Flu News Europe
Joint ECDC–WHO/Europe weekly influenza update

Summary

Week 44/2018 (29 October–4 November 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 in low numbers.
- For week 44/2018, data from the 18 Member States and areas 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 has so far been low in the European Region.

Primary care data

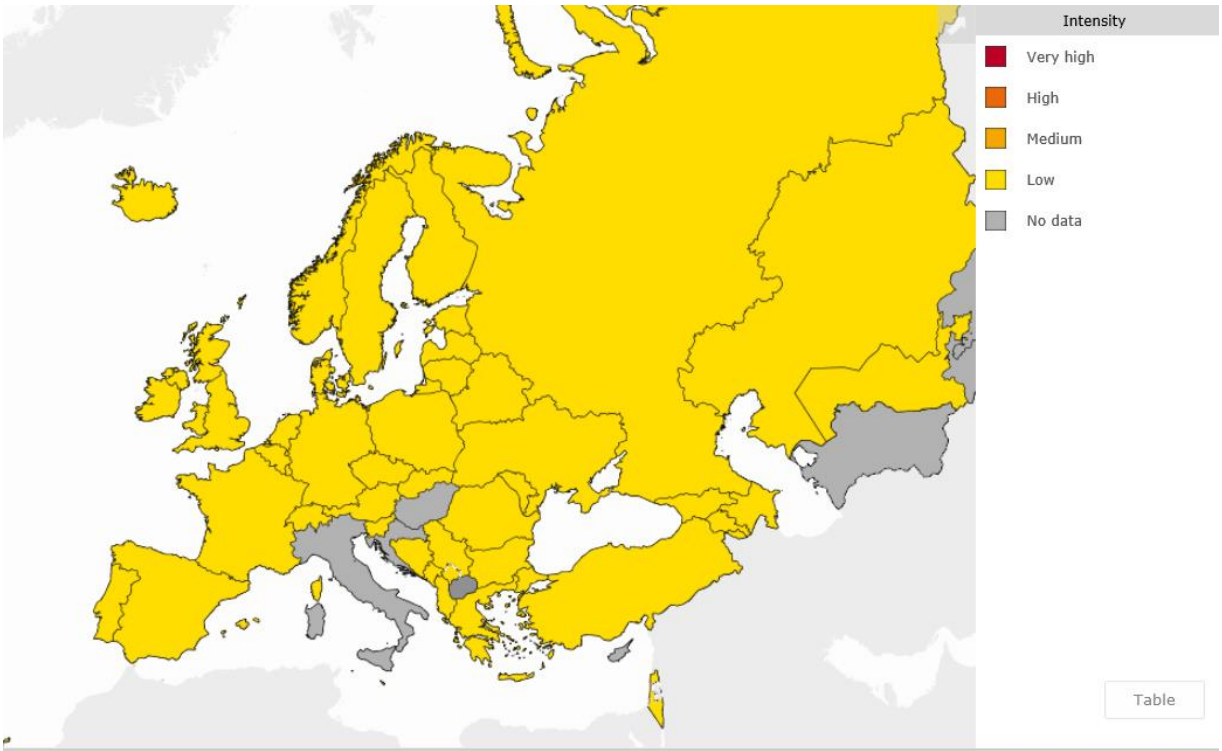
Influenza activity

All 46 Member States and areas reporting on intensity reported low intensity for week 44/2018 (see Fig. 1), indicating that influenza activity was within baseline levels.

Of the 46 Member States and areas reporting on geographic spread, 28 reported no activity (across the region), 17 reported sporadic spread (across the region) and 1 (Iceland) reported local spread (see Fig. 2).

Maps of qualitative indicators in the European Region

Fig. 1. Intensity in the European Region, week 44/2018

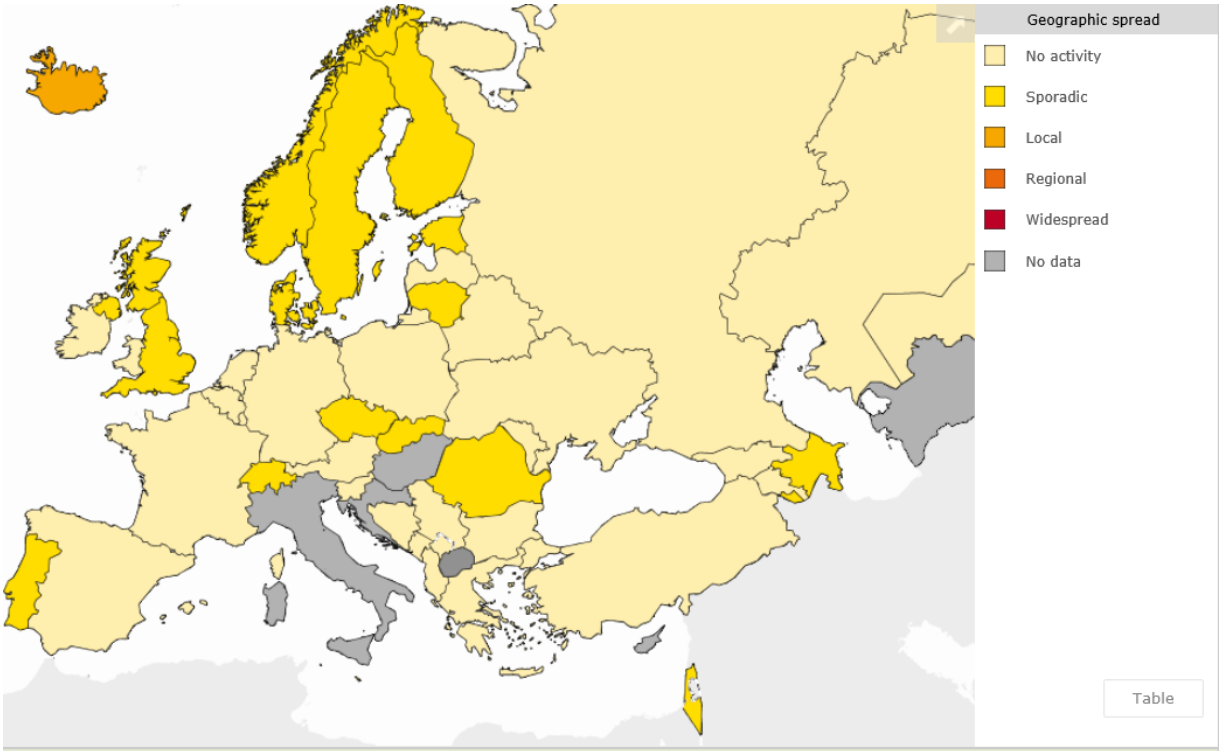


Map disclaimer

The designation employed and the presentation of this material do not imply the expression of any opinion whatsoever on the part of the Secretariat of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.

** The administrative boundaries include spatial feature for Kosovo, this designation being without prejudice to position on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.*
Administrative boundaries: © EuroGeographics, © UN-FAO.

Fig. 2. Geographic spread in the European Region, week 44/2018



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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)

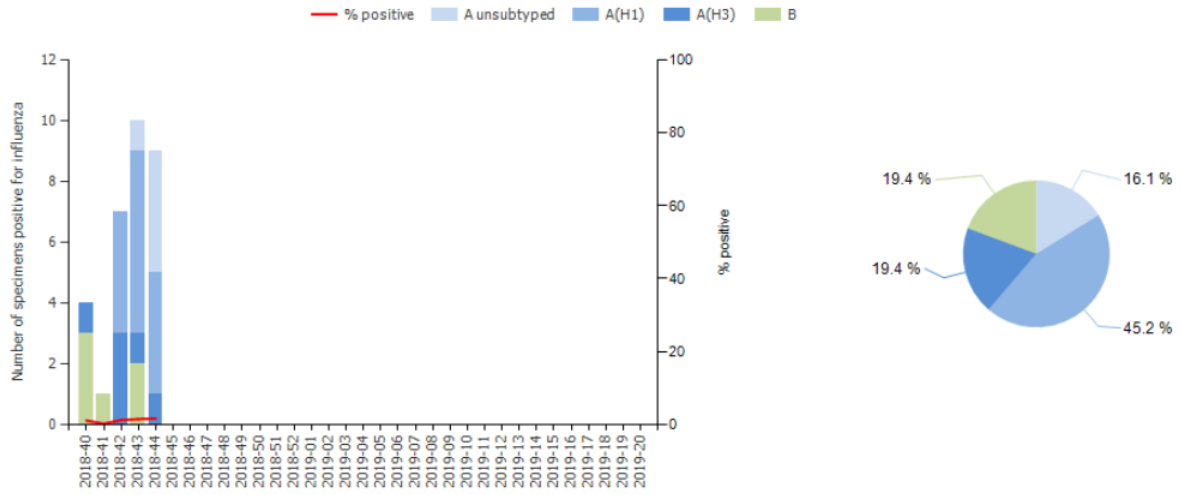
For week 44/2018, 9 (1.7%) of 524 sentinel specimens tested positive for influenza viruses. All 9 were type A viruses and of the 5 subtyped, 4 were A(H1N1)pdm09 and 1 was A(H3N2) (Fig. 3 and Table 1).

Of 13 Member States or areas across the region that each tested at least 10 sentinel specimens in week 44/2018, none reported a rate of influenza virus detections above 10%.

For the season to date, more influenza type A (n = 25, 80.6%) than type B (n = 6, 19.4%) viruses have been detected. Of 20 subtyped A viruses, 14 (70%) were A(H1N1)pdm09 and 6 (30%) were A(H3N2). Of 6 influenza type B viruses only 2 were ascribed to a lineage, both being B/Yamagata (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 44/2018 and cumulatively.

	Current Week		Season 2018–2019	
Virus type and subtype	**Number**	**%[a]**	**Number**	**%[a]**
Influenza A	**9**	**100.0**	**25**	**80.6**
A(H1N1)pdm09	4	80.0	14	70.0
A(H3N2)	1	20.0	6	30.0
A not subtyped	4	-	5	-
Influenza B	**0**	**0.0**	**6**	**19.4**
B/Victoria lineage	0	-	0	0.0
B/Yamagata lineage	0		2	100.0
Unknown lineage	0	-	4	-
Total detections (total tested)	**9 (524)**	**1.7**	**31 (2 492)**	**1.2**

[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 and areas monitors severe disease related to influenza virus infection by surveillance of 1) hospitalized laboratory-confirmed influenza cases in ICUs (12 Member States or areas), or other wards (8 Member States or areas), or 2) severe acute respiratory infections (SARI; 17 Member States or areas).

1.1) Hospitalized laboratory-confirmed influenza cases – ICUs

Among laboratory-confirmed influenza cases reported in ICUs for week 44/2018 (n = 7), there were 6 with influenza type A and 1 with influenza type B virus infection.

Since week 40/2018, 15 cases (88%) have been reported with influenza type A viruses and 2 (11%) with influenza type B viruses. Of 8 subtyped influenza A viruses, all were A(H1N1)pdm09. No influenza B viruses were ascribed to a lineage.

1.2) Hospitalized laboratory-confirmed influenza cases – other wards

Among laboratory-confirmed influenza cases reported in wards other than ICUs for week 44/2018 (n = 3), all were infected with influenza type A viruses.

Since week 40/2018, 16 cases (80%) have been reported with influenza type A viruses and 4 (20%) with influenza type B viruses. Of 5 subtyped influenza A viruses, 3 were A(H1N1)pdm09 and 2 A(H3N2). No influenza B viruses were ascribed to a lineage.

2. SARI surveillance

For week 44/2018, 815 SARI cases were reported by 13 countries. Of 131 specimens tested for influenza viruses, none were positive.

Of 3 285 SARI cases reported since week 40/2018, 3 281 had age reported and, of these, 63.2% were 0–4 years old and 19.4% were 15–64 years old. Since week 40/2018, only 1 SARI case has tested positive for influenza virus and it was subtype A(H1N1)pdm09.

Mortality monitoring

For week 44/2018, the EuroMOMO project received data from 18 EU/EEA Member States and areas 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 44/2018, 148 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 148 viruses, 89.9% were type A and 10.1% were type B viruses (Table 2). Of the 43 influenza A viruses that were subtyped, 69.8% were A(H1N1)pdm09 and 30.2% were A(H3N2). 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 44/2018

	Current Week		Season 2018–2019	
Virus type and subtype	**Number**	**%[a]**	**Number**	**%[a]**
Influenza A	**133**	**89.9**	**431**	**84.7**
A(H1N1)pdm09	30	69.8	106	56.4
A(H3N2)	13	30.2	82	43.6
A not subtyped	90	-	243	-
Influenza B	**15**	**10.1**	**78**	**15.3**
B/Victoria lineage	0	-	0	0.0
B/Yamagata lineage	0	-	3	100.0
Unknown lineage	15	-	75	-
Total detections (total tested)	**148 (10 685)**	**-**	**509 (52 360)**	**-**

[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 44/2018, 12 virus genetic characterizations were reported. All were A(H1N1)pdm09 viruses belonging to the A/Michigan/45/2015 (6B.1) clade. 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

12 A(H1N1)pdm09 viruses with collection dates in weeks 40–44/2018 have been tested for susceptibility to neuraminidase inhibitors. None showed evidence of reduced susceptibility to the inhibitors.

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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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Tables and figures should be referenced:

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