

Summary

Week 47/2018 (19–25 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.
- The large majority of influenza virus detections were of type A.
- For week 47/2018, data from the 22 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 of week 47/2018, influenza activity has been low in the European Region.

Primary care data

Syndromic surveillance data

Of all Member States and areas with thresholds defined, only Cyprus reported influenza-like illness (ILI) activity above its baseline level.

All Member States and areas with thresholds defined for acute respiratory infection (ARI) reported activity at their baseline level.

Influenza activity

All 47 Member States and areas reporting on intensity reported low levels for week 47/2018 (see Fig. 1).

Of the 47 Member States and areas reporting on geographic spread, 21 reported no activity and 26 reported sporadic cases (see Fig. 2).

Maps of qualitative indicators in the European Region

Fig. 1. Intensity in the European Region, week 47/2018

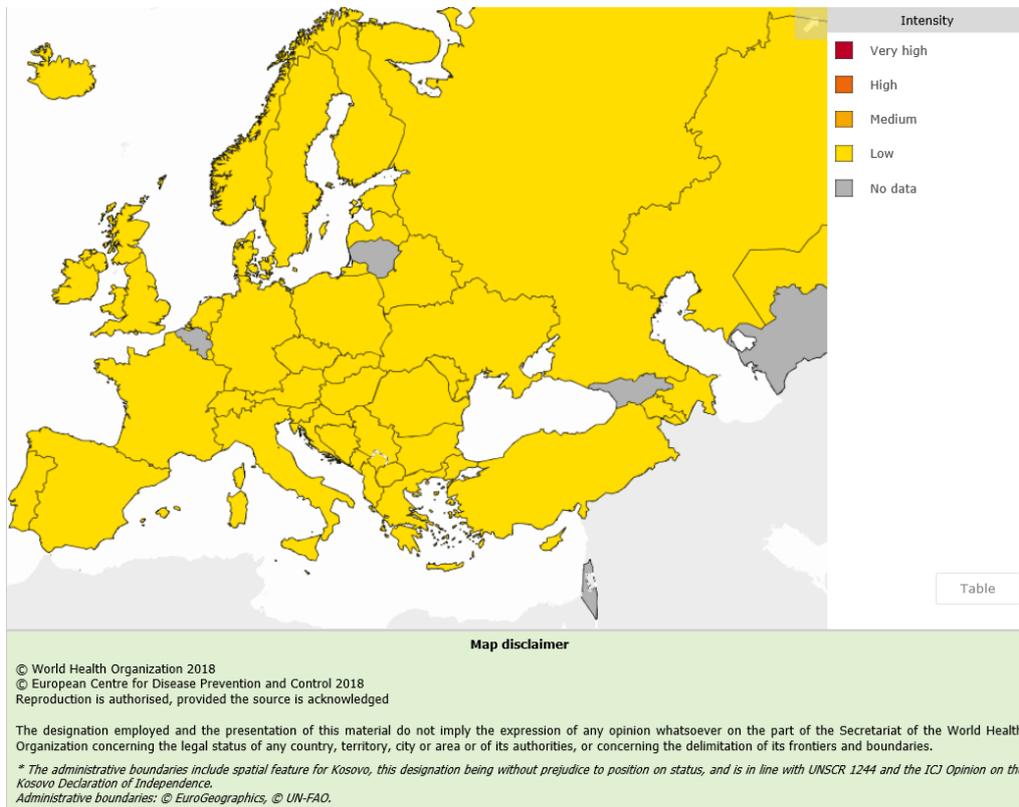
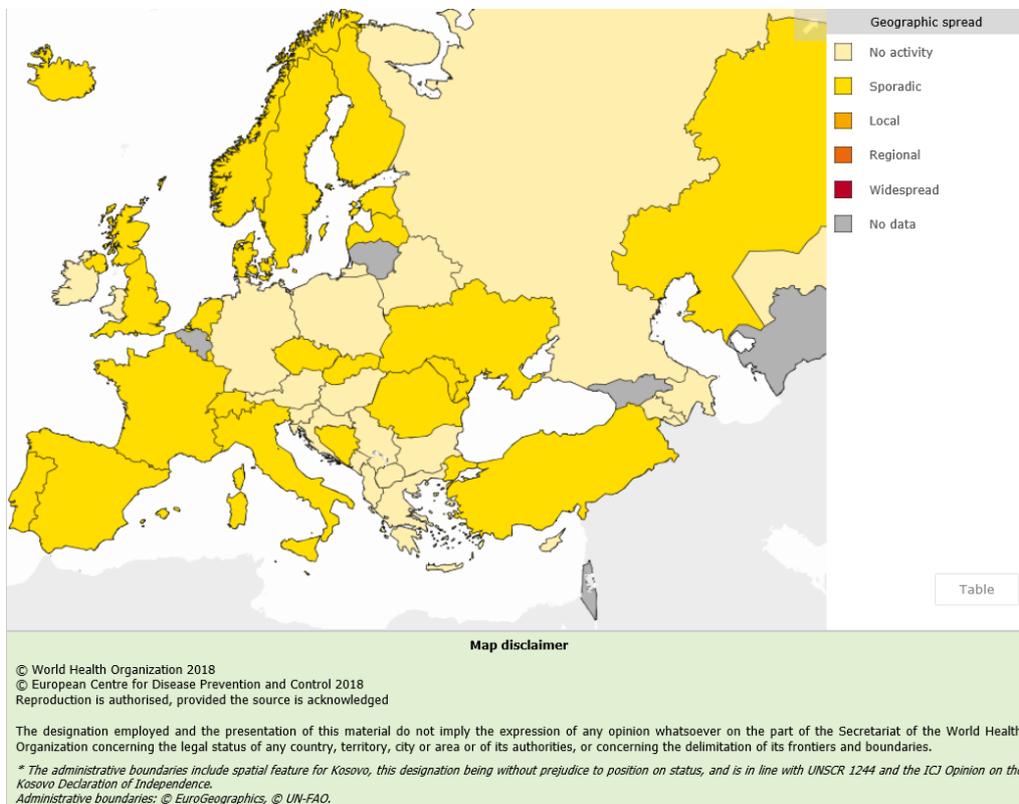


Fig. 2. Geographic spread in the European Region, week 47/2018



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

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

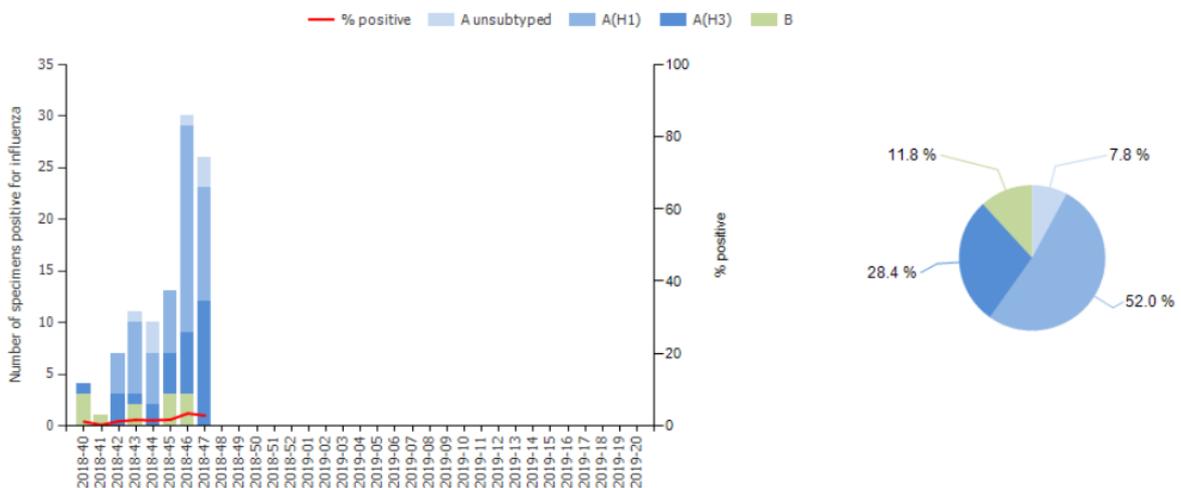
For week 47/2018, 26 (2.8%) of 923 sentinel specimens tested positive for an influenza virus; all were type A. Of 23 subtyped A viruses, 11 were A(H1N1)pdm09 and 12 were A(H3N2) (Fig. 3 and Table 1).

Of 23 Member States or areas across the region that tested at least 10 sentinel specimens in week 47/2018, 2 reported a rate of influenza virus detections of at least 10%: Luxembourg (10.0%) and Turkey (10.6%).

For the season to date, more influenza type A (n=90, 88.2%) than type B (n=12, 11.8%) viruses have been detected. Of 82 subtyped A viruses, 53 (64.6%) were A(H1N1)pdm09 and 29 (35.4%) were A(H3N2). Of 5 influenza type B viruses ascribed to a lineage, 4 were B/Yamagata and 1 was B/Victoria (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 47/2018 and cumulatively.

Virus type and subtype	Current Week		Season 2018–2019	
	Number	% ^a	Number	% ^a
Influenza A	26	100	90	88.2
A(H1N1)pdm09	11	47.8	53	64.6
A(H3N2)	12	52.2	29	35.4
A not subtyped	3	-	8	-
Influenza B	0	0	12	11.8
B/Victoria lineage	0	-	1	20
B/Yamagata lineage	0	-	4	80
Unknown lineage	0	-	7	-
Total detections (total tested)	26 (923)	2.8	102 (5235)	1.9

^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 and areas monitor 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 in week 47/2018 (n = 24), influenza type A viruses (95.8%) were detected more frequently than influenza type B viruses (4.2%).

Since week 40/2018, more influenza type A (n=65, 90.3%) than type B (n=7, 9.7%) viruses were detected. Of 34 subtyped influenza A viruses, 97.1% were A(H1N1)pdm09 and 2.9% were A(H3N2). No influenza B viruses were ascribed to a lineage. Of 15 cases with known age, 1 was under 4 years old, 5 were 15–64 years old and 5 were 65 years and older.

1.2) Hospitalized laboratory-confirmed influenza cases – other wards

Among laboratory-confirmed influenza cases reported in wards other than ICUs in week 47/2018 (n = 16), influenza type A viruses (93.8%) were detected more frequently than influenza type B viruses (6.2%).

Since week 40/2018, more influenza type A (n=78, 89.7%) than type B (n=9, 10.3%) viruses were detected. Of 18 subtyped influenza A viruses, 77.8% were A(H1N1)pdm09 and 22.2% were A(H3N2). No influenza B viruses were ascribed to a lineage. Of 87 cases with known age, 57.5% were 15–64 years old and 24.1% were 65 years and older.

2. SARI surveillance

For week 47/2018, 905 SARI cases were reported by 12 Member States or areas. Of 160 specimens tested for influenza viruses, 1.9% were positive. All were influenza type A viruses.

Of 6 198 SARI cases reported since week 40/2018, 6 191 had a recorded age and of these, 67% were 0–4 years old and 16.9% were 15–64 years old. For SARI cases testing positive for influenza viruses since week 40/2018 (n=11), all were type A viruses. Of the 10 influenza type A infected cases for which subtyping was performed, 8 were infected by A(H1N1)pdm09 viruses and 2 were infected by A(H3N2) viruses.

Mortality monitoring

For week 47/2018, the [EuroMOMO](#) project received data from 22 Member States or 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 47/2018, 296 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 an influenza virus; 92.6% were type A and 7.4% were type B. Of 79 subtyped A viruses, 68.4% were A(H1N1)pdm09 and 31.6% were A(H3N2) (Fig. 3 and Table 2).

For the season to date, more influenza type A (n=1244, 89.1%) than type B (n=152, 10.9%) viruses have been detected. Of 534 subtyped A viruses, 343 (64.2%) were A(H1N1)pdm09 and 191 (35.8%) were A(H3N2). Of 6 influenza type B viruses ascribed to a lineage, all were B/Yamagata (Table 2).

Table 2. Influenza virus detections in non-sentinel source specimens by type and subtype, week 47/2018 and cumulatively

Virus type and subtype	Current Week		Season 2018–2019	
	Number	% ^a	Number	% ^a
Influenza A	274	92.6	1244	89.1
A(H1N1)pdm09	54	68.4	343	64.2
A(H3N2)	25	31.6	191	35.8
A not subtyped	195	-	710	-
Influenza B	22	7.4	152	10.9
B/Victoria lineage	0	-	0	0
B/Yamagata lineage	0	-	6	100
Unknown lineage	22	-	146	-
Total detections (total tested)	296 (14575)		1396 (95883)	

^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

Since week 40/2018, genetic characterizations of 57 viruses were reported. 41 were A(H1N1)pdm09 viruses belonging to the A/Michigan/45/2015 (6B.1) clade, 16 were A(H3) viruses belonging to the A/Singapore-16-0019/2016 (3C.2a1b) 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

28 A(H1N1)pdm09 viruses and 3 A(H3N2) viruses with collection dates in weeks 40–46/2018 have been tested for susceptibility to neuraminidase inhibitors. None showed evidence of reduced susceptibility to the inhibitors.

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.

Suggested citation:

European Centre for Disease Prevention and Control/WHO Regional Office for Europe. Flu News Europe, Joint ECDC–WHO weekly influenza update, week 47/2018.

Tables and figures should be referenced:

European Centre for Disease Prevention and Control/WHO Regional Office for Europe. Flu News Europe, Joint ECDC–WHO weekly influenza update, week 47/2018.

© World Health Organization 2018.

© European Centre for Disease Prevention and Control 2018.

Reproduction is authorized, provided the source is acknowledged.