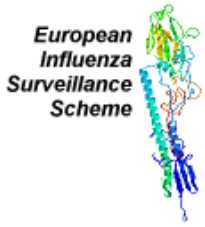
Low levels of influenza activity in Europe



Summary: Levels of influenza activity in Europe are currently low, with all countries reporting no or only sporadic influenza activity this week. There have been sporadic laboratory confirmed cases of influenza across Europe in the past four weeks: twelve cases of influenza A and seven cases of influenza B.

Epidemiological situation - week 41/2007: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were low in all of the 25 countries providing these data. For the geographical spread indicator, sporadic influenza activity was reported in two countries and no activity in 23 countries. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (week 38-41/2007): So far this season, the consultation rates for ILI and/or ARI are at levels usually seen outside the winter period (i.e. below the national baseline threshold).

Virological situation - week 41/2007: The total number of respiratory specimens collected by sentinel physicians in week 41/2007 was 102, of which three (2.9%) were influenza virus positive (one type A each in Ireland and Spain, and one type B in the Netherlands). In addition, three influenza A virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals). The non-sentinel findings were reported by Denmark (subtype H3N2), France and the Netherlands.

Cumulative virological situation - 2007-2008 season (week 38-41/2007): Based on (sub)typing data of all influenza virus detections from week 38 to 41/2007 (N=31; sentinel and non-sentinel data), six were A (not subtyped), three were A(H3), three were A(H1) and seven were B. The influenza virus detections were reported by the following countries: Belgium (1), Denmark (1), England (3), Estonia (1), France (4), Germany (2), Ireland (1), the Netherlands (3), Spain (1), Sweden (2).

Based on the antigenic and/or genetic characterisation of three influenza viruses, two were A/Solomon Island/3/2006 (H1N1)-like and one was B/Florida/4/2006-like (the B/Yamagata/16/88 lineage) (click here).

Comment: There have only been sporadic laboratory confirmed cases of influenza reported to EISS in the last month. A number of these cases were reported to be infections acquired outside of Europe (e.g. a person returning from holiday in Asia). It is currently too early to say which virus type or subtype will become dominant in Europe this season.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 30 European countries that are members of EISS. In week 41/2007, 25 countries reported clinical data and 24 countries reported virological data to EISS. 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.

Erratum: The ILI and ARI consultation rates for Romania in the table below are incorrect. The consultation rate for ILI is 0 and for ARI it is 862.1 per 100,000 population.

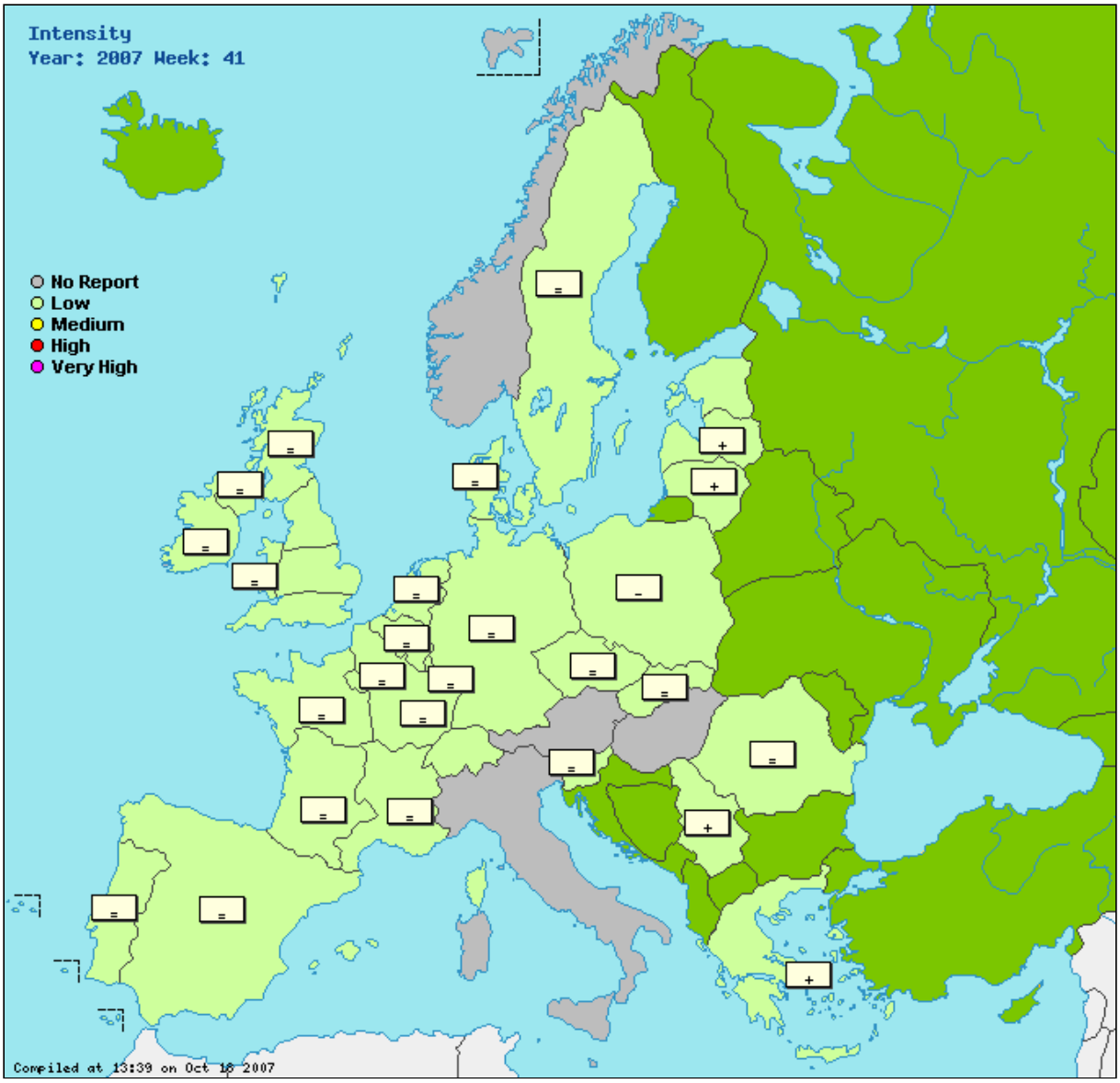
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Switzerland
No influenaz activity detected so far.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None			0	0%	None	96.2 (graphs)	1429.9 (graphs)	Click here
Czech Republic	Low	None			19	0%	None	26.7 (graphs)	1016.9 (graphs)	Click here
Denmark	Low	None			0	0%	None	20.3 (graphs)		Click here
England	Low	None			0	0%	None	6.5 (graphs)	564.6 (graphs)	Click here
Estonia	Low	None			1	0%	None	0.3 (graphs)	163.9 (graphs)	Click here
France	Low	Sporadic			14	0%	None		1846.4 (graphs)	Click here
Germany	Low	None			15	0%	None		794.3 (graphs)	Click here
Greece	Low	None						80.6 (graphs)		Click here
Ireland	Low	Sporadic			6	16.7%	None	6.2 (graphs)		Click here
Latvia	Low	None						(graphs)	991.3 (graphs)	Click here
Lithuania	Low	None			0	0%	None	0.2 (graphs)	441.4 (graphs)	Click here

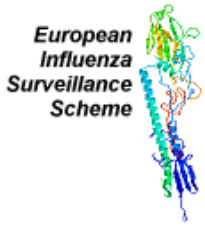
Luxembourg	Low	None	1	0%	None	(graphs)	2141.6 (graphs)	Click here
Malta			0	0%	None	(graphs)		Click here
Netherlands	Low	None	9	11.1%	None	31.8 (graphs)		Click here
Northern Ireland	Low	None	0	0%	None	13.4 (graphs)		Click here
Norway			0	0%	None	(graphs)		Click here
Poland	Low	None	9	0%	None	50.6 (graphs)		Click here
Portugal	Low	None	8	0%	None	4.5 (graphs)		Click here
Romania	Low	None	0	0%	None	(graphs)	862.1 (graphs)	Click here
Scotland	Low	None	0	0%	None	6.4 (graphs)		Click here
Serbia	Low	None	1	0%	None	71.4 (graphs)		Click here
Slovakia	Low	None	3	0%	None	189.9 (graphs)	1503.2 (graphs)	Click here
Slovenia	Low	None	1	0%	None	(graphs)	1104.5 (graphs)	Click here
Spain	Low	None	9	11.1%	None	7.7 (graphs)		Click here
Sweden	Low	None	0	0%	None	1.0 (graphs)		Click here
Switzerland	Low	None	6	0%	None	(graphs)		Click here
Wales	Low	None				0.3 (graphs)		Click here
Europe			102	2.9%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Low levels of influenza activity across all of Europe



Summary: Levels of influenza activity are currently low in Europe, with 26 countries reporting no or only sporadic influenza activity this week. There have been sporadic laboratory confirmed cases of influenza in the past four weeks: 18 cases of influenza A and nine cases of influenza B.

Epidemiological situation - week 42/2007: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were low in all of the 25 countries providing these data. For the geographical spread indicator, sporadic influenza activity was reported in France, the remaining 25 countries reported no activity. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (week 39-42/2007): In the last four weeks, the consultation rates for ILI and/or ARI have been at levels usually seen outside the winter period (i.e. below the national baseline threshold).

Virological situation - week 42/2007: The total number of respiratory specimens collected by sentinel physicians in week 42/2007 was 153, of which two (1.3%) were influenza virus positive (1 H3N2 and 1 H1; both in Spain). In addition, four influenza B and three influenza A virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals). The non-sentinel findings were reported by Denmark (B), England (B), Germany (H3), Hungary (A not subtyped) and Sweden (2 B and 1 A not subtyped).

Cumulative virological situation - 2007-2008 season (week 39-42/2007): Based on (sub)typing data of all influenza virus detections in the last four weeks (N=27; sentinel and non-sentinel data), eight were A (not subtyped), six were A(H1), four were A(H3) and nine were B. The influenza virus detections were reported by the following countries: Denmark (2), England (5), France (5), Germany (3), Hungary (1), Ireland (1), the Netherlands (3), Spain (3) and Sweden (4).

Based on the antigenic and/or genetic characterisation of three influenza viruses, two were A/Solomon Island/3/2006 (H1N1)-like and one was B/Florida/4/2006-like (the B/Yamagata/16/88 lineage) (click here).

Comment: There are currently only sporadic laboratory confirmed cases of influenza being detected in Europe. Virus detections have been made across Europe in the last month, e.g. from Spain (3) in the west, to Sweden (4) in the north and Hungary (1) in the east. It is too early to say which virus type or subtype will become dominant in Europe this season.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 30 European countries that are members of EISS. In week 42/2007, 26 countries reported clinical data and 26 countries reported virological data to EISS. 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.

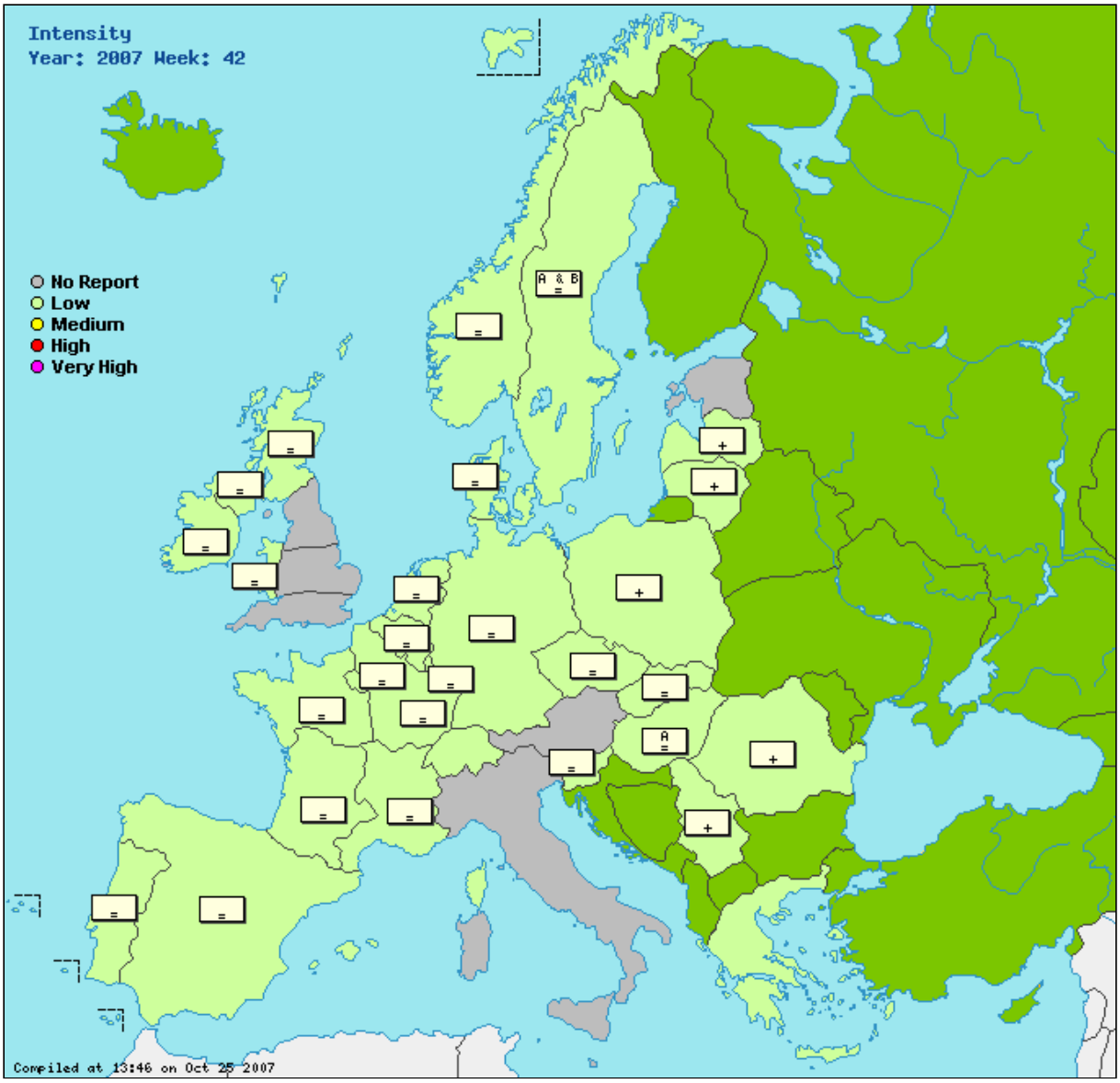
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Latvia
No influenza virus detection , nor isolation so far in Latvia
Spain
Sporadic AH3N2 and AH1 virus detections in the East and North of Spain.
Switzerland
No influenza virus detected this week

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None			8	0%	None	106.2 (graphs)	1289.1 (graphs)	Click here
Czech Republic	Low	None			14	0%	None	25.7 (graphs)	1039.8 (graphs)	Click here
Denmark	Low	None			1	0%	None	36.5 (graphs)		Click here
England					20	0%	None	7.2 (graphs)	565.2 (graphs)	Click here
Estonia		None			0	0%	None	(graphs)		Click here
France	Low	Sporadic			13	0%	None		1797.5 (graphs)	Click here
Germany	Low	None			20	0%	None		869.0 (graphs)	Click here

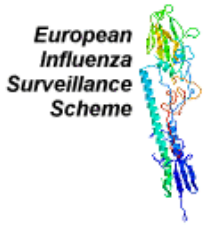
Greece	Low	None				60.9 (graphs)		Click here
Hungary	Low	None	5	0%	Type A	48.7 (graphs)		Click here
Ireland	Low	None	3	0%	None	5.8 (graphs)		Click here
Latvia	Low	None	0	0%	None	(graphs)	1338.3 (graphs)	Click here
Lithuania	Low	None	0	0%	None	0.6 (graphs)	480.5 (graphs)	Click here
Luxembourg	Low	None	2	0%	None	(graphs)	2418.8 (graphs)	Click here
Malta			0	0%	None	(graphs)		Click here
Netherlands	Low	None	10	0%	None	27.5 (graphs)		Click here
Northern Ireland	Low	None	2	0%	None	20.2 (graphs)		Click here
Norway	Low	None	0	0%	None	28.2 (graphs)		Click here
Poland	Low	None	9	0%	None	61.8 (graphs)		Click here
Portugal	Low	None	3	0%	None	8.9 (graphs)		Click here
Romania	Low	None	8	0%	None	922.7 (graphs)	0.6 (graphs)	Click here
Scotland	Low	None	8	0%	None	(graphs)		Click here
Serbia	Low	None	1	0%	None	63.8 (graphs)		Click here
Slovakia	Low	None	3	0%	None	204.7 (graphs)	1537.3 (graphs)	Click here
Slovenia	Low	None	1	0%	None	(graphs)	1092.8 (graphs)	Click here
Spain	Low	None	15	13.3%	None	13.7 (graphs)		Click here
Sweden	Low	None	0	0%	Type A and B	1.6 (graphs)		Click here
Switzerland	Low	None	7	0%	None	4.8 (graphs)		Click here
Wales	Low	None				0.7 (graphs)		Click here
Europe			153	1.3%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Low levels of influenza activity in Europe



Summary: Levels of influenza activity remain low in Europe, with 28 countries reporting no or only sporadic influenza activity this week. There have been sporadic laboratory confirmed cases of influenza since the start of the 2007-2008 season in week 40/2007: 21 cases of influenza A and twelve cases of influenza B.

Epidemiological situation - week 43/2007: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were low in all of the 28 countries providing these data. For the geographical spread indicator, sporadic influenza activity was reported in England and France, the remaining 26 countries reported no activity. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (week 40-43/2007): So far this season, the consultation rates for ILI and/or ARI across the whole of Europe have been at levels usually seen outside the winter period (i.e. below the national baseline threshold).

Virological situation - week 43/2007: The total number of respiratory specimens collected by sentinel physicians in week 43/2007 was 176, none of them were influenza virus positive. Two non-sentinel specimens (e.g. specimens collected for diagnostic purposes in hospitals) were positive for influenza virus: one type A (not subtyped) from England and one type A subtype H1 from Slovakia.

Cumulative virological situation - 2007-2008 season (week 40-43/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=33; sentinel and non-sentinel data), six were A (not subtyped), ten were A(H1), five were A(H3) and twelve were B. The influenza virus detections were reported by the following countries: Denmark (2), England (6), France (5), Germany (3), Hungary (1), Ireland (1), the Netherlands (3), Slovakia (1), Spain (3) and Sweden (4).

Based on the antigenic and/or genetic characterisation of four influenza viruses, three were A/Solomon Island/3/2006 (H1N1)-like and one was B/Florida/4/2006-like (the B/Yamagata/16/88 lineage) (click here).

Comment: Influenza activity in Europe is currently low and there have only been sporadic laboratory confirmed cases of influenza since week 40/2007 across the whole of Europe: in Denmark, England, France, Germany, Hungary, Ireland, the Netherlands, Scotland, Slovakia (see 'Network comment'), Spain and Sweden. Out of the three influenza viruses A(H1), A(H3) and B, no particular group is yet emerging as dominant in Europe.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 30 European countries that are members of EISS. In week 43/2007, 28 countries reported clinical data and 24 countries reported virological data to EISS. 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.

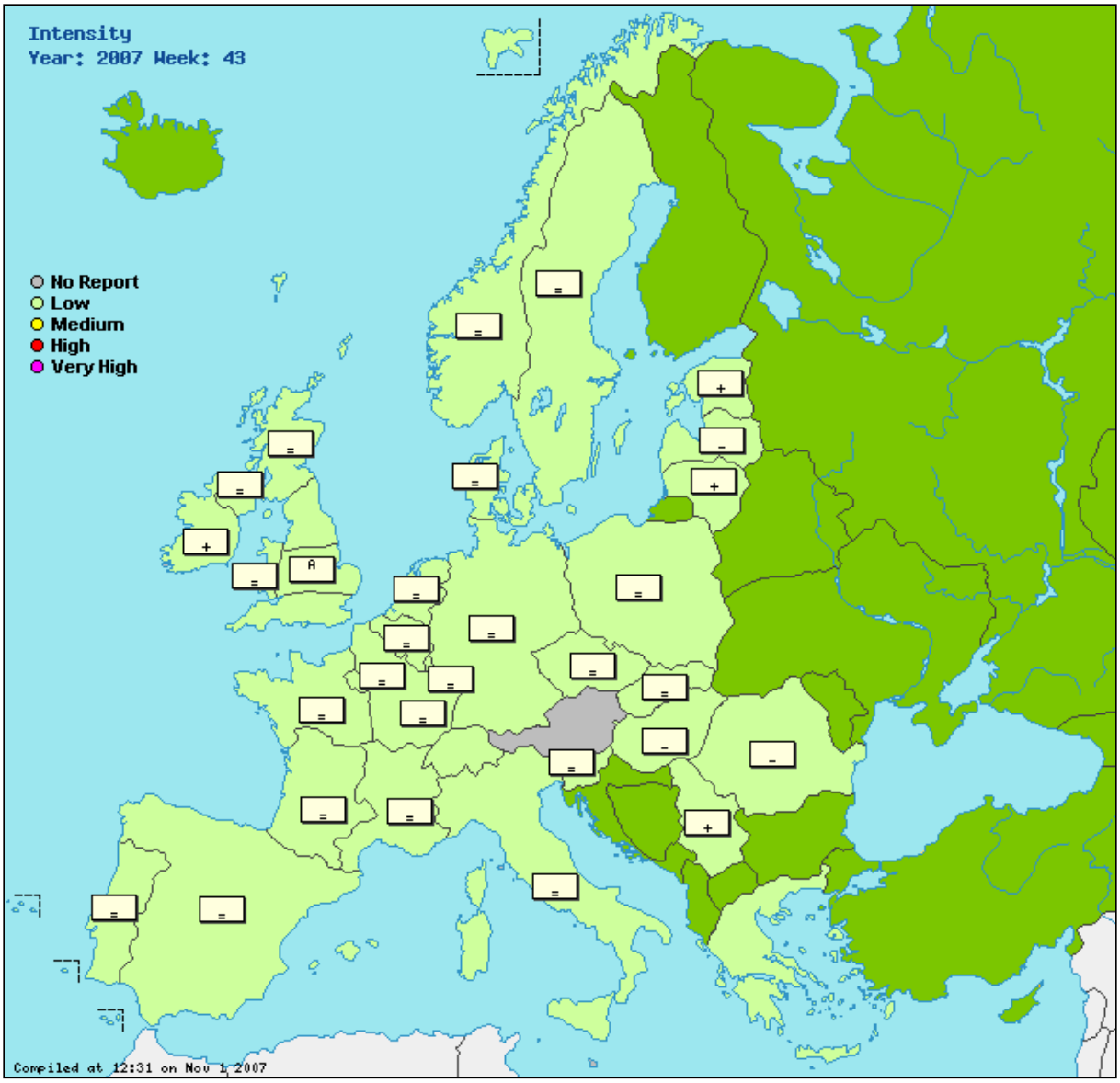
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Czech Republic
To date, only non-flu viruses (adenovirus, parainfluenza) and M.pneumoniae are detected.
Scotland
Results from samples collected in weeks 41 and 42 revealed detections of 1 influenza B from routine sources and 1 influenza A (H1) from the sentinel system.
Slovakia
The first isolate of Influenza A/H1 virus was isolated in the laboratory of NIC, Bratislava in week 43. The positive swabs were sent from the Hospital of infection deseases in Bratislava. Two other cases of parainfluenza 3 were recognized in laboratory of NIC by RT-PCR method .They were sent from sentinel doctors.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None			4	0%	None	95.5 (graphs)	1473.9 (graphs)	Click here
Czech Republic	Low	None			19	0%	None	27.3 (graphs)	1015.4 (graphs)	Click here
Denmark	Low	None			2	0%	None	47.9 (graphs)		Click here
England	Low	Sporadic			32	0%	None	8.2 (graphs)	535.5 (graphs)	Click here

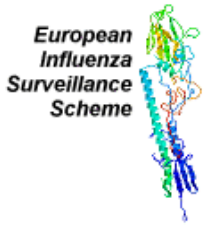
Estonia	Low	None	0	0%	None	0.2 (graphs)	437.6 (graphs)	Click here
France	Low	Sporadic	19	0%	None		1946.9 (graphs)	Click here
Germany	Low	None	14	0%	None		935.0 (graphs)	Click here
Greece	Low	None	0	0%	None	59.8 (graphs)		Click here
Hungary	Low	None	4	0%	None	38.8 (graphs)		Click here
Ireland	Low	None	6	0%	None	10.0 (graphs)		Click here
Italy	Low	None				74.7 (graphs)		Click here
Latvia	Low	None	0	0%	None	(graphs)	1173.8 (graphs)	Click here
Lithuania	Low	None	0	0%	None	1.3 (graphs)	492.5 (graphs)	Click here
Luxembourg	Low	None				25.2 (graphs)	2973.0 (graphs)	Click here
Netherlands	Low	None	7	0%	None	21.3 (graphs)		Click here
Northern Ireland	Low	None	0	0%	None	16.4 (graphs)		Click here
Norway	Low	None	0	0%	None	26.9 (graphs)		Click here
Poland	Low	None	19	0%	None	63.5 (graphs)		Click here
Portugal	Low	None	2	0%	None	4.6 (graphs)		Click here
Romania	Low	None	6	0%	None	877.8 (graphs)	0.2 (graphs)	Click here
Scotland	Low	None	1	0%	None	(graphs)		Click here
Serbia	Low	None	1	0%	None	90.3 (graphs)		Click here
Slovakia	Low	None	3	0%	None	210.4 (graphs)	1569.4 (graphs)	Click here
Slovenia	Low	None	0	0%	None	(graphs)	972.3 (graphs)	Click here
Spain	Low	None	20	0%	None	19.5 (graphs)		Click here
Sweden	Low	None	17	0%	None	0.3 (graphs)		Click here
Switzerland	Low	None				13.0 (graphs)		Click here
Wales	Low	None				1.0 (graphs)		Click here
Europe			176	0%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Low levels of influenza activity in Europe



Summary: Levels of influenza activity remain low in Europe, with 28 countries reporting no or only sporadic influenza activity this week. There has been no change in influenza activity in the last week, or since the start of the 2007-2008 season in week 40/2007, and seasonal influenza activity has not yet started in any part of Europe.

Epidemiological situation - week 44/2007: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were low in all of the 28 countries providing these data. For the geographical spread indicator, sporadic influenza activity was reported in England, France and Scotland; the remaining 25 countries reported no activity. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (week 40-44/2007): So far this season, the consultation rates for ILI and/or ARI across the whole of Europe have been at levels usually seen outside the winter period (i.e. below the national baseline threshold).

Virological situation - week 44/2007: The total number of respiratory specimens collected by sentinel physicians in week 44/2007 was 239, of which two (0.8%) were influenza virus positive (both influenza B viruses; reported by Poland). In addition, six influenza virus detections (five A and one B) were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals). The non-sentinel findings were reported by England (two A subtype H1), Scotland (one A not subtyped and one B), Sweden (one A not subtyped) and Switzerland (one A not subtyped).

Cumulative virological situation - 2007-2008 season (week 40-44/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=47; sentinel and non-sentinel data), 11 were A (not subtyped), 13 were A(H1), six were A(H3) and 17 were B. The influenza virus detections were reported by the following countries: Denmark (2), England (9), France (8), Germany (3), Hungary (1), Ireland (1), the Netherlands (3), Poland (2), Scotland (6), Slovakia (1), Spain (4), Sweden (5) and Switzerland (2).

Based on the antigenic and/or genetic characterisation of four influenza viruses, six were A/Solomon Island/3/2006 (H1N1)-like and one was B/Florida/4/2006-like (B/Yamagata/16/88 lineage) (click here).

Comment: Influenza activity in Europe remains low which is typical for this time of the year. There have been only sporadic laboratory confirmed cases of influenza since week 40/2007 and these have been reported across the whole of Europe: in Denmark, England, France, Germany, Hungary, Ireland, the Netherlands, Poland, Scotland, Slovakia, Spain, Sweden and Switzerland. For the whole of Europe, out of the three influenza viruses A(H1), A(H3) and B, no one group has yet emerged as the dominant virus.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 30 European countries that are members of EISS. In week 44/2007, 28 countries reported clinical data and 27 countries reported virological data to EISS. 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.

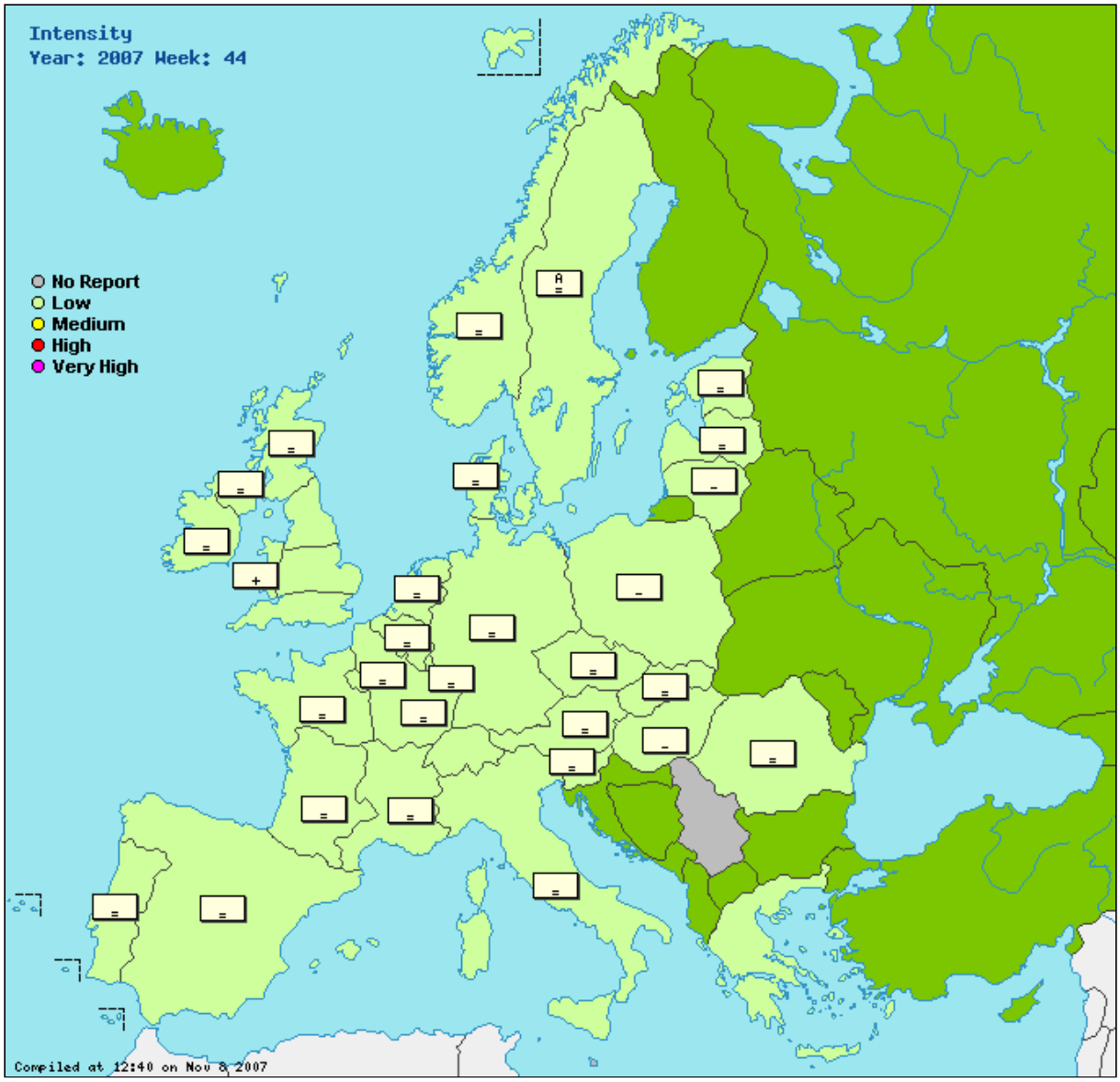
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Switzerland
No influenza activity observed in Switzerland

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria	Low	None			50	0%	None	917.6 (graphs)		Click here
Belgium	Low	None			9	0%	None	68.4 (graphs)	1090.9 (graphs)	Click here
Czech Republic	Low	None			35	0%	None	24.4 (graphs)	1040.3 (graphs)	Click here
Denmark	Low	None			5	0%	None	50.6 (graphs)		Click here
England	Low	Sporadic			23	0%	None	9.8 (graphs)	465.9 (graphs)	Click here
Estonia	Low	None			0	0%	None	0.2 (graphs)	154.6 (graphs)	Click here
France	Low	Sporadic			13	0%	None		1523.1 (graphs)	Click here
Germany	Low	None			18	0%	None		852.0 (graphs)	Click here
Greece	Low	None			0	0%	None	63.8 (graphs)		Click here
Hungary	Low	None			4	0%	None	24.5 (graphs)		Click here
Ireland	Low	None			1	0%	None	4.9 (graphs)		Click here

Italy	Low	None				18.1 (graphs)		Click here
Latvia	Low	None	0	0%	None	(graphs)	1209.8 (graphs)	Click here
Lithuania	Low	None	0	0%	None	0.5 (graphs)	257.6 (graphs)	Click here
Luxembourg	Low	None	1	0%	None	27.5 (graphs)	2857.9 (graphs)	Click here
Netherlands	Low	None	14	0%	None	21.7 (graphs)		Click here
Northern Ireland	Low	None	0	0%	None	16.8 (graphs)		Click here
Norway	Low	None	0	0%	None	26.3 (graphs)		Click here
Poland	Low	None	6	33.3%	None	55.0 (graphs)		Click here
Portugal	Low	None	1	0%	None	4.0 (graphs)		Click here
Romania	Low	None	6	0%	None	918.3 (graphs)	1.1 (graphs)	Click here
Scotland	Low	Sporadic	9	0%	None	(graphs)		Click here
Serbia			0	0%	None	(graphs)		Click here
Slovakia	Low	None	3	0%	None	174.3 (graphs)	1370.2 (graphs)	Click here
Slovenia	Low	None	5	0%	None	(graphs)	685.9 (graphs)	Click here
Spain	Low	None	18	0%	None	15.1 (graphs)		Click here
Sweden	Low	None	7	0%	Type A	1.7 (graphs)		Click here
Switzerland	Low	None	11	0%	None	14.0 (graphs)		Click here
Wales	Low	None				2.7 (graphs)		Click here
Europe			239	0.8%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

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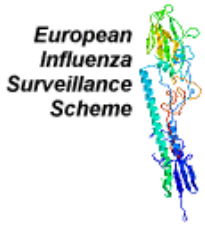
Low levels of influenza activity in Europe



Summary: In Europe, levels of influenza activity remain low at levels normally seen outside the seasonal influenza peak period, with 28 countries reporting no or only sporadic influenza activity this week. There has been no significant change in influenza activity since the start of the 2007-2008 winter period in week 40/2007, and, so far, only a few laboratory confirmed cases of influenza have been reported across Europe.

Epidemiological situation - week 45/2007: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were low in all of the 28 countries providing these data. For the geographical spread indicator, sporadic influenza activity was reported in England, France, Scotland and Slovakia; the remaining 24 countries reported no influenza activity. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (week 40-45/2007): So far this season, the consultation rates for ILI and/or ARI across the whole of Europe have been at levels usually seen outside the seasonal influenza peak period (i.e. below the national baseline threshold).

Virological situation - week 45/2007: The total number of respiratory specimens collected by sentinel physicians in week 45/2007 was 270, of which four (1.5%) were influenza virus positive; one type A not subtyped (from Spain) and three A(H1) (one from Germany and two from Slovakia). In addition, nine influenza virus detections (five type A and four type B) were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals). The non-sentinel findings were reported by Austria [one B], Denmark [one A(H1)], England [one B], the Netherlands [one A(H3)], Poland [one B], Scotland [one A not subtyped], Spain [one B], and Switzerland [two A not subtyped].

Cumulative virological situation - 2007-2008 season (week 40-45/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=67; sentinel and non-sentinel data), 18 were A(not subtyped), 18 were A(H1), eight were A(H3) and 23 were B. The influenza virus detections were reported from 16 countries across Europe.

Based on the antigenic and/or genetic characterisation of ten influenza viruses, eight were A/Solomon Island/3/2006 (H1N1)-like and two were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) (click here).

Comment: Influenza activity in Europe remains low, which is typical for this time of the year. There have been only sporadic laboratory confirmed cases of influenza since week 40/2007, and these have been reported across Europe: in Austria, Belgium, Denmark, England, France, Germany, Hungary, Ireland, the Netherlands, Norway, Poland, Scotland, Slovakia, Spain, Sweden and Switzerland. Out of the three influenza viruses A(H1), A(H3) and B, no particular type or subtype has yet emerged as the dominant virus.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 30 European countries that are members of EISS. In week 45/2007, 28 countries reported clinical data and 24 countries reported virological data to EISS. 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).
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Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

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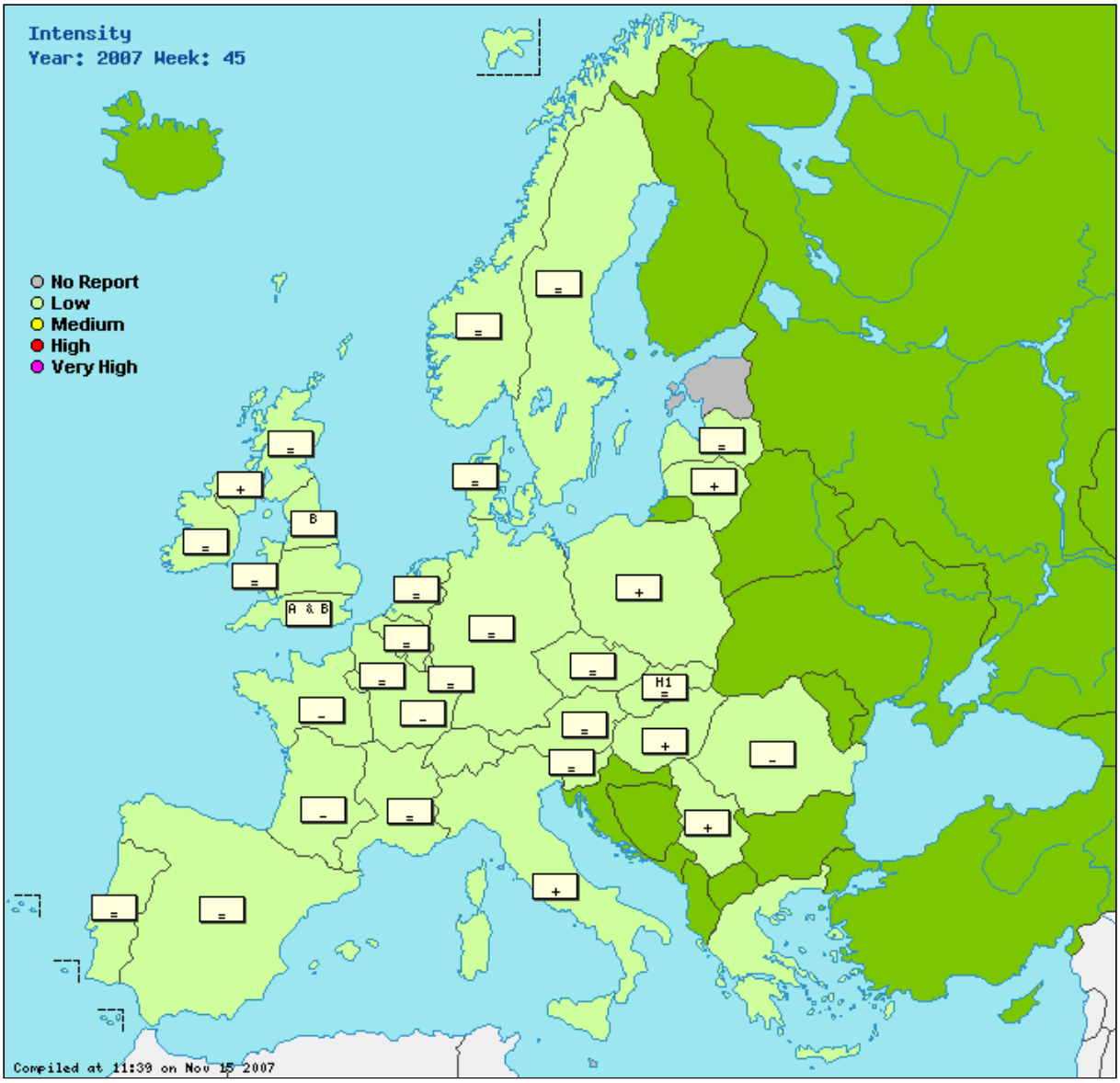
Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Switzerland

No influenza activty observed in the Sentinel system. Few sporadic cases are detected in non sentinel system.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria	Low	None			47	0%	None	913.4 (graphs)		Click here
Belgium	Low	None			9	0%	None	89.4 (graphs)	1387.0 (graphs)	Click here
Czech Republic	Low	None			28	0%	None	26.9 (graphs)	1074.4 (graphs)	Click here
Denmark	Low	None			6	0%	None	52.7 (graphs)		Click here
England	Low	Sporadic			24	0%	Type A and B	8.1 (graphs)	602.4 (graphs)	Click here
Estonia					3	0%	None	(graphs)		Click here
France	Low	Sporadic			35	0%	None		1667.6 (graphs)	Click here
Germany	Low	None			28	3.6%	None		999.0 (graphs)	Click here
Greece	Low	None						37.9 (graphs)		Click here
Hungary	Low	None			6	0%	None	38.5 (graphs)		Click here
Ireland	Low	None			10	0%	None	8.9 (graphs)		Click here

Italy	Low	None				32.7 (graphs)		Click here
Latvia	Low	None				(graphs)	1167.6 (graphs)	Click here
Lithuania	Low	None	0	0%	None	1.3 (graphs)	539.7 (graphs)	Click here
Luxembourg	Low	None	6	0%	None	18.9 (graphs)	2493.9 (graphs)	Click here
Netherlands	Low	None	6	0%	None	36.3 (graphs)		Click here
Northern Ireland	Low	None	0	0%	None	36.9 (graphs)		Click here
Norway	Low	None	0	0%	None	29.0 (graphs)		Click here
Poland	Low	None	7	0%	None	76.9 (graphs)		Click here
Portugal	Low	None	2	0%	None	6.3 (graphs)		Click here
Romania	Low	None	9	0%	None	0.7 (graphs)	838.7 (graphs)	Click here
Scotland	Low	Sporadic	4	0%	None	(graphs)		Click here
Serbia	Low	None	1	0%	None	104.4 (graphs)		Click here
Slovakia	Low	Sporadic	5	40.0%	Type A, Subtype H1	181.4 (graphs)	1528.0 (graphs)	Click here
Slovenia	Low	None	3	0%	None	(graphs)	987.3 (graphs)	Click here
Spain	Low	None	21	4.8%	None	16.5 (graphs)		Click here
Sweden	Low	None				2.6 (graphs)		Click here
Switzerland	Low	None	10	0%	None	11.2 (graphs)		Click here
Wales	Low	None				1.7 (graphs)		Click here
Europe			270	1.5%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

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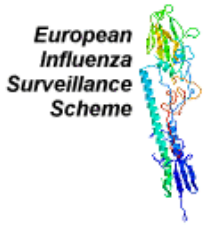
Low levels of influenza activity in Europe



Summary: In Europe, levels of influenza activity remain low at levels normally seen outside the seasonal influenza peak period, with 30 countries reporting no or only sporadic influenza activity this week. There has been no significant change in influenza activity since the start of the 2007-2008 winter season in week 40/2007. So far, sporadic laboratory confirmed cases of influenza have been reported across Europe.

Epidemiological situation - week 46/2007: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were low in all of the 29 countries providing these data. For the geographical spread indicator, sporadic influenza activity was reported in Belgium, England, France, Malta, Norway, Poland and Spain; the remaining 23 countries reported no influenza activity. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (week 40-46/2007): So far this season, the consultation rates for ILI and/or ARI across the whole of Europe have been at levels usually seen outside the seasonal influenza peak period (i.e. below the national baseline threshold).

Virological situation - week 46/2007: The total number of respiratory specimens collected by sentinel physicians in week 46/2007 was 473, of which 15 (3.2%) were influenza virus positive; seven type A not subtyped, three type A subtype H1 and five type B. In addition, 14 influenza virus detections (six type A not subtyped, two type A subtype H1 and six type B) were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals). Influenza virus detections were reported from 12 countries across Europe.

Cumulative virological situation - 2007-2008 season (week 40-46/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=108; sentinel and non-sentinel data), 32 were type A not subtyped, 27 were A(H1), ten were A(H3) and 39 were B. The influenza virus detections were reported from 16 countries across Europe.

Based on the antigenic and/or genetic characterisation of 14 influenza viruses, eight were A/Solomon Island/3/2006 (H1N1)-like and six were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) (click here).

Comment: Influenza activity in Europe remains low, which is typical for this time of the year. There have been only sporadic laboratory confirmed cases of influenza since week 40/2007, and these have been reported across Europe. Out of the three influenza viruses A(H1), A(H3) and B, no particular type or subtype has yet emerged as the dominant virus for Europe. However, some countries report mainly influenza A (>80% of all detections in e.g. France and Spain) and other countries report mainly influenza B (>60% of all detections in e.g. Poland and Sweden). Compared to previous seasons it is noteworthy that about 73% of all subtyped influenza A viruses are of the H1 subtype. Since 1996, substantial circulation of influenza A(H1) viruses occurred only in the winter season 2000/2001, and to a lesser extent, but still substantial, in 2005/2006. In all the other seasons, A(H3) viruses were the dominant circulating influenza A subtypes.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 30 European countries that are members of EISS. In week 46/2007, 30 countries reported clinical data and 27 countries reported virological data to EISS. 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.

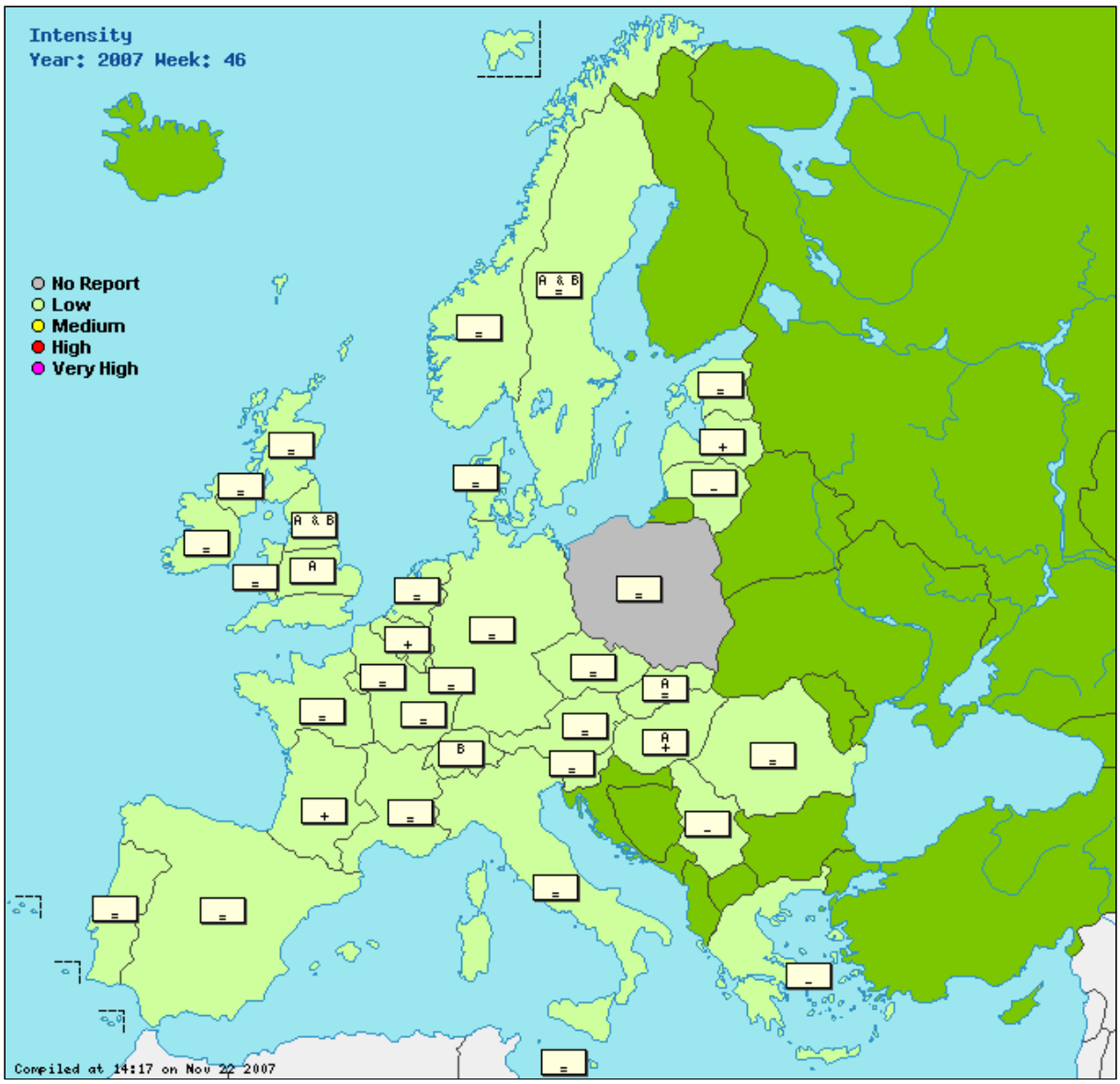
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

Low = no influenza activity or influenza at baseline levels
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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.

Country comments (where available)

Italy
No influenza activity is reported. No influenza positive samples have been detected.
Norway
One sporadic case of influenza B detected in SE Norway
Switzerland
An influenza B virus was detected in 7 years old girl in the central part of Switzerland. Activity remained low these last weeks.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria	Low	None			71	0%	None	1031.6 (graphs)		Click here
Belgium	Low	Sporadic			24	4.2%	None	118.8 (graphs)	1357.4 (graphs)	Click here
Czech Republic	Low	None			44	0%	None	30.9 (graphs)	1167.1 (graphs)	Click here
Denmark	Low	None			8	0%	None	33.0 (graphs)		Click here
England	Low	Sporadic			41	2.4%	Type A and B	9.2 (graphs)	502.7 (graphs)	Click here
Estonia	Low	None			2	0%	None	1.9 (graphs)	344.0 (graphs)	Click here

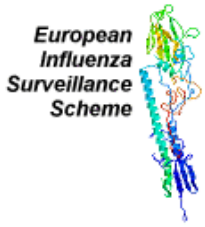
France	Low	Sporadic	40	0%	None		1617.4 (graphs)	Click here
Germany	Low	None	32	0%	None		1040.0 (graphs)	Click here
Greece	Low	None				30.0 (graphs)		Click here
Hungary	Low	None	7	0%	Type A	42.5 (graphs)		Click here
Ireland	Low	None	7	0%	None	6.5 (graphs)		Click here
Italy	Low	None	0	0%	None	39.3 (graphs)		Click here
Latvia	Low	None	0	0%	None	(graphs)	1296.8 (graphs)	Click here
Lithuania	Low	None	0	0%	None	1.3 (graphs)	444.8 (graphs)	Click here
Luxembourg	Low	None	3	0%	None	40.3 (graphs)	2519.2 (graphs)	Click here
Malta	Low	Sporadic				(graphs)		Click here
Netherlands	Low	None	12	0%	None	37.2 (graphs)		Click here
Northern Ireland	Low	None	4	0%	None	29.8 (graphs)		Click here
Norway	Low	Sporadic	8	12.5%	None	36.2 (graphs)		Click here
Poland		Sporadic	59	10.2%	None	65.8 (graphs)		Click here
Portugal	Low	None	2	0%	None	21.0 (graphs)		Click here
Romania	Low	None	19	0%	None	0.3 (graphs)	861.6 (graphs)	Click here
Scotland	Low	None	0	0%	None	(graphs)		Click here
Serbia	Low	None	0	0%	None	100.5 (graphs)		Click here
Slovakia	Low	None	4	50.0%	Type A	193.1 (graphs)	1570.2 (graphs)	Click here
Slovenia	Low	None	1	0%	None	(graphs)	847.1 (graphs)	Click here
Spain	Low	Sporadic	47	6.4%	None	30.0 (graphs)		Click here
Sweden	Low	None	27	0%	Type A and B	1.3 (graphs)		Click here
Switzerland	Low	None	11	9.1%	Type B	17.6 (graphs)		Click here
Wales	Low	None				2.0 (graphs)		Click here
Europe			473	3.2%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Low levels of influenza activity in Europe



Summary: In Europe, levels of influenza activity remain low at levels normally seen outside the seasonal influenza peak period, with 28 countries reporting no or only sporadic influenza activity this week. Since week 40/2007, only sporadic laboratory confirmed cases of influenza have been reported across Europe. An increase in levels of influenza-like illness was reported for Spain in week 47 but the influenza activity still remains below baseline levels.

Epidemiological situation - week 47/2007: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were low in all of the 28 countries providing these data. For the geographical spread indicator, sporadic influenza activity was reported in 10 countries; the remaining 18 countries reported no influenza activity. In Spain an increase in clinical influenza activity was observed and corresponded to an increase in laboratory confirmed cases in week 47. However, the clinical influenza activity in Spain remains below baseline levels of influenza activity. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (week 40-47/2007): So far this season, the consultation rates for ILI and/or ARI across the whole of Europe have been at levels usually seen outside the seasonal influenza peak period (i.e. below the national baseline threshold).

Virological situation - week 47/2007: The total number of respiratory specimens collected by sentinel physicians in week 47/2007 was 375, of which 20 (5.3%) were influenza virus positive; 11 type A not subtyped, three type A subtype H1, one type A subtype H1N1, one type A subtype H3N2, and four type B. In addition, 25 influenza virus detections (13 type A not subtyped, five type A subtype H1, one type A subtype H3N2 and six type B) were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals). Influenza virus detections were reported from 11 countries across Europe.

Cumulative virological situation - 2007-2008 season (week 40-47/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=168; sentinel and non-sentinel data), 59 were type A not subtyped, 42 were A(H1), 13 were A(H3) and 54 were B. The influenza virus detections were reported from 18 countries across Europe.

Based on the antigenic and/or genetic characterisation of 21 influenza viruses, 16 were A/Solomon Island/3/2006 (H1N1)-like, four were B/Florida/4/2006-like (B/Yamagata/16/88 lineage), and one was B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

Comment: Influenza activity in Europe remains low. There have been only sporadic laboratory confirmed cases of influenza since week 40/2007, and these have been reported across Europe. Of the total number of isolates 32% were influenza B, 35% were influenza A not subtyped, 25% were influenza A(H1), and 8% were influenza A(H3). At present, we cannot foresee whether one of the three influenza viruses A(H1), A(H3) or B, will emerge as the dominant virus for Europe.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 30 European countries that are members of EISS. In week 47/2007, 28 countries reported clinical data and 27 countries reported virological data to EISS. 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.

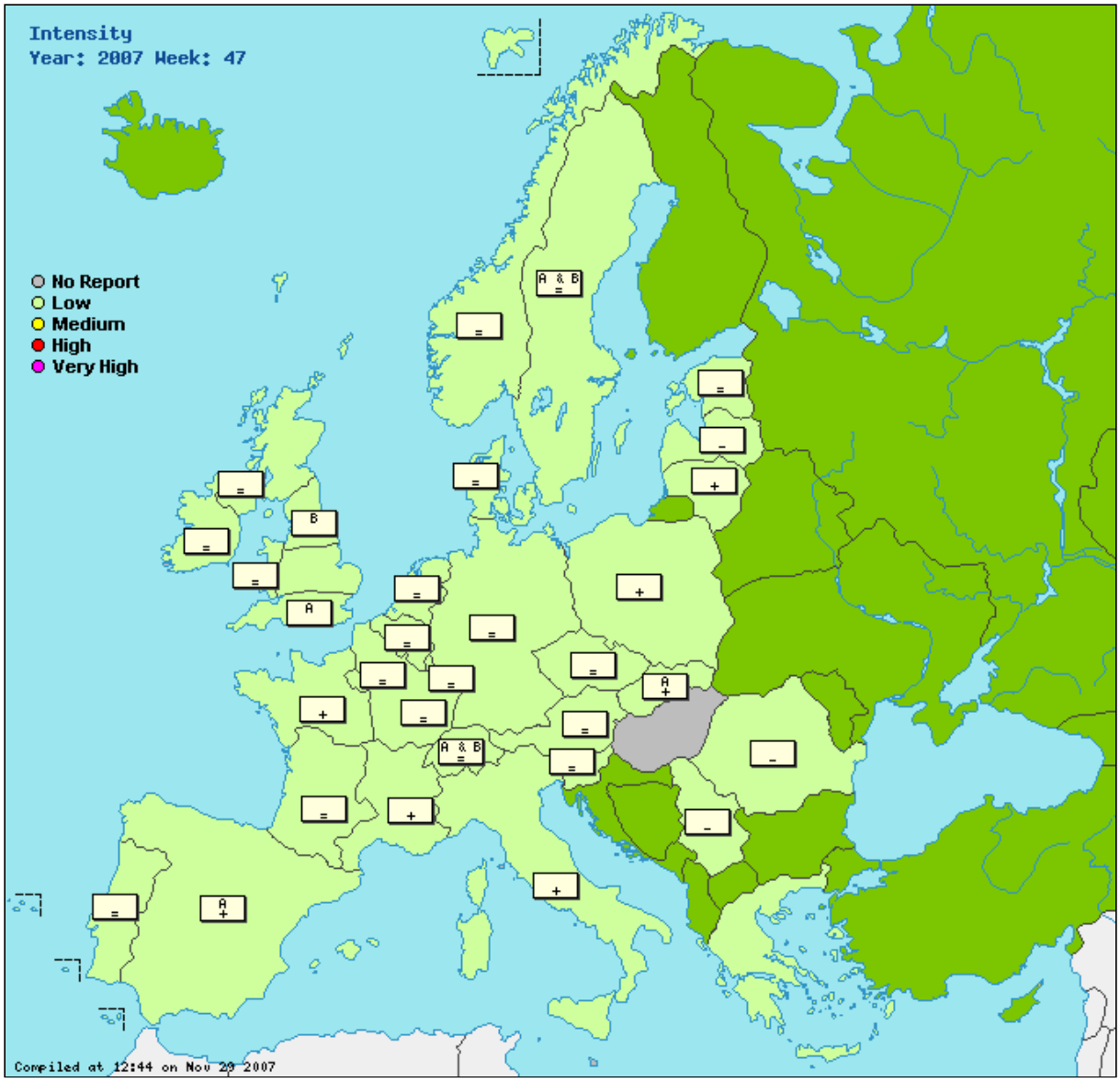
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Belgium
Sporadic activity with one non-sentinel case of Influenza A (not subtyped).
Italy
No virus isolation and/or identification is reported.
Spain
Influenza activity is increasing in Spain. Sporadic isolates of infuenza viruses A detections within the sentinel system in the north and south of Spain.
Switzerland
Influenza viruses have been detected at a higher rate last week. Medical consultations remained lower than threshold.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria	Low	None			49	0%	None	937.8 (graphs)		Click here
Belgium	Low	Sporadic			18	0%	None	120.0 (graphs)	1576.1 (graphs)	Click here
Czech Republic	Low	None			35	2.9%	None	33.4 (graphs)	1186.3 (graphs)	Click here
Denmark	Low	Sporadic			3	33.3%	None	59.2 (graphs)		Click here

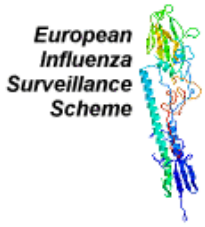
England	Low	Sporadic	39	5.1%	Type A and B	13.1 (graphs)	722.4 (graphs)	Click here
Estonia	Low	None	2	0%	None	0.8 (graphs)	175.9 (graphs)	Click here
France	Low	Sporadic	24	0%	None		1936.2 (graphs)	Click here
Germany	Low	None					1111.0 (graphs)	Click here
Greece	Low	None	0	0%	None	41.2 (graphs)		Click here
Hungary			12	0%	None	(graphs)		Click here
Ireland	Low	None	7	0%	None	5.5 (graphs)		Click here
Italy	Low	None	6	0%	None	45.5 (graphs)		Click here
Latvia	Low	None	0	0%	None	0.5 (graphs)	1173.4 (graphs)	Click here
Lithuania	Low	None	1	0%	None	1.9 (graphs)	520.7 (graphs)	Click here
Luxembourg	Low	None	7	0%	None	21.6 (graphs)	2245.7 (graphs)	Click here
Netherlands	Low	None	5	0%	None	38.4 (graphs)		Click here
Northern Ireland	Low	Sporadic	4	0%	None	27.8 (graphs)		Click here
Norway	Low	Sporadic	5	0%	None	35.6 (graphs)		Click here
Poland	Low	Sporadic	42	4.8%	None	82.3 (graphs)		Click here
Portugal	Low	None	1	0%	None	6.1 (graphs)		Click here
Romania	Low	None	15	0%	None	1.3 (graphs)	846.8 (graphs)	Click here
Scotland	Low	None	0	0%	None	(graphs)		Click here
Serbia	Low	None	1	0%	None	95.8 (graphs)		Click here
Slovakia	Low	Sporadic	9	11.1%	Type A	220.1 (graphs)	1670.8 (graphs)	Click here
Slovenia	Low	None	10	0%	None	1.5 (graphs)	948.0 (graphs)	Click here
Spain	Low	Sporadic	61	16.4%	Type A	43.7 (graphs)		Click here
Sweden	Low	None	0	0%	Type A and B	2.5 (graphs)		Click here
Switzerland	Low	Sporadic	19	15.8%	Type A and B	17.5 (graphs)		Click here
Wales	Low	None				1.4 (graphs)		Click here
Europe			375	5.3%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Low levels of influenza activity in Europe



Summary: Levels of influenza activity remain low in Europe, at levels normally seen outside the seasonal influenza peak period. A total of 29 countries reported no or only sporadic influenza activity in week 48/2007. There are currently 50-65 influenza virus detections per week in Europe, which remains a low number compared to previous seasons.

Epidemiological situation - week 48/2007: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were low in 28 countries providing these data and medium in one country. For the geographical spread indicator, sporadic influenza activity was reported in ten countries; the remaining 19 countries reported no influenza activity.

In recent weeks there has been an increase in clinical influenza activity observed in Spain which has been validated by an increase in laboratory confirmed cases of influenza virus. However, the clinical influenza activity in Spain still remains below the national baseline threshold. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (week 40-48/2007): So far this season, the consultation rates for ILI and/or ARI across the whole of Europe have been at levels usually seen outside the seasonal influenza peak period (i.e. below the national baseline threshold).

Virological situation - week 48/2007: The total number of respiratory specimens collected by sentinel physicians in week 48/2007 was 472, of which 31 (6.6%) were influenza virus positive; seven type A not subtyped, 11 type A subtype H1, eight type A subtype H1N1 and five type B. In addition, 21 influenza virus detections (11 type A not subtyped, one type A subtype H1 and nine type B) were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals). Influenza virus detections were reported from 13 countries across Europe.

Cumulative virological situation - 2007-2008 season (week 40-48/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=240; sentinel and non-sentinel data), 80 were type A not subtyped, 67 were A(H1), 14 were A(H3) and 79 were B. The influenza virus detections were reported from 21 countries across Europe.

Based on the antigenic and/or genetic characterisation of 35 influenza viruses, 28 were A/Solomon Island/3/2006 (H1N1)-like, six were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and one was B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

Comment: Influenza activity in Europe remains low. The weekly total number of influenza virus detections is gradually increasing (it was 52 in week 48/2008) but this number currently remains low. During the weeks of peak influenza activity, the total number of influenza detections in Europe is over 1000 detections per week (1111 in week 08/2006 of the 2005-2006 season and 2254 in week 07/2007 of the 2006-2007 season).

Of the total number of detections made so far this season (N=240), 33% were influenza B, 28% were influenza A not subtyped, 28% were influenza A(H1) and 6% were influenza A(H3). At present, it is still too early to say which of the three influenza viruses A(H1), A(H3) or B will emerge as the dominant virus in Europe.

Whilst influenza activity in Europe is currently low, reports of RSV (respiratory syncytial virus), a respiratory virus with clinical symptoms similar to influenza, are currently increasing in Europe [click here (second graph)]. Not all countries report RSV detections to EISS but they are increasing in the United Kingdom (e.g. England and Scotland), the Netherlands and Sweden. The increase in RSV detections at this time of the year is a normal epidemiological phenomenon, with detections usually declining in Europe at the end of December / early January.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 48/2007, 29 countries reported epidemiological data and 27 countries reported virological data to EISS. 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.

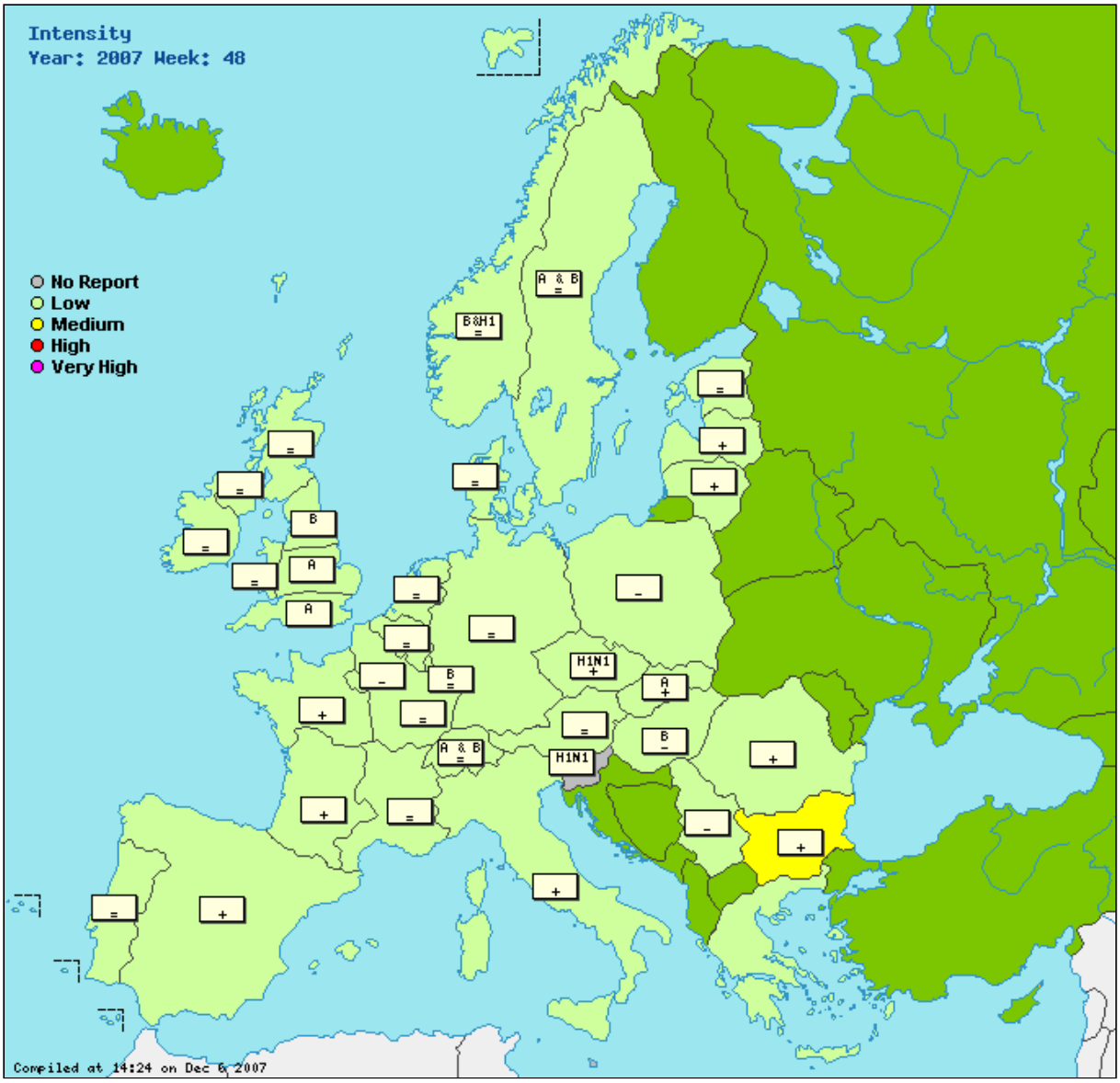
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Italy
No influenza positive samples have been detected during this week.
Switzerland
No influenza virus was detected this week. Medical consultation remained below threshold. An influenza B was antigically characterised. It was a B/Malaysia/2506/2004-like was characterised.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria	Low	None			63	0%	None	731.9 (graphs)		Click here
Belgium	Low	None			29	0%	None	121.7 (graphs)	1664.9 (graphs)	Click here
Bulgaria	Medium	None							1017.7 (graphs)	Click here
Czech Republic	Low	Sporadic			34	11.8%	Type A, Subtype H1N1	39.9 (graphs)	1269.4 (graphs)	Click here
Denmark	Low	None			2	0%	None	68.3 (graphs)		Click here
England	Low	Sporadic			39	25.6%	Type A, Subtype H1	13.4 (graphs)	787.6 (graphs)	Click here
Estonia	Low	None			3	0%	None	4.0 (graphs)	346.1 (graphs)	Click here
France	Low	Sporadic			53	1.9%	None		2011.6 (graphs)	Click here

Germany	Low	None	30	6.7%	None		1136.0 (graphs)	Click here
Greece	Low	None	0	0%	None	52.2 (graphs)		Click here
Hungary	Low	Sporadic	5	20.0%	Type B	45.6 (graphs)		Click here
Ireland	Low	None	8	0%	None	14.3 (graphs)		Click here
Italy	Low	None	0	0%	None	55.9 (graphs)		Click here
Latvia	Low	None				(graphs)	1290.4 (graphs)	Click here
Lithuania	Low	None	0	0%	None	1.9 (graphs)	583.8 (graphs)	Click here
Luxembourg	Low	Sporadic	4	25.0%	Type B	100.8 (graphs)	2754.5 (graphs)	Click here
Netherlands	Low	None	8	0%	None	27.3 (graphs)		Click here
Northern Ireland	Low	None	3	0%	None	21.2 (graphs)		Click here
Norway	Low	Sporadic	3	33.3%	Type B and Type A, Subtype H1	37.0 (graphs)		Click here
Poland	Low	None	39	0%	None	71.7 (graphs)		Click here
Portugal	Low	None	1	0%	None	10.2 (graphs)		Click here
Romania	Low	None	13	0%	None	0.2 (graphs)	883.8 (graphs)	Click here
Scotland	Low	Sporadic	1	0%	None	(graphs)		Click here
Serbia	Low	None	0	0%	None	93.7 (graphs)		Click here
Slovakia	Low	Sporadic	5	20.0%	Type A	282.1 (graphs)	1844.7 (graphs)	Click here
Slovenia			18	22.2%	Type A, Subtype H1N1	(graphs)	1052.5 (graphs)	Click here
Spain	Low	Sporadic	65	9.2%	None	60.0 (graphs)		Click here
Sweden	Low	None	26	0%	Type A and B	1.3 (graphs)		Click here
Switzerland	Low	Sporadic	20	0%	Type A and B	30.2 (graphs)		Click here
Wales	Low	None				1.0 (graphs)		Click here
Europe			472	6.6%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

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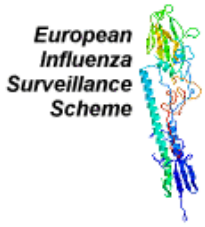
Low levels of influenza activity in Europe



Summary: Levels of influenza activity remained low in Europe, at levels normally seen outside the seasonal influenza peak period. A total of 29 countries reported no or only sporadic influenza activity in week 49/2007. The total number of influenza virus detections in that week in Europe was still low (n=96). Of the total virus detections since week 40, 76% were influenza A of which about 90% were of the H1 subtype.

Epidemiological situation - week 49/2007: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were low in 28 countries providing these data and medium in one country. For the geographical spread indicator, local influenza activity was reported in Czech Republic, sporadic influenza activity in 15 countries and in the remaining 13 countries no influenza activity was reported.

Cumulative epidemiological situation - 2007-2008 season (week 40-49/2007): So far this season, the consultation rates for ILI and/or ARI across the whole of Europe have been at levels usually seen outside the seasonal influenza peak period (i.e. below the national baseline threshold).

Virological situation - week 49/2007: The total number of respiratory specimens collected by sentinel physicians in week 49/2007 was 568, of which 69 (12.2%) were influenza virus positive; 21 type A not subtyped, 41 type A subtype H1, five type A subtype H3 and two type B. In addition, 27 influenza virus detections (18 type A not subtyped, three type A subtype H1 and six type B) were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals).

Cumulative virological situation - 2007-2008 season (week 40-49/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=376; sentinel and non-sentinel data), 129 were type A not subtyped, 137 were A(H1), 19 were A(H3) and 91 were B.

Based on the antigenic and/or genetic characterisation of 68 influenza viruses, 59 were A/Solomon Island/3/2006 (H1N1)-like, one was A/Brisbane/10/2007 (H3N2)-like, six were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and two were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

Comment: Influenza activity in Europe remained low. The total number of influenza virus type A detections per week continued to increase, whereas the total number of type B virus detections per week decreased slightly over the last two weeks (click here). The H1 subtype accounted for about 90% of the total number of subtyped type A viruses reported since week 40. Antigenically or genetically characterised A(H1) viruses were all A/Solomon Island/3/2006 (H1N1)-like, the new drift variant that replaced A/New Caledonia/20/99 (H1N1) in the vaccine for the 2007/2008 season (click here).

Detections of respiratory syncytial virus (RSV), a respiratory virus with clinical symptoms similar to influenza, continued to increase in a number of countries (e.g. England and the Netherlands), whereas in Ireland it reached its peak. For Europe as a whole it was stabilising.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 49/2007, 29 countries reported epidemiological data and 28 countries reported virological data to EISS. 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.

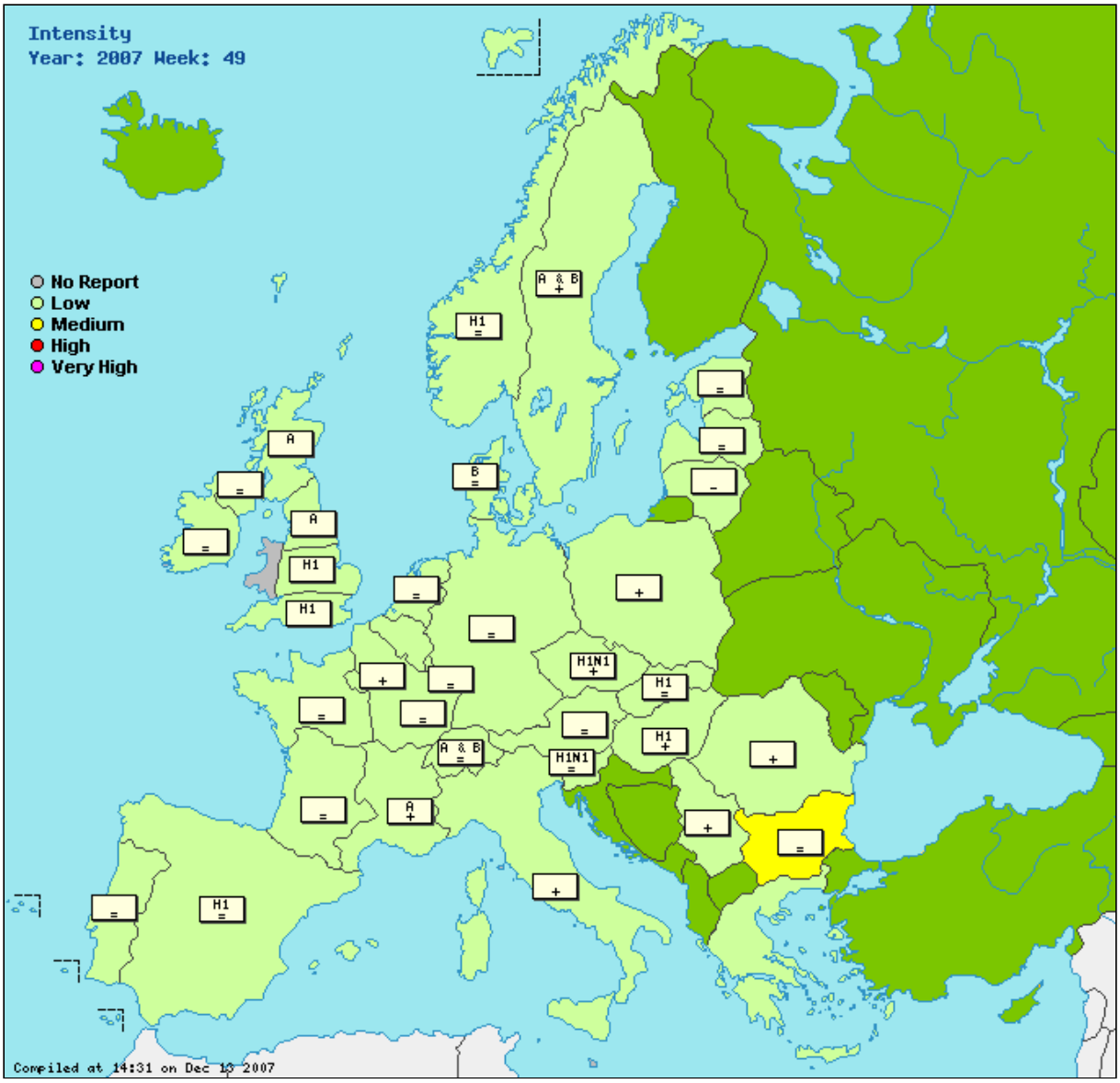
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Austria
Local outbreak at 2 schools in Vienna with H1N1 Solomon Islands
Belgium
Sporadic activity due to 3 non-sentinel cases of influenza A, not subtyped.
Italy
First influenza A/H1N1 virus, collected during the 47 th week, has been isolated from a 41 years old, not vaccinated, woman in Parma (Northern Italy).
Switzerland
Sporadic activity is still observed in Switzerland. Influenza A and influenza B viruses are detected.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria	Low	Sporadic			69	8.7%	None	1105.6 (graphs)		Click here
Belgium	Low	Sporadic			24	0%	None	146.4 (graphs)	1838.7 (graphs)	Click here
Bulgaria	Medium	None							935.7 (graphs)	Click here
Czech Republic	Low	Local			47	29.8%	Type A, Subtype H1N1	46.7 (graphs)	1289.0 (graphs)	Click here

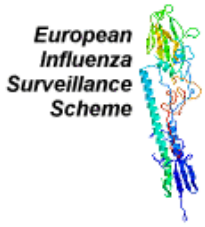
Denmark	Low	Sporadic	8	12.5%	Type B	58.1 (graphs)		Click here
England	Low	Sporadic	60	30.0%	None	16.2 (graphs)	781.8 (graphs)	Click here
Estonia	Low	Sporadic	5	20.0%	None	2.8 (graphs)	330.9 (graphs)	Click here
France	Low	Sporadic	78	3.9%	None		2209.5 (graphs)	Click here
Germany	Low	None	42	2.4%	None		1173.0 (graphs)	Click here
Greece	Low	None	0	0%	None	47.3 (graphs)		Click here
Hungary	Low	Sporadic	13	0%	Type A, Subtype H1	59.3 (graphs)		Click here
Ireland	Low	Sporadic	5	20.0%	None	9.8 (graphs)		Click here
Italy	Low	Sporadic	5	0%	None	61.7 (graphs)		Click here
Latvia	Low	None	0	0%	None	0.0 (graphs)	1262.9 (graphs)	Click here
Lithuania	Low	None	6	0%	None	3.7 (graphs)	567.9 (graphs)	Click here
Luxembourg	Low	None	7	0%	None	69.8 (graphs)	2814.0 (graphs)	Click here
Netherlands	Low	None	8	0%	None	22.5 (graphs)		Click here
Northern Ireland	Low	None	3	0%	None	25.1 (graphs)		Click here
Norway	Low	Sporadic	5	20.0%	Type A, Subtype H1	43.4 (graphs)		Click here
Poland	Low	None	39	0%	None	86.2 (graphs)		Click here
Portugal	Low	None	4	0%	None	4.0 (graphs)		Click here
Romania	Low	None	5	0%	None	0.0 (graphs)	930.9 (graphs)	Click here
Scotland	Low	Sporadic	1	0%	Type A	2.1 (graphs)		Click here
Serbia	Low	None	0	0%	None	95.8 (graphs)		Click here
Slovakia	Low	None	14	28.6%	Type A, Subtype H1	322.5 (graphs)	1974.4 (graphs)	Click here
Slovenia	Low	Sporadic	11	18.2%	Type A, Subtype H1N1	2.5 (graphs)	1091.4 (graphs)	Click here
Spain	Low	Sporadic	54	27.8%	Type A, Subtype H1	57.7 (graphs)		Click here
Sweden	Low	Sporadic	23	0%	Type A and B	4.1 (graphs)		Click here
Switzerland	Low	Sporadic	32	6.3%	Type A and B	28.5 (graphs)		Click here
Europe			568	12.2%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Europe will probably experience continued low levels of influenza activity over Christmas and New Year



Summary: Levels of influenza activity remained low in Europe, at levels normally seen outside the seasonal influenza peak period in most countries. A total of 28 countries reported no or only sporadic influenza activity in week 50/2007. The percentage of respiratory specimens testing positive for influenza virus in Europe remains low at about 5%, despite the increase in laboratory confirmed cases for Europe as a whole. Of the total virus detections since week 40, 78% were influenza A of which about 90% were of the H1 subtype.

Epidemiological situation - week 50/2007: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were low in 27 countries and medium in three countries (Austria, Bulgaria and Northern Ireland) providing these data. For the geographical spread indicator, local influenza activity was reported in Czech Republic and Spain, sporadic influenza activity in 13 countries and in the remaining 15 countries no influenza activity was reported.

Cumulative epidemiological situation - 2007-2008 season (week 40-50/2007): So far this season, the consultation rates for ILI and/or ARI have been at levels usually seen outside the seasonal influenza peak period (i.e. below or at the national baseline threshold) in most countries in Europe.

Virological situation - week 50/2007: The total number of respiratory specimens collected by sentinel physicians in week 50/2007 was 777, of which 84 (10.8%) were influenza virus positive; 33 type A not subtyped, 40 type A subtype H1 and 11 type B. In addition, 57 influenza virus detections (32 type A not subtyped, 14 type A subtype H1 and 11 type B) were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals).

Cumulative virological situation - 2007-2008 season (week 40-50/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=555; sentinel and non-sentinel data), 191 were type A not subtyped, 220 were A(H1), 21 were A(H3) and 123 were B.

Based on the antigenic and/or genetic characterisation of 124 influenza viruses, 101 were A/Solomon Island/3/2006 (H1N1)-like, seven were A/Brisbane/10/2007 (H3N2)-like, ten were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and six were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

Comment: The number of laboratory confirmed cases of influenza continues to increase, but clinical Influenza activity in most of Europe remains low. The closing of schools and occurrence of public holidays over Christmas and New Year is likely to affect the observed rates of influenza in the coming two weeks. From previous experience it will also reduce the levels of reporting from primary care. This probably means that the current low levels of observed influenza activity will continue during the Christmas and New Year period. The experience in recent years has been that the peak activity of influenza occurs after the New Year period (click here).

Regarding the dominant subtype isolated thus far, the situation in Europe seems to be very similar to the US where the majority of the subtyped viruses were influenza A(H1) viruses (click here). A clear majority of the antigenically or genetically characterised A(H1) viruses since week 40/2007 seem to be a good match to the corresponding vaccine strain A/Solomon Island/3/2006, which is included in the 2007-2008 vaccine (click here).

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 50/2007, 30 countries reported epidemiological data and 28 countries reported virological data to EISS. 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.

Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

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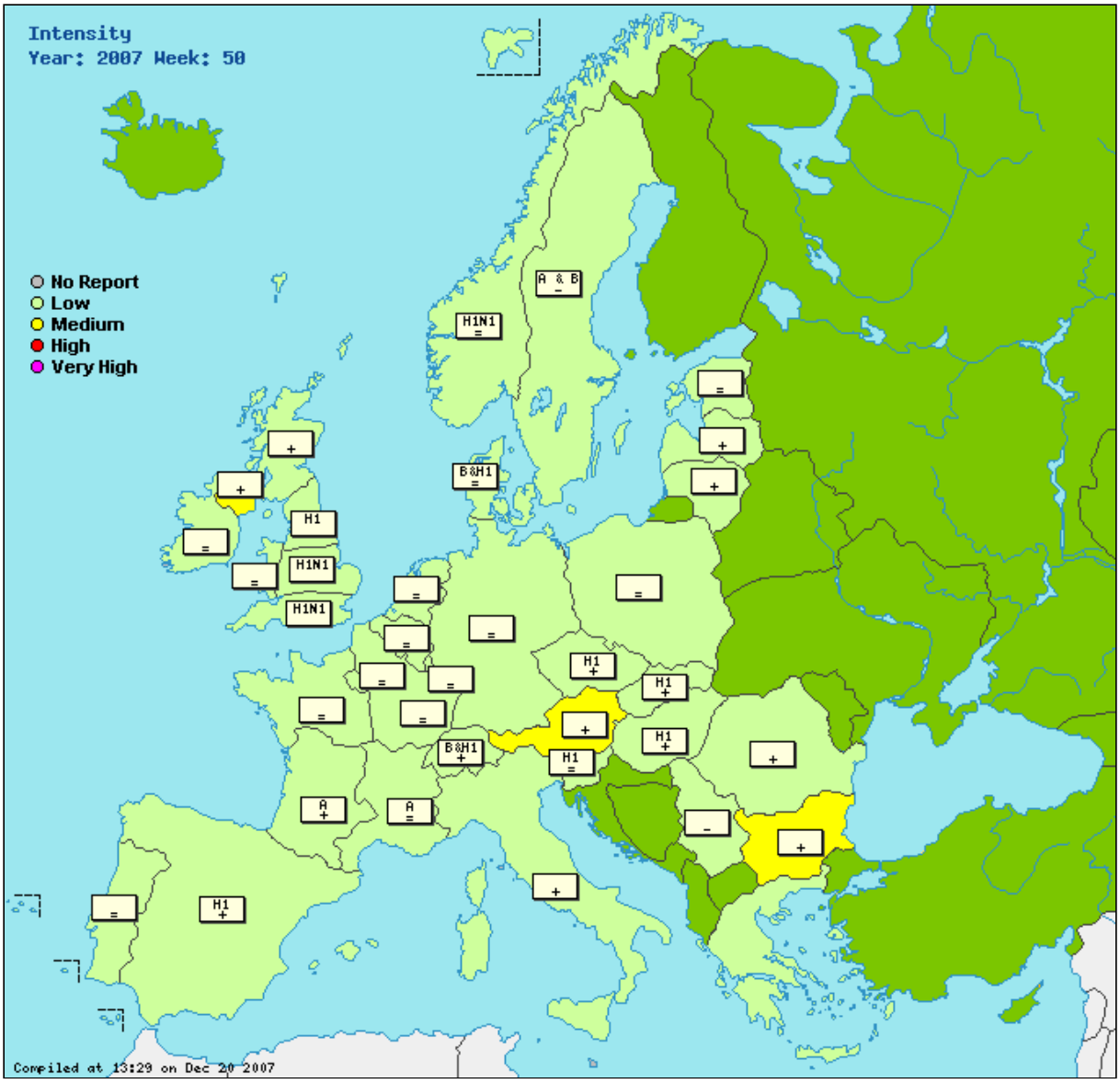
You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

Low = no influenza activity or influenza at baseline levels
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High = higher than usual levels of influenza activity
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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.

Country comments (where available)

Italy
One A/H1N1 and 2 influenza B viruses have been detected during this week. One further B virus has been isolated from a sample collected in week 49.
Latvia
Two the firsts influenza A cases was confirmed by the immunofluorescence during this week in Latvia.
Switzerland
No influenza virus detected this week. The activity remained sporadic with an amount of sample that remained stable.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria	Medium	None			98	2.0%	None	1232.4 (graphs)		Click here
Belgium	Low	None			11	0%	None	120.8 (graphs)	1731.1 (graphs)	Click here
Bulgaria	Medium	None							1040.2 (graphs)	Click here
Czech Republic	Low	Local			42	14.3%	Type A, Subtype H1	68.6 (graphs)	1403.1 (graphs)	Click here
Denmark	Low	Sporadic			9	11.1%	Type B and Type A, Subtype H1	76.4 (graphs)		Click here
England	Low	Sporadic			67	19.4%	Type A, Subtype H1N1	14.3 (graphs)	786.6 (graphs)	Click here

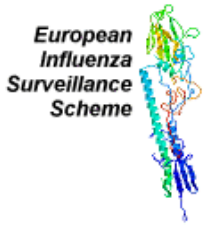
Estonia	Low	None	6	0%	None	0.5 (graphs)	170.4 (graphs)	Click here
France	Low	Sporadic	217	5.5%	Type A		2291.8 (graphs)	Click here
Germany	Low	Sporadic	43	16.3%	None		1136.0 (graphs)	Click here
Greece	Low	None	7	0%	None	46.7 (graphs)		Click here
Hungary	Low	Sporadic	12	0%	Type A, Subtype H1	70.5 (graphs)		Click here
Ireland	Low	Sporadic	11	36.4%	None	7.2 (graphs)		Click here
Italy	Low	Sporadic	20	0%	None	101.1 (graphs)		Click here
Latvia	Low	None	0	0%	None	0.5 (graphs)	1326.8 (graphs)	Click here
Lithuania	Low	None	7	0%	None	3.4 (graphs)	672.2 (graphs)	Click here
Luxembourg	Low	None	8	0%	None	21.6 (graphs)	3325.4 (graphs)	Click here
Netherlands	Low	None	16	0%	None	39.8 (graphs)		Click here
Northern Ireland	Medium	None	0	0%	None	31.0 (graphs)		Click here
Norway	Low	Sporadic	6	0%	Type A, Subtype H1N1	43.6 (graphs)		Click here
Poland	Low	None	34	0%	None	83.1 (graphs)		Click here
Portugal	Low	Sporadic	2	50.0%	None	6.8 (graphs)		Click here
Romania	Low	None	4	0%	None	0.7 (graphs)	947.4 (graphs)	Click here
Scotland	Low	Sporadic	1	0%	None	(graphs)		Click here
Serbia	Low	None	0	0%	None	94.2 (graphs)		Click here
Slovakia	Low	Sporadic	26	26.9%	Type A, Subtype H1	411.2 (graphs)	2292.0 (graphs)	Click here
Slovenia	Low	Sporadic	15	26.7%	Type A, Subtype H1	7.0 (graphs)	1129.5 (graphs)	Click here
Spain	Low	Local	89	30.3%	Type A, Subtype H1	69.0 (graphs)		Click here
Sweden	Low	None	0	0%	Type A and B	1.3 (graphs)		Click here
Switzerland	Low	Sporadic	26	0%	Type B and Type A, Subtype H1	38.7 (graphs)		Click here
Wales	Low	None				1.0 (graphs)		Click here
Europe			777	10.8%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Low levels of influenza activity in Europe over Christmas



Summary: Levels of influenza activity remain low in most countries across Europe, at levels normally seen outside the seasonal influenza peak period. A total of 18 countries reported a low intensity of clinical influenza activity and one country - Spain – reported a medium intensity (above the national baseline) in week 51/2007. Of the total virus detections since week 40/2007 (N=735), 79% were influenza A of which about 90% were of the H1 subtype.

Epidemiological situation - week 51/2007: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were low in 18 countries and medium in Spain. For the geographical spread indicator, regional influenza activity was reported in Spain, local activity in the Czech Republic, sporadic activity in 11 countries and no activity was reported in six countries. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (week 40-51/2007): So far this season, the consultation rates for ILI and/or ARI have been at levels usually seen outside the seasonal influenza peak period (i.e. below or at the national baseline threshold) in most countries in Europe. A medium intensity of influenza activity (i.e. consultations rates above the national baseline threshold) has been reported in Bulgaria (in week 48/2007), Austria (50/2007), Northern Ireland (50/2007) and Spain (week 51/2007).

Virological situation - week 51/2007: The total number of respiratory specimens collected by sentinel physicians in week 51/2007 was 566, of which 99 (18%) were influenza virus positive; 39 type A not subtyped, 43 type A subtype H1, one type A subtype H3 and 16 type B. In addition, 31 influenza virus detections (25 type A not subtyped, one type A subtype H1 and 5 type B) were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals).

Cumulative virological situation - 2007-2008 season (week 40-51/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=735; sentinel and non-sentinel data), 273 (37%) were type A not subtyped, 287 (39%) were A(H1), 22 (3%) were A(H3) and 153 (21%) were B.

Based on the antigenic and/or genetic characterisation of 129 influenza viruses, 109 were A/Solomon Island/3/2006 (H1N1)-like, six were A/Brisbane/10/2007 (H3N2)-like, seven were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and seven were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

Comment: Influenza activity is increasing in most of the regional networks in Spain but is particularly high in the North (click here). The highest levels of clinical influenza activity in Spain are being observed in children aged 5-14 and 0-4 (click here). Across the border, in the South West of France, clinical influenza activity is also high (click here). In contrast, levels of clinical influenza activity in Portugal are low (click here).

So far this season, the dominant virus in Spain is influenza A(H1). Of all influenza virus detections since week 40/2007 (N=162 sentinel and non-sentinel data), 61 (38%) were type A not subtyped, 67 (41%) were A(H1), 6 (4%) were A(H3) and 28 (17%) were B. This pattern is similar to Europe as a whole (see above). However, in some countries (e.g. Germany, Poland and Sweden) type B viruses account for 40%-75% of the total virus detections whereas in other countries (e.g. Slovakia and Slovenia) detections are exclusively type A viruses. This heterogeneity (by country) is not unusual in Europe (e.g. during the 2005-2006 season).

Overall, for Europe as a whole, 79% of total virus detections since week 40/2007 (N=735) have been influenza A, of which 93% were of the H1 subtype (calculation excludes the type A not subtyped virus detections). The characterisation data reported to EISS since week 40/2007 indicate that there seems to be a good match between the circulating A(H1) virus and the corresponding vaccine strain A/Solomon Island/3/2006 which is included in the 2007-2008 vaccine (click here).

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 51/2007, 19 countries reported epidemiological data and 18 countries reported virological data to EISS. 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.

Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

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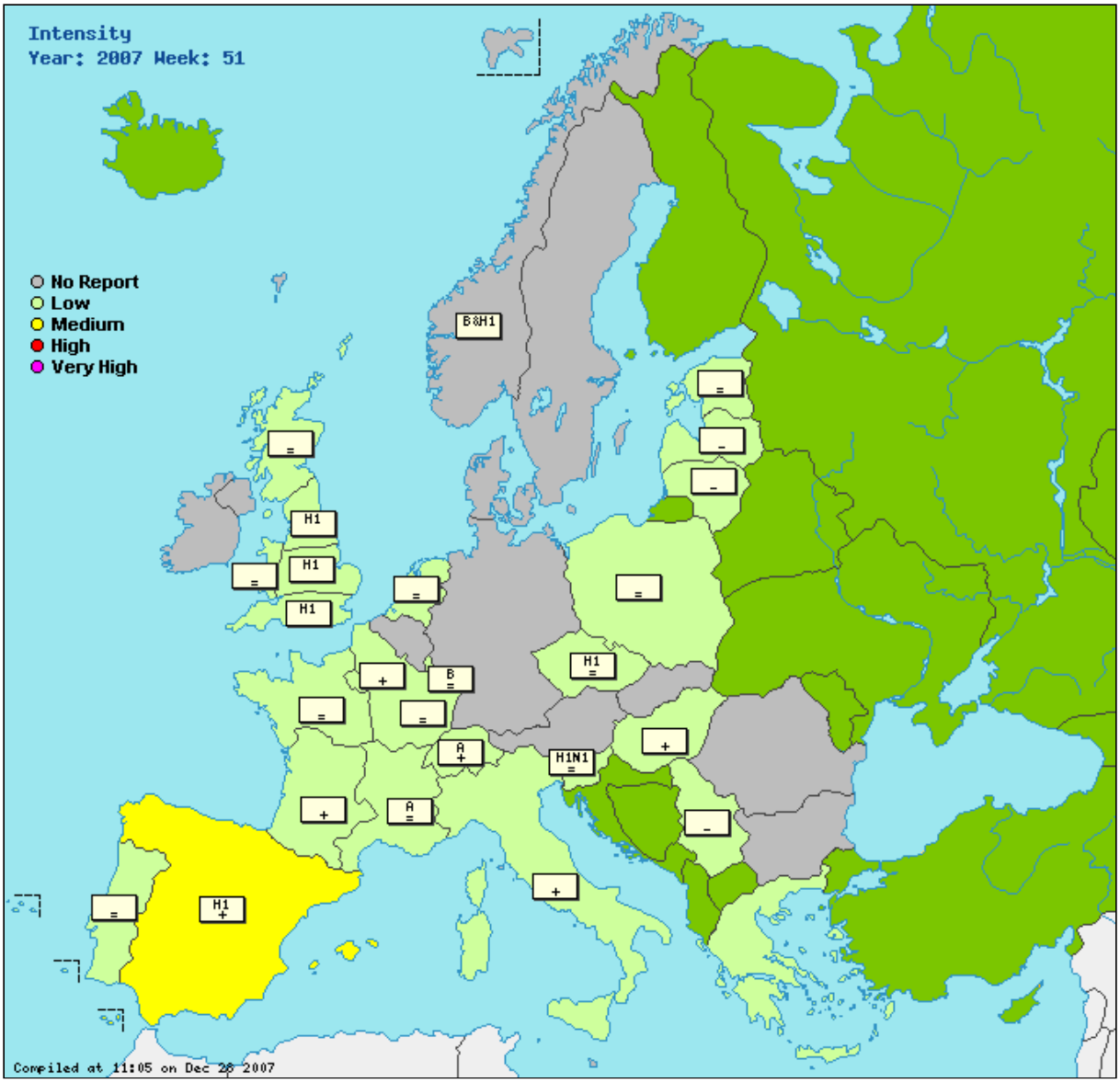
You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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

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

Low = no influenza activity or influenza at baseline levels
Medium = usual levels of influenza activity
High = higher than usual levels of influenza activity
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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.

Country comments (where available)

Greece
All tested samples were found negative for influenza virus during this week in Southern Greece.
Italy
Influenza activity remains at low levels. Two A/H1N1 viruses have been detected during this week.
Spain
Increasing influenza activity in most of the Spanish regional networks. Global clinical morbidity rates above baseline values. AH1 virus is dominant.
Switzerland
Sporadic influenza viruses are still detected in Switzerland.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Czech Republic	Low	Local			79	15.2%	Type A, Subtype H1	83.1 (graphs)	1416.2 (graphs)	Click here
England	Low	Sporadic			87	27.6%	None	14.5 (graphs)	687.6 (graphs)	Click here
Estonia	Low	Sporadic			5	40.0%	None	1.0 (graphs)	131.9 (graphs)	Click here
France	Low	Sporadic			119	12.6%	None	(graphs)	2390.6 (graphs)	Click here

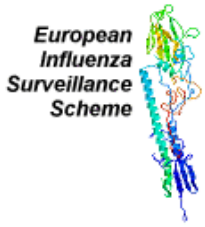
Germany			39	20.5%	None				(graphs)	Click here
Greece	Low	None	14	0%	None	70.4	(graphs)		(graphs)	Click here
Hungary	Low	Sporadic				78.4	(graphs)		(graphs)	Click here
Italy	Low	Sporadic	26	3.9%	None	191.2	(graphs)		(graphs)	Click here
Latvia	Low	Sporadic	0	0%	None	0.0	(graphs)	1200.7	(graphs)	Click here
Lithuania	Low	None	3	0%	None	3.2	(graphs)	563.4	(graphs)	Click here
Luxembourg	Low	Sporadic	14	7.1%	Type B	86.4	(graphs)	3087.9	(graphs)	Click here
Netherlands	Low	None				46.7	(graphs)		(graphs)	Click here
Norway			5	60.0%	Type B and Type A, Subtype H1N1		(graphs)			Click here
Poland	Low	None	17	0%	None	83.1	(graphs)		(graphs)	Click here
Portugal	Low	Sporadic	2	0%	None	15.0	(graphs)		(graphs)	Click here
Scotland	Low	Sporadic	1	0%	None	0.0	(graphs)		(graphs)	Click here
Serbia	Low	None				85.9	(graphs)		(graphs)	Click here
Slovakia			15	60.0%	None		(graphs)			Click here
Slovenia	Low	Sporadic	20	10.0%	Type A, Subtype H1N1	0.0	(graphs)	1055.9	(graphs)	Click here
Spain	Medium	Regional	91	20.9%	Type A, Subtype H1	107.3	(graphs)		(graphs)	Click here
Switzerland	Low	Sporadic	29	10.3%	Type A	19.4	(graphs)			Click here
Wales	Low	None				1.9	(graphs)		(graphs)	Click here
Europe			566	17.5%						Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Increased level of influenza activity in Spain and low levels across the rest of Europe



Summary: Levels of influenza activity remain low in most countries across Europe, at levels normally seen outside the seasonal influenza peak period. Only Spain reported a medium intensity of influenza activity (above the national baseline) in week 52/2007. Of the total virus detections since week 40/2007 (N=995), 81% were influenza A of which over 94% were of the H1 subtype.

Epidemiological situation - week 52/2007: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were low in 21 countries and medium in Spain. For the geographical spread indicator, regional influenza activity was reported in Spain, local activity in four countries, sporadic activity in nine countries and no activity was reported in eight countries. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (week 40-52/2007): So far this season, the consultation rates for ILI and/or ARI have been at levels usually seen outside the seasonal influenza peak period (i.e. below or at the national baseline threshold) in most countries in Europe. A medium intensity of influenza activity (i.e. consultations rates were above the national baseline threshold) was first reported in Bulgaria (in week 48/2007), Austria (50/2007), Northern Ireland (50/2007) and Spain (week 51/2007).

Virological situation - week 52/2007: The total number of respiratory specimens collected by sentinel physicians in week 52/2007 was 184, of which 55 (30%) were influenza virus positive; 19 type A not subtyped, 27 type A subtype H1, one type A subtype H3 and eight type B. In addition, 40 influenza virus detections (22 type A not subtyped, 13 type A subtype H1 and five type B) were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals).

Cumulative virological situation - 2007-2008 season (week 40-52/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=995; sentinel and non-sentinel data), 384 (39%) were type A not subtyped, 401 (40%) were A(H1), 25 (3%) were A(H3) and 185 (19%) were B.

Based on the antigenic and/or genetic characterisation of 148 influenza viruses, 117 were A/Solomon Island/3/2006 (H1N1)-like, seven were A/Brisbane/10/2007 (H3N2)-like, 14 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and ten were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

Comment: Influenza activity is above the national baseline level in Spain, with the highest ILI consultation rates observed in children aged 5-14 and 0-4 (click here). The ILI consultation rate in Spain is only slightly higher than in week 51/2007 but will have been affected by the Christmas / New Year holidays and it is therefore not yet possible to say whether the rate is levelling off. In the rest of Europe, including France (source: GROG), the ILI and/or ARI consultation rates are below or around the national baseline level.

Overall, for Europe as a whole, 81% of total virus detections since week 40/2007 (N=995) have been influenza A, of which 94% were of the H1 subtype (calculation excludes the type A not subtyped virus detections). The characterisation data reported to EISS since week 40/2007 indicate that there seems to be a good match between the circulating A(H1) virus and the corresponding vaccine strain A/Solomon Island/3/2006 which is included in the 2007-2008 vaccine (click here).

For Europe as a whole, detections of respiratory syncytial virus (RSV), a respiratory virus with clinical symptoms similar to influenza, peaked in week 49/2007 and are now declining (click here [second graph]). Despite this overall trend, detections of RSV remain high in Northern Ireland, Scotland and Sweden.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 52/2007, 22 countries reported epidemiological data and 22 countries reported virological data to EISS. 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.

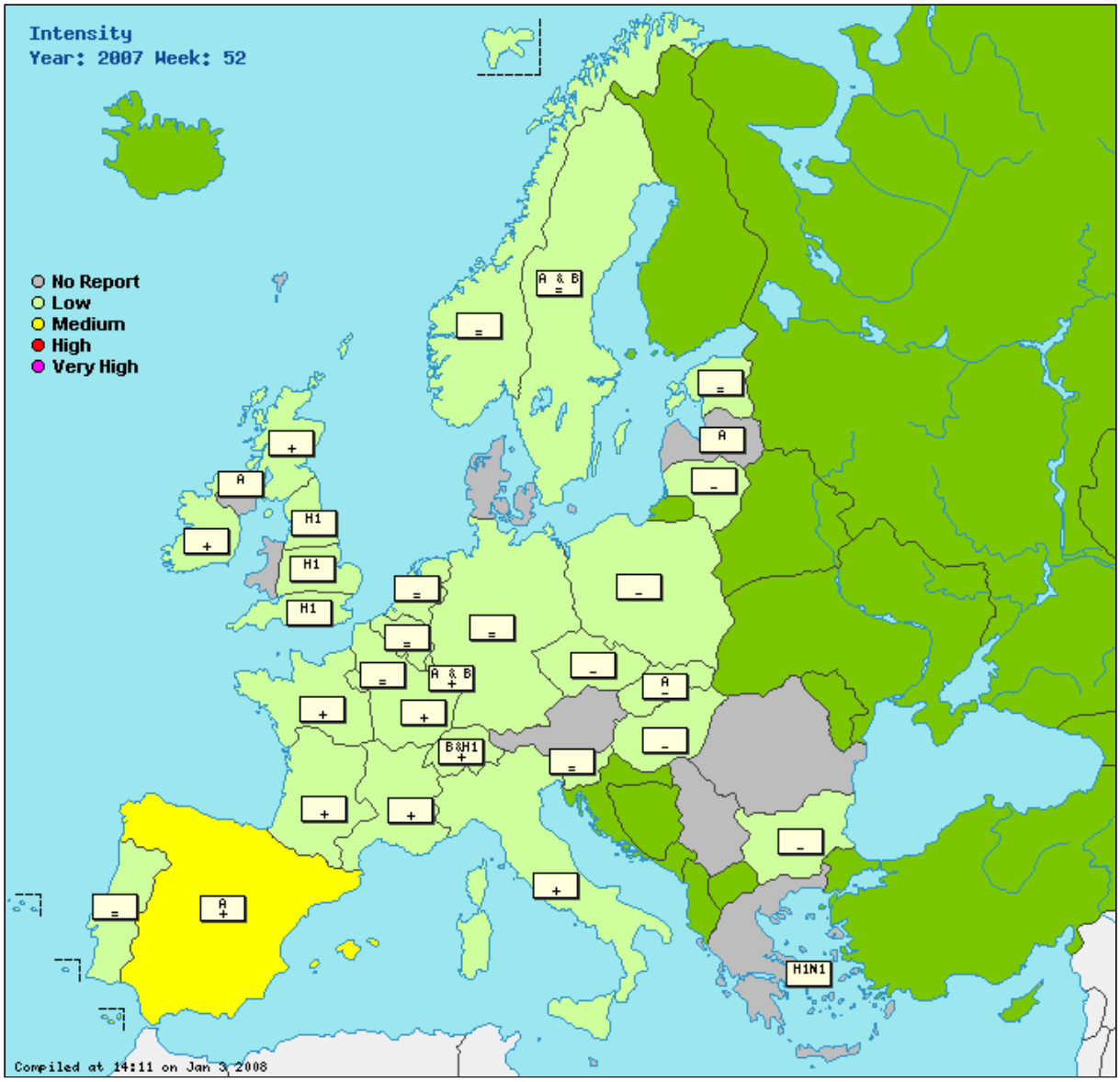
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Greece
A respiratory specimen collected from a hospitalized 6-month old girl in Athens was found to be A/H1N1 positive by Real-time PCR
Norway
Because of Christmas and New Year, data for this period not yet complete.
Sweden
Scarse clinical reporting this week due to Christmas hollidays.
Switzerland
sporadic influenza viruses detected in Switzerland. Medical consultations remained below threshold.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None			7	0%	None	94.0 (graphs)	1561.6 (graphs)	Click here
Bulgaria	Low	None						(graphs)	468.0 (graphs)	Click here
Czech Republic	Low	Local						50.3 (graphs)	853.1 (graphs)	Click here
Denmark					0	0%	None	(graphs)		Click here

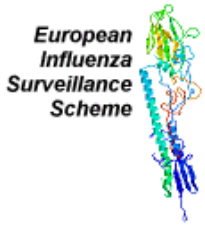
England	Low	Sporadic	47	57.5%	Type A, Subtype H1	20.9	(graphs)	679.2	(graphs)	Click here
Estonia	Low	None	0	0%	None	0.1	(graphs)	107.9	(graphs)	Click here
France	Low	Local	64	14.1%	None		(graphs)	2549.3	(graphs)	Click here
Germany	Low	None	4	25.0%	None		(graphs)	998.0	(graphs)	Click here
Greece			6	16.7%	Type A, Subtype H1N1		(graphs)			Click here
Hungary	Low	Sporadic				69.5	(graphs)		(graphs)	Click here
Ireland	Low	None	0	0%	None	15.8	(graphs)		(graphs)	Click here
Italy	Low	Local				293.7	(graphs)		(graphs)	Click here
Latvia			0	0%	Type A		(graphs)			Click here
Lithuania	Low	Sporadic	2	50.0%	None	6.8	(graphs)	412.9	(graphs)	Click here
Luxembourg	Low	Local	8	37.5%	Type A and B	151.3	(graphs)	3479.6	(graphs)	Click here
Netherlands	Low	None	4	0%	None	36.5	(graphs)		(graphs)	Click here
Northern Ireland			1	100.0%	Type A		(graphs)			Click here
Norway	Low	Sporadic	0	0%	None	12.6	(graphs)		(graphs)	Click here
Poland	Low	None	4	0%	None	18.3	(graphs)		(graphs)	Click here
Portugal	Low	Sporadic	0	0%	None	10.0	(graphs)		(graphs)	Click here
Scotland	Low	Sporadic				34.2	(graphs)		(graphs)	Click here
Slovakia	Low	Sporadic	4	100.0%	Type A	387.0	(graphs)	2321.6	(graphs)	Click here
Slovenia	Low	Sporadic	1	0%	None	0.0	(graphs)	340.6	(graphs)	Click here
Spain	Medium	Regional	21	38.1%	Type A	125.0	(graphs)		(graphs)	Click here
Sweden	Low	None	0	0%	Type A and B	2.8	(graphs)		(graphs)	Click here
Switzerland	Low	Sporadic	11	0%	Type B and Type A, Subtype H1	0.0	(graphs)		(graphs)	Click here
Wales			0	0%	None		(graphs)			Click here
Europe			184	29.9%						Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Increased levels of influenza activity in seven European countries and low levels across the rest of Europe



Summary: There is currently increased influenza activity in England, Ireland, Italy, Luxembourg, Slovenia, Spain and Switzerland. In France and Portugal levels of influenza activity are around the baseline threshold. All other countries reported low levels of influenza activity. Of the total virus detections since week 40/2007 (N=1475), 82% were influenza A of which about 95% were of the H1 subtype.

Epidemiological situation - week 01/2008: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were medium in England, Ireland, Italy, Luxembourg, Slovenia, Spain and Switzerland, whilst they remained low or became low again in 19 other countries that reported this indicator. For the geographical spread indicator, three countries (England, Spain and Switzerland) reported regional influenza activity, five countries local activity, 13 countries sporadic activity and five countries reported no influenza activity. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (since week 40/2007): So far this season, the consultation rates for ILI and/or ARI have been at levels usually seen outside the seasonal influenza peak period (i.e. below or at the national baseline threshold) in most countries in Europe. A medium intensity of influenza activity (i.e. consultations rates were above the national baseline threshold) was first reported in Bulgaria (in week 48/2007), Austria (50/2007), Northern Ireland (50/2007) and Spain (week 51/2007). In week 01/2008 intensity remained at medium level in Spain and England, Ireland, Italy, Luxembourg, Slovenia and Switzerland started reporting a medium intensity.

Virological situation - week 01/2008: The total number of respiratory specimens collected by sentinel physicians in week 01/2008 was 643, of which 143 (22%) were influenza virus positive; 44 (31%) type A not subtyped, 79 (55%) type A subtype H1 [of which 23 were A(H1N1)], one (1%) type A subtype H3 and 19 (13%) type B. In addition, 187 influenza virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals), of which 130 (70%) were type A not subtyped, 28 (15%) type A subtype H1 [of which 14 were A(H1N1)] and 29 (15%) type B.

Cumulative virological situation - 2007-2008 season (since week 40/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=1475; sentinel and non-sentinel data), 599 (41%) were type A not subtyped, 588 (40%) were A(H1), 28 (2%) were A(H3) and 260 (17%) were B.

Based on the antigenic and/or genetic characterisation of 268 influenza viruses, three were A/New Caledonia/20/99 (H1N1)-like, 216 were A/Solomon Island/3/2006 (H1N1)-like, two were A/Wisconsin/67/2005 (H3N2)-like, seven were A/Brisbane/10/2007 (H3N2)-like, 24 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and 16 were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

Comment: Consultation rates for ILI and ARI reported are affected by seasonal holidays. Since this report is based on a week which includes New Year's Day (1 January), usual patterns of access to primary care and patient swabbing procedures were probably disrupted and the reported consultation rates could be lower than an equivalent non-holiday week. Hence reported rates should be interpreted cautiously.

Despite this, the current data indicate that confirmed influenza activity is increasing in 16 European countries (see intensity map) and a further increase in influenza activity in the coming weeks can be expected. Countries reporting a medium intensity were located in Northern (England and Ireland), Southern (Italy, Slovenia, Spain) and Western (Luxembourg and Switzerland) Europe [according to the UN Geographical Regions]. In the rest of Europe, the ILI and/or ARI consultation rates are currently below the national baseline level but if the pattern of previous seasons is repeated it is likely that some or many of those countries will also see rises.

Overall, for Europe as a whole, 82% of total virus detections since week 40/2007 (N=1475) have been influenza A, of which 95% were of the H1 subtype (calculation excludes the type A not subtyped virus detections). The characterisation data reported to EISS since week 40/2007 indicate that there seems to be a good match between the circulating A(H1) virus and the corresponding vaccine strain A/Solomon Island/3/2006 which is included in the 2007-2008 vaccine (click here).

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 01/2008, 26 countries reported epidemiological data and 28 countries reported virological data to EISS. 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.

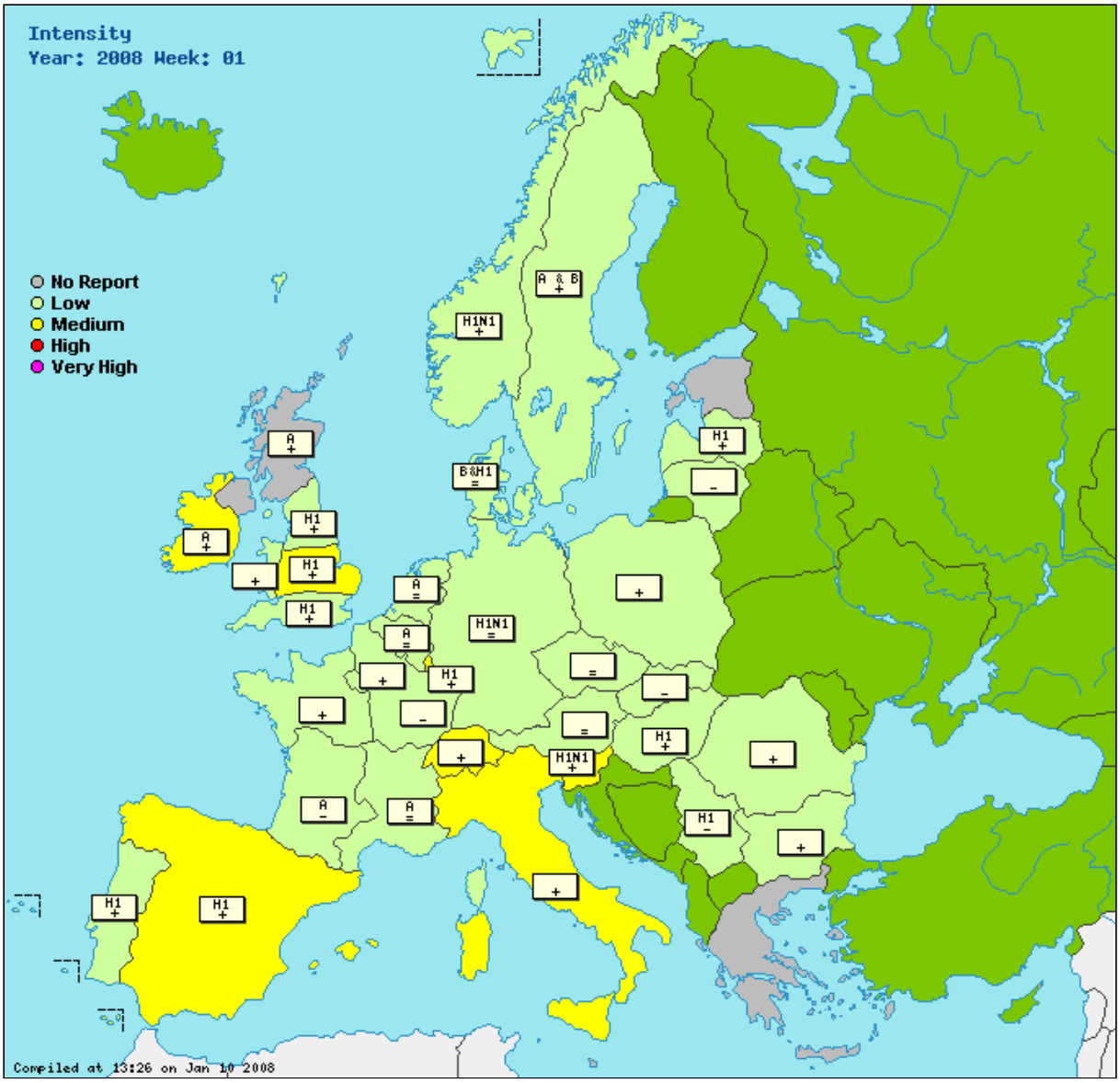
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Italy
Five A/H1N1 and 1 B influenza viruses have been detected during the last two weeks.

Serbia
In the 52nd week of 2007 (28.12.2007), we received 3 nose/throat samples obtained from children aged 6-8 years, all from Belgrade. Real-time results confirmed Inf A (H1) infection on the same day, but the results were not officially recorded until it was confirmed in tissue culture in the 1st week of 2008.

Sweden
We are courrently transfering our influensa reporting to a new reporting system from week 1/ 2008.We have therefore a substantial delay in reporting influensa activity for week 1/ 2008 due to some technical problem. The clinical data is not yet complete. The influensa activity is now increasing in Sweden. The RSV activity iincreases as well.
We are courrently transfering our influensa reporting to a new reporting system from week 1/ 2008.We have therefore a substantial delay in reporting influensa activity for week 1/ 2008 due to some technical problem. The influensa activity is now increasing in Sweden. The RSV activity iincreases as well.

Switzerland
Medical consultation for ILI bypassed threshold this week. Influenza A (H1N1) virus are mainly detected. Some influenza B virus are also detected.

Table and graphs (where available)

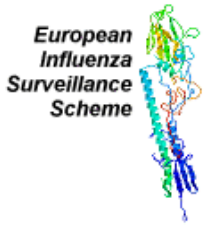
	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria	Low	Sporadic			99	6.1%	None	1305.5 (graphs)	(graphs)	Click here
Belgium	Low	Sporadic			10	10.0%	Type A	129.4 (graphs)	1704.7 (graphs)	Click here
Bulgaria	Low	None			10	0%	None	(graphs)	653.1 (graphs)	Click here
Czech Republic	Low	Local			37	0%	None	65.7 (graphs)	1021.8 (graphs)	Click here
Denmark	Low	Sporadic			2	50.0%	Type B and Type A, Subtype H1N1	82.7 (graphs)	(graphs)	Click here
England	Medium	Regional			127	37.0%	Type A, Subtype H1	31.4 (graphs)	883.3 (graphs)	Click here
Estonia					3	0%	None	(graphs)		Click here
France	Low	Local			114	17.5%	None	(graphs)	2234.5 (graphs)	Click here
Germany	Low	Sporadic			38	34.2%	Type A, Subtype H1N1	(graphs)	1097.0 (graphs)	Click here
Greece					12	16.7%	None	(graphs)		Click here
Hungary	Low	Sporadic			2	0%	Type A, Subtype H1	147.4 (graphs)	(graphs)	Click here
Ireland	Medium	Sporadic			19	52.6%	Type A	52.4 (graphs)	(graphs)	Click here
Italy	Medium	Local			34	5.9%	None	444.7 (graphs)	(graphs)	Click here
Latvia	Low	Sporadic			0	0%	Type A, Subtype H1	0.0 (graphs)	860.6 (graphs)	Click here
Lithuania	Low	Sporadic			2	100.0%	None	11.9 (graphs)	410.3 (graphs)	Click here
Luxembourg	Medium	Local			21	42.9%	Type A, Subtype H1	756.4 (graphs)	3328.3 (graphs)	Click here
Netherlands	Low	None			7	28.6%	Type A	19.9 (graphs)	(graphs)	Click here
Norway	Low	Sporadic			3	66.7%	Type A, Subtype H1N1	37.1 (graphs)	(graphs)	Click here
Poland	Low	None			1	0%	None	69.8 (graphs)	(graphs)	Click here
Portugal	Low	Sporadic			2	50.0%	Type A, Subtype H1	31.6 (graphs)	(graphs)	Click here
Romania	Low	None			10	0%	None	1.2 (graphs)	684.2 (graphs)	Click here
Scotland					0	0%	Type A	0.0 (graphs)	(graphs)	Click here
Serbia	Low	Sporadic			0	0%	Type A, Subtype H1	39.7 (graphs)	(graphs)	Click here
Slovakia	Low	Sporadic			3	0%	None	389.9 (graphs)	2037.7 (graphs)	Click here
Slovenia	Medium	Local			17	52.9%	Type A, Subtype H1N1	32.4 (graphs)	1020.5 (graphs)	Click here
Spain	Medium	Regional			50	30.0%	Type A, Subtype H1	150.8 (graphs)	(graphs)	Click here
Sweden	Low	Sporadic			0	0%	Type A and B	(graphs)	(graphs)	Click here
Switzerland	Medium	Regional			20	5.0%	None	111.3 (graphs)		Click here
Wales	Low	None						8.5 (graphs)	(graphs)	Click here
Europe					643	22.2%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

The influenza season has started in a number of European countries



Summary: There is currently increased influenza activity in the following, mainly western, European countries: Austria, Bulgaria, England, France, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Northern Ireland, Portugal, Slovenia, Spain and Switzerland. The total number of positive specimens has increased from around 200 per week in week 50/2007 to 714 positive specimens in week 02/2008. In the rest of Europe low levels of influenza activity were reported. Of the total virus detections since week 40/2007 (N=2379), 82% were influenza A of which about 99% were of the H1 subtype.

Epidemiological situation - week 02/2008: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were high in Austria and Bulgaria and medium in England, France, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Northern Ireland, Portugal, Slovenia, Spain and Switzerland, whilst they remained low in 13 other countries that reported this indicator. For the geographical spread indicator, eight countries (England, France, Hungary, Italy, Luxembourg, the Netherlands, Spain and Switzerland) reported widespread activity, two countries regional activity, five countries local activity, ten countries sporadic activity and two countries reported no influenza activity. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (since week 40/2007): The first countries in Europe to report a medium intensity of influenza activity (i.e. consultations rates were above the national baseline threshold) were Bulgaria (in week 48/2007) and Austria and Northern Ireland (both in week 50/2007). They were then above the baseline in Spain (since week 51/2007), England, Ireland, Italy, Luxembourg, Slovenia and Switzerland (all since week 01/2008). Since week 02/2008 consultation rates for ILI and/or ARI above baseline levels are additionally reported in France, Hungary, the Netherlands and Portugal. The highest consultation rates for ILI or ARI have been reported in the 0-4 and 5-14 age groups, however, England, Ireland, Spain and Switzerland reported high consultation rates also in the 15-64 age group.

Virological situation - week 02/2008: The total number of respiratory specimens collected by sentinel physicians in week 02/2008 was 1196, of which 399 (33%) were influenza virus positive; 191 (48%) type A not subtyped, 121 (31%) type A subtype H1 [of which 46 were A(H1N1)], one type A subtype H3 and 85 (21%) type B. In addition, 315 influenza virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals), of which 193 (61%) were type A not subtyped, 73 (23%) type A subtype H1 [of which 14 were A(H1N1)] and 49 (16%) type B.

Cumulative virological situation - 2007-2008 season (since week 40/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=2379; sentinel and non-sentinel data), 1075 (45%) were type A not subtyped, 855 (36%) were A(H1), 31 (1%) were A(H3) and 416 (18%) were B.

Based on the antigenic and/or genetic characterisation of 490 influenza viruses, 20 were A/New Caledonia/20/99 (H1N1)-like, 380 were A/Solomon Island/3/2006 (H1N1)-like, two were A/Wisconsin/67/2005 (H3N2)-like, eight were A/Brisbane/10/2007 (H3N2)-like, 71 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and 9 were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

Comment: In 14 of the 27 European countries that reported epidemiological data for week 02/2008, levels of influenza activity are above the baseline. This is a substantial increase compared to last week when only seven countries showed increased levels of influenza activity. Moreover, the number of positive specimens sharply increased from 198 in week 50/2007 to 714 detections in week 02/2008 (click here). These findings indicates that the annual influenza season has started in Europe. Influenza A(H1) is the dominant virus strain circulating in Europe this season and there is a good match between the strain and the corresponding vaccine strain A/Solomon Island/3/2006 which is included in the 2007-2008 vaccine.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 02/2008, 27 countries reported epidemiological data and 30 countries reported virological data to EISS. 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.

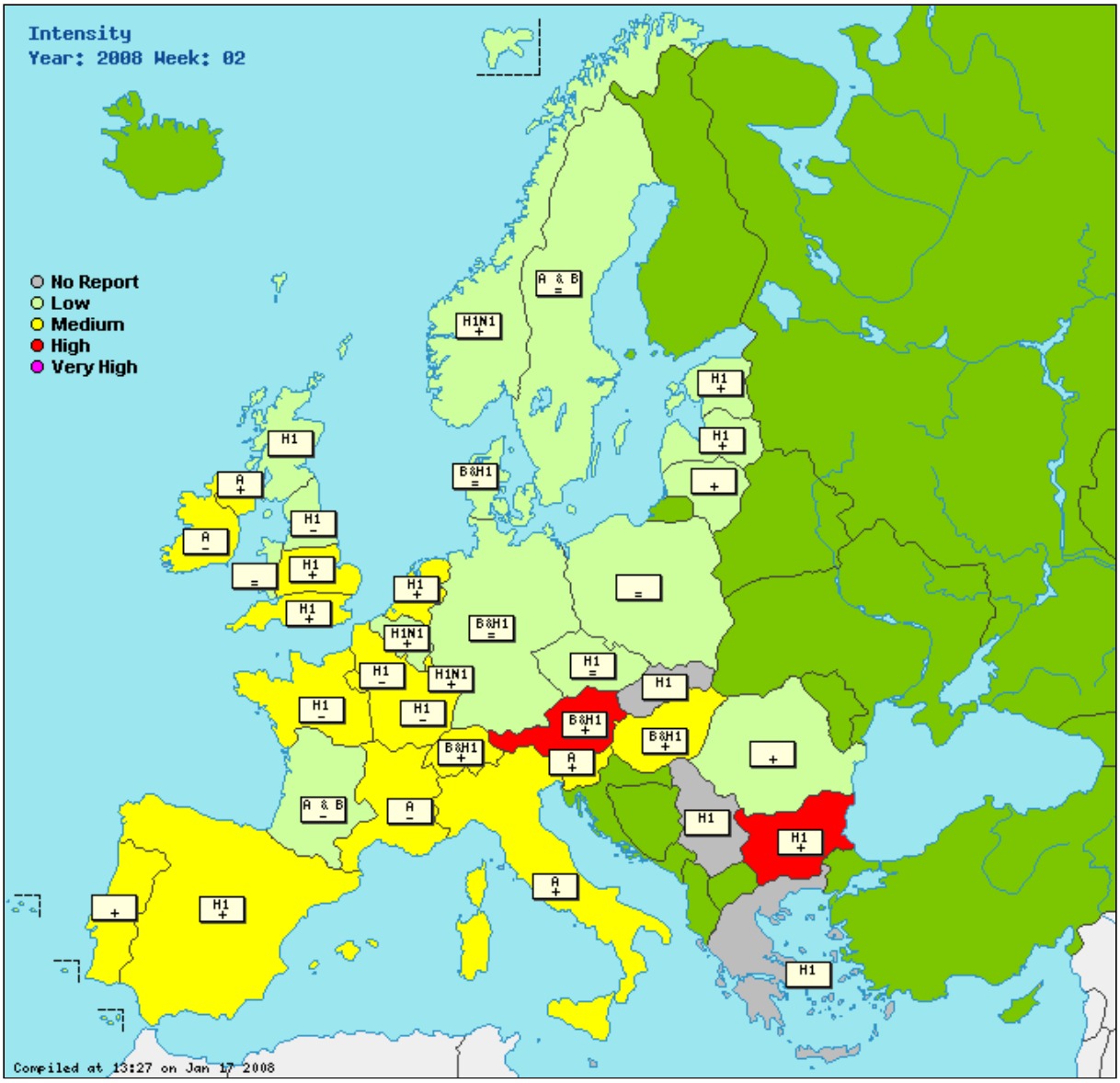
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Belgium
Influenza activity in Belgium is increasing, at levels above baseline values as calculated by the Moving Epidemic Method (MEM, Baseline Working Group, EISS). Regional influenza activity in Flanders and Brussels above the baseline level, whereas influenza activity in Wallonia is at baseline levels.

Bulgaria
First RT-PCR positive detections for A/H1 from two nasopharyngeal samples obtained from hospitalized children (3.7years and 6 monthts).

Greece
In Southern Greece, 11 clinical samples (35 nasopharyngeal swabs received in total) were found to be A/H1 positive by Real-time PCR. The HA sequences of seven isolates so far, were found A/Solomon Islands/3/2006 (H1N1)-like.

Italy
Further 15 influenza viruses were identified and/or isolated: 11 A (6 H1 and 5 A virus not yet subtyped) and 4 B.

Switzerland
Influenza activity continued to increase.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria	High	Local			52	42.3%	Type B and Type A, Subtype H1N1	1336.4 (graphs)	(graphs)	Click here
Belgium	Low	Regional			48	47.9%	Type A, Subtype H1N1	224.3 (graphs)	1963.4 (graphs)	Click here
Bulgaria	High	Regional			0	0%	Type A, Subtype H1	(graphs)	1290.8 (graphs)	Click here
Czech Republic	Low	Local			82	20.7%	Type A, Subtype H1	81.8 (graphs)	1217.7 (graphs)	Click here
Denmark	Low	Sporadic			8	50.0%	Type B and Type A, Subtype H1N1	93.4 (graphs)	(graphs)	Click here
England	Medium	Widespread			105	28.6%	Type A, Subtype H1	32.0 (graphs)	800.4 (graphs)	Click here
Estonia	Low	Sporadic			15	6.7%	Type A, Subtype H1	0.7 (graphs)	138.2 (graphs)	Click here
France	Medium	Widespread			238	32.8%	None	(graphs)	2262.3 (graphs)	Click here
Germany	Low	Sporadic			54	48.2%	Type B and Type A, Subtype H1N1	(graphs)	1206.0 (graphs)	Click here
Greece					17	29.4%	Type A, Subtype H1	(graphs)		Click here
Hungary	Medium	Widespread			21	42.9%	Type B and Type A, Subtype H1	300.3 (graphs)	(graphs)	Click here
Ireland	Medium	Local			15	33.3%	Type A	46.0 (graphs)	(graphs)	Click here
Italy	Medium	Widespread			82	15.9%	Type A	471.4 (graphs)	(graphs)	Click here
Latvia	Low	Sporadic			0	0%	Type A, Subtype H1	1.5 (graphs)	1222.8 (graphs)	Click here
Lithuania	Low	Sporadic			4	75.0%	None	28.6 (graphs)	715.4 (graphs)	Click here
Luxembourg	Medium	Widespread			32	31.3%	Type A, Subtype H1N1	186.1 (graphs)	3162.8 (graphs)	Click here
Netherlands	Medium	Widespread			20	30.0%	Type A, Subtype H1	52.1 (graphs)	(graphs)	Click here
Northern Ireland	Medium	Sporadic			0	0%	Type A	63.4 (graphs)	(graphs)	Click here
Norway	Low	Sporadic			13	38.5%	Type A, Subtype H1N1	61.8 (graphs)	(graphs)	Click here
Poland	Low	Sporadic			46	0%	None	67.5 (graphs)	(graphs)	Click here
Portugal	Medium	Local			3	33.3%	None	32.8 (graphs)	(graphs)	Click here
Romania	Low	None			38	0%	None	2.1 (graphs)	1093.9 (graphs)	Click here
Scotland	Low	Sporadic			5	60.0%	Type A, Subtype H1	0.0 (graphs)	(graphs)	Click here
Serbia					10	40.0%	Type A, Subtype H1	(graphs)		Click here
Slovakia					11	36.4%	Type A, Subtype H1	(graphs)		Click here
Slovenia	Medium	Local			47	74.5%	Type A	68.5 (graphs)	1668.2 (graphs)	Click here
Spain	Medium	Widespread			157	40.1%	Type A, Subtype H1	200.0 (graphs)	(graphs)	Click here
Sweden	Low	Sporadic			0	0%	Type A and B	1.4 (graphs)	(graphs)	Click here
Switzerland	Medium	Widespread			69	43.5%	Type B and Type A, Subtype H1	211.0 (graphs)		Click here
Wales	Low	None			4	50.0%	None	6.1 (graphs)	(graphs)	Click here
Europe					1196	33.4%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

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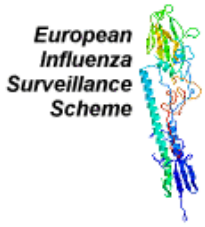
Increased influenza activity in Europe



Summary: There is currently medium or high influenza activity in 16 European countries (Austria, Belgium, Bulgaria, France, Hungary, Ireland, Italy, Lithuania, Luxembourg, Northern Ireland, Poland, Portugal, Romania, Slovenia, Spain and Switzerland). In week 03/2008, a further increase in consultations for influenza-like-illness (ILI) and/or acute respiratory infection (ARI) was reported by several countries and was most obvious for Hungary, Luxembourg, Portugal, Slovenia and Switzerland. Of the total virus detections since week 40/2007 (N=3447), 81% were influenza A of which about 99% were of the H1 subtype.

Epidemiological situation - week 03/2008: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were high in Bulgaria, Luxembourg and Switzerland, medium in Austria, Belgium, France, Hungary, Ireland, Italy, Lithuania, Northern Ireland, Poland, Portugal, Romania, Slovenia, Spain, whilst they remained low in 11 other countries that reported this indicator. For the geographical spread indicator, eleven countries (Austria, Belgium, France, Hungary, Italy, Luxembourg, the Netherlands, Portugal, Slovenia and Spain, Switzerland) reported widespread activity, three countries regional activity, five countries local activity, seven countries sporadic activity and one country reported no influenza activity.

Sixteen countries indicated an increase in clinical influenza activity. Compared to week 02/2008 substantial increases in consultations for clinical influenza were observed for the countries reporting a high intensity of influenza activity (Bulgaria, Luxembourg and Switzerland), but also for Portugal (click here) and Slovenia (click here), and to a lesser extent for Italy, Lithuania, Poland, Romania and Slovakia. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (since week 40/2007): The first countries in Europe to report a medium intensity of influenza activity (i.e. consultations rates were above the national baseline threshold) were Bulgaria (in week 48/2007) and Austria and Northern Ireland (both in week 50/2007). They were then above the baseline in Spain (since week 51/2007), England, Ireland, Italy, Luxembourg, Slovenia and Switzerland (all since week 01/2008), and in France, Hungary, the Netherlands and Portugal (in week 02/2008). In week 03/2008 consultation rates for ILI and/or ARI were also above baseline levels in Belgium, Lithuania, Poland and Romania, but were just below baseline levels again for England and the Netherlands. The highest consultation rates have generally been reported in the 0-4 and 5-14 age groups, however, England, Ireland, Norway, Spain and Switzerland also reported high consultation rates in the 15-64 age group compared to the other ages.

Virological situation - week 03/2008: The total number of respiratory specimens collected by sentinel physicians in week 03/2008 was 1529, of which 504 (33%) were influenza virus positive; 210 (42%) type A not subtyped, 205 (41%) type A subtype H1 [of which 98 were A(H1N1)], one type A subtype H3N2 and 88 (17%) type B. In addition, 345 influenza virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals), of which 251 (73%) were type A not subtyped, 43 (12%) type A subtype H1 [of which 15 were A(H1N1)] and 51 (15%) type B.

Cumulative virological situation - 2007-2008 season (since week 40/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=3447; sentinel and non-sentinel data), 1567 (45%) were type A not subtyped, 1241 (36%) were A(H1), 32 (1%) were A(H3) and 607 (18%) were B. While the majority of countries in Europe reported influenza H1 as dominant type, Sweden and Germany reported a relatively high proportion of influenza B compared to other countries.

Based on the antigenic and/or genetic characterisation of 788 influenza viruses, 57 were A/New Caledonia/20/99 (H1N1)-like, 593 were A/Solomon Island/3/2006 (H1N1)-like, two were A/Wisconsin/67/2005 (H3N2)-like, nine were A/Brisbane/10/2007 (H3N2)-like, 116 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and 11 were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

Comment: The annual influenza season has started in Europe. In 16 of the 27 European countries that reported epidemiological data for week 03/2008, levels of influenza activity are above the baseline. The increase in influenza activity in countries such as Italy, Lithuania, Slovenia, Poland, Portugal and Romania indicates that influenza is also now affecting Southern and Eastern European regions. Low levels of influenza activity with only sporadic cases or local outbreaks are currently reported in Scandinavia, Serbia, Slovakia and the United Kingdom. Influenza A(H1) is the dominant virus strain circulating in Europe this season and there is a good match between this virus and the corresponding vaccine strain A/Solomon Island/3/2006 which is included in the 2007-2008 vaccine.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 03/2008, 27 countries reported epidemiological data and 30 countries reported virological data to EISS. 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).

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Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

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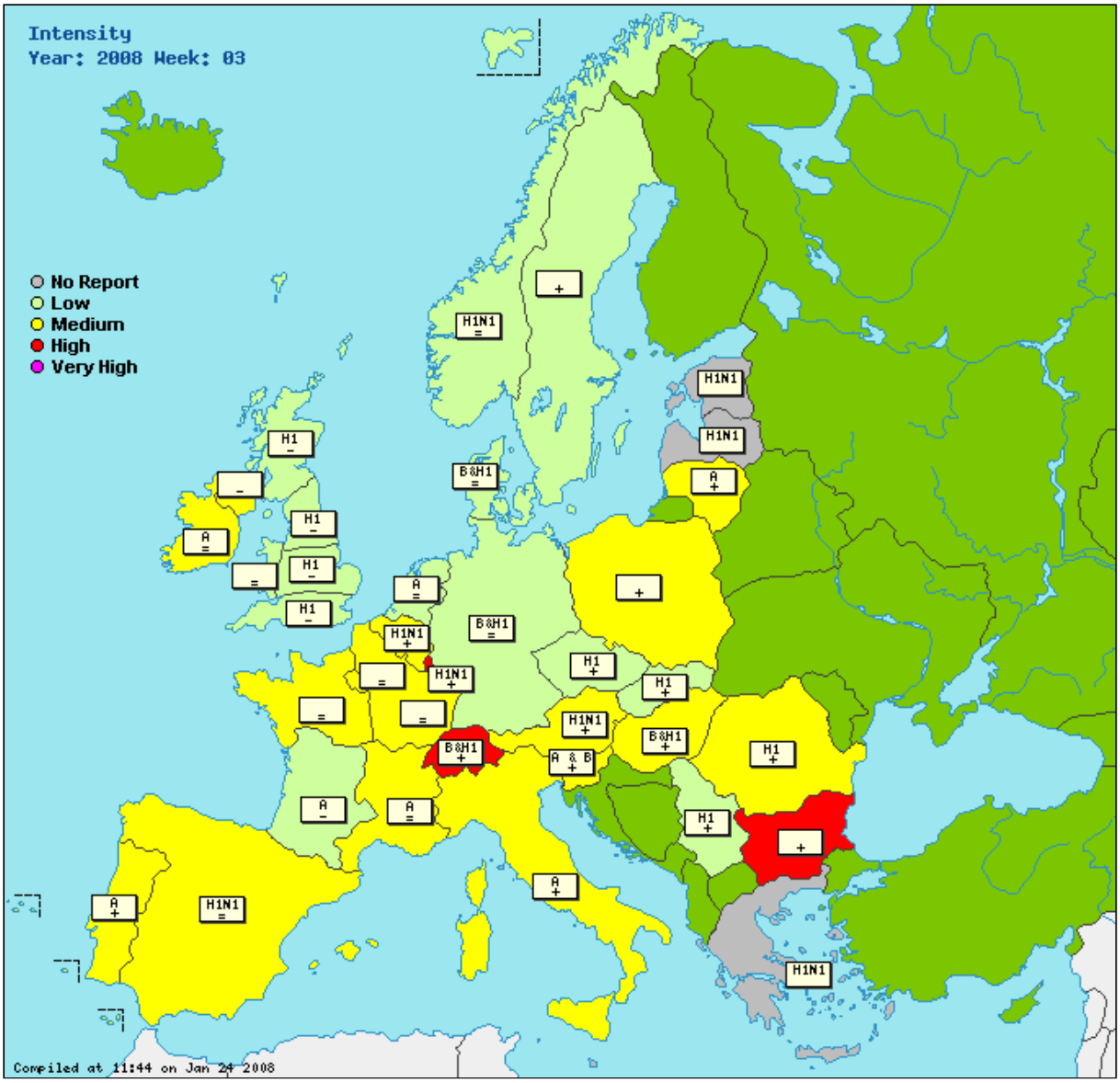
Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

Low = no influenza activity or influenza at baseline levels
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Sporadic = isolated cases of laboratory confirmed influenza infection
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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.

Country comments (where available)

Greece
In Southern Greece, 17 clinical samples (45 nasopharyngeal swabs received in total) were found to be A/H1 positive by Real-time PCR. The HA sequences of twelve isolates so far, were found A/Solomon Islands/3/2006 (H1N1)-like.

Italy
Twelve influenza A and B viruses have been detected during this week. Among the 6 A type viruses, 3 have been subtyped as H1.

Serbia
In the week 3/08 Torlak Institute lab confirmed Influenza A(H1) in 14 out of 15 through/nose samples (from children mostly), received on January 10, 2008 from the Montenegro Pablic Health Institute. Increased number of patients with influenza-like symptoms in Montenegro was recorded in the last week of December.

Slovakia
Most swabs from non sentinel doctors are patients from hospitals, half of them are small children, born 2006,2007.

Switzerland
influenza activity continued to increase in Switzerland. Influenza A (H1N1) remained detected in majority. They are related to influenza A/Solomon Island/03/06 (H1N1). Influenza B viruses are also detected, influenza B/Jiangsu-like and B/Malaysia-like viruses.

Table and graphs (where available)

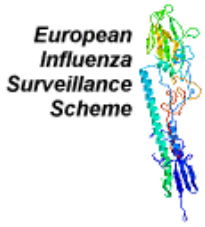
	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria	Medium	Widespread			98	34.7%	Type A, Subtype H1N1	1738.1 (graphs)	(graphs)	Click here
Belgium	Medium	Widespread			64	50.0%	Type A, Subtype H1N1	238.5 (graphs)	1793.7 (graphs)	Click here
Bulgaria	High	Regional			11	0%	None	(graphs)	1638.0 (graphs)	Click here
Czech Republic	Low	Regional			129	14.0%	Type A, Subtype H1	115.6 (graphs)	1370.5 (graphs)	Click here
Denmark	Low	Sporadic			11	45.5%	Type B and Type A, Subtype H1N1	74.5 (graphs)	(graphs)	Click here
England	Low	Local			82	23.2%	Type A, Subtype H1	19.8 (graphs)	625.5 (graphs)	Click here
Estonia					10	20.0%	Type A, Subtype H1N1	(graphs)		Click here
France	Medium	Widespread			289	36.7%	Type A, Subtype H1N1	(graphs)	2278.2 (graphs)	Click here
Germany	Low	Regional			114	49.1%	Type B and Type A, Subtype H1N1	(graphs)	1074.0 (graphs)	Click here
Greece					22	86.4%	Type A, Subtype H1N1	(graphs)		Click here
Hungary	Medium	Widespread			50	50.0%	Type B and Type A, Subtype H1	497.2 (graphs)	(graphs)	Click here
Ireland	Medium	Local			14	21.4%	Type A	49.4 (graphs)	(graphs)	Click here
Italy	Medium	Widespread			55	16.4%	Type A	645.2 (graphs)	(graphs)	Click here
Latvia					3	33.3%	Type A, Subtype H1N1	(graphs)		Click here
Lithuania	Medium	Local			8	50.0%	Type A	64.5 (graphs)	795.2 (graphs)	Click here
Luxembourg	High	Widespread			80	45.0%	Type A, Subtype H1N1	524.0 (graphs)	2841.6 (graphs)	Click here
Netherlands	Low	Widespread			16	37.5%	Type A	49.6 (graphs)	(graphs)	Click here
Northern Ireland	Medium	Sporadic			12	33.3%	None	57.3 (graphs)	(graphs)	Click here
Norway	Low	Sporadic			9	55.6%	Type A, Subtype H1N1	59.0 (graphs)	(graphs)	Click here
Poland	Medium	Sporadic			59	1.7%	None	101.1 (graphs)	(graphs)	Click here
Portugal	Medium	Widespread			8	25.0%	Type A	59.8 (graphs)	(graphs)	Click here
Romania	Medium	Local			92	17.4%	Type A, Subtype H1	2.6 (graphs)	1252.8 (graphs)	Click here
Scotland	Low	Sporadic			1	0%	Type A, Subtype H1	0.0 (graphs)	(graphs)	Click here
Serbia	Low	Sporadic			16	75.0%	Type A, Subtype H1	152.2 (graphs)	(graphs)	Click here
Slovakia	Low	Local			13	46.2%	Type A, Subtype H1	460.7 (graphs)	2259.5 (graphs)	Click here
Slovenia	Medium	Widespread			48	66.7%	Type A and B	126.1 (graphs)	1515.6 (graphs)	Click here
Spain	Medium	Widespread			151	23.2%	Type A, Subtype H1N1	188.7 (graphs)	(graphs)	Click here
Sweden	Low	Sporadic			20	10.0%	None	3.1 (graphs)	(graphs)	Click here
Switzerland	High	Widespread			39	30.8%	Type B and Type A, Subtype H1	318.4 (graphs)		Click here
Wales	Low	None			5	40.0%	None	7.8 (graphs)	(graphs)	Click here
Europe					1529	33.0%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Increased influenza activity in Europe



Summary: There is currently medium or high influenza activity in 18 countries in Europe (Austria, Belgium, Bulgaria, the Czech Republic, Estonia, France, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Poland, Portugal, Romania, Slovenia, Spain and Switzerland). In Ireland, Spain and the United Kingdom, influenza activity is now declining. Of the total virus detections since week 40/2007 (N=4913), 81% were influenza A of which about 98% were of the H1 subtype.

Epidemiological situation - week 04/2008: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were high in Bulgaria, Hungary, Luxembourg and Switzerland, medium in 14 countries, whilst they remained low in ten other countries that reported this indicator. For the geographical spread indicator, 12 countries reported widespread activity, five countries regional activity, three countries local activity, seven countries sporadic activity and one country reported no influenza activity.

Fifteen countries indicated an increase in clinical influenza activity in week 04/2008 compared to week 03/2008. Substantial increases in consultation rates for clinical influenza were observed in Latvia and Lithuania; in the other countries the increases were more modest. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (since week 40/2007): The first countries to report a medium intensity of influenza activity (i.e. consultations rates were above the national baseline threshold) were Bulgaria (in week 48/2007), Austria and Northern Ireland (both in week 50/2007). Consultation rates were then above the baseline threshold in Spain (since week 51/2007), England, Ireland, Italy, Luxembourg, Slovenia and Switzerland (all since week 01/2008). Influenza activity is now declining in Spain, Ireland and the United Kingdom.

In countries with increased levels of influenza activity, the highest consultation rates have generally been reported in the 0-4 and 5-14 age groups, however, England, Ireland, Norway, Spain and Switzerland have also reported high consultation rates in the 15-64 age group compared to the other ages. Consultation rates have not risen above the national baseline threshold in Denmark, Germany, the Netherlands, Norway, Serbia, Sweden and Wales.

Virological situation - week 04/2008: The total number of respiratory specimens collected by sentinel physicians in week 04/2008 was 1828, of which 630 (34%) were influenza virus positive; 281 (45%) type A not subtyped, 219 (35%) type A subtype H1 [of which 130 were A(H1N1)], three (<1%) type A subtype H3N2 and 125 (20%) type B. In addition, 441 influenza virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals), of which 271 (61%) were type A not subtyped, 78 (18%) type A subtype H1 [of which 46 were A(H1N1)], one (0.2%) type A subtype H3N2 and 91 (21%) type B.

Cumulative virological situation - 2007-2008 season (since week 40/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=4913; sentinel and non-sentinel data), 2236 (46%) were type A not subtyped, 1723 (35%) were A(H1), 41 (1%) were A(H3) and 913 (19%) were B. While the majority of countries in Europe reported influenza H1 as the dominant subtype, Sweden and Germany have reported a relatively high proportion of influenza B compared to other countries.

Based on the antigenic and/or genetic characterisation of 1025 influenza viruses, 57 were A/New Caledonia/20/99 (H1N1)-like, 778 were A/Solomon Island/3/2006 (H1N1)-like, two were A/Wisconsin/67/2005 (H3N2)-like, ten were A/Brisbane/10/2007 (H3N2)-like, 168 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and ten were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

Comment: Eighteen countries are currently reporting a medium or high intensity of influenza activity. A number of countries have not yet observed consultation rates above the national baseline threshold (e.g. the Netherlands and Germany) and a couple of countries in Western Europe (Ireland, Spain and the United Kingdom) are now observing declining rates.

Although influenza A(H1) is the dominant virus strain circulating in Europe this season, influenza B still represents 19% of the total influenza virus detections since the start of the season and, in Spain, influenza B is currently the dominant virus (see Network comments). There is a good match between the dominant virus strain circulating in Europe (influenza A(H1)) and the corresponding vaccine strain A/Solomon Island/3/2006 which is included in the 2007-2008 influenza vaccine.

On 25 January 2008, VIRGIL/EISS made an announcement that a significant proportion (13%) of the A(H1N1) viruses circulating in Europe were resistant to oseltamivir (click here for full text), with resistant viruses found in four countries (Denmark, England, France and Norway). The figures were updated on 31 January and resistant A(H1N1) viruses (14%) have now been isolated in Denmark, Finland, France, Germany, the Netherlands, Norway, Portugal, Sweden and the United Kingdom (click here for the full Eurosurveillance report).

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 04/2008, 28 countries reported epidemiological data and 29 countries reported virological data to EISS. 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.

Map

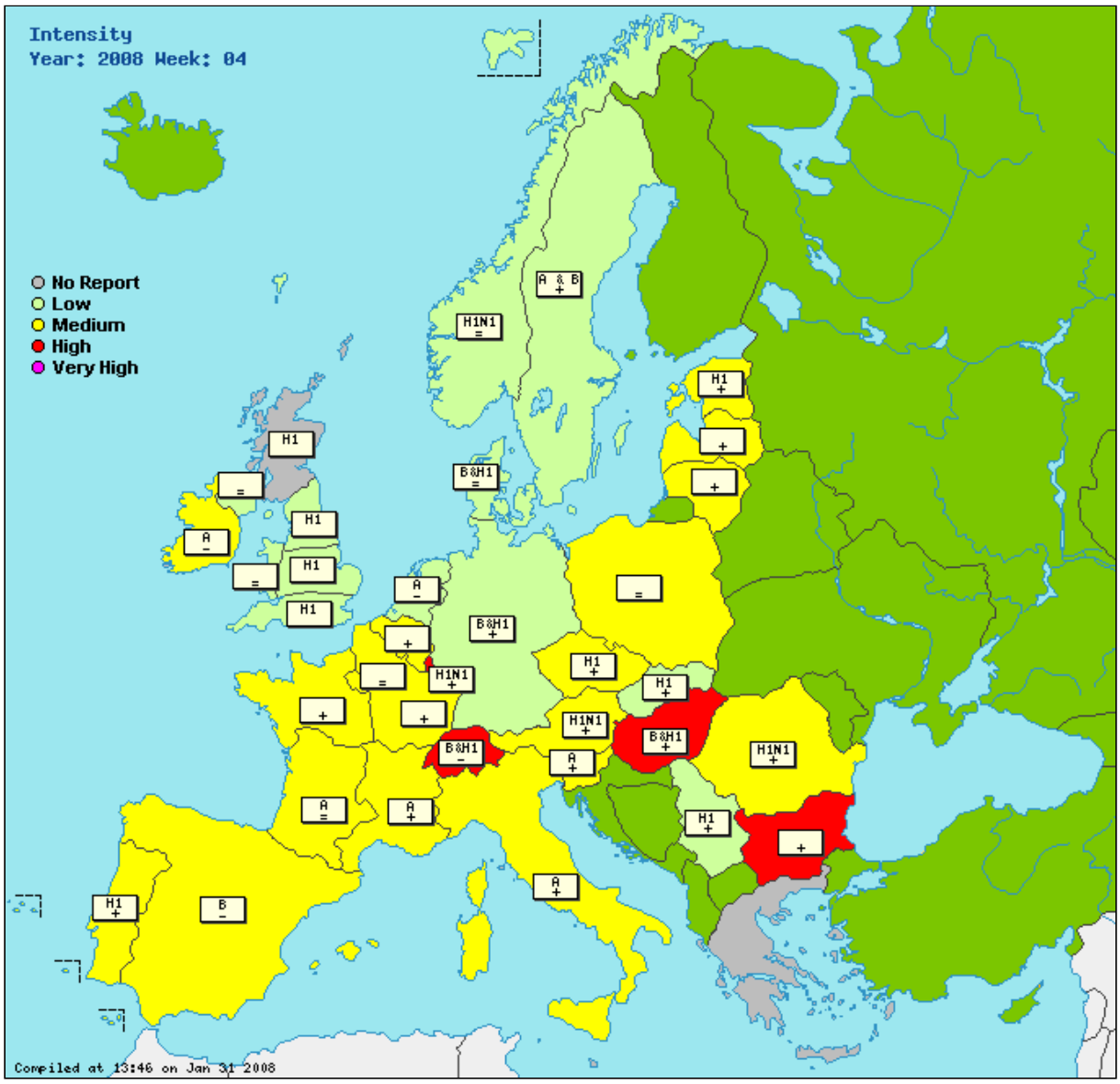
The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will

appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Greece
In Southern Greece, 24 clinical samples (55 nasopharyngeal swabs received in total) were found to be A/H1 positive by Real-time PCR. Interestingly the vast majority of the samples found positive by PCR(22 out of 24 nasopharyngeal swabs) were collected from young people up to fourteen years of age. The HA sequences of fifteen isolates so far, were found A/Solomon Islands/3/2006 (H1N1)-like.

Italy
During the last week 23 samples were positive for influenza A virus (13 H1 and 10 A not yet subtyped) and 10 for influenza B. Influenza A (H1N1) strains are predominant.

Norway
In creasing numbers of A(H1N1), but also influenza B, viruses this week. A high proportion of influenza A(H1N1) viruses in Norway this season are resistant to the neuraminidase inhibitor oseltamivir.

Spain
Influenza B is the predominant virus.

Sweden
The number of influensadiagnosis is gradually increasing but number of ILI still remains low.
Switzerland
Medical consultation started to decrease last week. The pick seem to be reached. Influenza A (H1N1) are mainly detected. Few influenza B viruses remained detected.

Table and graphs (where available)

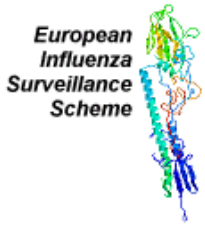
	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria	Medium	Widespread			168	48.8%	Type A, Subtype H1N1	1861.2 (graphs)	(graphs)	Click here
Belgium	Medium	Widespread			52	57.7%	None	323.9 (graphs)	1789.6 (graphs)	Click here
Bulgaria	High	Regional			93	0%	None	(graphs)	1852.4 (graphs)	Click here
Czech Republic	Medium	Regional			79	24.1%	Type A, Subtype H1	147.4 (graphs)	1444.0 (graphs)	Click here
Denmark	Low	Sporadic			20	55.0%	Type B and Type A, Subtype H1N1	88.1 (graphs)	(graphs)	Click here
England	Low	Sporadic			54	9.3%	None	15.1 (graphs)	569.7 (graphs)	Click here
Estonia	Medium	Local			26	26.9%	Type A, Subtype H1	3.8 (graphs)	180.5 (graphs)	Click here
France	Medium	Widespread			259	35.5%	Type A, Subtype H1N1	(graphs)	2492.9 (graphs)	Click here
Germany	Low	Regional			153	62.8%	Type B and Type A, Subtype H1N1	(graphs)	1125.0 (graphs)	Click here
Greece					30	73.3%	None	(graphs)		Click here
Hungary	High	Widespread			54	38.9%	Type B and Type A, Subtype H1	545.5 (graphs)	(graphs)	Click here
Ireland	Medium	Widespread			2	50.0%	Type A	34.5 (graphs)	(graphs)	Click here
Italy	Medium	Widespread			126	18.3%	Type A	447.4 (graphs)	(graphs)	Click here
Latvia	Medium	Regional						152.4 (graphs)	1759.4 (graphs)	Click here
Lithuania	Medium	Local						132.9 (graphs)	991.3 (graphs)	Click here
Luxembourg	High	Widespread			92	58.7%	Type A, Subtype H1N1	604.7 (graphs)	3754.1 (graphs)	Click here
Malta					0	0%	None	(graphs)		Click here
Netherlands	Low	Widespread			18	33.3%	Type A	38.0 (graphs)	(graphs)	Click here
Northern Ireland	Low	Sporadic			12	8.3%	None	64.4 (graphs)	(graphs)	Click here
Norway	Low	Sporadic			17	52.9%	Type A, Subtype H1N1	54.7 (graphs)	(graphs)	Click here
Poland	Medium	Sporadic			68	5.9%	None	132.7 (graphs)	(graphs)	Click here
Portugal	Medium	Widespread			5	40.0%	Type A, Subtype H1	61.9 (graphs)	(graphs)	Click here
Romania	Medium	Regional			211	5.7%	Type A, Subtype H1N1	10.2 (graphs)	1497.5 (graphs)	Click here
Scotland					11	9.1%	Type A, Subtype H1	(graphs)		Click here
Serbia	Low	Sporadic			14	85.7%	Type A, Subtype H1	217.0 (graphs)	(graphs)	Click here
Slovakia	Low	Local			16	81.3%	Type A, Subtype H1	494.9 (graphs)	2394.7 (graphs)	Click here
Slovenia	Medium	Widespread			45	71.1%	Type A	141.8 (graphs)	1643.4 (graphs)	Click here
Spain	Medium	Widespread			150	36.0%	Type B	164.8 (graphs)	(graphs)	Click here
Sweden	Low	Sporadic			20	30.0%	Type A and B	3.4 (graphs)	(graphs)	Click here
Switzerland	High	Widespread			30	43.3%	Type B and Type A, Subtype H1N1	283.3 (graphs)		Click here
Wales	Low	None			3	66.7%	None	5.8 (graphs)	(graphs)	Click here
Europe					1828	34.5%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Medium levels of influenza activity in most European Countries



Summary: Currently influenza activity is high in only one country (Bulgaria) in Europe, medium in 20 and low in eight other countries. Clinical influenza activity continued to decline in Spain, and it is reaching its peak in Bulgaria, Hungary, Switzerland and the United Kingdom. Of the total virus detections since week 40/2007 (N=6354), 80% were influenza A of which about 98% were of the H1 subtype with a good match with the current vaccine strain. A/H1N1 viruses resistant to oseltamivir have been detected in a number of countries.

Epidemiological situation - week 05/2008: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were high in Bulgaria, medium in 20 countries and low in eight other countries that reported this indicator. For the geographical spread indicator, 11 countries reported widespread activity, eight countries regional activity, two countries local activity, seven countries sporadic activity and one country reported no influenza activity.

Eleven countries indicated an increase in clinical influenza activity in week 05/2008 compared to week 04/2008. Substantial increases in consultation rates for clinical influenza were observed in Latvia and Estonia; in the other countries the increases were more modest. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (since week 40/2007): The first countries to report a medium intensity of influenza activity (i.e. consultations rates were above the national baseline threshold) were Bulgaria (in week 48/2007), Austria and Northern Ireland (both in week 50/2007). Consultation rates were then above the baseline threshold in Spain (since week 51/2007), England, Ireland, Italy, Luxembourg, Slovenia, Switzerland (all since week 01/2008) and The Netherlands (since week 05/2008). Influenza activity is now declining in Spain, while it is reaching its peak in Bulgaria, Hungary, Switzerland and the United Kingdom.

In countries with increased levels of influenza activity, the highest consultation rates have generally been reported in the 0-4 and 5-14 age groups, however, England, Ireland, Norway, Spain and Switzerland have also reported high consultation rates in the 15-64 age group compared to the other ages. Consultation rates have not risen above the national baseline threshold in Denmark, Germany, Norway, Serbia, Sweden and Wales.

Virological situation - week 05/2008: The total number of respiratory specimens collected by sentinel physicians in week 05/2008 was 1940, of which 643 (33%) were influenza virus positive. Among the positives, 237 (37%) were type A not subtyped, 218 (34%) type A subtype H1 [of which 132 were A(H1N1)], 10 (<2%) type A subtype H3 [of which four were A(H3N2)] and 178 (28%) type B. In addition, 389 influenza virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals), of which 251 (65%) were type A not subtyped, 47 (12%) type A subtype H1 [of which 26 were A(H1N1)], two(0.5%) type A H3 [of which one was A(H3N2)], and 89 (23%) type B..

Cumulative virological situation - 2007-2008 season (since week 40/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=6354; sentinel and non-sentinel data), 2778 (44%) were type A not subtyped, 2270 (36%) were A(H1), 59 (1%) were A(H3) and 1247 (20%) were B. While the majority of countries in Europe reported influenza A(H1) as the dominant subtype, Czech Republic, Denmark, France, Germany, Hungary, Portugal, Spain, Switzerland and Sweden have reported a relatively high proportion of influenza B compared to other countries.

Based on the antigenic and/or genetic characterisation of 1394 influenza viruses, 58 were A/New Caledonia/20/99 (H1N1)-like, 1090 were A/Solomon Island/3/2006 (H1N1)-like, two were A/Wisconsin/67/2005 (H3N2)-like, ten were A/Brisbane/10/2007 (H3N2)-like, 224 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage; not included in the vaccine for the 2007/2008 season) and ten were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage; included in the vaccine for the 2007/2008 season) (click here).

Comment: Only one country is currently reporting high intensity of influenza activity, however medium activity is still present in 20 countries reporting these data. A number of countries have not yet observed consultation rates above the national baseline threshold (e.g. Denmark and Germany). In the majority of countries the influenza activity is either unchanging or declining.

Although influenza A(H1) is the dominant virus strain circulating in Europe this season, influenza B still represents 20% of the total influenza virus detections since the start of the season and, in Spain, influenza B is currently the dominant virus. There is a good match between the dominant virus strain circulating in Europe (influenza A(H1)) and the corresponding vaccine strain A/Solomon Island/3/2006 which is included in the 2007-2008 influenza vaccine. Despite a mismatch of the majority of characterised influenza B viruses with the influenza B virus strain included in the vaccine, it is expected that the vaccine offers still valuable protection due to cross reactive antibodies between both lineages of influenza B viruses.

Regarding the monitoring of antiviral resistance (click here for full text), the update on 07 February showed that out of 755 isolates tested, 151 (20%) were resistant to oseltamivir (click here for full text). Resistant viruses were found in nine countries (Finland, France, Germany, Greece, the Netherlands, Norway, Portugal, Sweden, and the United Kingdom). (click here for the full Eurosurveillance report).

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 05/2008, 29 countries reported epidemiological data and 27 countries reported virological data to EISS. 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).

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Map

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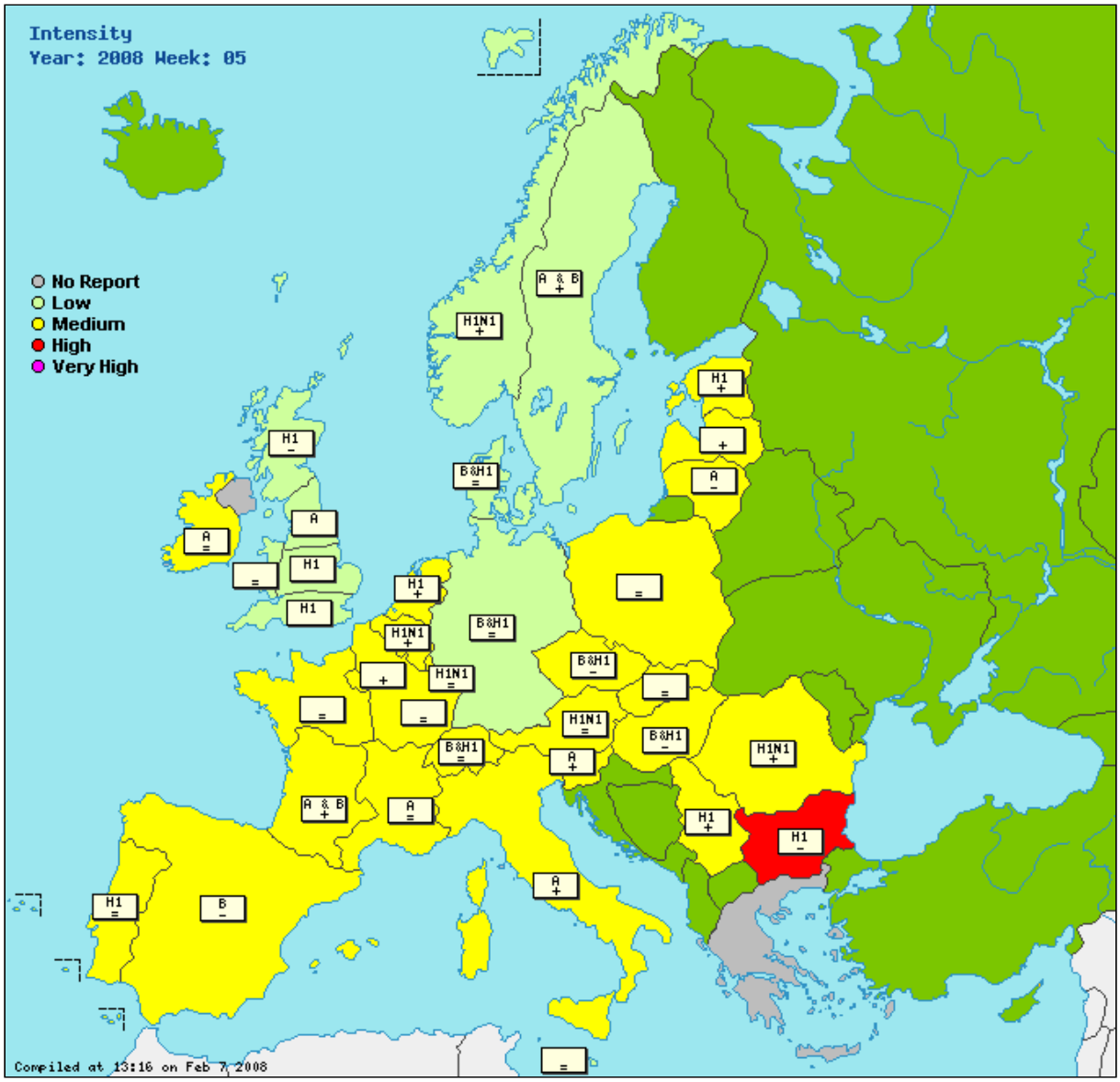
You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

= : stable clinical activity
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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.

Country comments **(where available)**

Greece
In Southern Greece, 18 clinical samples (33 nasopharyngeal swabs received in total) were found to be A/H1 positive by Real-time PCR, still a high percentage of samples positive for A(H1). It is interesting the fact that no samples have been found A/H3 positive by Real Time PCR so far.
Italy
Further 40 influenza virus detections are reported: 9 A/H1N1, 4 A/H3N2, 8 A not yet subtyped and 19 B.

Norway
Increasing clinical activity, especially in the region Middle Norway
In creasing numbers of A(H1N1) viruses are being detected. The proportion of influenza A(H1N1) viruses in Norway which are resistant to the neuraminidase inhibitor oseltamivir, remains high. First detections of A(H3) viruses this season.
Sweden
Fifteen additional ILI cases have been added to the report for week 4/2008
Switzerland
Influenza epidemic is still widespread in Switzerland.

Table and graphs (where available)

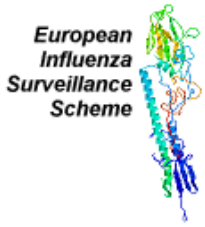
	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria	Medium	Widespread			172	49.4%	Type A, Subtype H1N1	1573.6 (graphs)	(graphs)	Click here
Belgium	Medium	Widespread			66	15.2%	Type A, Subtype H1N1	369.1 (graphs)	1691.0 (graphs)	Click here
Bulgaria	High	Regional			49	0%	Type A, Subtype H1	(graphs)	1606.8 (graphs)	Click here
Czech Republic	Medium	Regional			55	27.3%	Type B and Type A, Subtype H1	128.4 (graphs)	1341.0 (graphs)	Click here
Denmark	Low	Sporadic			17	58.8%	Type B and Type A, Subtype H1N2	122.5 (graphs)	(graphs)	Click here
England	Low	Sporadic			58	24.1%	Type A, Subtype H1	12.3 (graphs)	550.6 (graphs)	Click here
Estonia	Medium	Local			61	37.7%	Type A, Subtype H1	20.7 (graphs)	472.8 (graphs)	Click here
France	Medium	Widespread			313	27.5%	Type A, Subtype H1N1	(graphs)	2636.2 (graphs)	Click here
Germany	Low	Regional			211	56.9%	Type B and Type A, Subtype H1N1	(graphs)	1165.0 (graphs)	Click here
Greece					25	72.0%	None	(graphs)		Click here
Hungary	Medium	Widespread			45	46.7%	Type B and Type A, Subtype H1	455.2 (graphs)	(graphs)	Click here
Ireland	Medium	Widespread			2	0%	Type A	30.5 (graphs)	(graphs)	Click here
Italy	Medium	Widespread			149	20.1%	Type A	465.8 (graphs)	(graphs)	Click here
Latvia	Medium	Regional						266.1 (graphs)	1847.0 (graphs)	Click here
Lithuania	Medium	Regional			18	5.6%	Type A	131.7 (graphs)	920.6 (graphs)	Click here
Luxembourg	Medium	Widespread			87	52.9%	Type A, Subtype H1N1	674.4 (graphs)	3279.1 (graphs)	Click here
Malta	Low	Sporadic						(graphs)	(graphs)	Click here
Netherlands	Medium	Widespread			18	27.8%	Type A, Subtype H1	60.7 (graphs)	(graphs)	Click here
Norway	Low	Local			16	56.3%	Type A, Subtype H1N1	80.2 (graphs)	(graphs)	Click here
Poland	Medium	Sporadic			95	1.1%	None	110.1 (graphs)	(graphs)	Click here
Portugal	Medium	Widespread			14	64.3%	Type A, Subtype H1	54.9 (graphs)	(graphs)	Click here
Romania	Medium	Regional			185	9.2%	Type A, Subtype H1N1	14.3 (graphs)	1621.9 (graphs)	Click here
Scotland	Low	Sporadic			2	0%	Type A, Subtype H1	0.0 (graphs)	(graphs)	Click here
Serbia	Medium	Sporadic			13	76.9%	Type A, Subtype H1	268.0 (graphs)	(graphs)	Click here
Slovakia	Medium	Regional			8	12.5%	None	478.3 (graphs)	2366.6 (graphs)	Click here
Slovenia	Medium	Widespread			40	57.5%	Type A	193.5 (graphs)	1410.7 (graphs)	Click here
Spain	Medium	Regional			151	43.7%	Type B	139.9 (graphs)	(graphs)	Click here
Sweden	Low	Sporadic			24	16.7%	Type A and B	8.8 (graphs)	(graphs)	Click here
Switzerland	Medium	Widespread			46	41.3%	Type B and Type A, Subtype H1	270.4 (graphs)		Click here
Wales	Low	None						1.7 (graphs)	(graphs)	Click here
Europe					1940	33.1%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Medium levels of influenza activity in most European countries



Summary : In week 06/2008, influenza activity was high in only one country in Europe, medium in 18 and low in ten other countries. In large parts of Europe influenza activity continued to decline, whilst in other parts it was increasing or stable, compared to previous week. Of the total virus detections since week 40/2007 (N=8145), 80% were influenza A of which about 99% were of the H1 subtype with a good match with the current vaccine strain. By 13 February 2008, A(H1N1) viruses resistant to oseltamivir have been detected in 13 countries in Europe.

Epidemiological situation - week 06/2008: For the intensity indicator, the national levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were high in Bulgaria, medium in 18 countries and low in 10 other countries that reported this indicator. For the geographical spread indicator, 11 countries reported widespread activity, five countries regional activity, five countries local activity, seven countries sporadic activity and one country reported no influenza activity.

Six countries indicated an increase in clinical influenza activity in week 06/2008 compared to week 05/2008. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (since week 40/2007): The first countries to report a medium intensity of influenza activity (i.e. consultations rates above the national baseline threshold) were Bulgaria (in week 48/2007), Austria and Northern Ireland (both in week 50/2007). Consultation rates were then above the baseline threshold in Spain (since week 51/2007), England, Ireland, Italy, Luxembourg, Slovenia, Switzerland (all since week 01/2008) and The Netherlands (since week 05/2008), Sweden (since week 6/2008). Influenza activity is now declining in Austria, Bulgaria, Czech Republic, Hungary, Ireland, Lithuania, Luxemburg, Portugal, Romania, Slovakia, Slovenia, Spain, Switzerland, while it was unchanged in Belgium, Denmark, Italy, Latvia, Netherlands, Northern Ireland, Poland, and Wales.

In countries with increased levels of influenza activity, the highest consultation rates have generally been reported in the 0-4 and 5-14 age groups, however, England, Ireland, Norway, Spain and Switzerland have also reported high consultation rates in the 15-64 age group compared to the other ages.

Virological situation - week 06/2008: The total number of respiratory specimens collected by sentinel physicians in week 06/2008 was 1536, of which 616 (40%) were influenza virus positive. Among the positives, 205 (33%) were type A not subtyped, 224 (36%) type A subtype H1 [of which 161 were A(H1N1)], four (<1%) type A subtype H3N2 and 183 (30%) type B. In addition, 658 influenza virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals), of which 381 (58%) were type A not subtyped, 122 (19%) type A subtype H1 [of which 52 were A(H1N1)], one (< 1%) type A subtype H3, and 154 (23%) type B.

By 13 February 2008, of 986 A(H1N1) viruses tested for resistance to oseltamivir, 202 (20,5 %) were found resistant (click here for full text). Resistant viruses have been found in 13 countries and the range of resistant A(H1N1) viruses was from 4.3% in Denmark to 66.3% in Norway (click here for full text).

Cumulative virological situation - 2007-2008 season (since week 40/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=8145; sentinel and non-sentinel data), 3510 (43%) were type A not subtyped, 2881 (35%) were A(H1), 71 (1%) were A(H3) and 1683 (21%) were type B. While the majority of countries in Europe reported influenza A(H1) as the dominant subtype, Czech Republic, Denmark, England, Germany, Hungary, the Netherlands, Portugal, Spain, Switzerland and Sweden have reported a relatively high proportion of influenza B compared to other countries.

Based on the antigenic and/or genetic characterisation of 1705 influenza viruses, 58 were A/New Caledonia/20/99 (H1N1)-like, 1286 were A/Solomon Island/3/2006 (H1N1)-like, four were A/Wisconsin/67/2005 (H3N2)-like, 11 were A/Brisbane/10/2007 (H3N2)-like, 336 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage; not included in the vaccine for the 2007/2008 season) and ten were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage; included in the vaccine for the 2007/2008 season) (click here).

Comment: Only one country is currently reporting high intensity of influenza activity, however medium activity is still present in 18 countries reporting these data. A number of countries have not yet observed consultation rates above the national baseline threshold (e.g. Denmark and Germany). In the majority of countries the influenza activity is either unchanging or declining.

Although influenza A (H1) is the dominant virus strain circulating in Europe this season, influenza B represents 20% of the total influenza virus detections since the start of the season and, in Spain, influenza B is currently the dominant virus. The increased circulation of B type viruses was observed from the beginning of 2008, for week six the proportion of B type isolates was 30%.

There is a comparably good match between the dominant virus strain circulating in Europe (influenza A (H1)) and the corresponding vaccine strain A/Solomon Island/3/2006 which is included in the 2007-2008 influenza vaccine. Despite a mismatch of the majority of characterised influenza B viruses with the influenza B virus strain included in the vaccine, it is expected that the vaccine offers still valuable protection due to cross reactive antibodies between the two lineages of influenza B viruses This later aspect was highlighted in the recommended composition of influenza virus vaccines for use in the 2008–2009 influenza season (click here).

The number of countries that reported oseltamivir resistant A(H1N1) viruses increased from nine countries by 7 February 2008 to 13 countries by 13 February 2008. The new countries are Austria, the Czech Republic, Denmark and Luxembourg. This observation does not reflect spread since a week ago, rather they represent vigorous testing of all available specimens since the start of the season.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 06/2008, 29 countries reported epidemiological data and 28 countries reported virological data to EISS. 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.

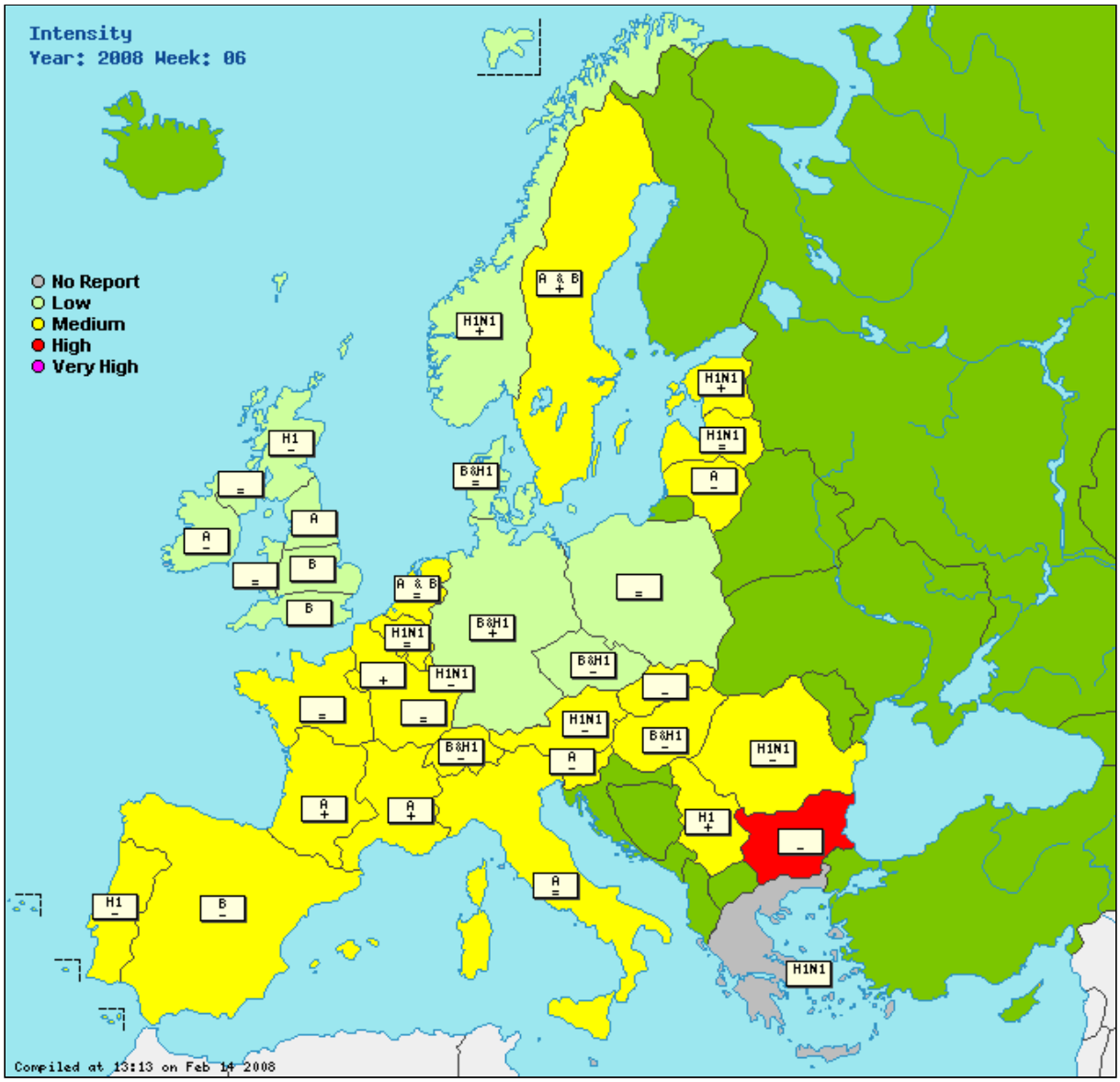
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Greece
In Southern Greece, 19 clinical samples (54 nasopharyngeal swabs received in total) were found to be A/H1 positive by Real-time PCR, still a high percentage of samples positive for A(H1). It is interesting the fact that no samples have been found A/H3 positive by Real Time PCR so far. Flu B viruses isolated so far, were of the Yamagata lineage.
Italy
During the last week, 14 samples were positive for influenza virus: 2 H1N1, 4 A not yet subtyped and 8 B.
Sweden
Number of ILI cases has been updated .
Switzerland
Influenza activity is slowly decreasing. Influenza A (H1N1) remained the main influenza virus detected.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria	Medium	Widespread			98	82.7%	Type A, Subtype H1N1	1611.8 (graphs)	(graphs)	Click here
Belgium	Medium	Widespread			49	63.3%	Type A, Subtype H1N1	334.4 (graphs)	1559.3 (graphs)	Click here
Bulgaria	High	Regional			68	0%	None	(graphs)	1420.9 (graphs)	Click here
Czech Republic	Low	Local			89	19.1%	Type B and Type A, Subtype H1	97.5 (graphs)	1191.2 (graphs)	Click here
Denmark	Low	Sporadic			16	56.3%	Type B and Type A, Subtype H1N1	127.0 (graphs)	(graphs)	Click here
England	Low	Sporadic			50	18.0%	Type A	12.6 (graphs)	605.8 (graphs)	Click here
Estonia	Medium	Local			40	50.0%	Type A, Subtype H1N1	21.5 (graphs)	516.9 (graphs)	Click here
France	Medium	Widespread			251	32.3%	Type A, Subtype H1N1	(graphs)	2806.8 (graphs)	Click here
Germany	Low	Regional			242	55.0%	Type B and Type A, Subtype H1N1	(graphs)	1251.8 (graphs)	Click here
Greece					36	44.4%	Type A, Subtype H1N1	(graphs)		Click here
Hungary	Medium	Widespread			48	39.6%	Type B and Type A, Subtype H1	298.5 (graphs)	(graphs)	Click here
Ireland	Low	Widespread			11	36.4%	Type A	15.5 (graphs)	(graphs)	Click here
Italy	Medium	Widespread			96	11.5%	Type A	461.1 (graphs)	(graphs)	Click here
Latvia	Medium	Widespread			9	66.7%	Type A, Subtype H1N1	261.3 (graphs)	1728.9 (graphs)	Click here
Lithuania	Medium	Regional			6	33.3%	Type A	80.2 (graphs)	664.9 (graphs)	Click here
Luxembourg	Medium	Widespread			54	53.7%	Type A, Subtype H1N1	544.1 (graphs)	2902.1 (graphs)	Click here
Netherlands	Medium	Widespread			24	50.0%	Type A and B	64.0 (graphs)	(graphs)	Click here
Northern Ireland	Low	Sporadic			6	100.0%	None	57.0 (graphs)	(graphs)	Click here
Norway	Low	Widespread			12	41.7%	Type A, Subtype H1N1	88.0 (graphs)	(graphs)	Click here
Poland	Low	Sporadic			26	11.5%	None	118.1 (graphs)	(graphs)	Click here
Portugal	Medium	Regional			12	100.0%	Type A, Subtype H1	38.1 (graphs)	(graphs)	Click here
Romania	Medium	Local			79	36.7%	Type A, Subtype H1N1	13.4 (graphs)	1410.7 (graphs)	Click here
Scotland	Low	Sporadic			0	0%	Type A, Subtype H1	0.0 (graphs)	(graphs)	Click here
Serbia	Medium	Sporadic			19	63.2%	Type A, Subtype H1	306.0 (graphs)	(graphs)	Click here
Slovakia	Medium	Local			11	54.6%	None	424.2 (graphs)	2109.4 (graphs)	Click here
Slovenia	Medium	Local			20	25.0%	Type A	106.3 (graphs)	1097.4 (graphs)	Click here
Spain	Medium	Regional			112	31.3%	Type B	126.2 (graphs)	(graphs)	Click here
Sweden	Medium	Sporadic			29	41.4%	Type A and B	10.6 (graphs)	(graphs)	Click here
Switzerland	Medium	Widespread			23	47.8%	Type B and Type A, Subtype H1N1	235.2 (graphs)		Click here
Wales	Low	None			0	0%	None	3.4 (graphs)	(graphs)	Click here
Europe					1536	40.1%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

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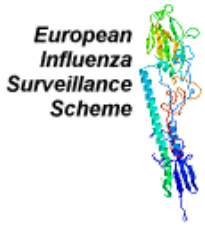
Influenza activity passed its peak in most European countries



Summary: There is currently medium influenza activity in 18 countries in Europe. In most countries influenza activity is unchanging or declining, but increasing influenza activity was reported for four countries. Compared to the detection of influenza A, the proportion of influenza B has increased from 14% in week 01/2008 to 37% in week 07/2008. The large majority of the total virus detections since week 40/2007 (N=9583), were influenza A (87%) of which about 99% were of the H1 subtype. By 20th February 2008, A(H1N1) viruses resistant to oseltamivir have been detected in 15 countries in Europe.

Epidemiological situation - week 07/2008: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were medium in 18 countries, whilst they remained low in ten other countries that reported this indicator. For the geographical spread indicator, eight countries reported widespread activity, six countries regional activity, three countries local activity, nine countries sporadic activity and two countries reported no influenza activity.

While Estonia, Germany, Norway and Slovenia indicated an increase in clinical influenza activity in week 07/2008 compared to week 06/2008, the majority of the countries in Europe reported decreasing or unchanging influenza activity. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (since week 40/2007): The first countries to report a medium intensity of influenza activity (i.e. consultations rates above the national baseline threshold) were Bulgaria (in week 48/2007), Austria and Northern Ireland (both in week 50/2007). Consultation rates were then above the baseline threshold in Spain (since week 51/2007), England, Ireland, Italy, Luxembourg, Slovenia, Switzerland (all since week 01/2008),the Netherlands (since week 05/2008) and Sweden (since week 06/2008). In week 07/2008 Germany and Norway started reporting a medium intensity of influenza activity.

In countries with increased levels of influenza activity, the highest consultation rates have generally been reported in the 0-4 and 5-14 age groups, however, England, Ireland, Norway, Spain and Switzerland have also reported high consultation rates in the 15-64 age group compared to the other ages.

Virological situation - week 07/2008: The total number of respiratory specimens collected by sentinel physicians in week 07/2008 was 1282, of which 553 (43%) were influenza virus positive; 119 (22%) type A not subtyped, 186 (34%) type A subtype H1 [of which 140 were A(H1N1)], four (<1%) type A subtype H3 [(of which three were A(H3N2)], and 244 (44%) type B. In addition, 543 influenza virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals), of which 274 (51%) were type A not subtyped, 90 (17%) type A subtype H1 [of which 35 were A(H1N1)], four (<1%) type A subtype H3 [of which one was A(H3N2)] and 175 (32%) type B.

Cumulative virological situation - 2007-2008 season (since week 40/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=9583; sentinel and non-sentinel data), 4003 (42%) were type A not subtyped, 3297 (34%) were A(H1), 85 (1%) were A(H3) and 2198 (23%) were B. While the majority of countries in Europe reported influenza A(H1) as the dominant subtype throughout the season, eight countries reported a co-circulation with influenza B in week 07/2008.

Based on the antigenic and/or genetic characterisation of 2097 influenza viruses, 58 were A/New Caledonia/20/99 (H1N1)-like, 1557 were A/Solomon Island/3/2006 (H1N1)-like, six were A/Wisconsin/67/2005 (H3N2)-like, 16 were A/Brisbane/10/2007 (H3N2)-like, 450 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and ten were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

Comment: The increased circulation of B type viruses was observed from the beginning of 2008. The proportion of influenza B has increased from 14% in week 01/2008 to 37% in week 07/2008 compared to the detection of influenza A. The majority of influenza B viruses in Europe this winter belongs to a different lineage than the current vaccine strain B/Malaysia/3506/2004. There are considerable antigenic differences between these two lineages, but, despite this mismatch, it is expected that the 2007-2008 vaccine still provides valuable protection due to cross reactive antibodies induced by the vaccine. More information on the antigenic characteristics of current viruses, and the cross reactivity induced by the present vaccine, can be found in the WHO recommendation on the composition of influenza virus vaccines for use in the 2008–2009 Northern Hemisphere influenza season (click here).

There is a reasonably good match between most A(H1N1) viruses currently circulating in Europe and the corresponding vaccine strain A/Solomon Island/3/2006 which is included in the 2007-2008 influenza vaccine. A number of recent A(H1N1) viruses strains are, however, distinguishable from the vaccine virus in antigenic analyses. As these viruses show better antigenic match to another virus, A/Brisbane/59/2007, the WHO has now recommended that an A/Brisbane/59/2007-like virus is included in the vaccine for the 2008/2009 season. Nevertheless, as there is still significant antigenic similarity, the present vaccine is expected to provide protection against the current H1N1 viruses.

By 20th February 2008, A(H1N1) viruses resistant to oseltamivir have been detected in 15 countries in Europe (click here for more information).

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 07/2008, 28 countries reported epidemiological data and 26 countries reported virological data to EISS. 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.

Erratum: The sentinel virological data for Romania are incorrect. This leads to a slight overestimation of the percent positive in the Table for Europe.

Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

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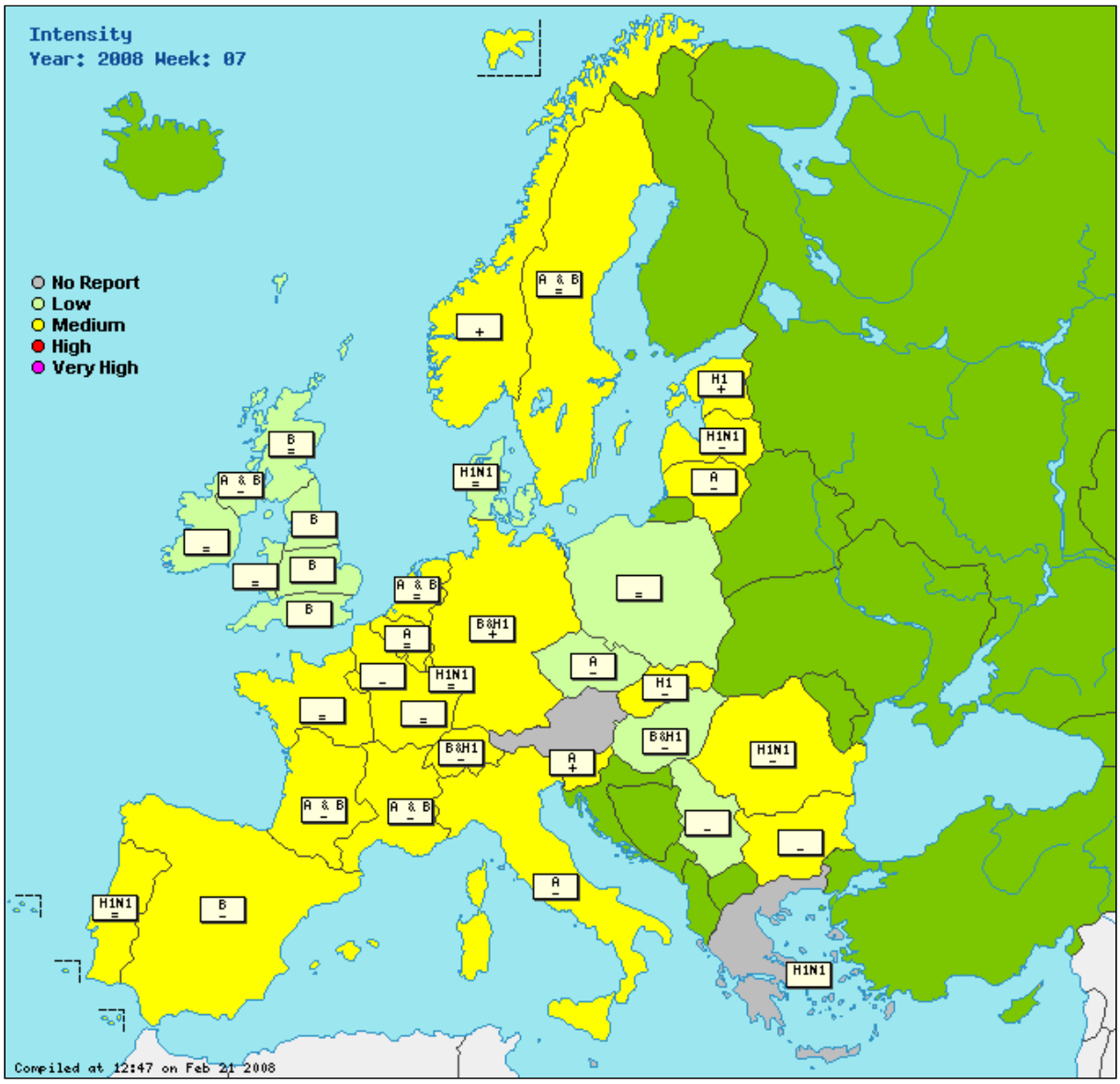
You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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

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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.

Country comments **(where available)**

Greece
In Southern Greece, 6 clinical samples (43 nasopharyngeal swabs received in total) were found to be A/H1 positive by Real-time PCR, a lower percentage of samples positive for A(H1) compared to previous weeks. It is interesting the fact

that no samples have been found A/H3 positive by Real Time PCR so far.

Italy

During this week, 25 influenza viruses were identified and/or isolated: 15 B, 2 A/H1, 3 A/H3 and 5 A viruses not yet subtyped.

Scotland

There has been a rise in influenza B detections in the past two weeks with influenza B the most prevalent virus detected in week 7 .

Switzerland

Influenza activity is decreasing.

Table and graphs (where available)

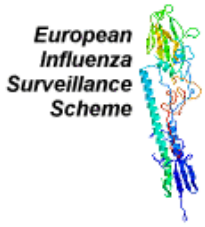
	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Medium	Widespread			61	60.7%	Type A	321.1 (graphs)	1540.9 (graphs)	Click here
Bulgaria	Medium	Regional			20	0%	None	(graphs)	1327.8 (graphs)	Click here
Czech Republic	Low	Sporadic			36	22.2%	Type A	65.9 (graphs)	1097.8 (graphs)	Click here
Denmark	Low	Sporadic			7	42.9%	Type A, Subtype H1N1	93.8 (graphs)	(graphs)	Click here
England	Low	Sporadic			46	26.1%	None	11.0 (graphs)	565.7 (graphs)	Click here
Estonia	Medium	Widespread			72	26.4%	Type A, Subtype H1	22.1 (graphs)	556.9 (graphs)	Click here
France	Medium	Widespread			209	42.6%	None	(graphs)	2582.9 (graphs)	Click here
Germany	Medium	Regional			247	55.5%	Type B and Type A, Subtype H1N1	(graphs)	1363.0 (graphs)	Click here
Greece					17	47.1%	Type A, Subtype H1N1	(graphs)		Click here
Hungary	Low	Regional			36	47.2%	Type B and Type A, Subtype H1	192.9 (graphs)	(graphs)	Click here
Ireland	Low	None			4	0%	None	18.8 (graphs)	(graphs)	Click here
Italy	Medium	Widespread			60	20.0%	Type A	637.5 (graphs)	(graphs)	Click here
Latvia	Medium	Regional			5	80.0%	Type A, Subtype H1N1	161.6 (graphs)	1403.7 (graphs)	Click here
Lithuania	Medium	Regional			12	41.7%	Type A	39.8 (graphs)	557.2 (graphs)	Click here
Luxembourg	Medium	Widespread			64	56.3%	Type A, Subtype H1N1	626.2 (graphs)	3131.1 (graphs)	Click here
Netherlands	Medium	Widespread			41	31.7%	Type A and B	66.6 (graphs)	(graphs)	Click here
Northern Ireland	Low	Sporadic			3	0%	Type A and B	47.4 (graphs)	(graphs)	Click here
Norway	Medium	Widespread						96.3 (graphs)	(graphs)	Click here
Poland	Low	Sporadic			68	1.5%	None	133.3 (graphs)	(graphs)	Click here
Portugal	Medium	Local			3	66.7%	Type A, Subtype H1N1	38.3 (graphs)	(graphs)	Click here
Romania	Medium	Local			69	111.6%	Type A, Subtype H1N1	11.3 (graphs)	1182.0 (graphs)	Click here
Scotland	Low	Sporadic			5	60.0%	Type B	0.0 (graphs)	(graphs)	Click here
Serbia	Low	Sporadic						222.3 (graphs)	(graphs)	Click here
Slovakia	Medium	Local			12	41.7%	Type A, Subtype H1	362.2 (graphs)	1956.3 (graphs)	Click here
Slovenia	Medium	Sporadic			19	5.3%	Type A	130.7 (graphs)	1514.6 (graphs)	Click here
Spain	Medium	Regional			111	46.0%	Type B	114.8 (graphs)	(graphs)	Click here
Sweden	Medium	Sporadic			30	33.3%	Type A and B	13.4 (graphs)	(graphs)	Click here
Switzerland	Medium	Widespread			25	12.0%	Type B and Type A, Subtype H1	184.5 (graphs)		Click here
Wales	Low	None						3.7 (graphs)	(graphs)	Click here
Europe					1282	43.1%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Influenza activity passed its peak in most European countries



Summary: There is currently medium influenza activity in 16 countries in Europe. In most countries influenza activity is unchanging or declining. The proportion of influenza B steadily increased since week 01/2008 and accounts for 49% of the total number of positive specimens in week 08/2008. The large majority of the total virus detections since week 40/2007 (N=10 964), were influenza A (74%) of which about 97% were of the H1 subtype. By 28 February 2008, A(H1N1) viruses resistant to oseltamivir have been detected in 15 countries in Europe.

Epidemiological situation - week 08/2008: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were medium in 16 countries, whilst they were low in 13 other countries that reported this indicator. For the geographical spread indicator, nine countries reported widespread activity, three countries regional activity, five countries local activity, 11 countries sporadic activity and one country reported no influenza activity.

The majority of the countries in Europe reported decreasing or unchanging influenza activity. Only four countries (Belgium, Ireland, Norway and Poland) reported increasing influenza activity. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (since week 40/2007): The first countries to report a medium intensity of influenza activity (i.e. consultations rates above the national baseline threshold) were Bulgaria (in week 48/2007), Austria and Northern Ireland (both in week 50/2007). Consultation rates were then above the baseline threshold in Spain (since week 51/2007), England, Ireland, Italy, Luxembourg, Slovenia, Switzerland (all since week 01/2008), the Netherlands (since week 05/2008) and Sweden (since week 06/2008). In week 07/2008 Germany and Norway started reporting a medium intensity of influenza activity. In Denmark influenza activity was not above the baseline level this season. In week 08/2008 Portugal, Slovakia and Slovenia reported low influenza activity again.

In countries with increased levels of influenza activity, the highest consultation rates have generally been reported in the 0-4 and 5-14 age groups, however, England, Ireland, Norway, Spain and Switzerland have also reported high consultation rates in the 15-64 age group compared to the other ages.

Virological situation - week 08/2008: The total number of respiratory specimens collected by sentinel physicians in week 08/2008 was 1232, of which 493 (40%) were influenza virus positive; 117 (24%) type A not subtyped, 120 (24%) type A subtype H1 [of which 96 were A(H1N1)], eight (2%) type A subtype H3 [of which three were A(H3N2)], and 248 (50%) type B. In addition, 503 influenza virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals), of which 195 (39%) were type A not subtyped, 70 (14%) type A subtype H1 [of which 31 were A(H1N1)], two (<1%) type A subtype H3 [both A(H3N2)] and 236 (47%) type B.

Cumulative virological situation - 2007-2008 season (since week 40/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=10 964; sentinel and non-sentinel data), 4435 (40%) were type A not subtyped, 3623 (33%) were A(H1), 96 (1%) were A(H3) and 2810 (26%) were B. While the majority of countries in Europe reported influenza A(H1) as the dominant subtype throughout the season, eight countries reported a co-circulation with influenza B since week 07/2008 and five countries reported influenza B as the dominant subtype in week 08/2008.

Based on the antigenic and/or genetic characterisation of 2524 influenza viruses, 58 were A/New Caledonia/20/99 (H1N1)-like, 1872 were A/Solomon Island/3/2006 (H1N1)-like, eight were A/Wisconsin/67/2005 (H3N2)-like, 16 were A/Brisbane/10/2007 (H3N2)-like, 560 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and ten were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

Comment: Medium intensity of influenza activity is still observed in 16 countries. All countries except for Denmark and Wales have shown influenza activity above the national baseline threshold this season. In three countries (Portugal, Slovakia and Slovenia) the intensity of influenza activity declined from medium to low in week 08/2008 (i.e. it returned to baseline levels).

The proportion of influenza B has further increased from 37% in week 07/2008 to almost 50% in week 08/2008. Despite the mismatch of the circulating influenza B viruses with the vaccine strain, it is expected that the 2007-2008 vaccine still provides valuable protection due to cross reactive antibodies induced by the vaccine. For more information on the antigenic characteristics of current viruses, and the cross reactivity induced by the present vaccine, see the WHO recommendation on the composition of influenza virus vaccines for use in the 2008–2009 Northern Hemisphere influenza season (click here).

A number of recent A(H1N1) viruses are distinguishable from the vaccine virus in antigenic analyses. As these viruses show better antigenic match to A/Brisbane/59/2007, the WHO has now recommended that an A/Brisbane/59/2007-like virus is included in the vaccine for the 2008/2009 season. As there is still significant antigenic similarity, the present vaccine is expected to provide protection against the current H1N1 viruses.

By 28 February 2008, A(H1N1) viruses resistant to oseltamivir have been found in 15 countries in Europe (click here for full text).

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 08/2008, 29 countries reported epidemiological data and 28 countries reported virological data to EISS. 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.

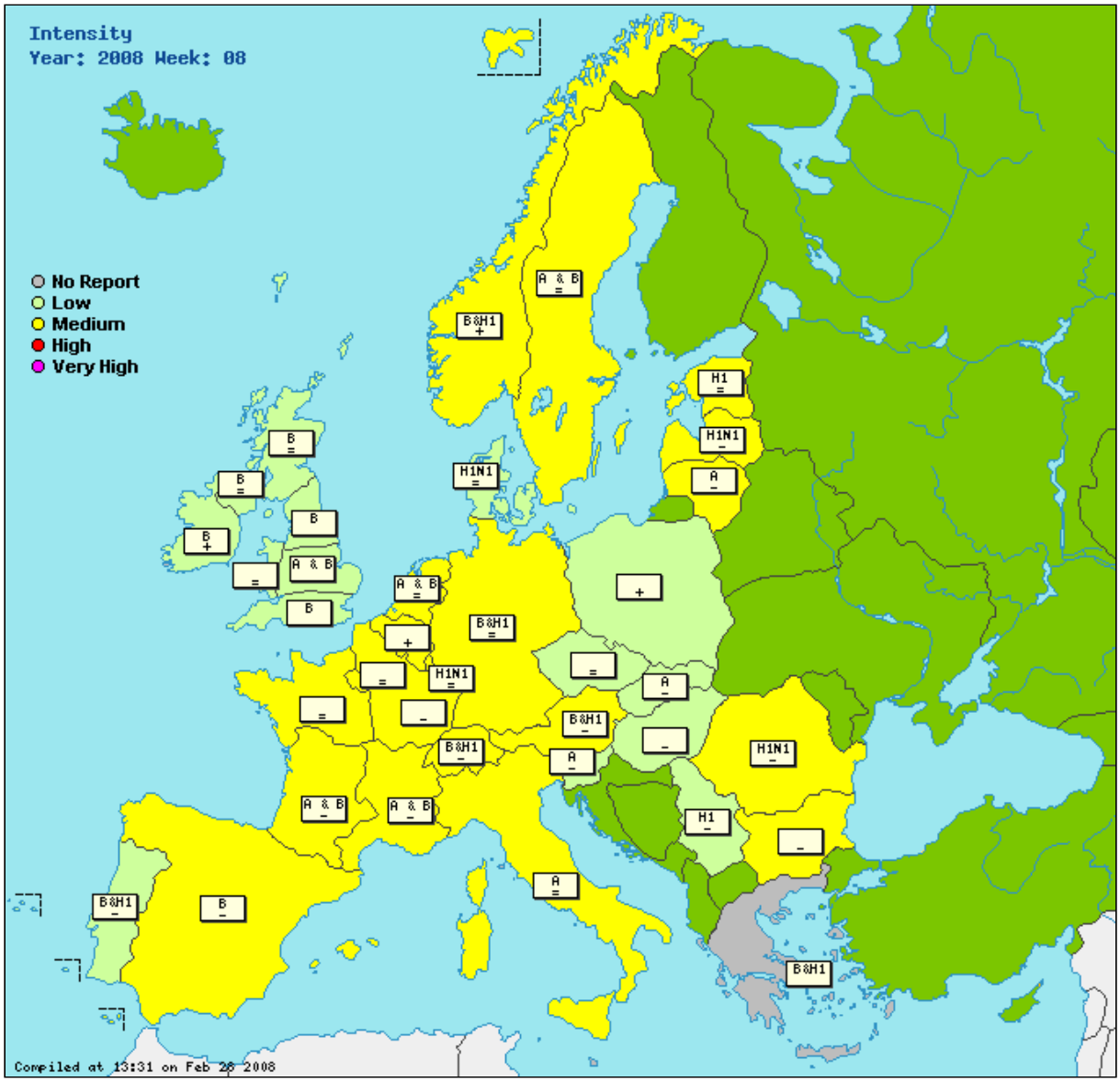
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments **(where available)**

Greece
There has been a rise in influenza B detections
Italy
Further 13 influenza viruses were identified and/or isolated: 7 B and 6 A (1 H1, 2 H3 and 3 not yet subtyped).
Norway
While influenza A(H1N1) activity appears to have levelled off during the last three weeks in Norway, influenza B is

increasing and is expected to become the majority virus in subsequent weeks.

Switzerland

Influenza activity is decreasing. Influenuza B viruses started to cbecome predominant in the country.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria	Medium	Widespread			110	35.5%	Type B and Type A, Subtype H1N1	1288.0 (graphs)	(graphs)	Click here
Belgium	Medium	Widespread			67	70.2%	None	438.1 (graphs)	1824.9 (graphs)	Click here
Bulgaria	Medium	Local			0	0%	None	(graphs)	1171.6 (graphs)	Click here
Czech Republic	Low	Sporadic			44	15.9%	None	62.8 (graphs)	1066.2 (graphs)	Click here
Denmark	Low	Sporadic			15	73.3%	Type A, Subtype H1N1	146.4 (graphs)	(graphs)	Click here
England	Low	Sporadic			40	27.5%	Type B	10.6 (graphs)	597.4 (graphs)	Click here
Estonia	Medium	Widespread			53	43.4%	Type A, Subtype H1	27.5 (graphs)	634.2 (graphs)	Click here
France	Medium	Widespread			161	44.1%	Type A, Subtype H1N1	(graphs)	2191.3 (graphs)	Click here
Germany	Medium	Regional			243	53.9%	Type B and Type A, Subtype H1N1	(graphs)	1347.0 (graphs)	Click here
Greece					11	72.7%	Type B and Type A, Subtype H1N1	(graphs)		Click here
Hungary	Low	Sporadic						135.5 (graphs)	(graphs)	Click here
Ireland	Low	Sporadic			8	25.0%	Type B	23.3 (graphs)	(graphs)	Click here
Italy	Medium	Widespread			30	13.3%	Type A	456.4 (graphs)	(graphs)	Click here
Latvia	Medium	Regional			3	33.3%	Type A, Subtype H1N1	75.5 (graphs)	1264.9 (graphs)	Click here
Lithuania	Medium	Local			3	0%	Type A	18.2 (graphs)	447.4 (graphs)	Click here
Luxembourg	Medium	Widespread			79	44.3%	Type A, Subtype H1N1	558.1 (graphs)	2674.4 (graphs)	Click here
Netherlands	Medium	Widespread			33	51.5%	Type A and B	68.4 (graphs)	(graphs)	Click here
Northern Ireland	Low	Sporadic			9	0%	Type B	48.4 (graphs)	(graphs)	Click here
Norway	Medium	Widespread			14	85.7%	Type B and Type A, Subtype H1N1	103.7 (graphs)	(graphs)	Click here
Poland	Low	Sporadic			80	3.8%	None	166.1 (graphs)	(graphs)	Click here
Portugal	Low	Sporadic			2	0%	Type B and Type A, Subtype H1N1	18.7 (graphs)	(graphs)	Click here
Romania	Medium	Local			62	3.2%	Type A, Subtype H1N1	5.5 (graphs)	1086.2 (graphs)	Click here
Scotland	Low	Sporadic			9	77.8%	Type B	0.7 (graphs)	(graphs)	Click here
Serbia	Low	Sporadic			3	0%	Type A, Subtype H1	(graphs)	(graphs)	Click here
Slovakia	Low	Local			4	0%	Type A	266.2 (graphs)	1738.9 (graphs)	Click here
Slovenia	Low	Local			11	0%	Type A	69.1 (graphs)	1411.8 (graphs)	Click here
Spain	Medium	Regional			79	43.0%	Type B	96.3 (graphs)	(graphs)	Click here
Sweden	Medium	Sporadic			26	42.3%	Type A and B	14.2 (graphs)	(graphs)	Click here
Switzerland	Medium	Widespread			33	51.5%	Type B and Type A, Subtype H1	166.8 (graphs)		Click here
Wales	Low	None						2.0 (graphs)	(graphs)	Click here
Europe					1232	40.0%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
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Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

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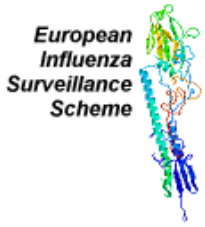
Influenza activity passed its peak in most European countries



Summary: There is currently medium influenza activity in 15 countries in Europe. In most countries influenza activity is declining or stable. The proportion of influenza B has steadily increased since week 01/2008 and accounted for 55% of the total number of positive specimens in week 09/2008. However, cumulatively the majority of the virus detections since the start of the season (week 40/2007) (N=12156), were influenza A (72%) of which about 97% were of the H1 subtype. By 5 March 2008, A(H1N1) viruses resistant to oseltamivir have been detected in 15 countries in Europe.

Epidemiological situation - week 09/2008: Regarding the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were medium in 15 countries, whilst they were low in 14 other countries that reported this indicator. For the geographical spread indicator, eight countries reported widespread activity, one country reported regional activity, six countries local activity, 13 countries sporadic activity and one country reported no influenza activity.

The majority of the countries in Europe reported decreasing or stable influenza activity. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (since week 40/2007): The first countries to report a medium intensity of influenza activity (i.e. consultations rates above the national baseline threshold) were Bulgaria (in week 48/2007), Austria and Northern Ireland (both in week 50/2007). Consultation rates were then above the baseline threshold in Spain (since week 51/2007), England, Ireland, Italy, Luxembourg, Slovenia, Switzerland (all since week 01/2008), the Netherlands (since week 05/2008) and Sweden (since week 06/2008). In week 07/2008 Germany and Norway started reporting a medium intensity of influenza activity. In week 09/2008 France and Spain reported low influenza activity again.

In countries with increased levels of influenza activity, the highest consultation rates have generally been reported in the 0-4 and 5-14 age groups, however, England, Ireland, Norway and Switzerland have also reported high consultation rates in the 15-64 age group compared to the other ages.

Virological situation - week 09/2008: The total number of respiratory specimens collected by sentinel physicians in week 09/2008 was 1155, of which 367 (32%) were influenza virus positive; 64 (17%) type A not subtyped, 90 (25%) type A subtype H1 [of which 66 were A(H1N1)], five (1%) type A subtype H3N2 and 208 (57%) type B. In addition, 405 influenza virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals), of which 131 (32%) were type A not subtyped, 53 (13%) type A subtype H1 [of which 32 were A(H1N1)], two (<1%) type A subtype H3N2 and 219 (54%) type B.

Cumulative virological situation - 2007-2008 season (since week 40/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=12156; sentinel and non-sentinel data), 4709 (39%) were type A not subtyped, 3957 (33%) were A(H1), 112 (1%) were A(H3) and 3378 (28%) were B.

Based on the antigenic and/or genetic characterisation of 2815 influenza viruses, 60 were A/New Caledonia/20/99 (H1N1)-like, 2053 were A/Solomon Island/3/2006 (H1N1)-like, 11 were A/Wisconsin/67/2005 (H3N2)-like, 51 were A/Brisbane/10/2007 (H3N2)-like, 628 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and 12 were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

Comment: All countries except for Denmark and Wales have reported influenza activity above the national baseline threshold this season. Only in Portugal influenza activity in week 09/2008 increased again after a previous decline, but only just over the baseline level.

The proportion of influenza B has further increased from almost 50% in week 08/2008 to 55% in week 09/2008. Despite the mis-match of the circulating influenza B viruses with the vaccine strain, it is expected that the 2007-2008 vaccine still provides valuable protection due to cross reactive antibodies induced by the vaccine. For more information on the antigenic characteristics of current viruses, and the cross reactivity induced by the present vaccine, see the WHO recommendation on the composition of influenza virus vaccines for use in the 2008–2009 Northern Hemisphere influenza season (click here).

A number of recent A(H1N1) viruses are distinguishable from the vaccine virus in antigenic analyses. As these viruses show better antigenic match to A/Brisbane/59/2007, the WHO has recommended that an A/Brisbane/59/2007-like virus is included in the vaccine for the 2008/2009 season. As there is still significant antigenic similarity, the present vaccine is expected to provide protection against the current H1N1 viruses.

While the majority of countries in Europe reported influenza A(H1) as the dominant subtype throughout the season, the number of type B isolates exceeded the number of type A isolates in Spain since week 04/2008, in Italy since week 06/2008, in England since week 07/2008, in Czech Republic, France, Greece, Hungary, Ireland, Sweden and Switzerland since week 08/2008, and in Germany, Luxembourg, Portugal, Scotland and Slovakia since week 09/2008.

By 5 March 2008, A(H1N1) viruses resistant to oseltamivir have been found in 15 countries in Europe (click here for full text).

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 09/2008, 29 countries reported epidemiological data and virological data to EISS. 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).

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Map

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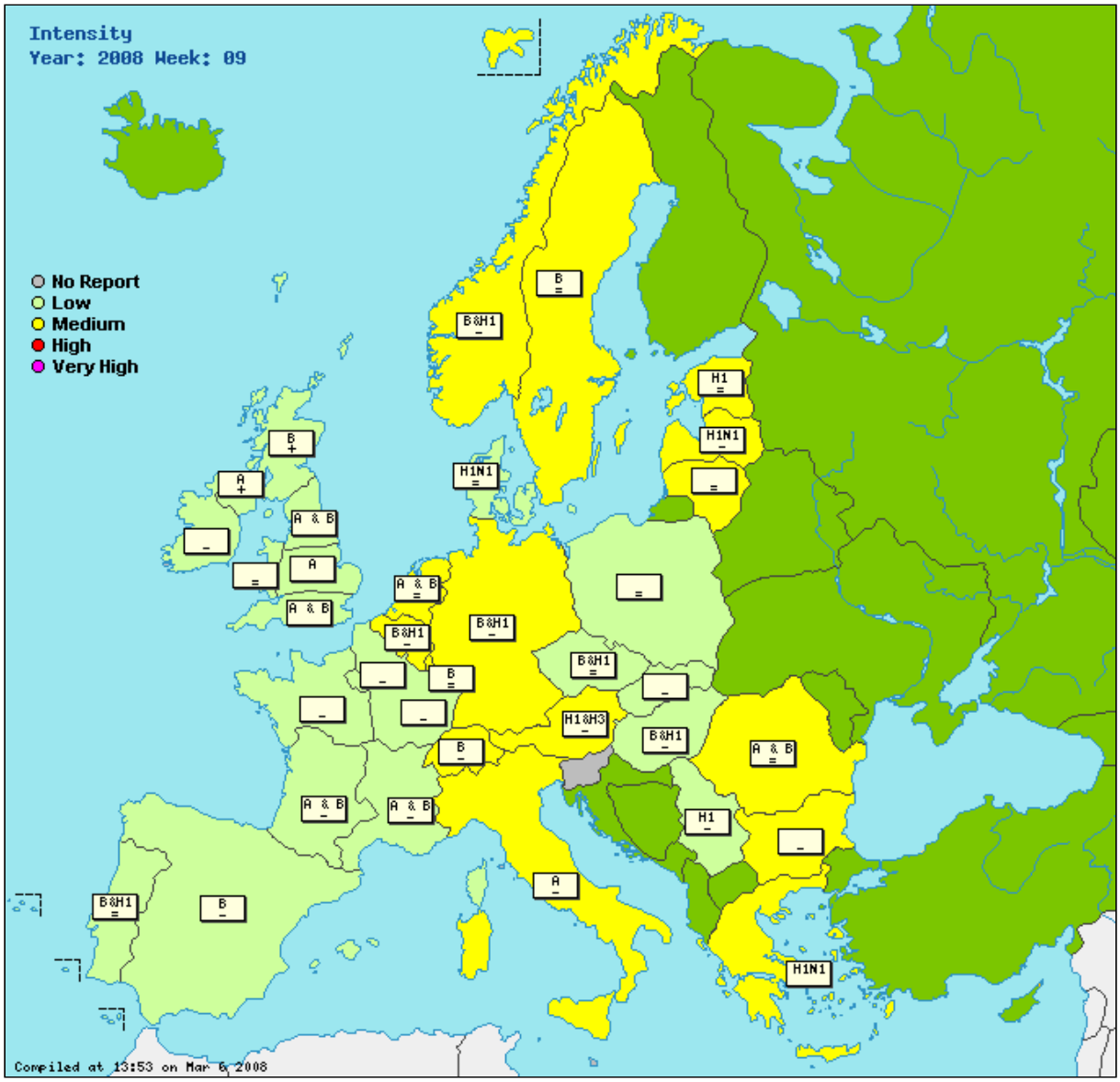
Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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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.

Country comments **(where available)**

Italy
Influenza B virus detections are prevalent and similar to those reported last week, whereas A virus detections are still decreasing.
Norway
We now observe declining numbers of both A(H1N1) and B viruses following an apparent peak in week 8.

Switzerland
Influenza activity decreased again. Influenza B viruses became predominant in the country.

Table and graphs (where available)

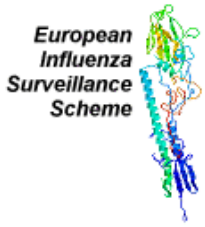
	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria	Medium	Widespread			84	21.4%	Type A, Subtype H1N1 and H3N2	903.9 (graphs)	(graphs)	Click here
Belgium	Medium	Widespread			57	49.1%	Type B and Type A, Subtype H1N1	320.9 (graphs)	1673.9 (graphs)	Click here
Bulgaria	Medium	Local			34	0%	None	(graphs)	1001.6 (graphs)	Click here
Czech Republic	Low	Sporadic			48	31.3%	Type B and Type A, Subtype H1	54.6 (graphs)	1049.8 (graphs)	Click here
Denmark	Low	Sporadic			13	61.5%	Type A, Subtype H1N1	67.9 (graphs)	(graphs)	Click here
England	Low	Sporadic			40	10.0%	Type A and B	15.9 (graphs)	647.9 (graphs)	Click here
Estonia	Medium	Widespread			55	49.1%	Type A, Subtype H1	29.4 (graphs)	687.4 (graphs)	Click here
France	Low	Local			120	30.0%	Type B	(graphs)	1781.7 (graphs)	Click here
Germany	Medium	Regional			243	45.7%	Type B and Type A, Subtype H1N1	(graphs)	1216.0 (graphs)	Click here
Greece	Medium	Sporadic			11	36.4%	Type A, Subtype H1N1	130.6 (graphs)	(graphs)	Click here
Hungary	Low	Local			17	23.5%	Type B and Type A, Subtype H1	88.7 (graphs)	(graphs)	Click here
Ireland	Low	Sporadic			4	25.0%	None	19.9 (graphs)	(graphs)	Click here
Italy	Medium	Widespread			68	16.2%	Type A	416.7 (graphs)	(graphs)	Click here
Latvia	Medium	Local			0	0%	Type A, Subtype H1N1	23.2 (graphs)	1124.0 (graphs)	Click here
Lithuania	Medium	Sporadic			4	0%	None	9.0 (graphs)	455.0 (graphs)	Click here
Luxembourg	Medium	Widespread			54	57.4%	Type B	604.6 (graphs)	3152.7 (graphs)	Click here
Netherlands	Medium	Widespread			29	37.9%	Type A and B	79.1 (graphs)	(graphs)	Click here
Northern Ireland	Low	Sporadic			0	0%	Type A	71.3 (graphs)	(graphs)	Click here
Norway	Medium	Widespread			7	14.3%	Type B and Type A, Subtype H1N1	262.2 (graphs)	(graphs)	Click here
Poland	Low	Sporadic			68	1.5%	None	152.4 (graphs)	(graphs)	Click here
Portugal	Low	Sporadic			2	100.0%	Type B and Type A, Subtype H1N1	28.4 (graphs)	(graphs)	Click here
Romania	Medium	Sporadic			33	6.1%	Type A and B	5.4 (graphs)	1058.9 (graphs)	Click here
Scotland	Low	Sporadic			1	0%	Type B	4.2 (graphs)	(graphs)	Click here
Serbia	Low	Sporadic			0	0%	Type A, Subtype H1	131.6 (graphs)	(graphs)	Click here
Slovakia	Low	Local			5	20.0%	None	227.4 (graphs)	1598.7 (graphs)	Click here
Slovenia					13	7.7%	None	(graphs)		Click here
Spain	Low	Local			59	39.0%	Type B	64.6 (graphs)	(graphs)	Click here
Sweden	Medium	Sporadic			32	46.9%	Type B	12.6 (graphs)	(graphs)	Click here
Switzerland	Medium	Widespread			54	22.2%	Type B	112.5 (graphs)		Click here
Wales	Low	None						2.4 (graphs)	(graphs)	Click here
Europe					1155	31.8%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Declining influenza activity in Europe



Summary: During week 10/2008, medium intensity of influenza activity was reported in nine countries in Europe, while it was low in the others. The majority of the countries reported decreasing activity. Influenza virus type B accounted for 63% of the total positive specimens collected during week 10, however the majority of virus detections since the start of the season were influenza A(H1N1) viruses. Influenza A(H1N1) viruses resistant to oseltamivir continued to be detected at variable levels across Europe.

Epidemiological situation - week 10/2008: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were medium in nine countries (Belgium, Estonia, Greece, Italy, Luxembourg, Netherlands, Norway, Romania and Sweden) and low in 19 countries. For the geographical spread indicator, widespread influenza activity was reported in eight countries, regional activity in one country (Germany), local activity in six countries, sporadic activity in 13 countries and no activity was reported in Wales. The majority of the countries in Europe reported decreasing (19 out of 27 countries) influenza activity. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (since week 40/2007): Influenza activity first increased above baseline levels towards the end of 2007 (weeks 48/2007-51/2007) in Austria, Bulgaria, Northern Ireland and Spain. Influenza activity then affected other countries across Europe. From week 02/2008 influenza activity started to decrease in England, and from weeks 04-05/2008 in Hungary, Ireland and Spain. In the majority of the other countries influenza activity started to decrease since week 06/2008 and 07/2008. In most countries, clinical consultation rates have been lower than during the 2006-2007 season.

In countries with increased levels of influenza activity, the highest consultation rates have generally been reported in the 0-4 and 5-14 age groups, however, England, Ireland, Norway and Switzerland have also reported high consultation rates in the 15-64 age group compared to the other ages.

Virological situation - week 10/2008: The total number of respiratory specimens collected by sentinel physicians in week 10/2008 was 945, of which 286 (30%) were influenza virus positive; 31 (11%) type A not subtyped, 51 (18%) type A subtype H1 [of which 24 were A(H1N1)], three (1%) type A subtype H3 [of which 1 were A(H3N2)] and 201 (70%) type B. In addition, 342 influenza virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals), of which 94 (27%) were type A not subtyped, 51 (15%) type A subtype H1 [of which 37 were A(H1N1)] and 197 (58%) type B.

Cumulative virological situation - 2007-2008 season (since week 40/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=13278; sentinel and non-sentinel data), 4871 (37%) were type A not subtyped, 4305 (32%) were A(H1), 121 (1%) were A(H3) and 3981 (30%) were B.

Based on the antigenic and/or genetic characterisation of 2913 influenza viruses, 60 were A/New Caledonia/20/99 (H1N1)-like, 1993 were A/Solomon Island/3/2006 (H1N1)-like, 17 were A/Wisconsin/67/2005 (H3N2)-like, 55 were A/Brisbane/10/2007 (H3N2)-like, 774 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and 14 were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here). By 12 March 2008, A(H1N1) viruses resistant to oseltamivir have been found in 15 countries in Europe with an overall prevalence of 21% (398/1900) (click here for full text).

Comment: The number of countries reporting medium clinical influenza activity has further decreased since week 08/2008 and influenza activity has still not passed its peak in only three European countries (Belgium, Estonia and Luxembourg). The summary epidemiological curve for Europe suggests that the 2007-2008 influenza season is coming to an end (click here). Influenza virus type B are continuing to be detected in a significant proportion of cases and this is consistent with figures reported in the past few weeks.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 10/2008, 29 countries reported epidemiological data and virological data to EISS. 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.

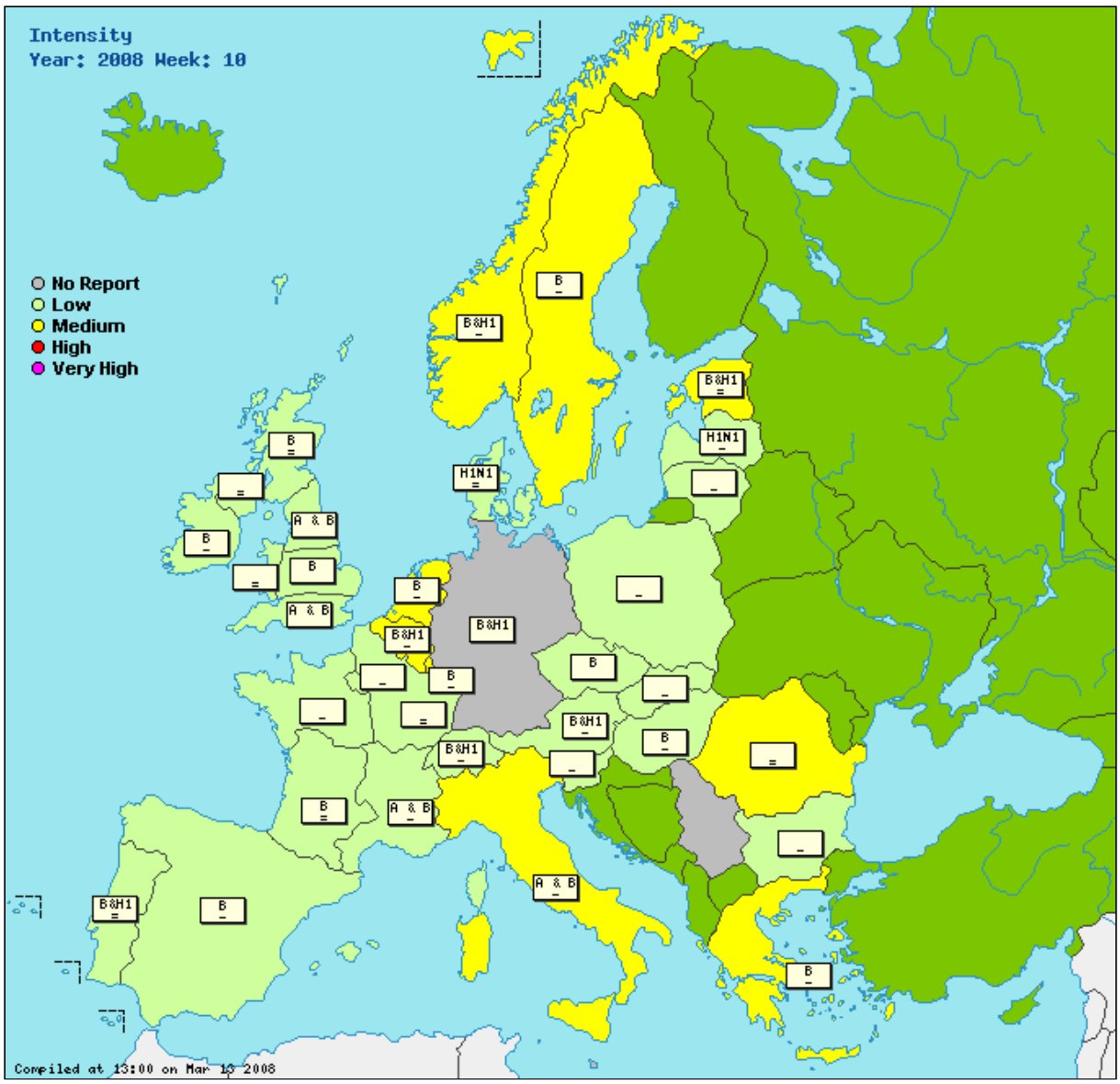
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Italy
Decreasing influenza activity is reported. During this week, 4 influenza viruses were identified and/or isolated.
Norway
In week 10, influenza B detections are in majority for the first time since November (week 46/2007)
Switzerland
Influenza is decreasing in all the country. Influenza B viruses remained predominant.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria	Low	Local			75	22.7%	Type B and Type A, Subtype H1N1	821.4 (graphs)	(graphs)	Click here
Belgium	Medium	Widespread			37	37.8%	Type B and Type A, Subtype H1N1	307.5 (graphs)	1601.5 (graphs)	Click here
Bulgaria	Low	None			38	0%	None	(graphs)	839.7 (graphs)	Click here
Czech Republic	Low	Sporadic			52	17.3%	Type B	38.0 (graphs)	977.4 (graphs)	Click here
Denmark	Low	Sporadic			13	38.5%	Type A, Subtype H1N1	37.2 (graphs)	(graphs)	Click here
England	Low	Sporadic			40	30.0%	Type B	11.0 (graphs)	583.6 (graphs)	Click here
Estonia	Medium	Widespread			55	47.3%	Type B and Type A, Subtype H1	26.0 (graphs)	519.2 (graphs)	Click here

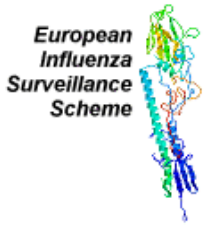
France	Low	Local	81	35.8%	None		(graphs)	1498.2	(graphs)	Click here
Germany			167	40.1%	Type B and Type A, Subtype H1N1				(graphs)	Click here
Greece	Medium	Sporadic	24	50.0%	Type B		(graphs)		(graphs)	Click here
Hungary	Low	Local	10	40.0%	Type B	56.5	(graphs)		(graphs)	Click here
Ireland	Low	Sporadic	8	62.5%	Type B	15.0	(graphs)		(graphs)	Click here
Italy	Medium	Local	34	0%	Type A and B	301.5	(graphs)		(graphs)	Click here
Latvia	Low	Sporadic	0	0%	Type A, Subtype H1N1	8.2	(graphs)	1133.7	(graphs)	Click here
Lithuania	Low	Sporadic	10	0%	None	2.6	(graphs)	390.0	(graphs)	Click here
Luxembourg	Medium	Widespread	45	55.6%	Type B		(graphs)			Click here
Netherlands	Medium	Widespread	26	30.8%	Type B	53.8	(graphs)		(graphs)	Click here
Northern Ireland	Low	None	20	60.0%	None	63.4	(graphs)		(graphs)	Click here
Norway	Medium	Widespread	9	44.4%	Type B and Type A, Subtype H1N1	94.8	(graphs)		(graphs)	Click here
Poland	Low	Sporadic	52	7.7%	None	129.4	(graphs)		(graphs)	Click here
Portugal	Low	Sporadic	0	0%	Type B and Type A, Subtype H1N1	29.3	(graphs)		(graphs)	Click here
Romania	Medium	Sporadic	36	0%	None	4.5	(graphs)	1081.5	(graphs)	Click here
Scotland	Low	Sporadic	2	0%	Type B	0.0	(graphs)		(graphs)	Click here
Slovakia	Low	Local				195.4	(graphs)	1482.5	(graphs)	Click here
Slovenia	Low	Sporadic	10	0%	None	13.8	(graphs)	1175.8	(graphs)	Click here
Spain	Low	Local	48	39.6%	Type B	44.0	(graphs)		(graphs)	Click here
Sweden	Medium	Sporadic	13	0%	Type B	17.9	(graphs)		(graphs)	Click here
Switzerland	Low	Local	40	35.0%	Type B and Type A, Subtype H1N1	77.1	(graphs)			Click here
Wales	Low	None				0.7	(graphs)		(graphs)	Click here
Europe			945	30.3%						Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Influenza season coming to an end in Europe



Summary: Most countries in Europe are now reporting a low intensity of influenza activity, with only Belgium, Bulgaria, Luxembourg, Norway, Romania and Sweden reporting clinical influenza activity above the baseline level. Influenza virus type B accounted for 71% of the total positive specimens collected during week 11/2008, however the majority of virus detections since the start of the season have been influenza A(H1N1) viruses. Influenza A(H1N1) viruses resistant to oseltamivir continued to be detected at variable levels across Europe.

Epidemiological situation - week 11/2008: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were medium in six countries (Belgium, Bulgaria, Luxembourg, Norway, Romania and Sweden) and low in 21 countries. For the geographical spread indicator, widespread influenza activity was reported in two countries (the Netherlands and Norway), regional activity in three countries, local activity in five countries, sporadic activity in 14 countries and no activity was reported in three countries. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (since week 40/2007): Influenza activity first increased above baseline levels towards the end of 2007 (weeks 48/2007-51/2007). The first countries where clinical influenza activity peaked were in Ireland (01/2008), England (02/2008) and Spain (02/2008). In most countries, influenza activity peaked between weeks 04/2008 and 08/2008.

With the exception of Austria and Romania, clinical consultation rates in all countries have been lower than during the 2006-2007 season. The highest consultation rates have generally been reported in the 0-4 and 5-14 age groups, however, England, Ireland, Norway and Switzerland have also reported high consultation rates in the 15-64 age group compared to the other ages.

Virological situation - week 11/2008: The total number of respiratory specimens collected by sentinel physicians in week 11/2008 was 733, of which 207 (28%) were influenza virus positive; 26 (13%) type A not subtyped, 33 (16%) type A subtype H1 [of which 22 were A(H1N1)] and 148 (71%) type B. In addition, 262 influenza virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals), of which 57 (22%) were type A not subtyped, 18 (7%) type A subtype H1 [of which 10 were A(H1N1)], four (2%) were A subtype H3 [of which four were A(H3N2)] and 183 (70%) type B.

Cumulative virological situation - 2007-2008 season (since week 40/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=13734; sentinel and non-sentinel data), 4942 (36%) were type A not subtyped, 4274 (31%) were A(H1), 127 (1%) were A(H3) and 4391 (32%) were B.

Based on the antigenic and/or genetic characterisation of 2913 influenza viruses, 62 were A/New Caledonia/20/99 (H1N1)-like, 2434 were A/Solomon Island/3/2006 (H1N1)-like, 17 were A/Wisconsin/67/2005 (H3N2)-like, 62 were A/Brisbane/10/2007 (H3N2)-like, 1142 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and 15 were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

By 19 March 2008, A(H1N1) viruses resistant to oseltamivir have been found in 16 countries in Europe with an overall prevalence of 21% (411/1986) (click here).

Comment: The 2007-2008 influenza season is coming to an end in Europe. All countries are reporting declining levels of clinical influenza activity and only six countries reported levels of clinical influenza activity that are above the national baseline (i.e. a medium intensity) in week 11/2008. In addition, virus detections of influenza are clearly declining for Europe as a whole (click here).

Whilst influenza activity was predominantly caused by the influenza A(H1N1) virus during most of the 2007-2008 season, in recent weeks influenza B has been dominant in Europe: there have been more weekly detections of influenza B than influenza A(H1N1) since week 09/2008. The peak of total virus detections in Europe for influenza A(H1N1) was reached in week 04/2008 and the peak for influenza B was reached four weeks later in week 08/2008 (click here).

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 11/2008, 27 countries reported epidemiological data and 26 countries reported virological data to EISS. 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).

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Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

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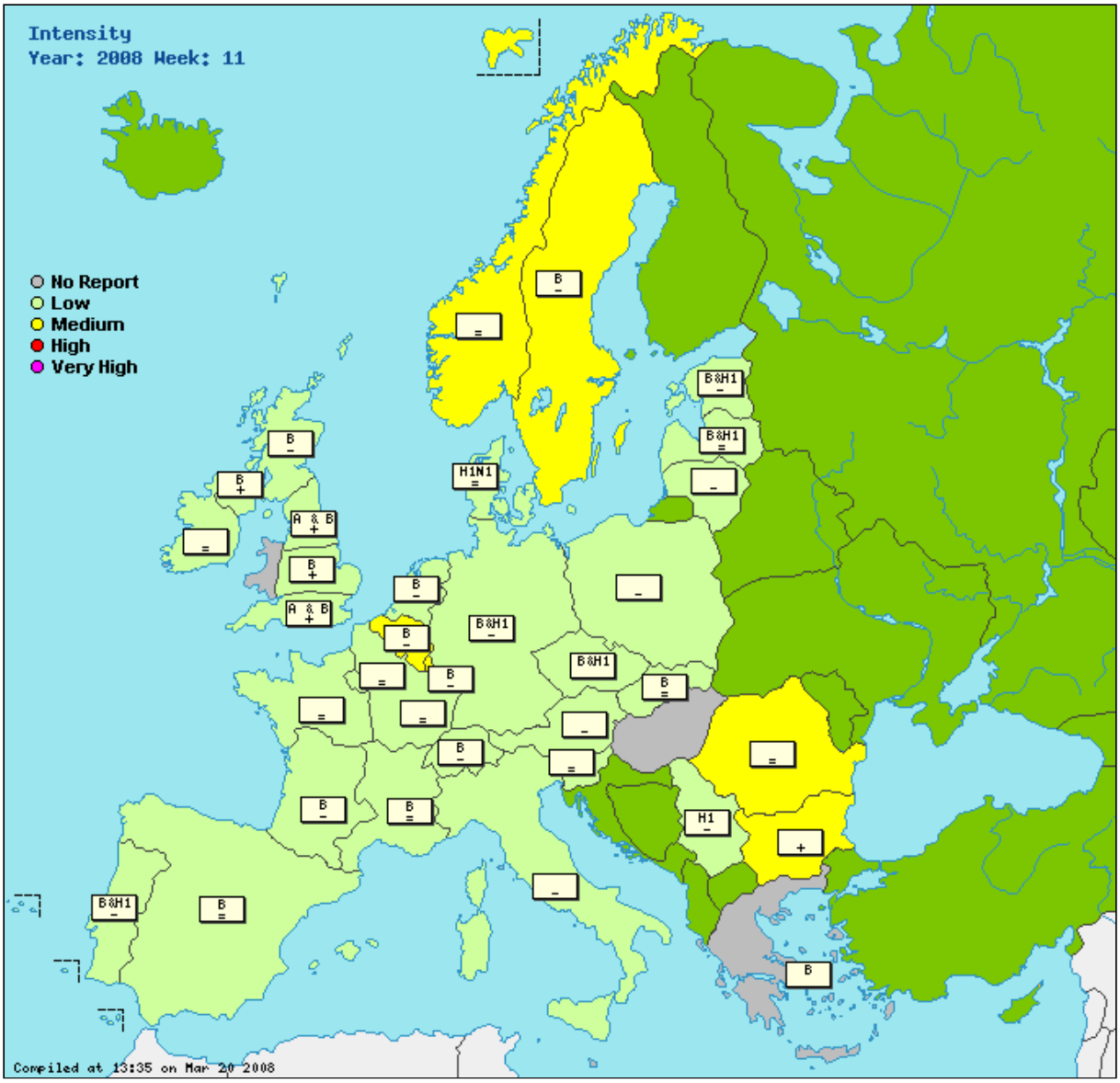
Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Italy
Only two influenza viruses were identified and/or isolated during last week
Switzerland
Influenza activity is decreasing now. Influenza B viruses are mainly detected.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria	Low	Sporadic			56	10.7%	None	898.7 (graphs)	(graphs)	Click here
Belgium	Medium	Regional			25	40.0%	Type B	220.9 (graphs)	1567.0 (graphs)	Click here
Bulgaria	Medium	None						(graphs)	977.2 (graphs)	Click here
Czech Republic	Low	Sporadic			75	9.3%	Type B and Type A, Subtype H1N1	40.4 (graphs)	987.7 (graphs)	Click here
Denmark	Low	Sporadic			4	50.0%	Type A, Subtype H1N1	48.5 (graphs)	(graphs)	Click here
England	Low	Sporadic			24	20.8%	Type B	13.6 (graphs)	605.9 (graphs)	Click here
Estonia	Low	Local			50	44.0%	Type B and Type A, Subtype H1	15.2 (graphs)	427.9 (graphs)	Click here
France	Low	Local			103	30.1%	None	(graphs)	1416.9 (graphs)	Click here
Germany	Low	Regional			107	55.1%	Type B and Type A, Subtype H1N1	(graphs)	1131.5 (graphs)	Click here

Greece			6	50.0%	Type B		(graphs)			Click here
Ireland	Low	Sporadic	3	0%	None	17.6	(graphs)		(graphs)	Click here
Italy	Low	Local	24	0%	None	195.8	(graphs)		(graphs)	Click here
Latvia	Low	Sporadic	0	0%	Type B and Type A, Subtype H1	8.2	(graphs)	992.4	(graphs)	Click here
Lithuania	Low	None	1	0%	None	1.0	(graphs)	280.5	(graphs)	Click here
Luxembourg	Medium	Regional	28	39.3%	Type B	209.3	(graphs)	2534.9	(graphs)	Click here
Netherlands	Low	Widespread	14	35.7%	Type B	42.8	(graphs)		(graphs)	Click here
Northern Ireland	Low	Sporadic	11	45.5%	Type B	81.0	(graphs)		(graphs)	Click here
Norway	Medium	Widespread				98.5	(graphs)		(graphs)	Click here
Poland	Low	Sporadic	73	4.1%	None	106.0	(graphs)		(graphs)	Click here
Portugal	Low	Sporadic	2	0%	Type B and Type A, Subtype H1N1	17.9	(graphs)		(graphs)	Click here
Romania	Medium	Sporadic	14	0%	None	2.9	(graphs)	1089.3	(graphs)	Click here
Scotland	Low	Sporadic	2	50.0%	Type B	0.0	(graphs)		(graphs)	Click here
Serbia	Low	Sporadic	0	0%	Type A, Subtype H1	93.1	(graphs)		(graphs)	Click here
Slovakia	Low	Local	7	14.3%	Type B	205.8	(graphs)	1516.4	(graphs)	Click here
Slovenia	Low	None	2	0%	None	6.3	(graphs)	1183.7	(graphs)	Click here
Spain	Low	Sporadic	37	32.4%	Type B	40.0	(graphs)		(graphs)	Click here
Sweden	Medium	Sporadic	26	30.8%	Type B	11.5	(graphs)		(graphs)	Click here
Switzerland	Low	Local	39	41.0%	Type B	78.8	(graphs)			Click here
Europe			733	28.2%						Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

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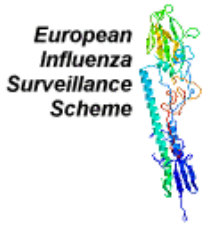
Declining influenza activity in Europe



Summary: Most countries in Europe are now reporting a low intensity of influenza activity. Only Bulgaria, Luxembourg and Romania reported clinical influenza activity above the baseline level in week 12/2008. Influenza virus type B accounted for 71% of the total positive specimens collected in week 12/2008, however the majority of virus detections since the start of the season have been influenza A(H1N1) viruses. Influenza A(H1N1) viruses resistant to oseltamivir continued to be detected at variable levels across Europe.

Epidemiological situation - week 12/2008: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were medium in three countries (Bulgaria, Luxembourg and Romania) and low in 19 countries. For the geographical spread indicator, widespread influenza activity was reported in the Netherlands, local activity in three countries, sporadic activity in 12 countries and no activity was reported in six countries. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (since week 40/2007): Influenza activity first increased above baseline levels towards the end of 2007 (weeks 48/2007-51/2007), and the first countries where clinical influenza activity peaked were Ireland (in week 01/2008), England (02/2008) and Spain (02/2008). In most countries, influenza activity peaked between weeks 04/2008 and 08/2008.

With the exception of Austria and Romania, clinical consultation rates in all countries have been lower than during the 2006-2007 season. The highest consultation rates have generally been reported in the 0-4 and 5-14 age groups, however, England, Ireland, Norway and Switzerland also reported high consultation rates in the 15-64 age group compared to the other ages.

Virological situation - week 12/2008: The total number of respiratory specimens collected by sentinel physicians in week 12/2008 was 413, of which 97 (24%) were influenza virus positive; nine (9%) type A not subtyped, nine (9%) type A subtype H1 [of which 7 were A(H1N1)], two (2%) type A subtype H3 and 77 (79%) type B. In addition, 241 influenza virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals), of which 63 (26%) were type A not subtyped, 13 (5%) type A subtype H1 [of which four were A(H1N1)], one (<1%) were A subtype H3 and 164 (68%) type B.

Cumulative virological situation - 2007-2008 season (since week 40/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=14266; sentinel and non-sentinel data), 4999 (35%) were type A not subtyped, 4380 (31%) were A(H1), 134 (1%) were A(H3) and 4753 (33%) were B.

Based on the antigenic and/or genetic characterisation of 3203 influenza viruses, 62 were A/New Caledonia/20/99 (H1N1)-like, 2113 were A/Solomon Island/3/2006 (H1N1)-like, 17 were A/Wisconsin/67/2005 (H3N2)-like, 20 were A/Brisbane/10/2007 (H3N2)-like, 977 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and 14 were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

By 26 March 2008, A(H1N1) viruses resistant to oseltamivir have been found in 19 countries in Europe with an overall prevalence of 23% (507/2216) (click here).

Comment: The 2007-2008 influenza season is coming to an end in Europe. All countries are reporting declining levels of clinical influenza activity and only three countries reported levels of clinical influenza activity that are above the national baseline (i.e. a medium intensity) in week 12/2008. In addition, virus detections of influenza are clearly declining for Europe as a whole (click here). Whilst influenza activity was predominantly caused by the influenza A(H1N1) virus during most of the season, in recent weeks (since week 09/2008) influenza B has been dominant in Europe.

A spatial analysis of the spread of influenza activity in Europe during the 2007-2008 winter (with preliminary data for 25 countries), revealed that the timing of peak clinical influenza activity followed a general pattern from south to north (p=0.004), while no significant pattern from west to east was observed [click here for more details]. Historically, west-east and/or south-north patterns in the timing of peak levels of clinical influenza activity have been common in Europe since the 1999/2000 season (nine winters): there were four seasons with a significant west-east pattern and four seasons with a south-north pattern. The current season, with its south-north pattern, is therefore not unusual.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 12/2008, 22 countries reported epidemiological data and 26 countries reported virological data to EISS. 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.

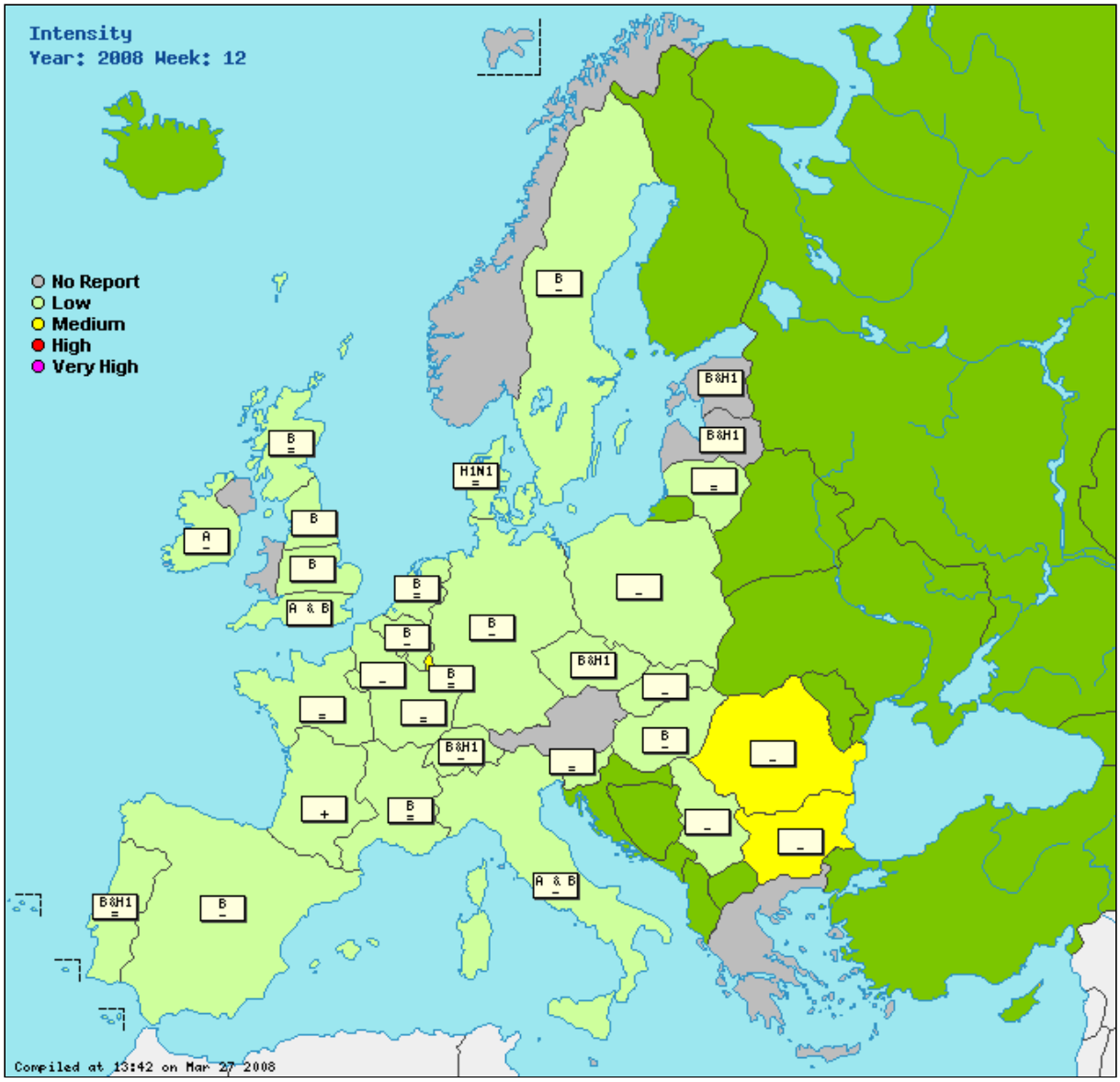
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Italy
One influenza A and three influenza B viruses have been detected during this week.
Norway
Lower numbers after a levelling out of virus numbers through weeks 10-to-11, but data incomplete and uncertain due to Easter holidays.
Sweden
Few reporting health units this week due to Eastern holidays. The data for week 12 wil be updated later.
Switzerland
Influenza highly decreased in all the country. Influenza B viruses are still detected.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	Local			13	15.4%	Type B	197.7 (graphs)	1611.6 (graphs)	Click here
Bulgaria	Medium	None			3	0%	None	(graphs)	957.4 (graphs)	Click here
Czech Republic	Low	Sporadic			45	4.4%	Type B and Type A, Subtype H1	35.1 (graphs)	970.2 (graphs)	Click here
Denmark	Low	Sporadic			3	0%	Type A, Subtype H1N1	5.7 (graphs)	(graphs)	Click here

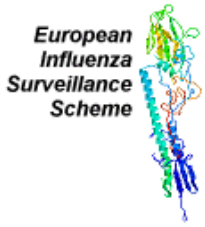
England	Low	Sporadic	16	31.3%	Type B	9.0	(graphs)	536.2	(graphs)	Click here
Estonia			32	25.0%	Type B and Type A, Subtype H1		(graphs)			Click here
France			52	15.4%	Type B		(graphs)	1515.6	(graphs)	Click here
Germany	Low	Sporadic	60	36.7%	Type B		(graphs)	999.2	(graphs)	Click here
Greece			9	22.2%	None		(graphs)			Click here
Hungary	Low	Local	10	40.0%	Type B	30.3	(graphs)		(graphs)	Click here
Ireland	Low	Sporadic	1	100.0%	Type A	8.6	(graphs)		(graphs)	Click here
Italy	Low	Sporadic	18	5.6%	Type A and B	156.5	(graphs)		(graphs)	Click here
Latvia			0	0%	Type B and Type A, Subtype H1		(graphs)			Click here
Lithuania	Low	None	5	0%	None	0.4	(graphs)	276.4	(graphs)	Click here
Luxembourg	Medium	Local	42	40.5%	Type B	342.6	(graphs)	2337.8	(graphs)	Click here
Netherlands	Low	Widespread	15	33.3%	Type B	48.0	(graphs)		(graphs)	Click here
Norway			0	0%	None		(graphs)			Click here
Poland	Low	None	12	0%	None	93.3	(graphs)		(graphs)	Click here
Portugal	Low	Sporadic	1	100.0%	Type B and Type A, Subtype H1N1	18.4	(graphs)		(graphs)	Click here
Romania	Medium	Sporadic	17	0%	None	2.1	(graphs)	1029.7	(graphs)	Click here
Scotland	Low	Sporadic	0	0%	Type B	0.0	(graphs)		(graphs)	Click here
Serbia	Low	Sporadic				94.0	(graphs)		(graphs)	Click here
Slovakia	Low	None	2	0%	None	162.1	(graphs)	1408.0	(graphs)	Click here
Slovenia	Low	None	2	0%	None	4.7	(graphs)	1250.6	(graphs)	Click here
Spain	Low	None	8	25.0%	Type B	12.8	(graphs)		(graphs)	Click here
Sweden	Low	Sporadic	21	38.1%	Type B	5.3	(graphs)		(graphs)	Click here
Switzerland	Low	Sporadic	26	34.6%	Type B and Type A, Subtype H1	48.8	(graphs)			Click here
Europe			413	23.5%						Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Influenza activity continues to decline in Europe



Summary: For all countries in Europe influenza activity has returned to low levels of activity. Influenza virus type B accounted for 78% of the total positive specimens collected in week 13/2008, however the majority of virus detections since the start of the season have been influenza A(H1N1) viruses. Influenza A(H1N1) viruses resistant to oseltamivir continued to be detected at variable levels across Europe.

Epidemiological situation - week 13/2008: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were low in 26 countries (see Erratum below). For the geographical spread indicator, widespread influenza activity was reported in the Netherlands, regional activity in Norway, local activity in Belgium and Luxembourg, sporadic activity in 17 countries and no activity was reported in six countries. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (since week 40/2007): Influenza activity first increased above baseline levels towards the end of 2007 (weeks 48/2007-51/2007), and the first countries where clinical influenza activity peaked were Ireland (in week 01/2008), England (02/2008) and Spain (02/2008). In most countries, influenza activity peaked between weeks 04/2008 and 08/2008.

For most countries clinical consultation rates have been lower than during the 2006-2007 season. The highest consultation rates have generally been reported in the 0-4 and 5-14 age groups, however, England, Ireland, Norway and Switzerland also reported high consultation rates in the 15-64 age group compared to the other ages.

Virological situation - week 13/2008: The total number of respiratory specimens collected by sentinel physicians in week 13/2008 was 317, of which 86 (27%) were influenza virus positive; 11 (13%) type A not subtyped, four (5%) type A subtype H1 [of which two were A(H1N1)], one (1%) type A subtype H3 and 70 (81%) type B. In addition, 224 influenza virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals), of which 45 (20%) were type A not subtyped, four (2%) type A subtype H1 [of which three were A(H1N1)], three (1%) were A subtype H3N2 and 172 (77%) type B.

Cumulative virological situation - 2007-2008 season (since week 40/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=14773; sentinel and non-sentinel data), 5052 (34%) were type A not subtyped, 4431 (30%) were A(H1), 142 (1%) were A(H3) and 5148 (35%) were B.

Based on the antigenic and/or genetic characterisation of 3917 influenza viruses, 62 were A/New Caledonia/20/99 (H1N1)-like, 2456 were A/Solomon Island/3/2006 (H1N1)-like, 17 were A/Wisconsin/67/2005 (H3N2)-like, 68 were A/Brisbane/10/2007 (H3N2)-like, 1297 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and 17 were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

By 02 April 2008, A(H1N1) viruses resistant to oseltamivir have been found in 19 countries in Europe with an overall prevalence of 23% (527/2271) (click here).

Comment: Influenza activity continues to decline in Europe and the 2007-2008 season is coming to an end . All countries are reporting stable or declining levels of clinical influenza activity and low levels of clinical influenza activity in week 13/2008 (see Erratum below). Virus detections of influenza are clearly declining for Europe as a whole (click here), and 14 countries reported zero virus detections in sentinel respiratory specimens collected in week 13/2008. Whilst influenza activity was predominantly caused by the influenza A(H1N1) virus during most of the season, in recent weeks (since week 09/2008) influenza B has been dominant in Europe.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 13/2008, 27 countries reported epidemiological data and 26 countries reported virological data to EISS. 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.

Erratum: The intensity indicator for Romania is incorrect. Based on the ILI consultation rates for week 13/2008, the correct intensity is low.

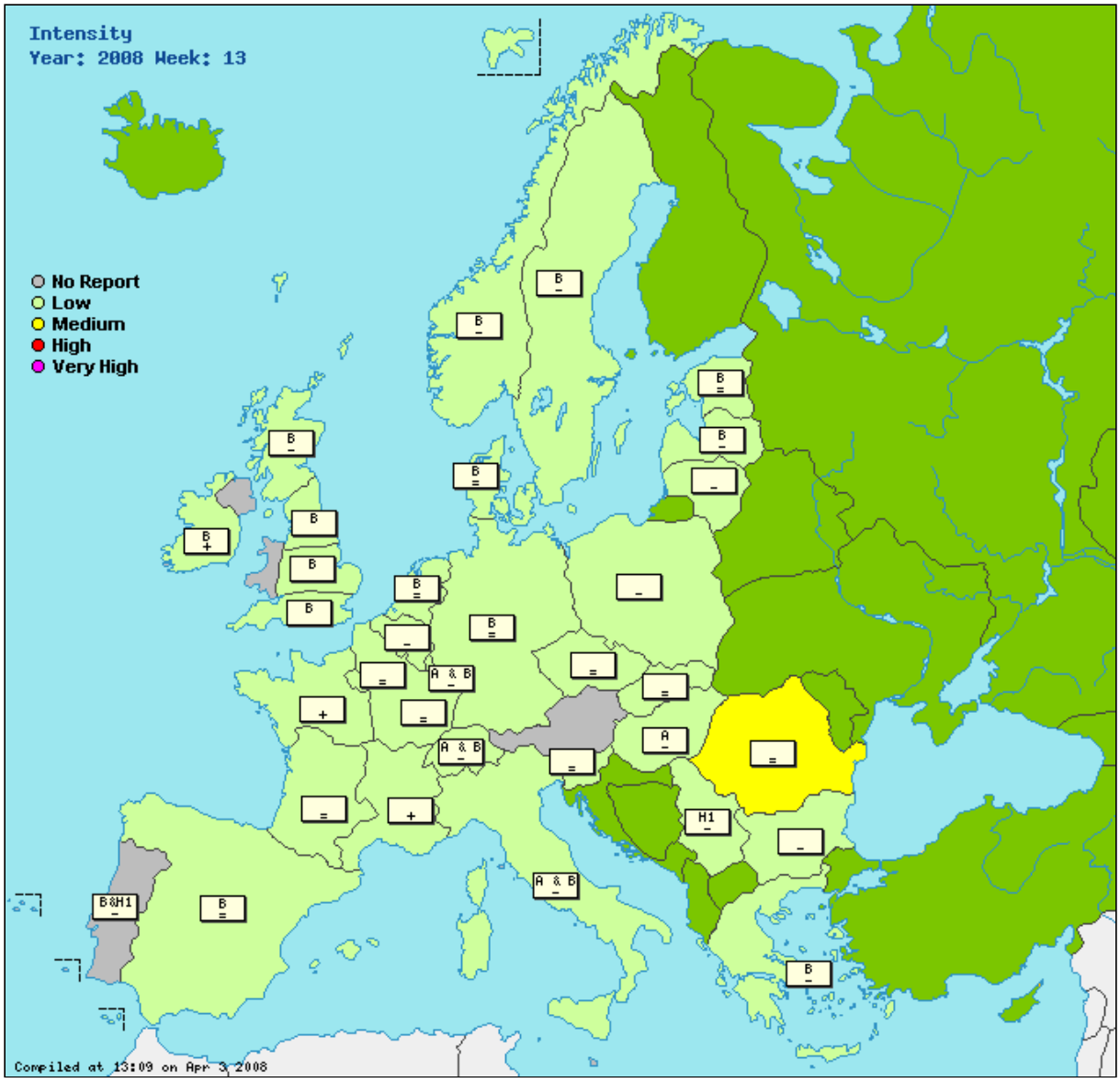
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Italy
Influenza activity continues to decrease all over the Country. One influenza A/H3N2 and one influenza B viruses have been detected during this week.
Sweden
Number of ILI cases is still decreasing but we have 66 laboratory verified cases, which is above the baseline.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	Local			17	0%	None	140.9 (graphs)	1205.3 (graphs)	Click here
Bulgaria	Low	None			3	0%	None	(graphs)	914.0 (graphs)	Click here
Czech Republic	Low	Sporadic						30.7 (graphs)	963.8 (graphs)	Click here
Denmark	Low	Sporadic			11	72.7%	Type B	34.5 (graphs)	(graphs)	Click here
England	Low	Sporadic			24	25.0%	Type B	10.1 (graphs)	517.2 (graphs)	Click here
Estonia	Low	Sporadic			27	44.4%	Type B	7.9 (graphs)	376.7 (graphs)	Click here
France	Low	Sporadic			59	22.0%	Type B	(graphs)	1401.4 (graphs)	Click here
Germany	Low	Sporadic			56	33.9%	Type B	(graphs)	954.4 (graphs)	Click here

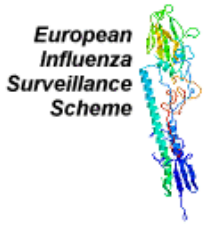
Greece	Low	Sporadic	5	20.0%	Type B	57.2	(graphs)		(graphs)	Click here
Hungary	Low	Sporadic	3	0%	Type A	27.8	(graphs)		(graphs)	Click here
Ireland	Low	Sporadic	3	100.0%	Type B	15.9	(graphs)		(graphs)	Click here
Italy	Low	Sporadic	9	0%	Type A and B	0.0	(graphs)		(graphs)	Click here
Latvia	Low	Sporadic	0	0%	Type B	0.5	(graphs)	728.2	(graphs)	Click here
Lithuania	Low	None	2	0%	None	0.5	(graphs)	201.3	(graphs)	Click here
Luxembourg	Low	Local	22	36.4%	Type A and B	129.6	(graphs)	2246.2	(graphs)	Click here
Netherlands	Low	Widespread	19	21.1%	Type B	40.1	(graphs)		(graphs)	Click here
Norway	Low	Regional	2	100.0%	Type B	56.7	(graphs)		(graphs)	Click here
Poland	Low	None	9	0%	None	78.9	(graphs)		(graphs)	Click here
Portugal		None	1	0%	Type B and Type A, Subtype H1N1	14.0	(graphs)		(graphs)	Click here
Romania	Medium	Sporadic	12	0%	None	2.1	(graphs)	1077.4	(graphs)	Click here
Scotland	Low	Sporadic	0	0%	Type B	0.0	(graphs)		(graphs)	Click here
Serbia	Low	Sporadic	0	0%	Type A, Subtype H1	70.8	(graphs)		(graphs)	Click here
Slovakia	Low	Sporadic	1	0%	None	197.9	(graphs)	1539.0	(graphs)	Click here
Slovenia	Low	None	3	0%	None	10.3	(graphs)	1093.4	(graphs)	Click here
Spain	Low	None	11	9.1%	Type B	22.6	(graphs)		(graphs)	Click here
Sweden	Low	Sporadic	12	75.0%	Type B	8.2	(graphs)		(graphs)	Click here
Switzerland	Low	Sporadic	6	0%	Type A and B	42.7	(graphs)			Click here
Europe			317	27.1%						Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

The 2007-2008 influenza season is coming to an end in Europe



Summary: For all countries in Europe influenza activity has returned to low levels of activity. Influenza virus type B accounted for 84% of the total positive specimens collected in week 14/2008, however the majority of virus detections since the start of the season have been influenza A(H1N1) viruses. Influenza A(H1N1) viruses resistant to oseltamivir continued to be detected at variable levels across Europe.

Epidemiological situation - week 14/2008: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were low in 25 countries who reported this indicator. For the geographical spread indicator, widespread influenza activity was reported in the Netherlands, regional activity in Norway, local activity in Slovakia, sporadic activity in 17 countries and no activity in four countries. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (since week 40/2007): Influenza activity first increased above baseline levels towards the end of 2007 (weeks 48/2007-51/2007), and the first countries where clinical influenza activity peaked were Ireland (in week 01/2008), England (02/2008) and Spain (02/2008). In most countries, influenza activity peaked between weeks 04/2008 and 08/2008.

For most countries clinical consultation rates have been lower than during the 2006-2007 season. The highest consultation rates have generally been reported in the 0-4 and 5-14 age groups, however, England, Ireland, Norway and Switzerland also reported high consultation rates in the 15-64 age group compared to the other ages.

Virological situation - week 14/2008: The total number of respiratory specimens collected by sentinel physicians in week 14/2008 was 323, of which 73 (23%) were influenza virus positive; seven (9%) type A not subtyped, two (2%) type A subtype H1 [of which one was A(H1N1)], two (2%) type A subtype H3 and 62 (85%) type B. In addition, 159 influenza virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals), of which 21 (13%) were type A not subtyped, two (1%) were type A subtype H1N1, two (1%) were A subtype H3 [of which one was A(H3N2)] and 134 (84%) were type B.

Cumulative virological situation - 2007-2008 season (since week 40/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=15222; sentinel and non-sentinel data), 4979 (33%) were type A not subtyped, 4632 (30%) were A(H1), 153 (1%) were A(H3) and 5458 (36%) were B.

Based on the antigenic and/or genetic characterisation of 3521 influenza viruses, 60 were A/New Caledonia/20/99 (H1N1)-like, 2164 were A/Solomon Island/3/2006 (H1N1)-like, 20 were A/Wisconsin/67/2005 (H3N2)-like, 115 were A/Brisbane/10/2007 (H3N2)-like, 1147 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and 15 were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

As of the 9th April 2008, A(H1N1) viruses resistant to oseltamivir have been found in 19 countries in Europe with an overall prevalence of 23% (556/2362) (click here).

Comment: Influenza activity in Europe for the 2007-2008 season is coming to an end with all countries reporting low levels of influenza activity this week. Virus detections of influenza are also declining for Europe as a whole (click here). The proportion of sentinel specimens tested positive for influenza virus is also decreasing (23%). Whilst influenza activity was predominantly caused by the influenza A(H1N1) virus during most of the season, in recent weeks (since week 09/2008) influenza B has been dominant in Europe. Also for the few remaining influenza A cases, the balance has now changed such that A(H1) virus numbers have fallen to be just as rare as the A(H3) viruses which have been a minority subtype throughout the outbreak period.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 14/2008, 25 countries reported epidemiological data and 23 countries reported virological data to EISS. 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).

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Map

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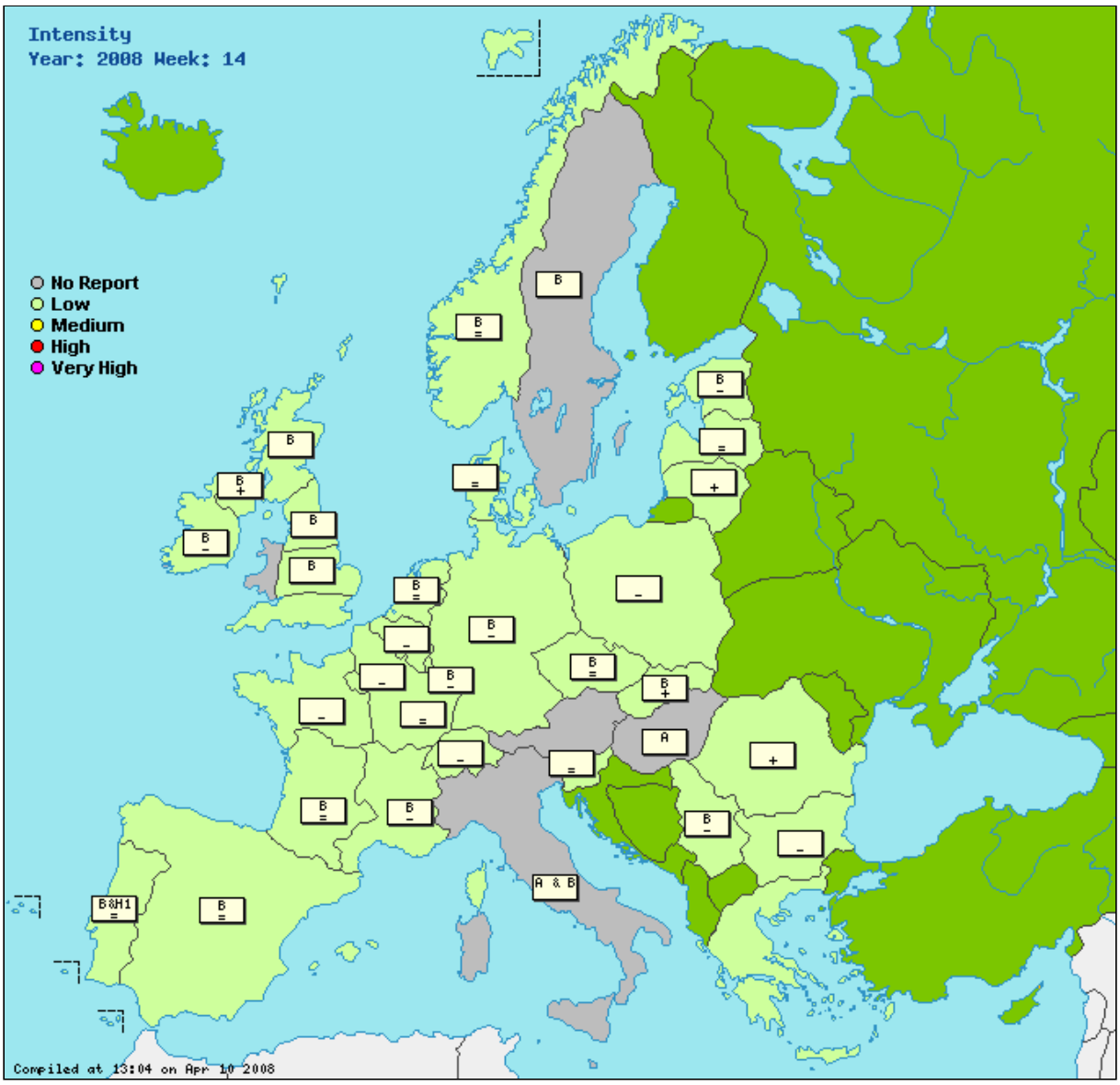
You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Italy
Low influenza activity is reported. One influenza B virus has been detected during this week.
Norway
The number of influenza B detections have remained comparably stable over the last two months. Influenza A detections have now become quite sporadic.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Austria					55	0%	None	(graphs)		Click here
Belgium	Low	Sporadic						92.3 (graphs)	1310.5 (graphs)	Click here
Bulgaria	Low	None						(graphs)	631.1 (graphs)	Click here
Czech Republic	Low	Sporadic			52	5.8%	Type B	32.5 (graphs)	972.5 (graphs)	Click here
Denmark	Low	Sporadic						38.6 (graphs)	(graphs)	Click here
England	Low	Sporadic			10	30.0%	Type B	15.5 (graphs)	617.9 (graphs)	Click here
Estonia	Low	Sporadic			9	55.6%	Type B	4.0 (graphs)	313.5 (graphs)	Click here
France	Low	Sporadic			25	24.0%	Type B	(graphs)	1524.0 (graphs)	Click here

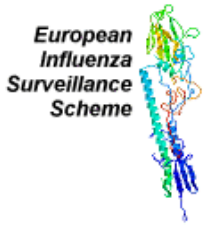
Germany	Low	Sporadic	43	39.5%	Type B	(graphs)	765.3	(graphs)	Click here
Greece	Low	Sporadic				64.3 (graphs)		(graphs)	Click here
Hungary			6	0%	Type A	(graphs)			Click here
Ireland	Low	Sporadic	8	37.5%	Type B	10.1 (graphs)		(graphs)	Click here
Italy			0	0%	Type A and B	(graphs)			Click here
Latvia	Low	Sporadic				4.4 (graphs)	707.4	(graphs)	Click here
Lithuania	Low	None	2	0%	None	0.3 (graphs)	248.4	(graphs)	Click here
Luxembourg	Low	Sporadic	9	33.3%	Type B	86.4 (graphs)	2073.4	(graphs)	Click here
Netherlands	Low	Widespread	14	21.4%	Type B	44.3 (graphs)		(graphs)	Click here
Northern Ireland	Low	Sporadic	7	57.1%	Type B	59.2 (graphs)		(graphs)	Click here
Norway	Low	Regional	3	100.0%	Type B	66.2 (graphs)		(graphs)	Click here
Poland	Low	Sporadic	22	18.2%	None	59.9 (graphs)		(graphs)	Click here
Portugal	Low	Sporadic	1	100.0%	Type B and Type A, Subtype H1N1	2.3 (graphs)		(graphs)	Click here
Romania	Low	Sporadic	6	0%	None	1.0 (graphs)	1132.8	(graphs)	Click here
Scotland	Low	Sporadic	2	50.0%	Type B	0.0 (graphs)		(graphs)	Click here
Serbia	Low	Sporadic	0	0%	Type B	63.4 (graphs)		(graphs)	Click here
Slovakia	Low	Local	6	33.3%	Type B	223.6 (graphs)	1696.5	(graphs)	Click here
Slovenia	Low	None	1	0%	None	22.7 (graphs)	1074.2	(graphs)	Click here
Spain	Low	None	22	31.8%	Type B	15.8 (graphs)		(graphs)	Click here
Sweden			20	40.0%	Type B	(graphs)			Click here
Switzerland	Low	Sporadic				25.8 (graphs)			Click here
Europe			323	22.6%					Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

The 2007-2008 influenza season is coming to an end



Summary: Influenza activity has returned to low levels in all countries across Europe. Influenza virus type B accounted for 82% of the total positive specimens collected in week 15/2008. However the majority of virus detections since the start of the season has been influenza A(H1N1) viruses.

Epidemiological situation - week 15/2008: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were low in 26 countries who reported this indicator. For the geographical spread indicator, widespread influenza activity was reported in the Netherlands, regional activity in Norway, local activity in England, sporadic activity in 16 countries and no activity in seven countries. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (since week 40/2007): Influenza activity first increased above baseline levels towards the end of 2007 (weeks 48/2007-51/2007), and the first countries where clinical influenza activity peaked were Ireland (in week 01/2008), England and Spain (both in week 02/2008). In most countries, influenza activity peaked between weeks 04/2008 and 08/2008. For most countries clinical consultation rates have been lower than during the 2006-2007 season. The highest consultation rates have generally been reported in the 0-4 and 5-14 age groups, however, England, Ireland, Norway and Switzerland also reported high consultation rates in the 15-64 age group compared to the other ages. A spatial analysis of the spread of influenza activity in Europe, revealed that the timing of peak clinical influenza activity followed a general pattern from south to north, while no significant pattern from west to east was observed.

Virological situation - week 15/2008: The total number of respiratory specimens collected by sentinel physicians in week 15/2008 was 253, of which 66 (26%) were influenza virus positive; five (8%) type A not subtyped, two (3%) type A subtype H1 [of which one was A(H1N1)], six (9%) type A subtype H3 [of which five were A(H3N2)] and 53 (80%) type B. In addition, 200 influenza virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals), of which 31 (16%) were type A not subtyped, three (1%) were type A subtype H1 [of which one was A(H1N1)], one (<1%) were A subtype H3 and 165 (83%) were type B.

Cumulative virological situation - 2007-2008 season (since week 40/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=16489; sentinel and non-sentinel data), 5094 (31%) were type A not subtyped, 4986 (30%) were A(H1), 166 (1%) were A(H3) and 6243 (38%) were B.
Based on the antigenic and/or genetic characterisation of 3337 influenza viruses, 60 were A/New Caledonia/20/99 (H1N1)-like, 2080 were A/Solomon Island/3/2006 (H1N1)-like, 21 were A/Wisconsin/67/2005 (H3N2)-like, 18 were A/Brisbane/10/2007 (H3N2)-like, 1143 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and 15 were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here). As of 16 April 2008, A(H1N1) viruses resistant to oseltamivir have been found in 19 countries in Europe with an overall prevalence of 24% (570/2409) (click here).

Comment: Influenza activity in Europe is coming to an end with all countries reporting low levels of influenza activity this week. Influenza virus detections are also declining for Europe as a whole, and the total number of detections by week 15 this season was slightly lower compared to the 2006-2007 winter season by the same week (click here). Whilst influenza activity was predominantly caused by the A(H1N1) influenza virus during most of the season, influenza B has been dominant in Europe since week 09/2008. (click here).

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 15/2008, 26 countries reported epidemiological data and 24 countries reported virological data to EISS. 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.

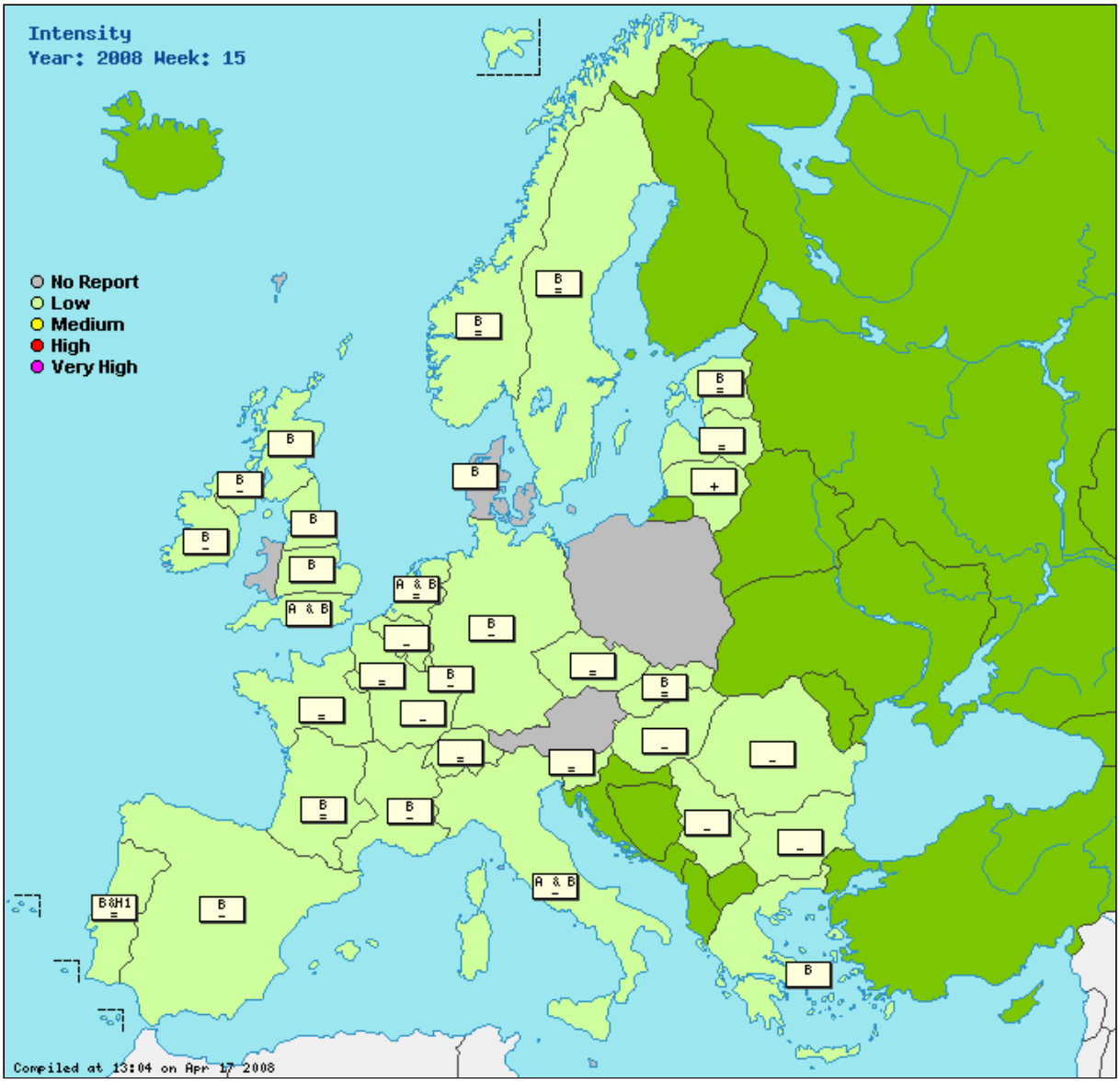
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Italy
Influenza activity continues to decrease all over the Country. One influenza A/H3N2 and one influenza B viruses have been detected during this week.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	Sporadic			6	0%	None	80.1 (graphs)	1162.2 (graphs)	Click here
Bulgaria	Low	None						(graphs)	630.1 (graphs)	Click here
Czech Republic	Low	Sporadic			40	2.5%	None	26.9 (graphs)	944.3 (graphs)	Click here
Denmark					6	66.7%	Type B	(graphs)		Click here
England	Low	Local			6	66.7%	Type B	8.6 (graphs)	433.9 (graphs)	Click here
Estonia	Low	Sporadic			21	33.3%	Type B	4.8 (graphs)	269.1 (graphs)	Click here
France	Low	Sporadic			29	31.0%	Type B	(graphs)	1434.3 (graphs)	Click here
Germany	Low	Sporadic			42	28.6%	Type B	(graphs)	677.2 (graphs)	Click here
Greece	Low	Sporadic			5	60.0%	Type B	89.4 (graphs)	(graphs)	Click here
Hungary	Low	None			1	0%	None	(graphs)	(graphs)	Click here

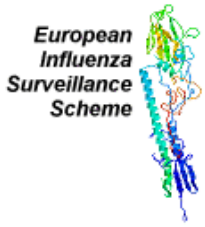
Ireland	Low	Sporadic	4	75.0%	Type B	7.2 (graphs)		(graphs)	Click here
Italy	Low	Sporadic	2	0%	Type A and B	52.6 (graphs)		(graphs)	Click here
Latvia	Low	Sporadic				0.0 (graphs)	751.5	(graphs)	Click here
Lithuania	Low	None	2	0%	None	0.2 (graphs)	315.8	(graphs)	Click here
Luxembourg	Low	Sporadic	8	25.0%	Type B	21.6 (graphs)	1813.9	(graphs)	Click here
Netherlands	Low	Widespread	19	36.8%	Type A and B	46.0 (graphs)		(graphs)	Click here
Northern Ireland	Low	Sporadic	6	16.7%	Type B	44.6 (graphs)		(graphs)	Click here
Norway	Low	Regional	3	33.3%	Type B	66.5 (graphs)		(graphs)	Click here
Portugal	Low	None	2	0%	Type B and Type A, Subtype H1N1	6.2 (graphs)		(graphs)	Click here
Romania	Low	Sporadic	7	0%	None	0.3 (graphs)	999.8	(graphs)	Click here
Scotland	Low	Sporadic	0	0%	Type B	0.0 (graphs)		(graphs)	Click here
Serbia	Low	Sporadic	0	0%	None	72.5 (graphs)		(graphs)	Click here
Slovakia	Low	None	5	40.0%	Type B	242.7 (graphs)	1713.2	(graphs)	Click here
Slovenia	Low	None	0	0%	None	6.3 (graphs)	914.3	(graphs)	Click here
Spain	Low	None	24	20.8%	Type B	11.3 (graphs)		(graphs)	Click here
Sweden	Low	Sporadic	15	33.3%	Type B	9.9 (graphs)		(graphs)	Click here
Switzerland	Low	Sporadic				22.0 (graphs)			Click here
Europe			253	26.1%					Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Low levels of influenza activity in Europe



Summary: Seasonal influenza activity is now back to levels seen outside the winter period in all European countries. Influenza virus type B accounted for 80% of the total positive specimens collected in week 16/2008. However, the majority of virus detections since the start of the season have been influenza A(H1N1) viruses. In most countries, influenza activity only reached moderate levels of intensity this winter.

Epidemiological situation - week 16/2008: For the intensity indicator, the national network levels of influenza-like illness (ILI) and/or acute respiratory infection (ARI) were low in 23 countries who reported this indicator. For the geographical spread indicator, widespread influenza activity was reported in the Netherlands, sporadic activity in ten countries and no activity in 13 countries. Definitions for the epidemiological indicators can be found here.

Cumulative epidemiological situation - 2007-2008 season (since week 40/2007): Influenza activity first increased above baseline levels towards the end of 2007 (weeks 48/2007-51/2007), and the first countries where clinical influenza activity peaked were Ireland (in week 01/2008), England and Spain (both in week 02/2008). In most countries, influenza activity peaked between weeks 04/2008 and 08/2008. Clinical consultation rates have been lower than during the 2006-2007 season for the majority of countries. The highest consultation rates have generally been reported in the 0-4 and 5-14 age groups. However, England, Ireland, Norway and Switzerland also reported elevated consultation rates in the 15-64 age group. A spatial analysis of the spread of influenza activity in Europe revealed that the timing of peak clinical influenza activity followed a general pattern from south to north, but this year there was no obvious west to east pattern observed.

Virological situation - week 16/2008: The total number of respiratory specimens collected by sentinel physicians in week 16/2008 was 132, of which 24 (18%) were influenza virus positive; three (13%) type A not subtyped, three (13%) type A subtype H1 [all A(H1N1)], four (16%) type A subtype H3 [of which three were A(H3N2)] and 14 (58%) type B. In addition, 185 influenza virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals), of which 31 (17%) were type A not subtyped, two (1%) were type A subtype H1 [of which one was A(H1N1)], three (2%) were A subtype H3 [all A(H3N2)] and 149 (80%) were type B.

Cumulative virological situation - 2007-2008 season (since week 40/2007): Based on (sub)typing data of all influenza virus detections since week 40/2007 (N=16763; sentinel and non-sentinel data), 5102 (30%) were type A not subtyped, 5021 (30%) were A(H1), 176 (1%) were A(H3) and 6464 (39%) were B.

Based on the antigenic and/or genetic characterisation of 3504 influenza viruses, ten were A/New Caledonia/20/99 (H1N1)-like, 2141 were A/Solomon Island/3/2006 (H1N1)-like, 21 were A/Wisconsin/67/2005 (H3N2)-like, 23 were A/Brisbane/10/2007 (H3N2)-like, 1293 were B/Florida/4/2006-like (B/Yamagata/16/88 lineage) and 16 were B/Malaysia/2506/2004-like (B/Victoria/2/87 lineage) (click here).

As of 23 April 2008, A(H1N1) viruses resistant to oseltamivir have been found in 19 countries in Europe with an overall prevalence of 23% (586/2533) (click here).

Comment: Influenza activity in Europe is coming to an end with all countries reporting low levels of influenza activity since week 14/2008. Influenza virus detections are also declining for Europe as a whole. Over the 2007-2008 season, influenza A peaked some weeks earlier in the season than influenza B (click here). Looking at the distribution of virus types on a country level, this is also clearly the case for the vast majority of countries [for a typical example: click here]. Influenza activity was predominantly caused by the A(H1N1) influenza virus during most of the season and influenza B has been dominant in Europe since week 09/2008.

Background: The Weekly Electronic Bulletin presents and comments influenza activity in the 31 European countries that are members of EISS. In week 16/2008, 23 countries reported epidemiological data and 23 countries reported virological data to EISS. 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.

Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

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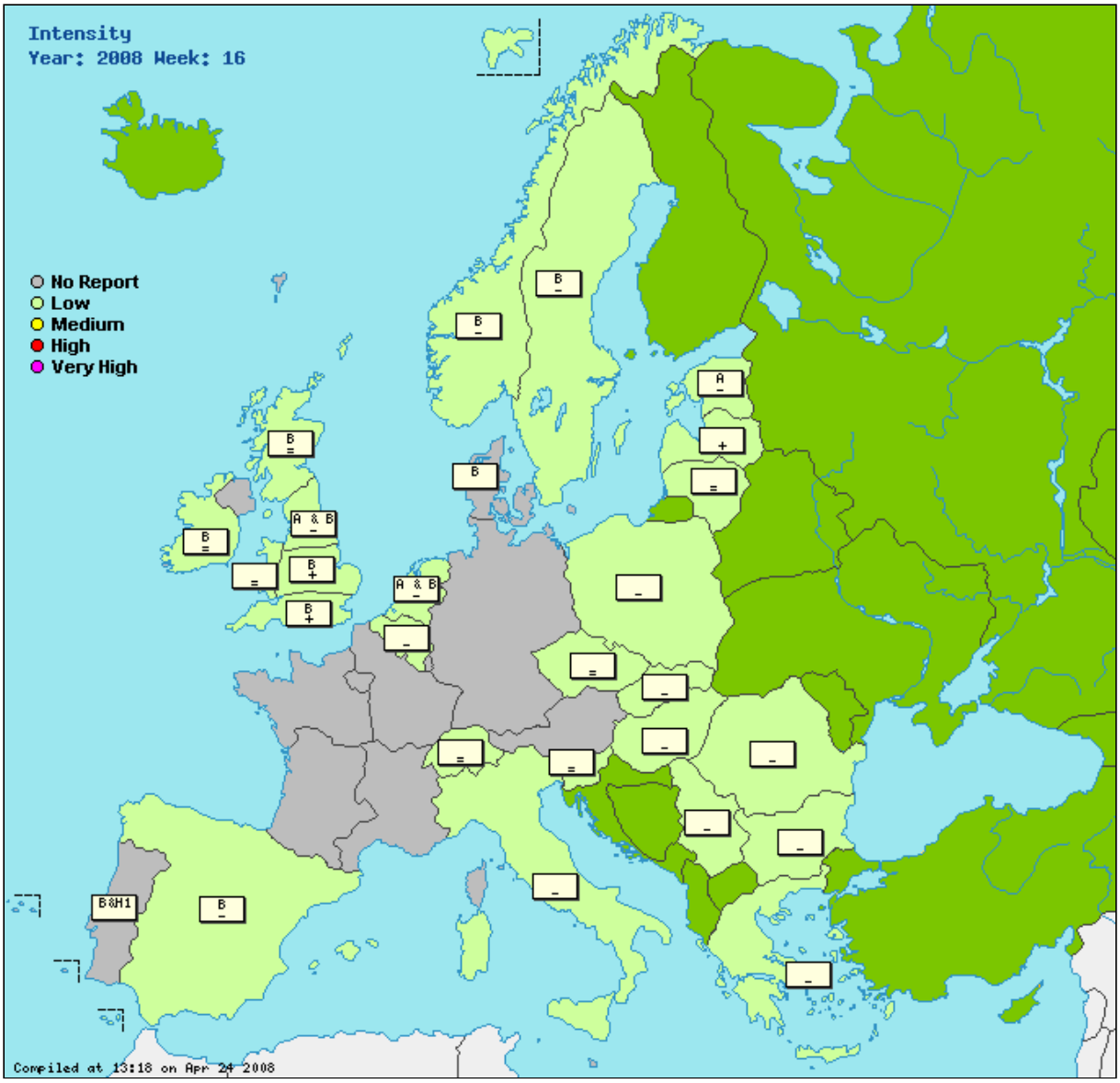
Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	Sporadic			5	0%	None	46.5 (graphs)	1051.6 (graphs)	Click here
Bulgaria	Low	None						(graphs)	610.0 (graphs)	Click here
Czech Republic	Low	None			17	11.8%	None	24.8 (graphs)	925.4 (graphs)	Click here
Denmark					2	50.0%	Type B	(graphs)		Click here
England	Low	Sporadic			11	9.1%	Type A and B	10.5 (graphs)	524.3 (graphs)	Click here
Estonia	Low	Sporadic			13	7.7%	Type A	4.0 (graphs)	318.8 (graphs)	Click here
France					4	0%	None		(graphs)	Click here
Germany					27	33.3%	None		(graphs)	Click here
Greece	Low	Sporadic						52.2 (graphs)	(graphs)	Click here
Hungary	Low	None			2	0%	None	19.2 (graphs)	(graphs)	Click here
Ireland	Low	Sporadic			5	40.0%	Type B	10.6 (graphs)	(graphs)	Click here
Italy	Low	None			2	0%	None	45.1 (graphs)	(graphs)	Click here

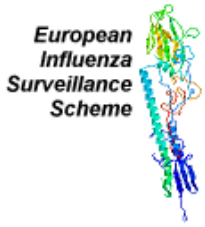
Latvia	Low	None				0.0	(graphs)	805.2	(graphs)	Click here
Lithuania	Low	None	5	0%	None	0.0	(graphs)	306.0	(graphs)	Click here
Netherlands	Low	Widespread	11	45.5%	Type A and B	32.6	(graphs)		(graphs)	Click here
Northern Ireland			0	0%	None		(graphs)			Click here
Norway	Low	Sporadic	0	0%	Type B	64.8	(graphs)		(graphs)	Click here
Poland	Low	None	8	0%	None	38.3	(graphs)		(graphs)	Click here
Portugal		None	0	0%	Type B and Type A, Subtype H1N1	0.0	(graphs)		(graphs)	Click here
Romania	Low	Sporadic	0	0%	None	0.0	(graphs)	865.5	(graphs)	Click here
Scotland	Low	Sporadic	0	0%	Type B	0.0	(graphs)		(graphs)	Click here
Serbia	Low	Sporadic	0	0%	None	41.7	(graphs)		(graphs)	Click here
Slovakia	Low	None	1	0%	None	211.9	(graphs)	1686.5	(graphs)	Click here
Slovenia	Low	None	0	0%	None	1.6	(graphs)	888.3	(graphs)	Click here
Spain	Low	None	19	15.8%	Type B	7.3	(graphs)		(graphs)	Click here
Sweden	Low	None	0	0%	Type B	4.1	(graphs)		(graphs)	Click here
Switzerland	Low	Sporadic				10.0	(graphs)			Click here
Wales	Low	None					(graphs)		(graphs)	Click here
Europe			132	18.2%						Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Low levels of influenza activity in Europe



Summary: Influenza virus detections have declined from a peak of 1790 detections in week 06/2008 to 28 in week 21/2008. Twelve countries reported an assessment of the geographical spread of influenza activity in week 21/2008: England, Norway and Scotland reported sporadic activity and ten countries reported no influenza activity.

In week 20/2008 and 21/2008, there was a total of 63 influenza virus detections in Europe (see graph and table for further details): in Denmark (2); England (20), Finland (1), Germany (1), Greece (1), Norway (7), Portugal (1), Scotland (29) and Spain (1). There were 50 (79%) detections of influenza B virus and 13 (21%) of influenza A virus (2 H1N1). This distribution confirms the overall trend in virus detections during the 2007-2008 season, with influenza A being dominant in the first half of the season and influenza B being dominant toward the end of the season (as of week 09/2008) and influenza A declining to low levels [click here]. However, whereas influenza A(H1N1) was clearly the predominant influenza A subtype during the 2007-2008 season (97% of subtyped A viruses), both A(H1N1) and A(H3N2) viruses have been co-circulating at sporadic levels during April and May 2008.

There have been no reports of unusual influenza activity in Europe at a community level (i.e. in a region or local area such as a city, county or district) since week 16/2008.

Background: The Inter-season Electronic Bulletin presents and comments influenza activity based on virological data reported to EISS. The Inter-season Electronic Bulletin will be published between week 21/2008 and week 39/2008.

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).

Erratum: The characterisation data in the Bulletin are incorrect, as the data presented [N=74] cover the reporting period week 40/2007 to week 21/2008. There are probably no characterisation data available for Europe in week 21/2008.

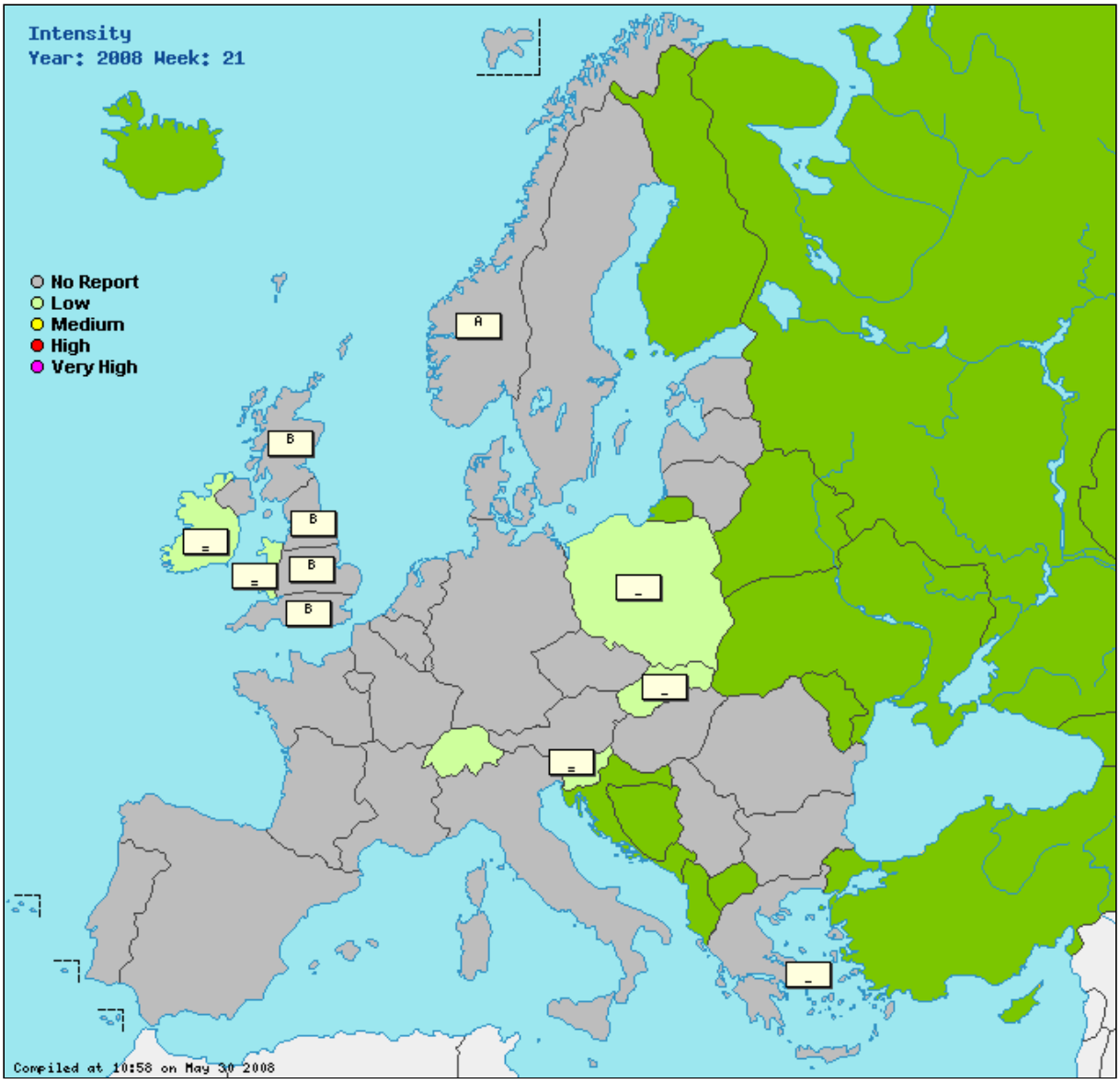
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Norway

One influenza A(H1N1) case seen in Oslo, SE Norway, has been characterised by genotyping as not resistant to oseltamivir. A further two cases of influenza A infection have been reported from Vest-Agder county, SE Norway.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium		None			0	0%	None	(graphs)		Click here
England		Sporadic			0	0%	Type B	(graphs)		Click here
Estonia		None			2	0%	None	(graphs)		Click here
Greece		None			0	0%	None	23.3 (graphs)	(graphs)	Click here
Ireland	Low	None						3.5 (graphs)	(graphs)	Click here
Norway		Sporadic			0	0%	Type A	(graphs)		Click here
Poland	Low	None			5	0%	None	3.2 (graphs)	(graphs)	Click here
Portugal					1	100.0%	None	(graphs)		Click here
Scotland		Sporadic			0	0%	Type B	(graphs)		Click here
Serbia		None			0	0%	None	(graphs)		Click here

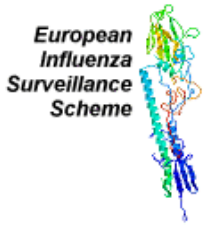
Slovakia	Low	None				103.3 (graphs)	1126.6 (graphs)	Click here
Slovenia	Low	None	0	0%	None	0.0 (graphs)	832.4 (graphs)	Click here
Switzerland	Low	None				3.7 (graphs)		Click here
Wales	Low	None				0.9 (graphs)	(graphs)	Click here
Europe			20	15.0%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Sporadic laboratory confirmed cases of influenza in Europe in recent weeks



Summary: Seasonal influenza activity in Europe has now come to and end and the number of laboratory confirmed cases of influenza is now very low (18 in the past two weeks). Ten countries reported an assessment of the geographical spread of influenza activity in week 23/2008: England reported sporadic activity and nine countries reported no influenza activity.

In week 22/2008 and 23/2008, there were a total of 18 influenza virus detections in Europe (see graph and table for further details): in England (6), Hungary (1), Ireland (1), Norway (6) and Slovakia (4). All detections were reported from non-sentinel sources, i.e. from hospitals or non-sentinel physicians. There were 16 (89%) detections of influenza B virus and two (11%) of influenza A virus (not subtyped).

During the 2007-2008 season, influenza A was dominant in the first half of the season and influenza B was dominant towards the end of the season (as of week 09/2008) [click here]. In the month of May 2008 (defined as week 19-22/2008), influenza B remained the dominant virus type with 156 detections (87%). However, whereas influenza A(H1N1) was clearly the predominant influenza A subtype during the 2007-2008 season (97% of subtyped A viruses), the subtype A(H1) and A(H3) were detected at the same levels in May (two detections of each along with 19 A un-subtyped viruses).

There have been no reports of unusual influenza activity in Europe at a community level (i.e. in a region or local area such as a city, county or district) since week 16/2008.

Background: The Inter-season Electronic Bulletin presents and comments influenza activity based on virological data reported to EISS. The Inter-season Electronic Bulletin will be published between week 21/2008 and week 39/2008.

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).

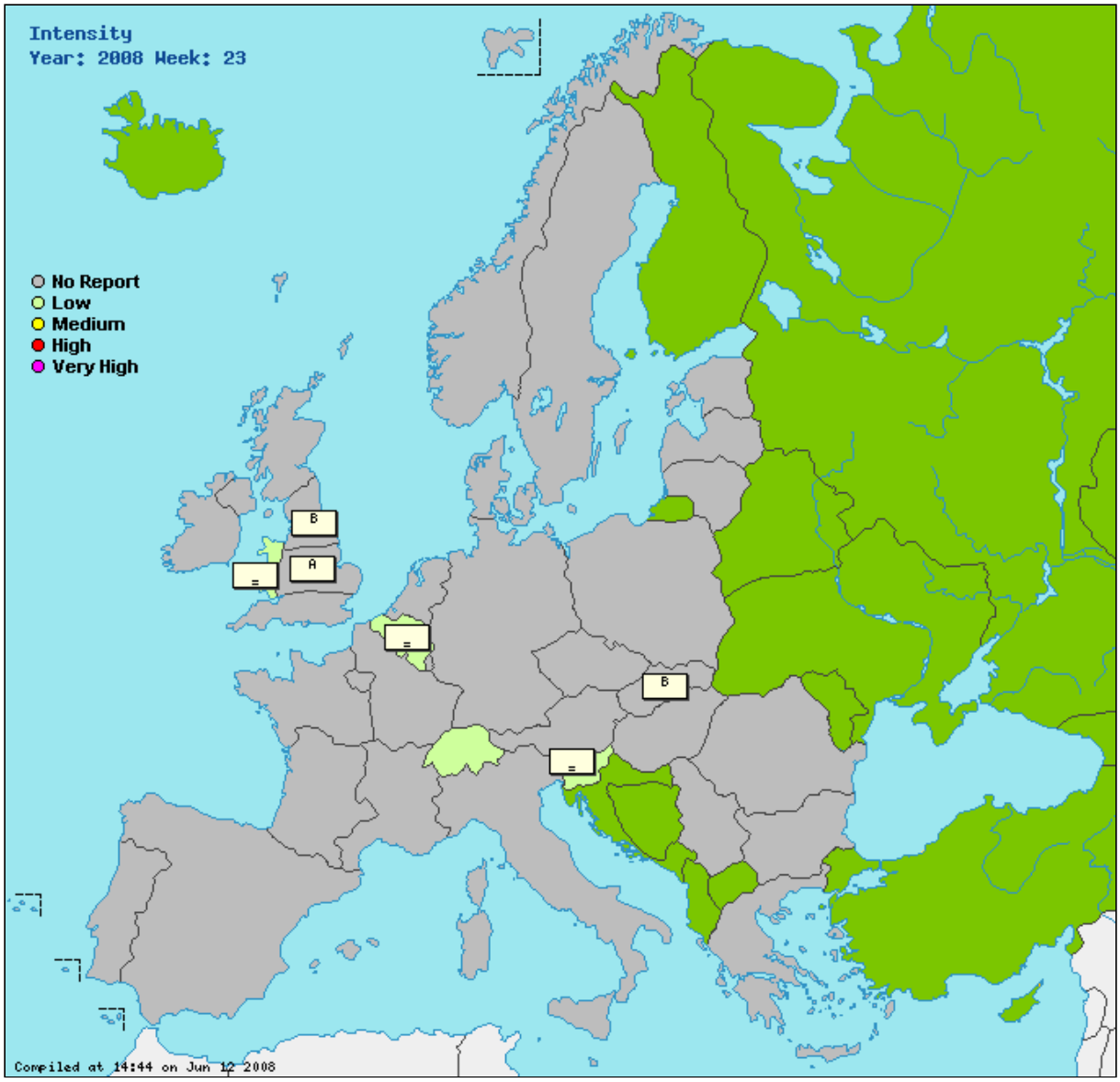
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None			0	0%	None	18.3 (graphs)	885.9 (graphs)	Click here
England		Sporadic			0	0%	None	(graphs)		Click here
Estonia		None			1	0%	None	(graphs)		Click here
Greece		None						18.5 (graphs)	(graphs)	Click here
Hungary		None			0	0%	None	(graphs)		Click here
Netherlands					2	0%	None	(graphs)		Click here
Norway		None			0	0%	None	(graphs)		Click here
Poland		None			1	0%	None	(graphs)		Click here
Portugal		None			0	0%	None	(graphs)		Click here
Slovakia					0	0%	Type B	(graphs)		Click here
Slovenia	Low				0	0%	None	0.0 (graphs)	685.2 (graphs)	Click here
Switzerland	Low	None			2	0%	None	2.3 (graphs)		Click here

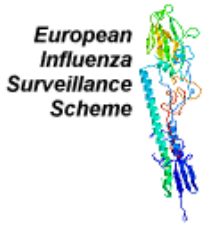
Wales	Low	None			1.7 (graphs)	(graphs)	Click here
Europe			10	0%			Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Sporadic laboratory confirmed cases of influenza in Europe



Summary: Influenza virus detections are sporadic in Europe at the moment. In week 24/2008 there were eight detections of influenza virus and in week 25/2008 there were six. Ten countries reported an assessment of the geographical spread of influenza activity in week 25/2008: England and Poland reported sporadic activity and eight countries reported no influenza activity.

In week 24/2008, a total of eight influenza viruses were detected in Europe: six in England and two in Spain. All were detected in specimens from non-sentinel sources, i.e. from hospitals or non-sentinel physicians. A total of six specimens tested positive for influenza virus in week 25/2008: three in England, one in Germany and two in the Netherlands. All specimens except the one from Germany, which was from the sentinel surveillance system, were from non-sentinel sources (see graph and table for further details).

In the last eight weeks (week 18-25/2008), there was a total of 246 influenza virus detections in Europe: 206 (84%) influenza B viruses, 6 (2%) influenza A (H1) viruses and 10 (4%) influenza A(H3) viruses were detected, along with 24 (10%) A un-subtyped viruses.

There have been no reports of unusual influenza activity in Europe at a community level (i.e. in a region or local area such as a city, county or district) since week 16/2008.

Background: The Inter-season Electronic Bulletin presents and comments influenza activity based on virological data reported to EISS. In weeks 24/2008 and 25/2008, a total of 12 countries reported virological data to EISS. The Inter-season Electronic Bulletin will be published between week 21/2008 and week 39/2008.

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).

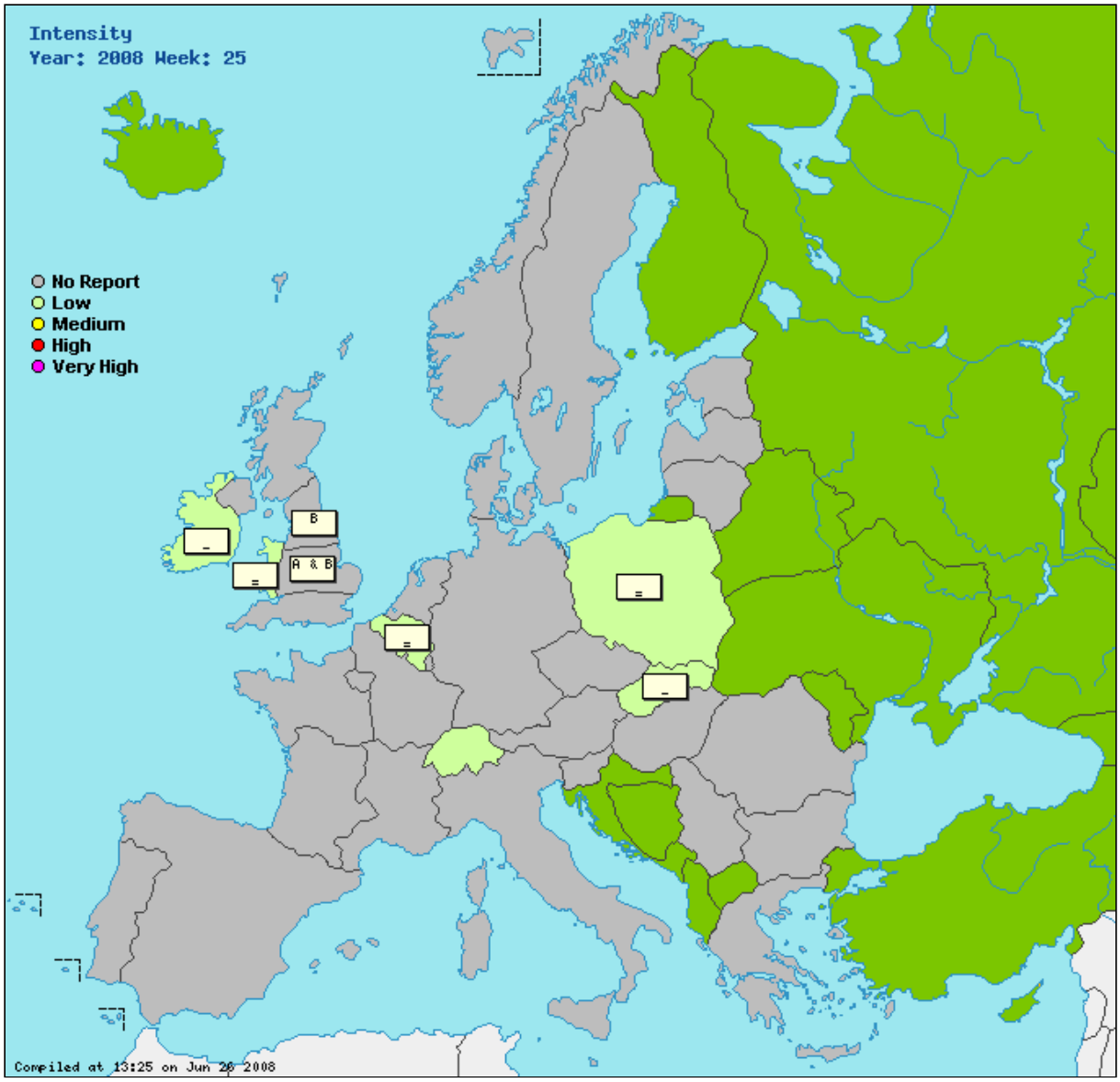
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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

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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.

Country comments (where available)

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None			0	0%	None	19.5 (graphs)	892.2 (graphs)	Click here
England		Sporadic			0	0%	Type A and B	(graphs)		Click here
Estonia		None			1	0%	None	(graphs)		Click here
Germany		None			8	12.5%	None		(graphs)	Click here
Greece					0	0%	None	(graphs)		Click here
Ireland	Low	None			0	0%	None	0.7 (graphs)	(graphs)	Click here
Netherlands					2	0%	None	(graphs)		Click here
Poland	Low	Sporadic			6	0%	None	3.3 (graphs)	(graphs)	Click here
Portugal					0	0%	None	(graphs)		Click here
Serbia					0	0%	None	(graphs)		Click here
Slovakia	Low	None						77.6 (graphs)	953.4 (graphs)	Click here
Slovenia		None			2	0%	None	(graphs)		Click here

Sweden			0	0%	None	(graphs)			Click here
Switzerland	Low	None				3.1 (graphs)			Click here
Wales	Low	None				0.9 (graphs)	(graphs)		Click here
Europe			22	9.1%					Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

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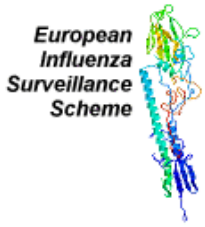
No influenza activity in Europe



Summary: Influenza virus detections are sporadic in Europe at the moment. In week 26/2008 there was only one detection of influenza virus and in week 27/2008 there were no detections. Twelve countries reported an assessment of the geographical spread of influenza activity in week 27/2008: none of them reported influenza activity.

In weeks 26-27/2008, only one influenza virus was detected in Europe: in Norway from a non-sentinel source, i.e. from a hospital or a non-sentinel physician, out of a total of 179 sentinel and non-sentinel specimens. Since week 20/2008 (i.e. 20/2008-27/2008), there have been a total of 128 influenza virus detections in Europe: 102 (79.7%) type B, 16 (12.5%) type A not subtyped, 8 (6.3%) type A subtype H3 and 2 (1.6%) type A subtype H1.

There have been no reports of unusual influenza activity in Europe at a community level (i.e. in a region or local area such as a city, county or district) since week 16/2008.

Background: The Inter-season Electronic Bulletin presents and comments influenza activity based on virological data reported to EISS. In weeks 26/2008 and 27/2008, a total of 18 countries reported virological data to EISS. The Inter-season Electronic Bulletin will be published between week 21/2008 and week 39/2008.

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).

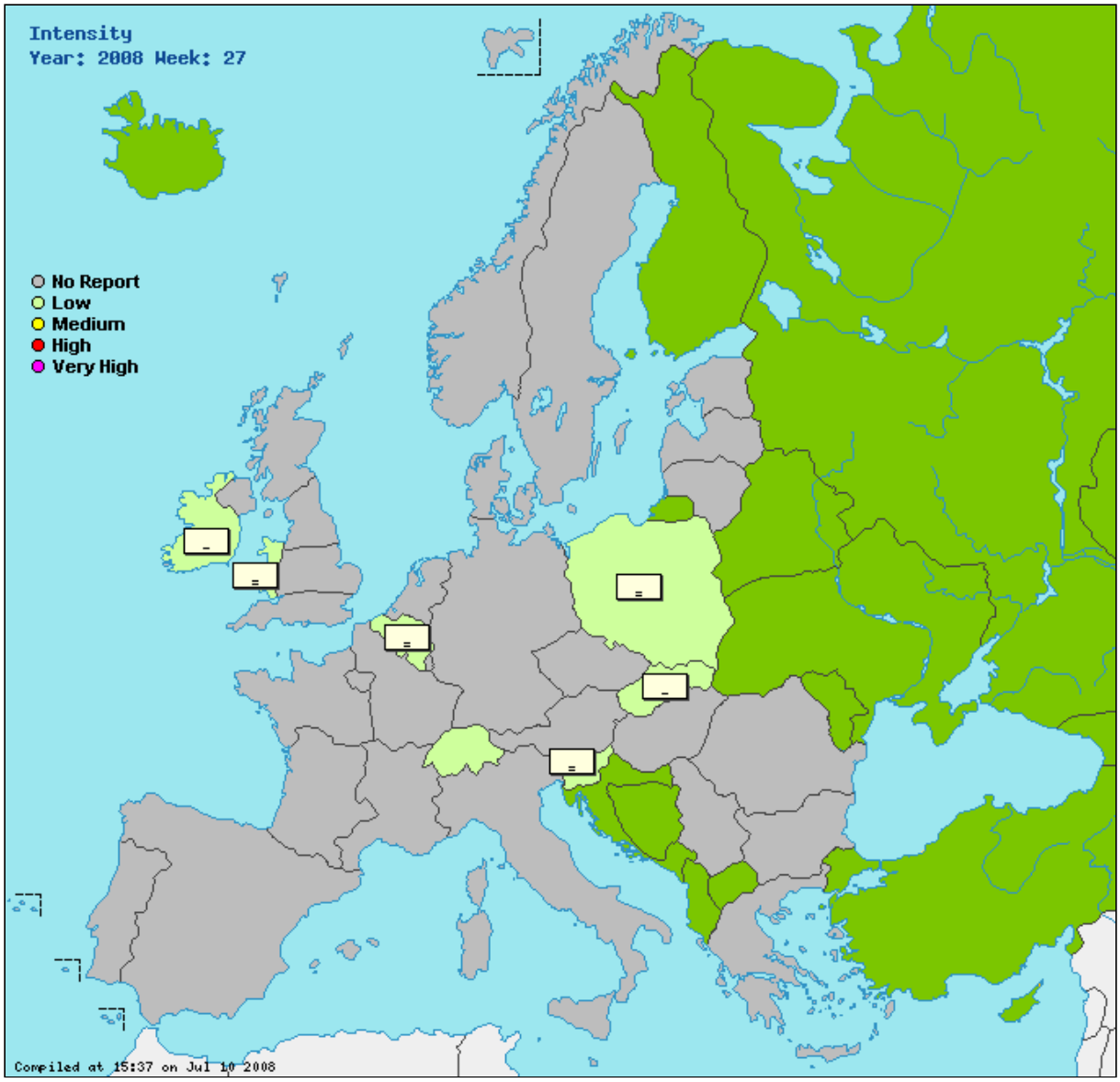
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

Low = no influenza activity or influenza at baseline levels
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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.

Country comments (where available)

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None						29.9 (graphs)	739.6 (graphs)	Click here
England		None			0	0%	None	(graphs)		Click here
Estonia		None			3	0%	None	(graphs)		Click here
Germany		None			16	0%	None		(graphs)	Click here
Hungary		None			0	0%	None	(graphs)		Click here
Ireland	Low	None			0	0%	None	0.6 (graphs)	(graphs)	Click here
Norway		None			0	0%	None	(graphs)		Click here
Poland	Low	None			1	0%	None	0.8 (graphs)	(graphs)	Click here
Portugal					0	0%	None	(graphs)		Click here
Serbia		None			0	0%	None	(graphs)		Click here
Slovakia	Low				0	0%	None	46.8 (graphs)	668.7 (graphs)	Click here
Slovenia	Low	None			0	0%	None	0.0 (graphs)	603.1 (graphs)	Click here

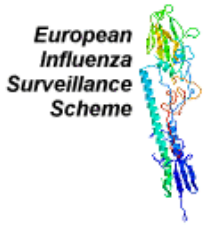
Sweden			0	0%	None	(graphs)			Click here
Switzerland	Low	None	1	0%	None	1.7 (graphs)			Click here
Wales	Low	None				0.0 (graphs)		(graphs)	Click here
Europe			23	0%					Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Single laboratory confirmed case of influenza in Europe in the last two weeks



Summary: Influenza virus detections are currently very sporadic in Europe. In week 28/2008 there was one detection and in week 29/2008 there were no detections. Eight countries reported an assessment of the geographical spread of influenza activity in week 29/2008 and all reported no influenza activity.

In weeks 28-29/2008, only one influenza virus was detected in Europe: an influenza virus B detected in Poland in a sentinel specimen (see graph and table for further details). Since week 21/2008 (i.e. 21/2008-29/2008), there have been a total of 101 influenza virus detections in Europe: 78 (77%) type B, 14 (14%) type A not subtyped, 7 (7%) type A subtype H3 and 2 (2%) type A subtype H1.

There have been no reports of unusual influenza activity in Europe at a community level (i.e. in a region or local area such as a city, county or district) since week 16/2008.

Background: The Inter-season Electronic Bulletin presents and comments influenza activity based on virological data reported to EISS. In weeks 28/2008 and 29/2008, a total of 14 countries reported virological data to EISS. The Inter-season Electronic Bulletin will be published between week 21/2008 and week 39/2008.

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).

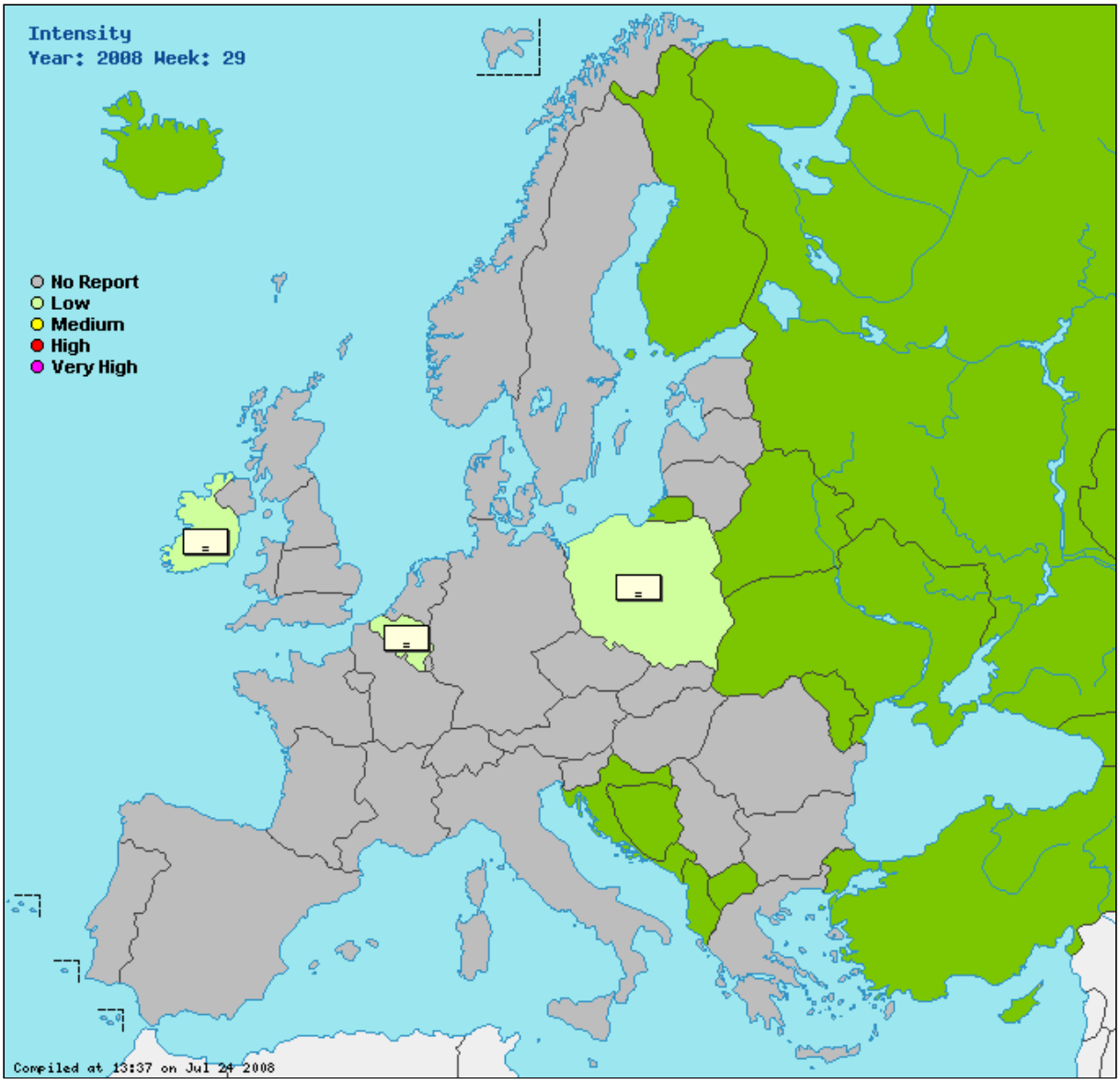
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Table and graphs (where available)

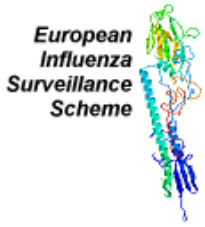
	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None						25.2 (graphs)	812.4 (graphs)	Click here
England		None			0	0%	None	(graphs)		Click here
Estonia		None			1	0%	None	(graphs)		Click here
Ireland	Low	None			0	0%	None	1.7 (graphs)	(graphs)	Click here
Poland	Low	None			1	100.0%	None	1.0 (graphs)	(graphs)	Click here
Portugal					0	0%	None	(graphs)		Click here
Serbia		None			0	0%	None	(graphs)		Click here
Slovakia		None			0	0%	None	(graphs)		Click here
Slovenia		None			0	0%	None	(graphs)		Click here
Europe					16	6.3%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

SPORADIC INFLUENZA ACTIVITY IN EUROPE



Summary: Influenza virus detections are currently sporadic in Europe. In week 30/2008 there was one detection and in week 31/2008 there were five detections. The geographical spread was reported by 13 countries: one country reported sporadic influenza activity as and 12 countries reported no influenza activity.

In weeks 30-31/2008, six influenza viruses were detected in Europe all in non sentinel samples: in week 30 in England one influenza virus type A, in week 31 in Poland one influenza virus type A, in England three type A viruses and one type B virus. Even if the numbers of specimens collected from sentinel and non-sentinel systems is approximate the same, the detections where made in non sentinel specimens and there is an increase in type A virus presence (see graph and table for further details).

There have been no reports of unusual influenza activity in Europe at a community level (i.e. in a region or local area such as a city, county or district) since week 16/2008.

Background: The Inter-season Electronic Bulletin presents and comments influenza activity based on virological data reported to EISS. In weeks 30/2008 and 31/2008, a total of 15 countries reported virological data to EISS. The Inter-season Electronic Bulletin will be published between week 21/2008 and week 39/2008.

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).

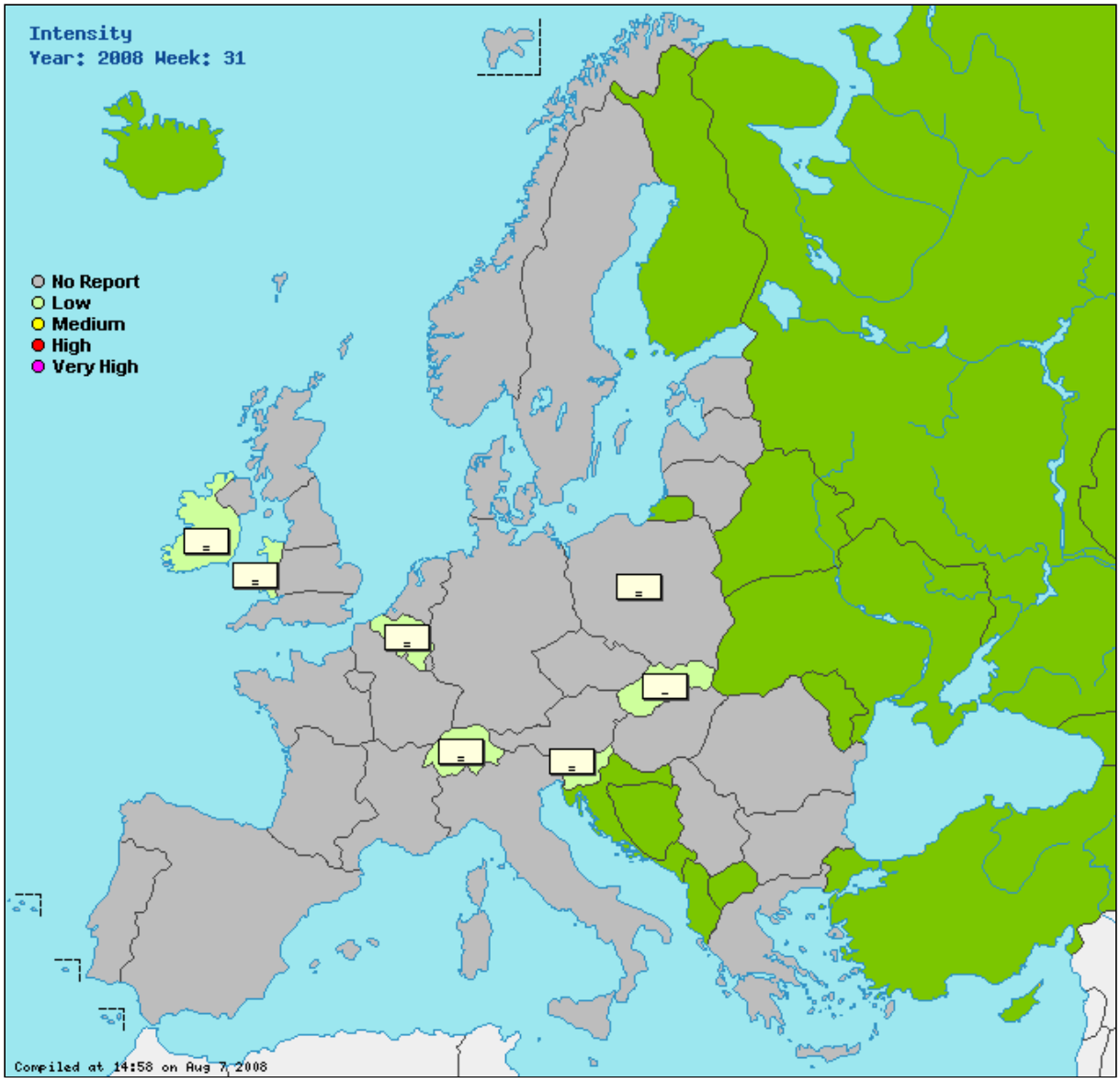
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

Low = no influenza activity or influenza at baseline levels
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Very high = particularly severe levels of influenza 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.

Country comments (where available)

Norway
No influenza virus detections since one case of influenza B was reported from Northern Norway in week 29. In Northern Norway, low-grade but continuous sporadic circulation had persisted until then.
Switzerland
No influenza viruses detcted since the week 17.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None			0	0%	None	5.7 (graphs)	495.5 (graphs)	Click here
England		None			0	0%	None	(graphs)		Click here
Estonia		None			0	0%	None	(graphs)		Click here
France					4	0%	None		(graphs)	Click here
Germany		None			7	0%	None		(graphs)	Click here
Greece		None						6.9 (graphs)	(graphs)	Click here
Ireland	Low	None			1	0%	None	2.1 (graphs)	(graphs)	Click here
Netherlands					0	0%	None	(graphs)		Click here

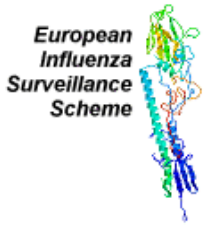
Norway		None	0	0%	None		(graphs)		Click here
Poland		Sporadic	0	0%	None	1.1	(graphs)	(graphs)	Click here
Portugal			0	0%	None		(graphs)		Click here
Serbia		None	0	0%	None		(graphs)		Click here
Slovakia	Low	None				42.1	(graphs)	510.8 (graphs)	Click here
Slovenia	Low	None	0	0%	None	0.0	(graphs)	430.7 (graphs)	Click here
Sweden			0	0%	None		(graphs)		Click here
Switzerland	Low	None	1	0%	None	2.1	(graphs)		Click here
Wales	Low	None				0.0	(graphs)	(graphs)	Click here
Europe			17	0%					Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Sporadic laboratory confirmed cases of influenza in Europe



Summary: Influenza virus detections occur sporadically in Europe. While no detections were reported in week 32/2008, there were two detections of influenza virus in week 33/2008. Fourteen countries reported an assessment of the geographical spread of influenza activity in week 33/2008 of which thirteen reported no influenza activity and Switzerland reported sporadic activity.

In weeks 32-33/2008, only two influenza viruses were detected in Europe: an influenza A(H1N1) virus in the Netherlands and an influenza B virus detected in Switzerland. Since week 21/2008 (i.e. 21/2008-33/2008), there have been a total of 118 influenza virus detections in Europe: 83 (70%) type B, 19 (16%) type A not subtyped, 11 (9%) type A subtype H3 and 5 (4%) type A subtype H1. The majority of cases (91%) in the weeks 21-33/2008 were reported from non-sentinel sources. The proportion of influenza B was quite substantial at the end of the 2007/2008 season but has now gradually diminished (see also the graph for Europe).

There have been no reports of unusual influenza activity in Europe at a community level (i.e. in a region or local area such as a city, county or district) since week 16/2008.

Background: The Inter-season Electronic Bulletin presents and comments influenza activity based on virological data reported to EISS. In weeks 32/2008 and 33/2008, a total of 16 countries reported virological data to EISS. The Inter-season Electronic Bulletin will be published between week 21/2008 and week 39/2008.

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).

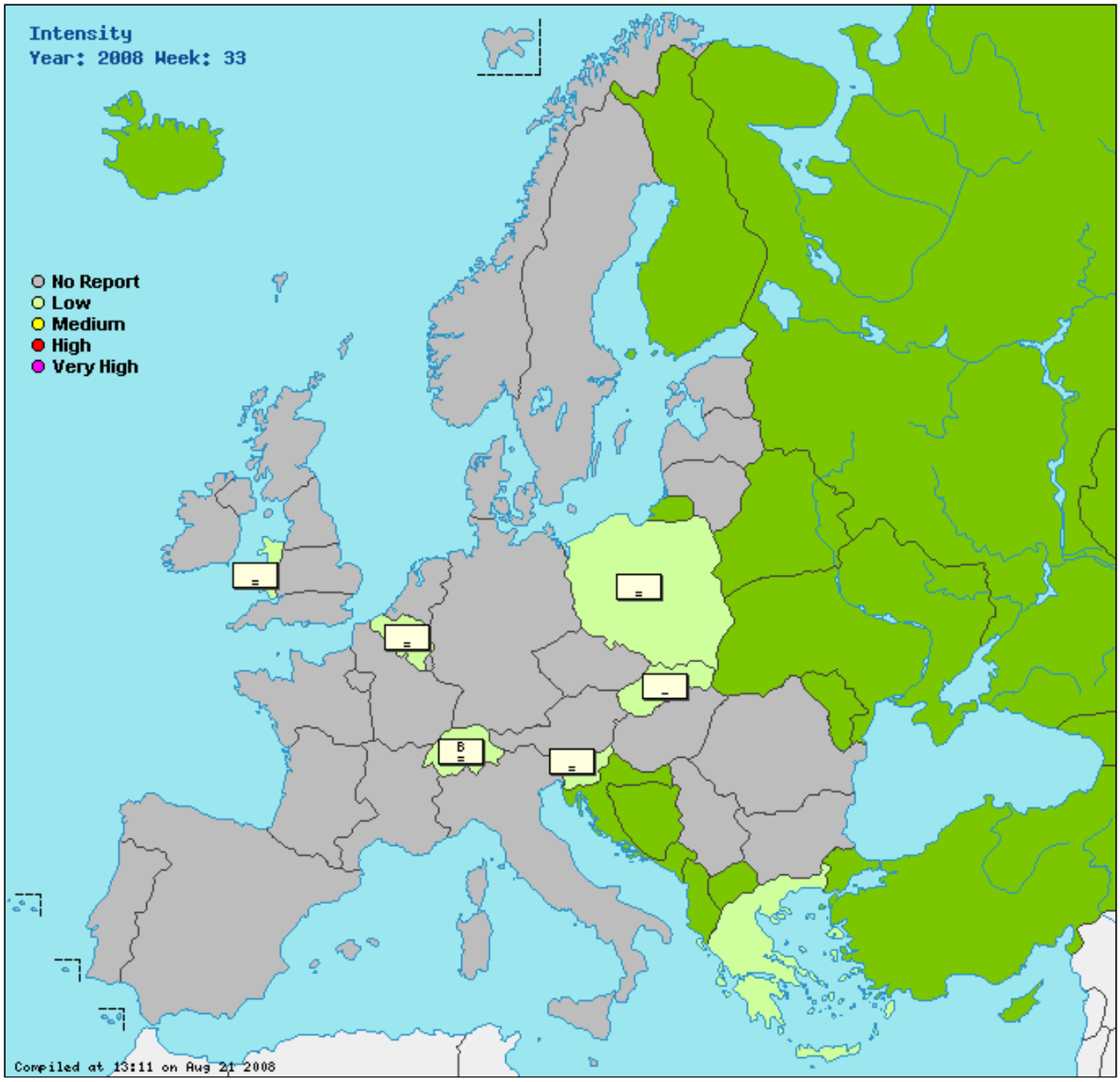
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

Low = no influenza activity or influenza at baseline levels
Medium = usual levels of influenza activity
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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.

Country comments (where available)

Switzerland
No activity observed in Sentinel network. One non-sentinel specimen was detected influenza B in a 17 years old girl from North of the country.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None			0	0%	None	10.8 (graphs)	470.4 (graphs)	Click here
England		None			0	0%	None	(graphs)		Click here
Estonia		None			0	0%	None	(graphs)		Click here
Germany		None			3	0%	None		(graphs)	Click here
Greece	Low	None						19.8 (graphs)	(graphs)	Click here
Ireland		None			0	0%	None	(graphs)		Click here
Netherlands					1	0%	None	(graphs)		Click here
Norway		None			0	0%	None	(graphs)		Click here
Poland	Low	None			0	0%	None	0.2 (graphs)	(graphs)	Click here
Portugal		None			0	0%	None	(graphs)		Click here

Serbia		None	0	0%	None	(graphs)		Click here
Slovakia	Low	None				38.8 (graphs)	504.0 (graphs)	Click here
Slovenia	Low	None	0	0%	None	0.0 (graphs)	239.8 (graphs)	Click here
Switzerland	Low	Sporadic	0	0%	Type B	0.7 (graphs)		Click here
Wales	Low	None				0.0 (graphs)	(graphs)	Click here
Europe			4	0%				Click here

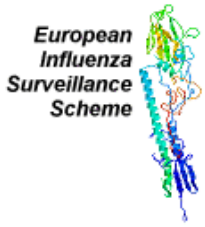
Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Week 35 : 25/08/2008-31/08/2008 05 September 2008, Issue N° 271

Sporadic laboratory confirmed cases of influenza in Europe



Summary: Influenza virus detections occur sporadically in Europe. One detection was reported in week 34/2008, and another one in week 35/2008. Out of 13 countries reporting the geographical spread indicator in week 34-35/2008, 12 countries reported no influenza activity and Switzerland reported sporadic activity.

In week 34-35/2008, only two influenza viruses were detected in Europe out of a total of 123 investigated specimens: one influenza A not subtyped virus in the Poland from a sentinel specimen and one influenza A not subtyped virus detected in Switzerland from a non-sentinel specimen.

There have been no reports of unusual influenza activity in Europe at a community level (i.e. in a region or local area such as a city, county or district) since week 16/2008.

Background: The Inter-season Electronic Bulletin presents and comments influenza activity based on virological data reported to EISS. In weeks 34/2008 and 35/2008, a total of 15 countries reported virological data to EISS. The Inter-season Electronic Bulletin will be published between week 21/2008 and week 39/2008.

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).

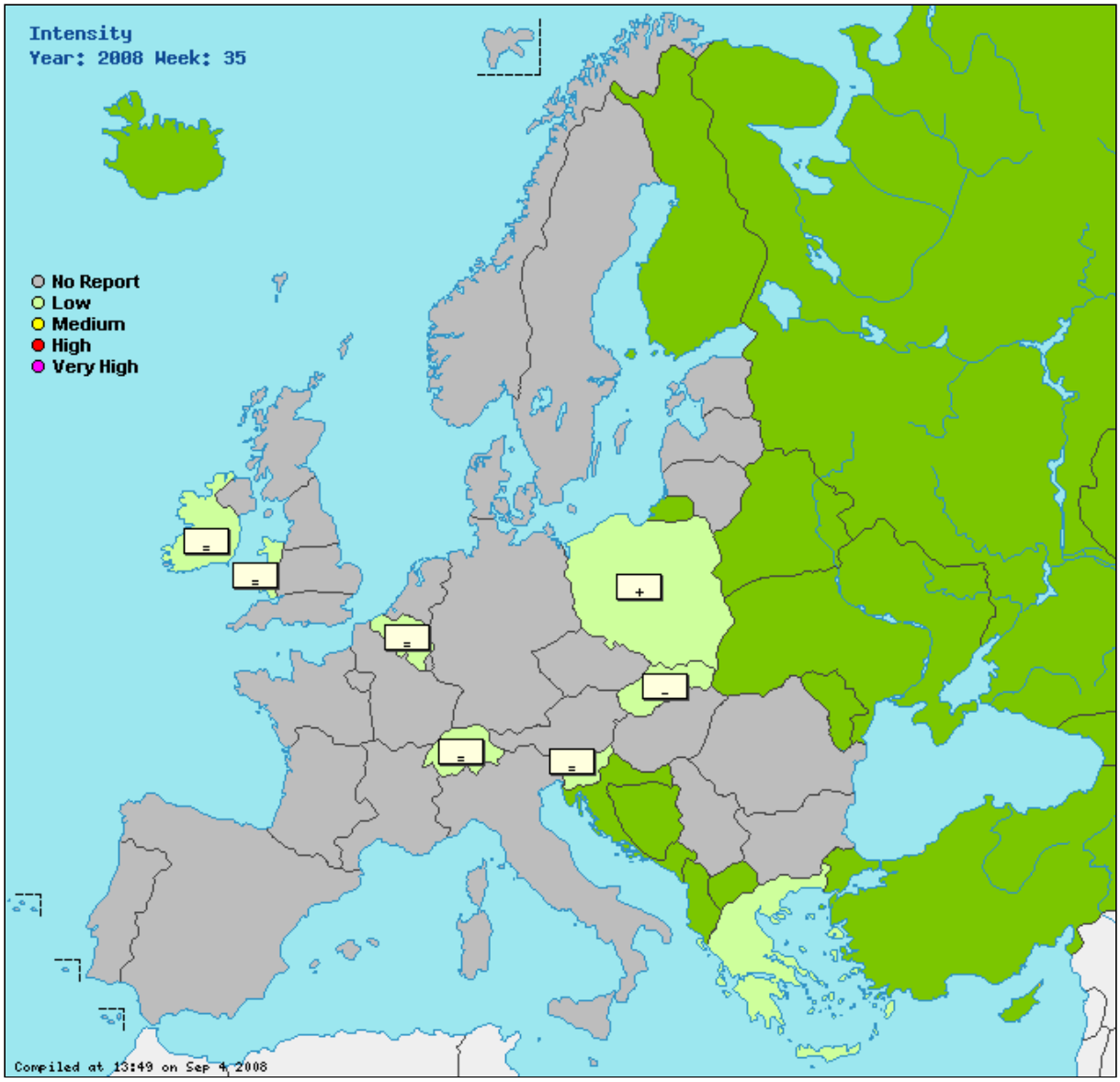
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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

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Country comments (where available)

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None			0	0%	None	9.7 (graphs)	667.4 (graphs)	Click here
England		None			1	0%	None	(graphs)		Click here
Estonia		None			0	0%	None	(graphs)		Click here
Greece	Low	None						16.0 (graphs)	(graphs)	Click here
Ireland	Low	None			0	0%	None	2.2 (graphs)	(graphs)	Click here
Netherlands					5	0%	None	(graphs)		Click here
Norway		None			0	0%	None	(graphs)		Click here
Poland	Low	None			0	0%	None	0.4 (graphs)	(graphs)	Click here
Portugal		None			0	0%	None	(graphs)		Click here
Slovakia	Low	None			0	0%	None	28.4 (graphs)	463.5 (graphs)	Click here
Slovenia	Low	None			0	0%	None	0.0 (graphs)	525.2 (graphs)	Click here
Sweden		None			0	0%	None	(graphs)		Click here

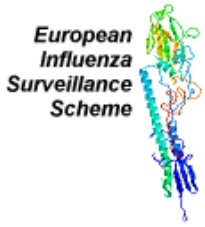
Switzerland	Low	Sporadic	0	0%	None	1.3 (graphs)		Click here
Wales	Low	None				0.0 (graphs)	(graphs)	Click here
Europe			371	0%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

VERY SPORADIC INFLUENZA ACTIVITY IN EUROPE



Summary: Influenza virus detections occur very sporadically in Europe. In week 36/2008, there was no detection and in week 37 there was only one detection reported. Out of 11 countries reporting the geographical spread indicator in week 36-37/2008, 10 countries reported no influenza activity and England reported sporadic activity.

In week 36-37/2008, Out of a total of 137 investigated specimens in Europe only one influenza virus (type A not subtyped) was detected in England from a non-sentinel specimen.

There have been no reports of unusual influenza activity in Europe at a community level (i.e. in a region or local area such as a city, county or district) since week 16/2008.

Background: The Inter-season Electronic Bulletin presents and comments influenza activity based on virological data reported to EISS. In weeks 36/2008 and 37/2008, a total of 14 countries reported virological data to EISS. The Inter-season Electronic Bulletin will be published between week 21/2008 and week 39/2008.

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).

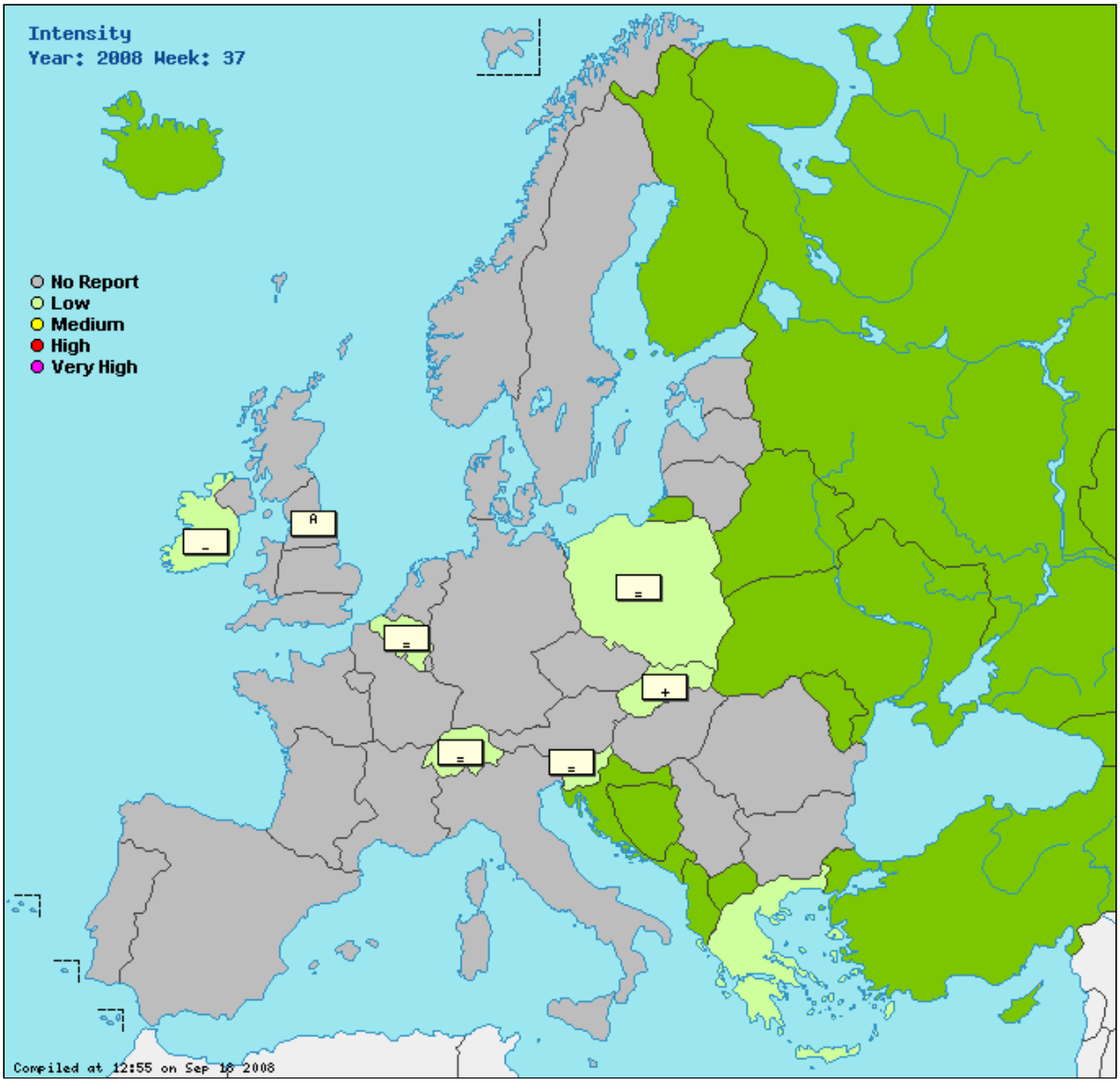
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None						23.8 (graphs)	1096.9 (graphs)	Click here
England		Sporadic			0	0%	Type A	(graphs)		Click here
Estonia		None			0	0%	None	(graphs)		Click here
Germany		None			10	0%	None		(graphs)	Click here
Greece	Low	None			0	0%	None	28.4 (graphs)	(graphs)	Click here
Ireland	Low	None			0	0%	None	2.5 (graphs)	(graphs)	Click here
Netherlands					2	0%	None	(graphs)		Click here
Poland	Low	None			0	0%	None	9.7 (graphs)	(graphs)	Click here
Portugal					0	0%	None	(graphs)		Click here
Serbia		None			0	0%	None	(graphs)		Click here
Slovakia	Low				0	0%	None	70.8 (graphs)	793.8 (graphs)	Click here
Slovenia	Low	None			1	0%	None	47.4 (graphs)	712.5 (graphs)	Click here

Sweden		None	0	0%	None	(graphs)	Click here
Switzerland	Low	None				2.5 (graphs)	Click here
Europe			13	0%			Click here

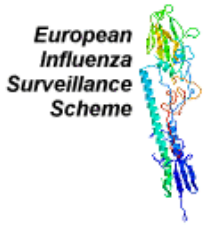
Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Week 39 : 22/09/2008-28/09/2008 03 October 2008, Issue N° 273

SPORADIC INFLUENZA ACTIVITY IN EUROPE



Summary: Influenza virus detections occur very sporadically in Europe. In week 38/2008, there were two detections and in week 39 there were nine detections reported. Out of nine countries reporting the geographical spread indicator in week 38-39/2008, all reported no influenza activity

In weeks 38-39/2008, 11 influenza viruses were detected in Europe out of a total of 244 investigated specimens: one influenza A not subtyped virus each in Poland, Spain, Switzerland and Sweden, respectively, and four in England. One type A(H3) in Germany, one type A(H3N2) and one type B in Sweden. All detections were from non-sentinel specimens. As usual for this time of the year, a number of the influenza cases are travellers who have been abroad.

There have been no reports of unusual influenza activity in Europe at community level (i.e. in a region or local area such as a city, county or district) since week 16/2008.

Background: The Inter-season Electronic Bulletin presents and comments influenza activity based on virological data reported to EISS. In weeks 38/2008 and 39/2008, a total of 16 countries reported virological data to EISS. The Inter-season Electronic Bulletin will be published between week 21/2008 and week 39/2008.

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).

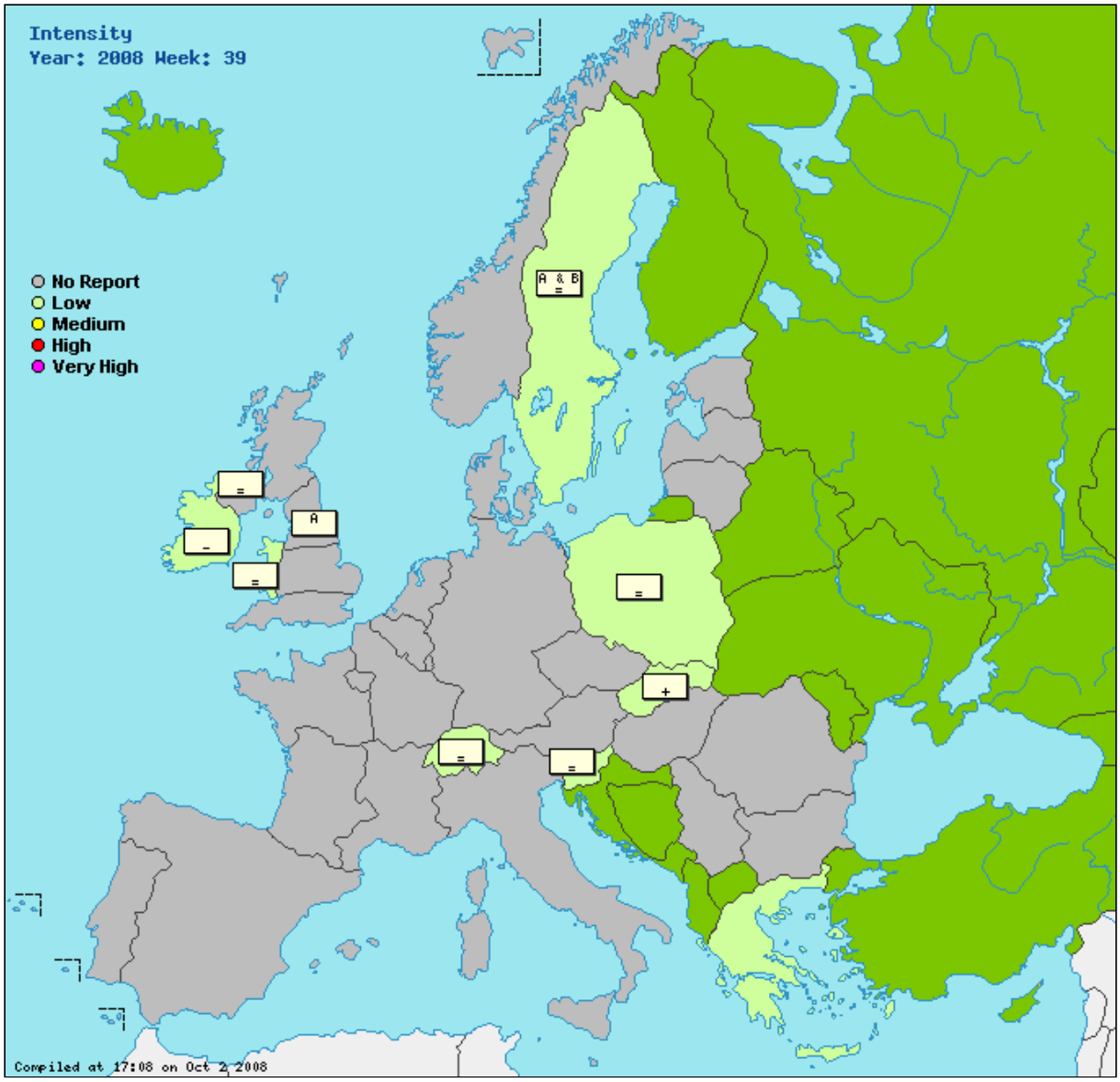
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Sweden

The patient with Influenza A has been in London, the Influenza B patient in Senegal.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
England					0	0%	None	(graphs)		Click here
Estonia					1	0%	None	(graphs)		Click here
Germany					17	0%	None		(graphs)	Click here
Greece	Low	None						56.1 (graphs)	(graphs)	Click here
Ireland	Low	None			1	0%	None	5.3 (graphs)	(graphs)	Click here
Netherlands					5	0%	None	(graphs)		Click here
Northern Ireland		None			3	0%	None	13.7 (graphs)	(graphs)	Click here
Norway					0	0%	None	(graphs)		Click here
Poland	Low	None			5	0%	None	41.2 (graphs)	(graphs)	Click here
Serbia					0	0%	None	(graphs)		Click here
Slovakia	Low	None			0	0%	None	173.4 (graphs)	1599.8 (graphs)	Click here

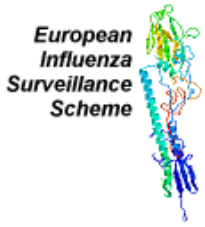
Slovenia	Low	None	5	0%	None	0.0 (graphs)	1177.1 (graphs)	Click here
Sweden	Low	None	0	0%	Type A and B	(graphs)	(graphs)	Click here
Switzerland	Low	None				4.5 (graphs)		Click here
Wales	Low	None				(graphs)	(graphs)	Click here
Europe			39	0%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Tamara Meerhoff, Liesbeth Meuwissen, Adam Meijer, John Paget, Koos van der Velden). It was reviewed by Dr. JosÃ© Marinho FalcÃ£o (National Institute of Health, Lisbon, Portugal), Dr. Jan Kyncl (National Institute of Public Health, Prague, Czech Republic) and Dr. Jan de Jong (Erasmus Medical Centre, Rotterdam, the Netherlands) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

No influenza activity in Europe



Summary: Influenza virus detections are sporadic in Europe at the moment. In week 26/2008 there was only one detection of influenza virus and in week 27/2008 there were no detections. Twelve countries reported an assessment of the geographical spread of influenza activity in week 27/2008: none of them reported influenza activity.

In weeks 26-27/2008, only one influenza virus was detected in Europe: in Norway from a non-sentinel source, i.e. from a hospital or a non-sentinel physician, out of a total of 179 sentinel and non-sentinel specimens. Since week 20/2008 (i.e. 20/2008-27/2008), there have been a total of 128 influenza virus detections in Europe: 102 (79.7%) type B, 16 (12.5%) type A not subtyped, 8 (6.3%) type A subtype H3 and 2 (1.6%) type A subtype H1.

There have been no reports of unusual influenza activity in Europe at a community level (i.e. in a region or local area such as a city, county or district) since week 16/2008.

Background: The Inter-season Electronic Bulletin presents and comments influenza activity based on virological data reported to EISS. In weeks 26/2008 and 27/2008, a total of 18 countries reported virological data to EISS. The Inter-season Electronic Bulletin will be published between week 21/2008 and week 39/2008.

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).

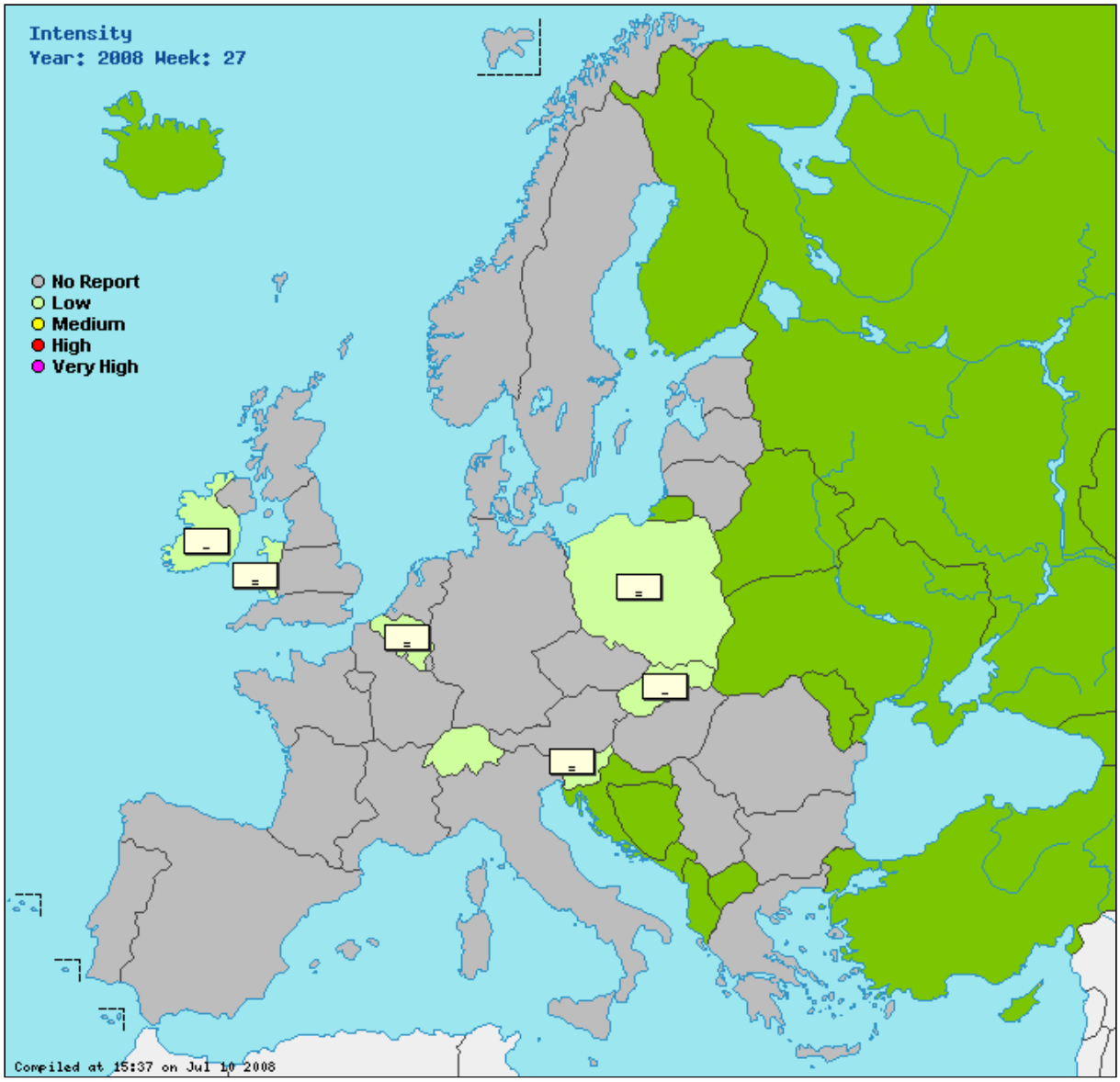
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None						29.9 (graphs)	739.6 (graphs)	Click here
England		None			0	0%	None	(graphs)		Click here
Estonia		None			3	0%	None	(graphs)		Click here
Germany		None			16	0%	None		(graphs)	Click here
Hungary		None			0	0%	None	(graphs)		Click here
Ireland	Low	None			0	0%	None	0.6 (graphs)	(graphs)	Click here
Norway		None			0	0%	None	(graphs)		Click here
Poland	Low	None			1	0%	None	0.8 (graphs)	(graphs)	Click here
Portugal					0	0%	None	(graphs)		Click here
Serbia		None			0	0%	None	(graphs)		Click here
Slovakia	Low				0	0%	None	46.8 (graphs)	668.7 (graphs)	Click here
Slovenia	Low	None			0	0%	None	0.0 (graphs)	603.1 (graphs)	Click here

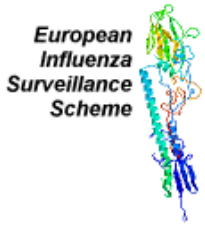
Sweden			0	0%	None	(graphs)			Click here
Switzerland	Low	None	1	0%	None	1.7 (graphs)			Click here
Wales	Low	None				0.0 (graphs)		(graphs)	Click here
Europe			23	0%					Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Single laboratory confirmed case of influenza in Europe in the last two weeks



Summary: Influenza virus detections are currently very sporadic in Europe. In week 28/2008 there was one detection and in week 29/2008 there were no detections. Eight countries reported an assessment of the geographical spread of influenza activity in week 29/2008 and all reported no influenza activity.

In weeks 28-29/2008, only one influenza virus was detected in Europe: an influenza virus B detected in Poland in a sentinel specimen (see graph and table for further details). Since week 21/2008 (i.e. 21/2008-29/2008), there have been a total of 101 influenza virus detections in Europe: 78 (77%) type B, 14 (14%) type A not subtyped, 7 (7%) type A subtype H3 and 2 (2%) type A subtype H1.

There have been no reports of unusual influenza activity in Europe at a community level (i.e. in a region or local area such as a city, county or district) since week 16/2008.

Background: The Inter-season Electronic Bulletin presents and comments influenza activity based on virological data reported to EISS. In weeks 28/2008 and 29/2008, a total of 14 countries reported virological data to EISS. The Inter-season Electronic Bulletin will be published between week 21/2008 and week 39/2008.

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).

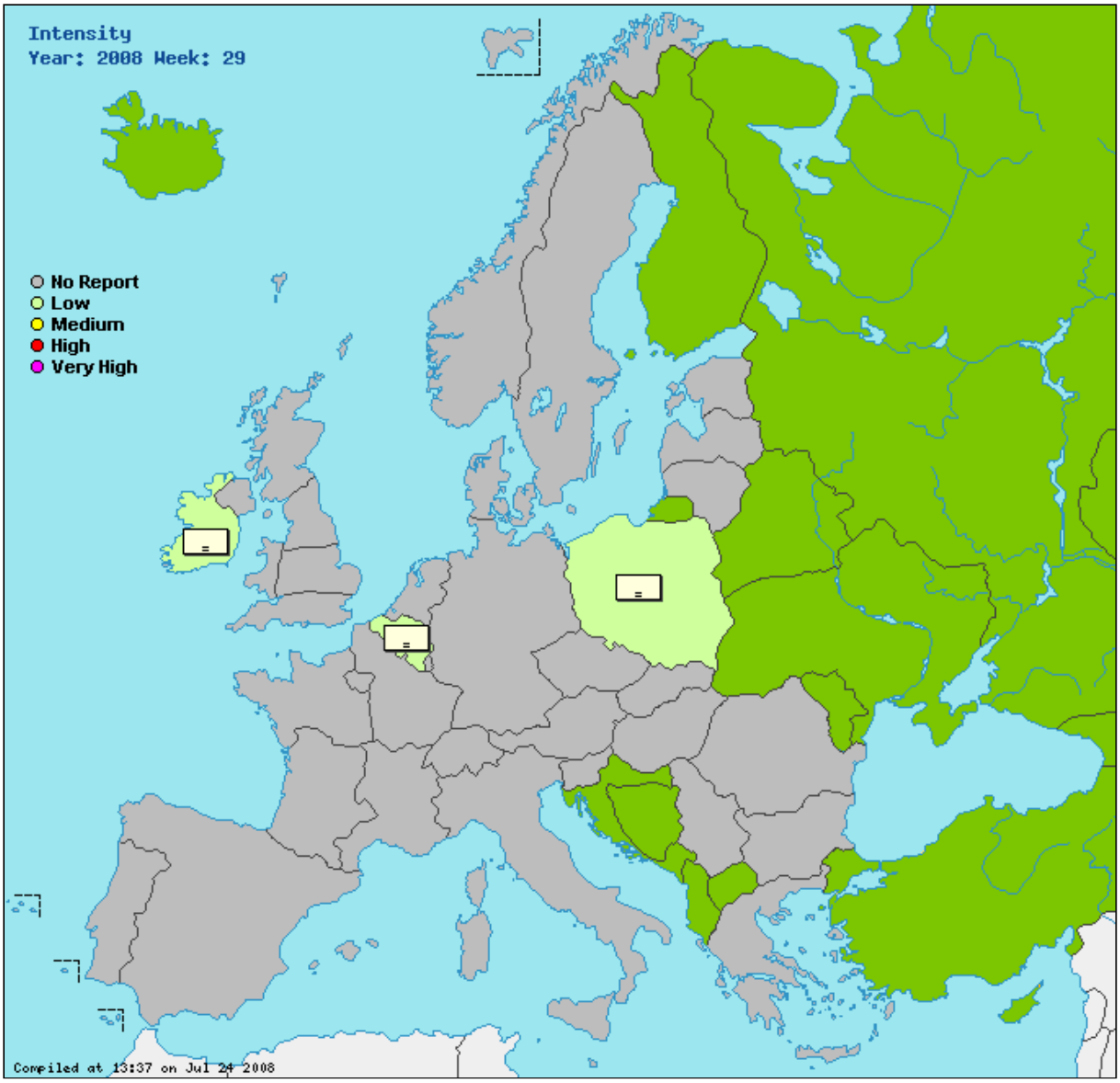
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

Low = no influenza activity or influenza at baseline levels
Medium = usual levels of influenza activity
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Very high = particularly severe levels of influenza 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.

Country comments (where available)

Table and graphs (where available)

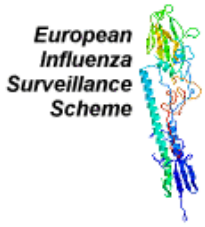
	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None						25.2 (graphs)	812.4 (graphs)	Click here
England		None			0	0%	None	(graphs)		Click here
Estonia		None			1	0%	None	(graphs)		Click here
Ireland	Low	None			0	0%	None	1.7 (graphs)	(graphs)	Click here
Poland	Low	None			1	100.0%	None	1.0 (graphs)	(graphs)	Click here
Portugal					0	0%	None	(graphs)		Click here
Serbia		None			0	0%	None	(graphs)		Click here
Slovakia		None			0	0%	None	(graphs)		Click here
Slovenia		None			0	0%	None	(graphs)		Click here
Europe					16	6.3%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

SPORADIC INFLUENZA ACTIVITY IN EUROPE



Summary: Influenza virus detections are currently sporadic in Europe. In week 30/2008 there was one detection and in week 31/2008 there were five detections. The geographical spread was reported by 13 countries: one country reported sporadic influenza activity as and 12 countries reported no influenza activity.

In weeks 30-31/2008, six influenza viruses were detected in Europe all in non sentinel samples: in week 30 in England one influenza virus type A, in week 31 in Poland one influenza virus type A, in England three type A viruses and one type B virus. Even if the numbers of specimens collected from sentinel and non-sentinel systems is approximate the same, the detections where made in non sentinel specimens and there is an increase in type A virus presence (see graph and table for further details).

There have been no reports of unusual influenza activity in Europe at a community level (i.e. in a region or local area such as a city, county or district) since week 16/2008.

Background: The Inter-season Electronic Bulletin presents and comments influenza activity based on virological data reported to EISS. In weeks 30/2008 and 31/2008, a total of 15 countries reported virological data to EISS. The Inter-season Electronic Bulletin will be published between week 21/2008 and week 39/2008.

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).

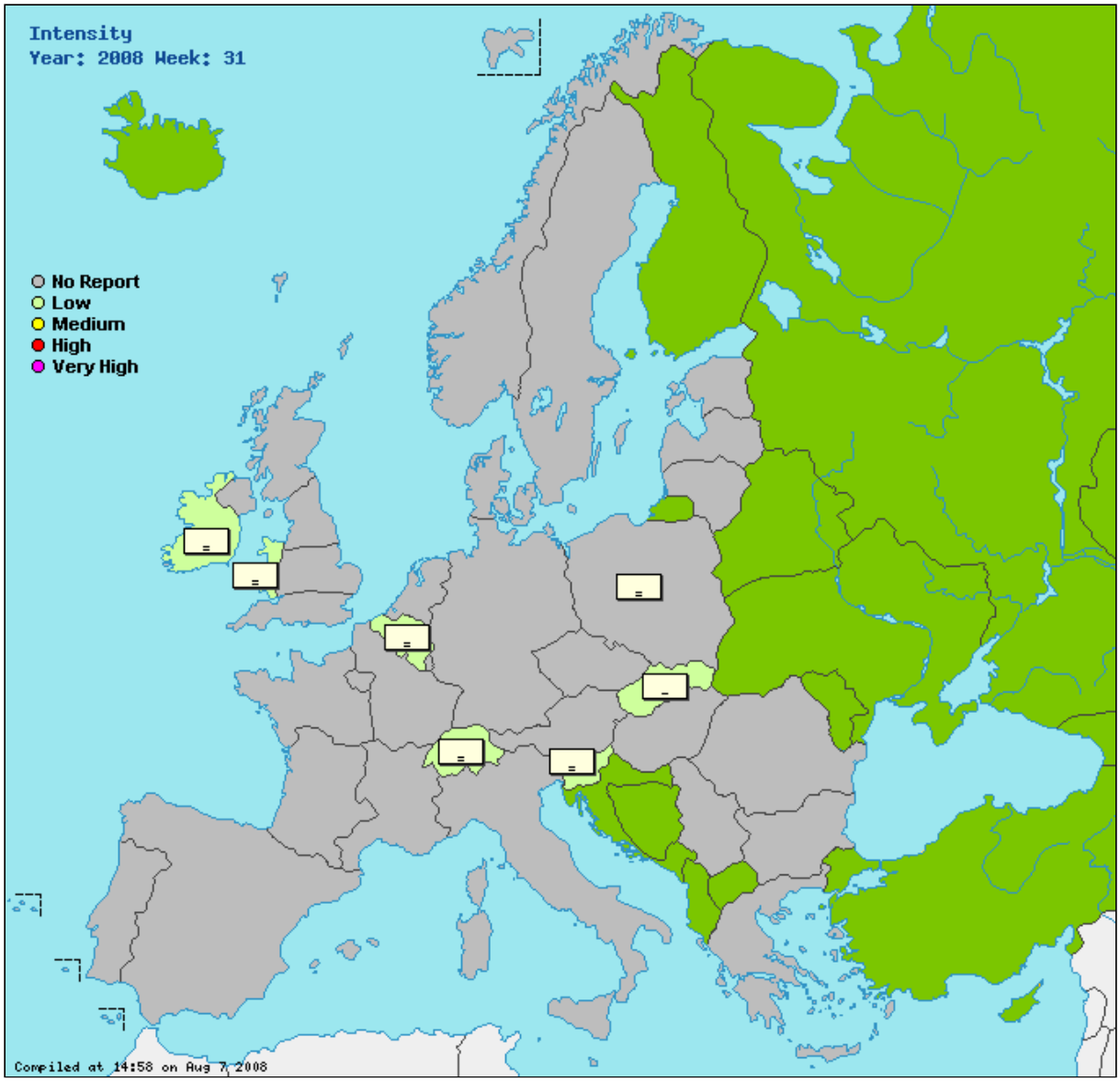
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Norway
No influenza virus detections since one case of influenza B was reported from Northern Norway in week 29. In Northern Norway, low-grade but continuous sporadic circulation had persisted until then.
Switzerland
No influenza viruses detcted since the week 17.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None			0	0%	None	5.7 (graphs)	495.5 (graphs)	Click here
England		None			0	0%	None	(graphs)		Click here
Estonia		None			0	0%	None	(graphs)		Click here
France					4	0%	None		(graphs)	Click here
Germany		None			7	0%	None		(graphs)	Click here
Greece		None						6.9 (graphs)	(graphs)	Click here
Ireland	Low	None			1	0%	None	2.1 (graphs)	(graphs)	Click here
Netherlands					0	0%	None	(graphs)		Click here

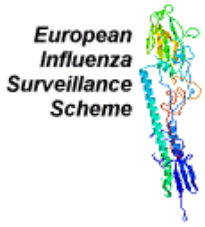
Norway		None	0	0%	None		(graphs)		Click here
Poland		Sporadic	0	0%	None	1.1	(graphs)	(graphs)	Click here
Portugal			0	0%	None		(graphs)		Click here
Serbia		None	0	0%	None		(graphs)		Click here
Slovakia	Low	None				42.1	(graphs)	510.8 (graphs)	Click here
Slovenia	Low	None	0	0%	None	0.0	(graphs)	430.7 (graphs)	Click here
Sweden			0	0%	None		(graphs)		Click here
Switzerland	Low	None	1	0%	None	2.1	(graphs)		Click here
Wales	Low	None				0.0	(graphs)	(graphs)	Click here
Europe			17	0%					Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Sporadic laboratory confirmed cases of influenza in Europe



Summary: Influenza virus detections occur sporadically in Europe. While no detections were reported in week 32/2008, there were two detections of influenza virus in week 33/2008. Fourteen countries reported an assessment of the geographical spread of influenza activity in week 33/2008 of which thirteen reported no influenza activity and Switzerland reported sporadic activity.

In weeks 32-33/2008, only two influenza viruses were detected in Europe: an influenza A(H1N1) virus in the Netherlands and an influenza B virus detected in Switzerland. Since week 21/2008 (i.e. 21/2008-33/2008), there have been a total of 118 influenza virus detections in Europe: 83 (70%) type B, 19 (16%) type A not subtyped, 11 (9%) type A subtype H3 and 5 (4%) type A subtype H1. The majority of cases (91%) in the weeks 21-33/2008 were reported from non-sentinel sources. The proportion of influenza B was quite substantial at the end of the 2007/2008 season but has now gradually diminished (see also the graph for Europe).

There have been no reports of unusual influenza activity in Europe at a community level (i.e. in a region or local area such as a city, county or district) since week 16/2008.

Background: The Inter-season Electronic Bulletin presents and comments influenza activity based on virological data reported to EISS. In weeks 32/2008 and 33/2008, a total of 16 countries reported virological data to EISS. The Inter-season Electronic Bulletin will be published between week 21/2008 and week 39/2008.

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).

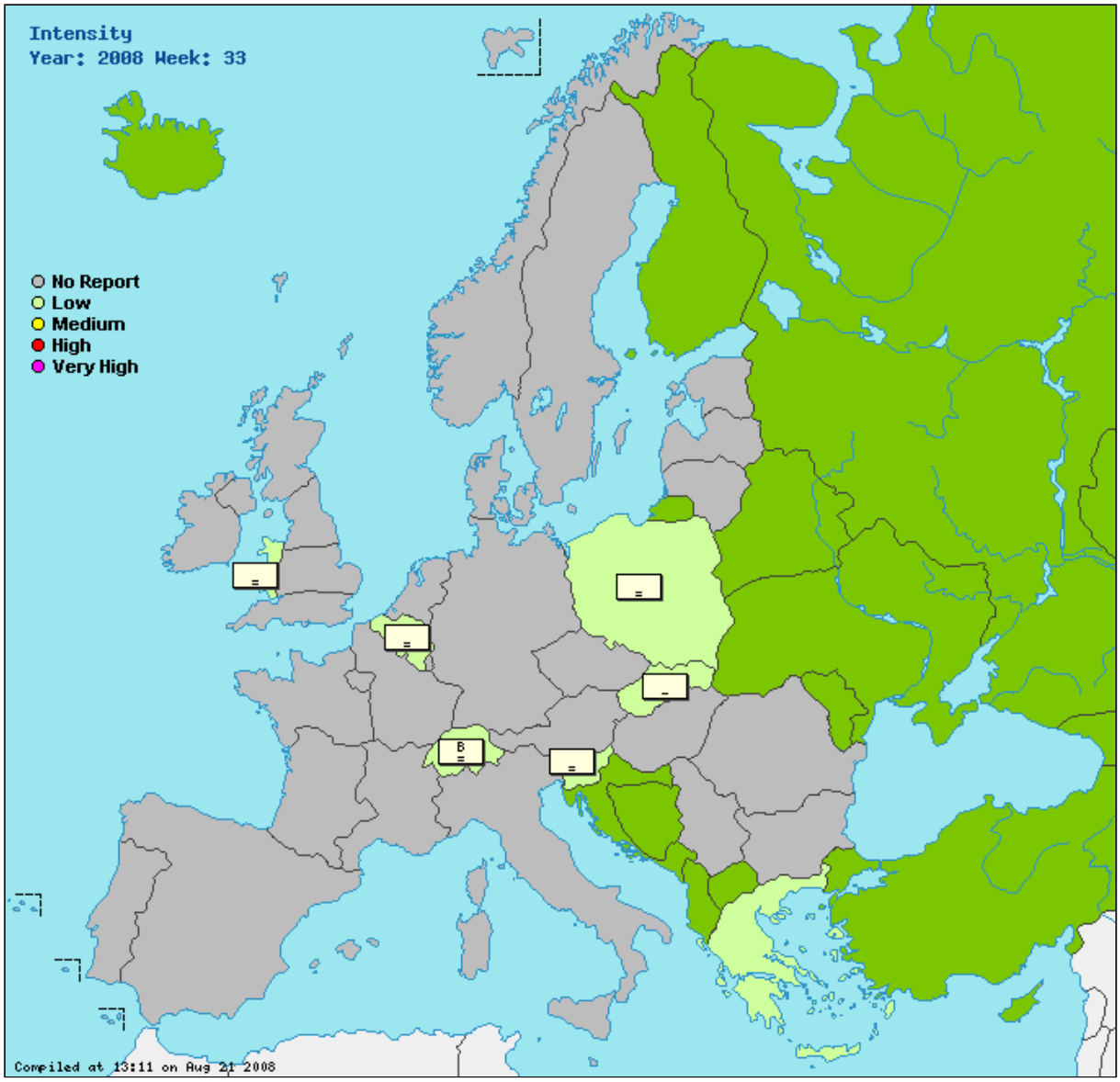
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

= : stable clinical activity
+ : increasing clinical activity
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Low = no influenza activity or influenza at baseline levels
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Very high = particularly severe levels of influenza 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.

Country comments (where available)

Switzerland
No activity observed in Sentinel network. One non-sentinel specimen was detected influenza B in a 17 years old girl from North of the country.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None			0	0%	None	10.8 (graphs)	470.4 (graphs)	Click here
England		None			0	0%	None	(graphs)		Click here
Estonia		None			0	0%	None	(graphs)		Click here
Germany		None			3	0%	None		(graphs)	Click here
Greece	Low	None						19.8 (graphs)	(graphs)	Click here
Ireland		None			0	0%	None	(graphs)		Click here
Netherlands					1	0%	None	(graphs)		Click here
Norway		None			0	0%	None	(graphs)		Click here
Poland	Low	None			0	0%	None	0.2 (graphs)	(graphs)	Click here
Portugal		None			0	0%	None	(graphs)		Click here

Serbia		None	0	0%	None	(graphs)		Click here
Slovakia	Low	None				38.8 (graphs)	504.0 (graphs)	Click here
Slovenia	Low	None	0	0%	None	0.0 (graphs)	239.8 (graphs)	Click here
Switzerland	Low	Sporadic	0	0%	Type B	0.7 (graphs)		Click here
Wales	Low	None				0.0 (graphs)	(graphs)	Click here
Europe			4	0%				Click here

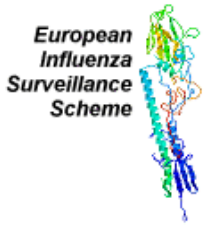
Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Week 35 : 25/08/2008-31/08/2008 05 September 2008, Issue N° 271

Sporadic laboratory confirmed cases of influenza in Europe



Summary: Influenza virus detections occur sporadically in Europe. One detection was reported in week 34/2008, and another one in week 35/2008. Out of 13 countries reporting the geographical spread indicator in week 34-35/2008, 12 countries reported no influenza activity and Switzerland reported sporadic activity.

In week 34-35/2008, only two influenza viruses were detected in Europe out of a total of 123 investigated specimens: one influenza A not subtyped virus in the Poland from a sentinel specimen and one influenza A not subtyped virus detected in Switzerland from a non-sentinel specimen.

There have been no reports of unusual influenza activity in Europe at a community level (i.e. in a region or local area such as a city, county or district) since week 16/2008.

Background: The Inter-season Electronic Bulletin presents and comments influenza activity based on virological data reported to EISS. In weeks 34/2008 and 35/2008, a total of 15 countries reported virological data to EISS. The Inter-season Electronic Bulletin will be published between week 21/2008 and week 39/2008.

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).

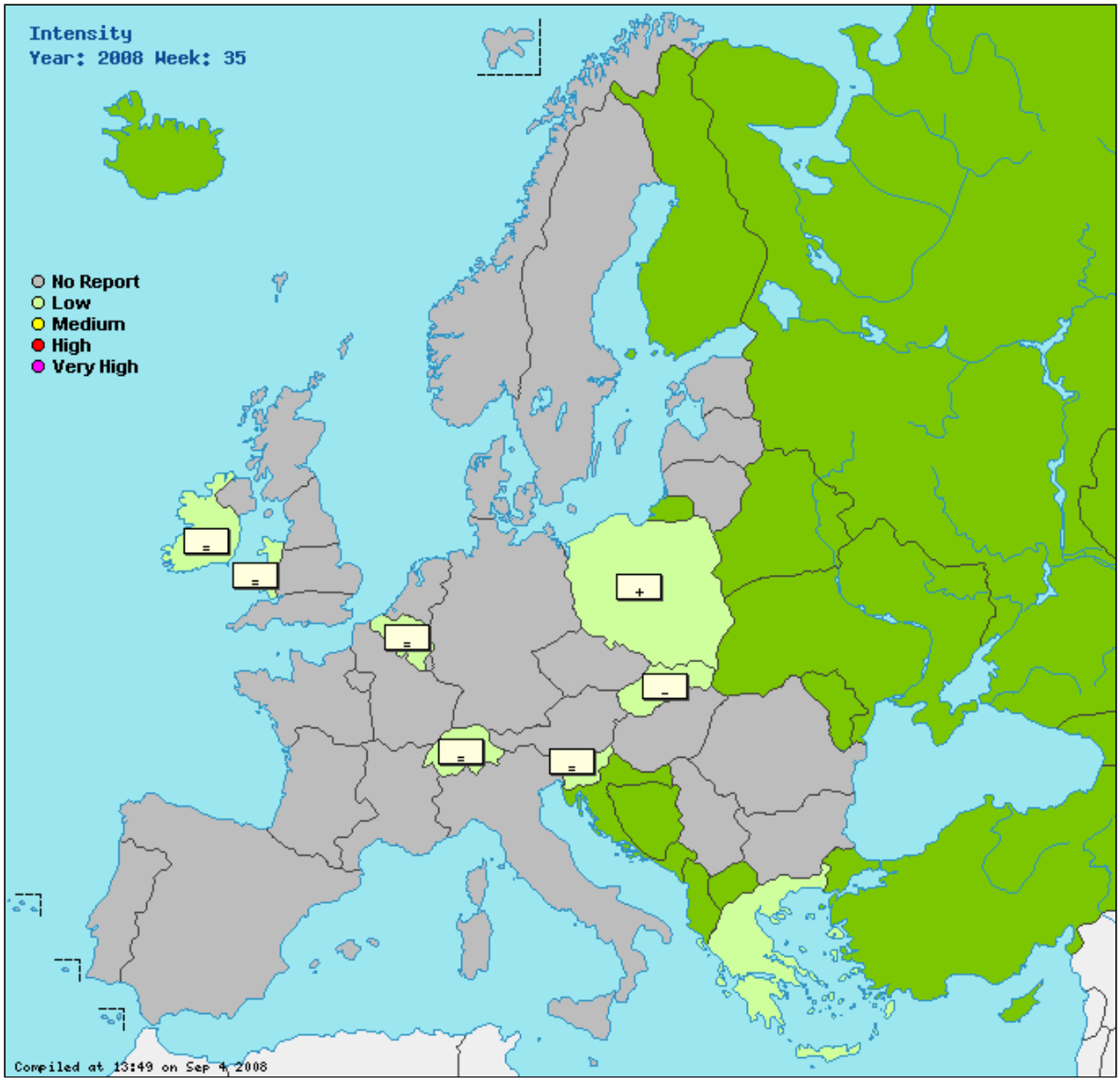
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

= : stable clinical activity
+ : increasing clinical activity
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Low = no influenza activity or influenza at baseline levels
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Country comments (where available)

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None			0	0%	None	9.7 (graphs)	667.4 (graphs)	Click here
England		None			1	0%	None	(graphs)		Click here
Estonia		None			0	0%	None	(graphs)		Click here
Greece	Low	None						16.0 (graphs)	(graphs)	Click here
Ireland	Low	None			0	0%	None	2.2 (graphs)	(graphs)	Click here
Netherlands					5	0%	None	(graphs)		Click here
Norway		None			0	0%	None	(graphs)		Click here
Poland	Low	None			0	0%	None	0.4 (graphs)	(graphs)	Click here
Portugal		None			0	0%	None	(graphs)		Click here
Slovakia	Low	None			0	0%	None	28.4 (graphs)	463.5 (graphs)	Click here
Slovenia	Low	None			0	0%	None	0.0 (graphs)	525.2 (graphs)	Click here
Sweden		None			0	0%	None	(graphs)		Click here

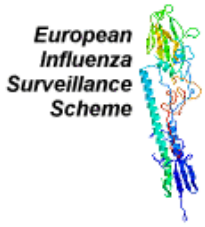
Switzerland	Low	Sporadic	0	0%	None	1.3 (graphs)		Click here
Wales	Low	None				0.0 (graphs)	(graphs)	Click here
Europe			371	0%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

VERY SPORADIC INFLUENZA ACTIVITY IN EUROPE



Summary: Influenza virus detections occur very sporadically in Europe. In week 36/2008, there was no detection and in week 37 there was only one detection reported. Out of 11 countries reporting the geographical spread indicator in week 36-37/2008, 10 countries reported no influenza activity and England reported sporadic activity.

In week 36-37/2008, Out of a total of 137 investigated specimens in Europe only one influenza virus (type A not subtyped) was detected in England from a non-sentinel specimen.

There have been no reports of unusual influenza activity in Europe at a community level (i.e. in a region or local area such as a city, county or district) since week 16/2008.

Background: The Inter-season Electronic Bulletin presents and comments influenza activity based on virological data reported to EISS. In weeks 36/2008 and 37/2008, a total of 14 countries reported virological data to EISS. The Inter-season Electronic Bulletin will be published between week 21/2008 and week 39/2008.

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).

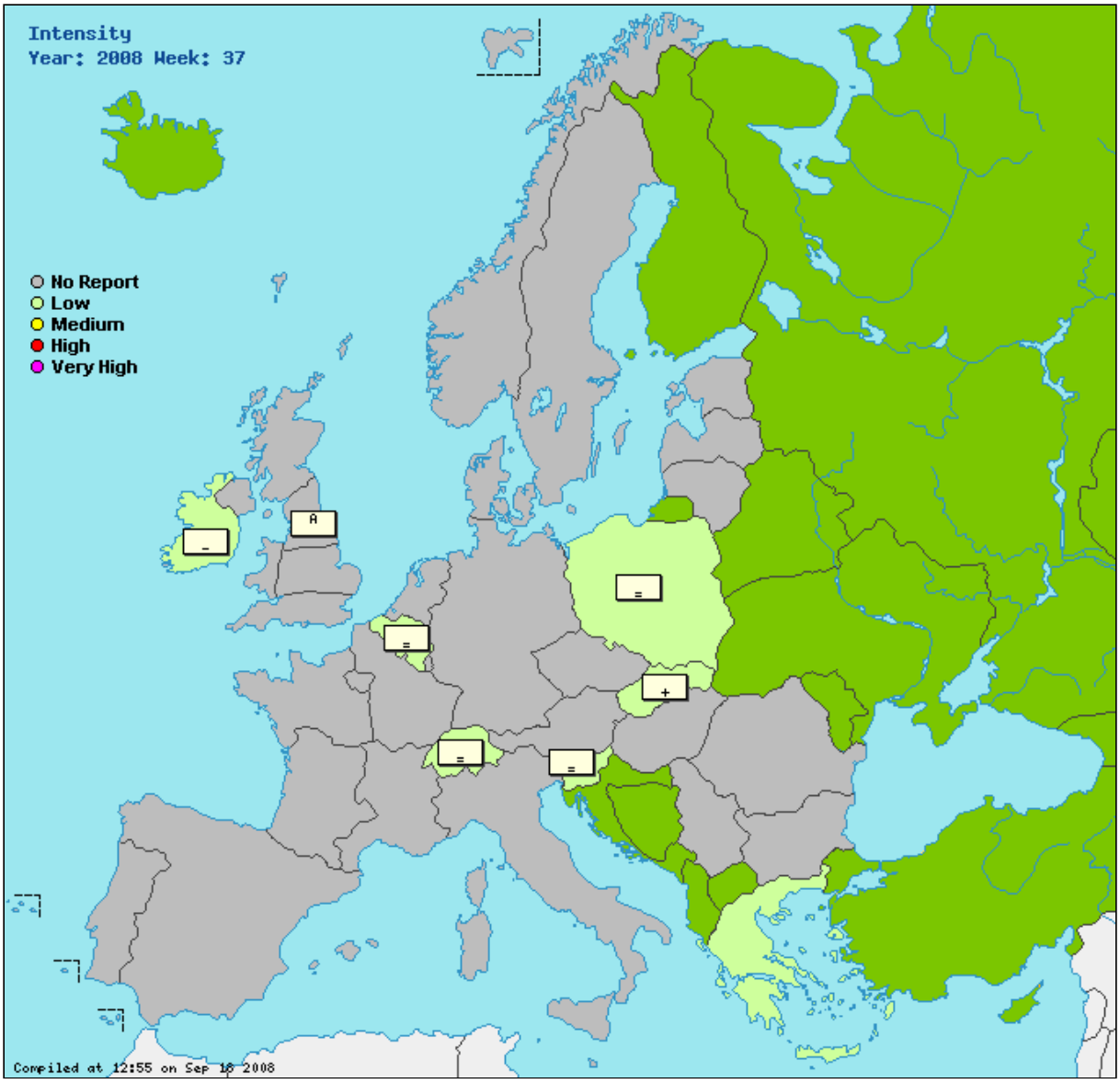
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

= : stable clinical activity
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Country comments (where available)

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
Belgium	Low	None						23.8 (graphs)	1096.9 (graphs)	Click here
England		Sporadic			0	0%	Type A	(graphs)		Click here
Estonia		None			0	0%	None	(graphs)		Click here
Germany		None			10	0%	None		(graphs)	Click here
Greece	Low	None			0	0%	None	28.4 (graphs)	(graphs)	Click here
Ireland	Low	None			0	0%	None	2.5 (graphs)	(graphs)	Click here
Netherlands					2	0%	None	(graphs)		Click here
Poland	Low	None			0	0%	None	9.7 (graphs)	(graphs)	Click here
Portugal					0	0%	None	(graphs)		Click here
Serbia		None			0	0%	None	(graphs)		Click here
Slovakia	Low				0	0%	None	70.8 (graphs)	793.8 (graphs)	Click here
Slovenia	Low	None			1	0%	None	47.4 (graphs)	712.5 (graphs)	Click here

Sweden		None	0	0%	None	(graphs)	Click here
Switzerland	Low	None				2.5 (graphs)	Click here
Europe			13	0%			Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
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Percentage positive: percentage of sentinel swabs that tested positive for influenza A or B
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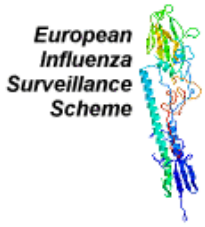
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
*: the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Annemarie Arkema, Tamara Meerhoff, Adam Meijer, John Paget and Koos van der Velden). It was reviewed by Olaf Hungnes (Norwegian Institute of Public Health, Oslo, Norway), Dr. Anne Mazick (Statens Serum Institut, Copenhagen, Denmark) and Dr. Viviane van Casteren (Scientific Institute of Public Health, Brussels, Belgium) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.

Week 39 : 22/09/2008-28/09/2008 03 October 2008, Issue N° 273

SPORADIC INFLUENZA ACTIVITY IN EUROPE



Summary: Influenza virus detections occur very sporadically in Europe. In week 38/2008, there were two detections and in week 39 there were nine detections reported. Out of nine countries reporting the geographical spread indicator in week 38-39/2008, all reported no influenza activity

In weeks 38-39/2008, 11 influenza viruses were detected in Europe out of a total of 244 investigated specimens: one influenza A not subtyped virus each in Poland, Spain, Switzerland and Sweden, respectively, and four in England. One type A(H3) in Germany, one type A(H3N2) and one type B in Sweden. All detections were from non-sentinel specimens. As usual for this time of the year, a number of the influenza cases are travellers who have been abroad.

There have been no reports of unusual influenza activity in Europe at community level (i.e. in a region or local area such as a city, county or district) since week 16/2008.

Background: The Inter-season Electronic Bulletin presents and comments influenza activity based on virological data reported to EISS. In weeks 38/2008 and 39/2008, a total of 16 countries reported virological data to EISS. The Inter-season Electronic Bulletin will be published between week 21/2008 and week 39/2008.

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).

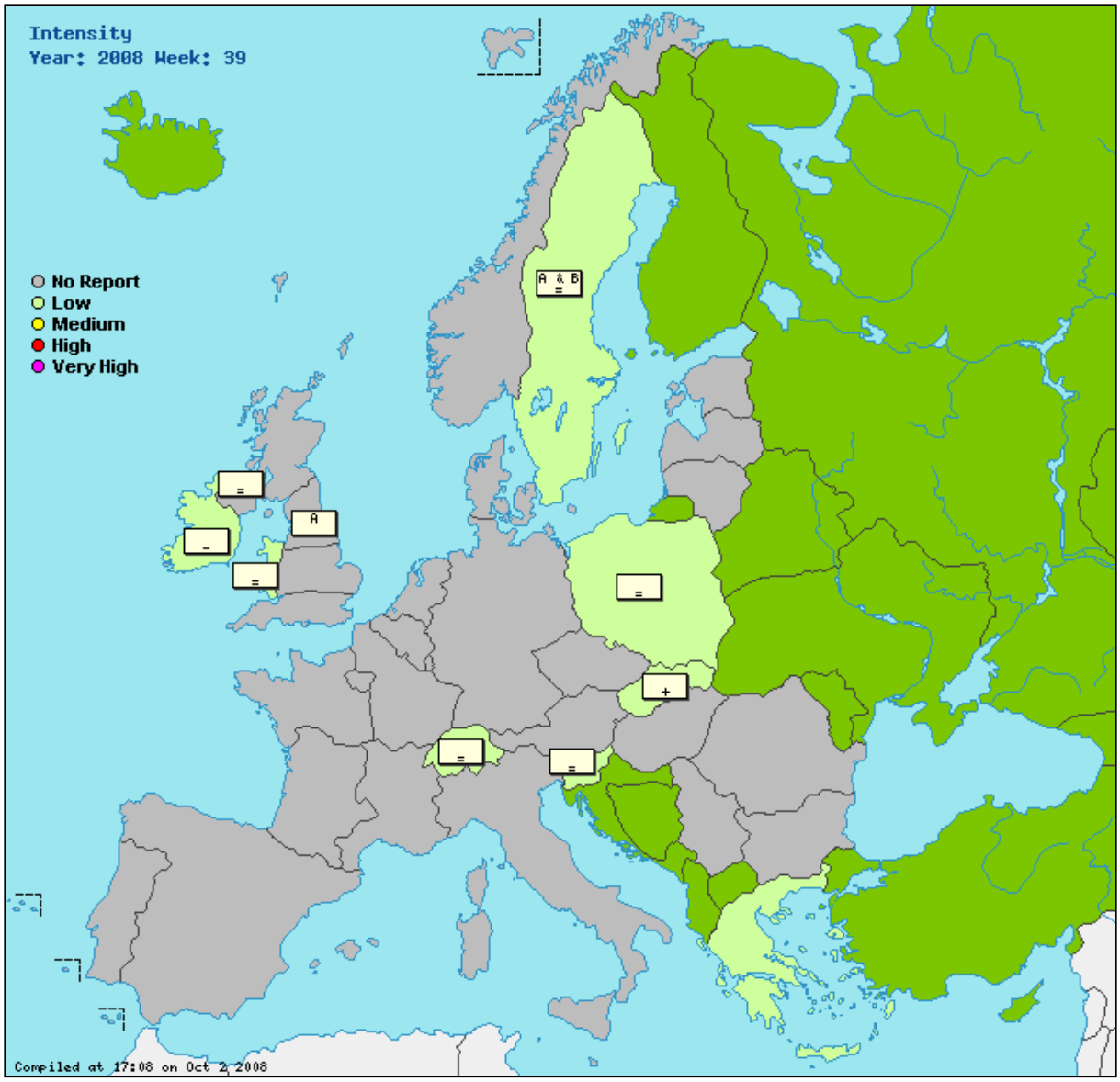
Map

The map presents the qualitative indicators of influenza activity (intensity, trend, geographical spread and impact) and the dominant virus as assessed by each of the countries.

Clicking on the map will, if available, take you through to the national web site. If 'regional' activity is reported, a pop-up text box will appear which describes the activity in greater detail.

Clicking on France, Russian Federation, Turkey and United Kingdom (England) will provide you with regional data.

You may select the type of map : **Intensity** ◉ **Geographical spread** ○



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 & B

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

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

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.

Country comments (where available)

Sweden

The patient with Influenza A has been in London, the Influenza B patient in Senegal.

Table and graphs (where available)

	Intensity	Geographic Spread	Impact	Trend	Sentinel swabs	Percentage positive	Dominant type	ILI per 100,000	ARI per 100,000	Virology graph and pie chart
England					0	0%	None	(graphs)		Click here
Estonia					1	0%	None	(graphs)		Click here
Germany					17	0%	None		(graphs)	Click here
Greece	Low	None						56.1 (graphs)	(graphs)	Click here
Ireland	Low	None			1	0%	None	5.3 (graphs)	(graphs)	Click here
Netherlands					5	0%	None	(graphs)		Click here
Northern Ireland		None			3	0%	None	13.7 (graphs)	(graphs)	Click here
Norway					0	0%	None	(graphs)		Click here
Poland	Low	None			5	0%	None	41.2 (graphs)	(graphs)	Click here
Serbia					0	0%	None	(graphs)		Click here
Slovakia	Low	None			0	0%	None	173.4 (graphs)	1599.8 (graphs)	Click here

Slovenia	Low	None	5	0%	None	0.0 (graphs)	1177.1 (graphs)	Click here
Sweden	Low	None	0	0%	Type A and B	(graphs)	(graphs)	Click here
Switzerland	Low	None				4.5 (graphs)		Click here
Wales	Low	None				(graphs)	(graphs)	Click here
Europe			39	0%				Click here

Preliminary data

Intensity: Low = no influenza activity or influenza activity at baseline level; Medium= usual levels of influenza activity; High = higher than usual levels of influenza activity; Very high = particularly severe levels of influenza activity.
Geographical spread: No activity = no laboratory-confirmed cases, or evidence of increased or unusual respiratory disease activity; Sporadic = isolated cases of laboratory-confirmed influenza infection; Localized = limited to one administrative unit in the country (or reporting site) only; Regional = appearing in multiple but <50% of the administrative units of the country (or reporting sites); Widespread = appearing in >=50% of the administrative units of the country (or reporting sites).
Impact: Low = demands on health-care services are not above usual levels; Moderate = demands on health-care services are above the usual demand levels but still below the maximum capacity of those services; Severe = demands on health care services exceed the capacity of those services.
Trend: Increasing = evidence that the level of respiratory disease activity is increasing compared with the previous week; Stable = evidence that the level of respiratory disease activity is unchanged compared with the previous week; Decreasing = evidence that the level of respiratory disease activity is decreasing compared with the previous week.
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
ARI: acute respiratory infection
ILI: influenza-like illness
Sentinel SARI: severe acute respiratory illness
Population: per 100,000 population
***:** the value in the table for these countries reflects the percent (e.g. from 0.0 to 100.0) of total outpatient encounters that were due to ILI/ARI rather than a consultation rate per 100,000

The bulletin text was written by the EISS Co-ordination Centre (Tamara Meerhoff, Liesbeth Meuwissen, Adam Meijer, John Paget, Koos van der Velden). It was reviewed by Dr. JosÃ© Marinho FalcÃ£o (National Institute of Health, Lisbon, Portugal), Dr. Jan Kyncl (National Institute of Public Health, Prague, Czech Republic) and Dr. Jan de Jong (Erasmus Medical Centre, Rotterdam, the Netherlands) on behalf of the EISS Working Group. The bulletin text is also reviewed by the European Centre for Disease Prevention and Control.