

WEEKLY BULLETIN

Communicable Disease Threats Report

Week 46, 12–18 November 2023

Today's disease topics

1. Overview of respiratory virus epidemiology in the EU/EEA
2. SARS-CoV-2 variant classification
3. West Nile virus One Health seasonal surveillance – 2023
4. Multistate outbreak with Salmonella Strathcona in Germany

Executive summary

Overview of respiratory virus epidemiology in the EU/EEA

- By the end of week 45 (ending 12 November 2023), rates of respiratory illness (influenza-like illness (ILI) and/or acute respiratory infection (ARI)) in the community were increasing in many EU/EEA countries. Rates of severe acute respiratory infection (SARI) cases presenting to secondary care were comparable to the same time last year.
- SARS-CoV-2 continued to circulate at higher levels than respiratory syncytial virus (RSV) and seasonal influenza. Countries reported a mix of increasing and decreasing trends for SARS-CoV-2 activity and severity. RSV activity continued to increase, with the highest impact among children aged 0–4 years. Seasonal influenza activity remained at a low level, although there is evidence of increasing geographical spread in some countries.

SARS-CoV-2 variant classification

- Since the last update on 27 October 2023, and as of 13 November 2023, no changes have been made to ECDC's classifications for variants of concern (VOCs), variants of interest (VOIs), variants under monitoring (VUMs), or de-escalated variants.
- **XBB.1.5-like+F456L** variants currently dominate the global and EU/EEA SARS-CoV-2 variant landscape. As of 6 November 2023, for week 42 (16 October 2023 to 22 October 2023). XBB.1.5-like lineages are circulating in a median proportion of 67% in EU/EEA countries (range: 32–76%). The overall proportion of XBB.1.5-like+F456L lineages levelled off in the EU/EEA, with stable trends observed over the past few weeks.

- **XBB.1.5-like+L455F+F456L** variants show an increasing trend in all countries in EU/EEA with sufficient reporting, with a median proportion of 17% (range: 26–50%). The lineages mainly present in this umbrella are HK.3 lineages and GK* lineages.
- **BA.2.86** is an emerging SARS-CoV-2 lineage characterised by a high number of spike mutations that are distinct from ancestral BA.2 and currently circulating XBB-derived variants. BA.2.86 is circulating in low proportions in the EU/EEA (median 8% in the EU/EEA overall). However, BA.2.86, including its sub-lineages, is the most rapidly increasing variant in the EU/EEA, with increasing trends observed in the last few weeks.

West Nile virus One Health seasonal surveillance – 2023

- Since the last update, and as of 15 November 2023, three human cases of West Nile virus (WNV) infection have been reported by EU/EEA countries, and one case was reported by an EU-neighbouring country.
- Since the beginning of the 2023 transmission season, 695 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 15 November 2023, EU/EEA countries have reported 137 outbreaks among equids and 243 outbreaks among birds.

Multistate outbreak with *Salmonella* Strathcona in Germany

- Since 1 January, and as of 13 November 2023, 149 cases of *Salmonella* Strathcona have been reported in nine EU/EEA countries, the United Kingdom, and the United States.
- This constitutes a multi-country outbreak with genetically closely related cases reported since 2011.
- Based on available information and repeated, seasonally detected occurrence of cases, it is likely that there is a common source of fresh product.
- The risk for new infections remains as long as the seasonal deliveries of contaminated produce continue.
- New outbreaks are likely to occur in future seasons until the contaminated vehicle or source has been identified, traced back, and control measures implemented.

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 20 EU/EEA countries up to week 45. Rates were increasing in multiple countries, but remained at levels similar to those observed in the same period last year. Moving epidemic method (MEM) thresholds were available for six countries for ARI and 17 countries for ILI. Among these countries, one reported low activity for ARI, three reported low activity for ILI and the remainder reported baseline activity.
- Among countries reporting data on testing in primary care sentinel settings for influenza, RSV or SARS-CoV-2, pooled test positivity at the EU/EEA level remained highest for SARS-CoV-2 at 14% (median of country values: 15%; IQR: 8–22%). An overall increasing trend in pooled SARS-CoV-2 positivity data has been observed since week 38, with the exception of Spain, a country that contributes a large proportion of the. Pooled test positivity for RSV and seasonal influenza remained at or below 4%. There was an increasing trend visible for RSV (with detections reported by 15 of 21 countries reporting tests), while influenza positivity remained stable.
- RSV detections in non-sentinel data continued to increase in recent weeks. Seasonal influenza detections have increased steadily over the past three weeks but remain at low levels. SARS-CoV-2 detections in non-sentinel data are similar to those reported for sentinel data, with a mixture of increasing and decreasing trends at the country level.
- Among the 45 sentinel detections of seasonal influenza, 43 were typed as influenza virus type A and two were typed as influenza virus type B. Thirty-two of the influenza type A detections were further subtyped as either A(H1)pdm09 (n = 19) or A(H3) (n = 13).
- Qualitative indicators are currently only reported for seasonal influenza. Of the 21 countries reporting influenza intensity, 14 countries reported baseline, three countries reported low and three countries reported medium levels of activity. Of 21 countries reporting the geographical spread of influenza, six countries reported no activity, 12 reported sporadic activity and three reported widespread activity. The change from last week, during which no country reported widespread activity, suggests increasing geographical spread in some countries.

Severe disease

- In recent weeks, increasing trends in SARS-CoV-2 positivity were observed in Croatia and Germany, while decreasing trends were observed in Belgium, Ireland, Malta and Spain. Levels of non-sentinel COVID-19 hospital, intensive care unit (ICU) and death indicators remained lower than during the same time last year, with increases continuing to be observed in a number of countries.
- In recent weeks, increasing trends in RSV positivity were observed in all countries reporting RSV data from SARI systems, with the highest positivity in the 0–4 years age group. Non-sentinel RSV hospital admissions also remained high in the 0–4-years age group, based on data from three countries.

Virus characterisation

SARS-CoV-2 variants for weeks 43–44 (23 October to 5 November 2023)

- The estimated distribution (median and IQR of proportions from 16 countries) of variants of concern (VOCs) or variants of interest (VOIs) was 66% (60–73%) for XBB.1.5+F456L, 18% (10–27%) for XBB.1.5, 8% (5–14%) for BA.2 and 1% (0–2%) for BA.2.75. The proportion of BA.2 (most of which is due to BA.2.86) had been growing, XBB.1.5-like+F456L had plateaued and XBB.1.5 showed a steady decreasing trend.

Period overview (week 25, 2023 to week 45, 2023)

- Following relatively low respiratory illness activity in the community and in secondary care over the summer period, consultation rates have been increasing in primary care settings since September. RSV activity began in around week 36 and has been increasing rapidly since, resulting in increasing hospital admissions among the 0–4-years age group. The increase appears to have occurred around four weeks later than last year. Transmission of SARS-CoV-2 began increasing in the late summer. While pooled data now suggest an overall decrease, several countries continue to report sharp increases, with impacts on severe disease visible and mainly affecting those aged 65 years and above. Influenza activity remains low.

ECDC assessment:

SARS-CoV-2 continued to circulate at higher levels than respiratory syncytial virus (RSV) and seasonal influenza. Countries reported a mix of increasing and decreasing trends for SARS-CoV-2 activity and severity. RSV activity continued to increase, with the highest impact among children aged 0–4 years. Seasonal influenza activity remained at a low level, although there is evidence of increasing geographical spread in some countries.

Actions:

ECDC monitors rates of respiratory illness presentation and respiratory virus activity in the EU/EEA, presenting findings in the European Respiratory Virus Surveillance Summary ([ERVISS.org](https://er viss.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: 13 November 2023

2. SARS-CoV-2 variant classification

Overview:**Weekly update on SARS-CoV-2 variants:**

Since the last update on 27 October 2023, and as of 13 November 2023, no changes have been made to ECDC's classifications for variants of concern (VOCs), variants of interest (VOIs), variants under monitoring (VUMs), or de-escalated variants.

The variant proportions listed below are reported for week 42, 2023 (16 October 2023 to 22 October 2023).

XBB.1.5-like+F456L lineages currently dominate the global and EU/EEA SARS-CoV-2 variant landscape. As of 6 November 2023, XBB.1.5-like lineages are circulating in a median proportion of 67% in EU/EEA countries (range: 32–76%). The overall proportion of XBB.1.5-like+F456L lineages levelled off in the EU/EEA, with stable trends observed over the past few weeks.

XBB.1.5-like+L455F+F456L variants show an increasing trend in all countries in EU/EEA with sufficient reporting, with a median proportion of 26% (range:17–50%). The lineages mainly present in this umbrella are HK.3 lineages and GK* lineages. [Preliminary studies](#) indicate that XBB.1.5-like+L455F+F456L variants may bind more efficiently to human ACE-2 and have similar immune evasive properties compared to XBB.1.5-like+F456L variants and XBB.1.5-like+L455F variants. Virtually all of the lineages are already included in the existing VOIs XBB.1.5-like+F456L but are being monitored specifically as VUMs.

The combination of these mutations (L455F and F456L) has also been increasing in BA.2.75 lineages. The **DV.7.1** variants that carry these mutations have been detected more frequently and are circulating at a median proportion of 1.4% in the EU/EEA (range: 0–5.5%).

BA.2.86 is an emerging SARS-CoV-2 lineage characterised by a high number of spike mutations that are distinct from ancestral BA.2 and currently circulating XBB-derived variants. BA.2.86 is circulating in low proportions in the EU/EEA (median 8% in the EU/EEA, range 0,5 - 8,2%). However, BA.2.86, including its sub-lineages, is the most rapidly increasing variant in the EU/EEA, with increasing trends observed in the last few weeks.

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

Actions:

For the latest update on SARS-CoV-2 variants, please see [ECDC's webpage on variants](#). Detailed country-specific COVID-19 updates are available on the [European Respiratory Virus Surveillance Summary \(ERVISS\)](#)

Last time this event was included in the CDTR: 13 November 2023

3. West Nile virus One Health seasonal surveillance – 2023

Overview:

This is the 25th weekly update of the 2023 West Nile virus (WNV) monitoring season.

Since last week's update, and as of 15 November 2023, European Union (EU) and European Economic Area (EEA) countries reported three human cases of West Nile virus (WNV) infection. Cases were reported by Romania (2) and Spain (1). EU-neighbouring countries reported one human case of WNV infection. The case was reported by North Macedonia.

Since the beginning of the 2023 transmission season, and as of 15 November 2023, EU/EEA countries have reported 695 human cases of WNV infection in Italy (329), Greece (162, of which one with unknown place of infection), Romania (103), France (38), Hungary (29), Spain (17), Germany (6), Croatia (6), and Cyprus (5). EU/EEA countries have reported 64 deaths, in Italy (26), Greece (23), Romania (12), and Spain (3). EU-neighbouring countries have reported 93 human cases of WNV infection, in Serbia (91) and North Macedonia (2), and two deaths in Serbia.

During the current transmission season, within the reporting countries, autochthonous human cases of WNV infection were reported from 140 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; Sömmmerda in Germany; Kastoria and Ioannina in Greece; Cosenza, Bari, Salerno, Lecce, Verbano-Cusio-Ossola, Taranto and Imperia in Italy; Gorj and Timiş in Romania; and Cáceres, Huelva, Valencia/València, Barcelona and Toledo in Spain.

Since the beginning of the 2023 transmission season, 137 outbreaks among equids and 243 outbreaks among birds have been reported by EU/EEA countries. Outbreaks among equids have been reported by France (38), Spain (34), Hungary (26), Italy (23), Germany (13), Portugal (2), and Austria (1). Outbreaks among birds have been reported by Italy (192), 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 and is expected to decrease further in the coming weeks.

As of 15 November 2023, the most recent onset date reported was 26 October 2023.

In accordance with the [Commission Directive 2014/110/EU](#), 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: 10 November 2023

4. Multistate outbreak with *Salmonella* Strathcona in Germany

Overview:

Since 1 January and as of 13 November 2023, 149 cases of *Salmonella* Strathcona have been reported in Austria (17), Finland (2), Czechia (13), Denmark (4), France (9), Germany (47), Italy (34), Luxembourg (1), Norway (1), the United Kingdom (13), and the United States (8). Most cases have been reported between August and October 2023. According to the available information, different age groups are affected without significant difference between genders (68 females and 54 males). Information on travel history was available for 19 cases in the EU/EEA and UK. Cases reported recent travel to different countries including Croatia (n=7), Italy (n=5), Montenegro (n=5), Egypt (n=1), and Europe (not further specified; n=1). In addition, six interviewed cases in the US reported travel to Europe (Spain, Italy, Croatia, France, and Slovenia). Of US cases, travel to Italy was reported by 4/6 cases.

A historical multi-country outbreak of *S.* Strathcona was investigated by Denmark in 2011, where 'datterino' tomatoes were suspected as vehicle of infection ([Müller et al. 2016](#)). Since then, outbreaks have been recorded in Denmark and Germany in 2019 and 2020. The human isolate from the outbreak in Denmark in 2011 belongs to the genetic cluster of 26 isolates within six AD (allelic difference) by cgMLST in a single-linkage clustering analysis with isolates available from six EU/EEA countries in 2011–2023 (as of 17 November 2023). The strain is very clonal and there are several isolates in Enterobase sharing cluster codes HC5_26490 and HC2_26490 ([Zhou et al. 2020](#), [Alikhan et al. 2018](#)). According to the information available following the interviews of 52 cases in 2023, 32 (61,5%) cases reported consumption of fresh tomatoes (any kind) prior to the disease onset. In addition, of 52 cases, 25 reported consumption of eggs (48%) and 24 cases (46%) reported consumption of cheese.

S. Strathcona is a rare serotype in the EU/EEA. In 2022, 89 cases were reported in the EU/EEA. A marked increase was noted between 2018 and 2019, when 28 and 98 cases were reported respectively. Since 2019, the trend has been stable.

ECDC assessment:

This is a re-emerging, seasonal outbreak of 149 *S. Strathcona* infections reported by nine EU/EEA countries, the United Kingdom, and the US in 2023, with most cases reported between August and October. Microbiological evidence indicates a common source. Epidemiological and microbiological data indicate that the most plausible hypothesis of vehicle of infection could be tomatoes, but this hypothesis needs further investigation.

The risk for new infections remains as long as the seasonal deliveries of contaminated produce continues. New outbreaks are likely to occur in future seasons until the contaminated vehicle has been identified, traced back and control measures implemented.

Actions:

ECDC is monitoring the event in EpiPulse and is sharing information through the CDTR report. ECDC encourages countries to report any information relevant to this outbreak in EpiPulse.

A teleconference took place on 9 November 2023 with focal points in EU/EEA countries, the United Kingdom, and the United States. Further investigations are ongoing.

Further information:

Müller et al 2016. Outbreak of *Salmonella* Strathcona caused by datterino tomatoes, Denmark, 2011, [Epidemiology and Infection](#).