

## SURVEILLANCE REPORT

### Weekly influenza surveillance overview

29 October 2010

## Main surveillance developments in week 42/2010 (18 Oct 2010 – 24 Oct 2010)

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

- The large majority of countries continue to report low rates and unchanging trends in sentinel physician consultations for influenza-like illness and acute respiratory infection.
- Six (1.7%) of 355 sentinel specimens tested positive for influenza virus. Seven of nine influenza viruses detected in sentinel and non-sentinel specimens were type A, and of the three subtyped, two were A(H3) and one was A(H1)2009.
- Three SARI cases not related to flu were reported during week 42/2010.
- Rare detections of influenza virus along with sporadic detections of respiratory syncytial virus in a number of European countries suggest that the low influenza-like illness and acute respiratory infection activity currently observed is likely due to respiratory pathogens other than influenza

**Sentinel surveillance of influenza-like illness (ILI)/ acute respiratory infection (ARI):** All of the 24 reporting countries continued to report low activity and most of them saw unchanging trends. For more information, [click here](#).

**Virological surveillance:** Sentinel physicians collected 355 specimens, six (1.7%) of which were positive for influenza virus. Of the nine influenza viruses detected from sentinel and non-sentinel sources during week 42/2010, seven were type A and two were type B. For more information, [click here](#).

**Hospital surveillance of severe acute respiratory infection (SARI):** Three SARI cases were reported during week 42/2010; no influenza viruses were detected from the cases. For more information, [click here](#).

# Sentinel surveillance (ILI/ARI)

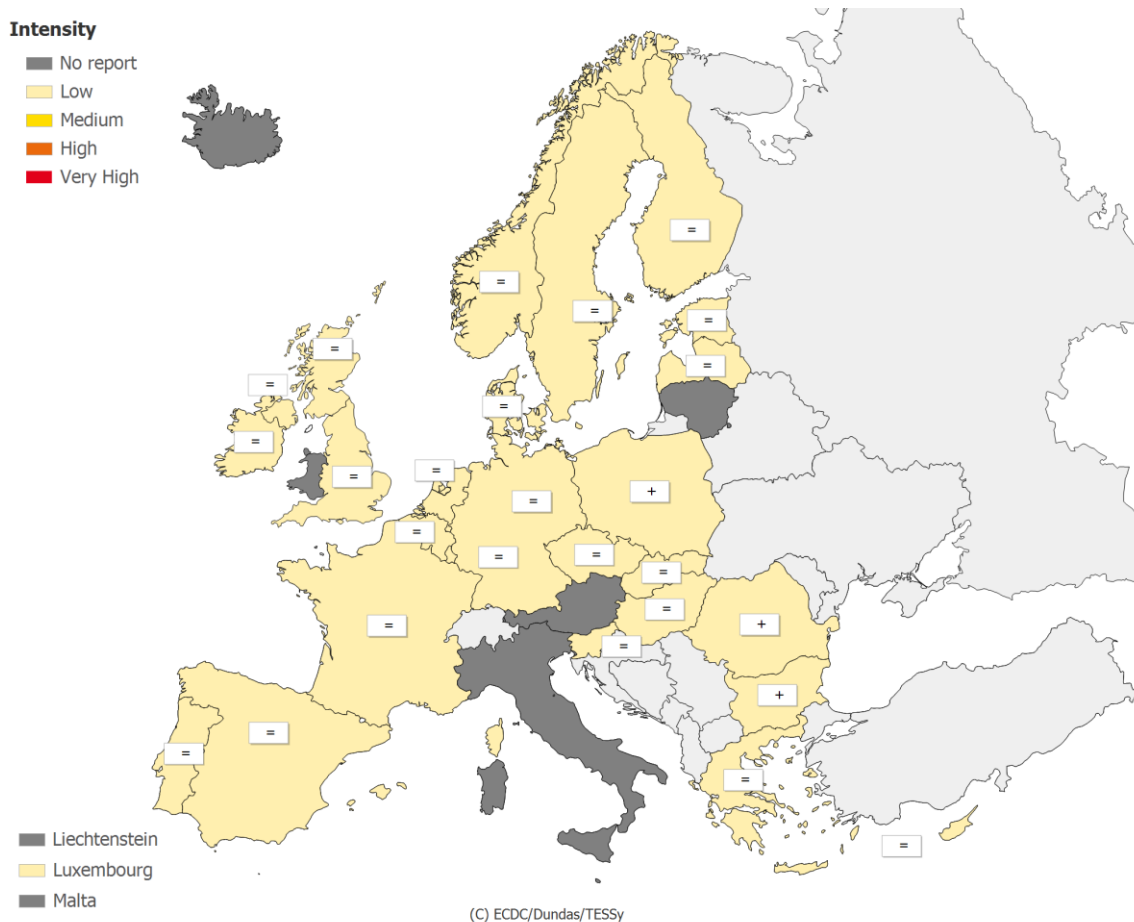
## Weekly analysis – epidemiology

During week 42/2010, 24 of 29 countries reported epidemiological data. All countries continued to experience low intensity (Map 1, Table 1).

For the geographic spread indicator, Cyprus, Estonia, France, Poland and the UK (England and Northern Ireland) reported sporadic cases, while all other countries reported no activity (Map 2, Table 1).

Bulgaria, Poland and Romania reported an increase in consultation rates for ILI/ARI compared with the previous week. The remaining countries reported no change (Map 1 and Table 1). Consultation rates continue to be at or below national baseline levels for all countries that reported.

**Map 1: Intensity for week 42/2010**



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

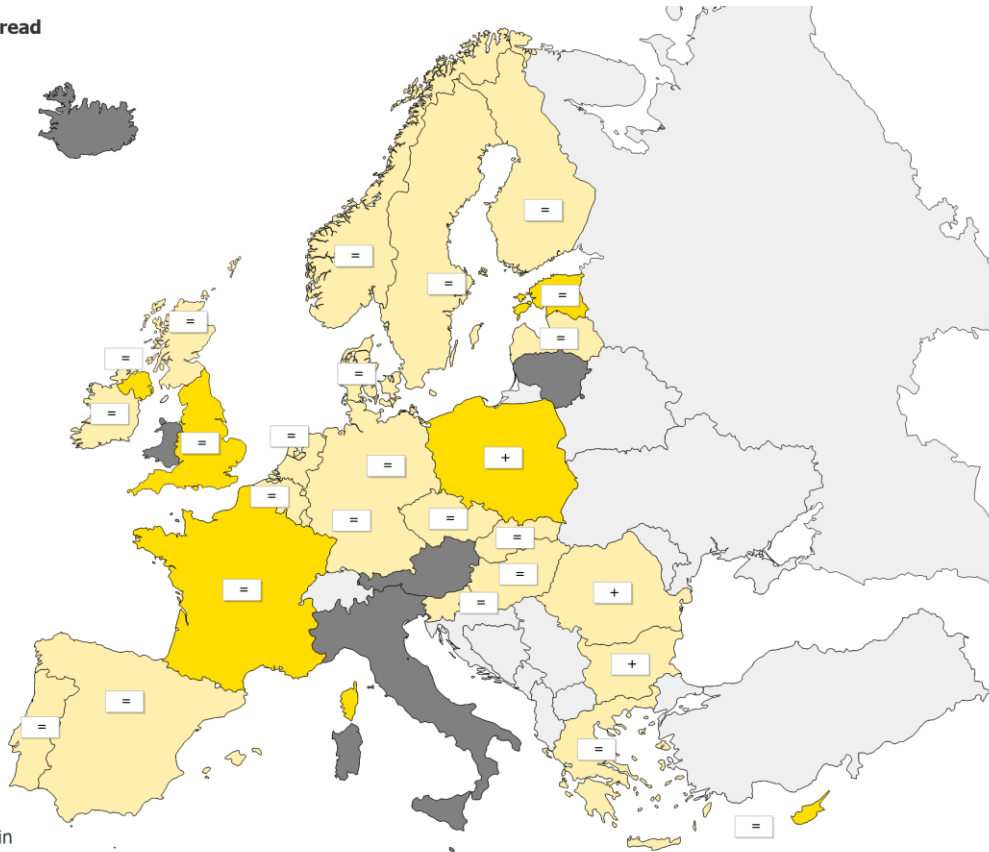
Legend:

<b>Low</b>	No influenza activity or influenza at baseline levels	-	Decreasing clinical activity
<b>Medium</b>	Usual levels of influenza activity	+	Increasing clinical activity
<b>High</b>	Higher than usual levels of influenza activity	=	Stable clinical activity
<b>Very high</b>	Particularly severe levels of influenza activity		

**Map 2: Geographic spread for week 42/2010**

**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:**

<b>No activity</b>	No evidence of influenza virus activity (clinical activity remains at baseline levels)	-	Decreasing clinical activity
<b>Sporadic</b>	Isolated cases of laboratory confirmed influenza infection	+	Increasing clinical activity
<b>Local outbreak</b>	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
<b>Regional activity</b>	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)		
<b>Widespread</b>	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 42/2010**

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
Belgium	Low	No activity	Stable	16	None	6.3	22.5	1039.5	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Bulgaria	Low	No activity	Increasing	0	None	-	-	642.9	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Cyprus	Low	Sporadic	Stable	-	-	-	-*	-*	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Czech Republic	Low	No activity	Stable	16	None	0.0	20.2	849.3	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Denmark	Low	No activity	Stable	0	None	-	55.0	0.0	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Estonia	Low	Sporadic	Stable	5	None	0.0	4.5	266.9	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Finland	Low	No activity	Stable	19	None	0.0	-	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
France	Low	Sporadic	Stable	41	None	0.0	-	1504.8	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Germany	Low	No activity	Stable	17	None	5.9	-	903.3	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Greece	Low	No activity	Stable	-	-	-	55.8	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Hungary	Low	No activity	Stable	14	None	0.0	90.1	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Ireland	Low	No activity	Stable	1	None	0.0	7.0	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Latvia	Low	No activity	Stable	0	None	-	0.0	1024.1	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Luxembourg	Low	No activity	Stable	3	None	0.0	-*	-*	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Netherlands	Low	No activity	Stable	9	None	0.0	16.9	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Norway	Low	No activity	Stable	1	None	0.0	23.5	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Poland	Low	Sporadic	Increasing	9	None	11.1	64.2	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Portugal	Low	No activity	Stable	1	None	0.0	3.8	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Romania	Low	No activity	Increasing	19	None	0.0	9.4	969.9	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Slovakia	Low	No activity	Stable	1	None	0.0	181.8	1603.0	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Slovenia	Low	No activity	Stable	7	None	0.0	0.0	936.3	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Spain	Low	No activity	Stable	74	None	2.7	17.9	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
Sweden	Low	No activity	Stable	0	None	-	1.4	-	<a href="#">Graphs</a>	<a href="#">Graphs</a>
UK - England	Low	Sporadic	Stable		None	1.2	9.6	411.8	<a href="#">Graphs</a>	<a href="#">Graphs</a>
UK - Northern Ireland	Low	Sporadic	Stable	6	None	0.0	13.7	312.1	<a href="#">Graphs</a>	<a href="#">Graphs</a>
UK - Scotland	Low	No activity	Stable	12	None	0.0	0.9	236.4	<a href="#">Graphs</a>	<a href="#">Graphs</a>

\*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

## Description of the system

This surveillance is based on nationally organized 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 42/2010, 23 countries reported virological data. Sentinel physicians collected 355 specimens, six (1.7%) of which were positive for influenza virus (Tables 1 and 2). In addition, three non-sentinel source specimens (i.e., specimens collected for diagnostic purpose in hospitals) were reported positive for influenza virus. Of the nine influenza viruses detected from sentinel and non-sentinel sources during week 42/2010, seven (77.8%) were type A and two (22.2%) were type B. These detections were reported by Belgium, Estonia, Germany, Ireland, Spain and the UK (England).

Three of the four influenza A viruses detected in week 42/2010 were subtyped: one as pandemic influenza A(H1)2009 virus and two as A(H3). Table 2 shows the distribution of both sentinel and non-sentinel specimens by type and subtype. Figures 1–3 show the trends of virological detections since week 40/2010 over time.

More details on circulating viruses can be found in the [report](#) prepared by the Community Network of Reference Laboratories coordination team.

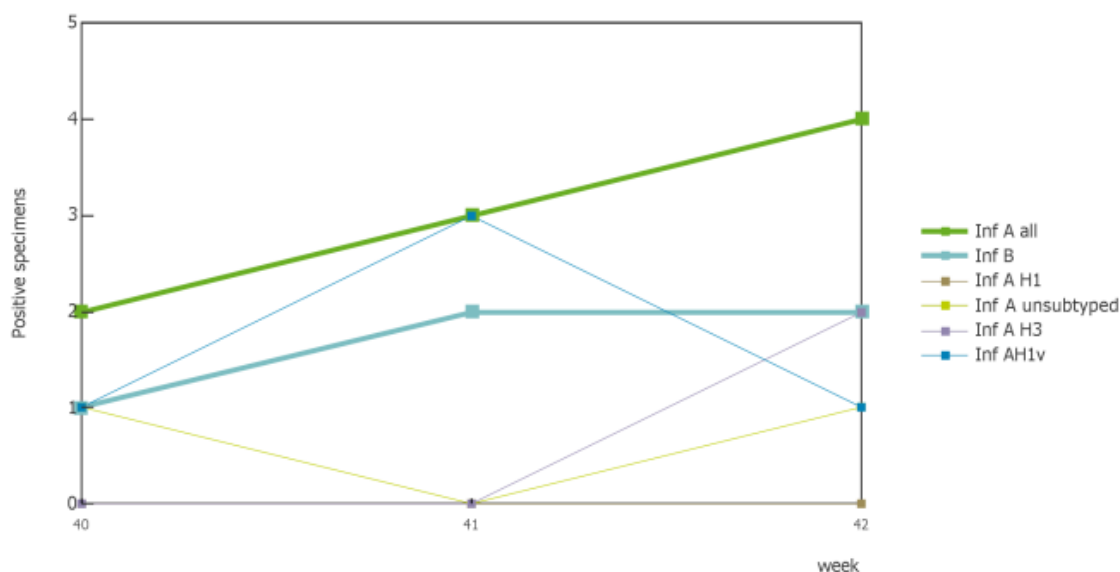
In week 42/2010, 12 countries reported 63 detections of respiratory syncytial virus, a number within the range of the previous season (Figure 4).

**Table 2: Weekly and cumulative influenza virus detections by type, subtype and surveillance system, weeks 40/2010–42/2010**

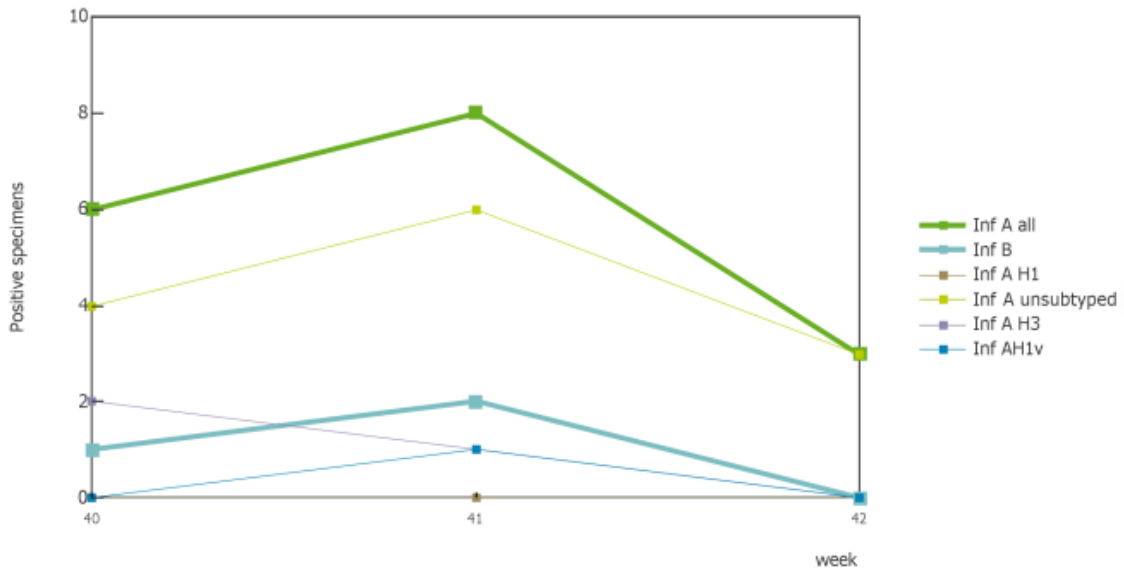
Virus type/subtype	Current Period		Season	
	Sentinel	Non-sentinel	Sentinel	Non-sentinel
Influenza A	4	3	9	17
A (pandemic H1N1)	1	0	5	1
A (subtyping not performed)	1	3	2	13
A (not subtypable)	0	0	0	0
A (H3)	2	0	2	3
A (H1)	0	0	0	0
Influenza B	2	0	5	3
<b>Total Influenza</b>	<b>6</b>	<b>3</b>	<b>14</b>	<b>20</b>

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

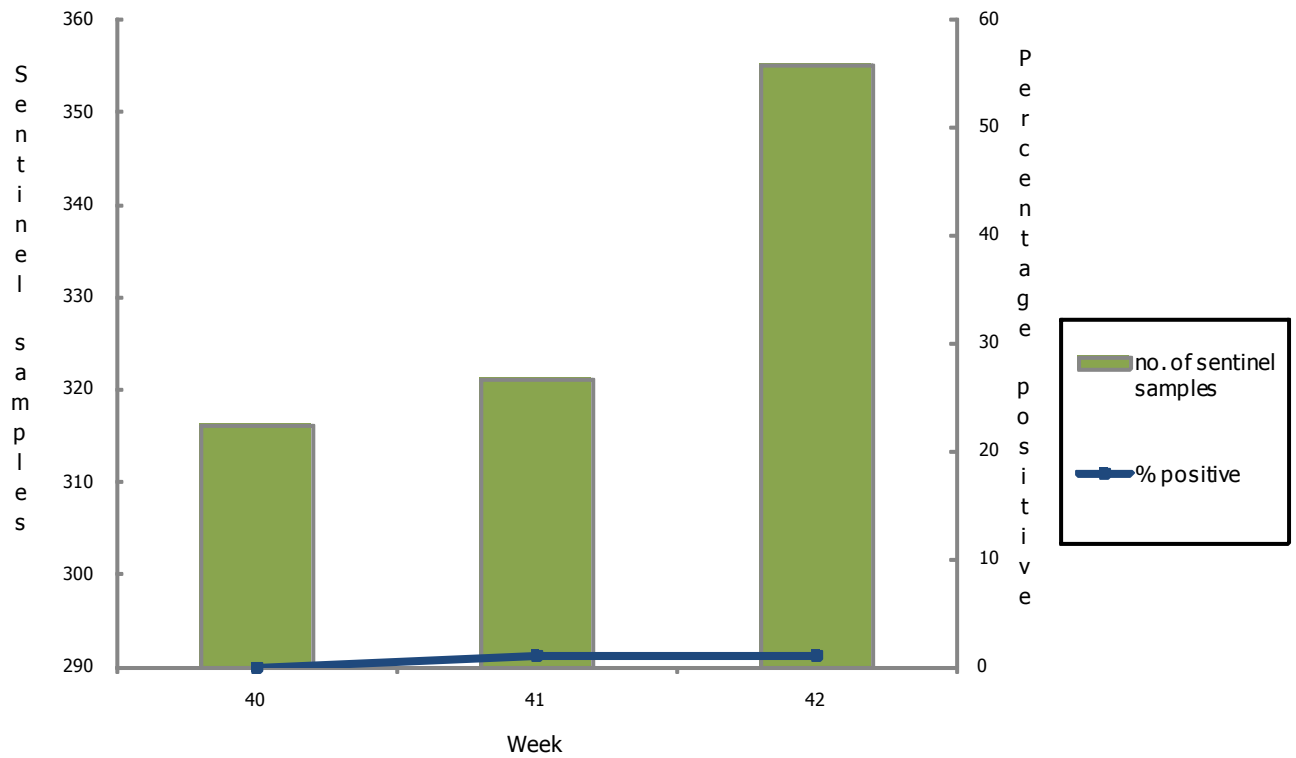
**Figure 1: Number of sentinel specimens positive for influenza, by type, subtype and by week of report, weeks 40/2010–42/2010**



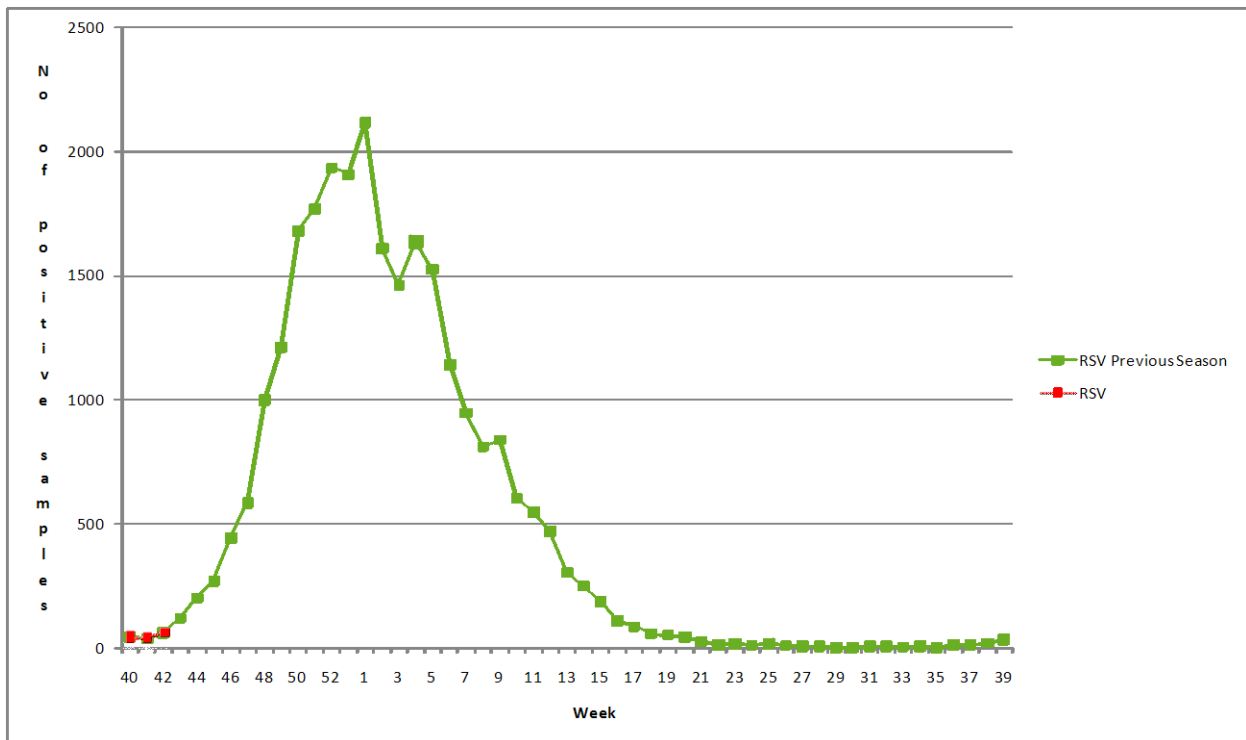
**Figure 2: Number of non-sentinel specimens positive for influenza by type, subtype and week of report, weeks 40/2010–42/2010**



**Figure 3: Proportion of sentinel samples positive for influenza, weeks 40/2010–42/2010**



**Figure 4: Respiratory syncytial virus detections, sentinel and non-sentinel, weeks 40/2010–42/2010**



## 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 week 42/2010, three SARI cases were reported in Romania. Influenza virus was not detected in any of these cases and none of the individuals had been vaccinated against influenza (Tables 3, 4 and 5).

**Table 3: Number of SARI cases by age and gender, week 42/2010**

Age groups	Male	Female
2-17		1
18-44	1	
45-59	1	
Total	2	1

**Table 4: Number of SARI cases by influenza type and subtype, week 42/2010**

Virus type/subtype	Number of cases during current week	Cumulative number of cases since the start of the season
Influenza A		
A (pandemic H1)		
A(H3)		
A(H1)		
Influenza B		
Unknown	3	3
Total	3	3

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

**Table 5: Number of SARI cases by vaccination status, week 42/2010**

Vaccination Status	Number Of Cases	Percentage of cases
Not full pandemic vaccination	0	0
Not vaccinated	3	100
TOTAL	3	

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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)

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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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