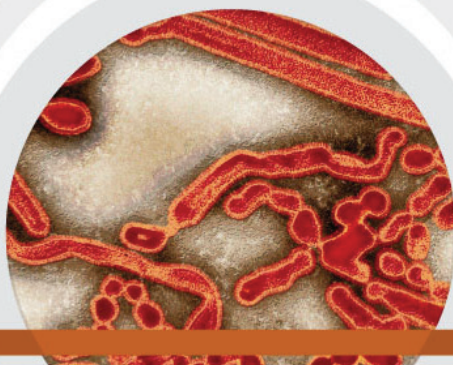


SURVEILLANCE REPORT



Weekly influenza surveillance overview

9 November 2012

Main surveillance developments in week 44/2012 (29 Oct 2012–4 Nov 2012)

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

Weekly reporting on influenza surveillance for the 2012–13 season started in week 40/2012 in Europe.

- In week 44/2012, all 26 reporting countries experienced low intensity of clinical influenza activity.
- Of 279 sentinel specimens tested across 19 countries, only two were positive for influenza virus.
- No hospitalised laboratory-confirmed influenza cases were reported.

Five weeks into the surveillance season for influenza, there has been no evidence of sustained influenza virus transmission in EU/EEA countries.

Sentinel surveillance of influenza-like illness (ILI)/ acute respiratory infection (ARI): Influenza activity of low-intensity was notified by all 26 countries reporting, with the majority of them indicating sporadic spread or no activity. For more information, [click here](#).

Virological surveillance: Twenty-four countries reported virology data. Sentinel physicians collected 279 specimens, of which two (0.7%) were positive for influenza virus. For more information, [click here](#).

Hospital surveillance of influenza laboratory-confirmed cases: In week 44/2012, there were no hospitalised influenza laboratory-confirmed cases reported. For more information, [click here](#).

Sentinel surveillance (ILI/ARI)

Weekly analysis – epidemiology

During week 44/2012, all 26 countries reporting clinical data experienced low-intensity influenza activity (Table 1, Map 1).

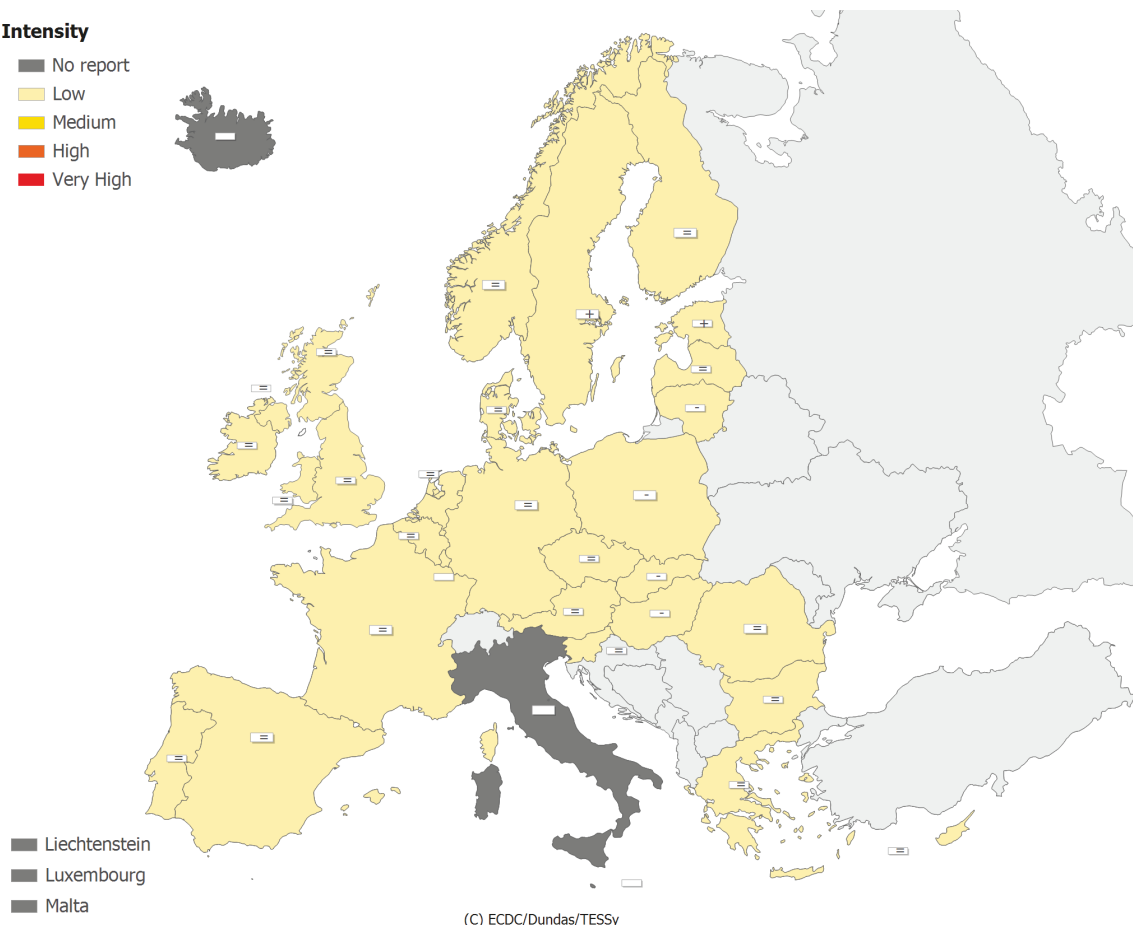
Geographic spread was reported as sporadic by seven countries (Denmark, France, Germany, Norway, Slovakia, Sweden and the United Kingdom), while the remaining 19 countries reported no activity (Table 1, Map 2).

Stable trends in clinical activity were reported by 19 countries while increasing trends were reported by Estonia and Sweden. A decreasing trend was reported by Hungary, Lithuania, Poland and Slovakia (Table 1, Map 2).

Map 1. Intensity for week 44/2012

Intensity

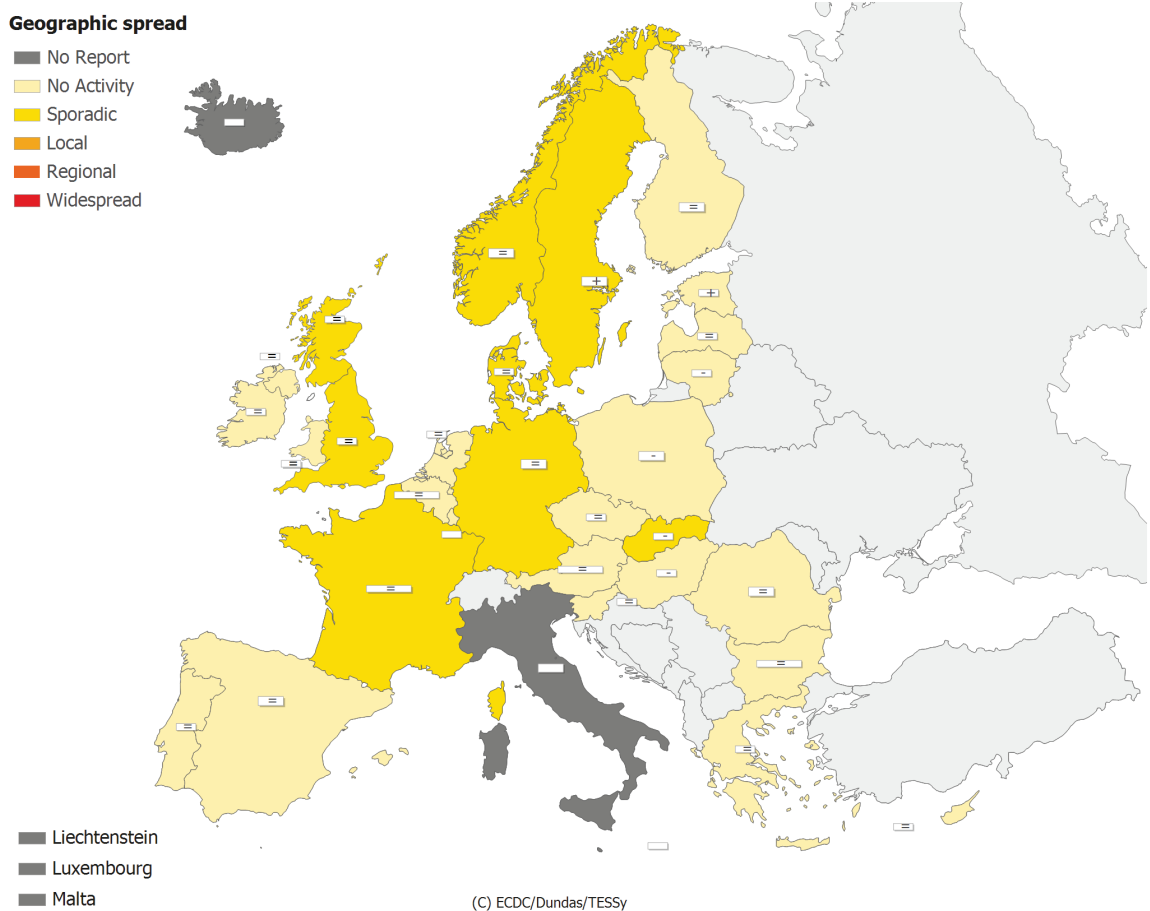
- No report
- Low
- Medium
- High
- Very High



* 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 44/2012



* 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
		=	Stable clinical activity
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)		

Table 1. Epidemiological and virological overview by country, week 44/2012

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	0	None	0.0	11.2	-	Graphs	Graphs
Belgium	Low	No activity	Stable	11	None	0.0	60.8	1240.4	Graphs	Graphs
Bulgaria	Low	No activity	Stable	0	None	0.0	-	552.3	Graphs	Graphs
Cyprus	Low	No activity	Stable	-	-	0.0	-*	-*	Graphs	Graphs
Czech Republic	Low	No activity	Stable	-	-	0.0	20.9	810.1	Graphs	Graphs
Denmark	Low	Sporadic	Stable	6	None	0.0	21.7	-	Graphs	Graphs
Estonia	Low	No activity	Increasing	0	-	0.0	5.5	267.8	Graphs	Graphs
Finland	Low	No activity	Stable	9	None	0.0	-	-	Graphs	Graphs
France	Low	Sporadic	Stable	43	None	0.0	-	1457.1	Graphs	Graphs
Germany	Low	Sporadic	Stable	36	None	2.8	-	945.4	Graphs	Graphs
Greece	Low	No activity	Stable	0	-	0.0	20.6	-	Graphs	Graphs
Hungary	Low	No activity	Decreasing	1	None	0.0	30.4	-	Graphs	Graphs
Iceland				-	-	0.0	-	-		
Ireland	Low	No activity	Stable	4	None	0.0	4.2	-	Graphs	Graphs
Italy				-	-	0.0	-	-		
Latvia	Low	No activity	Stable	0	None	0.0	0.0	896.7	Graphs	Graphs
Lithuania	Low	No activity	Decreasing	4	None	0.0	1.3	363.8	Graphs	Graphs
Luxembourg	Low	No activity	No information available	10	None	0.0	-*	-*	Graphs	Graphs
Malta				-	-	0.0	-	-		
Netherlands	Low	No activity	Stable	11	None	0.0	44.7	-	Graphs	Graphs
Norway	Low	Sporadic	Stable	4	None	0.0	25.6	-	Graphs	Graphs
Poland	Low	No activity	Decreasing	6	None	0.0	74.7	-	Graphs	Graphs
Portugal	Low	No activity	Stable	1	None	0.0	7.0	-	Graphs	Graphs
Romania	Low	No activity	Stable	12	-	0.0	1.6	649.7	Graphs	Graphs
Slovakia	Low	Sporadic	Decreasing	1	None	0.0	109.9	1255.2	Graphs	Graphs
Slovenia	Low	No activity	Stable	2	None	0.0	0.0	409.0	Graphs	Graphs
Spain	Low	No activity	Stable	40	None	0.0	9.9	-	Graphs	Graphs
Sweden	Low	Sporadic	Increasing	35	None	2.9	4.1	-	Graphs	Graphs
UK - England	Low	Sporadic	Stable	33	None	0.0	4.4	309.2	Graphs	Graphs
UK - Northern Ireland	Low	No activity	Stable	0	None	0.0	10.5	320.7	Graphs	Graphs
UK - Scotland	Low	Sporadic	Stable	9	None	0.0	9.2	390.1	Graphs	Graphs
UK - Wales	Low	No activity	Stable	1	-	0.0	5.9	-	Graphs	Graphs
Europe				279		0.7				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

Weekly analysis – virology

In week 44/2012, 19 countries tested 279 sentinel specimens, of which two (0.7%) were positive for influenza A virus (Tables 1 and 2, Figure 1). One, reported by Sweden, was subtyped as A(H1)pdm09 and the other, reported by Germany, was subtyped as A(H3).

In week 44/2012, 51 non-sentinel source specimens, e.g. specimens collected for diagnostic purposes in hospitals, were positive for influenza virus: 37 were type A and 14 were type B. Of the 11 subtyped influenza A viruses, 10 (90.9%) were A(H1)pdm09 and one (9.1%) was A(H3). The lineage of four non-sentinel B viruses was Yamagata (Table 2).

Of the 16 influenza viruses detected in sentinel specimens since week 40/2012, 11 (68.8%) were type A viruses and five (31.2%) were type B viruses. Of eight type A viruses subtyped, six were A(H3) and two A(H1)pdm09.

Of the 153 influenza viruses detected from non-sentinel sources since week 40/2012, 109 (71.2%) were type A, and 44 (28.8%) were type B. Of 21 type A viruses subtyped, 12 (57.1%) were A(H1)pdm09 and nine (42.9%) A(H3). The lineage of 11 type B viruses was Yamagata and one was Victoria (Table 2).

Of the eight genetic characterisations of influenza viruses reported for sentinel and non-sentinel specimens since week 40/2012, four were A(H3) clade representative A/Victoria/208/2009 (three falling within the A/Perth/10/2010 group 5 and one in the A/Victoria/361/2011 group 3C), one A(H1)pdm09 group 6 representative A/St Petersburg/27/2011, two B(Yam)-lineage clade representative B/Brisbane/3/2007 and one B(Yam) lineage - clade representative B/Bangladesh/3333/2007. More details on the antigenic and genetic characteristics of viruses circulating since 1 January 2012 can be found in the [October report](#) prepared by the Community Network of Reference Laboratories for Human Influenza in Europe (CNRL) coordination team.

Since week 40/2012, a total of four type A viruses have been tested for antiviral drug susceptibility, reported by the Netherlands (1 A(H1N1)pdm09) and Sweden (3 A(H3N2)). All were susceptible to oseltamivir and zanamivir, while the three A(H3N2) viruses assessed for M2 blocker susceptibility were resistant.

In week 44/2012, 13 countries reported 478 respiratory syncytial virus detections, suggesting a similar trend to last year (Figure 2).

Table 2. Weekly and cumulative influenza virus detections by type, sub-type and surveillance system, weeks 40–44/2012

Virus type/subtype	Current period Sentinel	Current period Non-sentinel	Season Sentinel	Season Non-sentinel
Influenza A	2	37	11	109
A(H1)pdm09	1	10	2	29
A(H3)	1	1	6	22
A(sub-type unknown)	0	26	3	58
Influenza B	0	14	5	44
B(Vic) lineage	0	0	0	1
B(Yam) lineage	0	4	0	11
Unknown lineage	0	10	5	32
Total influenza	2	51	16	153

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

Figure 1. Proportion of sentinel specimens positive for influenza virus, weeks 40–44/2012

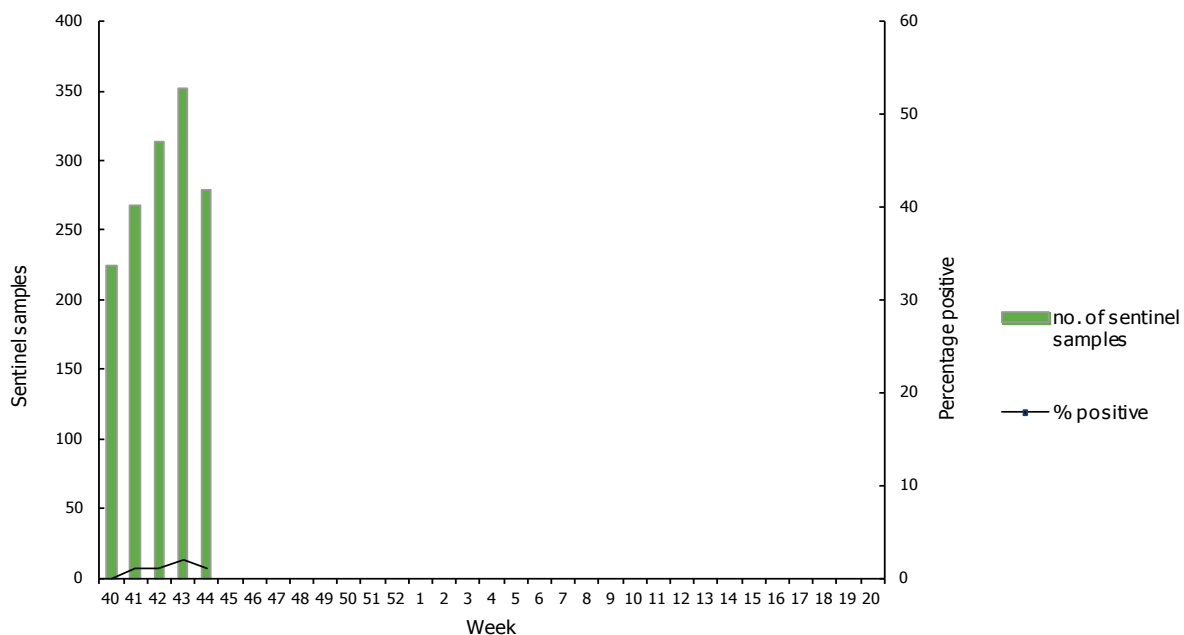
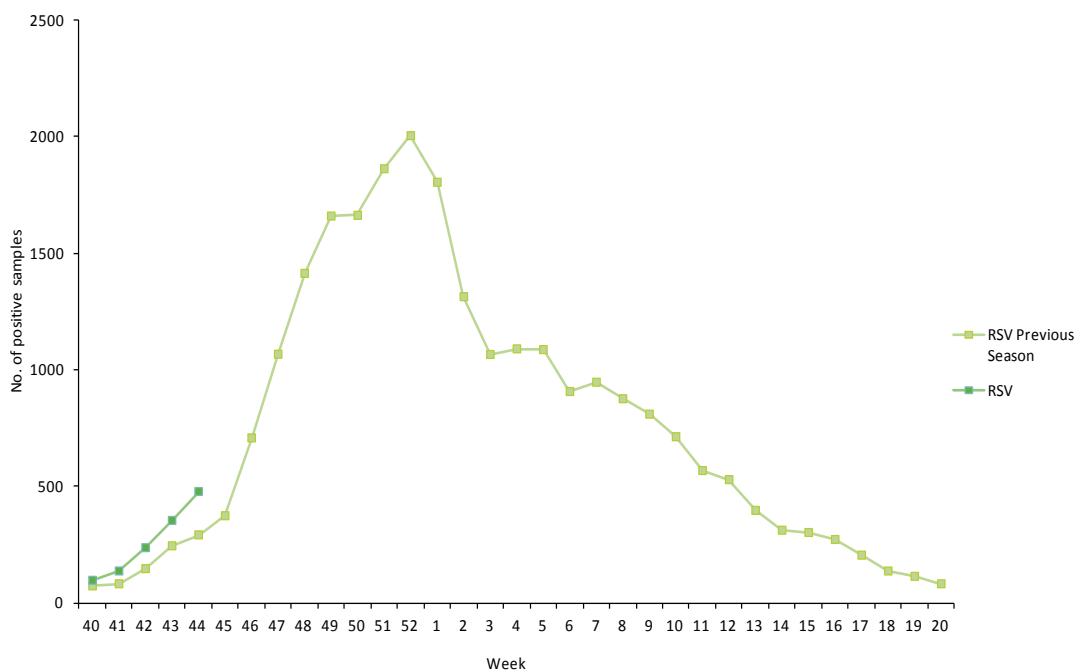


Figure 2. Respiratory syncytial virus (RSV) detections, sentinel and non-sentinel, weeks 40–44/2012



Country comments

Denmark: Denmark reported two non sentinel specimens that tested positive for influenza A virus. Both were subtyped as A(H1N1)pdm09, although not confirmed at the NIC Denmark.

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 drug 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 hospitalised influenza laboratory-confirmed cases

In week 44/2012, no hospitalised laboratory-confirmed influenza cases were reported.

Since week 40/2012, two hospitalised laboratory-confirmed influenza cases have been reported. Spain reported a case which tested positive for influenza A(H3) virus and Slovakia a case which tested positive for influenza A(H1)pdm09 virus.

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), 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.

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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