

## Summary

### Week 43/2018 (22–28 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 at low numbers.
- For week 43/2018, data from the 23 countries or regions reporting to the [EuroMOMO](#) project indicated all-cause excess 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.

### Primary care data

For week 43/2018, of those Member States in which thresholds for influenza-like illness (ILI) activity are defined, only Turkey reported activity above its threshold level, but without influenza virus detections. This indicates that ILI activity in this country might not be due to influenza activity.

Of those Member States in which thresholds for acute respiratory infection (ARI) thresholds are defined, all reported activity was within baseline levels.

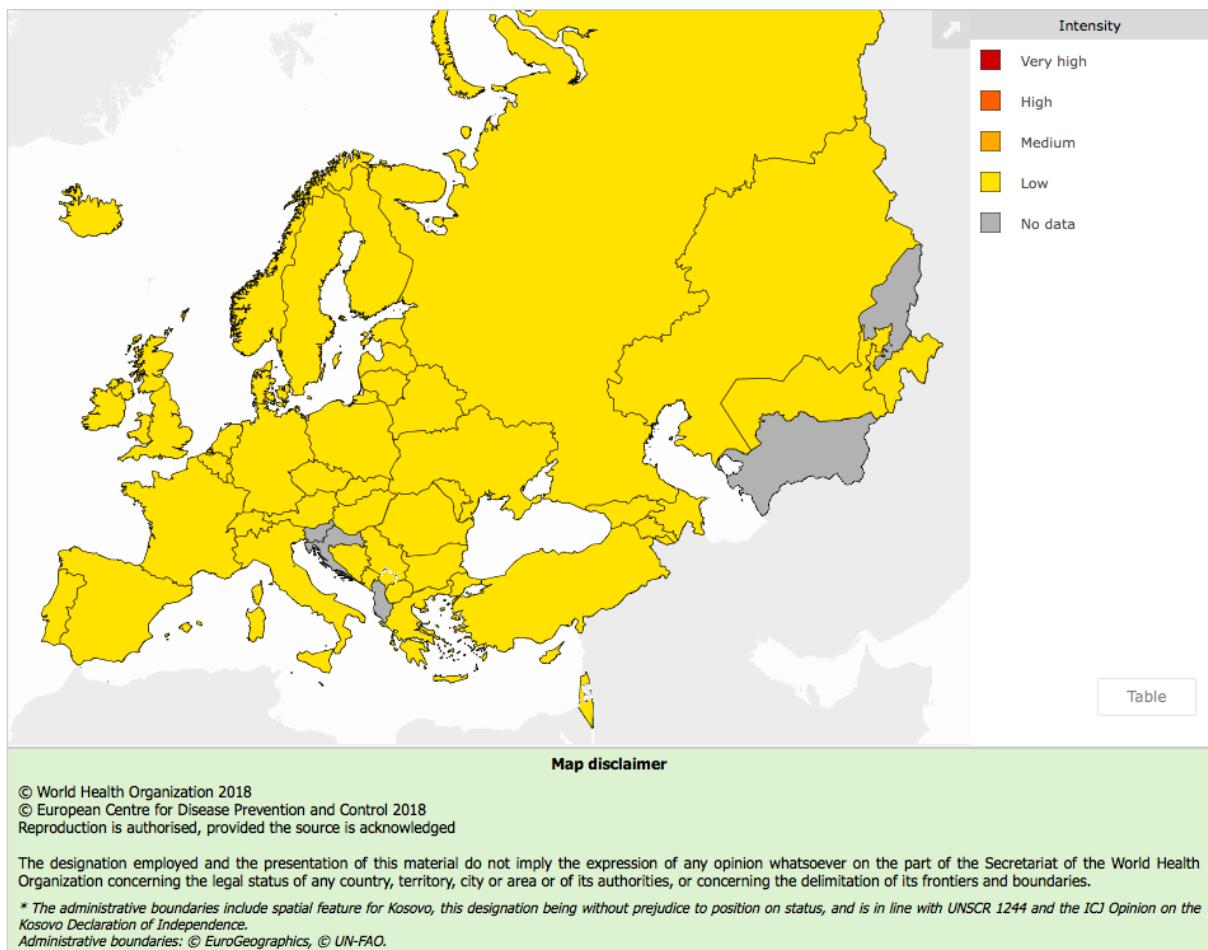
### Influenza activity

All 49 Member States and areas reporting on intensity reported low intensity for week 43/2018 (see Fig. 1), indicating that influenza activity is within baseline levels.

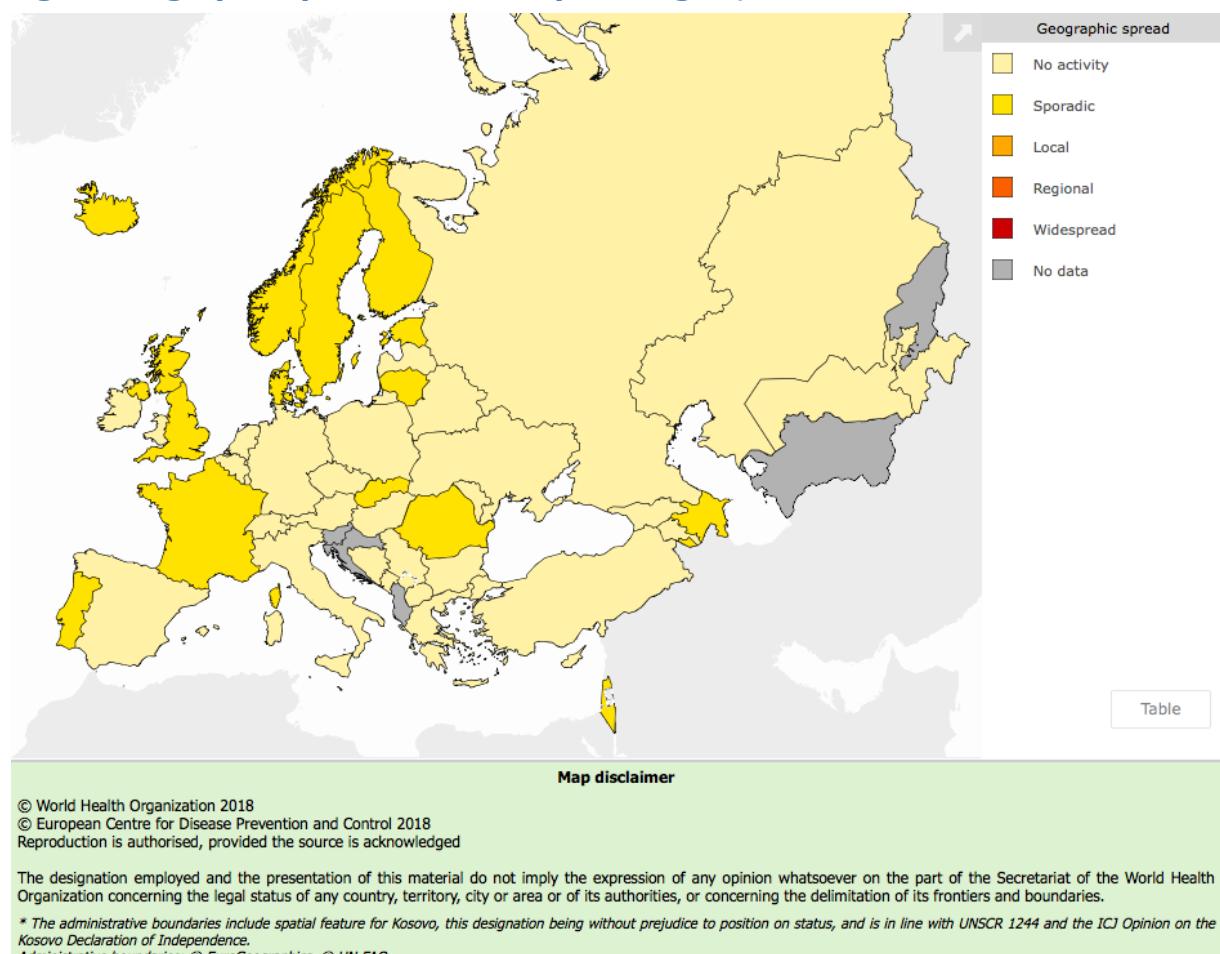
Of 49 Member States and areas reporting on geographic spread, 32 reported no activity (across the region) and 17 reported sporadic spread (across the region) (see Fig. 2).

## Maps of qualitative indicators in the European Region

Fig. 1. Intensity in the European Region, week 43/2018



**Fig. 2. Geographic spread in the European Region, week 43/2018**



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

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

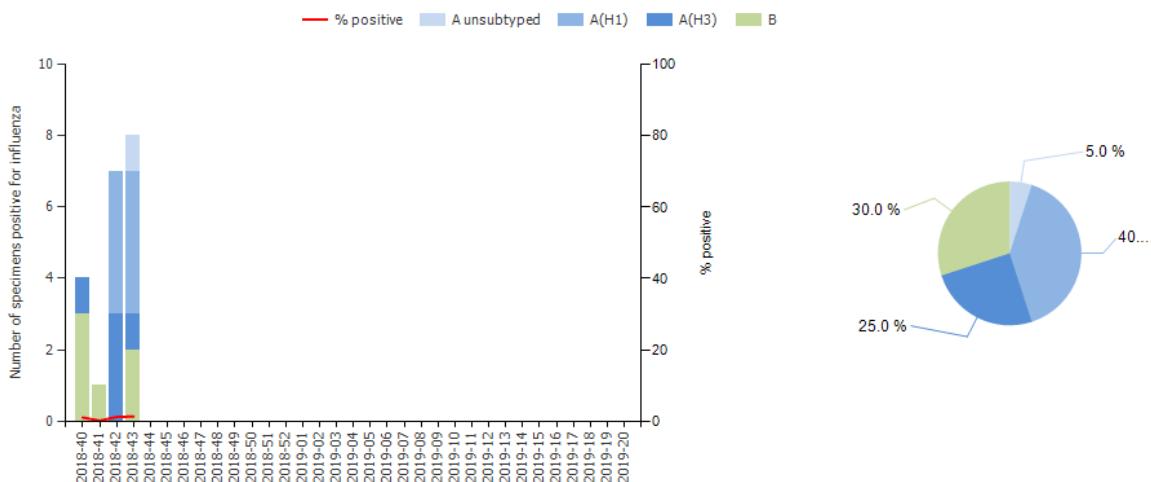
For week 43/2018, 8 (1.5%) of 549 sentinel specimens tested positive for influenza viruses, of which 6 were type A and 2 were type B. Of 5 subtyped A viruses, 4 were A(H1N1)pdm09 and 1 was A(H3N2). The type B viruses were not ascribed to a lineage.

Of 13 Member States or areas across the region that each tested at least 10 sentinel specimens in week 43/2018, 1 Member State (Czech Republic) reported a rate of influenza virus detections above 10%.

For the season overall, 20 influenza viruses have been detected: 8 A(H1N1)pdm09, 5 A(H3N2), 1 A not subtyped and 6 type B viruses (2 ascribed to the B/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, by week and cumulatively<sup>a</sup>**



<sup>a</sup> Pie chart shows cumulative data for this period.

**Table 1. Influenza virus detections in sentinel-source specimens by type and subtype, week 43/2018 and cumulatively.**

Virus type and subtype	Current Week		Season 2018–2019	
	Number	% <sup>a</sup>	Number	% <sup>a</sup>
<b>Influenza A</b>	<b>6</b>	<b>75</b>	<b>14</b>	<b>70</b>
A(H1N1)pdm09	4	80	8	61.5
A(H3N2)	1	20	5	38.5
A not subtyped	1		1	-
<b>Influenza B</b>	<b>2</b>	<b>25</b>	<b>6</b>	<b>30</b>
B/Victoria lineage	0		0	0
B/Yamagata lineage	0		2	100
Unknown lineage	2		4	-
<b>Total detections (total tested)</b>	<b>8 (549)</b>	<b>1.5</b>	<b>20 (1859)</b>	<b>1.1</b>

<sup>a</sup>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 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=17 countries).

### 1.1) Hospitalized laboratory-confirmed influenza cases – ICUs

3 cases of hospitalized laboratory-confirmed influenza A in ICUs were reported during week 43/2018 by the UK.

### 1.2) Hospitalized laboratory-confirmed influenza cases – other wards

1 case of hospitalization due to influenza in other wards was reported during week 43/2018 by the Czech Republic.

### 2. SARI surveillance

For week 43/2018, 767 SARI cases were reported by 13 countries. In total, 100 specimens were tested for influenza viruses and none were positive.

Of 2 267 SARI cases reported since week 40/2018, 2 264 had a recorded age and, of these, 61.9% were 0–4 years old and 20.2% were 15–64 years old.

## **Mortality monitoring**

For week 43/2018, the [EuroMOMO](#) project received data from 23 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 43/2018, 113 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 113, 85.8% were type A and 14.2% type B viruses (Table 2). Of the influenza A viruses that were subtyped, 68.3% were A(H3N2) and 31.7% 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 43/2018**

Virus type and subtype	Current Week		Season 2018–2019	
	Number	% <sup>a</sup>	Number	% <sup>a</sup>
<b>Influenza A</b>	<b>97</b>	<b>85.8</b>	<b>287</b>	<b>82.2</b>
A(H1N1)pdm09	28	68.3	62	49.2
A(H3N2)	13	31.7	64	50.8
A not subtyped	56	-	161	-
<b>Influenza B</b>	<b>16</b>	<b>14.2</b>	<b>62</b>	<b>17.8</b>
B/Victoria lineage	0	-	0	0
B/Yamagata lineage	0	-	2	100
Unknown lineage	16	-	60	-
<b>Total detections (total tested)</b>	<b>113</b>	<b>-</b>	<b>349</b>	<b>-</b>

<sup>a</sup> 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 43/2018, no virus genetic characterizations were reported. The latest characterization data are summarized in the [ECDC summary report for September](#).

For more information on virus characterizations for EU/EEA countries, see earlier [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 southern hemisphere 2019 season. 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](#). A comment by ECDC can be seen [here](#).

## **Antiviral susceptibility testing**

No viruses with collection dates in weeks 40-43/2018 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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