

Summary

Week 41/2018 (8–14 October 2018)

- 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 41/2018, data from the 21 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 $\Delta 162-163$ 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 within baseline levels.

Influenza activity

All 49 Member States and areas reporting on intensity reported low intensity for week 41/2018 (see Fig. 1), indicating that influenza activity is within baseline levels.

Of 49 Member States and areas reporting on geographic spread, 40 reported no activity (across the region) and 9 reported sporadic spread (in eastern, northern and western areas) (see Fig. 2).

Maps of qualitative indicators in the European Region

Fig. 1. Intensity in the European Region, week 41/2018

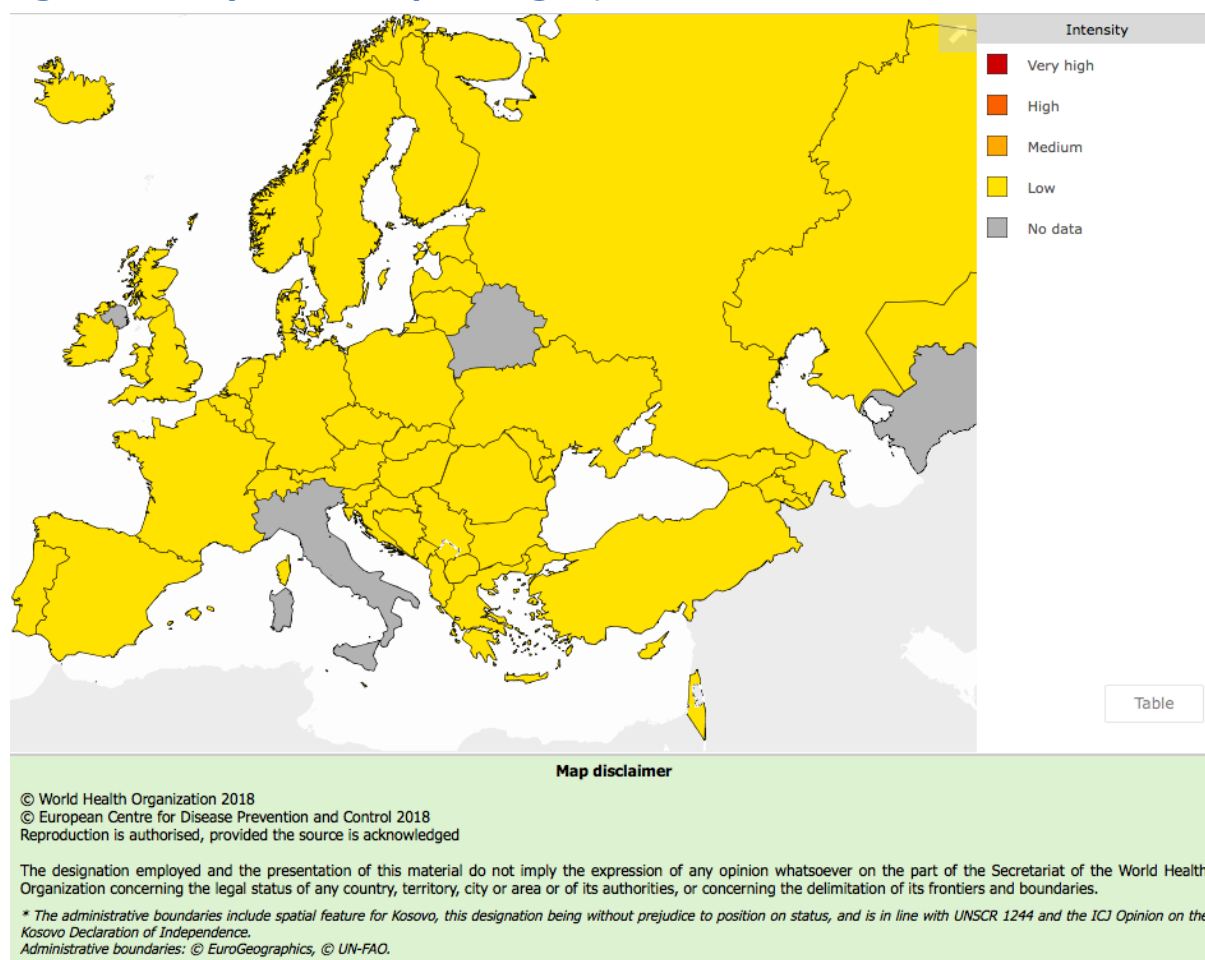
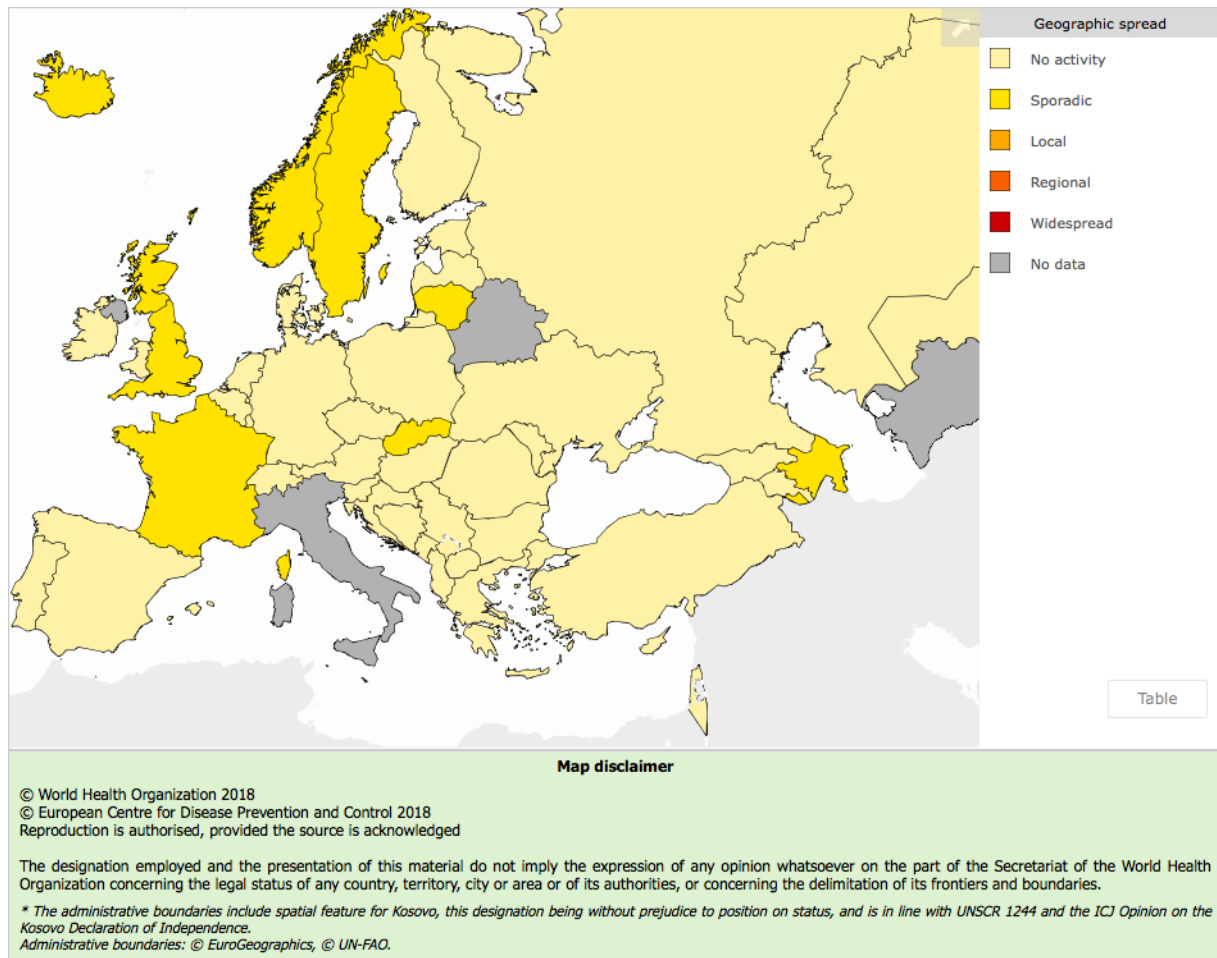


Fig. 2. Geographic spread in the European Region, week 41/2018



For interactive maps of influenza intensity and geographic spread, see the [Flu News Europe website](#).

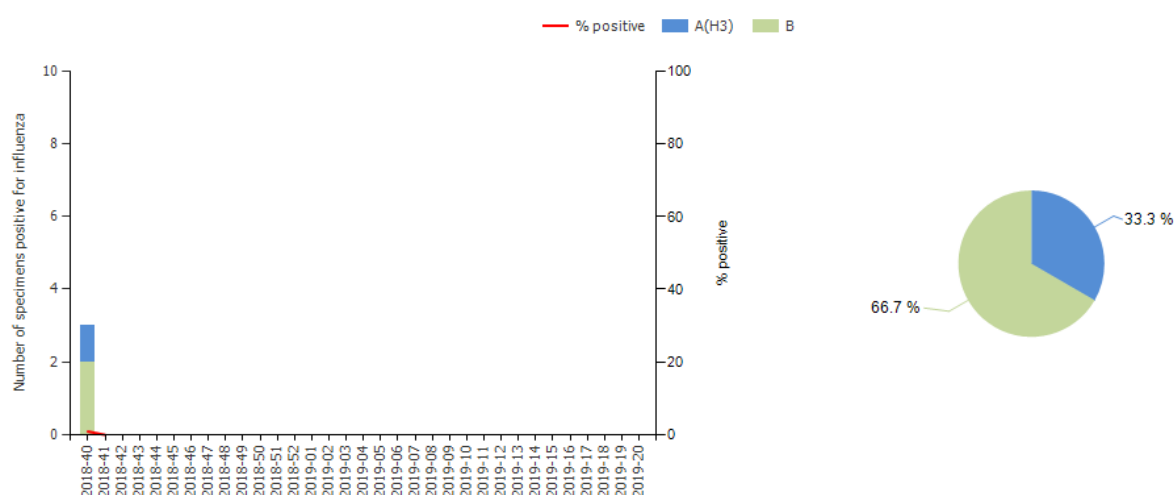
Viruses detected in sentinel-source specimens (ILI and ARI)

For week 41/2018, none of 329 sentinel specimens tested positive for influenza virus.

For the season overall, three influenza viruses (one A(H3N2) virus and two type B viruses (one ascribed to the B/Yamagata lineage) were detected (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, by week and cumulatively^a



^a Pie chart shows cumulative data for this period.

Table 1. Influenza virus detections in sentinel-source specimens by type and subtype, week 41/2018 and cumulatively

Virus type and subtype	Current Week		Season 2018-2019	
	Number	% ^a	Number	% ^a
Influenza A	0	-	1	33.3
A(H1N1)pdm09			0	-
A(H3N2)			1	100
A not subtyped			0	-
Influenza B	0	-	2	66.7
B/Victoria lineage			0	0.0
B/Yamagata lineage			1	100.0
Unknown lineage			1	-
Total detections (total tested)	0 (329)	-	3 (660)	0.5

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

1.1) Hospitalized laboratory-confirmed influenza cases – ICUs

One case of hospitalized laboratory-confirmed influenza A(H1N1)pdm09 in ICUs was reported during week 41/2018 by the UK.

1.2) Hospitalized laboratory-confirmed influenza cases – other wards

One case of hospitalized laboratory-confirmed influenza A(H1N1)pdm09 in other wards was reported during week 41/2018 by the Russian Federation.

2. SARI surveillance

For week 41/2018, 601 SARI cases were reported by 12 countries. In total, 82 specimens were tested for influenza viruses and one was positive.

Mortality monitoring

For week 41/2018, the [EuroMOMO](#) project received data from 21 EU/EEA Member States or regions that were included in pooled analyses. Overall, the pooled estimates of all-cause mortality showed expected 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 41/2018, 67 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 67, 89.6% were type A and 10.4% type B viruses (Table 2). Of the influenza A viruses that were subtyped, 62.5% were A(H3N2) and 37.5% were A(H1N1)pdm09. None of the influenza B viruses were assigned to a lineage.

Table 2. Influenza virus detections in non-sentinel source specimens by type and subtype, week 41/2018

Virus type and subtype	Current Week		Season 2018-2019	
	Number	% ^a	Number	% ^a
Influenza A	60	89.6	96	81.4
A(H1N1)pdm09	9	37.5	15	38.5
A(H3N2)	15	62.5	24	61.5
A not subtyped	36	-	57	-
Influenza B	7	10.4	22	18.6
B/Victoria lineage	0	-	-	-
B/Yamagata lineage	0	-	-	-
Unknown lineage	7	-	22	-
Total detections (total tested)	67 (8913)	-	118 (17 946)	-

^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 41/2018, 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 weeks 40–41/2018 have been tested for antiviral susceptibility.

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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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