

SURVEILLANCE REPORT

Weekly influenza surveillance overview

11 February 2011

Main surveillance developments in week 5/2011 (31 Jan – 06 Feb 2011)

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

- Most European countries continue to report medium to high influenza-like illness/acute respiratory infection consultation rates and widespread activity. Increasing trends are mainly observed in central, eastern and southern Europe whereas countries in western and northern Europe are reporting unchanging or declining trends.
- The proportion of influenza-positive sentinel specimens is gradually decreasing, having now reached 46%.
- 67% of influenza virus detections in week 5/2011 were type A, 33% were type B. In nine countries, type B detections exceeded those of type A. More than 98% of subtyped influenza A viruses were A(H1N1)2009.
- In week 5/2011, ten countries reported 194 all-cause SARI and confirmed hospitalised influenza cases, the latter mostly due to influenza A(H1N1)2009.
- Numbers of influenza infections with severe outcome have declined in western European countries (Denmark, France, the Netherlands, Ireland and the UK). However, there is now considerable uncertainty on information concerning severe cases in central and eastern European countries.

Sentinel surveillance of influenza-like illness (ILI)/ acute respiratory infection (ARI): Luxembourg continued to report very high ILI/ARI intensity, while Hungary and Poland raised their intensity indicator from medium to high for the first time this season. With Greece, Italy, Lithuania and Norway continuing to report high consultation rates, altogether six countries observed high intensity levels. For more information, [click here...](#)

Virological surveillance: Sentinel physicians collected 2 644 specimens, 1 220 (46.1%) of which tested positive for influenza virus. National detection rates in countries with more than 100 sentinel specimens were below 40% in Spain and the UK (England), approximately 60% in France, Germany, Italy and Luxembourg, and below 30% in Hungary and Poland. For more information, [click here...](#)

Hospital surveillance of severe acute respiratory infection (SARI): Belgium, Romania and Slovakia reported 44 all-cause SARI cases including two deaths, while seven countries reported 150 hospitalised confirmed influenza-infected cases including six deaths. For more information, [click here...](#)

Sentinel surveillance (ILI/ARI)

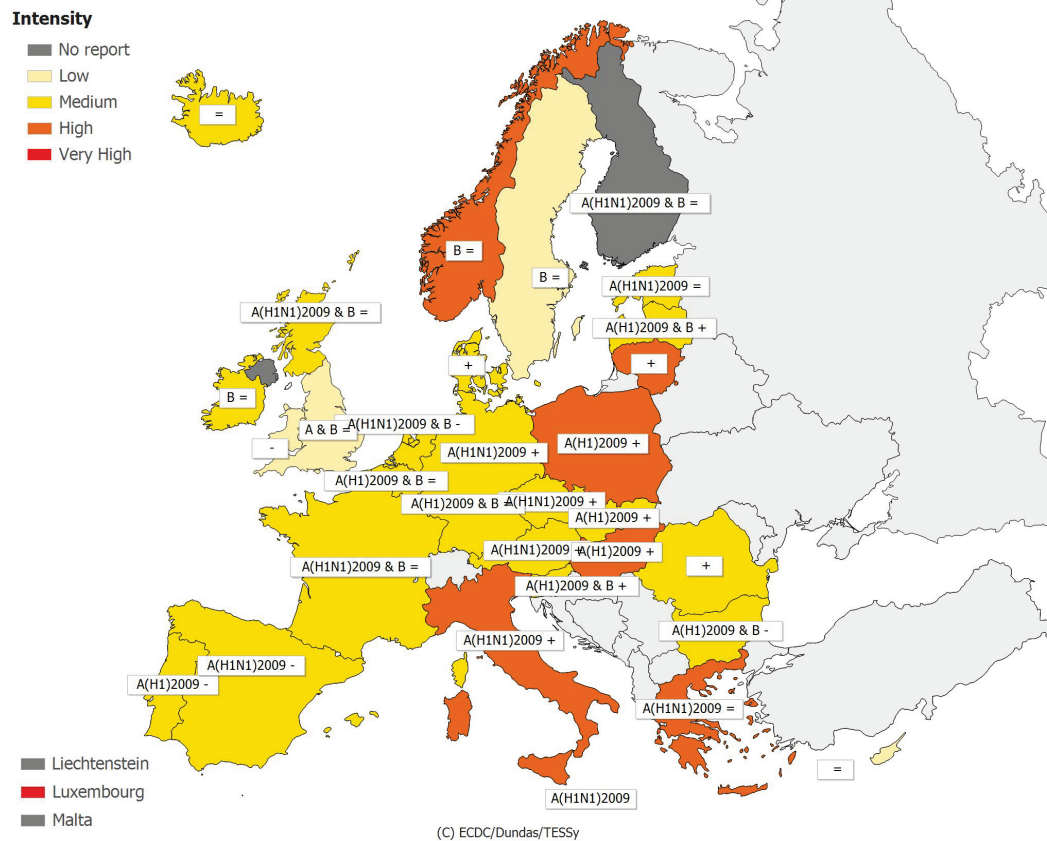
Weekly analysis – epidemiology

During week 05/2011, Luxembourg continued to report very high intensity, while Hungary and Poland raised their intensity indicator from medium to high for the first time this season. With Greece, Italy, Lithuania and Norway continuing to report high consultation rates, altogether six countries observed high intensity levels. Seventeen countries and the UK (Scotland) reported medium intensity whereas low intensity was observed in Cyprus, Sweden and the UK (England) (Map 1, Table 1).

Twenty countries in northern, western and southern Europe reported widespread activity, including the Czech Republic, Germany and Lithuania for the first time this season. Four countries in central and eastern Europe reported regional activity, while three countries reported sporadic or local activity and one country (Austria) no spread (Map 2, Table 1).

Increasing trends were reported by 12 countries in central, eastern and southern Europe, four countries less than in the preceding week. Unchanging trends were seen in 12 countries in western, central and northern Europe. Four countries and the UK (Wales) reported decreasing trends (Map 1 and 2, Table 1).

Map 1: Intensity for week 5/2011



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

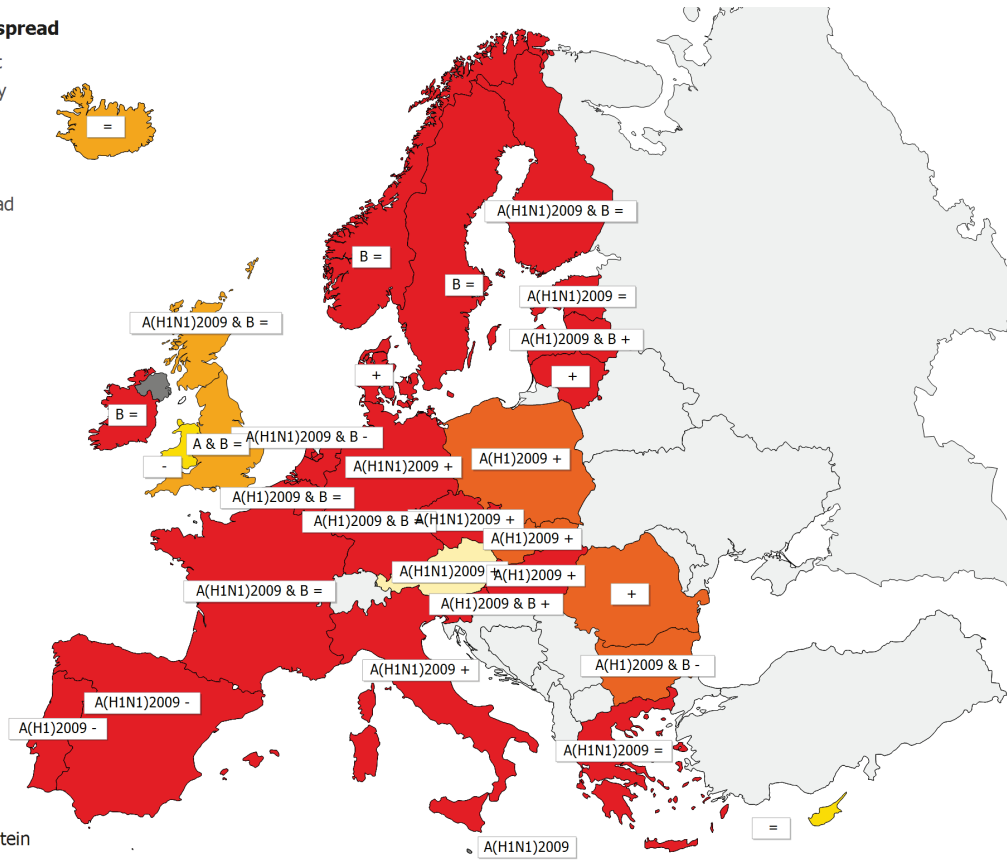
Legend:

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	A & B	Type A and B
		A(H1)2009	Type A, Subtype (H1)2009
		A(H1)2009 & B	Type B and Type A, Subtype (H1)2009
		A(H1N1)2009	Type A, Subtype (H1N1)2009
		A(H1N1)2009 & B	Type B and Type A, Subtype (H1N1)2009
		B	Type B

Map 2: Geographic spread for week 5/2011

Geographic spread

- No Report
- No Activity
- Sporadic
- Local
- Regional
- Widespread



- Liechtenstein
- Luxembourg
- Malta

(C) ECDC/Dundas/TESSy

* 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)	-	Decreasing clinical activity
Sporadic	Isolated cases of laboratory confirmed influenza infection	+	Increasing clinical activity
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)	=	Stable clinical activity
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)	A & B	Type A and B
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)	A(H1)2009	Type A, Subtype (H1)2009
		A(H1)2009 & B	Type B and Type A, Subtype (H1)2009
		A(H1N1)2009	Type A, Subtype (H1N1)2009
		A(H1N1)2009 & B	Type B and Type A, Subtype (H1N1)2009
		B	Type B

Table 1: Epidemiological and virological overview by country, week 5/2011

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	Medium	No activity	Increasing	99	A(H1N1)2009	79.8	7.9	45.9	Graphs	Graphs
Belgium	Medium	Widespread	Stable	84	B/A(H1)2009	65.5	437.7	1759.9	Graphs	Graphs
Bulgaria	Medium	Regional	Decreasing	15	B/A(H1)2009	53.3	-	1887.2	Graphs	Graphs
Cyprus	Low	Sporadic	Stable	-	-	0.0	-*	-*	Graphs	Graphs
Czech Republic	Medium	Widespread	Increasing	36	A(H1N1)2009	72.2	241.5	1598.7	Graphs	Graphs
Denmark	Medium	Widespread	Increasing	9	None	11.1	-	-	Graphs	Graphs
Estonia	Medium	Widespread	Stable	76	A(H1N1)2009	30.3	26.8	572.4	Graphs	Graphs
Finland	Unknown (no information available)	Widespread	Stable	55	B A(H1N1)2009	70.9	-	-	Graphs	Graphs
France	Medium	Widespread	Stable	297	B A(H1N1)2009	56.6	-	3026.7	Graphs	Graphs
Germany	Medium	Widespread	Increasing	281	A(H1N1)2009	59.8	-	1368.4	Graphs	Graphs
Greece	High	Widespread	Stable	28	A(H1N1)2009	82.1	366.9	-	Graphs	Graphs
Hungary	High	Widespread	Increasing	253	A(H1)2009	7.9	570.0	-	Graphs	Graphs
Iceland	Medium	Local	Stable	-	-	0.0	42.5	-	Graphs	Graphs
Ireland	Medium	Widespread	Stable	63	B	47.6	86.2	-	Graphs	Graphs
Italy	High	Widespread	Increasing	189	A(H1N1)2009	57.7	1102.1	-	Graphs	Graphs
Latvia	Medium	Widespread	Increasing	30	B/A(H1)2009	50.0	-*	-*	Graphs	Graphs
Lithuania	High	Widespread	Increasing	-	-	0.0	175.8	843.6	Graphs	Graphs
Luxembourg	Very High	Widespread	Stable	116	B/(A)H1)2009	60.3	-*	-*	Graphs	Graphs
Malta				0	B A(H1N1)2009	0.0	-*	-*	Graphs	Graphs
Netherlands	Medium	Widespread	Decreasing	55	B A(H1N1)2009	63.6	71.3	-	Graphs	Graphs
Norway	High	Widespread	Stable	17	B	82.4	166.5	-	Graphs	Graphs
Poland	High	Regional	Increasing	157	A(H1)2009	28.0	232.0	-	Graphs	Graphs
Portugal	Medium	Widespread	Decreasing	16	A(H1)2009	43.8	76.2	-	Graphs	Graphs
Romania	Medium	Regional	Increasing	-	-	0.0	36.8	1021.1	Graphs	Graphs
Slovakia	Medium	Regional	Increasing	15	A(H1)2009	53.3	481.2	2689.0	Graphs	Graphs
Slovenia	Medium	Widespread	Increasing	67	B/A(H1)2009	76.1	123.7	2030.2	Graphs	Graphs
Spain	Medium	Widespread	Decreasing	409	A(H1N1)2009	35.2	178.4	-	Graphs	Graphs
Sweden	Low	Widespread	Stable	57	B	33.3	10.1	-	Graphs	Graphs
UK - England	Low	Local	Stable	151	A/B	21.2	23.6	429.8	Graphs	Graphs
UK - Northern Ireland				-	-	0.0	-	-		
UK - Scotland	Medium	Local	Stable	69	B A(H1N1)2009	46.4	11.1	309.8	Graphs	Graphs
UK - Wales	Low	Sporadic	Decreasing	-	-	0.0	13.2	-	Graphs	Graphs
Europe				2644		46.1			Graphs	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

Country comments

Luxembourg: Occasional reports of bacterial secondary infections and pneumonia.

Portugal: Overall, the ILI incidence rate is decreasing, although with considerable variability.

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

In week 5/2011, 26 countries reported virological data. Sentinel physicians collected 2 644 specimens, 1 220 (46.1%) of which tested positive for influenza virus, showing a continuation of the slowly decreasing trend seen since week 52/2010 (Table 1, Figure 3). National detection rates in countries with more than 100 sentinel specimens were below 40% in Spain and the UK (England), approximately 60% in France, Germany, Italy and Luxembourg, and then again below 30% in Hungary and Poland (Table 1). In addition, 3 837 non-sentinel source specimens (i.e. specimens collected for diagnostic purpose in hospitals) were reported positive for influenza virus.

Of the 5 057 influenza viruses detected during week 05/2011, 3 408 (67.4%) were type A and 1 649 (32.6%) were type B. Nine countries in western and northern Europe¹ reported higher numbers of influenza B than influenza A virus detections. Of the 2 670 influenza A viruses that were subtyped, 2 627 (98.4%) were A(H1)2009 and 43 (1.6%) were A(H3) (Table 2).

Since week 40/2010, 25 826 (70.6%) of the 36 601 influenza virus detections in sentinel and non-sentinel specimens were influenza A and 10 775 (29.4%) were influenza B viruses. Of 17 328 influenza A viruses subtyped, 16 892 (97.5%) were A(H1)2009 and 436 (2.5%) were A(H3) (Table 2). Trends of virological detections since week 40/2010 are shown in Figures 1–3.

Since week 40/2010, 1 297 influenza viruses from sentinel and non-sentinel specimens have been characterised antigenically (Figure 4): 737 (56.8%) as A/California/7/2009 (H1N1)-like; 80 (6.2%) as A/Perth/16/2009 (H3N2)-like; 451 (34.8%) as B/Brisbane/60/2008-like (Victoria lineage); and 29 (2.2%) as B/Florida/4/2006-like (Yamagata lineage).

Since week 40/2010, Ireland, Italy, Norway, Spain and the UK have reported antiviral resistance data to TESSy (Table 3). Twenty-three (3.2%) of 720 influenza A(H1)2009 viruses tested for susceptibility to neuraminidase inhibitors were resistant to oseltamivir, but remained sensitive to zanamivir. All the resistant viruses carried the H275Y substitution. Nineteen resistant viruses were from patients with known exposure to antivirals. While for seven of these patients, no exposure to neuraminidase inhibitors was reported, 12 had been exposed to oseltamivir.

More details on circulating viruses can be found in the [December report](#) prepared by the Community Network of Reference Laboratories (CNRL) coordination team. Also, a detailed analysis of the viruses isolated in the UK was published in [Eurosveillance](#) indicating no evidence of any significant antigenic changes in the A(H1N1)2009 and type B viruses in that country and a good match with the seasonal vaccine viruses.

Table 2: Weekly and cumulative influenza virus detections by type, subtype and surveillance system, weeks 40/2010–5/2011

Virus type/subtype	Current Period		Season	
	Sentinel	Non-sentinel	Sentinel	Non-sentinel
Influenza A	690	2718	6384	19442
A(H1)2009	565	2062	5686	11206
A (subtyping not performed)	111	627	527	7971
A (not subtypable)	0	0	0	0
A (H3)	14	29	171	265
A (H1)	0	0	0	0
Influenza B	530	1119	3013	7762
Total Influenza	1220	3837	9397	27204

Note: A(H1)2009, A(H3) and A(H1) includes both N-subtyped and non-N-subtyped viruses

¹ Belgium, Finland, Iceland, Ireland, Luxembourg, Netherlands, Norway, Sweden and United Kingdom.

Figure 1: Number of sentinel specimens positive for influenza, by type, subtype and by week of report, weeks 40/2010–5/2011

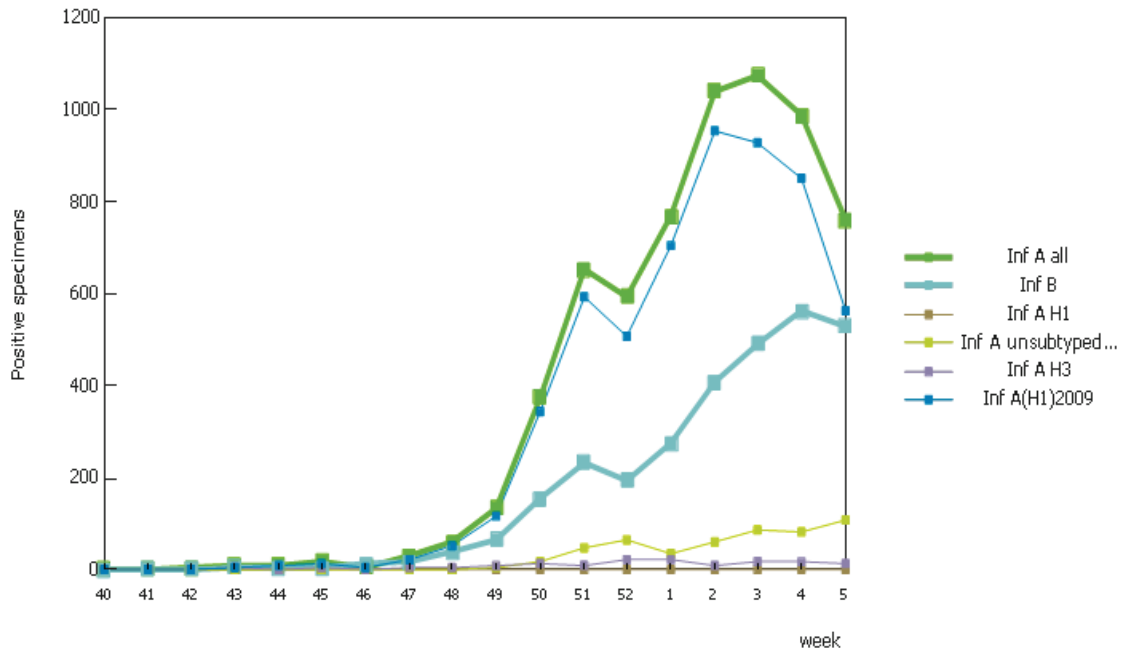


Figure 2: Number of non-sentinel specimens positive for influenza by type, subtype and week of report, weeks 40/2010–5/2011

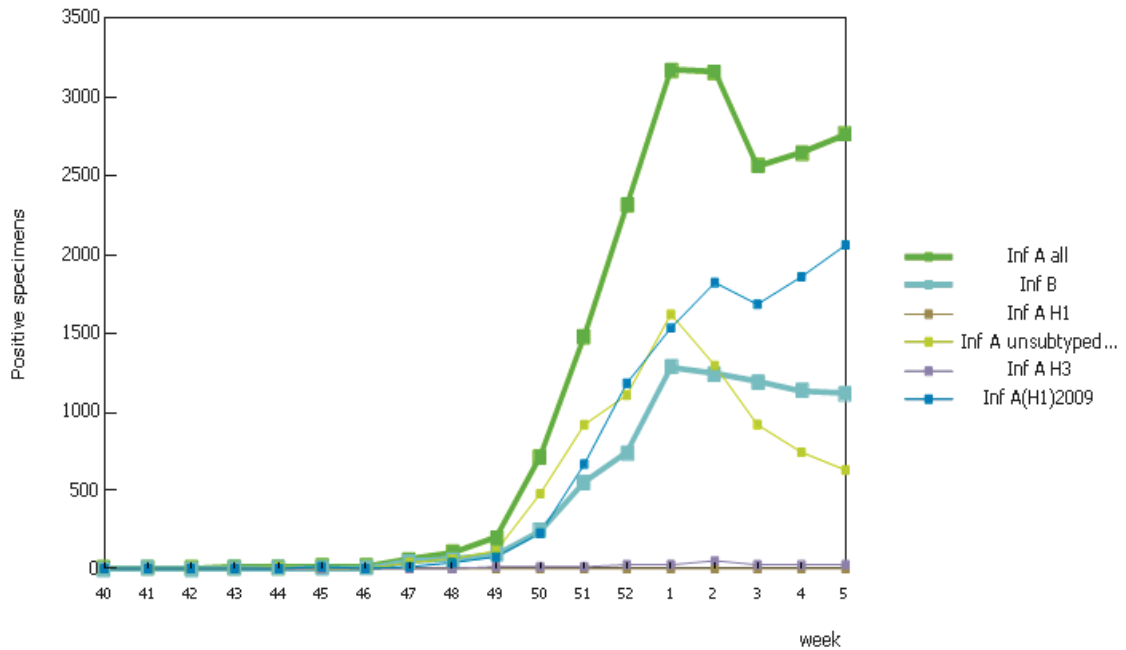


Figure 3: Proportion of sentinel samples positive for influenza, weeks 40/2010–5/2011

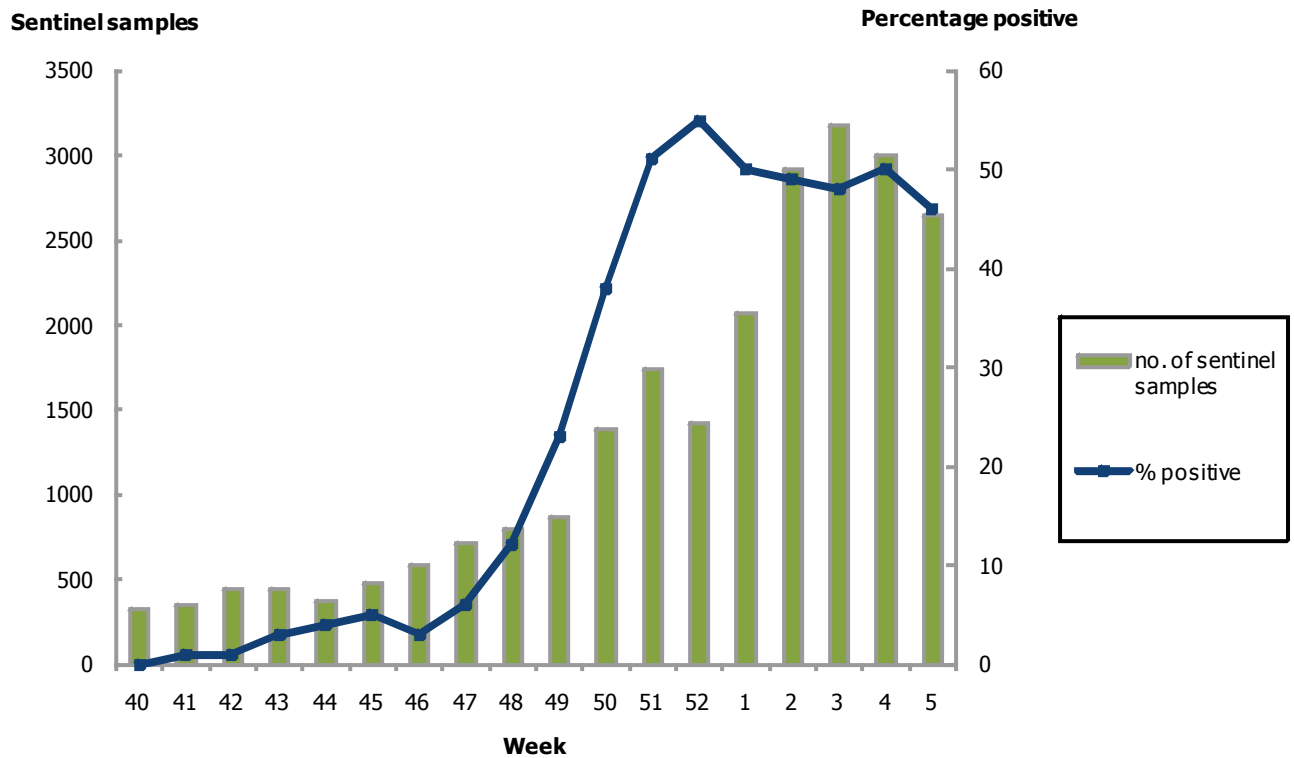


Figure 4: Results of antigenic characterisations of sentinel and non-sentinel influenza virus isolates, weeks 40/2010–5/2011

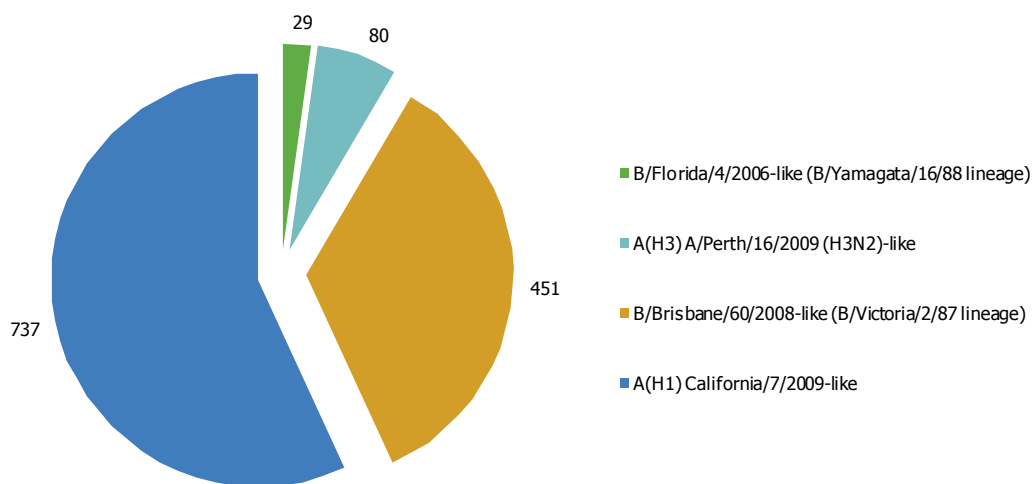
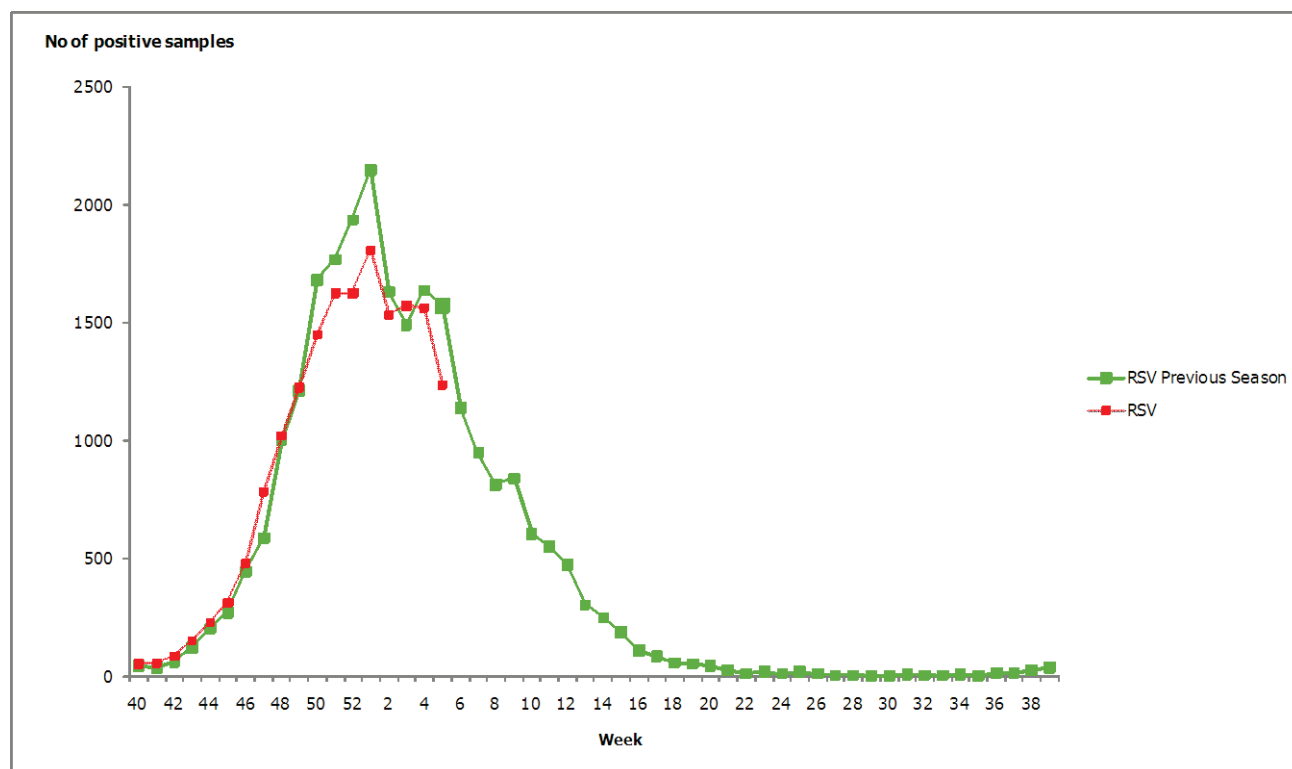


Table 3: Antiviral resistance by influenza virus type and subtype, weeks 40/2010–5/2011

Virus type and subtype	Resistance to neuraminidase inhibitors				Resistance to M2 inhibitors	
	Oseltamivir		Zanamivir		Isolates tested	Resistant n (%)
	Isolates tested	Resistant n (%)	Isolates tested	Resistant n (%)		
A(H3N2)	1	0	1	0	2	2 (100)
A(H1N1)	0	0	0	0	0	0
A(H1N1)2009	720	23 (3.2)	720	0	35	35 (100)
B	61	0	62	0	NA*	NA*

* NA - not applicable, as M2 inhibitors do not act against influenza B viruses

Figure 5: Respiratory syncytial virus (RSV) detections, sentinel and non-sentinel, weeks 40/2010–5/2011



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

In week 5/2011, Belgium, Romania and Slovakia reported 44 all-cause SARI cases (i.e. regardless of the causative pathogen) including two deaths, while seven countries reported 150 hospitalised confirmed influenza cases including six deaths. France and Ireland only reported cases admitted to intensive care (ICU). Since week 40/2010, ten countries have reported 3 053 all-cause SARI and hospitalised confirmed influenza cases including 224 deaths (Tables 4 and 5). The epidemic curve peaked in week 52/2010 (Figure 6).

Of 2 025 influenza virus detections since week 40/2010, 1 931 (95.4%) were type A and 61 (4.6%) were type B. Of 1 825 influenza A viruses subtyped, 1 811 (99.2%) were A(H1)2009 and 14 (0.8%) were A(H3) (Table 6).

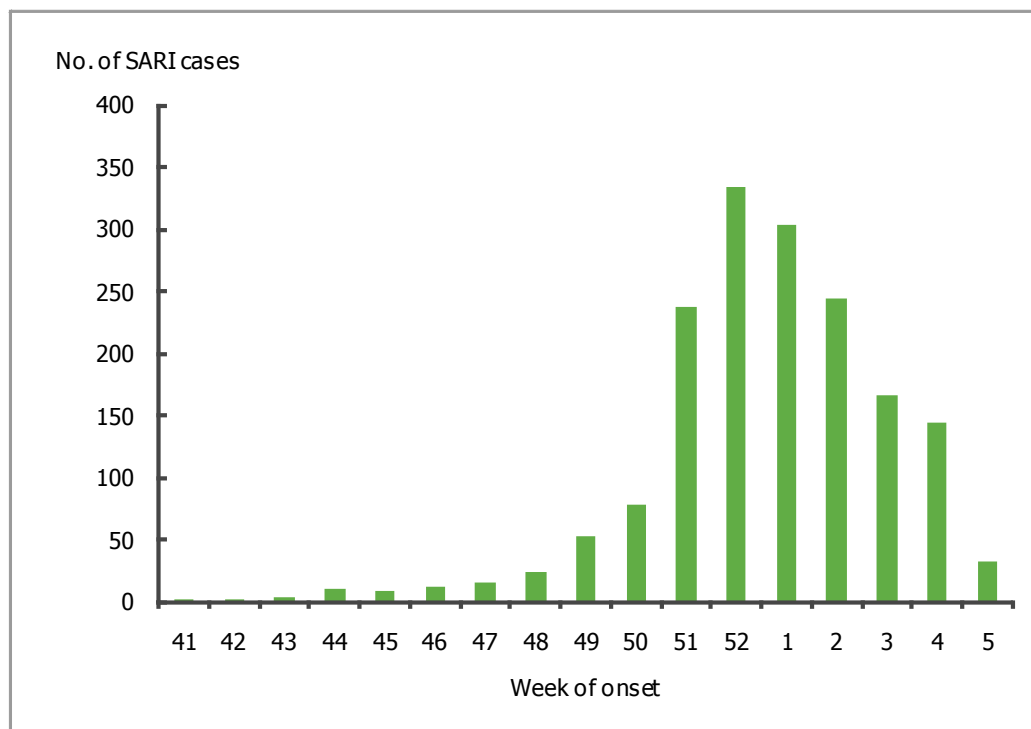
Overall, ICU admission was reported for 1 300 patients, 665 (51.2%) of whom were known to have required ventilation (Table 7). In patients with available information, obesity was the most frequent underlying condition, but 918 (40.9%) of 2 245 all-cause SARI and hospitalised confirmed influenza-infected cases had no prior underlying condition (Figure 7).

Table 4: Cumulative number of all-cause SARI cases, weeks 40/2010- 5/2011

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
Belgium	663				
Romania	188	2.93	12	0.19	6413821
Slovakia	31	0.57	3	0.06	5433385
Total	882		15		

Table 5: Cumulative number of hospitalised influenza cases, weeks 40/2010–5/2011

Country	Number of cases	Number of fatal cases reported
Austria	156	6
Spain	1011	93
Finland	42	6
France	532	63
Ireland	113	15
Malta	45	1
Portugal	272	25
Total	2171	209

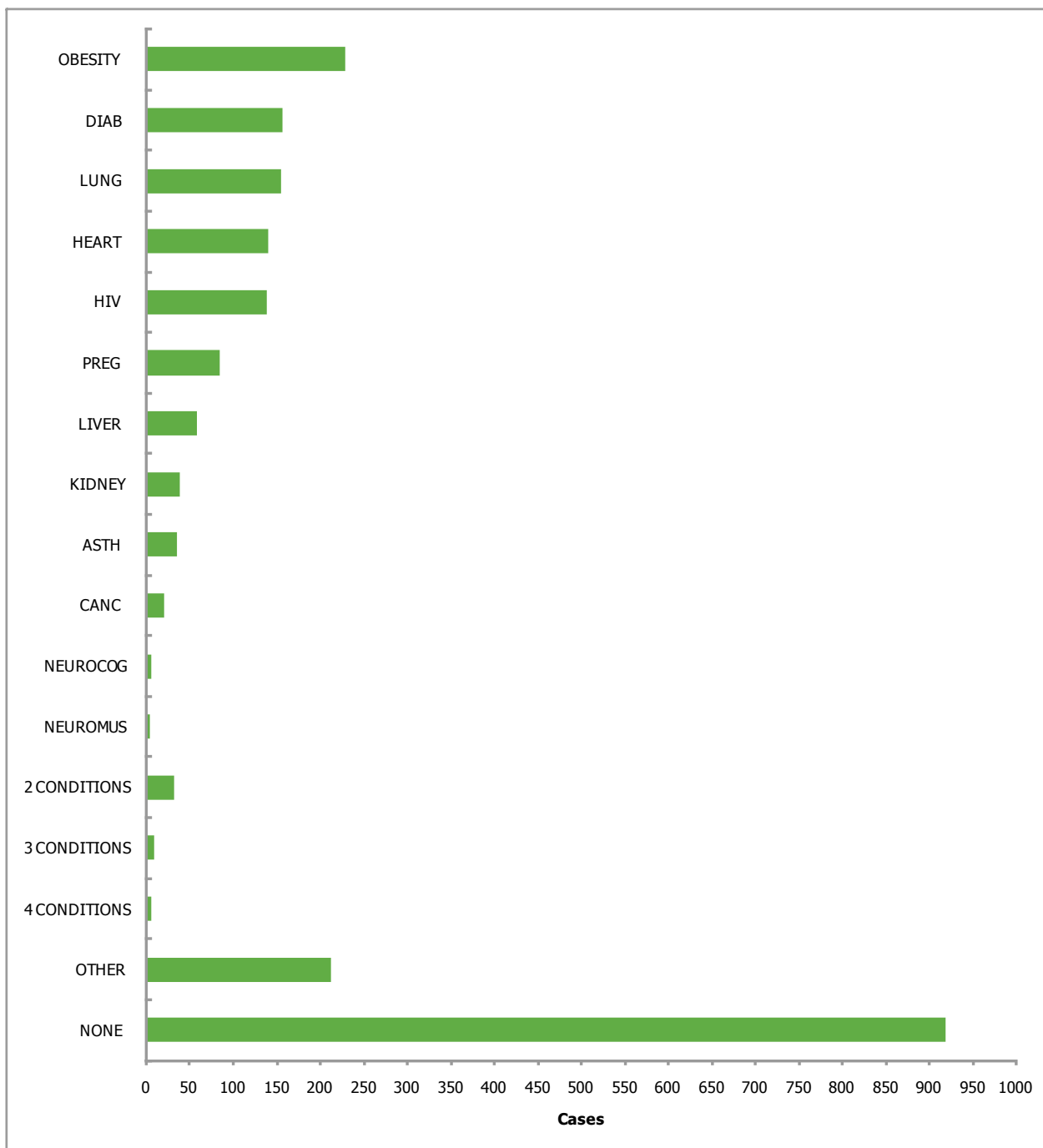
Figure 6: Number of SARI and hospitalised confirmed influenza cases by week of onset, weeks 40/2010–5/2011**Table 6: Number of SARI and hospitalised confirmed influenza cases by influenza type and subtype, week 5/2011**

Virus type/subtype	Number of cases during current week	Cumulative number of cases since the start of the season
Influenza A	126	1931
A(H1)2009	121	1811
A(subtyping not performed)	5	106
A(H3)		14
Influenza B	9	61
Other Pathogen		33
Unknown	59	1028
Total	194	3053

Table 7: Number of SARI and hospitalised confirmed influenza cases by level of care and respiratory support, weeks 40/2010–5/2011

Respiratory support	ICU	Inpatient ward	Other	Unknown
No respiratory support available			1	
No respiratory support necessary	129	249	322	
Oxygen therapy	65	91	265	
Respiratory support given unknown	441	114	512	156
Ventilator	665	11	6	26

Figure 7: Number of SARI cases by underlying condition, weeks 40/2010–5/2011



Note: Other (O) represents any other underlying condition than: asthma (ASTH), cancer (CANC), diabetes (DIAB), chronic heart disease (HEART), HIV/other immune deficiency (HIV), kidney-related conditions (KIDNEY), liver-related conditions (LIVER), chronic lung disease (LUNG), neurocognitive disorder (including seizure) (NEUROCOG), neuromuscular disorder (NEUROMUS), obesity (BMI between 30 and 40) (OBESITY), morbid obesity (BMI above 40) (OBESITYMORB), pregnancy (PREG). NONE is reported if there were no underlying conditions and UNK when the underlying conditions were unknown.

Country comments and specific information concerning hospitalised cases and mortality

This section is compiled from specific comments and published reports on the website where these are indicated by reporters. They are structured to represent influenza-associated hospitalisations (and some emergency hospital consultations), use of higher level care and mortality.

Czech Republic: Up to the end of week 5/2011, a cumulative total of 54 SARI patients with laboratory-confirmed influenza A(H1N1)2009 virus infection have been reported by intensive care units, including six deaths. Influenza activity is still increasing.

Denmark ([SSI Link](#)): Up to 7 February (week 5/2011), a cumulative total of 109 influenza patients have been reported by intensive care units (ICUs) in Denmark with a median age of 55 years (range 15 months to 83 years). Fifteen patients were admitted to an ICU in week 5/2011 compared with 24 new admissions in week 4. There is still pressure on the wards, reflected by the proportion of ICU beds used for influenza patients. On Monday, 7 February 2011, there were 36 influenza patients in ICUs, corresponding with 10.0% of the total number of occupied ICU beds in the country, compared with 10.2% in the week before. Of the ICU patients, 91 were diagnosed with influenza A, 36 of whom were reported to have been further subtyped as A(H1N1)2009. Eighteen patients had an influenza B infection. Eight patients with influenza A and two patients with influenza B received extracorporeal membrane oxygenation (ECMO). Fifteen patients with confirmed influenza A and five with influenza B died. Eighteen patients were reported to be previously healthy, and for another 29 patients, no underlying condition was reported. For 62 patients, one or more underlying conditions were described. One influenza patient was reported to be pregnant. Initial alignment with the Danish Vaccination Registry showed that 19 of the 109 patients had received the 2010/2011 seasonal influenza vaccine between weeks 39 and 46 of 2010. The other 90 patients were either not vaccinated between weeks 39 and 46 of 2010 or had not been reported to the registry.

France ([INVS Link](#)): By week 5/2011, in the sentinel network of hospitals *Oscour*, 1506 emergency consultations for influenza-like illness had been reported with 75 hospitalisations which is a little less than in week 4. In the national network of paediatric and adult intensive care units (ICUs), the numbers have also been decreasing since week 01/2011. Considered cumulatively, 534 influenza cases have been reported from ICUs with influenza A(H1N1)2009 predominating and around 70% of cases being between 15 and 64 years of age. A clinical risk factor is reported in most cases. Conversely, 37% of these severe cases were reported to have no identified risk factor. In this network, 63 deaths have been reported which represents 12% of reports.

Ireland ([HPSC influenza link](#)): For the 2010/2011 season, to date (9 February 2011), 848 confirmed influenza cases have been hospitalised, 113 cases have been admitted to intensive care units and 18 deaths have been reported to HPSC. At the peak this represented 1.1 cases /100 000 population requiring higher level (intensive) care. As of 9 February, there remained 59 hospitalised cases, a total that has not changed in the last week. Thirty-one of the hospitalised cases remained in intensive care. Eighty-six (76%) of the 113 cases had underlying medical conditions. The underlying medical conditions include: chronic respiratory disease, chronic heart disease, immunosuppression, pregnancy, metabolic disorders and morbid obesity. HPSC has been informed of 18 influenza-associated deaths to date this season of which 14 had influenza A(H1N1)2009, one influenza A (unsubtyped) and three influenza B. One death was in a patient in the 0–4 year age group, 13 patients were in the 15–64 year age group and four patients were aged 65 years and older. Most deaths (16 out of 18) occurred in patients with underlying medical conditions.

The Netherlands ([RIVM influenza link](#)): As of week 5/2011 and since 4 October 2010, a cumulative total of 534 hospital patients were reported as infected with A(H1N1)2009 influenza virus and 32 fatalities were notified. The largest numbers of hospital admissions with influenza have been children in the age group of 0–5 years. Underlying conditions were reported in 54% of hospitalised patients. By week 4/2011, all-age all-cause mortality was well below the statistically generated upper limit for the time of year in the Netherlands.

Norway: Total hospitalised: 141 (in ICU: 32); Age 0–4 hospitalised: 28 (in ICU: 3); Age 5–14 hospitalised: 2 (in ICU: 1); Age 15–29 hospitalised: 19 (in ICU: 1); Age 30–64 hospitalised: 83 (in ICU: 25); Age 65+ hospitalised: 9 (in ICU: 2).

Romania: For week 5/2011, 15 SARI cases due to influenza A(H1N1)2009 and six SARI cases due to influenza B were reported. The cumulative figures for the whole season are 32 and 14, respectively. In week 5, four SARI-related deaths were reported, three of which were confirmed to be due to influenza.

Spain ([ISCIH Influenza Link](#)): In Spain, information concerning severe illness due to influenza infection with associated admission to hospitals comes from a surveillance system developed during the 2009/2010 pandemic season specifically for this purpose. Since week 40/2010 and up to week 05/2011, 1011 severe hospitalised confirmed influenza cases have been reported. Severely affected cases were mostly in the 15–64 year age groups (67%). Conversely, 13% were less than 5 years old. Of 871 cases with outcome information, 78 died, 10% with no known risk factors. Of the severe cases, 632 had information available on the status of influenza vaccination for the 2010/2011 season and only 14% of 546 cases had been immunised. Monovalent pandemic vaccines were

reported to have been received for only 8% of hospitalised cases (38/484). Eighty per cent of the cases included in the groups which were recommended influenza vaccination (chronic diseases, pregnancy, obesity, older than 60 years) had not been vaccinated this season.

UK (HPA Influenza Link and DH (England) Link): In week 6/2011, the number of patients in England with confirmed or suspected influenza in critical care beds have declined from a peak of nearly 800 three weeks ago (equivalent to 1.4 per 100 000 population) to around 100 cases on 10 February 2011. About 70% of these cases are in the age group 16 to 64 years. Up to 9 February 2011, 439 deaths have been reported in influenza cases from across the UK. Ninety-three per cent of the cases with additional information were associated with A(H1N1)2009, 1% with untyped influenza A and 6% with influenza B infection. Reported deaths associated with influenza have been mainly among younger adults and children. Amongst cases with information on age, 3% were less than 5 years old; 4% between 5 and 14 years; 72% from 15 to 64 years and 21% were 65 years or older. Of those with available information, 71% were in one of the clinical risk groups for whom vaccination is recommended, which includes pregnant women. Important reported clinical risk factors were underlying respiratory disease including asthma (27% of those in the clinical risk groups) and immunosuppression (23%). Of cases with information on immunisation history, 72% had not received the 2010 trivalent vaccine and 95% had not received the monovalent pandemic vaccine last season. All-cause all-age deaths (due to multiple causes not just influenza) declined again in week 4 and is now below the upper statistical limit of expected levels for this time of year.

UK (Scotland): The number of severely ill cases due to laboratory-confirmed influenza virus infection has fallen. Similarly, the number of deaths due to influenza has fallen compared to previous weeks.

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). Additionally the report is reviewed by experts of WHO regional office Europe.

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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.

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