SURVEILLANCE REPORT

Weekly influenza surveillance overview

22 October 2010

Main surveillance developments in week 41/2010 (11 – 17 Oct 2010)

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

- The large majority of countries continue to report low rates and unchanging trends in sentinel physician consultations for influenza-like illness and acute respiratory infection.
- Four (1.7%) of 236 sentinel specimens tested positive for influenza virus. Ten (71.4%) of 14 influenza viruses detected in sentinel and non-sentinel specimens were type A, and three of the four type A viruses subtyped were 2009 pandemic influenza A(H1N1).
- No SARI cases were reported for week 41/2010.
- Rare sporadic detections of influenza virus along with sporadic detections of respiratory syncytial virus in a number of European countries suggest that the reported influenza-like illness and acute respiratory infection activity was likely due to respiratory pathogens other than influenza.

Sentinel surveillance of influenza-like illness (ILI)/ acute respiratory infection (ARI): All of the 20 reporting countries continued to report low activity and most of them saw unchanging trends. For more information, **click here.**

Virological surveillance: Sentinel physicians collected 236 specimens, four (1.7%) of which were positive for influenza virus. Of the 14 influenza viruses detected from sentinel and non-sentinel sources during week 41/2010, 10 (71.4%) were type A and four (28.6%) were type B. For more information, **click here.**

Hospital surveillance of severe acute respiratory infection (SARI): During week 41/2010, no SARI cases were reported. For more information, **click here.**

Sentinel surveillance (ILI/ARI)

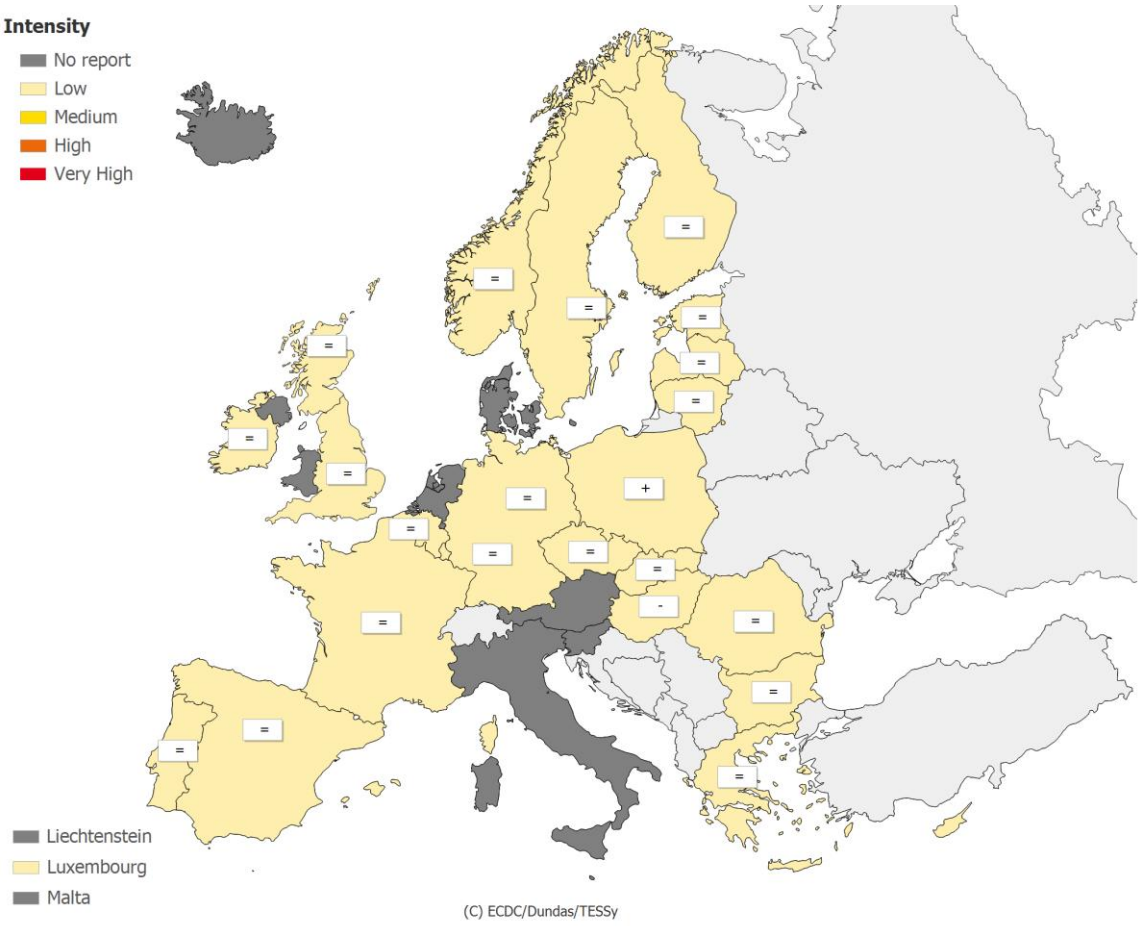
Weekly analysis – epidemiology

During week 41/2010, 22 of 29 countries reported epidemiological data. All countries continued to experience low intensity (Map 1, Table 1).

For the geographic spread indicator, Cyprus, Estonia, Slovakia and the UK (England) reported sporadic cases, while all other countries observed no activity (Map 2, Table 1).

Compared with the previous week, Poland reported an increase in the consultation rates for ILI/ARI while Hungary reported a decrease. The remaining countries reported no change (Map 1 and Table 1). Consultation rates continue to be at national baseline levels throughout the reporting countries.

Map 1: Intensity for week 41/2010

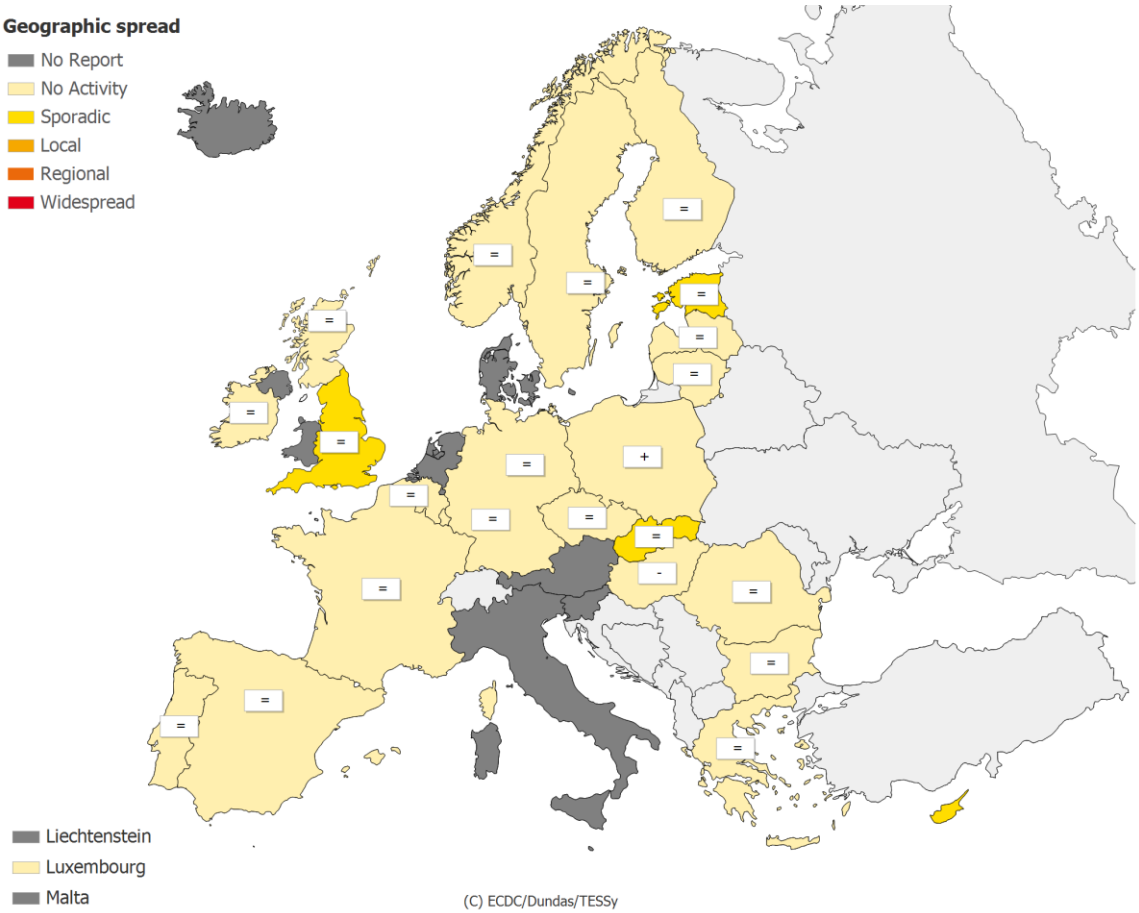


* A type/subtype is reported as dominant when > 40 % of all samples are positive for the type/subtype.

Legend:

Low	No influenza activity or influenza at baseline levels	-	Decreasing clinical activity
Medium	Usual levels of influenza activity	+	Increasing clinical activity
High	Higher than usual levels of influenza activity	=	Stable clinical activity
Very high	Particularly severe levels of influenza activity		

Map 2: Geographic spread for week 41/2010



* 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 activity	No evidence of influenza virus activity (clinical activity remains at baseline levels)
Sporadic	Isolated cases of laboratory confirmed influenza infection
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)

-	Decreasing clinical activity
+	Increasing clinical activity
=	Stable clinical activity

Table 1: Epidemiological and virological overview by country, week 41/2010

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				0	None	-	-	-	Graphs	Graphs
Belgium	Low	No activity	Stable	16	-	0.0	39.3	1065.6	Graphs	Graphs
Bulgaria	Low	No activity	Stable	0	None	-	-	535.2	Graphs	Graphs
Cyprus	Low	Sporadic		-	-	-	-*	-*	Graphs	Graphs
Czech Republic	Low	No activity	Stable	-	-	-	19.4	812.1	Graphs	Graphs
Denmark				0	None	-	-	-	Graphs	Graphs
Estonia	Low	Sporadic	Stable	4	None	0.0	4.4	272.6	Graphs	Graphs
Finland	Low	No activity	Stable	21	None	0.0	-	-	Graphs	Graphs
France	Low	No activity	Stable	-	-	-	-	1604.1	Graphs	Graphs
Germany	Low	No activity	Stable	7	None	14.3	-	983.6	Graphs	Graphs
Greece	Low	No activity	Stable	0	None	-	66.6	-	Graphs	Graphs
Hungary	Low	No activity	Decreasing	-	-	-	92.3	-	Graphs	Graphs
Iceland				-	-	-	-	-		
Ireland	Low	No activity	Stable	8	None	0.0	6.6	-	Graphs	Graphs
Italy				-	-	-	-	-		
Latvia	Low	No activity	Stable	0	None	-	0.0	991.5	Graphs	Graphs
Lithuania	Low	No activity	Stable	-	-	-	0.9	438.3	Graphs	Graphs
Luxembourg	Low	No activity	Stable	6	None	0.0	-*	-*	Graphs	Graphs
Malta				-	-	-	-	-		
Netherlands				8	None	0.0	-	-	Graphs	Graphs
Norway	Low	No activity	Stable	0	None	-	22.9	-	Graphs	Graphs
Poland	Low	No activity	Increasing	7	None	0.0	43.9	-	Graphs	Graphs
Portugal	Low	No activity	Stable	0	None	-	11.7	-	Graphs	Graphs
Romania	Low	No activity	Stable	10	None	0.0	9.4	820.6	Graphs	Graphs
Slovakia	Low	Sporadic	Stable	-	-	-	171.3	1595.7	Graphs	Graphs
Slovenia				3	None	0.0	-	-	Graphs	Graphs
Spain	Low	No activity	Stable	33	None	0.0	10.8	-	Graphs	Graphs
Sweden	Low	No activity	Stable	16	None	0.0	3.6	-	Graphs	Graphs
UK - England	Low	Sporadic	Stable	80	None	3.8	8.4	401.3	Graphs	Graphs
UK - Northern Ireland				-	-	-	-	-		
UK - Scotland	Low	No activity	Stable	17	None	0.0	0.9	196.1	Graphs	Graphs
UK - Wales				-	-	-	-	-		
Europe				236		1.7				Graphs

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

Description of the system

This surveillance is based on nationally organized 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) are participating. 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

In week 41/2010, 20 countries reported virological data. Sentinel physicians collected 236 specimens, four (1.7%) of which were positive for influenza virus (Tables 1 and 2). In addition, 10 non-sentinel source specimens (i.e., specimens collected for diagnostic purpose in hospitals) were reported positive for influenza virus. Of the 14 influenza viruses detected from sentinel and non-sentinel sources during week 41/2010, 10 (71.4%) were type A and four (28.6%) were type B. These detections were reported by Estonia, Germany, Greece, Ireland, Spain and the UK (England).

Four of the ten influenza A viruses detected in week 41/2010 were subtyped: three as 2009 pandemic influenza A(H1N1) virus and one as A(H3). Table 2 shows the distribution of both sentinel and non-sentinel specimens by type and subtype.

More details on circulating viruses can be found in the report prepared by the Community Network of Reference Laboratories coordination team.

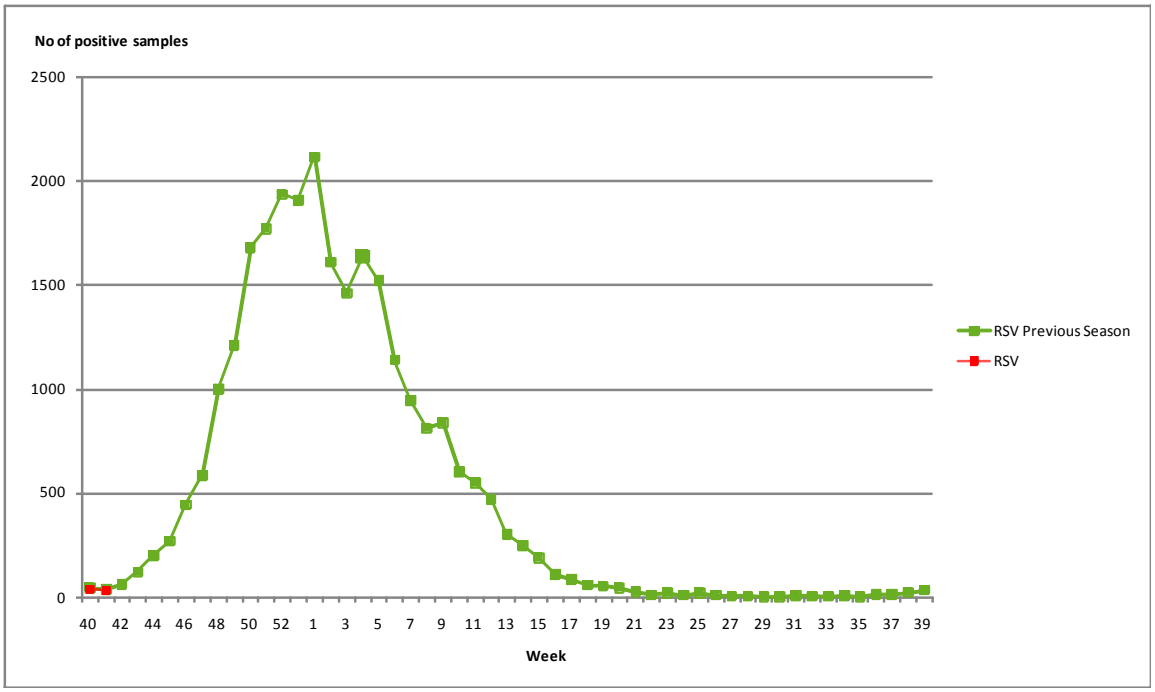
In week 41/2010, seven countries reported 31 detections of respiratory syncytial virus, a number well within the range of the previous season (Figure 1).

Table 2: Weekly and cumulative influenza virus detections by type, subtype and surveillance system, weeks 40/2010–41/2010

	Current Period		Season	
Virus type/subtype	Sentinel	Non-sentinel	Sentinel	Non-sentinel
Influenza A	2	8	4	14
A (pandemic H1N1)	2	1	3	1
A (subtyping not performed)	0	6	1	10
A (not subtypable)	0	0	0	0
A (H3)	0	1	0	3
A (H1)	0	0	0	0
Influenza B	2	2	3	3
Total Influenza	**4**	**10**	**7**	**17**

Note: A(pandemic H1), A(H3) and A(H1) includes both N-subtyped and not N-subtyped viruses

Figure 1: Respiratory syncytial virus (RSV) detections, sentinel and non-sentinel, weeks 40–41/2010



Country comments

In Finland during week 41, nine of 21 specimens tested positive for adenovirus.

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 on the current virus strains recommended by WHO for vaccine preparation click here.

Hospital surveillance – severe acute respiratory infection (SARI)

Weekly analysis – SARI

During week 41/2010, no SARI cases were reported.

The report text was written by an editorial team at the European Centre for Disease Prevention and Control (ECDC): Eeva Broberg, Flaviu Plata, Phillip Zucs 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, The Netherlands) and Thedi Ziegler (National Institute for Health and Welfare, Finland)