

# EUROPEAN INFLUENZA SURVEILLANCE NETWORK



## Weekly electronic bulletin

Week 31: 27 July 2009 - 02 August 2009

07 August 2009

### Continued pandemic influenza virus detections across Europe with increased activity in the UK (Northern Ireland)

**Summary:** All of the 84 subtyped influenza viruses detected by sentinel networks in week 31/2009 were A(H1N1)v, and the UK (Northern Ireland) reported medium activity for the first time. Ireland and the UK (England, Northern Ireland) are the only countries that have reported influenza activity above their national baseline levels since the pandemic was declared.

**Epidemiological situation - week 31/2009:** For the intensity indicator, the national network levels for influenza-like illness (ILI) and/or acute respiratory infection (ARI), Ireland and the UK (England, Northern Ireland) reported medium activity. The highest consultation rates in Ireland and the UK (England, Northern Ireland) were observed among individuals aged 0–4 years and 15–64 years. For the geographical spread indicator, widespread activity was reported in the UK (England) and local activity was reported in Spain. The remaining countries reported sporadic (Belgium, Denmark, Hungary, Ireland, Latvia, Portugal, Slovenia and the UK (Northern Ireland)) or no activity (Bulgaria, Estonia, France, Germany, Greece, Lithuania, Romania, Slovakia and Sweden). The reported trends included an increase in Denmark and the UK (Northern Ireland), a decrease in Bulgaria, Latvia and the UK (England) and stability in the rest of the reporting countries.

**Cumulative epidemiological situation - weeks 16–31/2009:** Since week 16/2009, influenza activity above baseline levels was reported in the following locations: the UK (England) since week 27/2009, Ireland since week 30/2009, and UK (Northern Ireland) in week 31/2009. Influenza activity decreased in the UK (England) to medium in week 31/2009 after it was reported to be high in weeks 28–30. Influenza activity remained low in all other countries reporting to ECDC since week 16/2009.

**Virological situation - week 31/2009:** The total number of respiratory specimens collected by sentinel physicians in week 31/2009 was 584, of which 99 (17%) were positive for influenza virus: 84 (85%) were subtype A(H1N1)v and 15 A untyped.

The highest proportions of sentinel specimens positive for influenza were observed in Denmark (42%), Greece (40%) and Spain (29%).

In addition, 2059 non-sentinel source specimens (e.g. specimens collected for diagnostic purposes in hospitals) were reported positive for influenza virus. Of these, 2056 were type A (1725 subtype (H1N1)v, two subtype H3N2 and 329 not subtyped) and three type B.

**Cumulative virological situation - weeks 16–31/2009:** Of the 11819 virus detections (sentinel and non-sentinel) since week 16/2009, 11369 (96%) were type A (7295 subtype (H1N1)v, 146 subtype H3, 106 subtype H3N2, 48 subtype H1, 38 subtype H1N1 and 3736 not subtyped) and 450 (4%) were type B. During week 31/2009, the proportion of sentinel specimens positive for influenza (17%) decreased compared to week 30/2009 when it was 27%, the highest since week 16/2009.

Based on the antigenic and/or genetic characterisation of 7080 influenza viruses reported from week 20/2008 to week 31/2009, 5178 (73%) were reported as A/Brisbane/10/2007 (H3N2)-like, 293 (4%) as A/Brisbane/59/2007 (H1N1)-like, 58 (1%) as B/Florida/4/2006-like (B/Yamagata/16/88 lineage), 1486 (21%) as B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) and 65 (1%) as A/California/7/2009 (H1N1)v-like. From this week onwards, we will report characterisations of the pandemic virus as A/California/7/2009 (H1N1)v-like in order to be in line with the current virus strains recommended by WHO for vaccine preparation. For details [click here](#).

All A(H1N1)v viruses tested so far have been sensitive to oseltamivir and zanamivir—except for one specimen isolated in Denmark in a patient on oseltamivir treatment—but resistant to M2 inhibitors. For ECDC threat assessment on this [click here](#).

**Comment:** Increased influenza activity is now being reported in the UK (England, Northern Ireland) and Ireland, while three other EU countries (Denmark, Greece and Spain) are detecting the pandemic virus in a high proportion of their sentinel specimens. The increased influenza activity reported in three neighbouring countries is not surprising, and possible reasons for this focal pandemic activity were mentioned in the week 29 bulletin.

During week 31/2009, all the positive sentinel samples subtyped were the pandemic virus and of 1730 non-sentinel samples subtyped, only five were seasonal influenza strains. This indicates that the pandemic virus is the predominant circulating influenza virus. This does not, however, preclude the co-circulation of seasonal and pandemic influenza viruses during the winter period as circulation of seasonal strains during the summer is uncommon.

Background: The Weekly Electronic Bulletin presents and comments on influenza activity in the European Union and Norway. Of these countries, 14 reported both clinical and virological data, four reported virological data only and four reported clinical data only in week 31/2009. The spread of influenza viruses and their epidemiological impact in Europe are being monitored by the network under the aegis of [the European Centre for Disease Prevention and Control](#) in Stockholm (Sweden) in collaboration with the [WHO Collaborating Centre for Reference and Research on Influenza](#) in London (UK).

Other bulletins: The EISN bulletin is prepared using reports from GP consultations and other sources, depending on individual country arrangements. It is important to recognise that different health care systems and types of measurement should also be considered when assessing the impact of influenza.

The bulletin text was written by an editorial team at the [European Centre for Disease Prevention and Control](#) (ECDC): Flaviu Plata, Phillip Zucs and Bruno Ciancio. The bulletin text was reviewed by the Community Network of Reference Laboratories for Human Influenza in Europe (CNRL) coordination team: Adam Meijer, Rod Daniels, Alan Hay and Maria Zambon. On behalf of the EISN members the bulletin text was reviewed by Joan O'Donnell (Health Protection Surveillance Centre, Ireland) and Katarina Prosenc (National Institute of Public Health, Slovenia).  
Maps and commentary used in this Bulletin do not imply any opinions whatsoever of ECDC or its partners on the legal status of the countries and territories shown or concerning their borders.

**Comments on Clinical Data provided by countries in week 31, 2009**

No country has provided comments

**Comments on Virological Data provided by countries in week 31, 2009****Network comments**

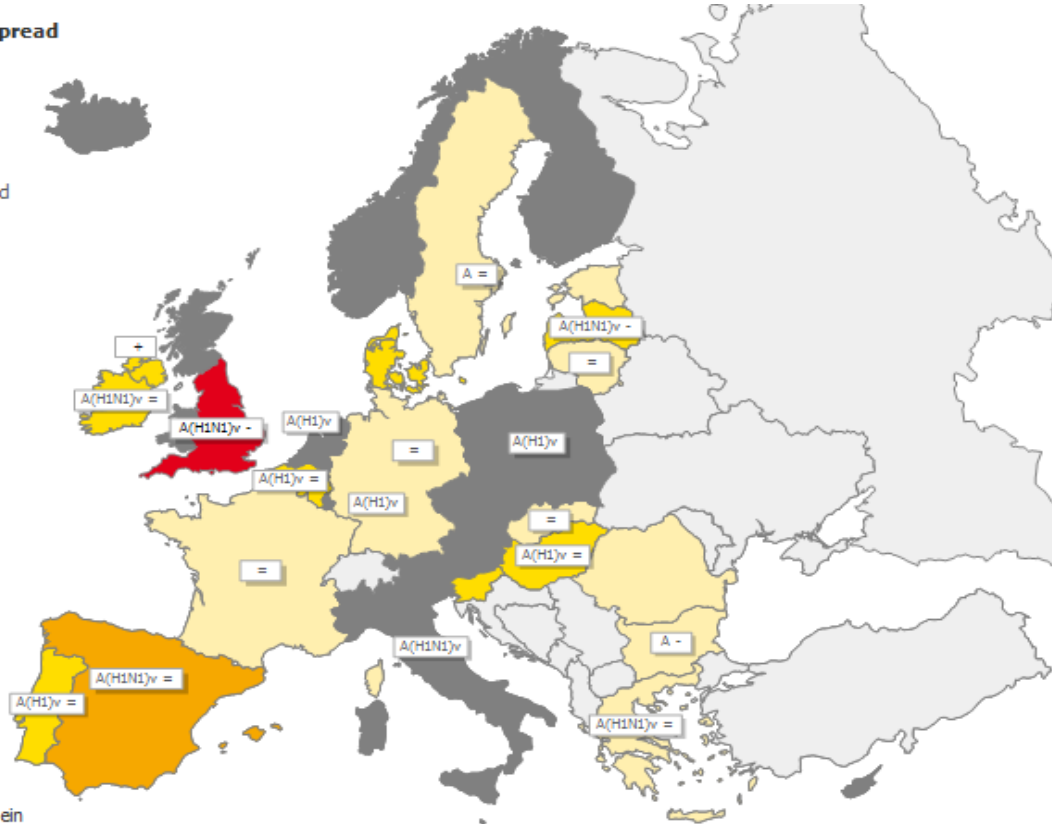
Latvia	0
Slovenia	In Slovenia in the week 31 first 4 A (H1N1)v influenza viruses were detected in specimens collected by sentinel physicians.



Influenza Geographic Spread in Week 31, 2009

**Geographic spread**

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



- Liechtenstein
- Luxembourg
- Malta

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

Legend:

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)	-	Decreasing clinical activity
		+	Increasing clinical activity
		=	Stable clinical activity
No activity	No evidence of influenza virus activity (clinical activity remains at baseline levels)	A	Type A
		A(H1)v	Type A, Subtype H1v
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(H1N1)v	Type A, Subtype H1N1v
Sporadic	Isolated cases of laboratory confirmed influenza infection		
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)		

## Influenza Intensity in Week 31, 2009

Country	Intensity	Geographic spread	No. of sentinel swabs	Percentage positive *	Dominant Type	ILI per 100.000	ARI per 100.000	Epidemiological overview	Virological overview
Belgium	Low	Sporadic	77	14.3	A(H1)v			<a href="#">graphs</a>	<a href="#">graphs</a>
Bulgaria	Low	No activity		-	A			<a href="#">graphs</a>	<a href="#">graphs</a>
Denmark	Low	Sporadic	24	41.7	A(H1N1)v	46.9	0.0	<a href="#">graphs</a>	<a href="#">graphs</a>
Estonia	Low	No activity	0	-	None	0.2	60.3	<a href="#">graphs</a>	<a href="#">graphs</a>
France	Low	No activity		-			657.4	<a href="#">graphs</a>	<a href="#">graphs</a>
Germany	Low	No activity		-			414.1	<a href="#">graphs</a>	<a href="#">graphs</a>
Greece	Low	No activity	6	40.0	A(H1N1)v	54.0		<a href="#">graphs</a>	<a href="#">graphs</a>
Hungary	Low	Sporadic	6	0.0	A(H1)v	13.1		<a href="#">graphs</a>	<a href="#">graphs</a>
Ireland	Medium	Sporadic	32	15.6	A(H1N1)v	32.5		<a href="#">graphs</a>	<a href="#">graphs</a>
Italy			0	-	A(H1N1)v			<a href="#">graphs</a>	<a href="#">graphs</a>
Latvia	Low	Sporadic	0	-	A(H1N1)v	0.0	128.2	<a href="#">graphs</a>	<a href="#">graphs</a>
Lithuania	Low	No activity		-		0.1	64.7	<a href="#">graphs</a>	<a href="#">graphs</a>
Luxembourg			30	10.0	A(H1)v			<a href="#">graphs</a>	<a href="#">graphs</a>
Netherlands			14	14.3	A(H1)v			<a href="#">graphs</a>	<a href="#">graphs</a>
Poland			4	0.0	A(H1)v			<a href="#">graphs</a>	<a href="#">graphs</a>
Portugal	Low	Sporadic	0	-	A(H1)v	3.3		<a href="#">graphs</a>	<a href="#">graphs</a>
Romania	Low	No activity	38	0.0	None	7.2	483.7	<a href="#">graphs</a>	<a href="#">graphs</a>
Slovakia	Low	No activity		-		41.4	558.0	<a href="#">graphs</a>	<a href="#">graphs</a>
Slovenia	Low	Sporadic	16	25.0	None	6.3	428.0	<a href="#">graphs</a>	<a href="#">graphs</a>
Spain	Low	Local	144	29.2	A(H1N1)v	36.0		<a href="#">graphs</a>	<a href="#">graphs</a>
Sweden	Low	No activity	28	0.0	A			<a href="#">graphs</a>	<a href="#">graphs</a>
UK - England	Medium	Widespread	165	16.0	A(H1N1)v			<a href="#">graphs</a>	<a href="#">graphs</a>
UK - Northern Ireland	Medium	Sporadic		-		142.5	227.2	<a href="#">graphs</a>	<a href="#">graphs</a>
Europe			584	17.0				<a href="#">graphs</a>	<a href="#">graphs</a>

\* Based on sentinel data

## Weekly total of viral detections 31, 2009

Virus type/subtype	Current Week		Season	
	Sentinel	Non-sentinel	Sentinel	Non-sentinel
Influenza A	99	2056	10756	23501
A (pandemic H1N1)	84	1725	672	6648
A (subtyping not performed)	15	329	2988	11045
A (not subtypable)	0	0	0	17
A (H3)	0	2	6758	5420
A (H1)	0	0	338	379
Influenza B	0	3	2483	2846