

## SURVEILLANCE REPORT

# Weekly influenza surveillance overview

8 November 2013

## Main surveillance developments in week 44/2013(28 October – 3 November 2013)

*This first page contains the main developments for this week and can be printed separately or together with the more detailed information that follows.*

During week 44/2013 influenza activity was low in Europe:

- All 25 reporting countries experienced low intensity of clinical influenza activity and reported stable or decreasing trends.
- Sporadic cases were reported by five countries.
- Of 236 sentinel specimens collected by 19 countries, one tested positive for influenza virus.
- Nine hospitalised laboratory-confirmed influenza cases have been reported since week 40 by Ireland and the UK.

**Sentinel surveillance of influenza-like illness (ILI)/ acute respiratory infection (ARI):** Low intensity was reported by all 25 reporting countries. For more information, [click here](#).

**Virological surveillance:** Only one of 236 sentinel specimens tested was positive for influenza virus. For more information, [click here](#).

**Hospital surveillance of laboratory-confirmed influenza cases:** Eight out of nine influenza-positive hospitalised cases reported were admitted to ICU. For more information, [click here](#).

# Sentinel surveillance (ILI/ARI)

## Weekly analysis – epidemiology

For week 44/2013, clinical data were reported by 25 countries, all of which experienced low-intensity influenza activity, the lowest category of reporting (Table 1, Map1).

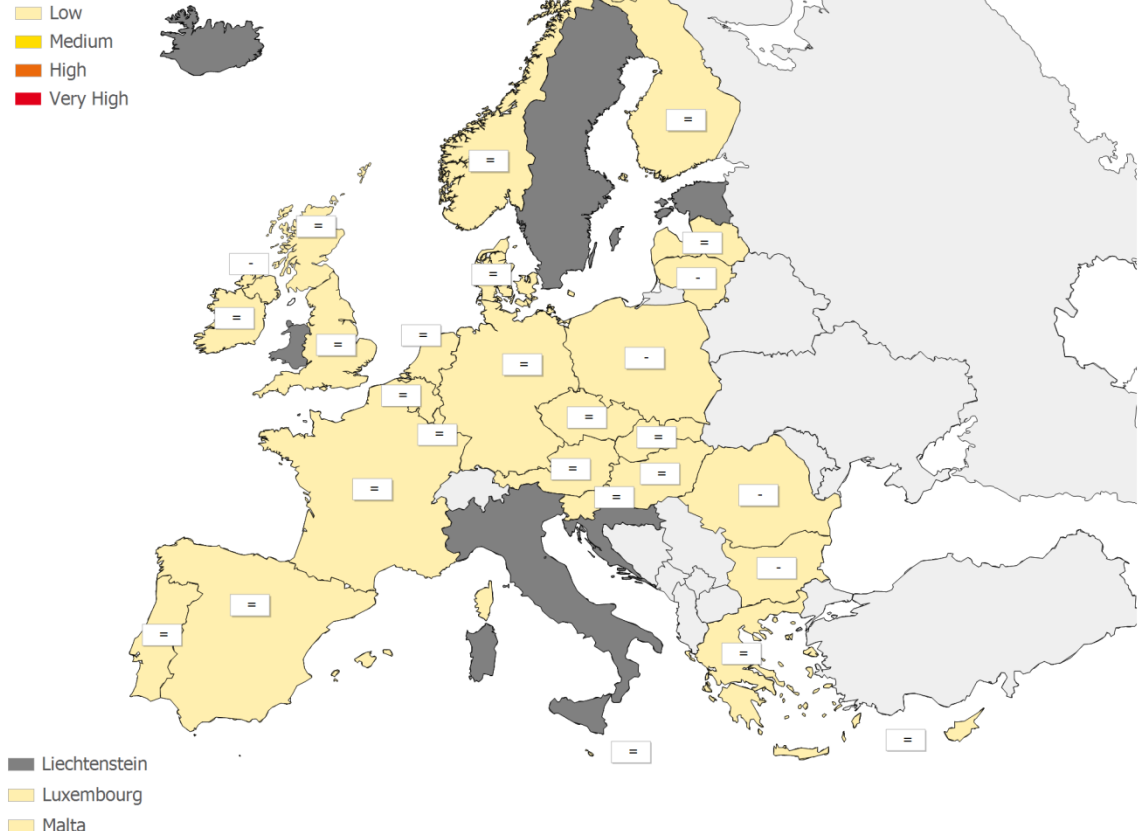
Geographic patterns of influenza activity were reported as sporadic by Denmark, France, Norway, Slovakia and the UK (Scotland). All other countries reported no activity (Table 1, Map 2).

All countries reported decreasing or stable trends (Table 1, Map 2).

**Map 1. Intensity for week 44/2013**

**Intensity**

- No report
- Low
- Medium
- High
- Very High



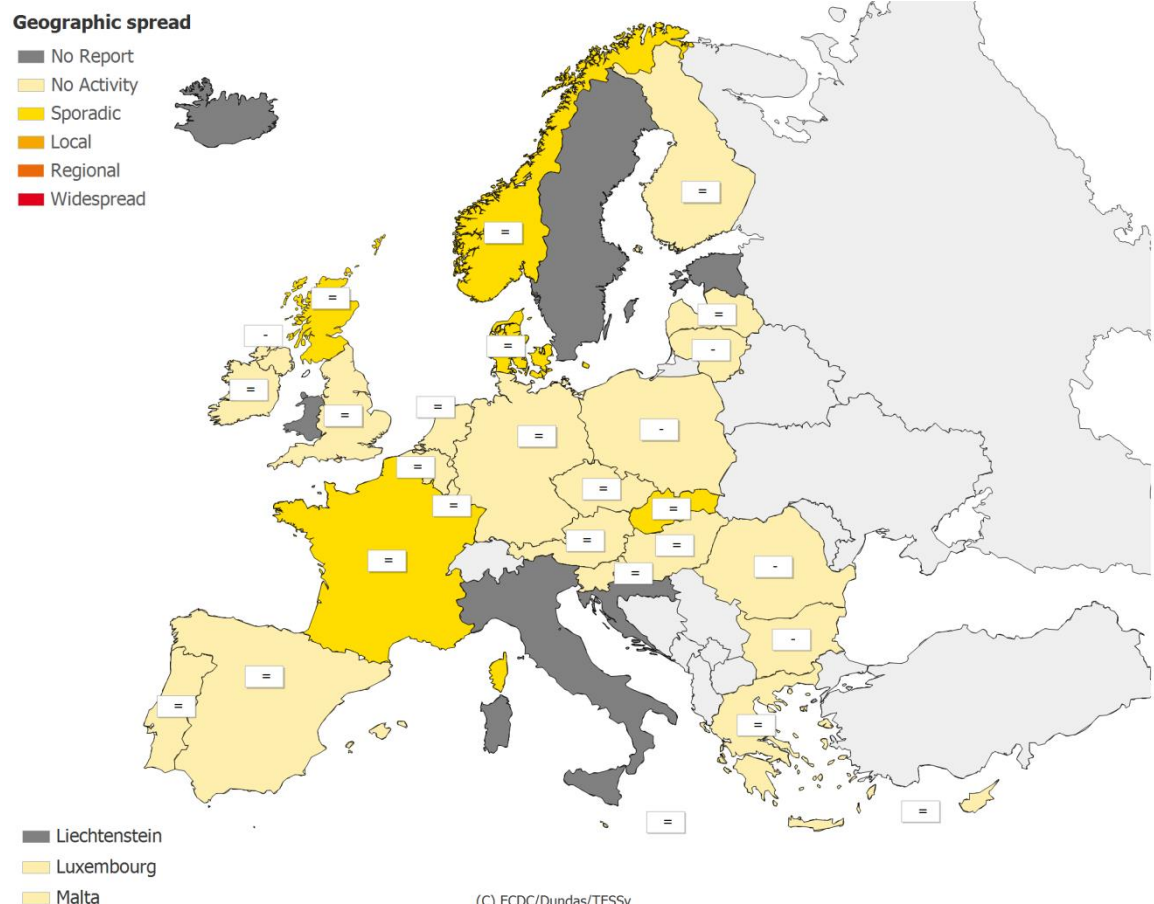
(C) ECDC/Dundas/TESSy

\* A type/subtype is reported as dominant when at least ten samples have been detected as influenza positive in the country and of those > 40 % are positive for the type/subtype.

Legend:

<b>No report</b>	Intensity level was not reported	+	Increasing clinical activity
<b>Low</b>	No influenza activity or influenza at baseline levels	-	Decreasing clinical activity
<b>Medium</b>	Usual levels of influenza activity	=	Stable clinical activity
<b>High</b>	Higher than usual levels of influenza activity		
<b>Very high</b>	Particularly severe levels of influenza activity		

**Map 2. Geographic spread for week 44/2013**



\* A type/subtype is reported as dominant when at least ten samples have been detected as influenza positive in the country and of those > 40 % are positive for the type/subtype.

**Legend:**

<b>No report</b>	Activity level was not reported	+	Increasing clinical activity
<b>No activity</b>	No evidence of influenza virus activity (clinical activity remains at baseline levels)	-	Decreasing clinical activity
<b>Sporadic</b>	Isolated cases of laboratory confirmed influenza infection	=	Stable clinical activity
<b>Local outbreak</b>	Increased influenza activity in local areas (e.g. a city) within a region, or outbreaks in two or more institutions (e.g. schools) within a region (laboratory confirmed)		
<b>Regional activity</b>	Influenza activity above baseline levels in one or more regions with a population comprising less than 50% of the country's total population (laboratory confirmed)		
<b>Widespread</b>	Influenza activity above baseline levels in one or more regions with a population comprising 50% or more of the country's population (laboratory confirmed)		

**Table 1. Epidemiological and virological overview by country, week 44/2013**

Country	Intensity	Geographic spread	Trend	No. of sentinel specimens	Dominant type	Percentage positive	ILI per 100 000	ARI per 100 000	Epidemiological overview	Virological overview
Austria	Low	No activity	Stable	0	None	0.0	666.2	-	Graphs	Graphs
Belgium	Low	No activity	Stable	5	None	0.0	9.5	1011.2	Graphs	Graphs
Bulgaria	Low	No activity	Decreasing	0	None	0.0	-	452.4	Graphs	Graphs
Croatia				-	-	0.0	-	-		
Cyprus	Low	No activity	Stable	-	-	0.0	.*	.*	Graphs	Graphs
Czech Republic	Low	No activity	Stable	15	None	0.0	18.5	744.6	Graphs	Graphs
Denmark	Low	Sporadic	Stable	7	None	0.0	19.5	-	Graphs	Graphs
Estonia				4	None	0.0	-	-	Graphs	Graphs
Finland	Low	No activity	Stable	8	None	0.0	-	-	Graphs	Graphs
France	Low	Sporadic	Stable	20	-	0.0	-	1139.3	Graphs	Graphs
Germany	Low	No activity	Stable	-	-	0.0	-	837.5	Graphs	Graphs
Greece	Low	No activity	Stable	0	None	0.0	58.5	-	Graphs	Graphs
Hungary	Low	No activity	Stable	1	None	0.0	27.6	-	Graphs	Graphs
Iceland				0	-	0.0	-	-	Graphs	Graphs
Ireland	Low	No activity	Stable	2	None	0.0	1.3	-	Graphs	Graphs
Italy				-	-	0.0	-	-		
Latvia	Low	No activity	Stable	0	None	0.0	0.0	782.0	Graphs	Graphs
Lithuania	Low	No activity	Decreasing	11	None	0.0	0.7	382.4	Graphs	Graphs
Luxembourg	Low	No activity	Stable	4	-	0.0	.*	.*	Graphs	Graphs
Malta	Low	No activity	Stable	0	None	0.0	.*	.*	Graphs	Graphs
Netherlands	Low	No activity	Stable	11	None	9.1	12.0	-	Graphs	Graphs
Norway	Low	Sporadic	Stable	5	None	0.0	23.1	-	Graphs	Graphs
Poland	Low	No activity	Decreasing	3	None	0.0	147.3	-	Graphs	Graphs
Portugal	Low	No activity	Stable	1	None	0.0	6.0	-	Graphs	Graphs
Romania	Low	No activity	Decreasing	1	-	0.0	1.5	600.3	Graphs	Graphs
Slovakia	Low	Sporadic	Stable	2	None	0.0	108.9	1152.9	Graphs	Graphs
Slovenia	Low	No activity	Stable	4	None	0.0	0.0	606.1	Graphs	Graphs
Spain	Low	No activity	Stable	53	None	0.0	10.7	-	Graphs	Graphs
Sweden				-	-	0.0	-	-		
UK - England	Low	No activity	Stable	58	None	0.0	5.3	145.2	Graphs	
UK - Northern Ireland	Low	No activity	Decreasing	0	None	0.0	14.4	349.3	Graphs	
UK - Scotland	Low	Sporadic	Stable	21	None	0.0	4.7	318.9	Graphs	
UK - Wales				-	-	0.0	-	-		
<b>Europe</b>				<b>236</b>		<b>0.4</b>			<b>Graphs</b>	<b>Graphs</b>

*\*Incidence per 100 000 is not calculated for these countries as no population denominator is provided. Liechtenstein does not report to the European Influenza Surveillance Network.*

## Description of the system

Surveillance is based on nationally organised sentinel networks of physicians, mostly general practitioners (GPs), covering at least 1 to 5% of the population in their countries. All EU/EEA Member States (except Liechtenstein) participate. Depending on their country's choice, each sentinel physician reports the weekly number of patients seen with ILI, ARI, or both to a national focal point. From the national level, both numerator and denominator data are then reported to the European Surveillance System (TESSy) database. Additional semi-quantitative indicators of intensity, geographic spread, and trend of influenza activity at the national level are also reported.

# Virological surveillance

## Weekly analysis – virology

For week 44/2013, 19 countries collected 236 sentinel specimens, one of which, from the Netherlands, tested positive for influenza A(H3) virus (Tables 1–2).

In addition, 34 specimens from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals) were found to be positive for influenza virus. Of these, 30 were type A and four type B. Of four subtyped influenza A viruses, three were A(H1)pdm09 and one was A(H3). For two of the influenza B viruses, the lineage was determined as B/Yamagata/16/88 lineage (Table 2).

Since week 40/2013, genetic characterisation of six influenza viruses has been reported for sentinel and non-sentinel specimens. Of five influenza A viruses, four were characterised as A(H3) clade representative A/Victoria/208/2009 – A/Texas/50/2012 subgroup (3C), one of the recommended A virus components for the 2013–2014 influenza season vaccine, and one as A(H1)pdm09 group 6 representative A/St Petersburg/27/2011, which was the main genetic clade reported during the previous season. The B virus was characterised as B/Yamagata/16/88 lineage clade 2 representative B/Massachusetts/02/2012, the recommended B virus component for the 2013–2014 influenza season vaccine.

Since week 40/2013, one virus has been characterised as antigenic group A(H1)pdm09 A/California/7/2009 (H1N1)-like. More details on viruses circulating between 1 January and 31 May 2013 can be found in the [September report](#) prepared by the European Reference Laboratory Network for Human Influenza (ERLI-Net) coordination team.

Since week 40/2013, antiviral susceptibility results of two A(H1N1)pdm09 viruses have been reported. Neither virus carried amino acid substitution previously associated with reduced inhibition by neuraminidase inhibitors. Both viruses carried amino acid substitutions conferring resistance against M2 ion-channel blocker antiviral drugs.

For week 44/2013, 129 respiratory syncytial virus detections were reported by six countries, indicative of a continuing low level of activity.

**Table 2. Weekly and cumulative influenza virus detections by type, subtype and surveillance system, weeks 40–44/2013**

Virus type/subtype	Current period Sentinel	Current period Non-sentinel	Season Sentinel	Season Non-sentinel
Influenza A	1	30	12	96
A(H1)pdm09	0	3	5	18
A(H3)	1	1	6	23
A(sub-type unknown)	0	26	1	55
Influenza B	0	4	4	21
B(Vic) lineage	0	0	0	0
B(Yam) lineage	0	2	0	4
Unknown lineage	0	2	4	17
<b>Total influenza</b>	<b>1</b>	<b>34</b>	<b>16</b>	<b>117</b>

Note: A(H1)pdm09 and A(H3) include both N-subtyped and non-N-subtyped viruses. B (Vic) is B/Victoria/2/87 lineage; B(Yam) is B/Yamagata/16/88 lineage.

## Description of the system

According to the nationally defined sampling strategy, sentinel physicians take nasal or pharyngeal swabs from patients with ILI, ARI or both and send the specimens to influenza-specific reference laboratories for virus detection, (sub-)typing, antigenic or genetic characterisation and antiviral susceptibility testing.

For details of the current virus strains recommended by WHO for vaccine preparation [click here](#).

# Hospital surveillance – severe influenza disease

## Weekly analysis of hospitalised laboratory-confirmed influenza cases

Since week 40/2013, nine hospitalised laboratory-confirmed influenza cases have been reported by UK and Ireland (Table 3), with eight of the patients having been admitted to ICU. Five of the cases were infected with influenza A, two of which were subtyped as A(H1)pdm09 and four were infected with influenza B virus (Table 4).

**Table 3. Cumulative number of hospitalised laboratory-confirmed influenza cases, weeks 40–44/2013**

Country	Number of cases	Incidence of cases per 100 000 population	Number of fatal cases reported	Incidence of fatal cases per 100 000 population	Estimated population covered
Ireland	1				
United Kingdom	8	0.01			63705030
<b>Total</b>	<b>9</b>		<b>0</b>		

**Table 4. Number of hospitalised laboratory-confirmed influenza cases by influenza type and subtype, week 44/2013 and cumulative for the season**

Pathogen	Number of cases during current week	Cumulative number of cases since the start of the season
Influenza A		5
A(H1)pdm09		2
A(H3)		
A(sub-typing not performed)		3
Influenza B		4
<b>Total</b>		<b>9</b>

## The EuroMOMO mortality monitoring system

Week 44: All-cause mortality has been within the normal range for all reporting countries.

Further details are available on <http://www.euromomo.eu/>

*This report was written by an editorial team at the European Centre for Disease Prevention and Control (ECDC): Cornelia Adlhoch, Eeva Broberg, Julien Beauté and René Snacken. The bulletin text was reviewed by European Reference Laboratory Network for Human Influenza (ERLI-Net) coordination team: Adam Meijer, Rod Daniels, John McCauley and Maria Zambon. On behalf of the EISN members, the bulletin text was reviewed by Maja Sočan (Inštitut za varovanje zdravja), Allison Waters (University College Dublin) and Tyra Grove Krause (Statens Serum Institut, Copenhagen). In addition, the report is reviewed by experts of WHO Regional Office for Europe.*

*Maps and commentary published in this Weekly Influenza Surveillance Overview (WISO) do not represent a statement on the part of ECDC or its partners on the legal or border status of the countries and territories shown.*

*All data published in the WISO are up-to-date on the day of publication. Past this date, however, published data should not be used for longitudinal comparisons as countries tend to retrospectively update their database.*

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