

# EUROPEAN INFLUENZA SURVEILLANCE NETWORK



## Weekly electronic bulletin

Week 35: 24 August 2009 - 30 August 2009

04 September 2009

### Widespread increasing influenza activity in Sweden with low activity in most of the other European countries

**Summary:** Sweden is currently the only European country reporting widespread influenza activity at medium level with an increasing trend. In Ireland and the UK (England and Northern Ireland), influenza activity continues to decline, while all other countries are reporting low local activity at most.

**Epidemiological situation – week 35/2009:** For the intensity indicator – national network levels for influenza-like illness (ILI) and/or acute respiratory infection (ARI) – Ireland, Sweden and the UK (Northern Ireland) reported medium activity and all other countries reported low activity. For the geographical spread indicator, widespread activity was reported in Sweden and local activity in Ireland, Spain and the UK (England). The remaining countries reported sporadic or no activity. Hungary, Spain and Sweden saw an increasing trend while Ireland, Romania and the UK (England and Northern Ireland) reported a decreasing trend. Levels of activity remained unchanged for the remaining 12 countries that reported in this week.

**Cumulative epidemiological situation – weeks 16–35/2009:** Since week 16/2009, influenza activity above baseline levels has been reported in the following locations: the UK (England) since week 27/2009, Ireland since week 30/2009, the UK (Northern Ireland) since week 31/2009, Norway since week 34/2009 and Sweden since week 35/2009. In the UK (England), influenza activity was high in weeks 28–30, decreased to medium levels in week 32 and to low levels in week 33. Influenza activity remained at medium levels in week 35 in both Ireland and the UK (Northern Ireland), but appeared to be decreasing in both countries. In most locations where influenza activity rose above baseline levels this summer, the most affected age groups were those aged 15–64 years. Only in the UK (England) did children aged less than 15 years have the highest ILI consultation rates.

**Virological situation – week 35/2009:** Sentinel physicians collected 669 respiratory specimens, of which 137 (20%) were positive for influenza virus, all of them type A: 130 were subtype (H1N1)v and seven not subtyped. Of the countries testing more than ten sentinel specimens, the highest proportions of specimens positive for influenza virus were observed in Spain (36%), followed by Ireland and the UK (England) with 20% each. In addition, 1053 non-sentinel source specimens (e.g. specimens collected for diagnostic purposes in hospitals) were reported positive for influenza virus. Of these, 1048 were type A (866 subtype H1N1v, one H1, four H3, three H3N2 and 174 not subtyped) and five type B. Altogether, 15 of the 22 countries reporting virological data stated influenza A(H1)v or A(H1N1)v as their dominant subtype.

**Cumulative virological situation – weeks 16–35/2009:** Of the 22 471 virus detections (sentinel and non-sentinel) since week 16/2009, 21 987 (98%) were type A (14 710 subtype H1N1v, 182 subtype H3, 119 subtype H3N2, 77 subtype H1, 41 subtype H1N1 and 6 858 not subtyped) and 484 (2%) were type B. Based on the antigenic and/or genetic characterisation of 9 277 influenza viruses reported from week 40/2008 to week 35/2009, 6 462 (69%) were reported as A/Brisbane/10/2007 (H3N2)-like, 382 (4%) as A/Brisbane/59/2007 (H1N1)-like, 73 (1%) as B/Florida/4/2006-like (B/Yamaqata/16/88 lineage), 2 203 (24%) as B/Malaysia/2506/2004-like or B/Brisbane/60/2008-like (B/Victoria/2/87 lineage) and 157 (2%) as A/California/7/2009 (H1N1)v-like. Since week 31/2009, we have reported 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 resistant to M2 inhibitors but sensitive to oseltamivir and zanamivir – except for one oseltamivir-resistant specimen isolated in Denmark from a patient on oseltamivir treatment.

**Comment:** Sweden is currently the only European country reporting widespread influenza activity at medium level with an increasing trend. In Ireland and the UK (England and Northern Ireland), influenza activity continues to decline while all other countries report low local activity at most. In more than two thirds of reporting countries, the pandemic (H1N1) 2009 virus is the dominant influenza subtype with very little co-circulation of seasonal influenza A(H3) and B.

**Background:** The Weekly Electronic Bulletin presents and comments on influenza activity in the European Union and Norway. Of these countries, 16 reported both clinical and virological data, six reported virological data only and three reported clinical data only in week 35/2009. 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).

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 healthcare 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, Bruno Ciancio 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, 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 Prosenč (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 35, 2009**

No country has provided comments

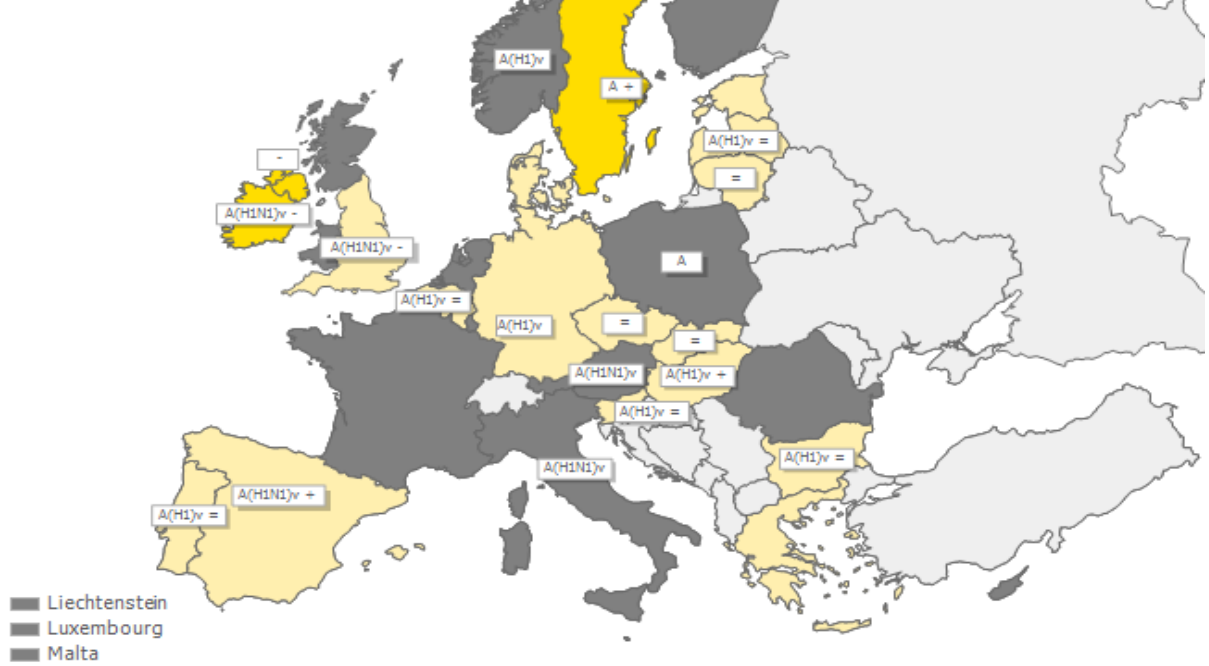
**Comments on Virological Data provided by countries in week 35, 2009****Network comments**

Latvia                      First case of influenza A/H3 confirmed in patient arrived from USA.

Influenza Intensity in Week 35, 2009

**Intensity**

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



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

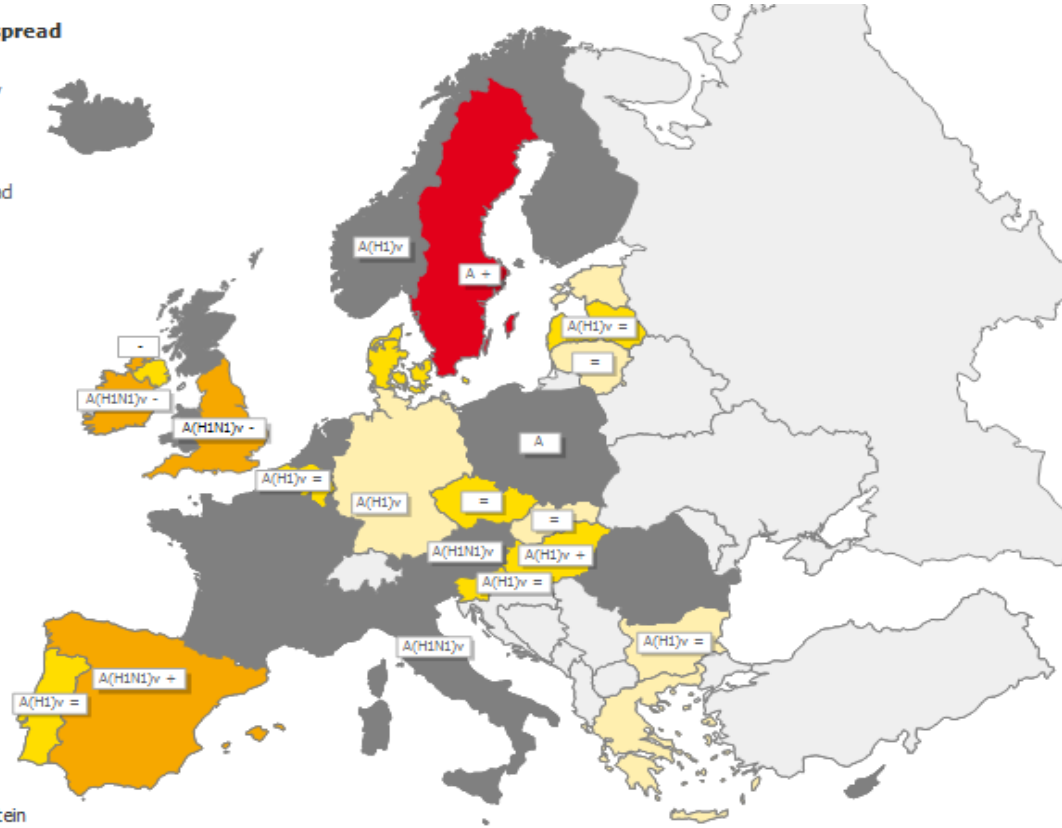
Legend:

High	Higher than usual levels of influenza activity	-	Decreasing clinical activity
Low	No influenza activity or influenza at baseline levels	+	Increasing clinical activity
Medium	Usual levels of influenza activity	=	Stable clinical activity
Very high	Particularly severe levels of influenza activity	A	Type A
		A(H1)v	Type A, Subtype H1v
		A(H1N1)v	Type A, Subtype H1N1v

Influenza Geographic Spread in Week 35, 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)		

## Country Overview in Week 35, 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
Austria			13	0.0	A(H1N1)v			<a href="#">graphs</a>	<a href="#">graphs</a>
Belgium	Low	Sporadic	79	10.1	A(H1)v	78.8	692.2	<a href="#">graphs</a>	<a href="#">graphs</a>
Bulgaria	Low	No activity	0	-	A(H1)v		290.7	<a href="#">graphs</a>	<a href="#">graphs</a>
Czech Republic	Low	Sporadic		-		5.4	359.5	<a href="#">graphs</a>	<a href="#">graphs</a>
Denmark	Low	Sporadic	8	0.0	A(H1N1)v	56.3	0.0	<a href="#">graphs</a>	<a href="#">graphs</a>
Estonia	Low	No activity	2	0.0	None	0.5	80.1	<a href="#">graphs</a>	<a href="#">graphs</a>
Germany	Low	No activity	59	6.8	None		464.7	<a href="#">graphs</a>	<a href="#">graphs</a>
Greece	Low	No activity	3	33.3	None	25.7		<a href="#">graphs</a>	<a href="#">graphs</a>
Hungary	Low	Sporadic	9	11.1	A(H1)v	12.3		<a href="#">graphs</a>	<a href="#">graphs</a>
Ireland	Medium	Local	15	20.0	A(H1N1)v	33.7		<a href="#">graphs</a>	<a href="#">graphs</a>
Italy			2	100.0	A(H1N1)v			<a href="#">graphs</a>	<a href="#">graphs</a>
Latvia	Low	Sporadic	0	-	A(H1)v	0.0	152.8	<a href="#">graphs</a>	<a href="#">graphs</a>
Lithuania	Low	No activity		-		0.1	73.5	<a href="#">graphs</a>	<a href="#">graphs</a>
Luxembourg			26	11.5	A(H1)v			<a href="#">graphs</a>	<a href="#">graphs</a>
Netherlands			17	0.0	None			<a href="#">graphs</a>	<a href="#">graphs</a>
Norway			19	10.5	A(H1)v			<a href="#">graphs</a>	<a href="#">graphs</a>
Poland			1	0.0	A			<a href="#">graphs</a>	<a href="#">graphs</a>
Portugal	Low	Sporadic	1	0.0	A(H1)v	2.7		<a href="#">graphs</a>	<a href="#">graphs</a>
Romania			22	0.0	None			<a href="#">graphs</a>	<a href="#">graphs</a>
Slovakia	Low	No activity		-		47.4	569.6	<a href="#">graphs</a>	<a href="#">graphs</a>
Slovenia	Low	Sporadic	10	0.0	A(H1)v	0.0	354.1	<a href="#">graphs</a>	<a href="#">graphs</a>
Spain	Low	Local	261	36.4	A(H1N1)v	53.6		<a href="#">graphs</a>	<a href="#">graphs</a>
Sweden	Medium	Widespread	52	15.4	A	9.9		<a href="#">graphs</a>	<a href="#">graphs</a>
UK - England	Low	Local	70	20.0	A(H1N1)v	11.8	196.9	<a href="#">graphs</a>	<a href="#">graphs</a>
UK - Northern Ireland	Medium	Sporadic		-		56.6	216.6	<a href="#">graphs</a>	<a href="#">graphs</a>
Europe			669	20.5					<a href="#">graphs</a>

\* Based on sentinel data

## Total of Viral Detections in the Season up till Week 35, 2009

Virus type/subtype	Current Week		Season	
	Sentinel	Non-sentinel	Sentinel	Non-sentinel
Influenza A	137	1048	11685	33190
A (pandemic H1N1)	130	866	1581	13154
A (subtyping not performed)	7	174	3001	14154
A (not subtypable)	0	0	0	17
A (H3)	0	7	6765	5462
A (H1)	0	1	338	411
Influenza B	0	5	2457	2907