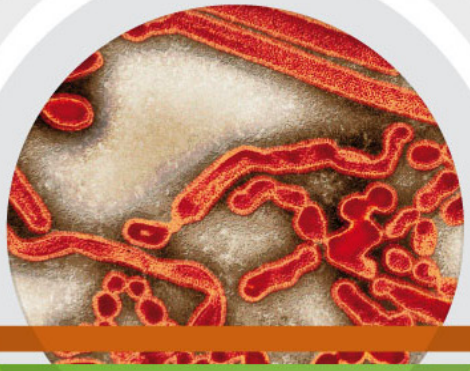


SURVEILLANCE REPORT

Fortnightly influenza surveillance overview

2 August 2013

Main surveillance developments in weeks 29–30/2013 (15–28 July 2013)

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

During the period between influenza seasons from week 21/2013 onwards, ECDC produces overviews of influenza activity on a fortnightly basis. For weeks 29–30/2013:

- All 17 reporting countries reported low-intensity transmission with stable or declining trends.
- Five countries tested 18 sentinel specimens, none of which was positive for influenza virus.
- No laboratory-confirmed severe influenza cases were reported. However, since week 21/2013, five hospitalised confirmed cases have been reported by two countries.

Since week 21/2013, influenza activity has been low in Europe.

Sentinel surveillance of influenza-like illness (ILI)/ acute respiratory infection (ARI): During the current two-week reporting period, all reporting countries experienced low-intensity influenza activity. For more information, click here.

Virological surveillance: None of the 18 sentinel specimens collected by five countries tested positive for influenza virus. For more information, click here.

Hospital surveillance of influenza laboratory-confirmed cases: Since week 21/2013, five laboratory-confirmed severe influenza cases have been reported. For more information, click here.

Sentinel surveillance (ILI/ARI)

Epidemiology

For weeks 29–30/2013, clinical data were reported by 17 countries.

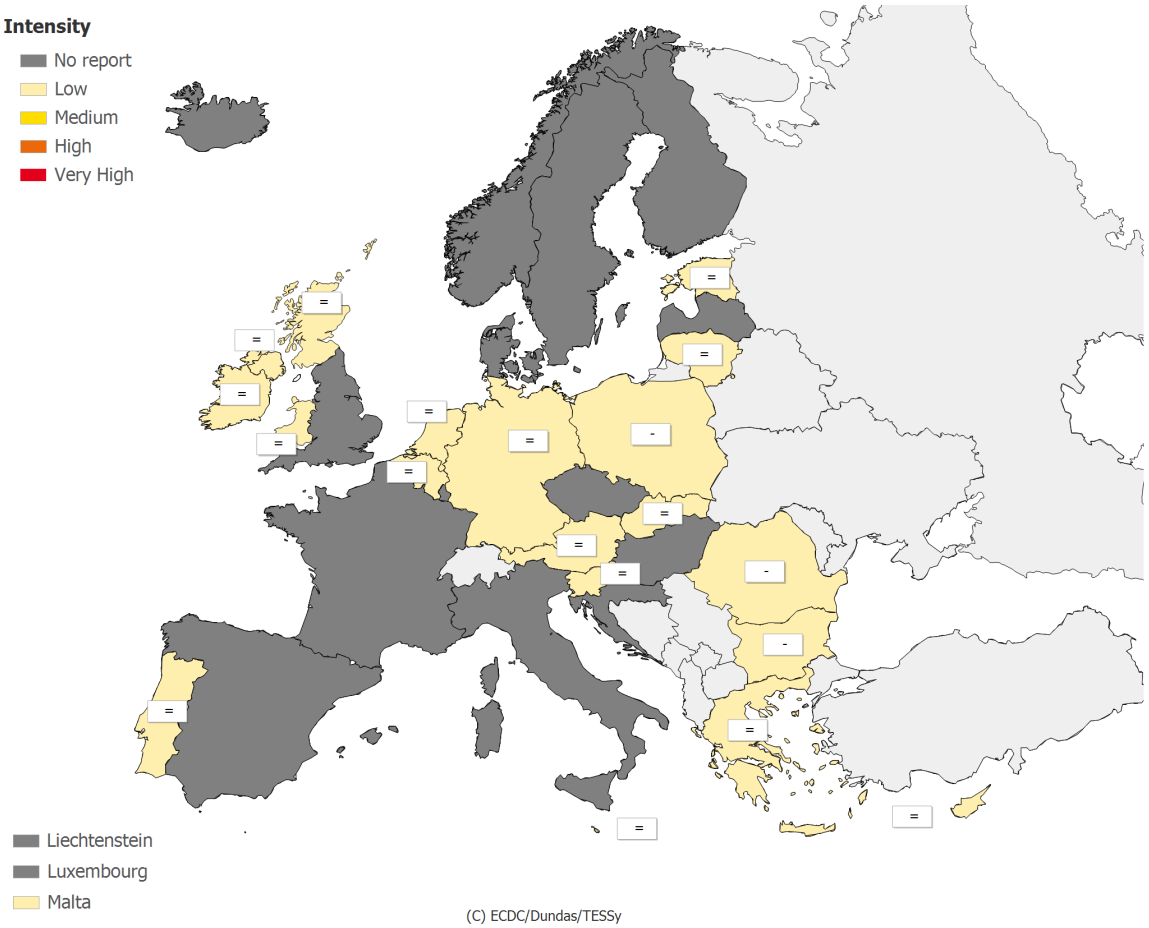
All reporting countries experienced low-intensity influenza activity, the lowest category of reporting (Table 1, Map 1).

For weeks 29–30, geographic patterns of influenza activity were reported as sporadic or local by Malta and the UK (Scotland). All other countries reported no activity (Table 1, Map 2).

For weeks 29–30, Bulgaria, Poland, and Romania reported decreasing trends. The remaining 14 countries reported stable trends (Table 1, Map 2).

Since week 21/2013, all countries have reported a return to baseline levels of ILI/ARI rates after the 2012–2013 influenza season.

Map 1. Intensity for weeks 29–30/2013

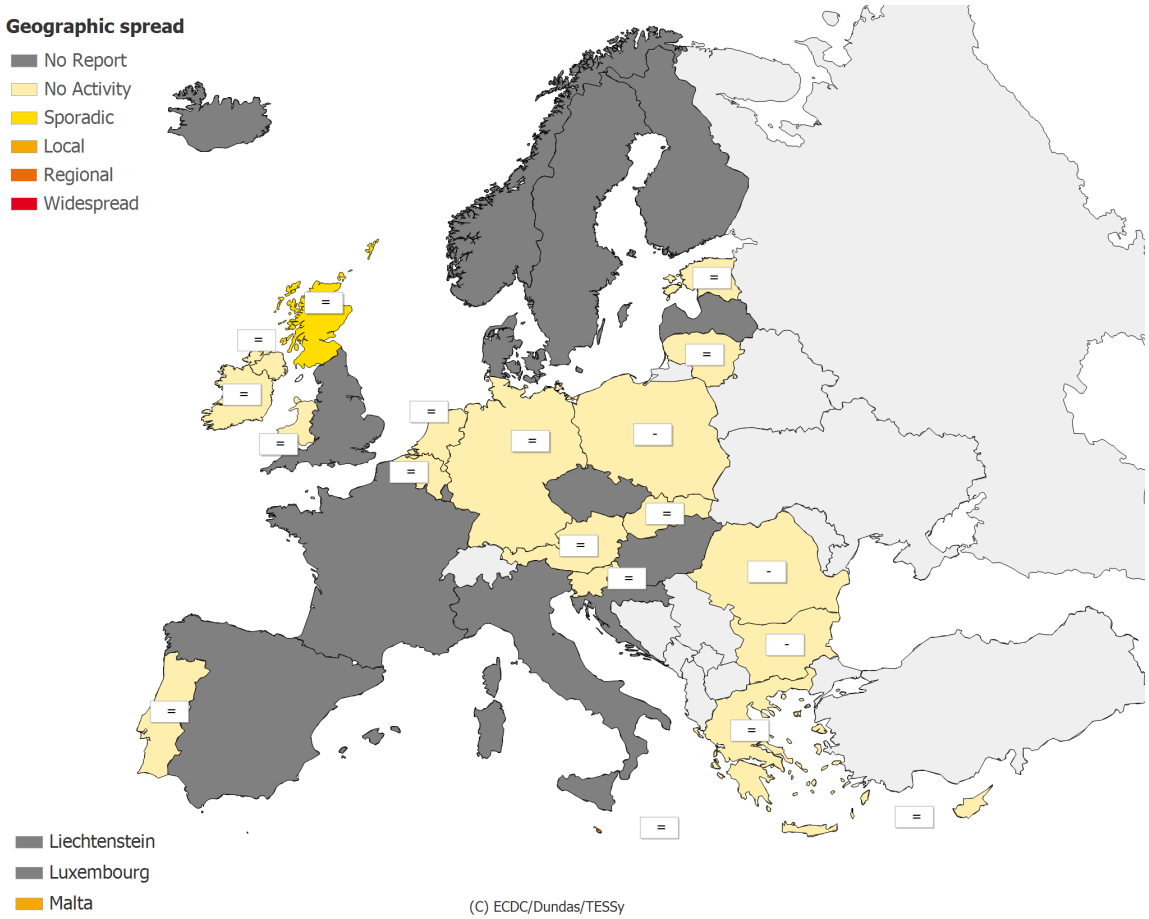


* A type/subtype is reported as dominant when at least ten samples have been detected as influenza positive in the country and of those > 40 % are positive for the type/subtype.

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 weeks 29–30/2013



* 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
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)

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

Table 1. Epidemiological and virological overview by country, weeks 29-30/2013

Country	Intensity	Geographic spread	Trend	No. of sentinel specimens	Dominant type	Percentage positive	ILI per 100 000	ARI per 100 000	Epidemio-logical overview	Virological overview
Austria	Low	No activity	Stable	0	None	0.0	-	-	Graphs	Graphs
Belgium	Low	No activity	Stable	0	None	0.0	1.6	518.2	Graphs	Graphs
Bulgaria	Low	No activity	Decreasing	0	None	0.0	-	244.3	Graphs	Graphs
Cyprus	Low	No activity	Stable	-	-	0.0	-*	-*	Graphs	Graphs
Czech Republic				-	-	0.0	-	-		
Denmark				0	None	0.0	-	-	Graphs	Graphs
Estonia	Low	No activity	Stable	0	None	0.0	1.5	61.3	Graphs	Graphs
Finland				-	-	0.0	-	-		
France				-	-	0.0	-	-		
Germany	Low	No activity	Stable	9	None	0.0	-	496.7	Graphs	Graphs
Greece	Low	No activity	Stable	0	None	0.0	17.2	-	Graphs	Graphs
Hungary				-	-	0.0	-	-		
Iceland				-	-	0.0	-	-		
Ireland	Low	No activity	Stable	2	None	0.0	1.2	-	Graphs	Graphs
Italy				-	-	0.0	-	-		
Latvia				-	-	0.0	-	-		
Lithuania	Low	No activity	Stable	0	None	0.0	0.1	114.9	Graphs	Graphs
Luxembourg				-	-	0.0	-	-		
Malta	Low	Local	Stable	0	None	0.0	-*	-*	Graphs	Graphs
Netherlands	Low	No activity	Stable	4	None	0.0	6.5	-	Graphs	Graphs
Norway				2	None	0.0	-	-	Graphs	Graphs
Poland	Low	No activity	Decreasing	0	None	0.0	48.3	-	Graphs	Graphs
Portugal	Low	No activity	Stable	0	None	0.0	0.0	-	Graphs	Graphs
Romania	Low	No activity	Decreasing	0	None	0.0	0.0	312.0	Graphs	Graphs
Slovakia	Low	No activity	Stable	0	None	0.0	27.0	565.2	Graphs	Graphs
Slovenia	Low	No activity	Stable	0	None	0.0	0.0	381.2	Graphs	Graphs
Spain				0	None	0.0	-	-	Graphs	Graphs
Sweden				-	-	0.0	-	-	Graphs	Graphs
UK - England				-	-	0.0	-	-		
UK - Northern Ireland	Low	No activity	Stable	1	None	0.0	2.4	182.7	Graphs	Graphs
UK - Scotland	Low	Sporadic	Stable	-	None	0.0	1.0	197.2	Graphs	Graphs
UK - Wales	Low	No activity	Stable	-	-	0.0	-	-	Graphs	Graphs
Europe				**18**		**0.0**				**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 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

For weeks 29–30/2013, five countries tested 18 sentinel specimens, none of which was positive for influenza virus (Tables 1–2).

In addition, 13 non-sentinel source specimens (e.g. specimens collected for diagnostic purposes in hospitals) were found to be positive for influenza; 12 were type A and one type B (Table 2). Of five influenza A viruses subtyped, all were A(H1)pdm09 (Table 2). The lineage of the detected B virus is unknown.

Since week 21/2013, twenty-three antigenic characterisations of influenza viruses have been reported for sentinel and non-sentinel specimens. Of the ten antigenic characterisations of influenza A viruses reported, two have been characterised as A/Victoria/361/2011(H3N2)-like and eight as A(H1)pdm09 A/California/7/2009 (H1N1)-like. Of the thirteen antigenic characterisations of influenza B viruses reported, all have been characterised as B/Estonia/55669/2011-like (B/Yamagata/16/88-lineage). Since week 21/2013, no genetic characterisations of influenza viruses have been reported.

More details on viruses that circulated from 1 January to 31 May 2013 can be found in the July report prepared by the European Reference Laboratory Network for Human Influenza (ERLI-Net) coordination team.

Since week 21/2013, one influenza A(H1N1)pdm09 and two influenza B viruses have been tested for antiviral susceptibility. None showed indications of reduced inhibition to neuraminidase inhibitors. For weeks 29–30/2013, no reduced neuraminidase inhibitor susceptibility was reported.

For weeks 29–30/2013, four countries reported four respiratory syncytial virus detections, remaining below the baseline level.

Table 2. Weekly (weeks 29–30/2013) and cumulative (from week 21/2013) influenza virus detections by type, subtype and surveillance system

Virus type/subtype	Current period Sentinel	Current period Non-sentinel	Season Sentinel	Season Non-sentinel
Influenza A	0	12	2	102
A(H1)pdm09	0	5	2	22
A(H3)	0	0	0	25
A(sub-type unknown)	0	7	0	55
Influenza B	0	1	0	50
B(Vic) lineage	0	0	0	1
B(Yam) lineage	0	0	0	8
Unknown lineage	0	1	0	40
Total influenza	**0**	**13**	**2**	**152**

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

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

Hospital surveillance – severe influenza disease

Weekly analysis of hospitalised laboratory-confirmed influenza cases

For weeks 29–30/2013, no hospitalised laboratory-confirmed influenza cases were reported. Since week 21/2013, five hospitalised confirmed cases have been reported by Ireland and Spain. Two patients were infected with A(H1N1)pdm09, one with A(H3), one with an un-subtyped A virus and one with a B virus.

The EuroMOMO mortality monitoring system

Analysis of pooled data from 11 countries or regions showed that overall all-cause mortality has been at normal levels since week 17/2013. In single countries there have been excess mortality peaks in recent weeks. This may reflect increased mortality due to heat. Further details are available on http://www.euromomo.eu.

This report was written by an editorial team at the European Centre for Disease Prevention and Control (ECDC): Eeva Broberg, Julien Beauté and René Snacken. The bulletin text was reviewed by the European Reference Laboratory Network for Human Influenza (ERLI-Net) 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), Vincent Enouf (Institut Pasteur, France) and Anne Mazick (Statens Serum Institut, Copenhagen). In addition, the report is reviewed by experts of WHO Regional Office for Europe.