Flu News Europe

Joint ECDC–WHO/Europe weekly influenza update

Summary

Week 40/2018 (1–7 October 2018)

- This is the first weekly report for the 2018-2019 influenza season.
- Influenza activity was low throughout the European Region.
- Influenza viruses were detected sporadically in specimens from persons with respiratory illness presenting to medical care.
- Both influenza A and B type viruses were detected.
- For week 40/2018, data from the 19 countries or regions reporting to the EuroMOMO project indicated all-cause mortality to be at expected levels for this time of the year.

2018–2019 season overview

- As is usual for this time of year, influenza activity is low in the European Region.
- Due to the diversity of A(H3N2) influenza viruses that circulated during the 2018 southern hemisphere season, WHO recently recommended a change of the A(H3N2) component for inclusion in egg-based seasonal influenza vaccines for use in the 2019 Southern Hemisphere influenza season, to provide better protection against recently circulating influenza A(H3N2) viruses. In addition, the influenza B component in trivalent vaccines was changed to a B/Victoria-lineage virus, representing the emergent clade with the amino acid deletions Δ162-163 in haemagglutinin (HA), similar to the 2018–2019 vaccine for the northern hemisphere influenza season. See the full southern hemisphere VCM report here.

Primary care data

All countries with thresholds based on syndromic surveillance data for influenza-like illness (ILI) and/or acute respiratory infection (ARI) reported respiratory infections to be at baseline levels.

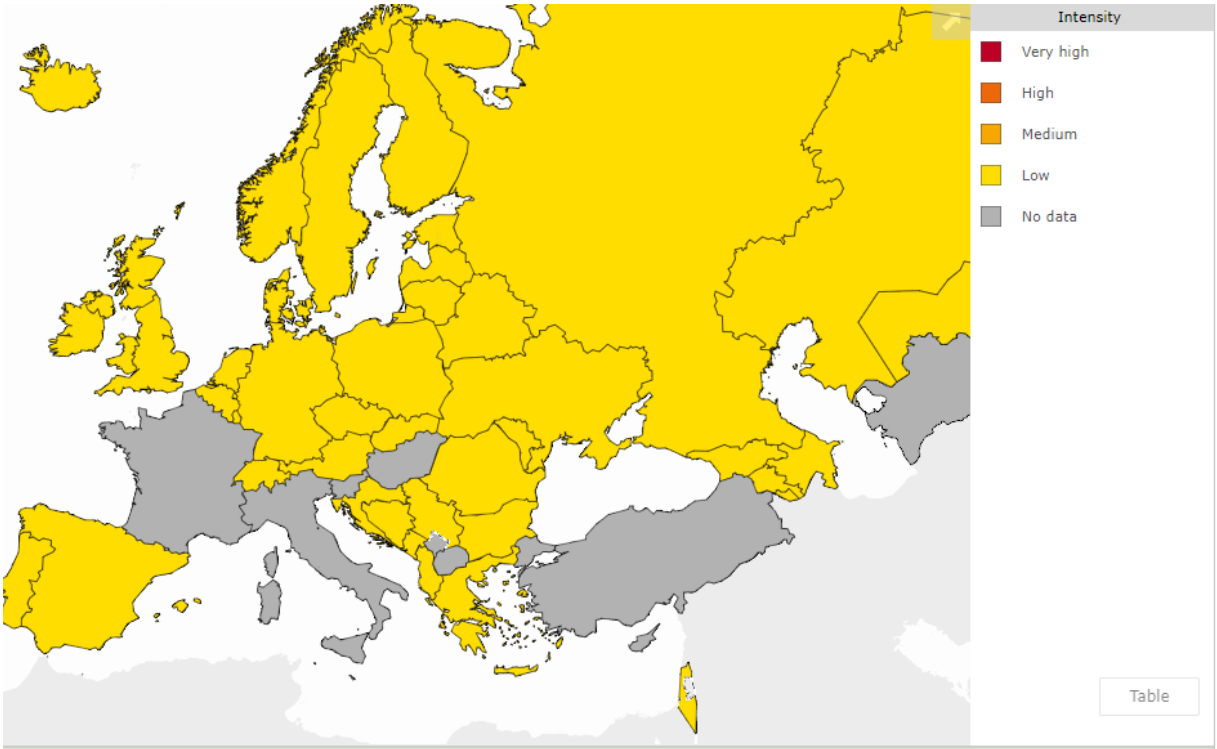
Influenza activity

All 42 Member States and areas reporting on intensity reported low intensity (see Fig. 1), indicating that influenza activity is at baseline levels.

Of 42 Member States and areas reporting on geographic spread, 34 reported no activity (they were distributed across the region) and 8 reported sporadic detections (eastern, northern, western areas) (see Fig. 2).

Maps of qualitative indicators in the European Region

Fig. 1. Intensity in the European Region, week 40/2018



Map disclaimer

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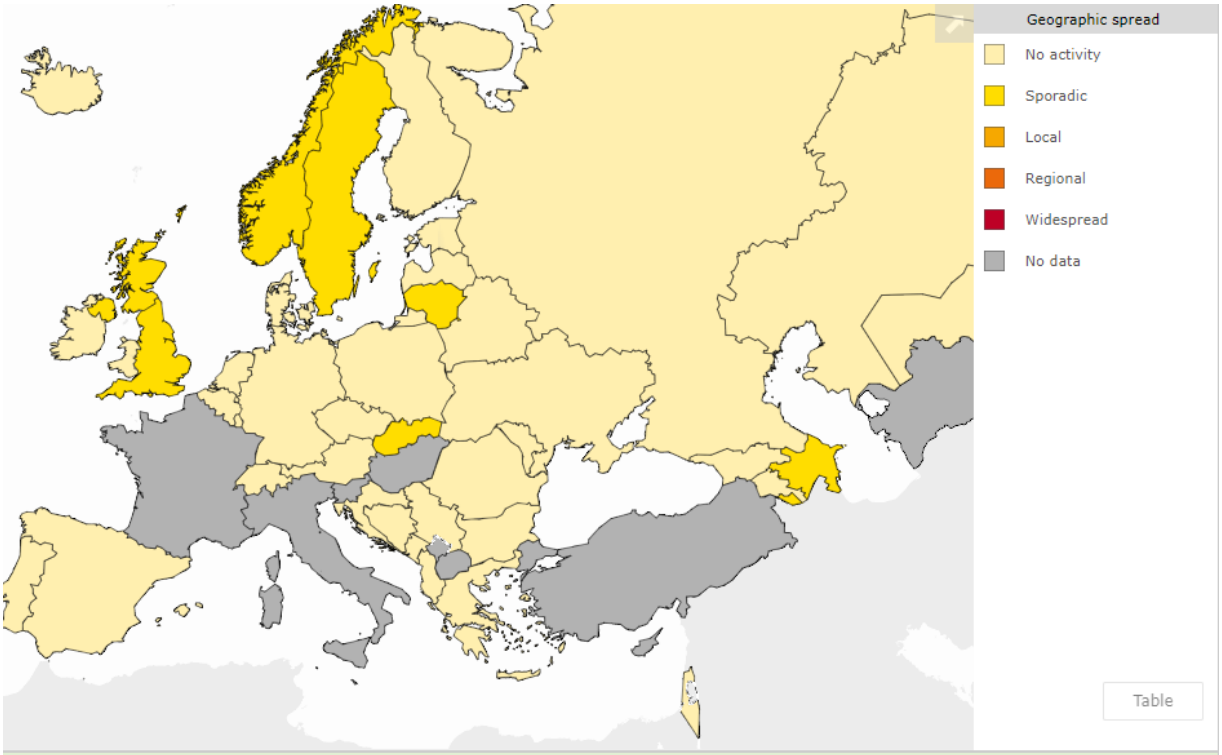
Fig. 2. Geographic spread in the European Region, week 40/2018



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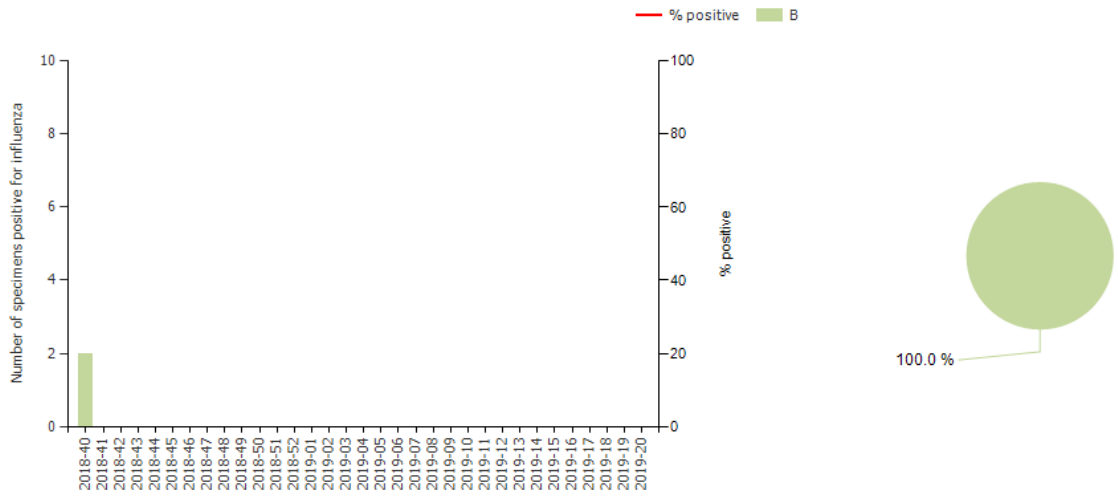
For interactive maps of influenza intensity and geographic spread, see the Flu News Europe website.

Viruses detected in sentinel-source specimens (ILI and ARI)

For week 40/2018, 2 (0.8%) of 239 sentinel specimens tested positive for influenza B viruses, 1 of which was ascribed to the Yamagata lineage (Fig. 3 and Table 1).

Details of the distribution of viruses detected in non-sentinel-source specimens can be found in the Virus characteristics section.

Fig. 3. Influenza virus detections in sentinel-source specimens by type and subtype for week 40/2018[a]



[a] Pie chart shows cumulative data for this period.

Table 1. Influenza virus detections in sentinel-source specimens by type and subtype, week 40/2018

Virus type and subtype	Number	%[a]
Influenza A	**0**	**0.0**
A(H1N1)pdm09	0	0
A(H3N2)	0	0
A not subtyped	0	-
Influenza B	**2**	**100.0**
B/Victoria lineage	0	0.0
B/Yamagata lineage	1	100.0
Unknown lineage	1	-
Total detections (total tested)	**2 (239)**	**0.8**

[a]For influenza type percentage calculations, the denominator is total detections; for subtype and lineage, it is total influenza A subtyped and total influenza B lineage determined, respectively; for total detections, it is total tested.

Severity

A subset of Member States monitor severe disease related to influenza virus infection by surveillance of 1) hospitalized laboratory-confirmed influenza cases in ICUs (n=12), or other wards (n=8), or 2) severe acute respiratory infections (SARI; n=16).

1.1) Hospitalized laboratory-confirmed influenza cases – ICUs

Only 2 cases of hospitalized laboratory-confirmed influenza in ICUs were reported during week 40/2018, both by the UK.

1.2) Hospitalized laboratory-confirmed influenza cases – other wards

There were no reports of hospitalized laboratory-confirmed influenza cases in other wards during week 40/2018.

2. SARI surveillance

For week 40/2018, 272 SARI cases were reported. Of the 81 specimens tested, none were positive for influenza viruses.

Mortality monitoring

For week 40/2018, the EuroMOMO project received data from 19 EU/EEA Member States or regions that were included in pooled analyses. Overall, the pooled estimates of all-cause mortality showed expected mortality levels for this time of year in the participating countries.

Virus characteristics

Details of the distribution of viruses detected in sentinel-source specimens can be found in the Primary care data section.

Viruses detected in non-sentinel-source specimens

For week 40/2018, 42 specimens from non-sentinel sources (such as hospitals, schools, primary care facilities not involved in sentinel surveillance, or nursing homes and other institutions) tested positive for influenza viruses. Of the 42, 69% were type A and 31% type B viruses (Table 2). Of the influenza A viruses that were subtyped, 60% were A(H1N1)pdm09. None of the influenza B viruses from non-sentinel specimens were assigned to a lineage.

Table 2. Influenza virus detections in non-sentinel-source specimens by type and subtype, week 40/2018

Virus type and subtype	Number	%[a]
Influenza A	**29**	**69.0**
A(H1N1)pdm09	6	60.0
A(H3N2)	4	40.0
A not subtyped	19	-
Influenza B	**13**	**31.0**
B/Victoria lineage	0	0
B/Yamagata lineage	0	0
Unknown lineage	13	-
Total detections (total tested)	**42**	**-**

[a] For type percentage calculations, the denominator is total detections; for subtype and lineage, it is total influenza A subtyped and total influenza B lineage determined, respectively; as not all countries have a true non-sentinel testing denominator, no percentage calculations for total tested are shown.

Genetic characterization

For week 40/2018, no virus genetic characterizations were reported. The latest characterization data are summarized in the ECDC summary report for July.

For more information on virus characterizations for EU/EEA countries, see the latest WHO CC London Influenza virus characterisation reports.

The recommended composition of the trivalent influenza vaccine for the northern hemisphere 2018–2019 season included an A/Michigan/45/2015 (H1N1)pdm09-like virus, an A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus and a B/Colorado/06/2017-like virus (B/Victoria lineage). For quadrivalent vaccines, a B/Phuket/3073/2013-like virus (B/Yamagata lineage) was recommended. The full report can be found here.

On 27 September 2018, WHO announced the recommended vaccine composition for the 2019 season for the southern hemisphere. The recommendations matched the A(H1N1)pdm09 and B components for the 2018–2019 northern hemisphere season, but the A(H3N2) component was changed for egg-based vaccines. The full report can be found here.

Antiviral susceptibility testing

No viruses with collection dates in week 40/2018 have been tested for antiviral susceptibility.

This weekly update was prepared by an editorial team at the European Centre for Disease Prevention and Control (Cornelia Adlhoch, Angeliki Melidou, Pasi Penttinen, Phillip Zucs and Emmanuel Robesyn) and the WHO Regional Office for Europe (Caroline Brown, Sonja Olsen, Piers Mook, Dmitriy Pereyaslov and Tamara Meerhoff, Temporary Advisor to WHO). It was reviewed by country experts (Iris Hasibra(Hatibi), Institute of Public Health, Albania; Joan O'Donnell, Health Protection Surveillance Centre, Ireland) and by experts from the network (Adam Meijer, National Institute for Public Health and the Environment (RIVM), the Netherlands; Rod Daniels and John McCauley, WHO Collaborating Centre for Reference and Research on Influenza, Francis Crick Institute, United Kingdom).

Maps and commentary do not represent a statement on the legal or border status of the countries and territories shown.

All data are up to date on the day of publication. Past this date, however, published data should not be used for longitudinal comparisons, as countries retrospectively update their databases.

The WHO Regional Office for Europe is responsible for the accuracy of the Russian translation.

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