



SURVEILLANCE REPORT

Weekly influenza surveillance overview

5 September 2014

Main surveillance developments during weeks 21–35/2014 (19 May-31 August 2014)

This first page contains the main developments for weeks 21-35/2014 and can be printed separately or together with the more detailed information that follows.

For weeks 21-35/2014:

- Low intensity was reported by all countries submitting reports (15 to 19 depending on the week). Local or sporadic activity was reported by eight countries.
- Of 330 sentinel specimens tested across 14 countries, 10 were positive for influenza virus. Eight were influenza A viruses and two were type B.
- Nine hospitalised, laboratory-confirmed influenza cases were reported by two countries; six of these cases were admitted to intensive care units.

Overall, influenza activity and circulation of influenza viruses in reporting countries was low.

Sentinel surveillance of influenza-like illness (ILI)/ acute respiratory infection (ARI): Although low intensity was reported by all countries submitting reports, eight countries reported sporadic to local activity. For more information, click here.

Virological surveillance: Since week 20/2014, of 330 sentinel specimens tested ten were positive for influenza virus, eight were type A and two were type B. For more information, <u>click here</u>.

Hospital surveillance of laboratory-confirmed influenza cases: Since week 20/2014, nine cases have been reported, one of which had a fatal outcome. For more information, <u>click here</u>.

Sentinel surveillance (ILI/ARI)

Weekly and seasonal analysis

During weeks 21–35/2014, clinical data were reported by 15 to 19 countries on a weekly basis. Low intensity was reported by all countries submitting reports.

Geographic patterns of influenza activity varied across Europe: sporadic activity over a period of one to 14 weeks was reported by Croatia, Estonia, Germany, Lithuania, Poland, Slovakia and the UK (Northern Ireland and Scotland). Local activity was reported by Finland over four weeks. No activity was reported by the remaining nine countries.

Increasing trends have been reported over the last two weeks by Poland and Romania. The UK (Northern Ireland) reported intermittent increasing and decreasing trends during the period analysed. Stable and decreasing trends were reported by all other countries and ILI/ARI rates remained at or below baseline threshold levels in all countries.

Description of the system

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) 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.

Table 1. Virological overview by country, weeks 21-35/2014

Country	No. of sentinel specimens	Dominant type	Positive specimens
Austria		-	
Belgium	4	None	0
Bulgaria	0	None	0
Croatia	-	-	
Cyprus	-	-	
Czech Republic	-	-	
Denmark	1	None	0
Estonia	2	None	0
Finland	15	None	0
France	20	None	0
Germany	169	None	0
Greece	0	None	0
Hungary	-	-	
Iceland	0	-	0
Ireland	12	None	0
Italy	-	-	
Latvia	0	None	0
Lithuania	2	None	1
Luxembourg	-	-	
Malta	0	None	0
Netherlands	40	None	2
Norway	12	A(H3) & A(H3)/B	3
Poland	1	None	1
Portugal	0	None	0
Romania	-	-	
Slovakia	1	None	0
Slovenia	34	None	1
Spain	0	None	0
Sweden	0	-	0
UK - England	0	A(H3)	0
UK - Northern Ireland	11	A & A(H3)/B	0
UK - Scotland	0	A	0
UK - Wales	6	A(H3)	2
Europe	330		10

^{*}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.

Virological surveillance

Weekly and seasonal analysis

During weeks 21–35/2014, 330 sentinel specimens were tested across 14 countries: 10 were positive for influenza virus (Tables 1–2). Of these 330 specimens, 44 had been tested since the last analysis covering weeks 21–30, but none of these were positive for influenza virus. Of the 10 positive specimens, eight were type A and two were type B of the Yamagata lineage. Of seven type A viruses subtyped, all were A(H3) (Table 2). Non-sentinel virus detections are summarised in Table 2.

The results of 48 genetic characterisations of sentinel and non-sentinel viruses were similar to those observed earlier during the 2013–2014 season. Of the 64 antigenically characterised viruses, six A(H1)pdm09 and 14 A(H3) viruses could not be attributed to a category. More details on viruses circulating during the 2013–2014 season can be found in the WHO CC July Report.

During weeks 21–35/2014 three viruses, two A(H3) and one A(H1)pdm09, were tested for susceptibility to neuraminidase inhibitors. None of them showed reduced susceptibility.

Table 2. Weekly and cumulative influenza virus detections by type, subtype and surveillance system, weeks 21–35/2014

Virus type/subtype	Sentinel weeks 21–35/2014	Non-sentinel weeks 21-35/2014	
Influenza A	8	374	
A(H1)pdm09	0	44	
A(H3)	7	114	
A(sub-type unknown)	1	216	
Influenza B	2	131	
B(Vic) lineage	0	2	
B(Yam) lineage	2	14	
Unknown lineage	0	115	
Total influenza	10	505	

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. The non-sentinel part of the surveillance system comprises viruses submitted from hospital and peripheral diagnostic laboratories to the influenza-specific reference laboratories for (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

Analysis of hospitalised laboratory-confirmed influenza cases

During weeks 21–35/2014, a total of nine hospitalised, laboratory-confirmed influenza cases were reported by Slovakia and Spain. Six patients were infected by a type B, and three by a type A influenza virus. Two of the type A viruses were subtyped, one each of A(H1)pdm09 and A(H3).

Six patients were admitted to ICU, three with influenza A and three with B virus infection. One patient, older than 65 years, who had been infected by an influenza A(H3) virus, died.

Description of the system

A subset of EU countries reports case-based severe influenza data to ECDC every week. Case definitions, populations under surveillance and data formats differ among these countries (Table 7). In order to make the data more comparable and pool them at EU level, only hospitalised, laboratory-confirmed influenza cases are included in the weekly data analysis and displayed in this report.

Table 7. Main characteristics of severe influenza surveillance systems

Country	Case definition	Population under surveillance	Type of surveillance	Data format
Finland	Lab-confirmed, hospitalised	ICU**	Comprehensive	Case-based
France	Lab-confirmed, hospitalised	ICU	Comprehensive	Case-based
Ireland	Lab-confirmed, hospitalised	All wards	Comprehensive	Case-based
Romania	SARI*, hospitalised	All wards	Sentinel	Case-based
Spain	Lab-confirmed, hospitalised	All wards	Sentinel	Case-based
Sweden	Lab-confirmed, hospitalised	ICU	Comprehensive	Case-based
United Kingdom	Lab-confirmed, hospitalised	ICU	Comprehensive	Aggregated

^{*}Severe acute respiratory infection

The EuroMOMO mortality monitoring system

During weeks 21–35/2014, there were no major, unexplained increases in all-cause mortality for the reporting countries. Further details are available on http://www.euromomo.eu/)

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Maps and commentary published in this Weekly Influenza Surveillance Overview 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 Weekly Influenza Surveillance Overview 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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^{**}Intensive care unit