

## Summary

### Week 43/2016 (24–30 October 2016)

- Activity remained low in the region, with few samples testing positive for influenza viruses (2% of sentinel samples), and is at levels similar to that observed for the same period in recent seasons.
- Since week 40/2016, influenza A viruses have predominated, with most of those subtyped being A(H3N2).

### Global update

- As of mid-October, influenza activity in temperate southern hemisphere countries continued to decrease or remained low. Influenza activity in the temperate zone of the northern hemisphere remained at inter-seasonal levels. More information on global influenza activity is available [here](#).

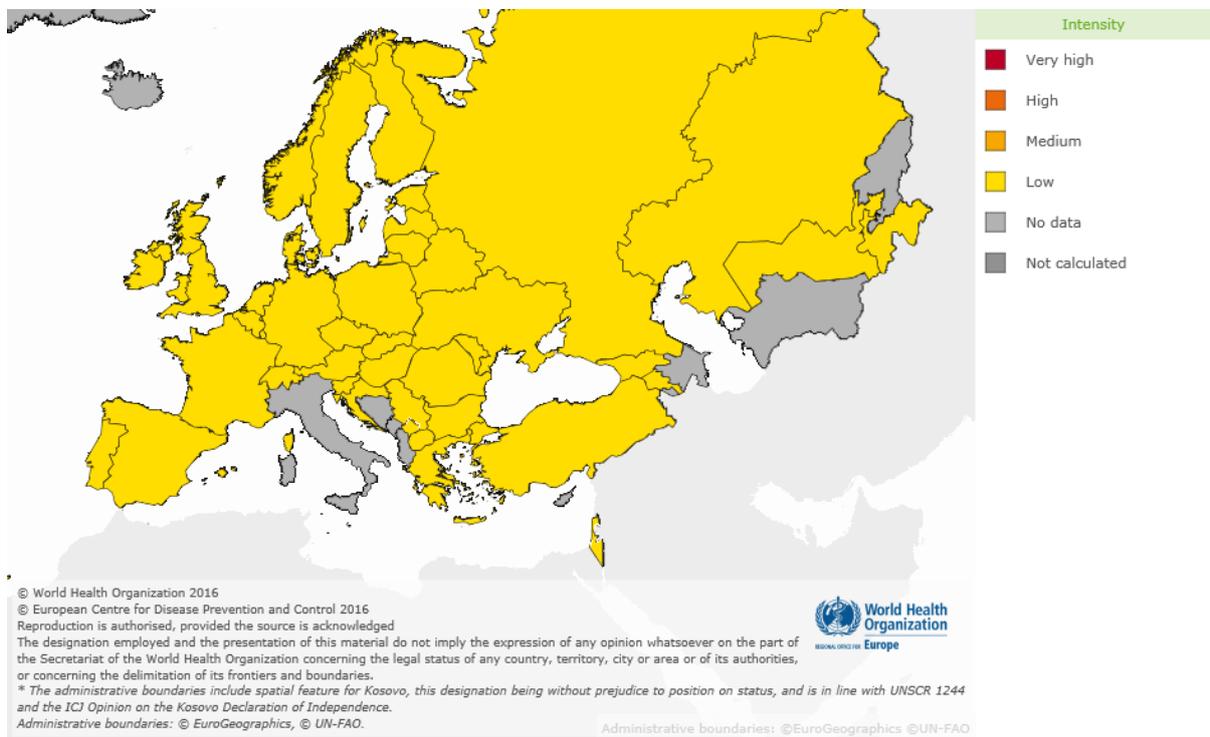
### Influenza activity

Influenza activity is at baseline levels with 43 of the 44 countries that submitted epidemiological data reporting low intensity (Fig. 1). Of the 14 countries that reported on geographic spread, two reported local and 12 reported sporadic spread; no apparent sub-regional distribution is evident (Fig. 2).

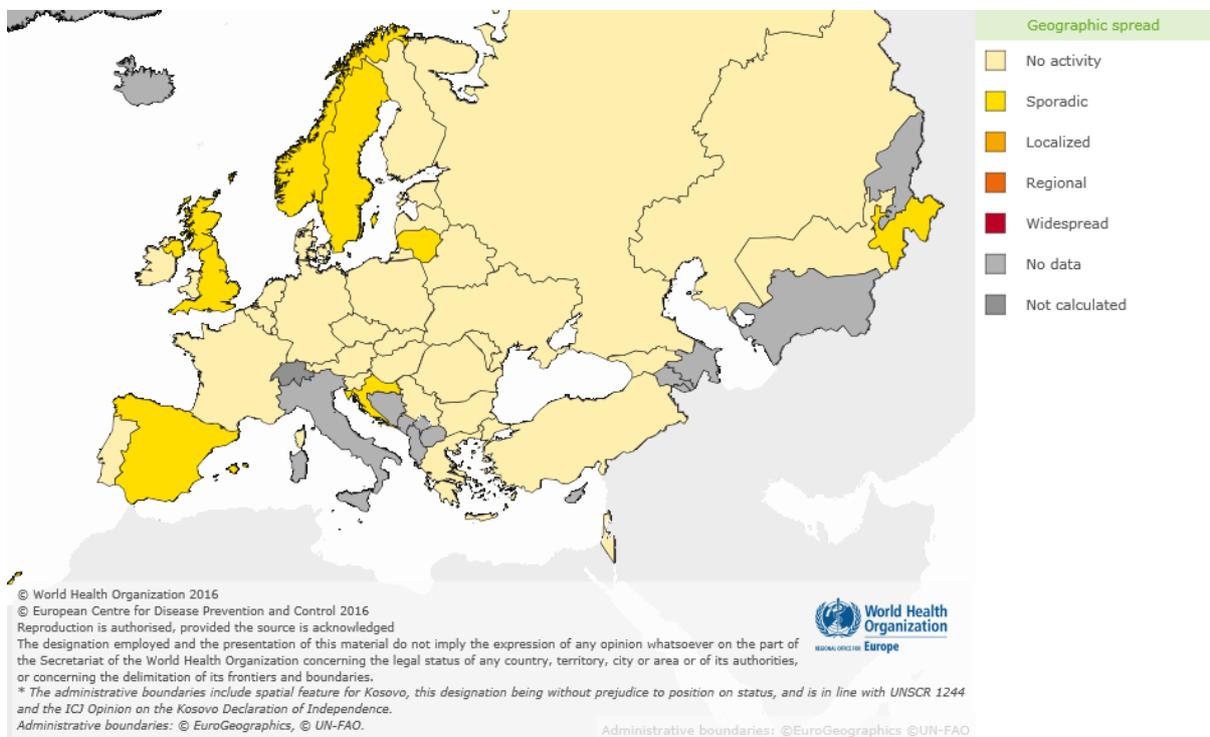
17 countries reported a total of 93 influenza positive specimens from sentinel and/or non-sentinel sources in week 43/2016. Few samples from sentinel ILI and/or ARI sources tested positive for influenza viruses (2% of sentinel samples). Of the 14 countries reporting local/sporadic activity, only seven actually reported virological detections.

## Interactive map of qualitative indicators and dominant virus type

**Fig. 1. Intensity in the European Region, week 43/2016**



**Fig. 2. Geographic spread in the European Region, week 43/2016**



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

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

For week 43/2016, of 731 sentinel specimens tested, 11 (2%) were positive for influenza virus (Table 1). Of these, nine (82%) were type A and two were type B. All six subtyped influenza A viruses were A(H3N2).

**Table 1. Influenza virus detections in sentinel-source specimens by type and subtype, week 43/2016 and cumulatively**

Virus type and subtype	Number of detections	
	Current Week	Season 2016-2017
<b>Influenza A</b>	<b>9</b>	<b>27</b>
A(H1N1)pdm09	0	1
A(H3N2)	6	23
A not subtyped	3	3
<b>Influenza B</b>	<b>2</b>	<b>5</b>
Unknown lineage	2	5
<b>Total detections (total tested)</b>	<b>11 (731)</b>	<b>32 (2678)</b>

## Severity

For week 43/2016, two influenza-positive cases were reported by Spain out of three countries (Ireland, Spain and UK) that submitted surveillance data on this indicator (based on hospitalized laboratory-confirmed influenza cases in intensive care units or other wards, or sentinel severe acute respiratory infections (SARI) systems).

## Mortality monitoring

Pooled analysis of data from the 19 countries or regions reporting to the [EuroMOMO](#) project indicated that all-cause mortality was within the normal range during the past weeks.

## Viruses detected in non-sentinel-source specimens

For week 43/2016, 82 specimens from non-sentinel sources (such as hospitals, schools, non-sentinel primary care units, nursing homes and other care institutions) tested positive for influenza viruses (Table 2). Similar to the previous week, 90% were type A and 10% type B. Of 18 influenza A viruses subtyped, 16 (89%) were A(H3N2). Similar distributions of types and subtypes have been observed since week 40/2016.

Since week 40, influenza viruses have been detected in 313 specimens from non-sentinel sources (Table 2). Of these, 273 (87%) were type A and 40 (13%) were type B. Of the 86 influenza A viruses subtyped, the majority (86%) were A(H3N2).

**Table 2. Influenza viruses detected in non-sentinel-source specimens, by virus (sub)type, week 43/2016 and cumulatively**

Virus type and subtype	Number of detections	
	Current Week	Season 2016-2017
<b>Influenza A</b>	<b>74</b>	<b>273</b>
A(H1N1)pdm09	2	12
A(H3N2)	16	74
A not subtyped	56	187
<b>Influenza B</b>	<b>8</b>	<b>40</b>
B/Victoria lineage	0	0
B/Yamagata lineage	0	2
Unknown lineage	8	38
<b>Total detections (total tested*)</b>	<b>82 (6 938)</b>	<b>313 (30 657)</b>

\* Not all countries have a true non-sentinel testing denominator and this is likely to be an underestimate.

## Virus characteristics

### Genetic characterization

Reporting of genetic characterization data will commence when genetic reporting categories for the 2016-2017 season have been finalized.

The ECDC summary report for [September 2016](#) provides detailed genetic and antigenic analyses of viruses collected between January and June 2016.

The recommended composition of trivalent influenza vaccines for the 2016-2017 season in the [northern hemisphere](#) is for inclusion of an A/California/7/2009 (H1N1)pdm09-like virus; an A/Hong Kong/4801/2014 (H3N2)-like virus; and a B/Brisbane/60/2008-like virus (B/Victoria lineage). For quadrivalent vaccines a B/Phuket/3073/2013-like virus (B/Yamagata lineage) virus is recommended. The recommended influenza A(H1N1)pdm09 component of the 2017 [southern hemisphere](#) influenza vaccine is an A/Michigan/45/2015 (H1N1)pdm09-like virus, the first update since A(H1N1)pdm09 viruses emerged in 2009.

## Antiviral susceptibility testing

Reporting of antiviral susceptibility data will commence when test results become available.

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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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