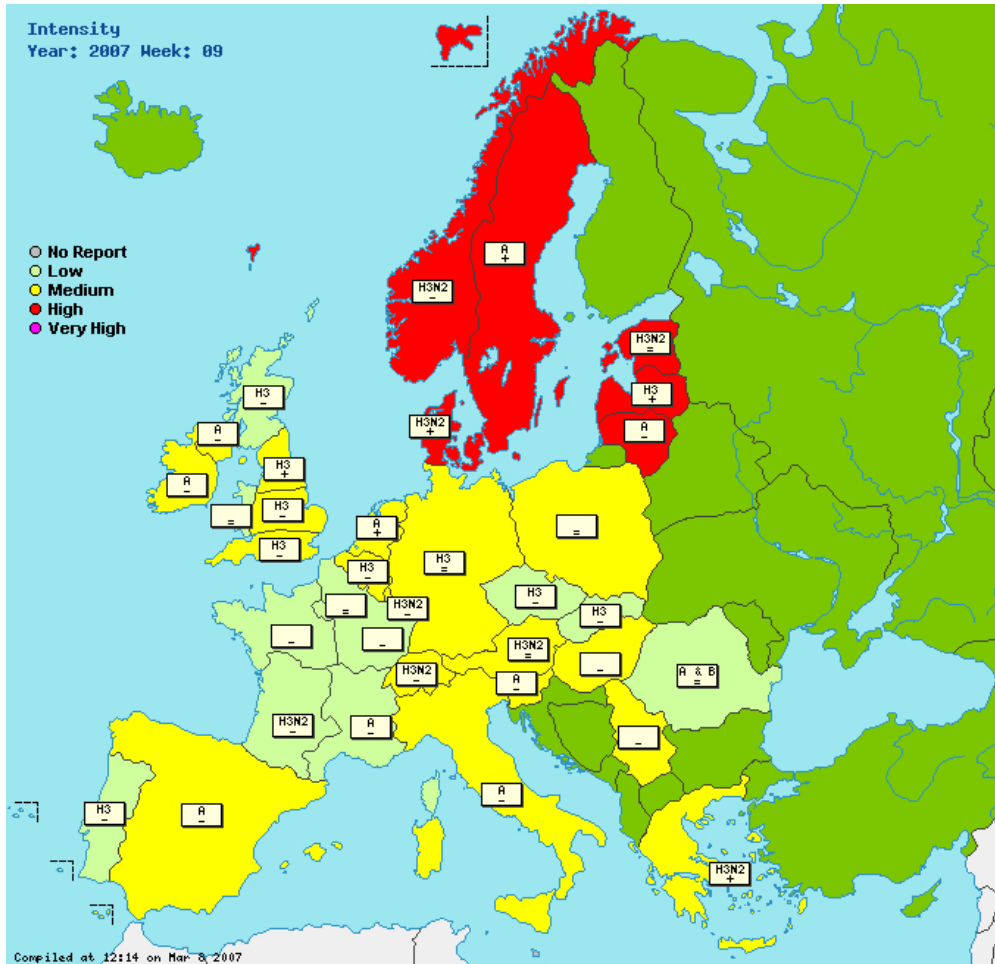
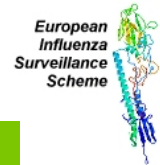


## Increased influenza activity in Central and Northern Europe Intensity of influenza



**A** = Dominant virus A  
**H1N1** = Dominant virus A(H1N1)  
**H3N2** = Dominant virus A(H3N2)  
**H1N2** = Dominant virus A(H1N2)  
**B** = Dominant virus B  
**A & B** = Dominant virus A and B

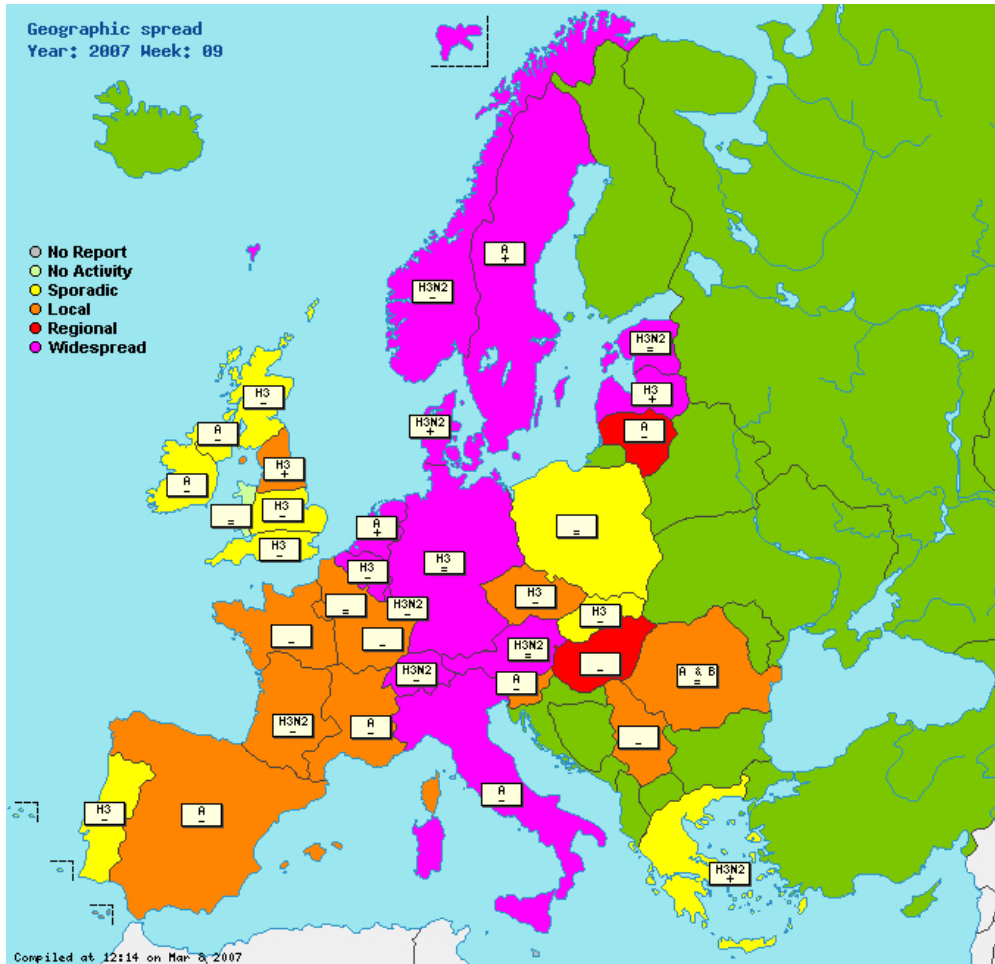
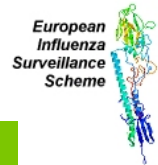
**Low** = no influenza activity or influenza at baseline levels  
**Medium** = usual levels of influenza activity  
**High** = higher than usual levels of influenza activity  
**Very high** = particularly severe levels of influenza activity

= : stable clinical activity  
 + : increasing clinical activity  
 - : decreasing clinical activity

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## Increased influenza activity in Central and Northern Europe Geographic spread of influenza



**A** = Dominant virus A  
**H1N1** = Dominant virus A(H1N1)  
**H3N2** = Dominant virus A(H3N2)  
**H1N2** = Dominant virus A(H1N2)  
**B** = Dominant virus B  
**A & B** = Dominant virus A and B

= : stable clinical activity  
 + : increasing clinical activity  
 - : decreasing clinical activity

**No activity** = no evidence of influenza virus activity (clinical activity remains at baseline levels)

**Sporadic** = isolated cases of laboratory confirmed influenza infection  
**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.

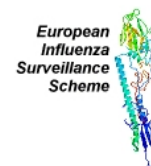
**Regional activity** = influenza activity above baseline levels in one or more regions with a population comprising less than 50% of the country's total population. Laboratory confirmed.

**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.

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## Increased influenza activity in Central and Northern Europe



**Summary:** Influenza activity is continuing to increase in several countries (Denmark, Germany, the Netherlands, Poland, and the Baltic States) or is peaking (Norway, Slovenia and Sweden). However, in most European countries activity is further receding and in some countries activity is back to non-flu levels. Influenza A(H3N2) remains the dominant virus circulating in Europe.

**Epidemiological situation - week 09/2007:** For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were high in the Scandinavian countries and Baltic States, medium in 16 countries and low in seven. A substantial increase in consultation rates above last week's rates for ILI and/or ARI was reported in Denmark, Latvia, Poland and the Netherlands, whilst in Estonia, Germany and Lithuania rates started to level off and in Norway, Slovenia and Sweden rates started to decline. For the geographical spread indicator, widespread activity was reported in 12 countries, regional in four, local in five, sporadic in seven and no activity in one.

Definitions for epidemiological indicators can be found [here](#).

**Cumulative epidemiological situation - 2006-2007 season (since week 40/2006):** This winter, the consultation rates for ILI and/or ARI started to increase around New Year in Scotland, Greece and Spain, where it has already returned to levels seen outside the winter period. For most other countries in the South-West of Europe consultation rates started to increase around mid January 2007 and have passed the peak. In large parts of Central and North-East Europe, activity started to increase in February and is still continuing. Except for Norway, highest consultation rates for ILI and/or ARI have been reported in the 0-4 and 5-14 years age groups.

**Virological situation - week 09/2007:** The total number of respiratory specimens collected by sentinel physicians was 1 653, of which 618 (37%) were positive for influenza virus; 603 (98%) influenza A and 15 (2%) influenza B. In addition, among 757 specimens from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals) positive for influenza virus 749 (99%) were influenza A and 11 (1%) influenza B.

**Cumulative virological situation - 2006-2007 season (since week 40/2006):** Based on (sub)typing data of all influenza virus detections (N=12 855; sentinel and non-sentinel data), 7 437 (58%) were type A not subtyped; 4 933 (38%) type A subtype H3 [of which 2 336 were also N-subtyped and all were subtype N2]; 268 (2%) type A subtype H1 [of which 116 were also N-subtyped and all were subtype N1]; and 217 (2%) type B. In Romania, 39% of viruses were influenza B.

For Europe as a whole, detection of respiratory syncytial virus (RSV) (a respiratory virus with clinical symptoms that are similar to influenza) has returned to low levels, though in several countries detections remain high (Denmark, Estonia, Germany and Scotland).

Based on the antigenic and/or genetic characterisation of 1 624 influenza viruses, 1 151 were A/Wisconsin/67/2005 (H3N2)-like; 286 A/California/7/2004 (H3N2)-like [a strain of the A(H3N2) virus that emerged during the 2004-2005 season, circulated during the 2005-2006 season, and is closely related to the A/Wisconsin/67/2005 (H3N2) reference virus]; 96 A/New Caledonia/20/99 (H1N1)-like; 90 B/Malaysia/2506/2004-like (the B/Victoria/2/87 lineage); and 1 B/Jiangsu/10/2003-like (the B/Yamagata/16/88 lineage) ([click here](#)). There is a good match between the 2006-2007 vaccine virus strains and the reported virus strains.

**Comment:** There are still countries scattered across Europe, mainly in the central and northern part, in which influenza activity is either increasing or just showing signs of levelling off. However, recent experience in most countries of Western Europe suggests the peak will shortly be reached in all remaining countries.

**Background:** The EISS Weekly Electronic Bulletin presents and comments on influenza activity in 30 European countries. In week 09/2007, 29 countries reported clinical data and 28 virological data. The spread of influenza virus strains and their epidemiological impact in Europe are being monitored by EISS in collaboration with the WHO Collaborating Centre in London (United Kingdom) and the European Centre for Disease Prevention and Control in Stockholm (Sweden).

**Other bulletins:** To view national / regional bulletins in Europe and other bulletins from around the world, please [click here](#).

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## Network comments (where available)



### Italy

Decreasing influenza activity.

During this week, 19 influenza viruses were identified and/or isolated (10 A/H3, 6 A/H1, 2 A not yet subtyped and 1 B viruses).

### Latvia

Increasing influenza activity, A/H3 viruses were isolated from all regions of Latvia

### Norway

ILI activity is increasing in 1 of 5 regions (Middle Norway) but decreasing in the rest of the country.

### Switzerland

Influenza activity is decreasing. Influenza A (H3N2) are still mainly detected.

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## EISS - Weekly Electronic Bulletin

Week 9 : 26/02/2007-04/03/2007

09 March 2007, Issue N°217 - 5/6

**Table**

	Intensity	Geographic spread	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000
Austria	Medium	Widespread	294	27.2%	Type A, Subtype H3N2	1364.2	
Belgium	Medium	Widespread	93	45.2%	Type A, Subtype H3	597.7	1857.1
Czech Republic	Low	Local	64	10.9%	Type A, Subtype H3	123.5	1455.1
Denmark	High	Widespread	54	75.9%	Type A, Subtype H3N2	299.3	
England	Medium	Regional	80	33.8%	Type A, Subtype H3	31.9	732.1
Estonia	High	Widespread	79	44.3%	Type A, Subtype H3N2	47.1	1095.9
France	Low	Regional	71	26.8%	Type A, Subtype H3N2		1764.7
Germany	Medium	Widespread	350	61.1%	Type A, Subtype H3		1917.0
Greece	Medium	Sporadic	12	41.7%	Type A, Subtype H3N2	117.9	
Hungary	Medium	Regional				203.1	
Ireland	Medium	Sporadic	27	22.2%	Type A	54.1	
Italy	Medium	Widespread	77	11.7%	Type A	382.5	
Latvia	High	Widespread	15	53.3%	Type A, Subtype H3	932.9	2597.1
Lithuania	High	Regional	23	13.0%	Type A	404.9	1397.0
Luxembourg	Medium	Widespread	59	27.1%	Type A, Subtype H3N2	558.1	3534.9
Malta			9	0%	None		
Netherlands	Medium	Widespread	27	25.9%	Type A	86.3	
Northern Ireland	Medium	Sporadic	5	0%	Type A	131.9	
Norway	High	Widespread	9	88.9%	Type A, Subtype H3N2	294.6	
Poland	Medium	Sporadic	102	2.0%	None	265.8	
Portugal	Low	Sporadic	5	20.0%	Type A, Subtype H3	17.9	

**Intensity:** for definitions see page 1

**Geographic spread:** for definitions see page 2

**Percentage positive:** percentage of sentinel swabs that tested positive for influenza A or B

**Dominant type:** this assessment is based on data from sentinel and non-sentinel sources

**ILI per 100,000:** influenza-like illness consultations per 100,000 population

**ARI per 100,000:** acute respiratory infection consultations per 100,000 population

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**Table**

	Intensity	Geographic spread	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000
Romania	Low	Local	30	36.7%	Type A and B	3.7	1044.8
Scotland	Low	Sporadic	2	0%	Type A, Subtype H3	17.4	
Serbia	Medium	Local	2	0%	None	143.6	
Slovakia	Low	Sporadic	10	60.0%	Type A, Subtype H3	454.1	1983.1
Slovenia	Medium	Local	18	50.0%	Type A	190.2	1741.7
Spain	Medium	Local	50	44.0%	Type A	76.9	
Sweden	High	Widespread	44	45.5%	Type A	21.2	
Switzerland	Medium	Widespread	42	47.6%	Type A, Subtype H3N2	228.8	
Wales	Low	None				8.6	
Europe			1653	37.4%			

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