

## SURVEILLANCE REPORT



# Weekly influenza surveillance overview

25 November 2011

## Main surveillance developments in week 46/2011 (14–20 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 46/2011, low influenza activity was notified by all 26 reporting countries.
- Of 535 sentinel specimens tested, eleven were positive for influenza viruses (2.1%).
- Since week 40/2011, twelve SARI cases have been reported by three countries. One of them was a confirmed case of influenza.
- Seven 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.

**Sentinel surveillance of influenza-like illness (ILI)/ acute respiratory infection (ARI):** Influenza activity of low-intensity was notified by all 26 reporting countries, with one of them indicating local spread. For more information, [click here](#).

**Virological surveillance:** The low proportion of sentinel specimens testing positive for influenza viruses (2.1%) 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, twelve SARI cases have been reported – from Slovakia, France and Romania. For more information, [click here](#).

# Sentinel surveillance (ILI/ARI)

## Weekly analysis – epidemiology

During week 46/2011, all 26 reporting countries experienced low-intensity influenza activity (Table 1, Map 1).

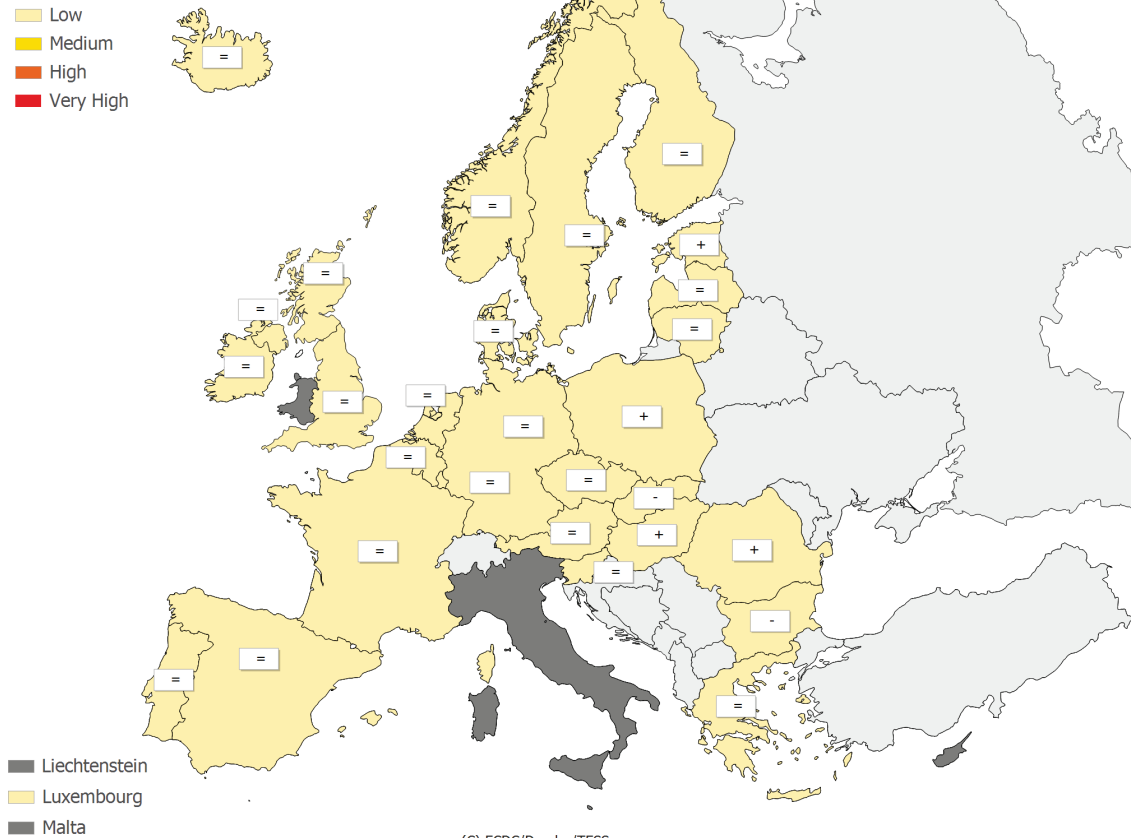
For the first time this season local spread was reported by one country (the Netherlands). Sporadic activity was reported by the Czech Republic, France, Ireland, Norway, Spain, Sweden and the UK (Northern Ireland) while absence of geographic spread was reported by 18 countries and the UK (England and Scotland) (Table 1, Map 2).

Stable trends were reported by 20 countries. Decreasing trends were reported by Bulgaria and Slovakia and increasing trends were reported by Estonia, Hungary, Poland and Romania (Table 1, Map 2).

**Map 1: Intensity for week 46/2011**

**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.

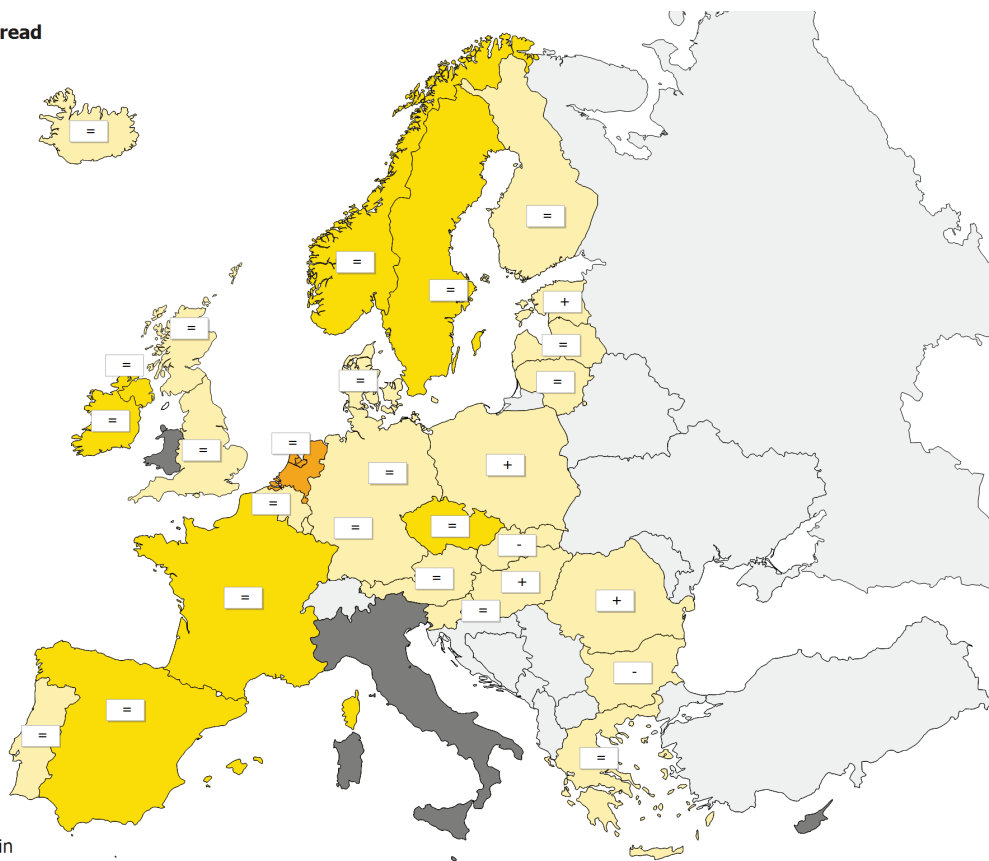
**Legend:**

<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 46/2011**

**Geographic spread**

- No Report
- No Activity
- Sporadic
- Local
- Regional
- Widespread



- Liechtenstein
- Luxembourg
- Malta

(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>	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 46/2011**

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	2	None	0.0	21.0	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Belgium	Low	No activity	Stable	11	None	9.1	70.8	1644.4	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Bulgaria	Low	No activity	Decreasing	6	None	0.0	-	1019.0	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Cyprus				-	-	0.0	-	-		
Czech Republic	Low	Sporadic	Stable	-	-	0.0	23.0	802.9	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Denmark	Low	No activity	Stable	0	None	0.0	58.5	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Estonia	Low	No activity	Increasing	2	-	0.0	4.6	235.2	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Finland	Low	No activity	Stable	26	None	0.0	-	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
France	Low	Sporadic	Stable	84	None	0.0	-	1706.4	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Germany	Low	No activity	Stable	17	None	0.0	-	1249.0	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Greece	Low	No activity	Stable	0	None	0.0	63.4	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Hungary	Low	No activity	Increasing	27	None	0.0	59.6	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Iceland	Low	No activity	Stable	0	None	0.0	1.3	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Ireland	Low	Sporadic	Stable	12	None	16.7	7.7	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Italy				7	-	0.0	-	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Latvia	Low	No activity	Stable	0	None	0.0	0.0	935.4	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Lithuania	Low	No activity	Stable	4	None	0.0	0.7	444.2	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Luxembourg	Low	No activity	Stable	4	None	0.0	-*	-*	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Malta				-	-	0.0	-	-		
Netherlands	Low	Local	Stable	13	None	0.0	29.1	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Norway	Low	Sporadic	Stable	7	None	0.0	26.9	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Poland	Low	No activity	Increasing	18	None	0.0	99.8	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Portugal	Low	No activity	Stable	3	None	0.0	14.8	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Romania	Low	No activity	Increasing	22	None	0.0	4.4	768.0	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Slovakia	Low	No activity	Decreasing	1	None	0.0	128.9	1272.5	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Slovenia	Low	No activity	Stable	4	None	0.0	0.0	802.9	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Spain	Low	Sporadic	Stable	94	None	5.3	21.8	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Sweden	Low	Sporadic	Stable	42	None	4.8	5.1	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
UK - England	Low	No activity	Stable	84	None	0.0	8.7	384.2	<a href="#">Graphs</a>	<a href="#">Graphs</a>
UK - Northern Ireland	Low	Sporadic	Stable	8	-	12.5	19.9	324.8	<a href="#">Graphs</a>	<a href="#">Graphs</a>
UK - Scotland	Low	No activity	Stable	37	None	0.0	14.4	446.0	<a href="#">Graphs</a>	<a href="#">Graphs</a>
UK - Wales				-	-	0.0	-	-		
Europe				535		2.1				<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 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 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 46/2011, 26 countries reported virological data. Of 535 sentinel specimens tested, eleven (2.1%) were positive for influenza virus (Table 2, Figure 1). In addition, 22 non-sentinel source specimens, e.g. specimens collected for diagnostic purposes in hospitals, were positive for influenza virus. Of the 33 influenza viruses detected from sentinel and non-sentinel sources during week 46/2011, 24 (72.7%) were type A and nine (27.3%) were type B. Eleven of the influenza A viruses were sub-typed as A(H3).

Of the 119 influenza virus detections in sentinel and non-sentinel specimens since week 40/2011, 85 (71.4%) were type A, and 34 (28.6%) were type B viruses. Of 46 influenza A viruses sub-typed, ten (21.7%) were A(H1)pdm09, and 36 (78.3%) were A(H3) viruses (Table 2, Figures 1 & 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).

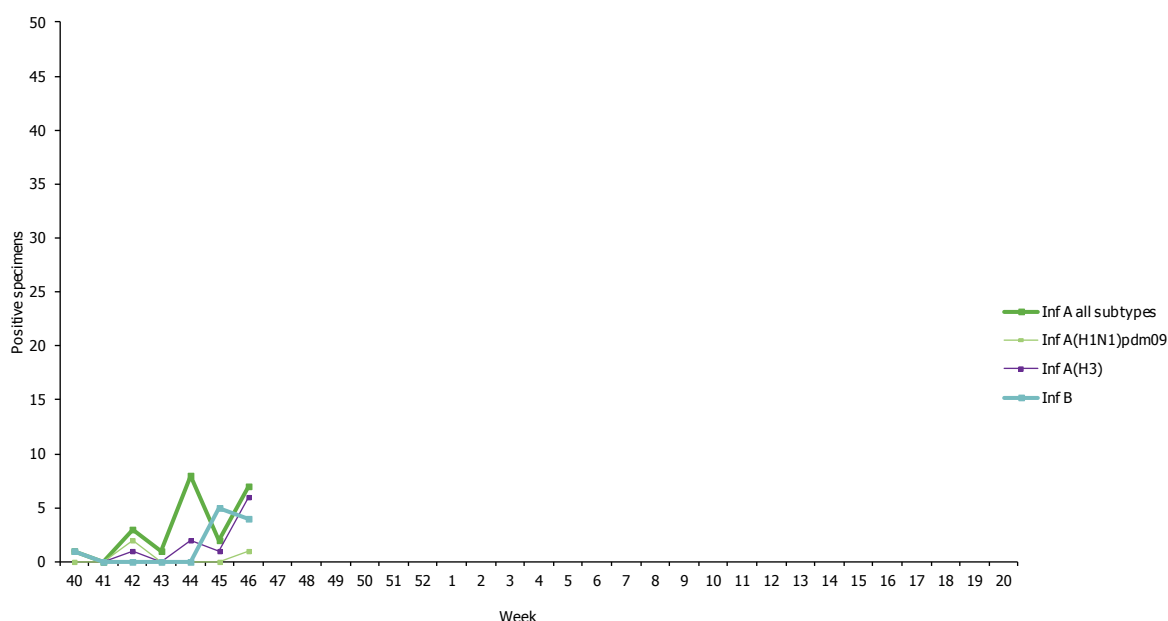
In week 46/2011, eleven countries reported 398 respiratory syncytial virus detections (Figure 5).

**Table 2: Weekly and cumulative influenza virus detections by type, sub-type and surveillance system, weeks 40–46/2011**

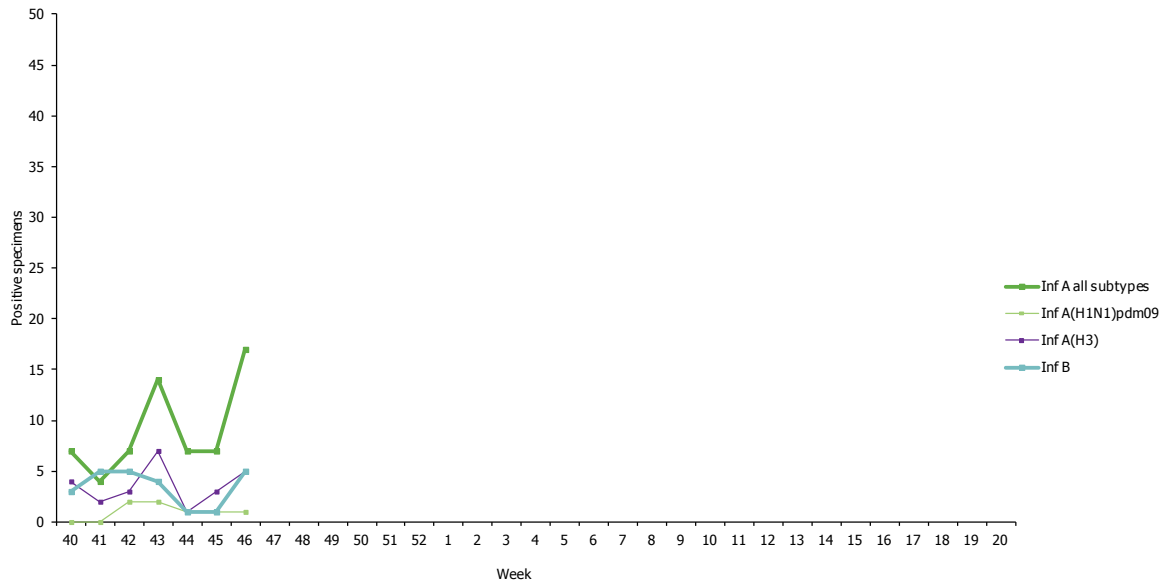
Virus type/subtype	Current Period		Season	
	Sentinel	Non-sentinel	Sentinel	Non-sentinel
Influenza A	7	17	22	63
A (H1)pdm09	1	1	3	7
A (H3)	6	5	11	25
A (sub-typing not performed)	0	11	8	31
Influenza B	4	5	10	24
B(Vic) lineage	0	0	0	2
B(Yam) lineage	1	0	2	0
Unknown lineage	3	5	8	22
<b>Total Influenza</b>	<b>11</b>	<b>22</b>	<b>32</b>	<b>87</b>

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

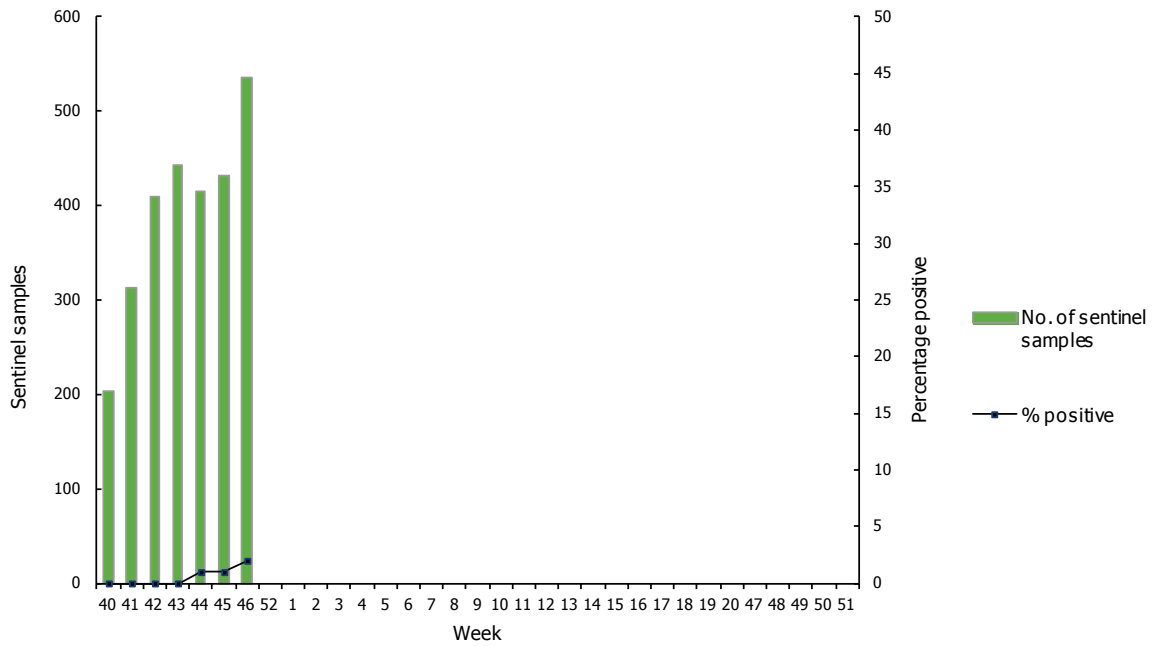
**Figure 1: Number of sentinel specimens positive for influenza, by type, sub-type and by week of report, weeks 40–46/2011**



**Figure 2: Number of non-sentinel specimens positive for influenza by type, sub-type and week of report, weeks 40–46/2011**

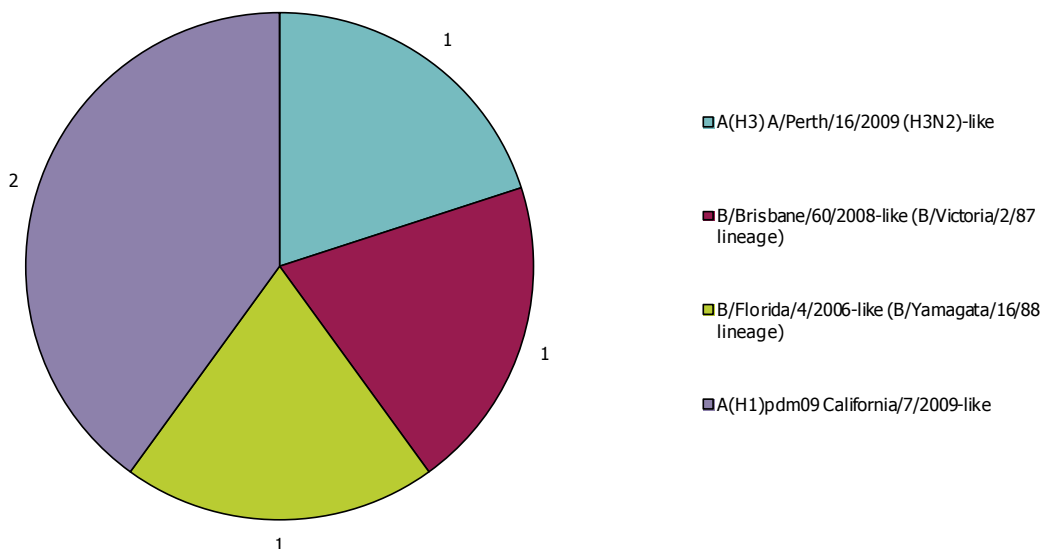


**Figure 3: Proportion of sentinel samples positive for influenza, weeks 40–46/2011**

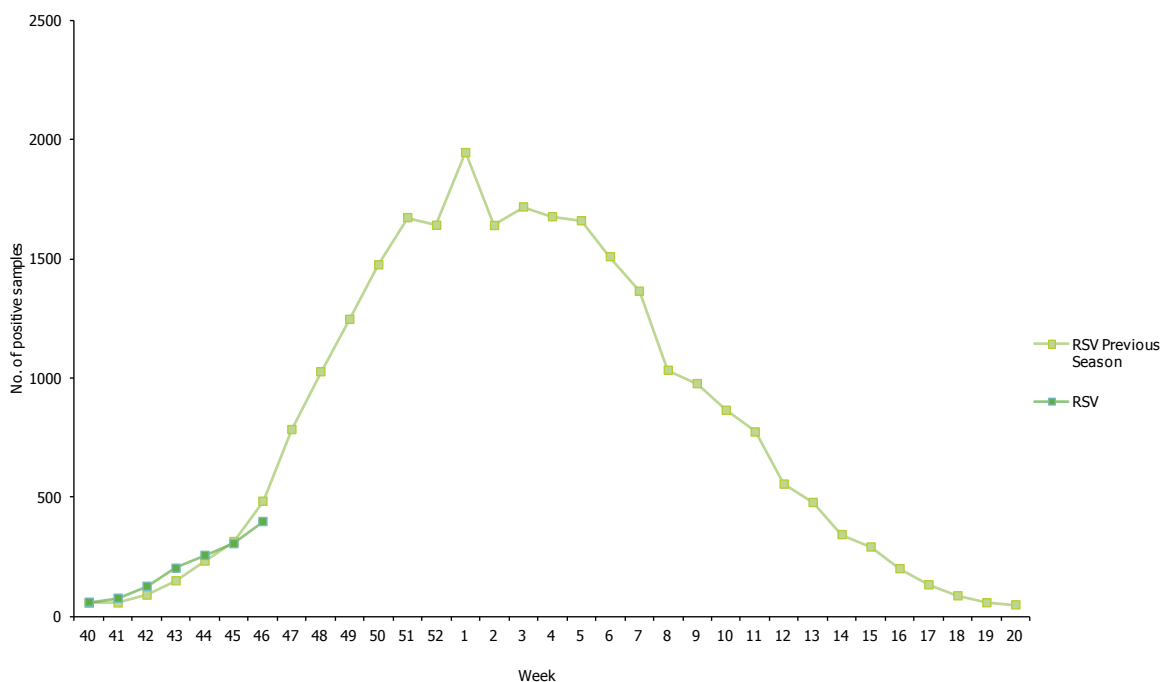




**Figure 4: Results of antigenic characterisations of sentinel and non-sentinel influenza virus isolates, weeks 40–46/2011**



**Figure 5: Respiratory syncytial virus (RSV) detections, sentinel and non-sentinel, weeks 40–46/2011**



### Country comments

**The Netherlands:** In weeks 41, 45 and 46 six influenza B viruses were detected in the Netherlands. The specimens were collected by one GP practice in a village in the north-east of the Netherlands. The GP reported increased consultations of patients with symptoms of acute respiratory infection. As viral loads were very low, possibly due to late date of sampling relative to the indicated date of disease onset, lineage determination, virus isolation and further characterisation were unsuccessful.

## 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 12 SARI cases have been reported to TESSy (Table 3). Eight 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 have been vaccinated against influenza (Table 6).

**Table 3: Cumulative number of SARI cases, weeks 40–46/2011**

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				
Romania	7	0.12			5813728
Slovakia	4	0.07			5435273
<b>Total</b>	<b>12</b>		<b>0</b>		

**Table 4: Number of SARI cases by age and gender, weeks 40–46/2011**

Age groups	Male	Female
Under 2		1
2-17	1	
18-44	2	1
45-59	3	1
>=60	2	1
<b>Total</b>	<b>8</b>	<b>4</b>

**Table 5: Number of SARI cases by influenza type and sub-type and other pathogens, week 46/2011 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)pdm09		
A(sub-typing not performed)		1
A(H3)		
Influenza B		
Other pathogen	4	4
Unknown	3	7
<b>Total</b>	<b>7</b>	<b>12</b>

**Table 6: Number of SARI cases by vaccination status, weeks 40–46/2011**

Vaccination Status	Number Of Cases	Percentage of cases
Not vaccinated	10	83.3
Unknown	2	17
<b>TOTAL</b>	<b>12</b>	

## Country comments

**Czech Republic:** We are reporting our first confirmed influenza death of this season: female born 1973, hospitalised on 25 October in an intensive care unit, first symptoms 19 October, influenza isolate A (H1N1)pdm09 confirmed at national influenza reference laboratory, antiviral treatment during hospitalisation, underlying condition – asthma, death on 9 November.

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*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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