

WEEKLY BULLETIN

Communicable disease threats report

Week 2, 4–10 January 2025

This week's topics

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Executive Summary

Overview of respiratory virus epidemiology in the EU/EEA

- Primary and secondary care consultation rates for acute respiratory illness (ARI), influenza-like illness (ILI) and severe acute respiratory illness (SARI) have been increasing in several countries in recent weeks. Overall, syndromic indicators in primary and secondary care are at levels comparable to this period in the previous two years.
- Influenza virus activity has been increasing since week 46, with the aggregate test positivity
 rate in primary care in the EU/EEA at 29% in week 1 (based on data from 16 countries). While
 hospital admissions due to influenza have been observed in all age groups, people aged 65
 years and older have the highest risk of hospitalisation and severe outcomes. Overall, influenza
 A(H1N1)pdm09 dominates the detections.
- RSV test positivity rate has remained stable over the past three weeks after rising for several weeks, with the aggregate test positivity rate in primary care in the EU/EEA at 10% in week 1. Children under five years of age have the highest risk for hospitalisation and severe outcomes due to RSV.
- Following a peak in July, SARS-CoV-2 activity has gradually decreased in most EU/EEA countries that experienced an epidemic wave during the summer. Among those who experience SARS-CoV-2 infection, people aged 65 years and older remain in the age group at the highest risk of hospitalisation and severe outcomes due to COVID-19.

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

- Countries should be prepared for continued increases in seasonal respiratory virus activity during the coming weeks. Vaccination is the most effective measure to protect against more severe forms of respiratory viral diseases. Vaccination campaigns have started in many EU/EEA countries. Those eligible for vaccination, particularly those at higher risk of severe outcomes, are encouraged to get vaccinated.
- ECDC has published specific public health recommendations for winter 2024/2025 in an epidemiological update.

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

- In November 2024, 249 cases were reported by 11 countries. Thirteen countries reported zero cases.
- Through its epidemic intelligence activities, ECDC identified an additional 68 new cases from eight EU countries.
- In 2024,19 measles-related deaths have been reported in Romania (18) and Ireland (1).
- There has been high measles activity overall in the EU/EEA over the last 12 months; however, the situation varies by country. Some countries have reported large and/or ongoing outbreaks while others have reported no sustained or very low transmission.
- An update for select countries outside of the EU/EEA is provided (Morocco).

Mpox due to monkeypox virus clade I – Belgium – 2024

- On 18 December 2024, Belgium reported a confirmed mpox case due to monkeypox virus (MPXV) clade Ib in an individual returning from one of the countries affected by the epidemic in Africa.
- On 26 December 2024, Belgium reported a second case of mpox due to MPXV clade Ib in a contact of the index case.
- Considering the measures implemented by Belgium, the risk for the general population in the EU/EEA related to this importation remains low, given a very low likelihood of further spread and a low impact. The <u>ECDC Rapid Risk Assessment Brief</u> published on 16 August 2024 remains valid.

Mpox due to monkeypox virus clade I – France – 2025

- On 7 January 2025, France reported an mpox case due to monkeypox virus clade Ib.
- The case did not report recent travel to Africa, but has been in contact with people returning from central Africa.
- Epidemiological investigations are ongoing to identify the index case and to clarify the likely transmission route.
- Considering the measures implemented by France, the risk for the general population in the EU/EEA related to this importation remains low, given a very low likelihood of further spread and a low impact. The ECDC Rapid Risk Assessment Brief published on 16 August 2024 remains valid.

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

- Globally, monkeypox virus (MPXV) clade I and clade II are circulating in multiple countries, with the epidemiological trends remaining largely unchanged.
- In 2024, most clade Ib cases in Africa have been reported by the Democratic Republic of the Congo (DRC), Burundi, and Uganda. According to the World Health Organization global update, Burundi and Uganda reported new cases in January 2025, while for the DRC the most recently available data refer to 2024.
- Outside the affected African countries, new MPXV clade I cases this week have been reported from France and China. Confirmed secondary transmission of mpox due to MPXV clade I outside Africa has been reported by the United Kingdom and Germany, and recently by Belgium and China.
- ECDC is closely monitoring and assessing the epidemiological situation, and additional related information can be found in the Centre's rapid risk assessment published on 16 August 2024 (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.

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

- Since the previous update on 2 December 2024, and as of 8 January 2025, no new MERS-CoV cases have been reported by the World Health Organization (WHO) or national health authorities.
- Since the beginning of 2024, and as of 8 January 2025, five MERS-CoV cases, including four fatalities, have been reported in Saudi Arabia with date of onset in 2024.

• The risk of sustained human-to-human transmission in Europe remains very low and the current MERS-CoV situation poses a low risk to the EU/EEA.

Increase in respiratory viral infections – China – 2024

- A seasonal increase in respiratory infections (influenza, human metapneumovirus (hMPV) and other pathogens) and an overall increase in influenza-like illness was reported in China.
- Influenza virus accounts for the highest positivity in sentinel primary care, as well as in hospital-based surveillance.
- On 7 January 2025, the World Health Organization (WHO) reported that 'Chinese authorities confirmed that the healthcare system is not overwhelmed, hospital utilisation is currently lower than this time last year, and there have been no emergency declarations or responses triggered.'

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

- On 6 January 2025, the United States Centers for Disease Control and Prevention (US CDC) reported that the patient that was hospitalised with severe avian influenza H5N1 in Louisiana has died.
- As of 6 January 2025, a total of 66 human cases of avian influenza A(H5) have been reported from 10 states in the United States (US) during 2024. Of these, 40 were individuals exposed to dairy cattle known or presumed to be infected with A(H5N1) and 23 were workers exposed to outbreaks of HPAI A(H5) at poultry farms. Two people had no known animal exposure and one had exposure to other animals, such as backyard flocks, wild birds, or other mammals.
- On 18 December, the Governor of California declared a state of emergency in the state to further expand monitoring and build on the coordinated approach to contain and mitigate the spread of H5N1.
- On 13 December, the first case of severe illness linked to the virus in the US was confirmed in a patient in Louisiana state. The genome data identified the virus is of the D1.1 genotype.
- On 6 December, the US Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) announced the start of its National Milk Testing Strategy (NMTS).
- According to the US CDC, the risk to the general population remains low, while people with
 exposure to infected poultry, cattle or other potentially infected domestic or wild animals have a
 higher risk of infection.

1. Overview of respiratory virus epidemiology in the EU/EEA

Overview:

Key indicators

All data presented in this summary 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. In the footer, known issues with reported data can be found under 'Country notes', with supporting information also available under 'Additional resources'.

- Of the 20 countries reporting ILI/ARI activity with the moving epidemic method (MEM), eight reported ILI activity and two reported ARI activity above the baseline level for week 1.
- Influenza activity has continued to increase, with 11 countries reporting primary care test positivity rates at or above 10% in week 1. Two countries reported high intensity and 13 countries widespread transmission. For secondary care, the pooled EU/EEA test positivity rate in SARI surveillance was 20% in week 1. Since W40, about 50% of individuals hospitalised with influenza are aged 65 years and older. Non-sentinel indicators of severe disease (hospital admissions, ICU admissions, and deaths) continued to increase since week 48.
- Of 276 influenza positive specimens from ILI/ARI surveillance, 203 (74%) were influenza type A virus, 63 (23%) were type B virus and 10 (4%) were untyped. Of 203 influenza A viruses, 132 were subtyped. Of these, 106 (80%) resulted as A(H1N1)pdm09 viruses and 26 (20%) as A(H3N2) viruses. All the five influenza type B viruses reported that were ascribed to a lineage were B/Victoria. Influenza B virus currently dominates in Portugal and a mixed dominance is reported by Bulgaria (A(H3)/B) and Spain (A(H1)pdm09/B) while other countries reported dominance of influenza A or one of the A subtypes.

- RSV activity has remained stable in primary and secondary care. Three countries reported ILI/ARI/SARI test positivity rates ≥10%. Since W40, about 70% of individuals hospitalised with RSV are children aged under five years and about 20% are aged 65 years and older. Hospital admissions and ICU admissions due to RSV continued to increase since week 44.
- SARS-CoV-2 activity in primary care and hospitals has continued to decrease or remain stable at the EU/EEA level in recent weeks, with lower rates of aggregate test positivity than those observed in 2024 at this time of year.

ECDC assessment:

While the number of patients presenting to primary care and hospitals for respiratory illness has remained at expected levels for this time of year, sharp increases in influenza virus and respiratory syncytial virus (RSV) activity have been observed in the EU/EEA. Although most reported RSV cases are in very young children, people aged 65 years and above are also at risk and can develop severe disease. While hospital admissions due to influenza have been observed in all age groups, those aged 65 years and older have the highest risk of hospitalisation and severe outcomes. SARS-CoV-2 activity continues to decrease but remains elevated in some reporting countries, with people aged 65 years and above at greatest risk of severe disease.

Actions:

Countries should be prepared for continued increases in influenza and RSV activity during the coming weeks and consider <u>infection prevention and control practices in healthcare settings</u>.

Vaccination against influenza viruses helps to limit severe disease outcomes for people at high risk. Healthcare workers and people at higher risk should stay up-to-date with influenza vaccination, in accordance with national recommendations.

Despite the observed decrease in SARS-CoV-2 activity, it is important to continue monitoring the impact of SARS-CoV-2 at national and regional levels. To assess the impact of emerging SARS-CoV-2 sub-lineages, countries should continue to sequence SARS-CoV-2-positive clinical specimens and report to GISAID and/or the European Surveillance System (TESSy).

Vaccination is the most effective measure to protect against more severe forms of respiratory viral diseases. Vaccination campaigns have started in many EU/EEA countries and these efforts should continue. While COVID-19 vaccination continues to protect against severe disease, its effect wanes over time and people at higher risk should stay up-to-date with COVID-19 vaccination, in accordance with national recommendations.

Several countries have made vaccination against RSV available for pregnant women and older adults, as well as immunisation with monoclonal antibodies for newborns. For more information, consult the national vaccination and immunisation recommendations made by each country's competent authorities.

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 all-cause mortality monitoring activity, aiming to detect and measure excess deaths related to seasonal influenza, pandemics and other public health threats, based on weekly national mortality statistics from up to 27 reporting European countries or subnational regions.
- WHO <u>recommends</u> that trivalent vaccines for use during the 2024–2025 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/Thailand/8/2022 or A/Massachusetts/18/2022 (H3N2)-like virus (clade 2a.3a.1 (J)); and a B/Austria/1359417/2021 (B/Victoria lineage)-like virus (subclade V1A.3a.2).

 Antigenic characterisation data presented in the WHO <u>2025 southern hemisphere vaccine</u> <u>composition meeting</u> report indicate that 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. The components also appear well matched for the A(H3N2) 2a.3a.1 (J) clade viruses, but less well matched for some of the more recent subclade 2a.3a.1 (J2) viruses characterised by S145N, N158K or K189R HA substitutions (alone or in combination). The majority of the A(H3N2) viruses identified worldwide since February 2024 belong to the subclade 2a.3a.1 (J2).

Sources: ERVISS

Last time this event was included in the Weekly CDTR: 3 January 2025

Maps and graphs

Figure 1. ILI/ARI virological surveillance in primary care – weekly test positivity



Source: ECDC

Figure 2. ILI/ARI virological surveillance in hospitals – weekly test positivity



Source: ECDC

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Figure 3. Overview of key indicators of activity and severity in week 1, 2025

		Repor	ting countries	EU/EEA summary			
Indicator	Syndrome or pathogen	Week 1	Week 52	Description	Value	Comment	
ILI/ARI consultation rates in primary care	ARI	14 rates (11 MEM)	13 rates (9 MEM)	Distribution of country MEM categories	9 Baseline 2 Low	Overall, ARI activity is at expected levels comparable to the same period in previous years. Of the 11 countries reporting MEM, two countries reported ARI activity above the baseline level for week 1: Bulgaria and Lithuania.	
	ILI	19 rates (18 MEM)	18 rates (17 MEM)		10 Baseline 5 Low 3 Medium	Overall, ILI activity is at expected levels comparable to the same period in previous years. Of the 18 countries reporting MEM, eight reported ILI activity above the baseline level for week I : Belgium, France, Greece, Ireland, Lithuania, Luxembourg, Romania and Slovenia.	
ILI/ARI test positivity in primary care	Influenza	16	17	Pooled (median; IQR)	29% (30; 14-31%)	The pooled EU/EEA test positivity rate in ILI/ARI surveillance stayed in week 1 (29%) at similar levels as in week 52 (31%). Test positivity rates $\ge 10\%$ were reported by 11 countries: Poland (59%), Ireland (58%), Spain (31%), Luxembourg (31%), Slovenia (30%), the Netherlands (30%), Greece (29%), Norway (17%), Italy (12%), Denmark (12%) and Germany (11%).	
	RSV	12	15		9.7% (4.6; 0.9-7.1%)	The pooled EU/EEA test positivity rate in ILI/ARI surveillance remained stable at 10%, but the median test positivity rate increased from 4% in week 52 to 5% in week 1. Two countries reported test positivity rates ≥10%: Luxembourg (29%), and Spain (13%).	
	SARS-CoV-2	13	15		2.2% (1.1; 0-5.4%)	Following a peak in July 2024, the pooled EU/EEA test positivity rate in ILI/ARI surveillance continued to slowly decrease. In the five countries with detections, only between 2 and 4 samples have tested positive for SARS-CoV-2.	
SARI rates in hospitals	SARI	7	8	-	-	SARI consultation rates continue to be reported at levels comparable to, or lower than, the same period in previous years.	
SARI test positivity in hospitals	Influenza	8	8	Pooled (median; IQR)	20% (22; 16-25%)	The pooled EU/EEA test positivity rate in SARI surveillance increased from 15% in week 52 to 20% in week 1. All five countries reporting more than five detections, reported test positivity rates $\geq 10\%$: Ireland (48%), Malta (25%), Greece (23%), Spain (21%) and Germany (15%). Since W40, about 50% of individuals hospitalised with influenza are aged 65 years and older, about 30% are aged 15-64 years, 16% are aged 0-4 years and 8% are 5-14 years old. Non-sentinel indicators of severe disease (hospital admissions, ICU admissions, and deaths) continued to increase since week 48.	
	RSV	7	8		13% (6.6; 4.7-14%)	The pooled EU/EEA test positivity rate in SARI surveillance remained stable around 13% in week 1. Two countries reported test positivity rates $\geq 10\%$ for week 1: Spain (24%) and Malta (14%). Since W40, about 70% of individuals hospitalised with RSV are children aged under five years and about 20% are aged 65 years and older. Non-sentinel indicators of severe disease (hospital admissions and ICU admissions) continued to increase since week 44.	
	SARS-CoV-2	7	8		3.9%	The pooled EU/EEA test positivity rate in SARI	

Source: ECDC

Figure 4. ILI/ARI virological surveillance in primary care – pathogen type and subtype distribution

		Week 1, 2025	Week 40, 2	2024 - week 1, 2025
Pathogen	Ν	%ª	Ν	%ª
Influenza	276	-	2711	-
Influenza A	203	76	1814	70
A(H1)pdm09	106	80	1069	73
A(H3)	26	20	396	27
A (unknown)	71	-	349	-
Influenza B	63	24	789	30
B/Vic	5	100	223	100
B/Yam	0	0.0	1	0.4
B (unknown)	58	-	565	-
Influenza untyped	10	-	108	-
RSV	71	-	1143	-
RSV-A	7	44	200	43
RSV-B	9	56	263	57
RSV untyped	55	-	680	-
SARS-CoV-2	14	-	2119	-

Source: ECDC

Figure 5. SARI virological surveillance in hospitals – pathogen type and subtype distribution

⊙Figure _○Table

		Week 1, 2025	Week 40, 2	024 - week 1, 2025
Pathogen	Ν	%a	Ν	%a
Influenza	309	-	1260	-
Influenza A	162	88	654	91
A(H1)pdm09	31	79	221	75
A(H3)	8	21	74	25
A (unknown)	123	-	359	-
Influenza B	23	12	65	9
B/Vic	0	-	2	100
B (unknown)	23	-	63	-
Influenza untyped	124	-	541	-
RSV	190	-	1597	-
RSV-A	24	73	332	51
RSV-B	9	27	314	49
RSV untyped	157	-	951	-
SARS-CoV-2	59	-	2346	-

Source: ECDC

Figure 6. Genetically	y characterised	influenza viru	s distribution,	, week 40,	, 2024 to	week 1,	2025
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	Subtype distribution		Subclade distribution			
Subtype	Ν	%	Subclade	Ν	%	
A(H1)pdm09	199	54	5a.2a(C.1.9)	187	94	
			5a.2a.1(D)	8	4	
			5a.2a(C.1)	4	2	
A(H3)	94	25	2a.3a.1(J.2)	51	55	
			2a.3a.1(J.2.2)	20	22	
			2a.3a.1(J.2.1)	19	20	
			2a.3a.1(J)	3	3	
			Not assigned	1	-	
B/Vic	78	21	V1A.3a.2(C.5.1)	37	55	
			V1A.3a.2(C.5.6)	13	19	
			V1A.3a.2(C.5.7)	9	13	
			V1A.3a.2(C)	8	12	
			Not assigned	11	-	

Source: ECDC

Please note that 'Figure 7. SARS-CoV-2 variant distribution, weeks 51–52, 2024' could not be produced this week, as data were not available. For information on SARS-CoV-2 variants classification, including information on variants under monitoring (VUMs), visit <u>ECDC's variants page</u>.

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

Overview:

In November 2024, 249 measles cases were reported by 11 countries and zero cases by 13 countries. In the most recent 12-month period, from 1 December 2023 to 30 November 2024, 30 EU/EEA countries reported a total of 17 329 cases of measles. Between 1 December 2023 and 30 November 2024, of the 17 329 cases with known age, 7 598 (43.8%) cases were in children under five years old and 5 081 (29.3%) cases were in individuals 15 years old or above.

The highest notification rates were observed in infants under one year old (550.3 cases per million population) and children aged 1–4 years old (321.6 cases per million population). Of 14 364 cases (100.0% of all cases) with a known age and vaccination status, 12 522 (87.2%) were unvaccinated, 1 200 (8.4%) were vaccinated with one dose of a measles-containing vaccine, 600 (4.2%) were vaccinated with two or more doses, and 25 (0.2%) were vaccinated with an unknown number of doses. Thirteen deaths (case fatality rate (CFR): 0.1) attributable to measles were reported to ECDC during the 12-month period by Romania (12) and Ireland (1). Detailed data are available in <u>ECDC's Surveillance Atlas of Infectious Diseases</u>.

Complementary epidemic intelligence surveillance, with data collection conducted on 9 January 2025 from official public sources, identified 68 new measles cases reported since the last monthly update. New cases were reported in eight EU countries: Austria (new: 20; total: 529), Czechia (new: 1; total: 35), Germany (new: 10; total: 646), Hungary (new: 1; total: 32), Ireland (new: 31; total: 213), the Netherlands (new: 3; total: 190); Norway (new: 1; total: 10) and Sweden (new: 1; total: 38). No measles-related deaths have been reported in recent months. Overall, 19 measles-related deaths have been reported in 2024, in Romania (18) and in Ireland (1).

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

Epidemiological summary for EU/EEA countries with relevant epidemic intelligence updates:

Since the last monthly update, new measles cases were reported in the following countries.

<u>Austria</u> reported 529 confirmed measles cases since 1 January 2024 and as of 2 January 2025, an increase of 20 cases since 3 December 2024. On 3 January 2025, the Gmunden district administration <u>reported</u> a measles case in Gosau in Dachstein West ski region to inform that further infections may be associated with this exposure.

<u>Czechia</u> reported one measles case in December 2024, and as of 1 January 2025, 35 measles cases have been reported in 2024.

<u>Finland</u> reported no new measles cases since the last monthly update and as of 9 January 2025. On 9 January 2025, the National Institute for Health and Welfare (THL) reported that an individual infected with measles travelled on a ferry from Tallinn to Helsinki on 7 January. The risk of infection for other passengers was assessed as "very small".

<u>Germany</u> reported 646 measles cases, an increase of 10 cases since the last monthly report. Of these, 645 measles cases were reported in 2024 and one in 2025 (data as of 9 January 2025).

Hungary reported 32 measles cases as of 6 January 2024, an increase of one case since 1 December 2024.

<u>Ireland</u> reported 29 measles cases between weeks 47–52, 2024 and a total of 213 measles cases in 2024. Two measles cases were reported in week 1, 2025 (data as of 4 January 2025).

<u>Netherlands</u> reported 190 measles cases in 2024 up to and including 16 December, of which three cases were reported in December 2024.

Norway reported 10 measles cases in 2024 and one case in 2025 (data as of 9 January 2025).

<u>Sweden</u> reported 38 cases in 2024 and as of 9 January 2025. Of these, one case was reported in December 2024.

Epidemiological summary for select countries outside of EU/EEA with relevant epidemic intelligence updates:

Morocco

According to media reports $(\underline{1},\underline{2})$, on 30 December 2024 the Moroccan health authorities provided an update on the ongoing nationwide measles epidemic in Morocco. The outbreak began in the Souss-Massa region in October 2023 and has since spread nationwide.

Since October 2023, 19 515 cases have been reported, with an incidence rate of 52.5 cases per 100 000 population. The authorities have reported 107 deaths due to measles (0.55% of the reported cases), of which approximately half were in children under 12 years old.

In 2024 alone, authorities reported 17 999 measles cases (5 094 confirmed) and 104 deaths.

The increase in measles cases is attributed to declining vaccination rates following the COVID-19 pandemic and vaccine hesitancy. However, according to the <u>WHO data</u>, between 2016 and 2023 Morocco reported 99% coverage of the first and second doses of measles vaccine.

Summary of measles cases reported by WHO regional offices

*As of 10 January 2025, the latest available measles data from WHO is from <u>11 December 2024</u>. This data was reported in the ECDC monthly measles update in December 2024.

WHO Regional Office for Europe (WHO/Europe) reported 104 849 measles cases in 2024. The five non-EU/EEA countries reporting the most measles cases were: Kazakhstan (27 967), Russian Federation (21 249), Azerbaijan (16 685), Kyrgyzstan (13 050) and the United Kingdom (2 756).

The numbers provided to WHO for EU/EEA countries are from TESSy data, which are updated monthly and available on the <u>ECDC Surveillance Atlas of Infectious</u> <u>Diseases</u>. Due to differences in reporting times, the numbers may not correspond to the data from epidemic intelligence screening.

WHO Regional Office for Africa (WHO AFRO) has reported 80 769 measles cases in 2024. The highest numbers of cases were reported from Ethiopia (28 139), Nigeria (10 237), Burkina Faso (7 147), Cote d'Ivoire (6 464) and the Democratic Republic of the Congo (4 489).

WHO Regional Office for the Americas (WHO PAHO) has reported 436 measles cases in 2024. Most cases (280) were reported from the United States.

WHO Regional Office for the Eastern Mediterranean (WHO EMRO) has reported 88 751 measles cases in 2024. The highest numbers of cases were reported from Iraq (32 179), Pakistan (23 596), Yemen (19 988), Afghanistan (8 816) and Somalia (1 306).

WHO Regional Office for South-East Asia (WHO SEARO) has reported 32 838 measles cases in 2024. The highest numbers of cases were reported from India (19 852), Thailand (7 507), Indonesia (4 718), Sri Lanka (296), and Nepal (222).

WHO Regional Office for the Western Pacific (WHO WPRO) has reported 9 207 measles cases in 2024. The following five countries reported the most cases: the Philippines (3 686), Malaysia (3 574), China (939), Viet Nam (852), and the Republic of Korea (47).

ECDC assessment:

The overall number of measles cases in the EU/EEA steadily increased between June 2023 and March 2024 and decreased between April 2024 and October 2024. In November 2024, a slight increase in case numbers compared with October 2024 was observed. **Measles cases may continue to increase in the EU/EEA in the coming months**. This is due to reported suboptimal vaccination coverage for measles-containing vaccines (MCV) in a number of EU/EEA countries (<95% in many of these countries), as well as a high probability of importation from areas experiencing high circulation. In addition, the majority of recently reported cases have acquired the disease within the reported country through community/local transmission, indicating a higher probability of being exposed to the virus within the EU/EEA than in previous months.

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

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

ECDC's latest advice on measles is available in the Threat Assessment Brief 'Measles on the rise in the EU/EEA: Considerations for a public health response', published in February 2024 and the conclusions of that remain valid. Additional information on the risk classification and ECDC recommendations can be found in this report.

Actions:

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

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

3. Mpox due to monkeypox virus clade I – Belgium – 2024

Overview:

On 18 December 2024, Belgium reported its first confirmed mpox case due to MPXV clade Ib. The case was confirmed as clade Ib on 16 December and was in an adult who had travel history to an African country where clade Ib was circulating. It was reported that the patient only had symptoms in the genital area and that prior to symptom onset they had sexual contact with a person who had mpox-compatible symptoms. Upon arrival in Belgium, the patient isolated on their own initiative (prior to diagnosis of mpox).

On 21 December, the patient's child developed symptoms and on 26 December the child's illness was confirmed as the second case of mpox due to MPXV clade Ib in Belgium. The child, who is under five years old, underwent clinical evaluation in paediatric emergency care and it was decided that hospitalisation was not required. The child is recovering well and is isolating at home together with a parent. Apart from this parent, five other high-risk contacts have been identified, four of whom are healthcare workers. All high-risk contacts have been informed of precautions to take and are being followed up.

For more information on the global epidemiological situation regarding MPXV clade Ib, see the weekly reports in <u>the Communicable Diseases Threats Report</u>.

ECDC assessment:

Considering the measures implemented by Belgium, the risk for the general population in the EU/EEA related to this importation is considered low, given a very low likelihood of further spread and a low impact. The <u>ECDC Rapid Risk Assessment</u> published on 16 August 2024 remains valid.

Actions:

ECDC is closely monitoring and assessing the evolving epidemiological situation of mpox in the EU/EEA and globally and is in contact with EU/EEA countries and partners. ECDC recommendations are available <u>here</u>.

Last time this event was included in the Weekly CDTR: 3 January 2025

4. Mpox due to monkeypox virus clade I – France – 2025

Overview:

On 7 January 2025, <u>France reported</u> an mpox case due to monkeypox virus clade Ib in a person without travel history to central Africa. However, the patient had been in contact with others that had previously travelled to central Africa. Based on the epidemiological investigation it is most likely that transmission took place in France.

ECDC assessment:

Considering the measures implemented by France, the risk for the general population in the EU/EEA related to this event is considered low, given a very low likelihood of further spread and a low impact. The <u>ECDC Rapid Risk Assessment</u> published on 16 August 2024 remains valid.

Actions:

ECDC is closely monitoring and assessing the evolving epidemiological situation of mpox in the EU/EEA and globally and is in contact with EU/EEA countries and partners. ECDC recommendations are available <u>here</u>.

Last time this event was included in the Weekly CDTR: -

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

Overview:

Update

Outside Africa, mpox cases due to monkeypox virus (MPXV) clade I were reported for the first time this week by France (one case) and China (one case with travel history to the Democratic Republic of the Congo (DRC) and four secondary cases).

In Africa, according to the World Health Organization global update, Burundi and Uganda reported new cases in January 2025 while for the DRC the most recently available data refer to 2024. The last six weeks and as of 5 January 2025, Burundi reported 798 confirmed cases and Uganda 767 confirmed cases, including eight deaths (<u>WHO Global report on mpox (data as of 5 January 2025</u>). The mpox epidemic continues in the DRC, with the most recent epidemiological data reporting over 9 000 cases in 2024. However, more recent data for December 2024 or early January 2025 have not been published yet.

Summary

Globally, MPXV clade I and clade II are circulating in multiple countries. Since 2022, MPXV clade II outside of Africa circulates mostly among adult men who have sex with men. In 2024, an increase of MPXV clade Ia and Ib was reported in the DRC, while clade Ia cases continued being reported by the Central African Republic and the Republic of the Congo (Congo) where it is endemic.

Following the epidemic of MPXV clade I in the DRC in 2024, MPXV clade I was first detected in Burundi, Rwanda, Uganda and Zambia (all neighbouring the DRC), as well as in Kenya and Zimbabwe.

Overall, in the African continent in 2024 and as of 5 January 2025, most confirmed clade I cases have been reported from the DRC (over 40 000 cases overall, over 9 000 confirmed and over 40 confirmed deaths), Burundi (over 3 000 confirmed cases and one death), and Uganda (overall 1 552 cases have been reported, including 12 deaths). Rwanda has reported 69 cases, Kenya 31 cases, Zambia four cases and Zimbabwe two cases (WHO Global report on mpox (data as of 5 January 2025)).

Outside Africa, in the EU/EEA, travel-associated cases or sporadic cases reporting epidemiological links with travel-associated cases of MPXV clade Ib have been reported in the EU/EEA by:

- Sweden (one case in August 2024);
- Germany (one case in October and five in December 2024);
- <u>Belgium (two cases in December 2024)</u>; and
- France (one case in January 2025).

<u>Outside Africa and the EU/EEA</u>, clade I cases have been reported by Thailand (one case in August 2024), India (one case in September 2024), the UK (five cases in October and November 2024), the United States (US) (one case in November 2024), Canada (one case in November 2024), Pakistan (one case in December 2024), Oman (one case in December 2024), and <u>China</u> (five cases in January 2025).

Travel-associated cases outside Africa from all countries besides India, Pakistan and Oman have reported travel history to Africa. The travel-associated cases reported by India, Pakistan and Oman had travel history to the United Arab Emirates (<u>WHO Multi-country outbreak of mpox, External situation report 44, 23 December 2024</u>).

Confirmed secondary transmission of mpox due to MPXV clade Ib outside Africa was reported for the first time in 2024 in the EU/EEA by Germany and Belgium, and outside the EU/EEA by the UK and China. The number of secondary cases reported in all secondary transmission events outside Africa range from one to four cases per event. Based on the available information, all transmission events were due to close contact, the cases presented with mild symptoms and no deaths have been reported.

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.

Since September 2024, following an analysis of the patterns of MPXV transmission observed at the national level and given the limitations and uncertainties, ECDC has used official epidemiological information to classify countries according to whether MPXV clade I is endemic or has been reported for the first time in 2024. The categories are as follows:

- Countries reporting only travel-associated cases or cases with a clear link to travel-associated cases: Belgium, Canada, China, Germany, France, India, Oman, Pakistan, Sweden, Thailand, the UK, the US, Zambia, and Zimbabwe;
- Countries reporting clusters of cases: Congo and Kenya;
- Countries reporting community transmission: Burundi, Central African Republic, the DRC, Rwanda, and Uganda.

The classification was last updated on 9 January 2025.

ECDC assessment:

The epidemiological situation regarding mpox due to MPXV clade Ib remains similar to the previous weeks. The sporadic cases of mpox clade I that have been reported outside Africa, including secondary transmission, are not unexpected.

The risk for EU/EEA citizens travelling to or living in the affected areas is considered moderate if they are having close contact with affected communities or low if contact with affected communities is avoided. The overall risk for the general population in the EU/EEA is currently assessed as low. However, more imported mpox cases due to MPXV clade I are likely to be reported by the EU/EEA and other countries.

EU/EEA countries may consider raising awareness in travellers to/from areas with ongoing MPXV transmission and among primary and other healthcare providers who may be consulted by such patients. If mpox is detected, contact tracing, partner notification and post-exposure preventative vaccination of eligible contacts are important public health response measures.

Please see the latest ECDC <u>Risk assessment for the EU/EEA of the mpox epidemic caused by</u> <u>monkeypox virus clade I in affected African countries</u>.

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>.

Sources: ECDC rapid risk assessment

Last time this event was included in the Weekly CDTR: 3 January 2025

6. Middle East respiratory syndrome coronavirus (MERS-CoV) – Multi-country – Monthly update

Overview:

Update: Since the previous update on 2 December 2024, and as of 8 January 2025, no new MERS-CoV cases have been reported by the World Health Organization (WHO) or national health authorities.

Summary: Since the beginning of 2024, and as of 8 January 2025, five MERS-CoV cases, including four fatalities, have been reported in <u>Saudi Arabia</u> with date of onset in 2024.

Since April 2012, and as of 8 January 2025, a total of 2 626 cases of MERS-CoV, including 953 deaths, have been reported by health authorities worldwide.

Sources: ECDC MERS-CoV page | WHO MERS-CoV | ECDC factsheet for professionals | WHO updated global summary and assessment of risk (November 2022) | Qatar MoPH Case #1 | Qatar MoPH Case #2 | FAO MERS-CoV situation update | WHO DON Oman | WHO DON Saudi Arabia | WHO DON UAE | WHO DON Saudi Arabia 1 | WHO IHR | WHO EMRO MERS Situation report | WHO DON Saudi Arabia 2 | WHO DON Saudi Arabia 3

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 EU/EEA, as stated in the <u>Rapid Risk Assessment</u> published by ECDC on 29 August 2018, which also provides details on the last person reported with the disease in Europe.

ECDC published a technical report, <u>Health emergency preparedness for imported cases of high-</u> <u>consequence infectious diseases</u>, 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 <u>Risk</u> <u>assessment guidelines for infectious diseases transmitted on aircraft (RAGIDA) – Middle East</u> <u>respiratory syndrome coronavirus (MERS-CoV)</u> in 22 January 2020.

Actions:

ECDC is monitoring this situation through its epidemic intelligence activities and reports on a monthly basis or when new epidemiological information is available.

Last time this event was included in the Weekly CDTR: 6 December 2024

Maps and graphs

Figure 1. Distribution of confirmed cases of MERS by place of infection and month of onset, April 2012 to December 2024



Source: ECDC

Figure 2. Geographical distribution of confirmed cases of MERS in Saudi Arabia by probable region of infection and exposure, with dates of onset from 1 January to 31 December 2024



7. Increase in respiratory viral infections – China – 2024

Overview:

Update: On 7 January 2025, <u>WHO reported</u> that "Chinese authorities confirmed that the healthcare system is not overwhelmed, hospital utilisation is currently lower than this time last year, and there have been no emergency declarations or responses triggered." According to WHO, the "levels of acute respiratory infections, including hMPV, in China are within the expected range for the winter season with no unusual outbreak patterns reported." During the first week of 2025, there has been increased international media attention regarding reported increases of hMPV infections in China. The increase is reported to be affecting the Northern Provinces of China and has been noted since the start of December 2024. Media also reported that this increase is mostly affecting children under 14 years old and is heavily impacting healthcare services.

Summary: China CDC reported <u>an overall increase in influenza-like illness activity</u> in the Northern Provinces of China, with influenza accounting for about 40% of samples tested in these provinces. As of 29 December 2024, China CDC sentinel surveillance data also showed an <u>increase in human</u> <u>metapneumovirus infections</u> in the context of heightened circulation of other respiratory viruses.

In the Northern and Southern provinces, influenza remains the main pathogen detected in influenzalike illness cases in outpatient and emergency departments (30.2% compared with 6.2% for hMPV) and in hospitalisations for severe acute respiratory infection (SARI) (17.7% compared with 5.4% for hMPV). Influenza predominates for outpatient and emergency department visits, as well as hospitalisation due to SARI in all age groups except the 5–14 years old age group, where the leading pathogen for hospitalisation is *Mycoplasma pneumoniae*. Currently, hMPV represents the third most common pathogen in hospitalised SARI patients in all age groups under 60 years old.

Background

Human metapneumovirus is a known cause of acute respiratory infections causing a significant seasonal burden particularly among young children worldwide. In <u>2018</u> it was estimated that it caused approximately 15 million cases of acute respiratory infection among children under 5 years old in 28 countries leading to about 15 000 deaths, particularly in less developed countries. No vaccine or specific antiviral is available to protect against hMPV.

hMPV can cause respiratory disease in people of all ages, but it can be severe among young children, older adults, and immunocompromised individuals. In temperate climates, hMPV is most active during late winter and spring and circulates simultaneously with other respiratory viruses (respiratory syncytial virus, influenza, SARS-CoV-2, and several other respiratory viruses).

ECDC assessment:

The currently reported epidemiological situation in China is that of a typical seasonal increase of several respiratory pathogens and does not raise any specific concern for the EU/EEA. hMPV circulates in the EU/EEA, although specific surveillance systems are not in place to monitor this pathogen. There are currently no indications from <u>surveillance of acute respiratory infections</u> in the EU/EEA of any unusual patterns for the time of the year.

Actions:

ECDC is in contact with China CDC and WHO/Europe to obtain additional information on this event. China CDC has shared the latest respiratory virus epidemiological bulletins.

On 8 January 2025, ECDC published a news item on the Increase in respiratory infections in China.

Last time this event was included in the Weekly CDTR: -

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

Overview:

Update:

On 6 January 2025, the <u>US CDC</u> and the <u>Louisiana Department of Health</u> reported that the patient that was hospitalised with severe avian influenza H5N1 in the state has died. This is the first death from H5N1 reported by the US. The patient was over 65 years old and according to the reports had underlying conditions. The patient had been exposed to non-commercial backyard flocks and other wild birds.

Background: In 2024, as of 6 January 2025, 66 human cases of avian influenza A(H5N1), including one death, have been confirmed by the US CDC from 10 states. Forty cases reported exposure to dairy cattle in the following states: California (36), Colorado (1), Michigan (2) and Texas (1). Twenty-three cases reported exposure to poultry in the following states: Colorado (9), Iowa (1), Oregon (1), Washington (11), and Wisconsin (1). One case, the patient reported in Louisiana that died, had exposure to backyard flocks and other wild birds. Two additional cases have been identified with unknown exposure: one in Missouri and one in California.

On 17 December 2024, the US CDC reported one new severe human case of avian influenza A(H5) (<u>CDC H5 Bird Flu Update</u>). According to the US <u>CDC</u>, the case occurred in Louisiana and was confirmed on 13 December. The individual reported exposure to sick and dead birds in backyard flocks, and this was the first case in the US linked to this exposure. The case was hospitalised with severe symptoms and later died. This marks the first instance of severe illness, as well as the first death, linked to the virus in the US.

On 29 April 2024, the US <u>CDC recommended</u> against consuming raw milk contaminated with live A(H5N1) virus as a way to develop antibodies against A(H5N1) virus to protect against future disease. Consuming raw milk can lead to serious health risks, especially for certain vulnerable populations.

On 6 December 2024, the US Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) announced the start of its <u>National Milk Testing Strategy</u> (NMTS). In partnership with state veterinarians, USDA implemented a strategy to collect unpasteurised milk samples to better assess where H5N1 is present, with the goal to better inform biosecurity and containment measures, as well as to inform state-led efforts to reduce risk to farm workers who may be in contact with animals infected with H5N1.

On 12 December 2024, <u>a study</u> showing that influenza virus may remain infectious in refrigerated unpasteurised milk for up to five days. The experiment was performed with a strain of human influenza virus H1N1 PR8.

The US CDC sequenced the viral genome of the H5N1 avian influenza virus that infected the patient in Louisiana. The sequencing identified that the virus is of the D1.1 genotype, which is related to other D1.1 strains recently detected in wild birds and poultry across the US, as well as in recent human cases in British Columbia, Canada and Washington State. The mutations found in virus sequences were not found in poultry samples collected on the patient's property, suggesting that the changes emerged in the patient after infection. This H5N1 strain differs from the B3.13 genotype, which has been detected in dairy cows, isolated human cases in various US states, and some poultry outbreaks.

The US CDC's current <u>assessment</u> of the human health risk of A(H5N1) to the general public in the US has not changed and continues to be considered low.

ECDC assessment:

To date, there have been no confirmed human cases of influenza A(H5N1) infection 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 has assessed the risk 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 contaminated environments (e.g. occupational exposure to infected animals).

Actions:

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 relevant ECDC guidance documents (<u>Testing and detection of zoonotic</u> influenza virus infections in humans; Investigation protocol of human cases of avian influenza virus; <u>Enhanced surveillance of severe avian influenza virus infections in hospital settings</u>).

It is important to raise awareness, including among all primary care workers, of the need to enquire 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. It is also important to communicate about the epidemiological situation so as not to miss or delay diagnosis of potential human cases.

Given the uncertainties related to mammal-to-mammal transmission and depending on the epidemiological situation, a low threshold can be considered for testing individuals exposed to potentially infected mammals (e.g. 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.

Relevant ECDC 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
- Investigation protocol of human cases of avian influenza virus infections in the EU/EEA
- Surveillance and targeted testing for the early detection of zoonotic influenza in humans during the winter period in the EU/EEA
- Joint ECDC-EFSA Drivers for a pandemic due to avian influenza and options for One Health mitigation measures

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 on the <u>avian influenza situation</u>.

Sources: Event Information Site for IHR National Focal Points | FAO | 2024-e000168

Last time this event was included in the Weekly CDTR: 3 January 2025

Events under active monitoring

- Overview of respiratory virus epidemiology in the EU/EEA last reported on 20 December 2024
- Avian influenza A(H5N1) human cases United States 2024 last reported on 20 December 2024
- Mpox due to monkeypox virus clade I and II Global outbreak 2024 last reported on 20 December 2024
- Mpox due to monkeypox virus clade I Germany 2024 last reported on 20 December 2024
- SARS-CoV-2 variant classification last reported on 20 December 2024
- Cyclone Chido, Mayotte 2024 last reported on 20 December 2024
- Mpox due to monkeypox virus clade I Belgium 2024 last reported on 20 December 2024
- Acute respiratory infections complicated by malaria (previously unknown/undiagnosed disease)
 Democratic Republic of the Congo 2024 last reported on 20 December 2024
- Hepatitis A multi-country 2024 last reported on 13 December 2024

- Suspected viral haemorrhagic fever Sierra Leone 2024 last reported on 13 December 2024
- Mpox in the EU/EEA, Western Balkan countries and Türkiye 2022–2024 last reported on 13 December 2024
- Circulating vaccine-derived poliovirus type 2 (cVDPV2) Multi-country 2024 last reported on 13 December 2024
- Measles Multi-country (World) Monitoring European outbreaks Monthly monitoring last reported on 13 December 2024
- Chikungunya and dengue Multi-country (World) Monitoring global outbreaks Monthly update - last reported on 13 December 2024
- Middle East respiratory syndrome coronavirus (MERS-CoV) Multi-country Monthly update last reported on 10 January 2025
- Increase in respiratory viral infections China 2024 last reported on 10 January 2025 Mpox due to monkeypox virus clade I France 2025 last reported on 10 January 2025
- Increase in respiratory infections due to Mycoplasma pnemoniae in the EU/EEA during the season 2024/2025 - last reported on 6 December 2024
- Influenza A(H5N1) Multi-country (World) Monitoring human cases last reported on 6 December 2024
- Avian influenza A(H5N1) human case Canada 2024 last reported on 3 January 2025