

## SURVEILLANCE REPORT

# Weekly influenza surveillance overview

18 November 2011

## Main surveillance developments in week 45/2011 (7–13 November 2011)

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

- During week 45/2011, low influenza activity was notified by all 28 reporting countries.
- Of 390 sentinel specimens tested, six were positive for influenza virus (1.5%).
- Since week 40/2011, five SARI cases have been reported, one of which was a confirmed influenza case.
- Six weeks after the beginning of the surveillance season for influenza in the Northern Hemisphere, there has been no evidence of sustained transmission in EU/EAA countries. As of week 45, the winter epidemics of influenza have not yet started in Europe.

**Sentinel surveillance of influenza-like illness (ILI)/ acute respiratory infection (ARI):** Influenza activity of low intensity was notified by all 28 reporting countries, with five of them reporting sporadic activity. For more information, [click here](#).

**Virological surveillance:** The low proportion of sentinel specimens that tested positive for influenza viruses (1.5%) suggests that there is currently little influenza virus circulation in Europe. For more information, [click here](#).

**Hospital surveillance of severe acute respiratory infection (SARI):** Since week 40/2011, five SARI cases have been reported from Slovakia and France. For more information, [click here](#).

# Sentinel surveillance (ILI/ARI)

## Weekly analysis – epidemiology

During week 45/2011, all 28 reporting countries experienced low-intensity influenza activity (Table 1, Map 1).

Absence of geographic spread was reported by 23 countries while sporadic activity was reported by the Czech Republic, France, Norway, Spain and Sweden (Table 1, Map 2).

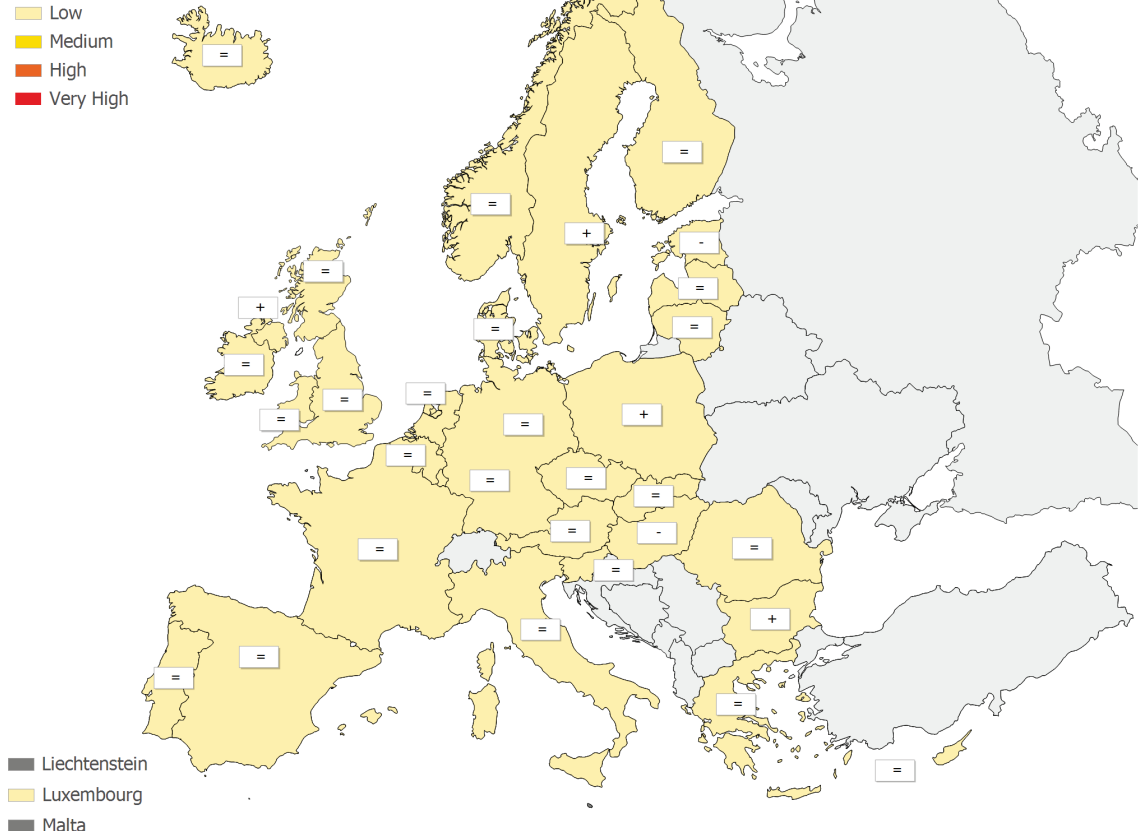
Stable trends were reported by 22 countries and the UK (England, Scotland and Wales). Decreasing trends were reported by Estonia and Hungary and increasing trends by Bulgaria, Poland, Sweden and the UK (Northern Ireland) (Table 1, Map 2).

Since the start of the season no country has reported an intensity level above 'low' or a geographic spread greater than 'sporadic'.

**Map 1: Intensity for week 45/2011**

**Intensity**

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



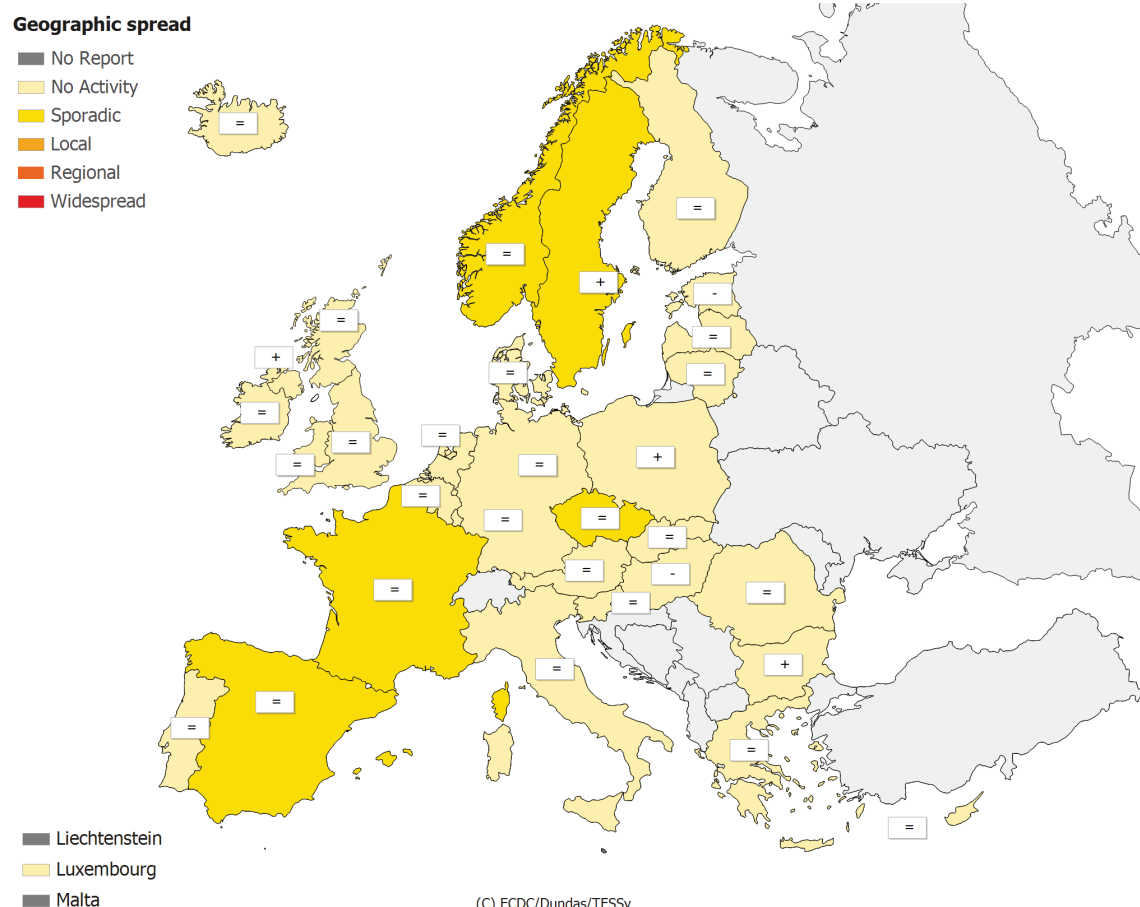
(C) ECDC/Dundas/TESSy

\* 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 45/2011**



\* 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
		=	Stable clinical activity
<b>Sporadic</b>	Isolated cases of laboratory confirmed influenza infection		
<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 45/2011**

Country	Intensity	Geographic spread	Trend	No. of sentinel swabs	Dominant type	Percentage positive*	ILI per 100 000	ARI per 100 000	Epidemiological overview	Virological overview
Austria	Low	No activity	Stable	4	None	0.0	21.2	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Belgium	Low	No activity	Stable	11	None	0.0	59.6	1146.6	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Bulgaria	Low	No activity	Increasing	0	None	0.0	-	1086.6	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Cyprus	Low	No activity	Stable	-	-	0.0	.*	.*	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Czech Republic	Low	Sporadic	Stable	-	-	0.0	23.5	863.3	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Denmark	Low	No activity	Stable	1	None	0.0	53.9	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Estonia	Low	No activity	Decreasing	0	None	0.0	4.3	217.7	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Finland	Low	No activity	Stable	33	None	0.0	-	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
France	Low	Sporadic	Stable	42	-	0.0	-	1326.7	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Germany	Low	No activity	Stable	15	None	0.0	-	1157.1	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Greece	Low	No activity	Stable	0	None	0.0	79.6	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Hungary	Low	No activity	Decreasing	0	None	0.0	56.2	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Iceland	Low	No activity	Stable	-	-	0.0	0.3	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Ireland	Low	No activity	Stable	6	None	0.0	8.2	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Italy	Low	No activity	Stable	-	-	0.0	77.2	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Latvia	Low	No activity	Stable	0	None	0.0	0.0	1085.5	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Lithuania	Low	No activity	Stable	0	None	0.0	0.4	379.9	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Luxembourg	Low	No activity	Stable	6	None	0.0	.*	.*	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Malta				0	None	0.0	.*	.*	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Netherlands	Low	No activity	Stable	10	None	30.0	30.7	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Norway	Low	Sporadic	Stable	4	None	25.0	26.1	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Poland	Low	No activity	Increasing	6	None	0.0	72.1	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Portugal	Low	No activity	Stable	0	None	0.0	6.2	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Romania	Low	No activity	Stable	22	None	0.0	3.7	700.9	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Slovakia	Low	No activity	Stable	3	None	0.0	145.3	1410.9	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Slovenia	Low	No activity	Stable	3	None	0.0	0.0	886.5	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Spain	Low	Sporadic	Stable	90	None	2.2	18.2	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Sweden	Low	Sporadic	Increasing	48	None	0.0	6.4	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
UK - England	Low	No activity	Stable	71	None	0.0	8.6	364.5	<a href="#">Graphs</a>	<a href="#">Graphs</a>
UK - Northern Ireland	Low	No activity	Increasing	6	-	0.0	21.2	340.9	<a href="#">Graphs</a>	<a href="#">Graphs</a>
UK - Scotland	Low	No activity	Stable	5	None	0.0	10.1	455.0	<a href="#">Graphs</a>	<a href="#">Graphs</a>
UK - Wales	Low	No activity	Stable	4	-	0.0	6.7	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Europe				390		1.5			<a href="#">Graphs</a>	<a href="#">Graphs</a>

\*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 1–5% 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 influenza-like illness (ILI), acute respiratory infection (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

In week 45/2011, 25 countries reported virological data. Of 390 sentinel specimens tested, six (1.5%) were positive for influenza virus (Table 2, Figures 1 and 3). In addition, six non-sentinel source specimens, e.g. specimens collected for diagnostic purposes in hospitals, were positive for influenza virus. Of the 12 influenza viruses detected from sentinel and non-sentinel sources during week 45/2011, seven (58.3%) were type A and 5 (41.7%) were type B. One of the influenza A viruses was subtyped as A(H3) (Table 2).

Of the 79 influenza virus detections in sentinel and non-sentinel specimens since week 40/2011, 59 (74.7%) were type A, and 20 (25.3%) were type B viruses. Of 31 influenza A viruses subtyped, eight (25.8%) were A(H1)pdm09, and 23 (75.2%) were A(H3) viruses (Table 2, Figures 1 and 2).

More details on circulating viruses can be found in the [August–September](#) report prepared by the Community Network of Reference Laboratories (CNRL) coordination team. Since week 40/2011, five antigenic characterisations have been reported (Figure 4).

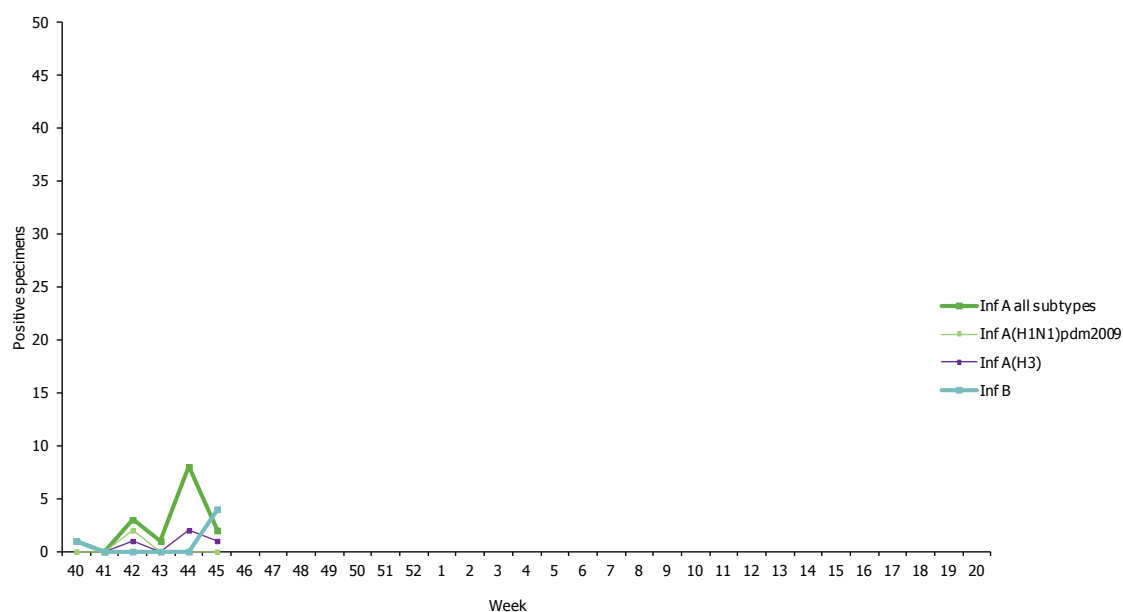
In week 45/2011, eight countries reported 192 respiratory syncytial virus detections (Figure 5).

**Table 2: Weekly and cumulative influenza virus detections by type, subtype and surveillance system, weeks 40–45/2011**

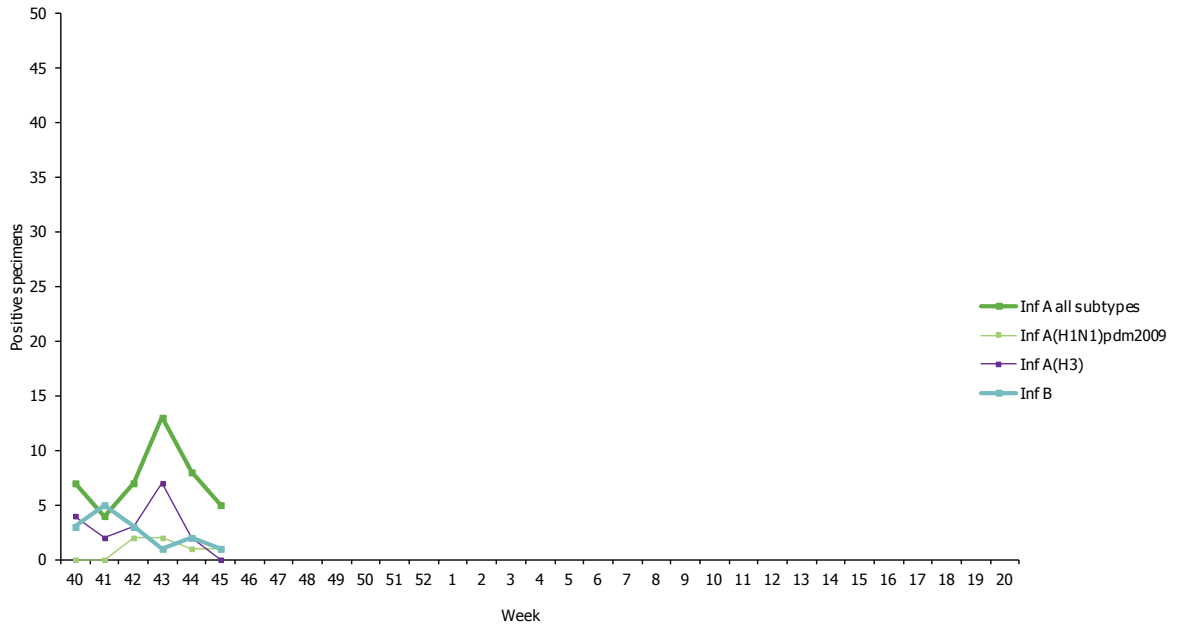
Virus type/subtype	Current Period		Season	
	Sentinel	Non-Sentinel	Sentinel	Non-Sentinel
Influenza A		2	5	15
A (H1)pdm2009		0	1	2
A (subtyping not performed)		1	4	8
A (H3)		1	0	5
Influenza B		4	1	5
B(Vic) lineage		0	0	0
B(Yam) lineage		0	0	0
Unknown lineage		4	1	5
<b>Total Influenza</b>		<b>6</b>	<b>6</b>	<b>20</b>

Note: A(H1)pdm09 and A(H3) include both N-sub-typed and non-N-sub-typed viruses

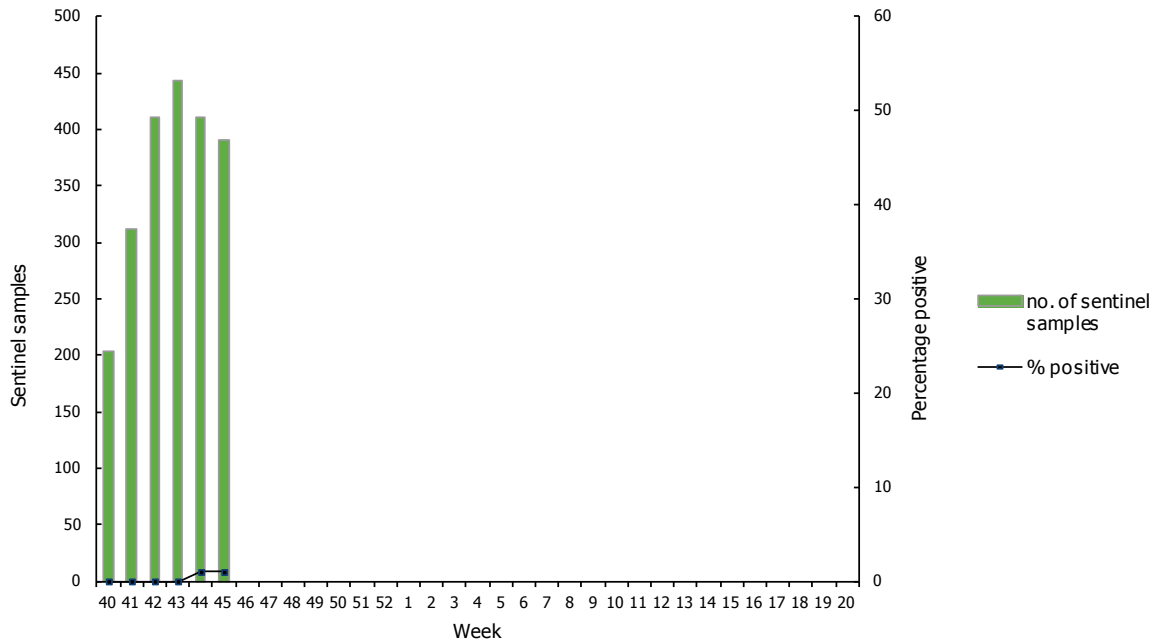
**Figure 1: Number of sentinel specimens positive for influenza, by type, subtype and by week of report, weeks 40–45/2011**



**Figure 2: Number of non-sentinel specimens positive for influenza by type, subtype and week of report, weeks 40–45/2011**

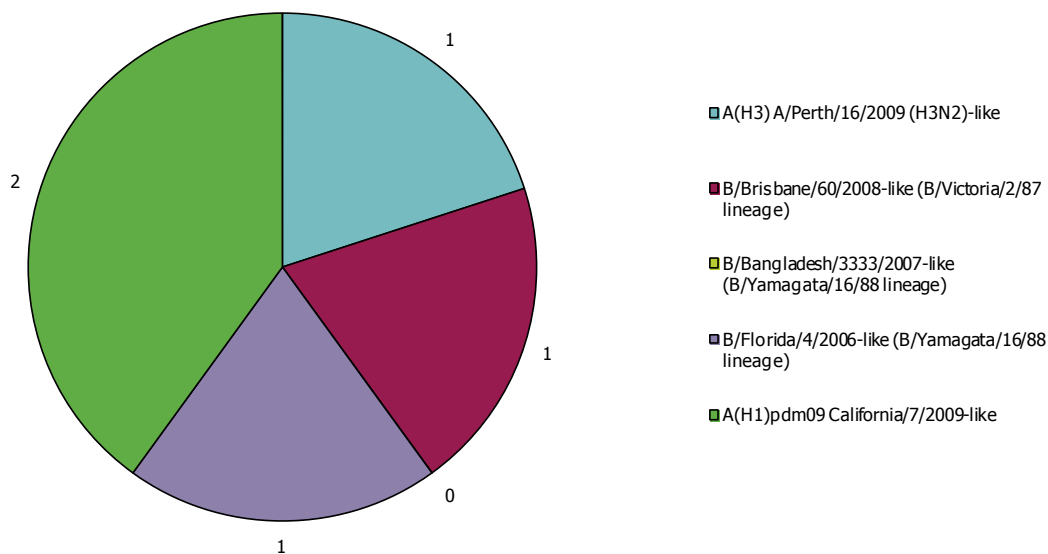


**Figure 3: Proportion of sentinel samples positive for influenza, weeks 40–45/2011**

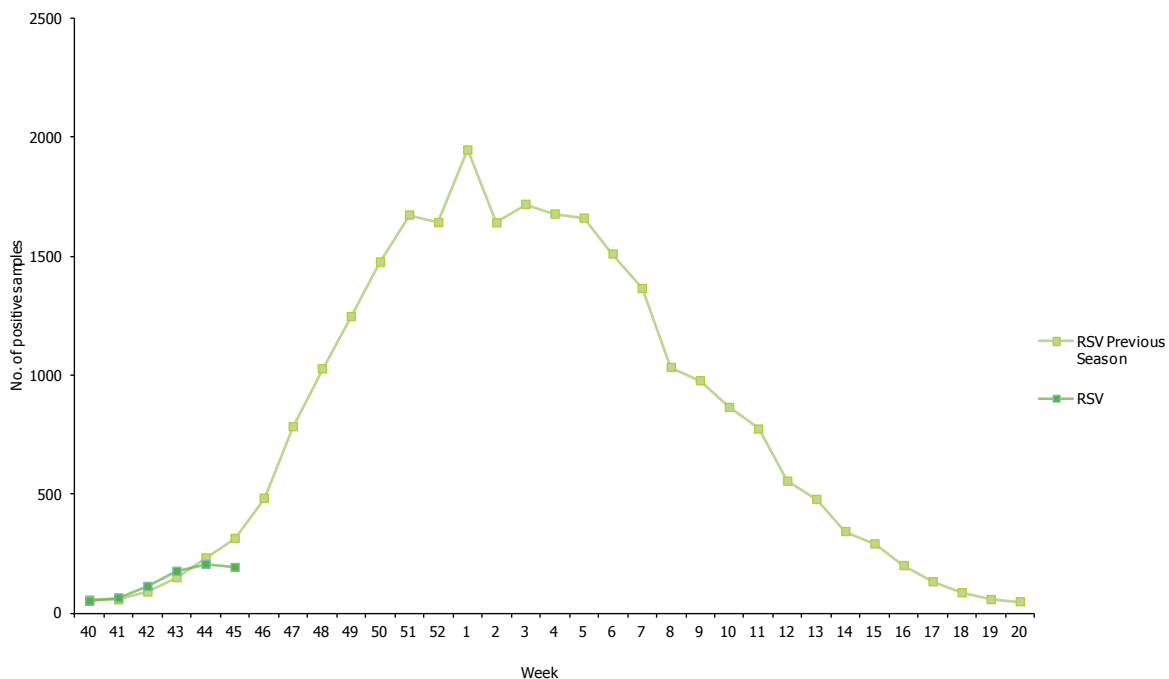




**Figure 4: Results of antigenic characterisations of sentinel and non-sentinel influenza virus isolates, weeks 40–45/2011**



**Figure 5: Respiratory syncytial virus (RSV) detections, sentinel and non-sentinel, weeks 40–45/2011**



## Description of the system

According to the nationally defined sampling strategy, sentinel physicians take nasal or pharyngeal swabs from patients with influenza-like illness (ILI), acute respiratory infection (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 on the current virus strains recommended by WHO for vaccine preparation [click here](#).

# Hospital surveillance – severe acute respiratory infection (SARI)

## Weekly analysis – SARI

Since week 40/2011, a total of five SARI cases have been reported to TESSy (Table 3). Four of them were males (Table 4). One of them was a confirmed case of influenza (Table 5) and none of the cases were known to be vaccinated against influenza (Table 6).

**Table 3: Cumulative number of SARI cases, weeks 40–45/2011**

Country	Number of cases	Incidence of SARI cases per 100 000 population	Number of fatal cases reported	Incidence of fatal cases per 100 000 population	Estimated population covered
France	1				
Slovakia	4	0.07			5 435 273
<b>Total</b>	<b>5</b>		<b>0</b>		

**Table 4: Number of SARI cases by age and gender, weeks 40–45/2011**

Age groups	Male	Female
18-44	1	
45-59	1	
>=60	2	1
<b>Total</b>	<b>4</b>	<b>1</b>

**Table 5: Number of SARI cases by influenza type and sub-type and other pathogens, week 45/2011 and cumulative for the season**

Pathogen	Number of cases during current week	Cumulative number of cases since the start of the season
Influenza A		1
A(H1)pdm2009		
A(sub-typing not performed)		1
A(H3)		
Influenza B		
Other pathogen		
Unknown	1	4
<b>Total</b>	<b>1</b>	<b>5</b>

**Table 6: Number of SARI cases by vaccination status, weeks 40–45/2011**

Vaccination status	Number of cases	Percentage of cases
Not vaccinated	3	60
Unknown	2	40
<b>TOTAL</b>	<b>5</b>	

*This report was written by an editorial team at the European Centre for Disease Prevention and Control (ECDC): Eeva Broberg, Flaviu Plata, Julien Beauté and René Snacken. The bulletin text was reviewed by the Community Network of Reference Laboratories for Human Influenza in Europe (CNRL) coordination team: Adam Meijer, Rod Daniels, John McCauley and Maria Zambon. On behalf of the EISN members, the bulletin text was reviewed by Amparo Larrauri Cámara (Instituto de Salud Carlos III, Spain) and Suzie Coughlan (UCD National Virus Reference Laboratory, Ireland). 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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