SURVEILLANCE REPORT

Bi-weekly influenza surveillance overview

30 July 2010

Main surveillance developments in Weeks 28–29 2010 (12 Jul 2010–25 Jul 2010)

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

- Epidemiological indicators do not show any influenza activity in 14 reporting EU countries.

Sentinel surveillance of influenza-like illness (ILI)/acute respiratory illness (ARI): Low intensity was reported by 13 countries and no geographic spread and stable or decreasing trends were reported by 14 countries. For more information, **click here…**

Virological surveillance: Sentinel physicians collected 62 respiratory specimens, of which none were positive for influenza virus. Of four non-sentinel source specimens, two were positive for influenza B virus and two were influenza A viruses not further sub-typed. For more information, **click here…**

Hospital surveillance of severe acute respiratory infection (SARI): During weeks 28-29/2010, only one SARI case was reported by Slovakia with no causative pathogen identified. For more information, **click here…**

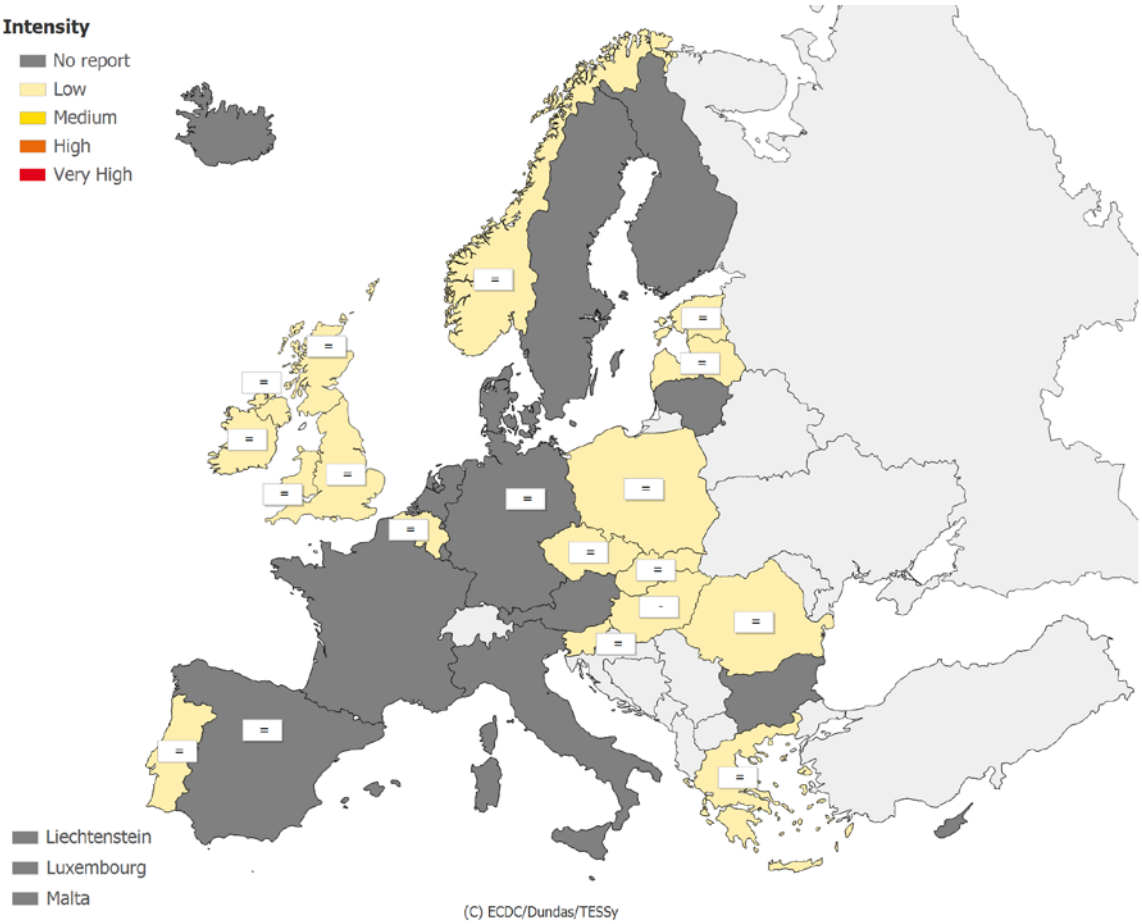
Sentinel surveillance (ILI/ARI)

Weekly analysis – epidemiology

During weeks 28 and 29/2010, 13 of 29 countries reported intensity indicator. For the 21st consecutive week, all reporting countries experienced low influenza intensity (Map 1, Table1).

All countries reported no activity, except the UK (Wales), which reported sporadic activity (Map 2, Table 1). All countries reported a decreasing or stable trend (Table 1).

Map 1: Intensity for Weeks 28–29/2010

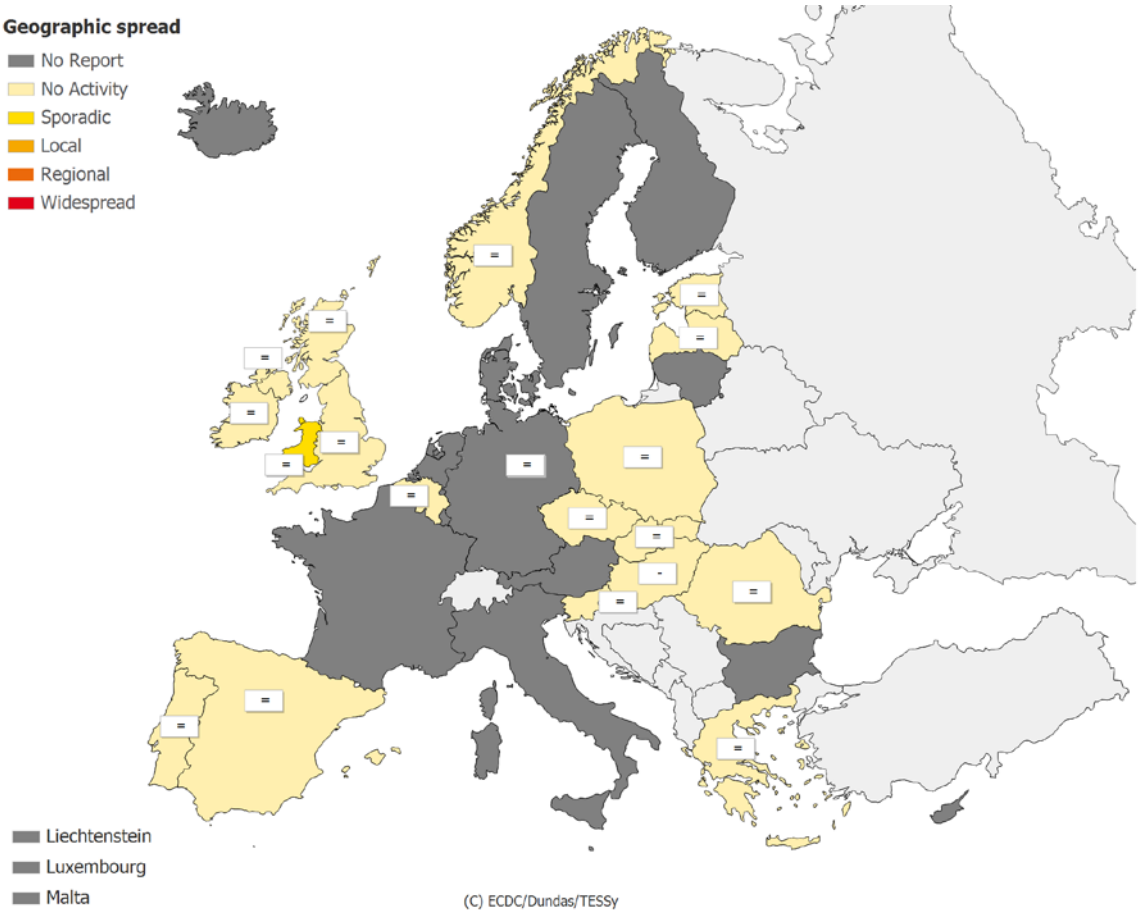


* A type/subtype is reported as dominant when > 40 % of all samples are positive for the type/subtype.

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 Weeks 28–29/2010



* 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 – Weeks 28 and 29/2010

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	-	-	-	8.2	329.9	Graphs	Graphs
Bulgaria				6	None	0.0	-	-	Graphs	Graphs
Cyprus				-	-	-	-	-		
Czech Republic	Low	No activity	Stable	-	-	-	4.7	369.0	Graphs	Graphs
Denmark				0	None	-	-	-	Graphs	Graphs
Estonia	Low	No activity	Stable	4	None	**0.0**	1.0	50.9	Graphs	Graphs
Finland				-	-	-	-	-		
France				-	-	-	-	-		
Germany				4	None	0.0	-	354.7	Graphs	Graphs
Greece	Low	No activity	Stable	-	-	-	22.6	-	Graphs	Graphs
Hungary	Low	No activity	Decreasing	9	None	0.0	8.5	-	Graphs	Graphs
Iceland				-	-	-	-	-		
Ireland	Low	No activity	Stable	0	None	-	0.9	-	Graphs	Graphs
Italy				-	-	-	-	-		
Latvia	Low	No activity	Stable	0	None	-	0.0	206.7	Graphs	Graphs
Lithuania				0	None	-	-	-	Graphs	Graphs
Luxembourg				-	-	-	-	-		
Malta				-	-	-	-	-		
Netherlands				2	None	0.0	-	-	Graphs	Graphs
Norway				1	None	0.0	8.7	-	Graphs	Graphs
Poland	Low	No activity	Stable	2	None	0.0	12.4	-	Graphs	Graphs
Portugal	Low	No activity	Stable	0	-	-	0.0	-	Graphs	Graphs
Romania	Low	No activity	Stable	0	None	-	0.0	422.1	Graphs	Graphs
Slovakia	Low	No activity	Stable	0	None	-	43.3	621.3	Graphs	Graphs
Slovenia	Low	No activity	Stable	1	None	0.0	3.5	682.9	Graphs	Graphs
Spain		No activity	Stable	3	None	0.0	-	-	Graphs	Graphs
Sweden				0	None	-	-	-	Graphs	Graphs
UK - England	Low	No activity	Stable	10	None	0.0	1.7	223.0	Graphs	Graphs
UK - Northern Ireland	Low	No activity	Stable	0	None	-	5.6	186.5	Graphs	Graphs
UK - Scotland	Low	No activity	Stable	20	None	0.0	1.0	109.2	Graphs	Graphs
UK - Wales	Low	Sporadic	Stable	-	-	-	1.7	-	Graphs	Graphs
Europe				62		0.0				Graphs

Note: Liechtenstein is not reporting to the European Influenza Surveillance Network

Description of the system

This 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) 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

During weeks 28 and 29/2010, 18 countries reported virological data. Sentinel physicians collected 62 specimens of which none were positive for influenza virus (Table 2). Four non-sentinel source specimens (e.g, specimens collected for diagnostic purpose in hospital settings) tested positive for influenza B virus and two for influenza A viruses (not subtyped).

Cumulative data since week 40/2009 show that subtyping was performed on 16 199 type A influenza viruses detected in samples from sentinel practices. Of these, 99.6% (16 141) were identified as the 2009 pandemic A(H1N1) virus. Table 2 shows the distribution of both sentinel and non-sentinel specimens by type and subtype. The proportion of positive sentinel samples has remained at low levels since week 07/2010.

An update from CNRL on influenza viruses characterisation can be found here: Surveillance report (July 2010).

Table 2: Weekly and cumulative influenza virus detections by type, subtype and surveillance system, weeks 40/2009–29/2010

	Current Period		Season	
Virus type/subtype	Sentinel	Non-sentinel	Sentinel	Non-sentinel
Influenza A	0	2	16880	91016
A (pandemic H1N1)	0	0	16141	79403
A (subtyping not performed)	0	2	681	11459
A (not subtypable)	0	0	14	50
A (H3)	0	0	8	53
A (H1)	0	0	36	51
Influenza B	0	2	186	437
Total Influenza	**0**	**4**	**17066**	**91453**

Note: A(pandemic H1N1), A(H3) and A(H1) includes both N-subtyped and not N-subtyped viruses

Table 3: Results of antigenic characterisations of sentinel and non-sentinel influenza virus isolates, weeks 40/2009–29/2010

Strain name	Number of strains
A(H1)v California/7/2009-like	3172
A(H3) A/Brisbane/10/2007 (H3N2)-like	6
A(H3) A/Perth/16/2009 (H3N2)-like	26
B/Brisbane/60/2008-like (B/Victoria/2/87 lineage)	19
B/Florida/4/2006-like (B/Yamagata/16/88 lineage)	5

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 28–29/2010, only one SARI case was reported by Slovakia. The causative pathogen was unknown.

Since the beginning of SARI Surveillance, 11 countries have reported 11 456 cases, of which 95% were 2009 pandemic influenza A(H1N1) laboratory-confirmed cases. Of these 11 456 SARI cases, 573 (5%) related deaths were reported.

Table 4: Cumulative number of SARI cases, weeks 40/2009–week 29/2010

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
Austria	2917		41		
Belgium	1749	16.39			10668666
Cyprus	26		9		
Finland	1422	26.7	56	1.05	5326314
France	1357		302		
United Kingdom	1639	4.15	65	0.16	39503332
Ireland	903		17		
Malta	216	52.22	1	0.24	413609
Netherlands	652	3.95	29	0.18	16521505
Romania	210	16.56	13	1.02	1268418
Slovakia	365		40		
Total	11456		573		73701844

Table 5: Number of SARI cases by influenza type and subtype, weeks 28–29/2010

Virus type/subtype	Number of cases during current week	Cumulative number of cases since the start of the season
Influenza A		9184
A (pandemic H1N1)		9152
A(subtyping not performed)		25
A(H3)		
A(H1)		7
A(H5)		
Influenza B		
Unknown	1	2272
Total	1	11456

The report text was written by an editorial team at the European Centre for Disease Prevention and Control (ECDC): Flaviu Plata, Phillip Zucs, Bruno Ciancio, Rene Snacken and Eeva Broberg. The bulletin text was reviewed by the Community Network of Reference Laboratories for Human Influenza in Europe (CNRL) coordination team: Adam Meijer, Rod Daniels, Alan Hay and Maria Zambon. On behalf of the EISN members the bulletin text was reviewed by Joan O'Donnell (Health Protection Surveillance Centre, Ireland) and Katarina Prosenc (National Institute of Public Health, Slovenia).

Maps and commentary used in this Weekly Influenza Surveillance Overview (WISO) do not imply any opinions whatsoever of ECDC or its partners on the legal status of the countries and territories shown or concerning their borders.

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 numbers in the database.