vaccination coverage has been decreasing for the past decade in Romania.

ECDC assessment:

Given the size of the current outbreak in Romania, the historical trends, and vaccination coverage for the first and second dose of MCV being below 95%, there is a high risk of continued measles transmission within Romania. Beside the direct impact on morbidity, mortality and long-term sequelae in the Romanian population, the current outbreak will cause repeated exportation of cases to other EU/EEA countries, with an increased risk of outbreaks, particularly where vaccination coverage is sub-optimal. Response efforts are continuing in Romania and should help ensure pockets of susceptible individuals are adequately vaccinated. In light of the announcement of epidemic, the Romanian authorities have paved the way for measles vaccination from nine months. This is an important outbreak response measure to protect very young children who are the ones most at risk of severe complications.

Actions:

The ECDC Health Taskforce will contact Romanian public health authorities to offer support in the ongoing response activities.

Last time this event was included in the CDTR: 7 December 2023
4. Detection of an mpox case on a special cruise vacation in South-East Asia catering to men who have sex with men (MSM)

Overview:

Summary
On 1 December 2023, Germany notified ECDC through EpiPulse of an mpox case in Germany who had participated in a special cruise vacation in South-East Asia catering to men who have sex with men (MSM). The cruise took place between 11 and 21 November 2023 with approximately 2 300 passengers from all over the world.

The case developed mild symptoms during the first days of travel and recovered without complications. On basis of anecdotal evidence and his own impression, he reported about 30-40 other persons also having had mpox-suspicious symptoms during the cruise.

The case was diagnosed after testing positive for mpox by PCR on 23 November 2023. Sequencing results and information on the mpox clade are pending. The case was vaccinated with one dose of Jynneos vaccine in August 2023. The case's partner wasn't vaccinated and did not show any mpox-related symptoms during the cruise ship travel. He was unvaccinated because he had mpox-related antibodies as sign of natural immunity following an apparent Mpx infection in 2022.

The agency that organised the cruise is based in the United States.

Background
Overall, 91 788 mpox cases have been reported globally since 2022, as of 31 October 2023. The highest number of cases have been reported in Europe and the Americas. Although mpox cases have been decreasing globally since September 2022, and reached the lowest level in April 2023, cases continue to be reported in 2023. The highest number of cases during the past six months (May to October 2023) have been reported from the Western Pacific region.

In the EU/EEA, as of 28 November, 29 countries have reported 21 586 mpox cases, including seven deaths in the European Surveillance System (TESSy) since 2022. In 2023, 472 mpox cases were reported from 21 EU/EEA countries. Portugal (163) and Spain (132) reported 64% of cases during 2023.

ECDC assessment:

The reported case was symptomatic during the cruise and is aware of other potential cases. Participants on special cruise vacations catering to men who have sex with men (MSM) are likely to have sex with multiple partners. Additionally, exposure may occur during dancing and other activities on the cruise ship where minimal clothing is worn. No information is available at this stage on the vaccination status of participants on the cruise. Considering the presence of at least one patient with clinical manifestations of mpox since the beginning of the cruise, reports on multiple sexual contacts between passengers during the cruise, a large number of passengers, and the long duration of the cruise, the likelihood of mpox infection for passengers on this cruise is high.

The impact of mpox in this population is assessed to be low, although the monkeypox virus clade is currently not known.

The overall risk for passengers on the cruise is assessed to be moderate.

The number of passengers on the cruise from EU/EEA countries is not known at present. However, based on the available information, this event does not currently change the overall risk of mpox infection for men who have sex with men in the EU/EEA (low risk) and for the broader population in the EU/EEA (very low risk).

Response options for EU/EEA countries include informing cruise passengers about the risk and asking them to be aware of symptoms, asking to abstain from sexual activity, and to seek care immediately should symptoms appear. ECDC has contacted US CDC to obtain further information on passengers from the EU/EEA and to facilitate sharing communication of this information with EU/EEA Member States.

In addition, it is important to increase awareness among healthcare professionals and support sexual health services in order to strengthen case detection, contact tracing, and management of cases; continue to offer testing
for orthopoxvirus; promote vaccination, and continue risk communication and community engagement, despite the decreasing number of cases.

Given the limitations in vaccine supplies, primary preventive vaccination (PPV) and post-exposure preventive vaccination (PEPV) strategies may be combined to focus on individuals at substantially higher 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 in contact with WHO/EURO, US CDC, and other relevant EU partners to gather more information about this event. ECDC encourages countries to share information related to this event in the EpiPulse item.

ECDC has contacted US CDC to obtain more information on passengers from the EU/EEA so that these can be notified by relevant authorities in EU/EEA Member States.

Specific guidance on mpox outbreaks in the cruise ship context is available through the EU Healthy Gateways: cruise ship operators interim guidance.

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.

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 to ensure that attendees have access to the right information.

ECDC offers laboratory support to Member States and collaborates with stakeholders on risk communication activities, such as targeted messaging for the general public and MSM communities. ECDC offers guidance on clinical sample storage and transport, case and contact management and contact tracing, infection prevention and control (IPC) guidance, cleaning and disinfection in healthcare settings and households, and vaccination approaches.

**Last time this event was included in the CDTR:** 5 December 2023

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

**Overview:**

**Update**

On 4 December, the Netherlands reported in EpiPulse a continuous increasing trend in *M. pneumoniae* detections by laboratories participating in the non-sentinel weekly virological surveillance network. As of week 46, 2023, *M. pneumoniae* detection trends continue to increase, reaching higher levels compared with the last four years. In addition, an increasing trend in patients consulting for pneumonia in patients aged 5-14 years has been observed from the national syndromic primary care surveillance system.

**Summary**

Six EU/EEA countries have reported recent increases in *M. pneumoniae* infections at the national level (Denmark, France, Ireland, the Netherlands, Norway, Sweden) 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.

**Background**

Epidemics of *M. pneumoniae* occur periodically, typically every one to three years. 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.

**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. 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 pressure 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: 2023-IRV-00008. 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:** 07 December 2023

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

**Overview:**

This is the 28th weekly update of the 2023 West Nile virus (WNV) monitoring season.

Since last week’s update, and as of 6 December 2023, European Union (EU) and European Economic Area (EEA) countries reported no human cases of West Nile virus (WNV) infection. EU-neighbouring countries also reported no human cases of WNV infection.

Since the beginning of the 2023 transmission season and as of 6 December 2023, EU/EEA countries have reported 707 human cases of WNV infection in Italy (336), Greece (162, of which 1 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 2 deaths in Serbia (2).

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 Timiș in Romania; and Cáceres, Huelva, Valencia/València, Barcelona and Toledo in Spain.

Since the beginning of the 2023 transmission season, 152 outbreaks among equids and 247 outbreaks among birds have been reported by EU/EEA countries. Outbreaks among equids have been reported by France (44), Spain (37), Hungary (26), Italy (25), Germany (14), Portugal (5), and Austria (1). Outbreaks among birds have been reported by Italy (196), 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 6 December 2023, the most recent onset date reported was 5 November 2023.

In accordance with the [Commission Directive 2014/110/EU](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014L0110), 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:** 1 December 2023

## 7. Middle East respiratory syndrome coronavirus (MERS-CoV) – Multi-country

### Overview:

**Update:** Since the previous update on 10 November 2023, no new MERS-CoV cases have been reported by WHO or national health authorities.

**Summary:** Since the beginning of 2023, and as of 5 December 2023, two MERS-CoV cases have been reported with the date of onset in 2023 by the United Arab Emirates (1) and Saudi Arabia (1).

Since April 2012, and as of 5 December 2023, a total of 2 617 cases of MERS-CoV, including 947 deaths, have been reported by health authorities worldwide.


**ECDC assessment:**

Human cases of MERS-CoV continue to be reported in the Arabian Peninsula. However, the number of new cases detected and reported through surveillance has dropped to the lowest levels since 2014. The risk of sustained human-to-human transmission in Europe remains very low. The current MERS-CoV situation poses a low risk to the European Union (EU), as stated in the [Rapid Risk Assessment](https://www.ecdc.europa.eu/en/publications-data/risk-assessment-middle-east-respiratory-syndrome-coronavirus-mers-cov) published by ECDC on 29 August 2018, which also provides details on the last case reported in Europe.

ECDC published a technical report, [Health emergency preparedness for imported cases of high-consequence infectious diseases](https://www.ecdc.europa.eu/en/publications-data/health-emergency-preparedness-imported-cases-high-consequence-infectious-diseases), in October 2019, which is still useful for EU Member States wanting to assess their level of
preparedness for a disease such as MERS-CoV. ECDC also published Risk assessment guidelines for infectious diseases transmitted on aircraft (RAGIDA) – Middle East Respiratory Syndrome Coronavirus (MERS-CoV) on 22 January 2020.

**Actions:**

ECDC is monitoring this situation through its epidemic intelligence activities and reports on a monthly basis.

**Last time this event was included in the CDTR:** 6 December 2023

**Figure 2. Geographical distribution of confirmed MERS-CoV cases by country of infection and year, from April 2012 to November 2023**

Date of production: 05/12/2023
Figure 3. Distribution of confirmed cases of MERS-CoV by place of infection and month of onset, March 2012 to 5 December 2023