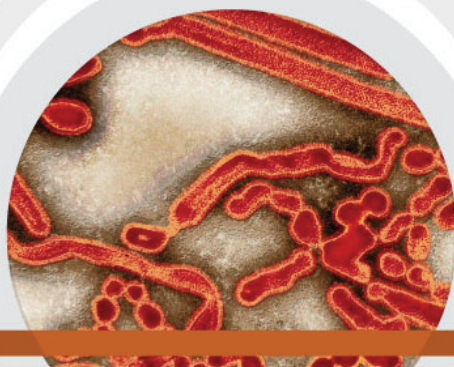


SURVEILLANCE REPORT



Weekly influenza surveillance overview

2 December 2011

Main surveillance developments in week 47/2011 (21 – 27 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 47/2011, low influenza activity was notified by all 28 countries reporting.
- Of 561 sentinel specimens tested during week 47/2011, six (1.1%) were positive for influenza virus. Of the 43 influenza virus detections in sentinel specimens since week 40/2011, 69.8% were type A and 30.2% were type B viruses. Of 22 influenza A viruses subtyped, 13.6% were A(H1)pdm09 and 86.4% were A(H3) viruses.
- Since week 40/2011, 38 SARI cases have been reported by four countries. Twelve of these patients were confirmed as influenza positive.
- Eight 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, but more influenza viruses are being detected.

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

Virological surveillance: The low proportion of sentinel specimens testing positive for influenza viruses (1.1%) 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, 38 SARI cases have been reported by four countries. For more information, [click here](#).

Sentinel surveillance (ILI/ARI)

Weekly analysis – epidemiology

During week 47/2011, all 28 countries reporting experienced low-intensity influenza activity (Table 1, Map 1).

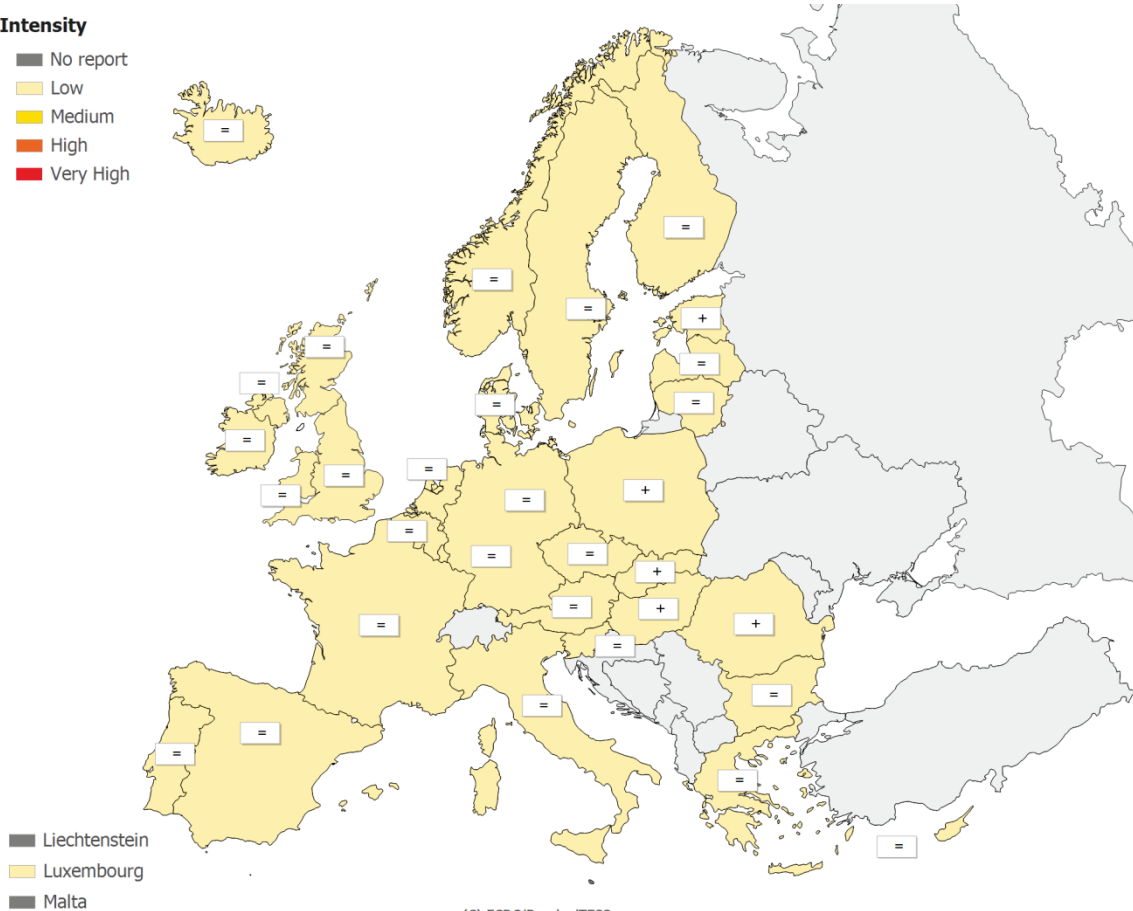
Only the Netherlands reported local activity. Sporadic activity was reported by the Czech Republic, France, Ireland, Norway, Spain, Sweden and the UK (Scotland). No geographic spread was reported by 20 countries and the UK (England, Northern Ireland and Wales) (Table 1, Map 2).

Stable trends were reported by 23 countries. Increasing trends were reported by Estonia, Hungary, Poland, Romania and Slovakia (Table 1, Map 2).

Map 1: Intensity for week 47/2011

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.

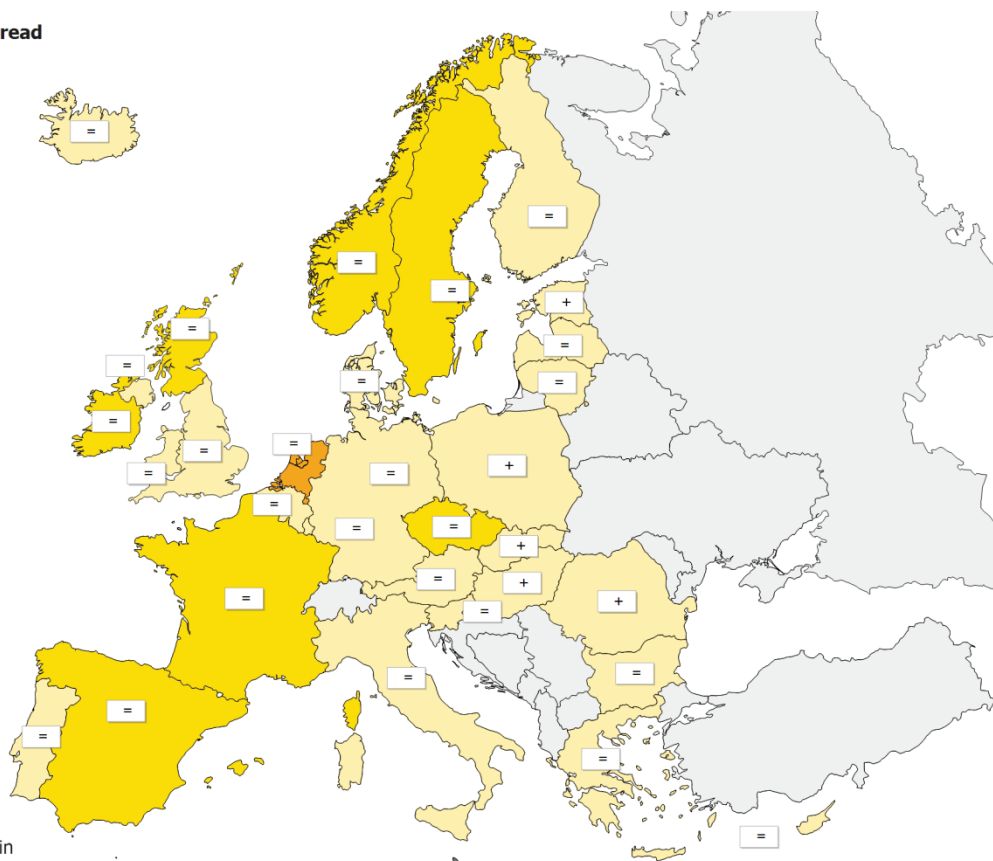
Legend:

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

Map 2: Geographic spread for week 47/2011

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:

No report	Activity level was not reported	+	Increasing clinical activity
No activity	No evidence of influenza virus activity (clinical activity remains at baseline levels)	-	Decreasing clinical activity
Sporadic	Isolated cases of laboratory confirmed influenza infection	=	Stable clinical activity
Local outbreak	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)		
Regional activity	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)		
Widespread	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 47/2011

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	19.4	-	Graphs	Graphs
Belgium	Low	No activity	Stable	15	None	6.7	51.8	1748.9	Graphs	Graphs
Bulgaria	Low	No activity	Stable	13	None	0.0	-	1052.7	Graphs	Graphs
Cyprus	Low	No activity	Stable	-	-	0.0	-*	-*	Graphs	Graphs
Czech Republic	Low	Sporadic	Stable	19	None	0.0	30.4	951.9	Graphs	Graphs
Denmark	Low	No activity	Stable	10	None	0.0	82.5	-	Graphs	Graphs
Estonia	Low	No activity	Increasing	3	None	0.0	6.0	255.4	Graphs	Graphs
Finland	Low	No activity	Stable	30	None	0.0	-	-	Graphs	Graphs
France	Low	Sporadic	Stable	70	None	1.4	-	1925.6	Graphs	Graphs
Germany	Low	No activity	Stable	35	None	0.0	-	1290.2	Graphs	Graphs
Greece	Low	No activity	Stable	0	None	0.0	69.6	-	Graphs	Graphs
Hungary	Low	No activity	Increasing	23	None	0.0	67.1	-	Graphs	Graphs
Iceland	Low	No activity	Stable	0	None	0.0	2.8	-	Graphs	Graphs
Ireland	Low	Sporadic	Stable	7	None	0.0	5.8	-	Graphs	Graphs
Italy	Low	No activity	Stable	18	None	11.1	106.7	-	Graphs	Graphs
Latvia	Low	No activity	Stable	0	None	0.0	0.0	1256.8	Graphs	Graphs
Lithuania	Low	No activity	Stable	3	None	0.0	0.8	483.6	Graphs	Graphs
Luxembourg	Low	No activity	Stable	6	None	0.0	-*	-*	Graphs	Graphs
Malta				-	-	0.0	-	-		
Netherlands	Low	Local	Stable	11	None	9.1	41.6	-	Graphs	Graphs
Norway	Low	Sporadic	Stable	9	None	0.0	36.0	-	Graphs	Graphs
Poland	Low	No activity	Increasing	15	None	0.0	103.5	-	Graphs	Graphs
Portugal	Low	No activity	Stable	4	None	0.0	26.3	-	Graphs	Graphs
Romania	Low	No activity	Increasing	16	None	0.0	2.8	809.5	Graphs	Graphs
Slovakia	Low	No activity	Increasing	5	None	0.0	155.3	1497.6	Graphs	Graphs
Slovenia	Low	No activity	Stable	4	None	0.0	0.0	936.7	Graphs	Graphs
Spain	Low	Sporadic	Stable	99	None	1.0	22.5	-	Graphs	Graphs
Sweden	Low	Sporadic	Stable	29	None	0.0	7.0	-	Graphs	Graphs
UK - England	Low	No activity	Stable	68	None	0.0	8.6	405.2	Graphs	Graphs
UK - Northern Ireland	Low	No activity	Stable	5	-	0.0	21.2	340.9	Graphs	Graphs
UK - Scotland	Low	Sporadic	Stable	37	None	0.0	17.0	500.6	Graphs	Graphs
UK - Wales	Low	No activity	Stable	3	-	0.0	-	-		
Europe				561		1.1				Graphs

*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 47/2011, 27 countries reported virological data. Of 561 sentinel specimens tested, six (1.1%) were positive for influenza virus (Table 2, Figure 1).

In addition, 20 non-sentinel source specimens, e.g. specimens collected for diagnostic purposes in hospitals, were positive for influenza virus. Of the 26 influenza viruses detected from sentinel and non-sentinel sources during week 47/2011, twenty (76.9%) were type A and six (23.1%) were type B. Ten of the influenza A viruses were subtyped as A(H3) and one as A(H1)pdm09 virus (Table 2).

Of the 43 influenza virus detections in sentinel specimens since week 40/2011, 30 (69.8%) were type A, and 13 (30.2%) were type B viruses. Of 22 influenza A viruses subtyped, three (13.6%) were A(H1)pdm09, and 19 (86.4%) were A(H3) viruses (Table 2, Figure 2).

Of the 154 influenza virus detections in sentinel and non-sentinel specimens since week 40/2011, 113 (73.4%) were type A, and 41 (26.6%) were type B viruses. Of 67 influenza A viruses subtyped, 12 (17.9%) were A(H1)pdm09 and 55 (82.1%) were A(H3) viruses (Table 2, Figures 2 & 3).

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 47/2011, 15 countries reported an increasing number (n= 570) of respiratory syncytial virus detections (Figure 5).

Table 2: Weekly and cumulative influenza virus detections by type, subtype and surveillance system, weeks 40–47/2011

Virus type/subtype	Current Period		Season		
	Sentinel	Non-Sentinel	Sentinel	Non-Sentinel	
Influenza A		4	16	30	83
A (H1)pdm09		0	1	3	9
A (H3)		4	6	19	36
A (sub-typing not performed)		0	9	8	38
Influenza B		2	4	13	28
B(Vic) lineage		0	0	0	2
B(Yam) lineage		0	0	3	0
Unknown lineage		2	4	10	26
Total influenza		6	20	43	111

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

Figure 1: Proportion of sentinel samples positive for influenza, weeks 40–47/2011

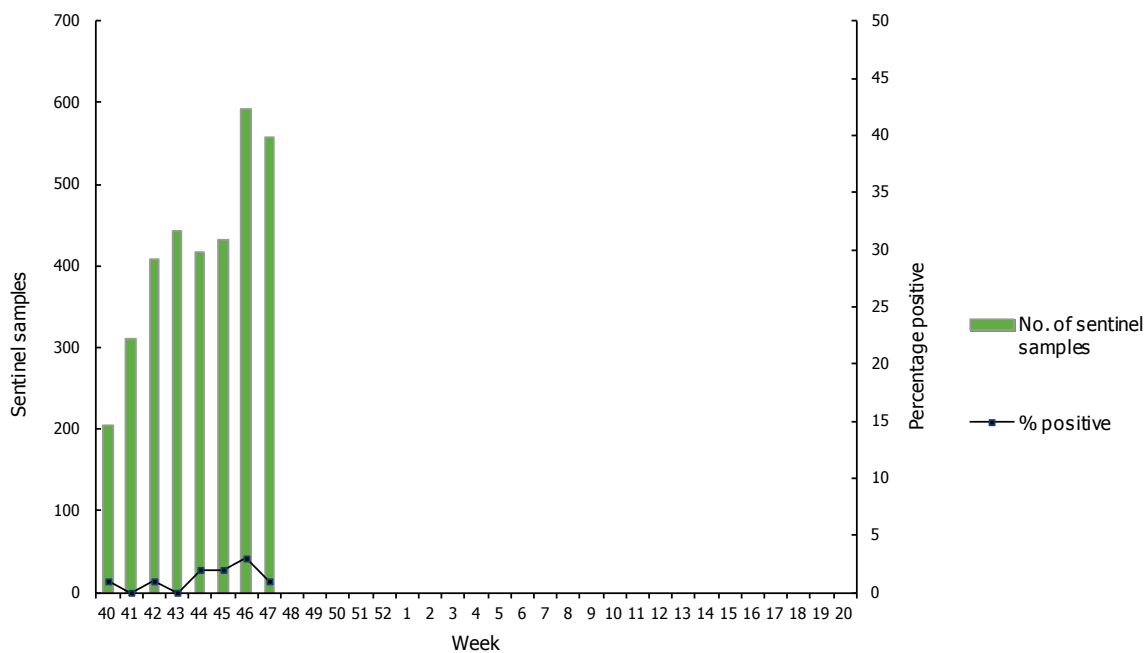


Figure 2: Number of sentinel specimens positive for influenza, by type, subtype and by week of report, weeks 40–47/2011

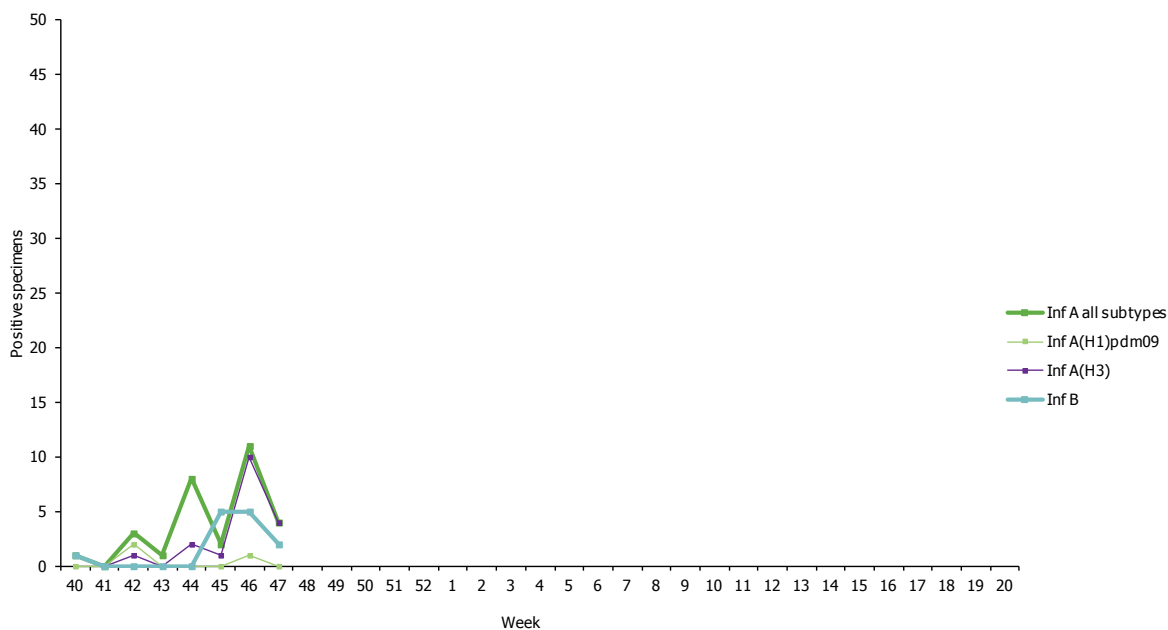


Figure 3: Number of non-sentinel specimens positive for influenza by type, subtype and week of report, weeks 40–47/2011

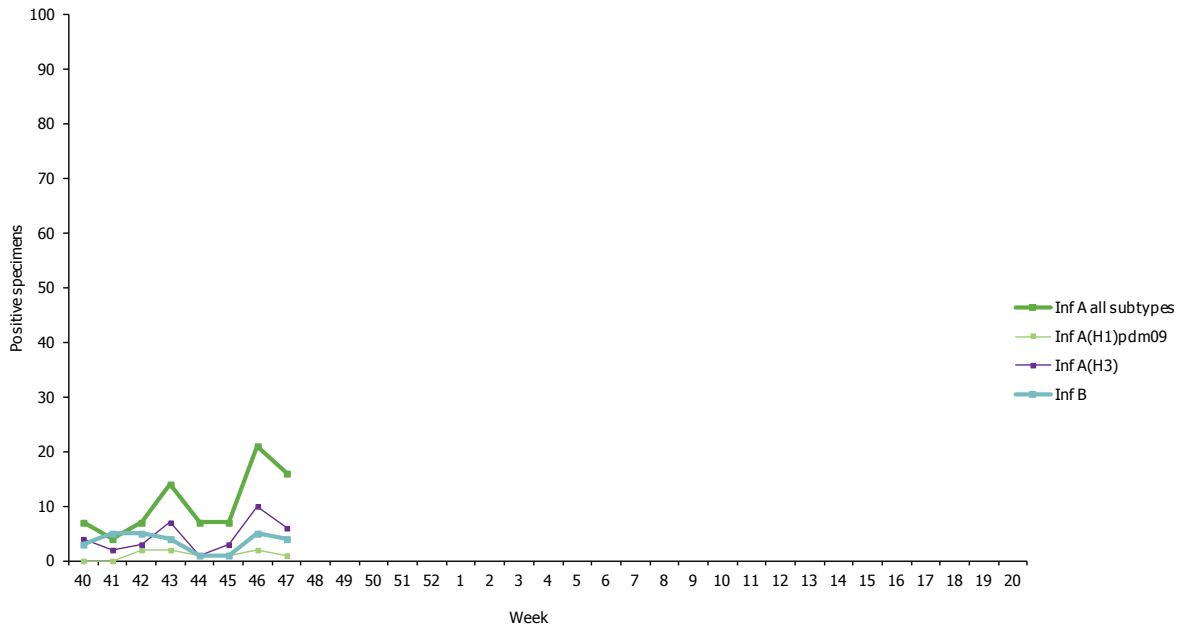


Figure 4: Results of antigenic characterisations of sentinel and non-sentinel influenza virus isolates, weeks 40–47/2011

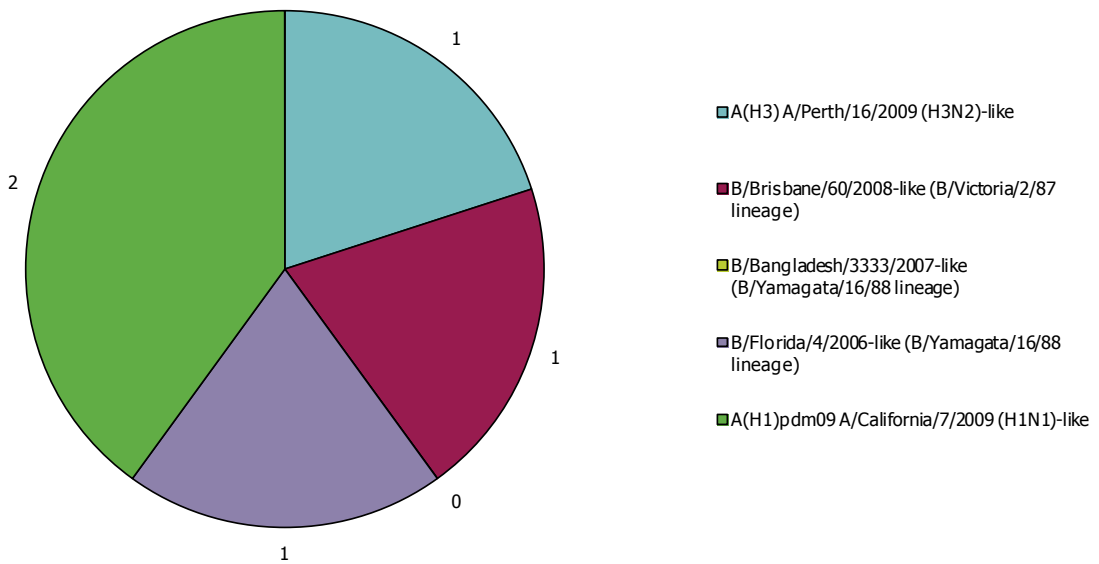
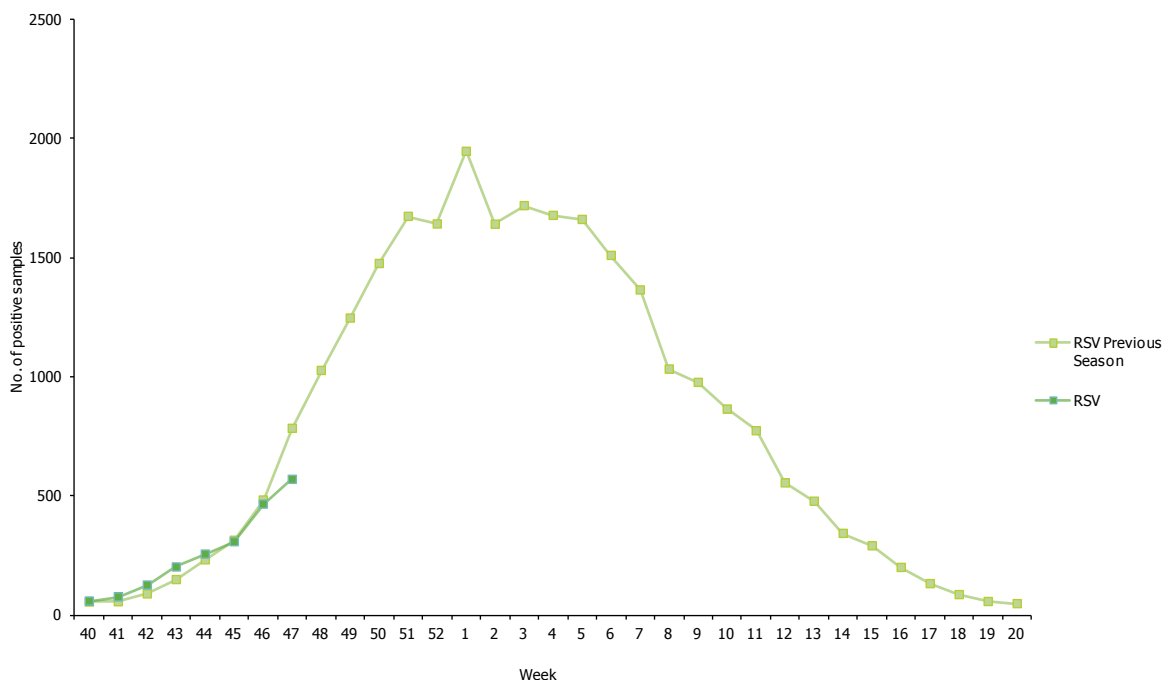


Figure 5: Respiratory syncytial virus (RSV) detections, sentinel and non-sentinel, weeks 40–47/2011



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 influenza disease

Weekly analysis of severe acute respiratory infection – SARI

Since week 40/2011, a total of 38 SARI cases, including one fatality, have been reported to TESSy by four countries (Table 3). Of 28 patients for whom information was available, 17 (60.7%) were male (Table 4). Up to week 47/2011 of reporting, 12 cases tested positive for influenza (Table 5), of which six were known to have been infected by A(H1)pdm09 viruses. Of the 25 patients with documented vaccination status, 24 (96.0%) had not been vaccinated (Table 6).

Table 3: Cumulative number of SARI cases, weeks 40–47/2011

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	2				
Romania	21	0.36	1	0.02	5813728
Slovakia	5	0.09			5440078
United Kingdom (England)	10	0.02			52234000
Total	38		1		

Table 4: Number of SARI cases by age and gender, weeks 40/2011–47/2011

Age groups	Male	Female	Unknown
Under 2	4	2	
2-17	3	2	
18-44	3	3	
45-59	3	1	
>=60	4	3	
Unknown			10
Total	17	11	10

Table 5: Number of SARI cases by influenza type and subtype and other pathogens, week 47/2011 and cumulative for the season

Pathogen	Number of cases during current week	Cumulative number of cases since the start of the season
Influenza A		11
A(H1)pdm09		6
A(H1)		
A(H3)		
A(sub-typing not performed)		5
Influenza B		1
Other pathogen		
Unknown	15	26
Total	15	38

Table 6: Number of SARI cases by vaccination status, weeks 40–47/2011

Vaccination status	Number of cases	Percentage of cases
Not vaccinated	24	63.2
Seasonal vaccination	1	2.6
Unknown	13	34.2
TOTAL	38	

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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