

SURVEILLANCE REPORT

Bi-weekly influenza surveillance overview

1 July 2011

Main surveillance developments in weeks 24–25, 2011 (13–26 Jun 2011)

This first page contains the main developments of these weeks and can be printed separately or together with the more detailed information following.

- The influenza season has come to an end in Europe with all countries reporting low intensity and only three countries reporting sporadic activity.
- For the seventh consecutive week, no influenza virus was detected in specimens from sentinel sources. Three influenza type A viruses were detected in non-sentinel specimens over the two-week period.
- Four SARI cases were reported, one of which tested positive for influenza virus.

Sentinel surveillance of influenza-like illness (ILI)/ acute respiratory infection (ARI): Low influenza activity was reported by 18 countries, associated with sporadic or no activity in terms of geographic spread. For more information, [click here](#).

Virological surveillance: No influenza virus was detected in specimens collected by sentinel practitioners. Only three influenza viruses were detected from non-sentinel sources during the two weeks. More details on characterisation of circulating viruses can be found in the [May-June](#) Report prepared by the Community Network of Reference Laboratories (CNRL) coordination team. For more information, [click here](#).

Hospital surveillance of severe acute respiratory infection (SARI): Four SARI cases were reported, one of which tested positive for influenza virus. For more information, [click here](#).

Sentinel surveillance (ILI/ARI)

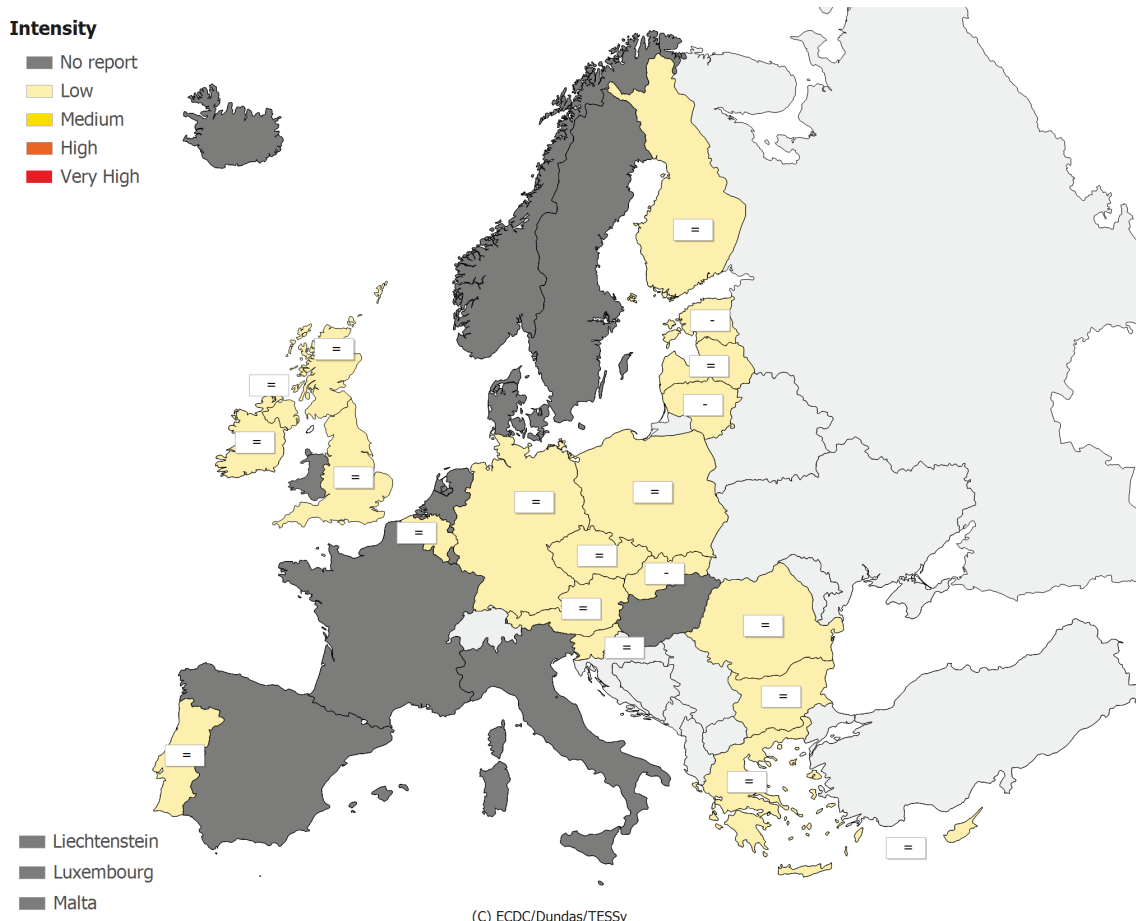
Weekly analysis – epidemiology

During weeks 24–25/2011, all 18 reporting countries experienced low intensity of influenza activity (Table 1, Map 1).

In terms of geographic spread, sporadic activity was reported by Cyprus, Poland and the UK (Scotland). No activity was reported by the remaining 16 countries and the UK (England and Northern Ireland).

Stable or decreasing trends were reported by all 18 countries (Table 1, Map 2).

Map 1 Intensity for weeks 24–25, 2011*



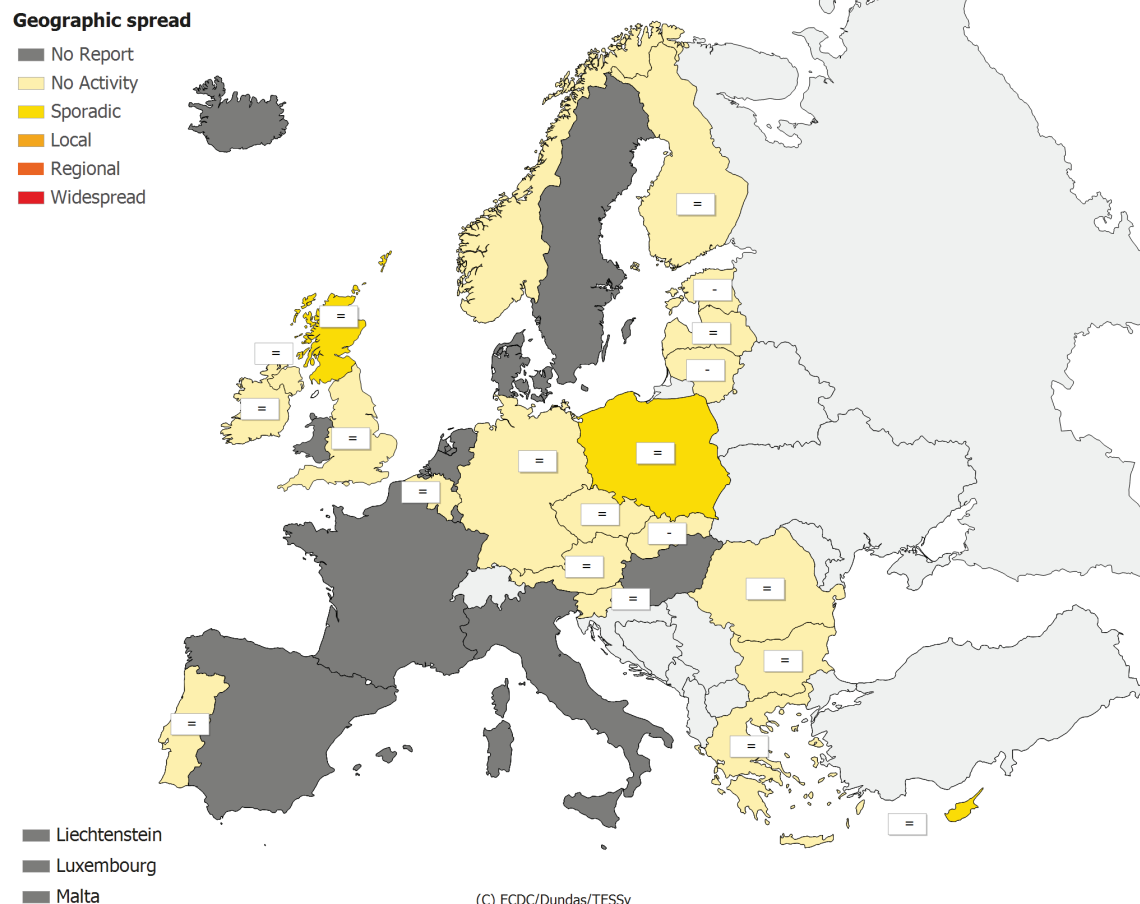
* A type/subtype is reported as dominant when > 40 % of all samples are positive for the type/subtype.

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		

*The map displays data for the most recent reported week only, of the two-week surveillance period. For the other week's information please consult the weekly 'Influenza activity maps' [here](#).

Map 2 Geographic spread for weeks 24–25, 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:

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)		

**The map displays data for the most recent reported week only, of the two-week surveillance period. For the other weeks' information please consult the weekly 'Influenza activity maps' [here](#).*

Table 1 Epidemiological and virological overview by country, weeks 24–25, 2011

Country	Inten- sity	Geogra- phic spread	Trend	No. of sentinel swabs	Dominant type	% positive	ILI per 100 000	ARI per 100 000	Epidemio- logical overview	Virolo- gical overview
Austria	Low	No activity	Stable	0	None	0.0	-	-	Graphs	Graphs
Belgium	Low	No activity	Stable	7	None	0.0	17.0	823.3	Graphs	Graphs
Bulgaria	Low	No activity	Stable	0	None	0.0	-	354.2	Graphs	Graphs
Cyprus	Low	Sporadic	Stable	-	-	0.0	-*	-*	Graphs	Graphs
Czech Republic	Low	No activity	Stable	-	-	0.0	8.7	502.3	Graphs	Graphs
Denmark				-	-	0.0	-	-		
Estonia	Low	No activity	Decreasing	0	None	0.0	2.2	84.3	Graphs	Graphs
Finland	Low	No activity	Stable	4	None	0.0	-	-	Graphs	Graphs
France				2	None	0.0	-	-	Graphs	Graphs
Germany	Low	No activity	Stable	7	None	0.0	-	349.7	Graphs	Graphs
Greece	Low	No activity	Stable	0	None	0.0	26.8	-	Graphs	Graphs
Hungary				-	-	0.0	-	-		
Iceland				-	-	0.0	-	-	Graphs	Graphs
Ireland	Low	No activity	Stable	3	None	0.0	3.5	-	Graphs	Graphs
Italy				-	-	0.0	-	-		
Latvia	Low	No activity	Stable	0	None	0.0	-*	-*	Graphs	Graphs
Lithuania	Low	No activity	Decreasing	0	None	0.0	0.0	129.6	Graphs	Graphs
Luxembourg				-	-	0.0	-	-		
Malta				-	-	0.0	-	-		
Netherlands				3	None	0.0	-	-	Graphs	Graphs
Norway		No activity		0	None	0.0	-	-	Graphs	Graphs
Poland	Low	Sporadic	Stable	0	None	0.0	8.8	-	Graphs	Graphs
Portugal	Low	No activity	Stable	-	-	0.0	0.0	-	Graphs	Graphs
Romania	Low	No activity	Stable	0	None	0.0	0.2	521.7	Graphs	Graphs
Slovakia	Low	No activity	Decreasing	0	None	0.0	65.8	841.8	Graphs	Graphs
Slovenia	Low	No activity	Stable	0	None	0.0	0.0	475.4	Graphs	Graphs
Spain				0	None	0.0	-	-	Graphs	Graphs
Sweden				0	None	0.0	-	-	Graphs	Graphs
UK - England	Low	No activity	Stable	19	None	0.0	2.4	269.9	Graphs	Graphs
UK - Northern Ireland	Low	No activity	Stable	4	-	0.0	5.6	288.8	Graphs	Graphs
UK - Scotland	Low	Sporadic	Stable	0	None	0.0	4.1	159.3	Graphs	Graphs
UK - Wales				-	-	0.0	-	-		
Europe				49		0.0				Graphs

**Incidence per 100 000 is not calculated for these countries as no population denominator is provided.*

Liechtenstein is not reporting to the European Influenza Surveillance Network.

For intensity, geographic spread and trend, the table displays data for the most recent reported week only, of the two-week surveillance period.

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) are participating. 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 weeks 24–25/2011, 21 countries reported virological data. None of the 49 sentinel specimens tested were positive for influenza virus. Of the non-sentinel source specimens (i.e. specimens collected for diagnostic purposes in hospitals), three were reported positive for influenza virus type A. One was subtyped as an A(H3) virus.

Since week 40/2010, of the 58 825 influenza detections in sentinel and non-sentinel specimens, 38 899 (66.1%) were influenza A and 19 926 (33.9%) were influenza B viruses. Of 27 971 subtyped influenza A viruses, 27 216 (97.3%) were A(H1)2009 and 755 (2.7%) were A(H3) viruses (Table 2).

Since week 40/2010, 4 697 influenza viruses from sentinel and non-sentinel specimens have been characterised antigenically (Figure 1): 2 347 as A/California/7/2009 (H1N1)-like; 2 004 as B/Brisbane/60/2008-like (Victoria lineage); 184 as B/Florida/4/2006-like (Yamagata lineage); 149 as A/Perth/16/2009 (H3N2)-like and 13 as B/Bangladesh/3333/2007-like (Yamagata lineage).

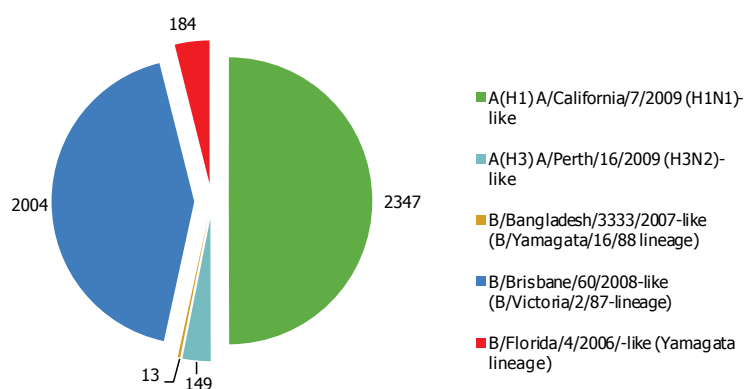
More details on characterisation of circulating viruses can be found in the [May-June](#) Report prepared by the Community Network of Reference Laboratories (CNRL) coordination team. The viruses circulating this season remain well-matched with the 2010/11 season vaccine viruses.

Table 2 Weekly and cumulative influenza virus detections by type, subtype and surveillance system, weeks 40/2010–25/2011

Virus type/subtype	Current Period		Season		
	Sentinel	Non-Sentinel	Sentinel	Non-Sentinel	
Influenza A		0	3	8437	30462
A (H1) 2009		0	0	7592	19624
A (subtyping not performed)		0	2	594	10334
A (not subtypable)		0	0	0	0
A (H3)		0	1	251	504
A (H1)		0	0	0	0
Influenza B		0	0	5736	14190
Total Influenza		0	3	14173	44652

Note: A(H1)2009, A(H3) and A(H1) include both N-subtyped and non-N-subtyped viruses.

Figure 1 Results of antigenic characterisations of sentinel and non-sentinel influenza virus isolates, weeks 40/2010–25/2011



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

During weeks 24–25/2011, four SARI cases were reported, one of which was related to influenza virus infection.

Since week 40/2010, 5 090 SARI cases and 490 related fatalities have been reported by 10 countries (Table 3). Of the 3 700 hospitalised cases with confirmed influenza virus infection, 3 384 (91.5%) were type A and 316 (8.5%) were type B. Of the 2 980 subtyped influenza A viruses, 2 957 (99.2%) were A(H1)2009 and 23 (0.8%) were A(H3) (Table 4). Since week 40/2010, of 2 040 SARI cases admitted to ICU, at least 1 029 (50.4%) required ventilation (Table 5).

Table 3 Cumulative number of SARI cases, weeks 40/2010–25/2011

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
Portugal	418		45		
Romania	449	7	30	0.47	6413821
Belgium	952				
Spain	1618		190		
Malta	55	13.3	1	0.24	413609
Slovakia	224	4.12	21	0.39	5435273
Finland	89		24		
Austria	373		12		
France	790		144		
Ireland	122		23		
Total	5090		490		

Table 4 Number of SARI cases by influenza type and subtype, week 25/2011 and cumulative for weeks 40/2010– 25/2011

Virus type/subtype	Number of cases during current week	Cumulative number of cases since the start of the season
Influenza A	1	3384
A(H1)2009	1	2957
A(subtyping not performed)		404
A(H3)		23
Influenza B		316
Other Pathogen		39
Unknown	3	1351
Total	4	5090

Table 5 Number of SARI cases by level of care and respiratory support, weeks 40/2010–25/2011

Respiratory support	ICU	Inpatient ward	Other	Unknown
No respiratory support available		1		
No respiratory support necessary	173	471	449	
Oxygen therapy	144	205	395	
Respiratory support given unknown	694	325	880	248
Ventilator	1029	17	6	53

This report was written by an editorial team at the European Centre for Disease Prevention and Control (ECDC): Eeva Broberg, Flaviu Plata 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 Bianca Snijders (RIVM Bilthoven, Netherlands) and Thedi Ziegler (National Institute for Health and Welfare, Finland). 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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